UNIVERSITAS
KRISTEN
MARANATHA

Fakultas Kedokteran Gigi

Jl. Prof. drg. Surya Sumantri, M.P.H. No. 65
Bandung - 40164, Jawa Barat, Indonesia
Telp: +62 22-201 2186 / 200 3450, ext. 1905 / 1906
Email: fkg@dent.maranatha.edu
www.maranatha.edu

SURAT TUGAS
No. 718/SUT/FKG-UKM/IX/2022

Yang bertanda tangan di bawah ini

Nama : Dr. Ignatius Setiawan, drg., MM.
Jabatan : Dekan Fakultas Kedokteran Gigi Universitas Kristen Maranatha

Dengan ini menugaskan kepada :

NO	NAMA DOSEN	NIK
1	Dr.Vinna Kurniawati Sugiaman, drg., M.kes., PBO.	120005
2	Rudy Djuanda, drg., Sp.KG	120012
3	Silvia Naliani, drg., Sp.Pros., M.K.G.	120029
4	Natallia Pranata, drg., M.Kes.	120024

Melaksanakan publikasi jurnal: "***Tissue Engineering With Stem Cell From Human Exfoliated Deciduous Teeth (SHED) And Collagen Matrix, Regulated By Growth Factor In Regenerating The Dental Pulp***" di Polymers pada September 2022.

Demikian agar tugas ini dilaksanakan dengan sebaik-baiknya.

Bandung, 9 September 2022
Dekan Fakultas Kedokteran Gigi
Universitas Kristen Maranatha

Dr. Ignatius Setiawan,drg., MM.
NIK. 120010

FAKULTAS
KEDOKTERAN GIGI

polymers

IMPACT FACTOR 4.967

Indexed in: PubMed

Understanding the Property Changes of Chitosan–Gelatin Nanocomposite Films

Volume 14 · Issue 18 | September (II) 2022

MDPI

mdpi.com/journal/polymers
ISSN 2073-4360

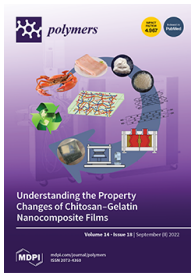
Forthcoming issue (/2073-4360/15/20)
Current issue (/2073-4360/15/19)

Vol. 15 (2023) (/2073-4360/15)
Vol. 14 (2022) (/2073-4360/14)
Vol. 13 (2021) (/2073-4360/13)
Vol. 12 (2020) (/2073-4360/12)
Vol. 11 (2019) (/2073-4360/11)
Vol. 10 (2018) (/2073-4360/10)
Vol. 9 (2017) (/2073-4360/9)
Vol. 8 (2016) (/2073-4360/8)
Vol. 7 (2015) (/2073-4360/7)
Vol. 6 (2014) (/2073-4360/6)
Vol. 5 (2013) (/2073-4360/5)
Vol. 4 (2012) (/2073-4360/4)
Vol. 3 (2011) (/2073-4360/3)
Vol. 2 (2010) (/2073-4360/2)
Vol. 1 (2009) (/2073-4360/1)

Affiliated Society:

(https://serve.mdpi.com/www/my_files/cliiik.php?oaparams=0bannerid=10322zoneid=4cb=88c0ef52d4oad

Polymers, Volume 14, Issue 18 (September-2 2022) – 222 articles



Cover Story (**view full-size image (/files/uploaded/covers/polymers/big_cover-polymers-v14-i18.png)**): Natural biopolymers such as chitosan and gelatin, which are biodegradable and inherently functional, have significant potential for biomedical and other specialized applications. Given this, determining how to create composite materials with the desired molecular interactions and tailored properties has attracted intense research interest. Herein, thermomechanically processed chitosan–gelatin biopolymer nanocomposite materials plasticised by glycerol or isosorbide and filled with nanoclay (MMT) or graphene oxide (GO) were studied. This work highlights different mechanisms that control the different properties of dual-biopolymer systems and provides an updated definition of biopolymer plasticization and insights into the design of polymeric materials involving multiple ways of chain interaction. **View this paper (https://www.mdpi.com/2073-4360/14/18/3797)**

(https://www.mdpi.com/2073-4360/14/18/3797)

- Issues are regarded as officially published after their release is announced to the **table of contents alert mailing list (/journal/polymers/toc-alert)**.
- You may **sign up for e-mail alerts (/journal/polymers/toc-alert)** to receive table of contents of newly released issues.
- PDF is the official format for papers published in both, html and pdf forms. To view the papers in pdf format, click on the "PDF Full-text" link, and use the free **Adobe Reader (http://www.adobe.com/)** to open them.

Order results

Publication Date

Result details

Normal

Section

All Sections

Show export options

Open Access Article **(/2073-4360/14/18/3923/pdf?version=1663817335)**

Role of Maleic Anhydride-Grafted Poly(lactic acid) in Improving Shape Memory Properties of Thermoresponsive Poly(ethylene glycol) and Poly(lactic acid) Blends (/2073-4360/14/18/3923)

by

Wasana Nonkrathok (https://sciprofiles.com/profile/2442776?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Tatiya Trongsatitkul (https://sciprofiles.com/profile/1036337?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
and
Nitinat Suppakarn (https://sciprofiles.com/profile/2347967?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3923; **https://doi.org/10.3390/polym14183923 (https://doi.org/10.3390/polym14183923)** - 19 Sep 2022

Cited by 5 (/2073-4360/14/18/3923#metrics) | Viewed by 1914

Abstract Generally, poly(ethylene glycol) (PEG) is added to poly(lactic acid) (PLA) to reduce brittleness and improve mechanical properties. However, shape memory properties of PEG/PLA blends suffered due to the blend's incompatibility. To enhance shape memory abilities of the blends, 0.45% maleic anhydride-grafted poly(lactic acid) **[...] Read more.**

(This article belongs to the Special Issue **Shape Memory and Functional Polymers (/journal/polymers/special_issues/Shape_Mem_Funct_Polym)**)

► Show Figures

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03923/article_deploy/html/images/polymers-14-03923-ag-550.jpg?1663817420)
(https://pub.mdpi-res.com/polymers/polymers-14-03923/article_deploy/html/images/polymers-14-03923-g001-550.jpg?1663817417)
(https://pub.mdpi-res.com/polymers/polymers-14-03923/article_deploy/html/images/polymers-14-03923-g002a-550.jpg?1663817407)
(https://pub.mdpi-res.com/polymers/polymers-14-03923/article_deploy/html/images/polymers-14-03923-g002b-550.jpg?1663817405)
(https://pub.mdpi-res.com/polymers/polymers-14-03923/article_deploy/html/images/polymers-14-03923-g003-550.jpg?1663817411)
(https://pub.mdpi-res.com/polymers/polymers-14-03923/article_deploy/html/images/polymers-14-03923-g004-550.jpg?1663817409)
(https://pub.mdpi-res.com/polymers/polymers-14-03923/article_deploy/html/images/polymers-14-03923-g005a-550.jpg?1663817408)
(https://pub.mdpi-res.com/polymers/polymers-14-03923/article_deploy/html/images/polymers-14-03923-g005b-550.jpg?1663817412)
(https://pub.mdpi-res.com/polymers/polymers-14-03923/article_deploy/html/images/polymers-14-03923-g006-550.jpg?1663817419)
(https://pub.mdpi-res.com/polymers/polymers-14-03923/article_deploy/html/images/polymers-14-03923-g007-550.jpg?1663817416)
(https://pub.mdpi-res.com/polymers/polymers-14-03923/article_deploy/html/images/polymers-14-03923-g008-550.jpg?1663817410)
(https://pub.mdpi-res.com/polymers/polymers-14-03923/article_deploy/html/images/polymers-14-03923-g009-550.jpg?1663817418)
(https://pub.mdpi-res.com/polymers/polymers-14-03923/article_deploy/html/images/polymers-14-03923-g010-550.jpg?1663817415)
(https://pub.mdpi-res.com/polymers/polymers-14-03923/article_deploy/html/images/polymers-14-03923-g011-550.jpg?1663817413)

Open Access Article (/2073-4360/14/18/3922/pdf?version=1663639812)

Polyaniline/Multi Walled Carbon Nanotubes—A Promising Photocatalyst Composite for Reactive Blue 4 Oxidation (/2073-4360/14/18/3922)

by **Ashraf H. Farha (https://sciprofiles.com/profile/922845?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Maha A. Tony (https://sciprofiles.com/profile/2328323?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Shehab A. Mansour (https://sciprofiles.com/profile/513806?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)** and **Ahmed B. El Basaty (https://sciprofiles.com/profile/author/VWg1UGg4SE1LbWZEQ3ZvdmNSbExBcDNLMlRZaEpzL3M2U09kUXFUUDQ5VT0=?**

Polymers **2022**, *14*(18), 3922; **https://doi.org/10.3390/polym14183922 (https://doi.org/10.3390/polym14183922)** - 19 Sep 2022

Cited by 2 (/2073-4360/14/18/3922#metrics) | Viewed by 1228

Abstract For the photocatalytic removal of the Reactive Blue 4 dye from an aqueous stream, new polyaniline/multi walled carbon nanotube nanocomposites (PANI-MWCNTs) were applied as a promising photocatalyst. The PANI-MWCNT nanocomposites were fabricated by aniline oxidation in the presence of MWCNTs using the typical **[...] Read more.**

(This article belongs to the Section **Polymer Composites and Nanocomposites (/journal/polymers/sections/polymer_composites_nanocomposites)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03922/article_deploy/html/images/polymers-14-03922-g001-550.jpg?1663748983)
(https://pub.mdpi-res.com/polymers/polymers-14-03922/article_deploy/html/images/polymers-14-03922-g002-550.jpg?1663748978)
(https://pub.mdpi-res.com/polymers/polymers-14-03922/article_deploy/html/images/polymers-14-03922-g003-550.jpg?1663748989)
(https://pub.mdpi-res.com/polymers/polymers-14-03922/article_deploy/html/images/polymers-14-03922-g004-550.jpg?1663748995)
(https://pub.mdpi-res.com/polymers/polymers-14-03922/article_deploy/html/images/polymers-14-03922-g005-550.jpg?1663748981)
(https://pub.mdpi-res.com/polymers/polymers-14-03922/article_deploy/html/images/polymers-14-03922-g006-550.jpg?1663748993)
(https://pub.mdpi-res.com/polymers/polymers-14-03922/article_deploy/html/images/polymers-14-03922-g007-550.jpg?1663748987)
(https://pub.mdpi-res.com/polymers/polymers-14-03922/article_deploy/html/images/polymers-14-03922-g008-550.jpg?1663748985)
(https://pub.mdpi-res.com/polymers/polymers-14-03922/article_deploy/html/images/polymers-14-03922-g009-550.jpg?1663748991)

Open Access Article (/2073-4360/14/18/3921/pdf?version=1663594050)

Generation of One-Dimensional Fibrous Polyethylene Nanocrystals in Epoxy Thermosets (/2073-4360/14/18/3921)

by **Honggang Mei (https://sciprofiles.com/profile/author/bHpTemJ3cFFtUjYra1pnbGdReVRldzJBK21aUk9TaXphcHl4cEFxN1B6OD0=?utm_source**, **Huaming Wang (https://sciprofiles.com/profile/author/aVFNcFJZWk43T0gxQ2pja254WW44S0FiL2Q5YUVFaUNHSS9ucmdlYmJOdz0=?utm_sou**, **Lei Li (https://sciprofiles.com/profile/2086365?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)** and **Sixun Zheng (https://sciprofiles.com/profile/1262222?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**

Polymers **2022**, *14*(18), 3921; **https://doi.org/10.3390/polym14183921 (https://doi.org/10.3390/polym14183921)** - 19 Sep 2022

Cited by 2 (/2073-4360/14/18/3921#metrics) | Viewed by 1396

Abstract The one-dimensional (1D) polyethylene (PE) nanocrystals were generated in epoxy thermosets via crystallization-driven self-assembly. Toward this end, an ABA triblock copolymer composed of PE midblock and poly(ε-caprolactone) (PCL) endblocks was synthesized via the ring opening metathesis polymerization followed by hydrogenation approach. The nanostructured **[...] Read more.**

(This article belongs to the Section **Smart and Functional Polymers (/journal/polymers/sections/Smart_Funct)**)

► Show Figures

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03921/article_deploy/html/images/polymers-14-03921-g001-550.jpg?1663594118)
(https://pub.mdpi-res.com/polymers/polymers-14-03921/article_deploy/html/images/polymers-14-03921-g002-550.jpg?1663594126)
(https://pub.mdpi-res.com/polymers/polymers-14-03921/article_deploy/html/images/polymers-14-03921-g003-550.jpg?1663594129)
(https://pub.mdpi-res.com/polymers/polymers-14-03921/article_deploy/html/images/polymers-14-03921-g004-550.jpg?1663594115)
(https://pub.mdpi-res.com/polymers/polymers-14-03921/article_deploy/html/images/polymers-14-03921-g005-550.jpg?1663594137)
(https://pub.mdpi-res.com/polymers/polymers-14-03921/article_deploy/html/images/polymers-14-03921-g006-550.jpg?1663594120)
(https://pub.mdpi-res.com/polymers/polymers-14-03921/article_deploy/html/images/polymers-14-03921-g007-550.jpg?1663594127)
(https://pub.mdpi-res.com/polymers/polymers-14-03921/article_deploy/html/images/polymers-14-03921-g008-550.jpg?1663594117)
(https://pub.mdpi-res.com/polymers/polymers-14-03921/article_deploy/html/images/polymers-14-03921-g009-550.jpg?1663594135)
(https://pub.mdpi-res.com/polymers/polymers-14-03921/article_deploy/html/images/polymers-14-03921-g010-550.jpg?1663594130)
(https://pub.mdpi-res.com/polymers/polymers-14-03921/article_deploy/html/images/polymers-14-03921-g011-550.jpg?1663594123)
(https://pub.mdpi-res.com/polymers/polymers-14-03921/article_deploy/html/images/polymers-14-03921-sch001-550.jpg?1663594122)
(https://pub.mdpi-res.com/polymers/polymers-14-03921/article_deploy/html/images/polymers-14-03921-sch002-550.jpg?1663594138)
(https://pub.mdpi-res.com/polymers/polymers-14-03921/article_deploy/html/images/polymers-14-03921-sch003-550.jpg?1663594124)

Open Access Editorial (/2073-4360/14/18/3920/pdf?version=1663728000)

Advances and Challenges in Biopolymer-Based Films (/2073-4360/14/18/3920)

by Swarup Roy (https://sciprofiles.com/profile/460729?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Jong-Whan Rhim (https://sciprofiles.com/profile/908307?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3920; https://doi.org/10.3390/polym14183920 (https://doi.org/10.3390/polym14183920) - 19 Sep 2022
Cited by 4 (/2073-4360/14/18/3920#metrics) | Viewed by 1476

Abstract Today, biobased polymers derived from sustainable and renewable natural sources are of great interest as an alternative to control the severe damage already caused by petro-chemical-based polymers [...] **Full article (/2073-4360/14/18/3920)**
(This article belongs to the Special Issue **Bio-Based Polymeric Films (/journal/polymers/special_issues/Biodegradable_Polymer_Films)**)

Open Access Article (/2073-4360/14/18/3919/pdf?version=1663644194)

Effects of Adding Methods of Fluorane Microcapsules and Shellac Resin Microcapsules on the Preparation and Properties of Bifunctional Waterborne Coatings for Basswood (/2073-4360/14/18/3919)

by Lin Wang (https://sciprofiles.com/profile/1181650?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Yan Han (https://sciprofiles.com/profile/1762961?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Xiaoxing Yan (https://sciprofiles.com/profile/707148?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3919; https://doi.org/10.3390/polym14183919 (https://doi.org/10.3390/polym14183919) - 19 Sep 2022
Cited by 6 (/2073-4360/14/18/3919#metrics) | Viewed by 1106

Abstract In this paper, urea-formaldehyde resin microcapsules with shellac resin as core material were prepared by in-situ polymerization. Morphologies of shellac resin microcapsules were characterized by optical microscope (OM) and scanning electron microscope (SEM). Both microcapsules were spherical in shape. The encapsulation property of **[...] Read more.**
(This article belongs to the Collection **Wood Composites (/journal/polymers/topical_collections/Wood_Compos_TC)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g001-550.jpg?1663748906)
(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g002-550.jpg?1663748918)
(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g003-550.jpg?1663748912)
(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g004-550.jpg?1663748890)
(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g005-550.jpg?1663748888)
(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g006-550.jpg?1663748901)
(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g007-550.jpg?1663748886)
(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g008-550.jpg?1663748919)
(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g009-550.jpg?1663748880)
(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g010-550.jpg?1663748898)
(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g011-550.jpg?1663748883)
(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g012-550.jpg?1663748889)
(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g013-550.jpg?1663748907)
(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g014-550.jpg?1663748882)
(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g015-550.jpg?1663748900)
(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g016-550.jpg?1663748897)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g017-550.jpg?1663748917)

(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g018-550.jpg?1663748905)

(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g019-550.jpg?1663748903)

(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g020-550.jpg?1663748915)

(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g021-550.jpg?1663748902)

(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g022-550.jpg?1663748922)

(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g023-550.jpg?1663748910)

(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g024-550.jpg?1663748911)

(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g025-550.jpg?1663748885)

(https://pub.mdpi-res.com/polymers/polymers-14-03919/article_deploy/html/images/polymers-14-03919-g026-550.jpg?1663748909)

Open Access Article (/2073-4360/14/18/3918/pdf?version=1663585232)

Potential Applications of an Exopolysaccharide Produced by *Bacillus xiamenensis* RT6 Isolated from an Acidic Environment (/2073-4360/14/18/3918)

by Elisa Huang-Lin (https://sciprofiles.com/profile/2423716?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Enrique Sánchez-León (https://sciprofiles.com/profile/2423140?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Ricardo Amils (https://sciprofiles.com/profile/81981?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Concepcion Abrusci (https://sciprofiles.com/profile/2378141?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3918; https://doi.org/10.3390/polym14183918 (https://doi.org/10.3390/polym14183918) - 19 Sep 2022

Cited by 2 (/2073-4360/14/18/3918#metrics) | Viewed by 1366

Abstract The *Bacillus xiamenensis* RT6 strain was isolated and identified by morphological, biochemical and molecular tests from an extreme acidic environment, Rio Tinto (Huelva). Optimisation tests for exopolysaccharide (EPS) production in different culture media determined that the best medium was a minimal medium with **[...] Read more.**

(This article belongs to the Special Issue **Biobased and Natural Polymers (/journal/polymers/special_issues/Bio_Nat_Polym)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03918/article_deploy/html/images/polymers-14-03918-g001-550.jpg?1663585295)

(https://pub.mdpi-res.com/polymers/polymers-14-03918/article_deploy/html/images/polymers-14-03918-g002-550.jpg?1663585304)

(https://pub.mdpi-res.com/polymers/polymers-14-03918/article_deploy/html/images/polymers-14-03918-g003-550.jpg?1663585298)

(https://pub.mdpi-res.com/polymers/polymers-14-03918/article_deploy/html/images/polymers-14-03918-g004-550.jpg?1663585300)

(https://pub.mdpi-res.com/polymers/polymers-14-03918/article_deploy/html/images/polymers-14-03918-g005-550.jpg?1663585297)

(https://pub.mdpi-res.com/polymers/polymers-14-03918/article_deploy/html/images/polymers-14-03918-g006-550.jpg?1663585303)

(https://pub.mdpi-res.com/polymers/polymers-14-03918/article_deploy/html/images/polymers-14-03918-g007-550.jpg?1663585302)

(https://pub.mdpi-res.com/polymers/polymers-14-03918/article_deploy/html/images/polymers-14-03918-g008-550.jpg?1663585300)

Open Access Article (/2073-4360/14/18/3917/pdf?version=1663585007)

Carbon/Basalt Fibers Hybrid Composites: Hybrid Design and the Application in Automobile Engine Hood (/2073-4360/14/18/3917)

by Yongfeng Pu (https://sciprofiles.com/profile/766251?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Baichuan Liu (https://sciprofiles.com/profile/author/bnBENzRFS2duZ2hUTXB2M3YwNCtpZVVES1J5VUhLUEhmdlk2L2tvc04vOD0=?utm_sourc, Guilian Xue (https://sciprofiles.com/profile/2397772?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Hongyu Liang (https://sciprofiles.com/profile/author/bzNML1RLOUhHVmk3bEo1cWthT3ZxbytraGdlZy8rR2tKUFFISk5XcGlEZz0=?utm_source=, Fangwu Ma (https://sciprofiles.com/profile/426516?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Meng Yang (https://sciprofiles.com/profile/author/MTh5RVpCWW5BTU96bW92a1RUQnNNT1lUZzZ2ZGVub05ldnQyVTMrODRydz0=?utm_sourc and Guangdong Tian (https://sciprofiles.com/profile/251794?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3917; https://doi.org/10.3390/polym14183917 (https://doi.org/10.3390/polym14183917) - 19 Sep 2022

Cited by 2 (/2073-4360/14/18/3917#metrics) | Viewed by 1187

Abstract The low-velocity impact properties and the optimal hybrid ratio range for improving the property of hybrid composites are studied, and the application of hybrid composites in automobile engine hoods is discussed in this paper. The low-velocity impact properties of the hybrid composite material **[...] Read more.**

(This article belongs to the Special Issue **Sustainable Polymeric Composites: Fabrication and Application (/journal/polymers/special_issues/sustain_polym_composite)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03917/article_deploy/html/images/polymers-14-03917-g001-550.jpg?1663585099)

(https://pub.mdpi-res.com/polymers/polymers-14-03917/article_deploy/html/images/polymers-14-03917-g002-550.jpg?1663585097)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03917/article_deploy/html/images/polymers-14-03917-g003-550.jpg?1663585075)

(https://pub.mdpi-res.com/polymers/polymers-14-03917/article_deploy/html/images/polymers-14-03917-g004-550.jpg?1663585096)

(https://pub.mdpi-res.com/polymers/polymers-14-03917/article_deploy/html/images/polymers-14-03917-g005-550.jpg?1663585089)

(https://pub.mdpi-res.com/polymers/polymers-14-03917/article_deploy/html/images/polymers-14-03917-g006-550.jpg?1663585093)

(https://pub.mdpi-res.com/polymers/polymers-14-03917/article_deploy/html/images/polymers-14-03917-g007-550.jpg?1663585081)

(https://pub.mdpi-res.com/polymers/polymers-14-03917/article_deploy/html/images/polymers-14-03917-g008-550.jpg?1663585094)

(https://pub.mdpi-res.com/polymers/polymers-14-03917/article_deploy/html/images/polymers-14-03917-g009-550.jpg?1663585073)

(https://pub.mdpi-res.com/polymers/polymers-14-03917/article_deploy/html/images/polymers-14-03917-g010-550.jpg?1663585075)

(https://pub.mdpi-res.com/polymers/polymers-14-03917/article_deploy/html/images/polymers-14-03917-g011-550.jpg?1663585086)

(https://pub.mdpi-res.com/polymers/polymers-14-03917/article_deploy/html/images/polymers-14-03917-g012a-550.jpg?1663585100)

(https://pub.mdpi-res.com/polymers/polymers-14-03917/article_deploy/html/images/polymers-14-03917-g012b-550.jpg?1663585080)

Open Access Article (/2073-4360/14/18/3916/pdf?version=1663584801)

Alkaline Treatment Variables to Characterize Poly(Vinyl Alcohol)/Poly(Vinyl Butyral/Vinyl Alcohol) Blend Films (/2073-4360/14/18/3916)

by Seong Baek Yang (https://sciprofiles.com/profile/214217?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Mohammad Rezaul Karim (https://sciprofiles.com/profile/760399?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Jungeon Lee (https://sciprofiles.com/profile/author/enFVRVRmclAyeXpyMGpVL2JCWGNWN0FHOUYvM0QwMlFJdHE4RGFYSlRWRT0=?utm_s, Jeong Hyun Yeum (https://sciprofiles.com/profile/219169?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Sabina Yeasmin (https://sciprofiles.com/profile/1429610?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3916; https://doi.org/10.3390/polym14183916 (https://doi.org/10.3390/polym14183916) - 19 Sep 2022

Cited by 5 (/2073-4360/14/18/3916#metrics) | Viewed by 1259

Abstract Novel poly(vinyl alcohol) (PVA)/poly(vinyl butyral–vinyl alcohol) (P(VB-VA)) films with improved hydrophobicity were prepared from poly(vinyl acetate) (PVAc)/poly(vinyl butyral) (PVB) blend films with various mass ratios by saponification in a heterogeneous medium. The successful conversion of PVAc to PVA and PVAc/PVB to PVA/P(VB-VA) films **[...] Read more.**

(This article belongs to the Special Issue **Surfaces and Interfaces of Polymer Composites (/journal/polymers/special_issues/Surfaces_and_Interfaces_of_Polymer_Composites)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03916/article_deploy/html/images/polymers-14-03916-g001-550.jpg?1663584910)

(https://pub.mdpi-res.com/polymers/polymers-14-03916/article_deploy/html/images/polymers-14-03916-g002-550.jpg?1663584902)

(https://pub.mdpi-res.com/polymers/polymers-14-03916/article_deploy/html/images/polymers-14-03916-g003-550.jpg?1663584904)

(https://pub.mdpi-res.com/polymers/polymers-14-03916/article_deploy/html/images/polymers-14-03916-g004-550.jpg?1663584908)

(https://pub.mdpi-res.com/polymers/polymers-14-03916/article_deploy/html/images/polymers-14-03916-g005-550.jpg?1663584897)

(https://pub.mdpi-res.com/polymers/polymers-14-03916/article_deploy/html/images/polymers-14-03916-g006-550.jpg?1663584906)

(https://pub.mdpi-res.com/polymers/polymers-14-03916/article_deploy/html/images/polymers-14-03916-g007-550.jpg?1663584892)

(https://pub.mdpi-res.com/polymers/polymers-14-03916/article_deploy/html/images/polymers-14-03916-g008-550.jpg?1663584910)

Open Access Article (/2073-4360/14/18/3915/pdf?version=1663583537)

Composite Coatings of Chitosan and Silver Nanoparticles Obtained by Galvanic Deposition for Orthopedic Implants (/2073-4360/14/18/3915)

by C. Zanca (https://sciprofiles.com/profile/2430116?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), S. Carbone (https://sciprofiles.com/profile/2446455?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), B. Patella (https://sciprofiles.com/profile/1599245?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), F. Lopresti (https://sciprofiles.com/profile/418194?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), G. Aiello (https://sciprofiles.com/profile/1087517?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), V. Brucato (https://sciprofiles.com/profile/282448?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), F. Carfì Pavia (https://sciprofiles.com/profile/1165959?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), V. La Carrubba (https://sciprofiles.com/profile/1507459?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and R. Inguanta (https://sciprofiles.com/profile/800922?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3915; https://doi.org/10.3390/polym14183915 (https://doi.org/10.3390/polym14183915) - 19 Sep 2022

Cited by 3 (/2073-4360/14/18/3915#metrics) | Viewed by 1564

Abstract In this work, composite coatings of chitosan and silver nanoparticles were presented as an antibacterial coating for orthopedic implants. Coatings were deposited on AISI 304L using the galvanic deposition method. In galvanic deposition, the difference of the electrochemical redox potential between two metals **[...] Read more.**

(This article belongs to the Special Issue **Applications of Biocompatible and Biodegradable Polymers and Their Composites (/journal/polymers/special_issues/appl_biocompat_biodegrad_polym_compos)**)

► Show Figures

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03915/article_deploy/html/images/polymers-14-03915-g001-550.jpg?1663583634)
(https://pub.mdpi-res.com/polymers/polymers-14-03915/article_deploy/html/images/polymers-14-03915-g002-550.jpg?1663583630)
(https://pub.mdpi-res.com/polymers/polymers-14-03915/article_deploy/html/images/polymers-14-03915-g003-550.jpg?1663583624)
(https://pub.mdpi-res.com/polymers/polymers-14-03915/article_deploy/html/images/polymers-14-03915-g004-550.jpg?1663583632)
(https://pub.mdpi-res.com/polymers/polymers-14-03915/article_deploy/html/images/polymers-14-03915-g005-550.jpg?1663583631)
(https://pub.mdpi-res.com/polymers/polymers-14-03915/article_deploy/html/images/polymers-14-03915-g006-550.jpg?1663583635)
(https://pub.mdpi-res.com/polymers/polymers-14-03915/article_deploy/html/images/polymers-14-03915-g007-550.jpg?1663583626)
(https://pub.mdpi-res.com/polymers/polymers-14-03915/article_deploy/html/images/polymers-14-03915-g008-550.jpg?1663583633)

Open Access Article (/2073-4360/14/18/3914/pdf?version=1663586285)

Compressive and Flexural Strengths of Mortars Containing ABS and WEEE Based Plastic Aggregates (/2073-4360/14/18/3914)

by

Youssef El Bitouri (https://sciprofiles.com/profile/2278532?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Didier Perrin (https://sciprofiles.com/profile/1387647?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3914; https://doi.org/10.3390/polym14183914 (https://doi.org/10.3390/polym14183914) - 19 Sep 2022

Cited by 3 (/2073-4360/14/18/3914#metrics) | Viewed by 1324

Abstract The incorporation of plastic aggregates as a partial replacement of natural aggregates in cementitious materials is interesting in several ways. From a mechanical point of view, the partial substitution of sand with plastic aggregates could improve some properties (e.g., ductility, thermal insulation). This **[...] Read more.**

(This article belongs to the Special Issue **Recycled Polymers: Eco-Design, Structure/Property Relationships and Compatibility** (/journal/polymers/special_issues/recycled_polymers_ecodesign_structure_property_compatibility))

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03914/article_deploy/html/images/polymers-14-03914-g001-550.jpg?1663586379)
(https://pub.mdpi-res.com/polymers/polymers-14-03914/article_deploy/html/images/polymers-14-03914-g002-550.jpg?1663586366)
(https://pub.mdpi-res.com/polymers/polymers-14-03914/article_deploy/html/images/polymers-14-03914-g003-550.jpg?1663586374)
(https://pub.mdpi-res.com/polymers/polymers-14-03914/article_deploy/html/images/polymers-14-03914-g004-550.jpg?1663586361)
(https://pub.mdpi-res.com/polymers/polymers-14-03914/article_deploy/html/images/polymers-14-03914-g005-550.jpg?1663586357)
(https://pub.mdpi-res.com/polymers/polymers-14-03914/article_deploy/html/images/polymers-14-03914-g006-550.jpg?1663586380)
(https://pub.mdpi-res.com/polymers/polymers-14-03914/article_deploy/html/images/polymers-14-03914-g007-550.jpg?1663586372)
(https://pub.mdpi-res.com/polymers/polymers-14-03914/article_deploy/html/images/polymers-14-03914-g008-550.jpg?1663586376)
(https://pub.mdpi-res.com/polymers/polymers-14-03914/article_deploy/html/images/polymers-14-03914-g009-550.jpg?1663586352)
(https://pub.mdpi-res.com/polymers/polymers-14-03914/article_deploy/html/images/polymers-14-03914-g0A1-550.jpg?1663586378)
(https://pub.mdpi-res.com/polymers/polymers-14-03914/article_deploy/html/images/polymers-14-03914-g0A2-550.jpg?1663586365)
(https://pub.mdpi-res.com/polymers/polymers-14-03914/article_deploy/html/images/polymers-14-03914-g0A3-550.jpg?1663586370)

Open Access Article (/2073-4360/14/18/3913/pdf?version=1663664876)

Biomimetic Synthesis of PANI/Graphitic Oxidized Carbon Nitride for Supercapacitor Applications (/2073-4360/14/18/3913)

by

Manuel Eduardo Martínez-Cartagena (https://sciprofiles.com/profile/2395518?utm_source=mdpi.com&utm_medium=website&utm_campaign=,
Juan Bernal-Martínez (https://sciprofiles.com/profile/1411569?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Arnulfo Banda-Villanueva (https://sciprofiles.com/profile/author/c1Q0MXhQYnhCWDl4cGdvVmNVb0lzSEFqOWRJV2E4djBRdk9tYmgwVjBnND,
Javier Enríquez-Medrano (https://sciprofiles.com/profile/1691570?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nam,
Víctor D. Lechuga-Islas (https://sciprofiles.com/profile/author/OG0vYVh5ZGtrZDBIVTRVZHRRdkNZSXdYMWJpa01MMitlb1JkcGRWVkp2VT0=?,
Ilse Magaña (https://sciprofiles.com/profile/1760215?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Teresa Córdova (https://sciprofiles.com/profile/1539101?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Diana Morales-Acosta (https://sciprofiles.com/profile/2425842?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
José Luis Olivares-Romero (https://sciprofiles.com/profile/314895?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nar
and
Ramón Díaz-de-León (https://sciprofiles.com/profile/193662?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3913; https://doi.org/10.3390/polym14183913 (https://doi.org/10.3390/polym14183913) - 19 Sep 2022

Viewed by 1246

Abstract Polyaniline (PANI) composites have gained momentum as supercapacitive materials due to their high energy density and power density. However, some drawbacks in their performance remain, such as the low stability after hundreds of charge-discharge cycles and limitations

scalability. Herein, we **[...] Read more.**

(This article belongs to the Special Issue **Polymer Based Electronic Devices and Sensors (/journal/polymers/special_issues/polymer_device_sensor)**)

► Show Figures

Open Access Article (/2073-4360/14/18/3912/pdf?version=1663585316)

Corona−Poled Porous Electrospun Films of Gram−Scale Y−Doped ZnO and PVDF Composites for Piezoelectric Nanogenerators (/2073-4360/14/18/3912)

by

Juan Yi (https://sciprofiles.com/profile/author/RzQ5dGZCaTI4UGI1OTZyYXlKVXl4TlNsZ1hxWkQ5SWRDY0daREkrWVpqWT0=?utm_source=md

,

Yiheng Song (https://sciprofiles.com/profile/author/OVJXMEQ4T0hVOEd6ZTd1NExZRXhpdE5VbUpmNTRZM2dJdjNZZXo3RGk3RT0=?utm_sou

,

Shixian Zhang (https://sciprofiles.com/profile/author/bkVZWEtCRVlEWHVVQ2tyRG44VjM5dVU4dGM2OEgwNFZHZWJZWTcxZS9jUT0=?utm_s

,

Zhilong Cao (https://sciprofiles.com/profile/author/VURHVllTcGh2eVFSai9qcFhUMlBtU0FmdFc4b21YNGxGZHpySkRMSkRwST0=?utm_source

,

Chenjian Li (https://sciprofiles.com/profile/author/Wk80Yjl2K1AyQURZb1N3SlNwMXRMQVlaNzVSOFZlc2V2QytmL0FncWNmaz0=?utm_source

and

Chuanxi Xiong (https://sciprofiles.com/profile/246889?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3912; **https://doi.org/10.3390/polym14183912 (https://doi.org/10.3390/polym14183912)** - 19 Sep 2022

Cited by 3 (/2073-4360/14/18/3912#metrics) | Viewed by 1704

Abstract For digging out eco−friendly and well−performed energy harvesters, piezoelectric nanogenerators are preferred owing to their effortless assembly. Corona−poling promotes output performance of either aligned or porous PVDF electrospun films and higher piezoelectric output was achieved by corona−poled porous PVDF electrospun films due to **[...] Read more.**

(This article belongs to the Special Issue **Electrostatic Spinning Micro and Nano Fibers (/journal/polymers/special_issues/Electrostatic_Spinning_Micro_Nano_Fibers)**)

► Show Figures

Open Access Article (/2073-4360/14/18/3911/pdf?version=1663581142)

Kinetics of Pectin Biopolymer Facial Erosion Characterized by Fluorescent Tracer Microfluidics (/2073-4360/14/18/3911)

by

Matthew W. Liao (https://sciprofiles.com/profile/author/OHQ3aFdXZGRTbFVnSk5lNTJzb2RZTVBlNjNhMGcwSFFlQm4ydWpHcU0wND0=?utm_s

,

Betty S. Liu (https://sciprofiles.com/profile/author/clNGT2hFN0Q0RnJmSGlOTmw3amFoZkN5Mm01SVJNaTlpMjFNUGZDOUZWWT0=?utm_sou

,

Joseph Sutlive (https://sciprofiles.com/profile/author/ZnhqU3FLaDlzNGU3dXVTckQvOWovbUdremk5dGFNaXljUGpjMUdlUDhXcz0=?utm_sour

,

Back to TopTop

Willi L. Wagner (https://sciprofiles.com/profile/author/cldidlhnTFVLckQ4UHJlVDNRR1R3dUhsOVRwYS9iRnRWcEY5N01QTVc5OUNYMHNYMlp
,
Hassan A. Khalil (https://sciprofiles.com/profile/2688536?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Z[illegible]hen (https://sciprofiles.com/profile/1774027?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Maximilian Ackermann (https://sciprofiles.com/profile/author/bWNMZ1E2OU40alBuaU5NelAzbGZ2U0NTOG5BSmNRQkZmbTJVMjBuZlNrYU9lV
and
Steven J. Mentzer (https://sciprofiles.com/profile/895768?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3911; https://doi.org/10.3390/polym14183911 (https://doi.org/10.3390/polym14183911) - 19 Sep 2022
Cited by 1 (/2073-4360/14/18/3911#metrics) | Viewed by 1062

Abstract Pectin is a plant-derived heteropolysaccharide that has been implicated in drug development, tissue engineering, and visceral organ repair. Pectin demonstrates remarkable biostability in a variety of physiologic environments but is biodegradable in water. To understand the dynamics of pectin biodegradation in basic environments, **[...] Read more.**
(This article belongs to the Special Issue **Analysis and Characterization of Renewable Polymers (** **/journal/polymers/special_issues/renewable_polymer)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03911/article_deploy/html/images/polymers-14-03911-g001-550.jpg?1663581214)
(https://pub.mdpi-res.com/polymers/polymers-14-03911/article_deploy/html/images/polymers-14-03911-g002-550.jpg?1663581213)
(https://pub.mdpi-res.com/polymers/polymers-14-03911/article_deploy/html/images/polymers-14-03911-g003-550.jpg?1663581206)
(https://pub.mdpi-res.com/polymers/polymers-14-03911/article_deploy/html/images/polymers-14-03911-g004-550.jpg?1663581209)
(https://pub.mdpi-res.com/polymers/polymers-14-03911/article_deploy/html/images/polymers-14-03911-g005-550.jpg?1663581208)
(https://pub.mdpi-res.com/polymers/polymers-14-03911/article_deploy/html/images/polymers-14-03911-g006-550.jpg?1663581205)
(https://pub.mdpi-res.com/polymers/polymers-14-03911/article_deploy/html/images/polymers-14-03911-g007-550.jpg?1663581212)

Open Access Article **(/2073-4360/14/18/3910/pdf?version=1663586233)**

Impact of Traces of Hydrogen Sulfide on the Efficiency of Ziegler–Natta Catalyst on the Final Properties of Polypropylene (/2073-4360/14/18/3910)

by
Joaquín Hernández-Fernández (https://sciprofiles.com/profile/2424301?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar
,
Heidi Cano (https://sciprofiles.com/profile/1905918?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Miguel Aldas (https://sciprofiles.com/profile/779696?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3910; https://doi.org/10.3390/polym14183910 (https://doi.org/10.3390/polym14183910) - 19 Sep 2022
Cited by 12 (/2073-4360/14/18/3910#metrics) | Viewed by 1743

Abstract Sulfur compounds are removed from propylene through purification processes. However, these processes are not 100% effective, so low concentrations of compounds such as H_2S may be present in polymer-grade propylene. This article studies the effects of H_2S content on **[...] Read more.**
(This article belongs to the Special Issue **Polymers and Nanotechnology for Industry 4.0 (/journal/polymers/special_issues/IOCPS2021)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03910/article_deploy/html/images/polymers-14-03910-g001-550.jpg?1663586296)
(https://pub.mdpi-res.com/polymers/polymers-14-03910/article_deploy/html/images/polymers-14-03910-g002-550.jpg?1663586299)
(https://pub.mdpi-res.com/polymers/polymers-14-03910/article_deploy/html/images/polymers-14-03910-g003-550.jpg?1663586303)
(https://pub.mdpi-res.com/polymers/polymers-14-03910/article_deploy/html/images/polymers-14-03910-g004-550.jpg?1663586305)
(https://pub.mdpi-res.com/polymers/polymers-14-03910/article_deploy/html/images/polymers-14-03910-g005-550.jpg?1663586301)

Open Access Article **(/2073-4360/14/18/3909/pdf?version=1663730679)**

Bioabsorbable Carboxymethyl Starch–Calcium Ionic Assembly Powder as a Hemostatic Agent (/2073-4360/14/18/3909)

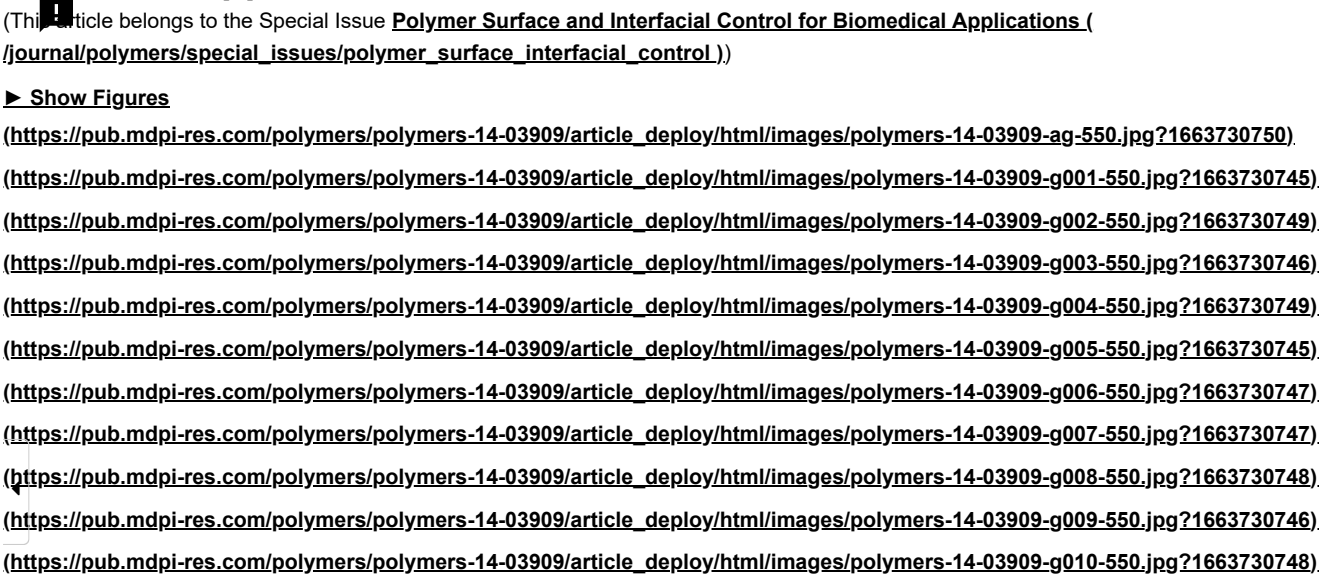
by
Young-Gwang Ko (https://sciprofiles.com/profile/author/NU1JY3ZVSzdORHYxZlFLdnFpUlc0V2NGMWpNYnJMNE43WS9KSVhyaGkzbz0=?utm_
,
Byeong Nam Kim (https://sciprofiles.com/profile/author/NlREMk9lTERhUWgvclZWUVZkUDgwNE5uWnM5cjBlcEpqVldVMXRna2xJVT0=?utm_s
,
Eun Jin Kim (https://sciprofiles.com/profile/author/M2w4bUtadWk2ZS9lbEsxOGVqenl4bTUwKzdUZ2F3TXRGU1VaMEl6ajQ5Zz0=?utm_source=
,
Ho Yun Chung (https://sciprofiles.com/profile/1603317?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Seong Yong Park (https://sciprofiles.com/profile/author/RENTQ2JCd2lvOStCeUpmY2VrQkZZWXVXODNoQmdtVDhldkRvcXowek9RMD0=?utm_
,
Young-Jin Kim (https://sciprofiles.com/profile/445955?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Oh Hyeong Kwon (https://sciprofiles.com/profile/2016032?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3909; https://doi.org/10.3390/polym14183909 (https://doi.org/10.3390/polym14183909) - 19 Sep 2022
Cited by 3 (/2073-4360/14/18/3909#metrics) | Viewed by 1760

Back to TopTop

Abstract In contrast to hemostatic fabrics, foams, and gels, hemostatic spray powders may be conveniently applied on narrow and complex bleeding sites. However, powdered hemostatic agents are easily desorbed from the bleeding surface because of blood flow, which seriously decreases their hemostatic function. In **[...] Read more.**

(This article belongs to the Special Issue **Polymer Surface and Interfacial Control for Biomedical Applications (/journal/polymers/special_issues/polymer_surface_interfacial_control)**)

► Show Figures



Open Access Article (/2073-4360/14/18/3908/pdf?version=1669794691)

Electroactive Oxidized Alginate/Gelatin/MXene ($Ti_3C_2T_x$) Composite Hydrogel with Improved Biocompatibility and Self-Healing Property (/2073-4360/14/18/3908)

by Hui Zhu (https://sciprofiles.com/profile/2216041?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Weitao Dai (https://sciprofiles.com/profile/author/L2ZuQWNSc2RVY0k2TWdBWVk1Vlp4RFY1WEc4ejMvOGlKckw2Q21tVGdMQT0=?utm_sourc , Liming Wang (https://sciprofiles.com/profile/author/MmlwUDhBMHBPeDE3UGRWbmV5elNMUU5TUkNoQXFKRElFY0JRV29qR0EzYz0=?utm_s , Cong Yao (https://sciprofiles.com/profile/author/YWhWdm16NnVTUkhRQ2hDNHc1RlNHSnRsaW1WY0d3TXpKRitMQnVjMFYxND0=?utm_sourc , Chenxi Wang (https://sciprofiles.com/profile/author/NXRrSlM1S2U4UDdJVlFTNXVDeFJQRWN1d0FxajM3ZFVzd04zaTlOSVdwND0=?utm_sourc , Bingsong Gu (https://sciprofiles.com/profile/author/dHhiVWJ5T2Q3bmFCdHV3YWp4UUEvUVJWRE0zUWFkTlhYR0xQWVhlSnN6QT0=?utm_sc , Dichen Li (https://sciprofiles.com/profile/369511?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Jiankang He (https://sciprofiles.com/profile/201786?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3908; https://doi.org/10.3390/polym14183908 (https://doi.org/10.3390/polym14183908) - 19 Sep 2022

Cited by 7 (/2073-4360/14/18/3908#metrics) | Viewed by 2432 | Correction (/2073-4360/14/23/5212)

Abstract Conductive hydrogels (CHs) have shown promising potential applied as wearable or epidermal sensors owing to their mechanical adaptability and similarity to natural tissues. However, it remains a great challenge to develop an integrated hydrogel combining outstanding conductive, self-healing and biocompatible performances with simple **[...] Read more.**

(This article belongs to the Special Issue **Current Trends in Polymeric Hydrogels for Tissue Engineering (/journal/polymers/special_issues/poly_hydrogels_tissue_eng)**)

► Show Figures

Open Access Article (/2073-4360/14/18/3907/pdf?version=1663571547)

Effect of Bacterial Cellulose Plasma Treatment on the Biological Activity of Ag Nanoparticles Deposited Using Magnetron Deposition (/2073-4360/14/18/3907)

by Alexander Vasil'kov (https://sciprofiles.com/profile/1050035?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Alexander Budnikov (https://sciprofiles.com/profile/2347269?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Tatiana Gromovykh (https://sciprofiles.com/profile/author/UVhoRWQvcnlrMVJTZ3NtTVF0QTkwTGEyWkpSSWFiOWU5eWdYK0w4d0p6OD0=?u , Marina Pigaleva (https://sciprofiles.com/profile/2464563?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Vera Sadykova (https://sciprofiles.com/profile/542365?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Natalia Arkharova (https://sciprofiles.com/profile/author/d3dVT1Z6QlkrWWVwdVdsV3Q5YTI4RUVuNmZIMjlPWWwvMk1OU3pKNlhrTT0=?utm_s
and
Alexander Naumkin (https://sciprofiles.com/profile/485144?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3907; https://doi.org/10.3390/polym14183907 (https://doi.org/10.3390/polym14183907) - 19 Sep 2022
Cited by 5 (/2073-4360/14/18/3907#metrics) | Viewed by 1528

Abstract New functional medical materials with antibacterial activity based on biocompatible bacterial cellulose (BC) and Ag nanoparticles (Ag NPs) were obtained. Bacterial cellulose films were prepared by stationary liquid-phase cultivation of the *Gluconacetobacter hansenii* strain GH-1/2008 in Hestrin–Schramm medium with glucose as a carbon **[...] Read more.**
(This article belongs to the Special Issue Advanced Polymer Simulation and Processing (/journal/polymers/special_issues/Polym_Simul_Process))

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03907/article_deploy/html/images/polymers-14-03907-ag-550.jpg?1663571657)
(https://pub.mdpi-res.com/polymers/polymers-14-03907/article_deploy/html/images/polymers-14-03907-g001-550.jpg?1663571651)
(https://pub.mdpi-res.com/polymers/polymers-14-03907/article_deploy/html/images/polymers-14-03907-g002-550.jpg?1663571657)
(https://pub.mdpi-res.com/polymers/polymers-14-03907/article_deploy/html/images/polymers-14-03907-g003-550.jpg?1663571649)
(https://pub.mdpi-res.com/polymers/polymers-14-03907/article_deploy/html/images/polymers-14-03907-g004-550.jpg?1663571646)
(https://pub.mdpi-res.com/polymers/polymers-14-03907/article_deploy/html/images/polymers-14-03907-g005-550.jpg?1663571638)
(https://pub.mdpi-res.com/polymers/polymers-14-03907/article_deploy/html/images/polymers-14-03907-g006-550.jpg?1663571651)
(https://pub.mdpi-res.com/polymers/polymers-14-03907/article_deploy/html/images/polymers-14-03907-g007-550.jpg?1663571641)
(https://pub.mdpi-res.com/polymers/polymers-14-03907/article_deploy/html/images/polymers-14-03907-g008-550.jpg?1663571642)

Open Access Article (/2073-4360/14/18/3906/pdf?version=1663569566)

Application of Ensemble Machine Learning Methods to Estimate the Compressive Strength of Fiber-Reinforced Nano-Silica Modified Concrete (/2073-4360/14/18/3906)

by Madiha Anjum (https://sciprofiles.com/profile/2984959?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Kaffayatullah Khan (https://sciprofiles.com/profile/345975?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Waqas Ahmad (https://sciprofiles.com/profile/1543897?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Ayaz Ahmad (https://sciprofiles.com/profile/2150840?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Muhammad Nasir Amin (https://sciprofiles.com/profile/189266?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Afnan Nafees (https://sciprofiles.com/profile/1614840?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3906; https://doi.org/10.3390/polym14183906 (https://doi.org/10.3390/polym14183906) - 19 Sep 2022
Cited by 5 (/2073-4360/14/18/3906#metrics) | Viewed by 1283

Abstract In this study, compressive strength (CS) of fiber-reinforced nano-silica concrete (FRNSC) was anticipated using ensemble machine learning (ML) approaches. Four types of ensemble ML methods were employed, including gradient boosting, random forest, bagging regressor, and AdaBoost regressor, to achieve the study's aims. The **[...] Read more.**
(This article belongs to the Special Issue Fiber-Reinforced Composite (/journal/polymers/special_issues/Fiber_Reinforced_Compos))

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03906/article_deploy/html/images/polymers-14-03906-g001-550.jpg?1663569666)
(https://pub.mdpi-res.com/polymers/polymers-14-03906/article_deploy/html/images/polymers-14-03906-g002-550.jpg?1663569644)
(https://pub.mdpi-res.com/polymers/polymers-14-03906/article_deploy/html/images/polymers-14-03906-g003-550.jpg?1663569637)
(https://pub.mdpi-res.com/polymers/polymers-14-03906/article_deploy/html/images/polymers-14-03906-g004-550.jpg?1663569646)
(https://pub.mdpi-res.com/polymers/polymers-14-03906/article_deploy/html/images/polymers-14-03906-g005-550.jpg?1663569672)
(https://pub.mdpi-res.com/polymers/polymers-14-03906/article_deploy/html/images/polymers-14-03906-g006-550.jpg?1663569638)
(https://pub.mdpi-res.com/polymers/polymers-14-03906/article_deploy/html/images/polymers-14-03906-g007-550.jpg?1663569652)
(https://pub.mdpi-res.com/polymers/polymers-14-03906/article_deploy/html/images/polymers-14-03906-g008-550.jpg?1663569641)
(https://pub.mdpi-res.com/polymers/polymers-14-03906/article_deploy/html/images/polymers-14-03906-g009-550.jpg?1663569636)
(https://pub.mdpi-res.com/polymers/polymers-14-03906/article_deploy/html/images/polymers-14-03906-g010-550.jpg?1663569660)
(https://pub.mdpi-res.com/polymers/polymers-14-03906/article_deploy/html/images/polymers-14-03906-g011-550.jpg?1663569674)
(https://pub.mdpi-res.com/polymers/polymers-14-03906/article_deploy/html/images/polymers-14-03906-g012-550.jpg?1663569671)
(https://pub.mdpi-res.com/polymers/polymers-14-03906/article_deploy/html/images/polymers-14-03906-g013-550.jpg?1663569649)
(https://pub.mdpi-res.com/polymers/polymers-14-03906/article_deploy/html/images/polymers-14-03906-g014-550.jpg?1663569657)
(https://pub.mdpi-res.com/polymers/polymers-14-03906/article_deploy/html/images/polymers-14-03906-g015-550.jpg?1663569647)
(https://pub.mdpi-res.com/polymers/polymers-14-03906/article_deploy/html/images/polymers-14-03906-g016-550.jpg?1663569655)
(https://pub.mdpi-res.com/polymers/polymers-14-03906/article_deploy/html/images/polymers-14-03906-g017-550.jpg?1663569669)

Back to TopTop

Open Access Article (/2073-4360/14/18/3905/pdf?version=1663567127)

Effect of Polycarboxylic Grinding Aid on Cement Chemistry and Properties (/2073-4360/14/18/3905)

by Yanyu Yang (https://sciprofiles.com/profile/1064887?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Guanglin Li (https://sciprofiles.com/profile/author/UXNmcFRycks2K1Yrb3RHQWRYV1NXQ3JwKzN6L3JxVG5PaVVlMjdxcGlyYz0=?utm_source, Weijun Yang (https://sciprofiles.com/profile/2009267?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Junfeng Guan (https://sciprofiles.com/profile/878398?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3905; https://doi.org/10.3390/polym14183905 (https://doi.org/10.3390/polym14183905) - 19 Sep 2022
Viewed by 1570

Abstract In view of the disadvantages of polycarboxylic acid grinding aids, such as poor reinforcement effect and cumbersome synthesis process, a new type of polycarboxylic acid grinding aid was prepared to meet the requirements of multifunctional admixture for cement concrete. The polycarboxylate grinding aid **[...] Read more.**

(This article belongs to the Special Issue **Fiber-Reinforced Composite (/journal/polymers/special_issues/Fiber_Reinforced_Compos)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03905/article_deploy/html/images/polymers-14-03905-g001-550.jpg?1663567212)

(https://pub.mdpi-res.com/polymers/polymers-14-03905/article_deploy/html/images/polymers-14-03905-g002-550.jpg?1663567215)

(https://pub.mdpi-res.com/polymers/polymers-14-03905/article_deploy/html/images/polymers-14-03905-g003-550.jpg?1663567214)

(https://pub.mdpi-res.com/polymers/polymers-14-03905/article_deploy/html/images/polymers-14-03905-g004-550.jpg?1663567211)

(https://pub.mdpi-res.com/polymers/polymers-14-03905/article_deploy/html/images/polymers-14-03905-g005-550.jpg?1663567205)

(https://pub.mdpi-res.com/polymers/polymers-14-03905/article_deploy/html/images/polymers-14-03905-g006-550.jpg?1663567216)

(https://pub.mdpi-res.com/polymers/polymers-14-03905/article_deploy/html/images/polymers-14-03905-g007-550.jpg?1663567213)

(https://pub.mdpi-res.com/polymers/polymers-14-03905/article_deploy/html/images/polymers-14-03905-g008a-550.jpg?1663567210)

(https://pub.mdpi-res.com/polymers/polymers-14-03905/article_deploy/html/images/polymers-14-03905-g008b-550.jpg?1663567216)

Open Access Article (/2073-4360/14/18/3904/pdf?version=1663552989)

Synthesis and Characterization of a Self-Polycondensation Diazaphthalanone Monomer and Its Polymers from Polycondensation Reactions (/2073-4360/14/18/3904)

by Xin Liu (https://sciprofiles.com/profile/author/S2hCVTJ2RmF2aEhRMC8vS1hXbElweDRleHNaZDZDWXd0QWd2RU1GcXo3OD0=?utm_source=, Xiaozhou Zhang (https://sciprofiles.com/profile/1360801?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Jiawei Jiang (https://sciprofiles.com/profile/author/RHRWdkJHdlBlWXJlMm9nQll1c0ljbk9KeGU5d0JFd2VFYm9SZ0NEOGt5VT0=?utm_source=, Hongge Jia (https://sciprofiles.com/profile/818754?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Xigao Jian (https://sciprofiles.com/profile/462065?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Jinyan Wang (https://sciprofiles.com/profile/605875?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3904; https://doi.org/10.3390/polym14183904 (https://doi.org/10.3390/polym14183904) - 19 Sep 2022
Viewed by 1488

Abstract Polyether ketone (PEK) plastics are linear thermoplastic polymers connected by at least one ether bond and at least one ketone bond on the aryl group. The reason for their excellent heat resistance, rigidity, and mechanical strength is that their main molecular chain contains **[...] Read more.**

(This article belongs to the Special Issue **Thermal Characterization and Applications of Polymer Composites (/journal/polymers/special_issues/therm_characterization_apps_polym_compos)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03904/article_deploy/html/images/polymers-14-03904-g001-550.jpg?1663565556)

(https://pub.mdpi-res.com/polymers/polymers-14-03904/article_deploy/html/images/polymers-14-03904-g002-550.jpg?1663565549)

(https://pub.mdpi-res.com/polymers/polymers-14-03904/article_deploy/html/images/polymers-14-03904-g003-550.jpg?1663565545)

(https://pub.mdpi-res.com/polymers/polymers-14-03904/article_deploy/html/images/polymers-14-03904-g004-550.jpg?1663565557)

(https://pub.mdpi-res.com/polymers/polymers-14-03904/article_deploy/html/images/polymers-14-03904-g005-550.jpg?1663565543)

(https://pub.mdpi-res.com/polymers/polymers-14-03904/article_deploy/html/images/polymers-14-03904-g006-550.jpg?1663565553)

(https://pub.mdpi-res.com/polymers/polymers-14-03904/article_deploy/html/images/polymers-14-03904-g007-550.jpg?1663565561)

(https://pub.mdpi-res.com/polymers/polymers-14-03904/article_deploy/html/images/polymers-14-03904-g008-550.jpg?1663565554)

(https://pub.mdpi-res.com/polymers/polymers-14-03904/article_deploy/html/images/polymers-14-03904-g009-550.jpg?1663565544)

(https://pub.mdpi-res.com/polymers/polymers-14-03904/article_deploy/html/images/polymers-14-03904-g010-550.jpg?1663565551)

(https://pub.mdpi-res.com/polymers/polymers-14-03904/article_deploy/html/images/polymers-14-03904-sch001-550.jpg?1663565558)

(https://pub.mdpi-res.com/polymers/polymers-14-03904/article_deploy/html/images/polymers-14-03904-sch002-550.jpg?1663565552)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03904/article_deploy/html/images/polymers-14-03904-sch003-550.jpg?1663565547)

(https://pub.mdpi-res.com/polymers/polymers-14-03904/article_deploy/html/images/polymers-14-03904-sch004-550.jpg?1663565559)

Open Access Article (/2073-4360/14/18/3903/pdf?version=1663497485)

Insignificant Difference in Biocompatibility of Regenerated Silk Fibroin Prepared with Ternary Reagent Compared with Regenerated Silk Fibroin Prepared with Lithium Bromide (/2073-4360/14/18/3903)

by

Guotao Cheng (https://sciprofiles.com/profile/author/bHNUL3RtY0pqZ3NqamVZMEg1MFJDN1R5SGMxNGpjY3ovOW0rajl4MjlOcz0=?utm_sour

,

Xin Wang (https://sciprofiles.com/profile/2159482?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Mengqiu Wu (https://sciprofiles.com/profile/author/MmlzYU05S1RDYjlWdERPdHVzaUp5MTFkS3plNUpMS0tMdHd4UDlsOUpxYz0=?utm_source

,

Siyuan Wu (https://sciprofiles.com/profile/author/dFc2eXlHcGw2Z0dNY25KVFBQcXlXV1UwTmNPSFlDcDczUGh2TUZhZnl2QT0=?utm_source=

,

Lan Cheng (https://sciprofiles.com/profile/author/eUVHWGRLTVQ2U3RNU0QxZ1RZRjJ6dFF4L3BqVmJRRnZKa254SnlwSVVCZz0=?utm_source

,

Xiaoning Zhang (https://sciprofiles.com/profile/501431?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and

Fangyin Dai (https://sciprofiles.com/profile/327984?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3903; **https://doi.org/10.3390/polym14183903 (https://doi.org/10.3390/polym14183903)** - 18 Sep 2022

Cited by 2 (/2073-4360/14/18/3903#metrics) | Viewed by 2107

Abstract *Bombyx mori* silk fibroin (SF) is widely used in the field of biomaterials due to its excellent biocompatibility and mechanical properties. However, SF cannot be used directly in many applications and needs to be dissolved first. Lithium bromide (LiBr) is a traditional solvent **[...] Read more.**

(This article belongs to the Special Issue **Advances in Fiber Materials and Manufacturing (/journal/polymers/special_issues/26C11F76N6)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03903/article_deploy/html/images/polymers-14-03903-g001-550.jpg?1663809765)

(https://pub.mdpi-res.com/polymers/polymers-14-03903/article_deploy/html/images/polymers-14-03903-g002-550.jpg?1663809765)

(https://pub.mdpi-res.com/polymers/polymers-14-03903/article_deploy/html/images/polymers-14-03903-g003-550.jpg?1663809763)

(https://pub.mdpi-res.com/polymers/polymers-14-03903/article_deploy/html/images/polymers-14-03903-g004-550.jpg?1663809766)

(https://pub.mdpi-res.com/polymers/polymers-14-03903/article_deploy/html/images/polymers-14-03903-g005-550.jpg?1663809769)

(https://pub.mdpi-res.com/polymers/polymers-14-03903/article_deploy/html/images/polymers-14-03903-g006-550.jpg?1663809762)

(https://pub.mdpi-res.com/polymers/polymers-14-03903/article_deploy/html/images/polymers-14-03903-g007-550.jpg?1663809767)

Open Access Article (/2073-4360/14/18/3902/pdf?version=1663667486)

New Self-Repairing System for Brittle Matrix Composites Using Corrosion-Induced Intelligent Fiber (/2073-4360/14/18/3902)

by

Yuyan Sun (https://sciprofiles.com/profile/author/ekpvNTVKZEJNNWJEd2JZSENwMElaVnN4bVFwRXEyYTBuRTFwKzR0WG9rST0=?utm_sour

,

Dongkai Wang (https://sciprofiles.com/profile/author/TjM5SDU2Q1JNcUdzUWhxRm5Cc1lUOCsxZWFDaU9yMjNMc3p5bWR6V1BOYz0=?utm_s

,

Zuquan Jin (https://sciprofiles.com/profile/707827?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Jianwei Sun (https://sciprofiles.com/profile/1519906?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and

Ziguo Wang (https://sciprofiles.com/profile/author/bnZGd3VhUkNrUnlDMnVraWdJT21helpKQXhCZXRITS9wd2FJRlpVYlNvcz0=?utm_source=r

Polymers **2022**, *14*(18), 3902; **https://doi.org/10.3390/polym14183902 (https://doi.org/10.3390/polym14183902)** - 18 Sep 2022

Cited by 1 (/2073-4360/14/18/3902#metrics) | Viewed by 1092

Abstract Brittle matrix composites such as concrete are susceptible to damage in the form of cracks. Most of the current self-repair and self-healing techniques have repair limits on crack widths or high costs of an external stimulator, or have an unfavorable effect on the **[...] Read more.**

(This article belongs to the Special Issue **Fiber-Reinforced Polymer Composites for Building and Bridge Applications (/journal/polymers/special_issues/Fiber_Rein)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03902/article_deploy/html/images/polymers-14-03902-g001-550.jpg?1663748666)

(https://pub.mdpi-res.com/polymers/polymers-14-03902/article_deploy/html/images/polymers-14-03902-g002-550.jpg?1663748659)

(https://pub.mdpi-res.com/polymers/polymers-14-03902/article_deploy/html/images/polymers-14-03902-g003-550.jpg?1663748662)

(https://pub.mdpi-res.com/polymers/polymers-14-03902/article_deploy/html/images/polymers-14-03902-g004-550.jpg?1663748664)

(https://pub.mdpi-res.com/polymers/polymers-14-03902/article_deploy/html/images/polymers-14-03902-g005-550.jpg?1663748663)

Open Access Article (/2073-4360/14/18/3901/pdf?version=1663492879)

Two-Stage Evolution of Gamma-Phase Spherulites of Poly (Vinylidene Fluoride) Induced by Alkylammonium Salt (/2073-4360/14/18/3901)

Back to TopTop

by Takuaki Miyashita (https://sciprofiles.com/profile/2358473?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Hiroshi Saito (https://sciprofiles.com/profile/362538?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3901; https://doi.org/10.3390/polym14183901 (https://doi.org/10.3390/polym14183901) - 18 Sep 2022
Cited by 1 (/2073-4360/14/18/3901#metrics) | Viewed by 1149

Abstract We investigated the evolution of the γ-phase spherulites of poly(vinylidene fluoride) (PVDF) added to 1 wt% of tetrabutylammonium hydrogen sulfate during the isothermal crystallization at 165 °C through polarized optical microscopy and light scattering measurements. Optically isotropic domains grew, and then optical anisotropy **[...] Read more.**

(This article belongs to the Special Issue **Crystallization in Polymer Science (/journal/polymers/special_issues/Crystallization_Polymer_Science)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03901/article_deploy/html/images/polymers-14-03901-g001-550.jpg?1663492992)
(https://pub.mdpi-res.com/polymers/polymers-14-03901/article_deploy/html/images/polymers-14-03901-g002-550.jpg?1663492976)
(https://pub.mdpi-res.com/polymers/polymers-14-03901/article_deploy/html/images/polymers-14-03901-g003-550.jpg?1663492984)
(https://pub.mdpi-res.com/polymers/polymers-14-03901/article_deploy/html/images/polymers-14-03901-g004-550.jpg?1663492975)
(https://pub.mdpi-res.com/polymers/polymers-14-03901/article_deploy/html/images/polymers-14-03901-g005-550.jpg?1663492972)
(https://pub.mdpi-res.com/polymers/polymers-14-03901/article_deploy/html/images/polymers-14-03901-g006-550.jpg?1663492987)
(https://pub.mdpi-res.com/polymers/polymers-14-03901/article_deploy/html/images/polymers-14-03901-g007-550.jpg?1663492981)
(https://pub.mdpi-res.com/polymers/polymers-14-03901/article_deploy/html/images/polymers-14-03901-g008-550.jpg?1663492980)
(https://pub.mdpi-res.com/polymers/polymers-14-03901/article_deploy/html/images/polymers-14-03901-g009-550.jpg?1663492978)
(https://pub.mdpi-res.com/polymers/polymers-14-03901/article_deploy/html/images/polymers-14-03901-g010-550.jpg?1663492989)

Open Access Article (/2073-4360/14/18/3900/pdf?version=1663569146)

Design and Performance Evaluation of Polymer Matrix Composite Helical Springs (/2073-4360/14/18/3900)

by Ling Chen (https://sciprofiles.com/profile/author/L3RjNndPeldBTFZueGFHWDJ6WnlMYUc2bmxLbVdnUE5ONVJyd2ZCNnNJVT0=?utm_source, Liwei Wu (https://sciprofiles.com/profile/1074739?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Hongjun Fu (https://sciprofiles.com/profile/2414732?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Youhong Tang (https://sciprofiles.com/profile/293717?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3900; https://doi.org/10.3390/polym14183900 (https://doi.org/10.3390/polym14183900) - 18 Sep 2022
Viewed by 1135

Abstract Helical springs are indispensable mechanical parts widely used in industry. Lightweight is one of the development trends of helical springs. In this study, three kinds of lightweight polymer matrix composite helical springs (PMCHSs) with unidirectional, multistrand, and wrapped textile structural reinforcement (PMCHS-U, PMCHS-M, **[...] Read more.**

(This article belongs to the Special Issue **Advances in Polymer Matrix Composites: Synthesis, Characterization and Simulation (/journal/polymers/special_issues/simul_polym_compos)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03900/article_deploy/html/images/polymers-14-03900-g001-550.jpg?1663569229)
(https://pub.mdpi-res.com/polymers/polymers-14-03900/article_deploy/html/images/polymers-14-03900-g002-550.jpg?1663569227)
(https://pub.mdpi-res.com/polymers/polymers-14-03900/article_deploy/html/images/polymers-14-03900-g003-550.jpg?1663569221)
(https://pub.mdpi-res.com/polymers/polymers-14-03900/article_deploy/html/images/polymers-14-03900-g004-550.jpg?1663569223)
(https://pub.mdpi-res.com/polymers/polymers-14-03900/article_deploy/html/images/polymers-14-03900-g005-550.jpg?1663569231)
(https://pub.mdpi-res.com/polymers/polymers-14-03900/article_deploy/html/images/polymers-14-03900-g006-550.jpg?1663569225)
(https://pub.mdpi-res.com/polymers/polymers-14-03900/article_deploy/html/images/polymers-14-03900-g007-550.jpg?1663569230)

Open Access Article (/2073-4360/14/18/3899/pdf?version=1663751615)

Properties and Hydrolysis Behavior of Celluloses of Different Origin (/2073-4360/14/18/3899)

by Ekaterina I. Kashcheyeva (https://sciprofiles.com/profile/1767705?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nam, Yulia A. Gismatulina (https://sciprofiles.com/profile/829926?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Galina F. Mironova (https://sciprofiles.com/profile/903882?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Evgenia K. Gladysheva (https://sciprofiles.com/profile/3005095?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Vera V. Budaeva (https://sciprofiles.com/profile/869061?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Ekaterina A. Skiba (https://sciprofiles.com/profile/3064499?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Back to TopTop

Vladimir N. Zolotuhin (https://sciprofiles.com/profile/author/dGtMeEdYN1JWZVgrc2RHbnRTNGE4Q3hTd2VVOVNvWHJreS9SZVZlYW50QT0=?u
,
Nadezhda A. Shavyrkina (https://sciprofiles.com/profile/2935300?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name
,
Aleksey N. Kortusov (https://sciprofiles.com/profile/author/dFpGeUsxSThZNS9DaFNYaytGUFc2NElDUWVwVERmaGFwSU1sdEpha3k2OD0=?u
and
Anna A. Korchagina (https://sciprofiles.com/profile/author/Q1A1MVNSQTFOdDJtaHVGRGFUSmV3bUZuNE13ZWFmS3JtUkh5S3orc0Npcz0=?u
Polymers **2022**, *14*(18), 3899; **https://doi.org/10.3390/polym14183899 (https://doi.org/10.3390/polym14183899)** - 18 Sep 2022
Cited by 4 (/2073-4360/14/18/3899#metrics) | Viewed by 1250

Abstract The present paper is a fundamental study on the physicochemical properties and hydrolysis behavior of cellulose samples differing in origin: bacterial, synthetic, and vegetal. Bacterial cellulose was produced by *Medusomyces gisevii* Sa-12 in an enzymatic hydrolyzate derived from oat-hull pulp. Synthetic cellulose was **[...] Read more.**
(This article belongs to the Special Issue **Biopolymers from Agricultural Waste (/journal/polymers/special_issues/biopolymers_agricultural_waste)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03899/article_deploy/html/images/polymers-14-03899-ag-550.jpg?1663751694)

(https://pub.mdpi-res.com/polymers/polymers-14-03899/article_deploy/html/images/polymers-14-03899-g001-550.jpg?1663751687)

(https://pub.mdpi-res.com/polymers/polymers-14-03899/article_deploy/html/images/polymers-14-03899-g002-550.jpg?1663751692)

(https://pub.mdpi-res.com/polymers/polymers-14-03899/article_deploy/html/images/polymers-14-03899-g003-550.jpg?1663751686)

(https://pub.mdpi-res.com/polymers/polymers-14-03899/article_deploy/html/images/polymers-14-03899-g004-550.jpg?1663751693)

Open Access Article **(/2073-4360/14/18/3898/pdf?version=1663490106)**

Bone Healing in Rat Segmental Femur Defects with Graphene-PCL-Coated Borate-Based Bioactive Glass Scaffolds (/2073-4360/14/18/3898)

by Ozgur Basal (https://sciprofiles.com/profile/2132773?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Ozlem Ozmen (https://sciprofiles.com/profile/2177419?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Aylin M. Deliormanlı (https://sciprofiles.com/profile/2149538?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3898; **https://doi.org/10.3390/polym14183898 (https://doi.org/10.3390/polym14183898)** - 18 Sep 2022
Cited by 1 (/2073-4360/14/18/3898#metrics) | Viewed by 1256

Abstract Bone is a continually regenerating tissue with the ability to heal after fractures, though healing significant damage requires intensive surgical treatment. In this study, borate-based 13-93B3 bioactive glass scaffolds were prepared though polymer foam replication and coated with a graphene-containing poly (ε-caprolactone) (PCL) **[...] Read more.**
(This article belongs to the Special Issue **Biomaterials for Tissue Engineering and Regeneration (/journal/polymers/special_issues/Biomaterials_Tissue_Engineering_and_Regeneration)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03898/article_deploy/html/images/polymers-14-03898-ag-550.jpg?1663656276)

(https://pub.mdpi-res.com/polymers/polymers-14-03898/article_deploy/html/images/polymers-14-03898-g001-550.jpg?1663490193)

(https://pub.mdpi-res.com/polymers/polymers-14-03898/article_deploy/html/images/polymers-14-03898-g002-550.jpg?1663490213)

(https://pub.mdpi-res.com/polymers/polymers-14-03898/article_deploy/html/images/polymers-14-03898-g003-550.jpg?1663490211)

(https://pub.mdpi-res.com/polymers/polymers-14-03898/article_deploy/html/images/polymers-14-03898-g004-550.jpg?1663490191)

(https://pub.mdpi-res.com/polymers/polymers-14-03898/article_deploy/html/images/polymers-14-03898-g005-550.jpg?1663490208)

(https://pub.mdpi-res.com/polymers/polymers-14-03898/article_deploy/html/images/polymers-14-03898-g006-550.jpg?1663490203)

(https://pub.mdpi-res.com/polymers/polymers-14-03898/article_deploy/html/images/polymers-14-03898-g007a-550.jpg?1663490195)

(https://pub.mdpi-res.com/polymers/polymers-14-03898/article_deploy/html/images/polymers-14-03898-g007b-550.jpg?1663490198)

(https://pub.mdpi-res.com/polymers/polymers-14-03898/article_deploy/html/images/polymers-14-03898-g008-550.jpg?1663490201)

(https://pub.mdpi-res.com/polymers/polymers-14-03898/article_deploy/html/images/polymers-14-03898-g009-550.jpg?1663490206)

(https://pub.mdpi-res.com/polymers/polymers-14-03898/article_deploy/html/images/polymers-14-03898-g010-550.jpg?1663490187)

(https://pub.mdpi-res.com/polymers/polymers-14-03898/article_deploy/html/images/polymers-14-03898-g011-550.jpg?1663490190)

Open Access Article **(/2073-4360/14/18/3897/pdf?version=1663489690)**

The Effects of Carbon–Silica Dual-Phase Filler on the Crosslink Structure of Natural Rubber (/2073-4360/14/18/3897)

by Jingyi Wang (https://sciprofiles.com/profile/1968285?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Hongbing Jia (https://sciprofiles.com/profile/2407129?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3897; **https://doi.org/10.3390/polym14183897 (https://doi.org/10.3390/polym14183897)** - 18 Sep 2022
Cited by 4 (/2073-4360/14/18/3897#metrics) | Viewed by 1161

Abstract Carbon–silica dual-phase filler (CSDPF)/natural rubber (NR) vulcanizate was prepared by mechanical blending, followed by a hot-press vulcanization. The dispersion of CSDPF in the NR matrix and the effects of CSDPF on the filler–rubber interaction and structure of the rubber network were studied. Scanning **[...] Read more.**

Back to TopTop

(This article belongs to the Special Issue **Carbonaceous Fillers-Reinforced Polymer Matrix Composite for Multi-Functional Applications II (/journal/polymers/special_issues/Carb_Fill_Rein_Poly_II)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03897/article_deploy/html/images/polymers-14-03897-g001-550.jpg?1663489760)

(https://pub.mdpi-res.com/polymers/polymers-14-03897/article_deploy/html/images/polymers-14-03897-g002-550.jpg?1663489763)

(https://pub.mdpi-res.com/polymers/polymers-14-03897/article_deploy/html/images/polymers-14-03897-g003-550.jpg?1663489757)

(https://pub.mdpi-res.com/polymers/polymers-14-03897/article_deploy/html/images/polymers-14-03897-g004-550.jpg?1663489761)

Open Access Article **(/2073-4360/14/18/3896/pdf?version=1683508939)**

Effect of Fuel Preheating on Engine Characteristics of Waste Animal Fat-Oil Biodiesel in Compression Ignition Engine (/2073-4360/14/18/3896)

by

Gokul Raghavendra Srinivasan (https://sciprofiles.com/profile/747401?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_

,

Ranjitha Jambulingam (https://sciprofiles.com/profile/2284171?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

,

Amel Gacem (https://sciprofiles.com/profile/2060660?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Akil Ahmad (https://sciprofiles.com/profile/1153549?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Javed Khan Bhutto (https://sciprofiles.com/profile/1567338?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Krishna Kumar Yadav (https://sciprofiles.com/profile/114541?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Amine Mezni (https://sciprofiles.com/profile/546373?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Omar Khulaif R. Alharbi (https://sciprofiles.com/profile/2425444?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name

,

Saiful Islam (https://sciprofiles.com/profile/1247868?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Yongtae Ahn (https://sciprofiles.com/profile/2143157?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Byong-Hun Jeon (https://sciprofiles.com/profile/334488?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3896; **https://doi.org/10.3390/polym14183896 (https://doi.org/10.3390/polym14183896)** - 18 Sep 2022

Cited by 3 (/2073-4360/14/18/3896#metrics) | Viewed by 1509

Abstract The present study aims at understanding the effects of fuel preheating on engine characteristics of waste animal fat-oil (WAF-O) biodiesel in a single-cylinder CI engine, with the preheating technique proposed as an effective means for enhancing the fuel properties. To understand the effects **[...]**

Read more.

(This article belongs to the Special Issue **Advanced Polymers for Energy and Environment Science (/journal/polymers/special_issues/Adv_Polym_Energy_Environ_Sci)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03896/article_deploy/html/images/polymers-14-03896-g001-550.jpg?1683509027)

(https://pub.mdpi-res.com/polymers/polymers-14-03896/article_deploy/html/images/polymers-14-03896-g002-550.jpg?1683509026)

(https://pub.mdpi-res.com/polymers/polymers-14-03896/article_deploy/html/images/polymers-14-03896-g003-550.jpg?1683509025)

(https://pub.mdpi-res.com/polymers/polymers-14-03896/article_deploy/html/images/polymers-14-03896-g004a-550.jpg?1683509020)

(https://pub.mdpi-res.com/polymers/polymers-14-03896/article_deploy/html/images/polymers-14-03896-g004b-550.jpg?1683509029)

(https://pub.mdpi-res.com/polymers/polymers-14-03896/article_deploy/html/images/polymers-14-03896-g005-550.jpg?1683509015)

(https://pub.mdpi-res.com/polymers/polymers-14-03896/article_deploy/html/images/polymers-14-03896-g006-550.jpg?1683509017)

(https://pub.mdpi-res.com/polymers/polymers-14-03896/article_deploy/html/images/polymers-14-03896-g007-550.jpg?1683509018)

(https://pub.mdpi-res.com/polymers/polymers-14-03896/article_deploy/html/images/polymers-14-03896-g008-550.jpg?1683509031)

(https://pub.mdpi-res.com/polymers/polymers-14-03896/article_deploy/html/images/polymers-14-03896-g009a-550.jpg?1683509032)

(https://pub.mdpi-res.com/polymers/polymers-14-03896/article_deploy/html/images/polymers-14-03896-g009b-550.jpg?1683509036)

(https://pub.mdpi-res.com/polymers/polymers-14-03896/article_deploy/html/images/polymers-14-03896-g010a-550.jpg?1683509014)

(https://pub.mdpi-res.com/polymers/polymers-14-03896/article_deploy/html/images/polymers-14-03896-g010b-550.jpg?1683509034)

(https://pub.mdpi-res.com/polymers/polymers-14-03896/article_deploy/html/images/polymers-14-03896-g011a-550.jpg?1683509022)

(https://pub.mdpi-res.com/polymers/polymers-14-03896/article_deploy/html/images/polymers-14-03896-g011b-550.jpg?1683509024)

Open Access Review **(/2073-4360/14/18/3895/pdf?version=1663580588)**

Magnetic 3D-Printed Composites—Production and Applications (/2073-4360/14/18/3895)

by **Guido Ehrmann (https://sciprofiles.com/profile/1447068?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**,
Tomasz Blachowicz (https://sciprofiles.com/profile/927376?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
and
Andrea Ehrmann (https://sciprofiles.com/profile/310829?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3895; **https://doi.org/10.3390/polym14183895 (https://doi.org/10.3390/polym14183895)** - 17 Sep 2022

Cited by 5 (/2073-4360/14/18/3895#metrics) | Viewed by 2921

Back to TopTop

Abstract Three-dimensional printing enables building objects shaped with a large degree of freedom. Additional functionalities can be included by modifying the printing material, e.g., by embedding nanoparticles in the molten polymer feedstock, the resin, or the solution used for printing, respectively. Such composite materials **[...] Read more.**

(This article belongs to the Special Issue **Advanced Additive Processes and 3D Printing for Polymer Composites (/journal/polymers/special_issues/processes_3D_printing)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03895/article_deploy/html/images/polymers-14-03895-g001-550.jpg?1663580663)

(https://pub.mdpi-res.com/polymers/polymers-14-03895/article_deploy/html/images/polymers-14-03895-g002-550.jpg?1663580673)

(https://pub.mdpi-res.com/polymers/polymers-14-03895/article_deploy/html/images/polymers-14-03895-g003-550.jpg?1663580682)

(https://pub.mdpi-res.com/polymers/polymers-14-03895/article_deploy/html/images/polymers-14-03895-g004-550.jpg?1663580671)

(https://pub.mdpi-res.com/polymers/polymers-14-03895/article_deploy/html/images/polymers-14-03895-g005-550.jpg?1663580670)

(https://pub.mdpi-res.com/polymers/polymers-14-03895/article_deploy/html/images/polymers-14-03895-g006-550.jpg?1663580683)

(https://pub.mdpi-res.com/polymers/polymers-14-03895/article_deploy/html/images/polymers-14-03895-g007-550.jpg?1663580667)

(https://pub.mdpi-res.com/polymers/polymers-14-03895/article_deploy/html/images/polymers-14-03895-g008-550.jpg?1663580680)

(https://pub.mdpi-res.com/polymers/polymers-14-03895/article_deploy/html/images/polymers-14-03895-g009-550.jpg?1663580679)

(https://pub.mdpi-res.com/polymers/polymers-14-03895/article_deploy/html/images/polymers-14-03895-g010-550.jpg?1663580677)

(https://pub.mdpi-res.com/polymers/polymers-14-03895/article_deploy/html/images/polymers-14-03895-g011-550.jpg?1663580665)

(https://pub.mdpi-res.com/polymers/polymers-14-03895/article_deploy/html/images/polymers-14-03895-g012-550.jpg?1663580668)

(https://pub.mdpi-res.com/polymers/polymers-14-03895/article_deploy/html/images/polymers-14-03895-g013-550.jpg?1663580684)

Open Access Article **(/2073-4360/14/18/3894/pdf?version=1663640978)**

Synthesis and Performance Evaluation of a Novel Heat and Salt-Resistant Gel Plugging Agent (/2073-4360/14/18/3894)

by **Xuejiao Li (https://sciprofiles.com/profile/2582155?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Meilong Fu (https://sciprofiles.com/profile/author/ZUo0US95L01pckgwRDFHMFI0Rm5RNFdoNituSzJFcGhtWTE3REJRb3AzQT0=?utm_source=**, **Jie Liu (https://sciprofiles.com/profile/author/eGliZWM0MDA5QUNXd0dHWTZOWmthNnFETkZLaFNKYW42NVJFbERPSlVsdz0=?utm_source=r**, **Qi Xiao (https://sciprofiles.com/profile/author/c1VxR2t5UVYxejBjVVBQUkx4Q1ZMZTZ1MTF1Sm9KMWJZTEtCV0tmcFlEND0=?utm_source=md**, **Wenhao Tang (https://sciprofiles.com/profile/author/K0l6NHljdTNyZjVlQkdEUWFQOU1RVFFIMHZmMG5EbTkyOXdQVmYrMzFlaz0=?utm_sourc** and **Guike Yang (https://sciprofiles.com/profile/author/VkRXUDhSbjhRbjJHa3RGQTlmNHhhMGpqdDZsK08yTmZyeG84NDYzcGdaWT0=?utm_sourc**

Polymers **2022**, *14*(18), 3894; **https://doi.org/10.3390/polym14183894 (https://doi.org/10.3390/polym14183894)** - 17 Sep 2022

Cited by 1 (/2073-4360/14/18/3894#metrics) | Viewed by 1064

Abstract Tahe oil field is a typical fissure cave carbonate reservoir with a temperature of up to 120~140 °C and a total salinity of formation water of (20~25) × 10^4 mg/L. In this paper, AM/AMPS was selected as the polymer, 1, 5-dihydroxy naphthol **[...] Read more.**

(This article belongs to the Special Issue **Polymers for Oilfield Production Chemistry (/journal/polymers/special_issues/oilfield_prod)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03894/article_deploy/html/images/polymers-14-03894-g001-550.jpg?1663641057)

(https://pub.mdpi-res.com/polymers/polymers-14-03894/article_deploy/html/images/polymers-14-03894-g002-550.jpg?1663641072)

(https://pub.mdpi-res.com/polymers/polymers-14-03894/article_deploy/html/images/polymers-14-03894-g003-550.jpg?1663641071)

(https://pub.mdpi-res.com/polymers/polymers-14-03894/article_deploy/html/images/polymers-14-03894-g004-550.jpg?1663641057)

(https://pub.mdpi-res.com/polymers/polymers-14-03894/article_deploy/html/images/polymers-14-03894-g005-550.jpg?1663641054)

(https://pub.mdpi-res.com/polymers/polymers-14-03894/article_deploy/html/images/polymers-14-03894-g006-550.jpg?1663641069)

(https://pub.mdpi-res.com/polymers/polymers-14-03894/article_deploy/html/images/polymers-14-03894-g007-550.jpg?1663641073)

(https://pub.mdpi-res.com/polymers/polymers-14-03894/article_deploy/html/images/polymers-14-03894-g008-550.jpg?1663641065)

(https://pub.mdpi-res.com/polymers/polymers-14-03894/article_deploy/html/images/polymers-14-03894-g009-550.jpg?1663641053)

(https://pub.mdpi-res.com/polymers/polymers-14-03894/article_deploy/html/images/polymers-14-03894-g010-550.jpg?1663641055)

Open Access Article **(/2073-4360/14/18/3893/pdf?version=1663410831)**

A Surface Plasmon Resonance-Based Photonic Crystal Fiber Sensor for Simultaneously Measuring the Refractive Index and Temperature (/2073-4360/14/18/3893)

by **Jingao Zhang (https://sciprofiles.com/profile/2346904?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Jinhui Yuan (https://sciprofiles.com/profile/1311440?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Yuwei Qu (https://sciprofiles.com/profile/author/WmtBUyt6Q09ydVN5eWZMRWdwQW55WGwrMStHcDNSYVZ1STFYZzlZcnJSMD0=?utm_sourc**, **Shi Qiu (https://sciprofiles.com/profile/1302818?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**Back to TopTop

Chao Mei (https://sciprofiles.com/profile/2423257?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Xiaq Zhou (https://sciprofiles.com/profile/952242?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Binbin Yan (https://sciprofiles.com/profile/849574?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Qiang Wu (https://sciprofiles.com/profile/251142?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Kuiru Wang (https://sciprofiles.com/profile/2347083?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Xinzhu Sang (https://sciprofiles.com/profile/2613756?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Chongxiu Yu (https://sciprofiles.com/profile/author/QkRsc2ZiaG82aUgxS1VlYmZ4a3pqRTQyMFlrZ0EyM2NLZmxqbFpxMUhHYz0=?utm_source
Polymers **2022**, *14*(18), 3893; https://doi.org/10.3390/polym14183893 (https://doi.org/10.3390/polym14183893) - 17 Sep 2022
Cited by 5 (/2073-4360/14/18/3893#metrics) | Viewed by 1184

Abstract In this paper, a surface plasmon resonance (SPR)-based photonic crystal fiber (PCF) sensor is proposed for simultaneously measuring the refractive index (RI) and temperature. In the design, the central air hole and external surface of the proposed PCF are coated with gold films, **[...] Read more.**
(This article belongs to the Special Issue **Polymers' Role in Sensors: Resistant Solid Supports or Multi-Purpose Sensing Units? (/journal/polymers/special_issues/Poly_Sensor_Resistant)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03893/article_deploy/html/images/polymers-14-03893-g001-550.jpg?1663410911)
(https://pub.mdpi-res.com/polymers/polymers-14-03893/article_deploy/html/images/polymers-14-03893-g002-550.jpg?1663410912)
(https://pub.mdpi-res.com/polymers/polymers-14-03893/article_deploy/html/images/polymers-14-03893-g003-550.jpg?1663410903)
(https://pub.mdpi-res.com/polymers/polymers-14-03893/article_deploy/html/images/polymers-14-03893-g004-550.jpg?1663410904)
(https://pub.mdpi-res.com/polymers/polymers-14-03893/article_deploy/html/images/polymers-14-03893-g005-550.jpg?1663410900)
(https://pub.mdpi-res.com/polymers/polymers-14-03893/article_deploy/html/images/polymers-14-03893-g006-550.jpg?1663410906)
(https://pub.mdpi-res.com/polymers/polymers-14-03893/article_deploy/html/images/polymers-14-03893-g007-550.jpg?1663410914)
(https://pub.mdpi-res.com/polymers/polymers-14-03893/article_deploy/html/images/polymers-14-03893-g008-550.jpg?1663410901)
(https://pub.mdpi-res.com/polymers/polymers-14-03893/article_deploy/html/images/polymers-14-03893-g009-550.jpg?1663410905)
(https://pub.mdpi-res.com/polymers/polymers-14-03893/article_deploy/html/images/polymers-14-03893-g010-550.jpg?1663410907)
(https://pub.mdpi-res.com/polymers/polymers-14-03893/article_deploy/html/images/polymers-14-03893-g011-550.jpg?1663410902)
(https://pub.mdpi-res.com/polymers/polymers-14-03893/article_deploy/html/images/polymers-14-03893-g012-550.jpg?1663410908)
(https://pub.mdpi-res.com/polymers/polymers-14-03893/article_deploy/html/images/polymers-14-03893-g013-550.jpg?1663410913)
(https://pub.mdpi-res.com/polymers/polymers-14-03893/article_deploy/html/images/polymers-14-03893-g014-550.jpg?1663410910)

Open Access Article (/2073-4360/14/18/3892/pdf?version=1663574384)

Split-Hopkinson Pressure Bar Test of Silicone Rubber: Considering Effects of Strain Rate and Temperature (/2073-4360/14/18/3892)

by Xintao Zhu (https://sciprofiles.com/profile/2302227?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Xiaojing Zhang (https://sciprofiles.com/profile/2168400?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Wenjin Yao (https://sciprofiles.com/profile/2173767?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Wenbin Li (https://sciprofiles.com/profile/841061?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3892; https://doi.org/10.3390/polym14183892 (https://doi.org/10.3390/polym14183892) - 17 Sep 2022
Cited by 1 (/2073-4360/14/18/3892#metrics) | Viewed by 1261

Abstract Using a split-Hopkinson pressure bar test instrument with a temperature control device, in this work, silicone rubber was tested at different temperatures (−40 °C–200 °C) and different strain rates (1.2×10^3 s^{-1}–7.2×10^3 s^{-1}). The **[...] Read more.**
(This article belongs to the Special Issue **Polymer Physical Properties: Viscoelasticity, Rheology and Mechanical Properties (/journal/polymers/special_issues/Polym_Phys_Prop_Viscoelasticity_Rheol_Mech_Prop)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03892/article_deploy/html/images/polymers-14-03892-g001-550.jpg?1663577389)
(https://pub.mdpi-res.com/polymers/polymers-14-03892/article_deploy/html/images/polymers-14-03892-g002-550.jpg?1663577390)
(https://pub.mdpi-res.com/polymers/polymers-14-03892/article_deploy/html/images/polymers-14-03892-g003-550.jpg?1663577382)
(https://pub.mdpi-res.com/polymers/polymers-14-03892/article_deploy/html/images/polymers-14-03892-g004-550.jpg?1663577395)
(https://pub.mdpi-res.com/polymers/polymers-14-03892/article_deploy/html/images/polymers-14-03892-g005-550.jpg?1663577387)
(https://pub.mdpi-res.com/polymers/polymers-14-03892/article_deploy/html/images/polymers-14-03892-g006-550.jpg?1663577386)
(https://pub.mdpi-res.com/polymers/polymers-14-03892/article_deploy/html/images/polymers-14-03892-g007-550.jpg?1663577393)
(https://pub.mdpi-res.com/polymers/polymers-14-03892/article_deploy/html/images/polymers-14-03892-g008-550.jpg?1663577383)
(https://pub.mdpi-res.com/polymers/polymers-14-03892/article_deploy/html/images/polymers-14-03892-g009-550.jpg?1663577388)
(https://pub.mdpi-res.com/polymers/polymers-14-03892/article_deploy/html/images/polymers-14-03892-g010-550.jpg?1663577383)

Open Access Article (/2073-4360/14/18/3891/pdf?version=1663412946)

Back to TopTop

Effects of At-Home and In-Office Bleaching Agents on the Color Recovery of Esthetic CAD-CAM Restorations after Red Wine Immersion (/2073-4360/14/18/3891)

by Wei-Fang Lee (https://sciprofiles.com/profile/1292991?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Hirokazu Takahashi (https://sciprofiles.com/profile/237913?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Shiun-Yi Huang (https://sciprofiles.com/profile/author/ZUFHODJCZHMwME9nWjh0UEUxV0Vubkp5bGhMZlRsRmlCT2FhZGYvU0pCVT0=?utm_, Jia-Zhen Zhang (https://sciprofiles.com/profile/author/NUtoWUFUUUdYcUUyU1VCMG0xc3k1SWxNejI1eXhCT2VsQnlFRDZYenpoZz0=?utm_so, Nai-Chia Teng (https://sciprofiles.com/profile/224241?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Pei-Wen Peng (https://sciprofiles.com/profile/422334?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

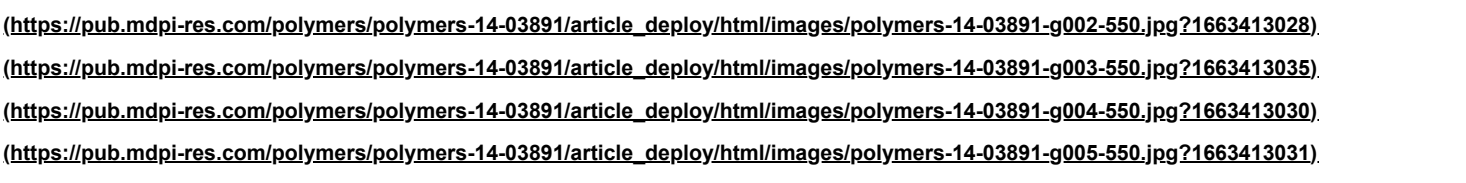
Polymers **2022**, *14*(18), 3891; https://doi.org/10.3390/polym14183891 (https://doi.org/10.3390/polym14183891) - 17 Sep 2022

Cited by 3 (/2073-4360/14/18/3891#metrics) | Viewed by 1045

Abstract The aim of this study was to evaluate the effects of at-home and in-office bleaching agents on esthetic CAD-CAM materials after red wine immersion by measuring their optical properties. Sixty specimens were prepared out of three esthetic CAD-CAM materials: Vita Enamic, Celtra Duo, **[...] Read more.**

(This article belongs to the Special Issue **Physical and Biological Properties of Polymeric Biomaterials** (/journal/polymers/special_issues/Physical_Biological_Properties_Polymeric_Biomaterials))

Show Figures



(https://pub.mdpi-res.com/polymers/polymers-14-03891/article_deploy/html/images/polymers-14-03891-g001-550.jpg?1663413033)

(https://pub.mdpi-res.com/polymers/polymers-14-03891/article_deploy/html/images/polymers-14-03891-g002-550.jpg?1663413028)

(https://pub.mdpi-res.com/polymers/polymers-14-03891/article_deploy/html/images/polymers-14-03891-g003-550.jpg?1663413035)

(https://pub.mdpi-res.com/polymers/polymers-14-03891/article_deploy/html/images/polymers-14-03891-g004-550.jpg?1663413030)

(https://pub.mdpi-res.com/polymers/polymers-14-03891/article_deploy/html/images/polymers-14-03891-g005-550.jpg?1663413031)

Open Access Article (/2073-4360/14/18/3890/pdf?version=1663410727)

On the Response of a Herschel–Bulkley Fluid Due to a Moving Plate (/2073-4360/14/18/3890)

by N'dri Arthur Konan (https://sciprofiles.com/profile/author/SUxQcEprMDN1bG9HNkhBRzJkcittK0k3RWZwRmVDaTJYOFVUb2tqaWdJTT0=?utm, Eilis Rosenbaum (https://sciprofiles.com/profile/766946?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Mehrdad Massoudi (https://sciprofiles.com/profile/527874?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3890; https://doi.org/10.3390/polym14183890 (https://doi.org/10.3390/polym14183890) - 17 Sep 2022

Cited by 1 (/2073-4360/14/18/3890#metrics) | Viewed by 1165

Abstract In this paper, we study the boundary-layer flow of a Herschel–Bulkley fluid due to a moving plate; this problem has been experimentally investigated by others, where the fluid was assumed to be Carbopol, which has similar properties to cement. The computational fluid dynamics **[...] Read more.**

(This article belongs to the Special Issue **Advanced Polymer Simulation and Processing** (/journal/polymers/special_issues/Polym_Simul_Process))

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03890/article_deploy/html/images/polymers-14-03890-ag-550.jpg?1663410807)

(https://pub.mdpi-res.com/polymers/polymers-14-03890/article_deploy/html/images/polymers-14-03890-g001-550.jpg?1663410796)

(https://pub.mdpi-res.com/polymers/polymers-14-03890/article_deploy/html/images/polymers-14-03890-g002-550.jpg?1663410805)

(https://pub.mdpi-res.com/polymers/polymers-14-03890/article_deploy/html/images/polymers-14-03890-g003-550.jpg?1663410792)

(https://pub.mdpi-res.com/polymers/polymers-14-03890/article_deploy/html/images/polymers-14-03890-g004-550.jpg?1663410802)

(https://pub.mdpi-res.com/polymers/polymers-14-03890/article_deploy/html/images/polymers-14-03890-g005-550.jpg?1663410799)

(https://pub.mdpi-res.com/polymers/polymers-14-03890/article_deploy/html/images/polymers-14-03890-g006-550.jpg?1663410795)

(https://pub.mdpi-res.com/polymers/polymers-14-03890/article_deploy/html/images/polymers-14-03890-g007-550.jpg?1663410804)

(https://pub.mdpi-res.com/polymers/polymers-14-03890/article_deploy/html/images/polymers-14-03890-g008-550.jpg?1663410806)

(https://pub.mdpi-res.com/polymers/polymers-14-03890/article_deploy/html/images/polymers-14-03890-g009-550.jpg?1663410800)

(https://pub.mdpi-res.com/polymers/polymers-14-03890/article_deploy/html/images/polymers-14-03890-g010-550.jpg?1663410794)

(https://pub.mdpi-res.com/polymers/polymers-14-03890/article_deploy/html/images/polymers-14-03890-g011-550.jpg?1663410803)

(https://pub.mdpi-res.com/polymers/polymers-14-03890/article_deploy/html/images/polymers-14-03890-g012-550.jpg?1663410797)

(https://pub.mdpi-res.com/polymers/polymers-14-03890/article_deploy/html/images/polymers-14-03890-g013-550.jpg?1663410793)

(https://pub.mdpi-res.com/polymers/polymers-14-03890/article_deploy/html/images/polymers-14-03890-g014-550.jpg?1663410807)

Open Access Article (/2073-4360/14/18/3889/pdf?version=1663730276)

N-Doped Biochar from Lignocellulosic Biomass for Preparation of Adsorbent: Characterization, Kinetics and Application (/2073-4360/14/18/3889)

by Jing Li (https://sciprofiles.com/profile/author/aW9YUkJjaXgrbDQ3a0ErR0lzeWlQSXhxTVpUZTJPVkZoOFU4dWZBcXo4TT0=?utm_source=mdp
, Haixun Lv (https://sciprofiles.com/profile/author/c2xCR0dMQ1gwRG1zVVF4d1JFaE9YaGZLbkxBaUVYT05QMlNvSFpZT1lhUT0=?utm_source=
, Ran Yang (https://sciprofiles.com/profile/author/T25zUVg5ZTFCVzcrcTZQaUpFOWhsUVlSd1FDYkJJM0FYcWpSdmF1OGo0MD0=?utm_source
, Liping Zhang (https://sciprofiles.com/profile/author/dnNNbEZ6bzNUSDgvcytDZzUwV1ZkM0RmTlNDN0pka3NaVHdXMVJUbHBUST0=?utm_sou
, Wei Tao (https://sciprofiles.com/profile/author/aUdtcEdXNXB5OFc5R0pRRGtJWXFmUS9JK2pkZFNjdVdnZEJ2cTUzYTNjYz0=?utm_source=md
, Guotao Liu (https://sciprofiles.com/profile/2517535?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Hui Gao (https://sciprofiles.com/profile/246936?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Ying Guan (https://sciprofiles.com/profile/1361245?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3889; https://doi.org/10.3390/polym14183889 (https://doi.org/10.3390/polym14183889) - 17 Sep 2022
Cited by 7 (/2073-4360/14/18/3889#metrics) | Viewed by 1339

Abstract *Medulla tetrapanacis* is composed of a lignocellulosic biopolymer and has a regular porous structure, which makes it a potential biomass material for preparing porous N-doped biochar. Herewith, N-doped *Medulla tetrapanacis* biochar (UBC) was successfully prepared by modification with urea and $NaHCO_3$ under **[...] Read more.**
(This article belongs to the Special Issue **Synthesis and Application of Cellulose-Based Composites (/journal/polymers/special_issues/Synthesis_Application_Cellulose_Based_Composites)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03889/article_deploy/html/images/polymers-14-03889-ag-550.jpg?1663730369)

(https://pub.mdpi-res.com/polymers/polymers-14-03889/article_deploy/html/images/polymers-14-03889-g001-550.jpg?1663730362)

(https://pub.mdpi-res.com/polymers/polymers-14-03889/article_deploy/html/images/polymers-14-03889-g002-550.jpg?1663730365)

(https://pub.mdpi-res.com/polymers/polymers-14-03889/article_deploy/html/images/polymers-14-03889-g003-550.jpg?1663730364)

(https://pub.mdpi-res.com/polymers/polymers-14-03889/article_deploy/html/images/polymers-14-03889-g004-550.jpg?1663730367)

(https://pub.mdpi-res.com/polymers/polymers-14-03889/article_deploy/html/images/polymers-14-03889-g005-550.jpg?1663730368)

Open Access Article (/2073-4360/14/18/3888/pdf?version=1663814779)

Analysis of Microplastics in Aquatic Shellfish by Pyrolysis–Gas Chromatography/Mass Spectrometry after Alkali Digestion and Solvent Extraction (/2073-4360/14/18/3888)

by Yingying Zhong (https://sciprofiles.com/profile/2436762?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Qibei Bao (https://sciprofiles.com/profile/2389380?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Lifeng Yuan (https://sciprofiles.com/profile/author/bVVrUjVaNEs0cHg5VThqMWlITCtnNFliQ3BEaGdJMzFXMk1FOU04dUkwbz0=?utm_source=
, Jiawen Liu (https://sciprofiles.com/profile/author/TkEzMDNEcFdSMUNhdCttOGlXWGxOaWZEMG9wVk5Fa2tPM0hBV0k1TVVPcz0=?utm_sourc
, Yan Cai (https://sciprofiles.com/profile/author/dDhSYy9JcWlJQmwvcVBzODVXOXFQSWtVT0xiN29HMk1QcDNVYUJoQ3dXcz0=?utm_source=
and Xianfeng Chen (https://sciprofiles.com/profile/author/bnFGdWtwejhPQ21yRHBVUWZNQVRaQT09?utm_source=mdpi.com&utm_medium=web
Polymers **2022**, *14*(18), 3888; https://doi.org/10.3390/polym14183888 (https://doi.org/10.3390/polym14183888) - 17 Sep 2022
Cited by 2 (/2073-4360/14/18/3888#metrics) | Viewed by 1647

Abstract Microplastics are harmful to both marine life and humans. Herein, a pyrolysis–gas chromatography–mass spectrometry (Py-GC/MS) technique for the detection of microplastics in aquatic shellfish is demonstrated. The organic matter in aquatic shellfish was removed by alkali digestion. Subsequently, using hexafluoroisopropanol as the extraction **[...] Read more.**
(This article belongs to the Special Issue **Polymers and the Circular Economy Model (/journal/polymers/special_issues/Polymers_Circular_Economy)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03888/article_deploy/html/images/polymers-14-03888-ag-550.jpg?1663814916)

(https://pub.mdpi-res.com/polymers/polymers-14-03888/article_deploy/html/images/polymers-14-03888-g001-550.jpg?1663814908)

(https://pub.mdpi-res.com/polymers/polymers-14-03888/article_deploy/html/images/polymers-14-03888-g002-550.jpg?1663814910)

(https://pub.mdpi-res.com/polymers/polymers-14-03888/article_deploy/html/images/polymers-14-03888-g003-550.jpg?1663814897)

(https://pub.mdpi-res.com/polymers/polymers-14-03888/article_deploy/html/images/polymers-14-03888-g004-550.jpg?1663814913)

(https://pub.mdpi-res.com/polymers/polymers-14-03888/article_deploy/html/images/polymers-14-03888-g005-550.jpg?1663814906)

(https://pub.mdpi-res.com/polymers/polymers-14-03888/article_deploy/html/images/polymers-14-03888-g006-550.jpg?1663814909)

(https://pub.mdpi-res.com/polymers/polymers-14-03888/article_deploy/html/images/polymers-14-03888-g007a-550.jpg?1663814899)

(https://pub.mdpi-res.com/polymers/polymers-14-03888/article_deploy/html/images/polymers-14-03888-g007b-550.jpg?1663814914)

(https://pub.mdpi-res.com/polymers/polymers-14-03888/article_deploy/html/images/polymers-14-03888-g008a-550.jpg?1663814912)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03888/article_deploy/html/images/polymers-14-03888-g008b-550.jpg?1663814910)

(https://pub.mdpi-res.com/polymers/polymers-14-03888/article_deploy/html/images/polymers-14-03888-g009-550.jpg?1663814898)

(https://pub.mdpi-res.com/polymers/polymers-14-03888/article_deploy/html/images/polymers-14-03888-g010-550.jpg?1663814894)

Open Access Editorial (/2073-4360/14/18/3887/pdf?version=1663413061)

Special Issue—"Bio-Based Materials: Contribution to Advancing Circular Economy" (/2073-4360/14/18/3887)

by

Maya Jacob John (https://sciprofiles.com/profile/1236810?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Sabu Thomas (https://sciprofiles.com/profile/578519?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3887; https://doi.org/10.3390/polym14183887 (https://doi.org/10.3390/polym14183887) - 17 Sep 2022

Viewed by 843

Abstract Bio-based materials have a significant role to play in the implementation of a functional circular economy [...] **Full article (/2073-4360/14/18/3887)**

(This article belongs to the Special Issue **Bio-Based Materials: Contribution to Advancing Circular Economy (/journal/polymers/special_issues/Bio_Based_Mater)**)

Open Access Article (/2073-4360/14/18/3886/pdf?version=1663729692)

Preparation and Optimization of Ibrutinib-Loaded Nanoliposomes Using Response Surface Methodology (/2073-4360/14/18/3886)

by Fareeaa Ashar (https://sciprofiles.com/profile/2225549?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Umme Hani (https://sciprofiles.com/profile/2213643?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Riyaz Ali M. Osmani (https://sciprofiles.com/profile/1793123?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Syed Mohammed Kazim (https://sciprofiles.com/profile/author/Q0hkeFRBa0tLZXRReTJMNXl2d0NEZHp0ZCtHVlUza1JQdnV4cWRqdno5bz0=?u and

S. Selvamuthukumar (https://sciprofiles.com/profile/28046?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3886; https://doi.org/10.3390/polym14183886 (https://doi.org/10.3390/polym14183886) - 17 Sep 2022

Cited by 2 (/2073-4360/14/18/3886#metrics) | Viewed by 1151

Abstract The main aim of this study was to optimize the formulation and process variables for the preparation of ibrutinib nanoliposomes and to evaluate the stability of nanoliposomes. The influence of four formulations and process parameters, namely, the phosphatidylcholine-to-cholesterol ratio (A), conc. of ibrutinib **[...] Read more.**

(This article belongs to the Special Issue **Advanced Polymeric Materials for Pharmaceutical Applications III (/journal/polymers/special_issues/adv_poly_mater_pharmaceu_appli_III)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03886/article_deploy/html/images/polymers-14-03886-g001a-550.jpg?1663748227)

(https://pub.mdpi-res.com/polymers/polymers-14-03886/article_deploy/html/images/polymers-14-03886-g001b-550.jpg?1663748226)

(https://pub.mdpi-res.com/polymers/polymers-14-03886/article_deploy/html/images/polymers-14-03886-g002-550.jpg?1663748222)

(https://pub.mdpi-res.com/polymers/polymers-14-03886/article_deploy/html/images/polymers-14-03886-g003-550.jpg?1663748226)

(https://pub.mdpi-res.com/polymers/polymers-14-03886/article_deploy/html/images/polymers-14-03886-g004-550.jpg?1663748239)

(https://pub.mdpi-res.com/polymers/polymers-14-03886/article_deploy/html/images/polymers-14-03886-g005-550.jpg?1663748230)

(https://pub.mdpi-res.com/polymers/polymers-14-03886/article_deploy/html/images/polymers-14-03886-g006-550.jpg?1663748232)

(https://pub.mdpi-res.com/polymers/polymers-14-03886/article_deploy/html/images/polymers-14-03886-g007-550.jpg?1663748237)

Open Access Article (/2073-4360/14/18/3885/pdf?version=1663647033)

Synthesis of Water-Dispersed Sulfobetaine Methacrylate–Iron Oxide Nanoparticle-Coated Graphene Composite by Free Radical Polymerization (/2073-4360/14/18/3885)

by Suguna Perumal (https://sciprofiles.com/profile/1523145?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Raji Atchudan (https://sciprofiles.com/profile/1491561?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Yong Rok Lee (https://sciprofiles.com/profile/80963?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3885; https://doi.org/10.3390/polym14183885 (https://doi.org/10.3390/polym14183885) - 17 Sep 2022

Cited by 3 (/2073-4360/14/18/3885#metrics) | Viewed by 1150

Abstract Research on the synthesis of water-soluble polymers has accelerated in recent years, as they are employed in many bio-applications. Herein, the synthesis of poly[2-(methacryloyloxy)ethyl]dimethyl-(3-sulfopropyl)ammonium hydroxide (PSB) by free radical polymerization in a sonication bath is described. PSB and iron oxide nanoparticles (IONPs) were **[...] Read more.**

(This article belongs to the Special Issue **Polymer Nanoparticles: Synthesis and Applications (/journal/polymers/special_issues/polymer_nanoparticles_synthesis_applications)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03885/article_deploy/html/images/polymers-14-03885-ag-550.jpg?1663748287)

(https://pub.mdpi-res.com/polymers/polymers-14-03885/article_deploy/html/images/polymers-14-03885-g001-550.jpg?1663748271)

(https://pub.mdpi-res.com/polymers/polymers-14-03885/article_deploy/html/images/polymers-14-03885-g002-550.jpg?1663748277)

(https://pub.mdpi-res.com/polymers/polymers-14-03885/article_deploy/html/images/polymers-14-03885-g003-550.jpg?1663748267)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03885/article_deploy/html/images/polymers-14-03885-g004-550.jpg?1663748286)

(https://pub.mdpi-res.com/polymers/polymers-14-03885/article_deploy/html/images/polymers-14-03885-g005-550.jpg?1663748269)

(https://pub.mdpi-res.com/polymers/polymers-14-03885/article_deploy/html/images/polymers-14-03885-g006-550.jpg?1663748279)

(https://pub.mdpi-res.com/polymers/polymers-14-03885/article_deploy/html/images/polymers-14-03885-g007-550.jpg?1663748272)

(https://pub.mdpi-res.com/polymers/polymers-14-03885/article_deploy/html/images/polymers-14-03885-sch001-550.jpg?1663748274)

(https://pub.mdpi-res.com/polymers/polymers-14-03885/article_deploy/html/images/polymers-14-03885-sch002-550.jpg?1663748280)

Open Access Article (/2073-4360/14/18/3884/pdf?version=1663660986)

Bioactivity and Thermal Stability of Collagen–Chitosan Containing Lemongrass Essential Oil for Potential Medical Applications (/2073-4360/14/18/3884)

by Maria Râpă (https://sciprofiles.com/profile/423058?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Traian Zaharescu (https://sciprofiles.com/profile/1067743?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Laura Mihaela Stefan (https://sciprofiles.com/profile/2436754?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Carmen Gaidău (https://sciprofiles.com/profile/994921?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Ioana Stănculescu (https://sciprofiles.com/profile/696951?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Rodica Roxana Constantinescu (https://sciprofiles.com/profile/1957151?utm_source=mdpi.com&utm_medium=website&utm_campaign=avata and Maria Stanca (https://sciprofiles.com/profile/1625857?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3884; https://doi.org/10.3390/polym14183884 (https://doi.org/10.3390/polym14183884) - 17 Sep 2022

Cited by 1 (/2073-4360/14/18/3884#metrics) | Viewed by 1387

Abstract Bioactive collagen–chitosan–lemongrass (COL–CS–LG) membranes were prepared by casting method and analyzed for potential biomedical applications. For COL–CS–LG membranes, LG essential oil release, antioxidant properties, in vitro cytotoxicity and antimicrobial assessments were conducted, as well as free radical determination after gamma irradiation by chemiluminescence, **[...] Read more.**

(This article belongs to the Special Issue **Advanced Natural Polymers (/journal/polymers/special_issues/natural_poly)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03884/article_deploy/html/images/polymers-14-03884-g001-550.jpg?1663661590)

(https://pub.mdpi-res.com/polymers/polymers-14-03884/article_deploy/html/images/polymers-14-03884-g002-550.jpg?1663661600)

(https://pub.mdpi-res.com/polymers/polymers-14-03884/article_deploy/html/images/polymers-14-03884-g003-550.jpg?1663661603)

(https://pub.mdpi-res.com/polymers/polymers-14-03884/article_deploy/html/images/polymers-14-03884-g004a-550.jpg?1663661602)

(https://pub.mdpi-res.com/polymers/polymers-14-03884/article_deploy/html/images/polymers-14-03884-g004b-550.jpg?1663661597)

(https://pub.mdpi-res.com/polymers/polymers-14-03884/article_deploy/html/images/polymers-14-03884-g005-550.jpg?1663661591)

(https://pub.mdpi-res.com/polymers/polymers-14-03884/article_deploy/html/images/polymers-14-03884-g006-550.jpg?1663661593)

(https://pub.mdpi-res.com/polymers/polymers-14-03884/article_deploy/html/images/polymers-14-03884-g007-550.jpg?1663661599)

(https://pub.mdpi-res.com/polymers/polymers-14-03884/article_deploy/html/images/polymers-14-03884-g008-550.jpg?1663661595)

Open Access Article (/2073-4360/14/18/3883/pdf?version=1663743874)

Microstructured Magnetoactive Elastomers for Switchable Wettability (/2073-4360/14/18/3883)

by Raphael Kriegl (https://sciprofiles.com/profile/2399035?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Gaia Kravanja (https://sciprofiles.com/profile/author/RDFNd0tqNi9zZjVXWGRhTmxlQlhvT0FkNDBkTno1U05oWmNBQktaSlcwVT0=?utm_sourc , Luka Hribar (https://sciprofiles.com/profile/1990048?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Lucija Čoga (https://sciprofiles.com/profile/author/NWJOSGFlUzl3TFl0ZHJHNHQ4Zi9pZktLSkswQStZWk5YYkd0ZEpTVmFPOD0=?utm_source , Irena Drevenšek-Olenik (https://sciprofiles.com/profile/20955?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Matija Jezeršek (https://sciprofiles.com/profile/171797?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Mitjan Kalin (https://sciprofiles.com/profile/2282636?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Mikhail Shamonin (https://sciprofiles.com/profile/295340?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3883; https://doi.org/10.3390/polym14183883 (https://doi.org/10.3390/polym14183883) - 17 Sep 2022

Cited by 4 (/2073-4360/14/18/3883#metrics) | Viewed by 1597

Abstract We demonstrate the control of wettability of non-structured and microstructured magnetoactive elastomers (MAEs) by magnetic field. The synthesized composite materials have a concentration of carbonyl iron particles of 75 wt.% (≈27 vol.%) and three different stiffnesses of the elastomer matrix. A new method **[...] Read more.**

(This article belongs to the Special Issue **Frontier in Magneto-/ Electro-Active Elastomers (/journal/polymers/special_issues/magneto_electro_active_elastomer)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03883/article_deploy/html/images/polymers-14-03883-ag-550.jpg?1664504138)

(https://pub.mdpi-res.com/polymers/polymers-14-03883/article_deploy/html/images/polymers-14-03883-g001-550.jpg?1663748199)

(https://pub.mdpi-res.com/polymers/polymers-14-03883/article_deploy/html/images/polymers-14-03883-g002-550.jpg?1663748178)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03883/article_deploy/html/images/polymers-14-03883-g003-550.jpg?1663748185)
(https://pub.mdpi-res.com/polymers/polymers-14-03883/article_deploy/html/images/polymers-14-03883-g004-550.jpg?1663748177)
(https://pub.mdpi-res.com/polymers/polymers-14-03883/article_deploy/html/images/polymers-14-03883-g005-550.jpg?1663748182)
(https://pub.mdpi-res.com/polymers/polymers-14-03883/article_deploy/html/images/polymers-14-03883-g006-550.jpg?1663748181)
(https://pub.mdpi-res.com/polymers/polymers-14-03883/article_deploy/html/images/polymers-14-03883-g007-550.jpg?1663748195)
(https://pub.mdpi-res.com/polymers/polymers-14-03883/article_deploy/html/images/polymers-14-03883-g008-550.jpg?1663748206)
(https://pub.mdpi-res.com/polymers/polymers-14-03883/article_deploy/html/images/polymers-14-03883-g009-550.jpg?1663748202)
(https://pub.mdpi-res.com/polymers/polymers-14-03883/article_deploy/html/images/polymers-14-03883-g010-550.jpg?1663748193)
(https://pub.mdpi-res.com/polymers/polymers-14-03883/article_deploy/html/images/polymers-14-03883-g011-550.jpg?1663748197)
(https://pub.mdpi-res.com/polymers/polymers-14-03883/article_deploy/html/images/polymers-14-03883-g012-550.jpg?1663748177)
(https://pub.mdpi-res.com/polymers/polymers-14-03883/article_deploy/html/images/polymers-14-03883-g013-550.jpg?1663748188)
(https://pub.mdpi-res.com/polymers/polymers-14-03883/article_deploy/html/images/polymers-14-03883-g014-550.jpg?1663748196)
(https://pub.mdpi-res.com/polymers/polymers-14-03883/article_deploy/html/images/polymers-14-03883-g015-550.jpg?1663748180)
(https://pub.mdpi-res.com/polymers/polymers-14-03883/article_deploy/html/images/polymers-14-03883-g0A1-550.jpg?1663748204)
(https://pub.mdpi-res.com/polymers/polymers-14-03883/article_deploy/html/images/polymers-14-03883-g0A2-550.jpg?1663748198)

Open Access Article (/2073-4360/14/18/3882/pdf?version=1663572197)

Polyhydroxybutyrate Rice Hull and Torrefied Rice Hull Biocomposites (/2073-4360/14/18/3882)

by Zach McCaffrey (https://sciprofiles.com/profile/2357134?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Andrew Cal (https://sciprofiles.com/profile/author/RHoxZ1hsVFRPbU56TUlBSVZYRXBSbGZiY1NlMGk2anBjU0RhL1UzZmVHdz0=?utm_source , Lennard Torres (https://sciprofiles.com/profile/author/VkdwSTVUL05ZVmw4d0NUWXVyeHJ0V3NKV2ZFODBYcCtBb0oxeXQxSlV5cz0=?utm_sc , Bor-Sen Chiou (https://sciprofiles.com/profile/author/emJJUGpiMkQxRVRsQXpleXZBOFErSEJVTXBOVXpqSVdmRHV1cTBoUWJNOD0=?utm_ , Delilah Wood (https://sciprofiles.com/profile/265445?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Tina Williams (https://sciprofiles.com/profile/author/cjNzOXVNRzFaTWplR1FkVS9zVWFYek1LeE9FT1phV2cwd3RSLzI2R2xscz0=?utm_source= and William Orts (https://sciprofiles.com/profile/author/dFdSNXZOVk92amtjeGRFTEZSTC9BWTkwRU9iSDNmVklYbkxFUnRCa1Npbz0=?utm_sourc

Polymers **2022**, *14*(18), 3882; https://doi.org/10.3390/polym14183882 (https://doi.org/10.3390/polym14183882) - 17 Sep 2022
Cited by 1 (/2073-4360/14/18/3882#metrics) | Viewed by 1132

Abstract Raw and torrefied rice hulls (RRH and TRH) were incorporated into polyhydroxybutyrate (PHB) as fillers using extrusion and injection molding to produce biomass-polymer composites. Filler and composite materials were characterized by particle size analysis, thermomechanical analysis, thermogravimetric analysis, differential scanning calorimetry, FTIR analysis, **[...] Read more.**

(This article belongs to the Special Issue **Advances in Fiber Reinforced Polymer Composites (/journal/polymers/special_issues/front_fiber_reinf_polym)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03882/article_deploy/html/images/polymers-14-03882-g001-550.jpg?1663572272)
(https://pub.mdpi-res.com/polymers/polymers-14-03882/article_deploy/html/images/polymers-14-03882-g002-550.jpg?1663572275)
(https://pub.mdpi-res.com/polymers/polymers-14-03882/article_deploy/html/images/polymers-14-03882-g003-550.jpg?1663572273)
(https://pub.mdpi-res.com/polymers/polymers-14-03882/article_deploy/html/images/polymers-14-03882-g004-550.jpg?1663572292)
(https://pub.mdpi-res.com/polymers/polymers-14-03882/article_deploy/html/images/polymers-14-03882-g005-550.jpg?1663572267)
(https://pub.mdpi-res.com/polymers/polymers-14-03882/article_deploy/html/images/polymers-14-03882-g006-550.jpg?1663572287)
(https://pub.mdpi-res.com/polymers/polymers-14-03882/article_deploy/html/images/polymers-14-03882-g007-550.jpg?1663572290)
(https://pub.mdpi-res.com/polymers/polymers-14-03882/article_deploy/html/images/polymers-14-03882-g008-550.jpg?1663572289)
(https://pub.mdpi-res.com/polymers/polymers-14-03882/article_deploy/html/images/polymers-14-03882-g009-550.jpg?1663572271)
(https://pub.mdpi-res.com/polymers/polymers-14-03882/article_deploy/html/images/polymers-14-03882-g010-550.jpg?1663572269)
(https://pub.mdpi-res.com/polymers/polymers-14-03882/article_deploy/html/images/polymers-14-03882-g011-550.jpg?1663572294)
(https://pub.mdpi-res.com/polymers/polymers-14-03882/article_deploy/html/images/polymers-14-03882-g012-550.jpg?1663572285)
(https://pub.mdpi-res.com/polymers/polymers-14-03882/article_deploy/html/images/polymers-14-03882-g013-550.jpg?1663572281)

Open Access Article (/2073-4360/14/18/3881/pdf?version=1663644804)

Preparation and Properties of Intrinsically Black Polyimide Films with CIE Lab Color Parameters Close to Zero and High Thermal Stability for Potential Applications in Flexible Printed Circuit Boards (/2073-4360/14/18/3881)

Back to TopTop

by
Xi Chen (https://sciprofiles.com/profile/author/a3VsUEpNZWNlZFkzWmxkM2JobTdQckxoSUFJcWk1MjVjTEJSODF6NzBFND0=?utm_source=mc
,
Yan Zhang (https://sciprofiles.com/profile/author/SDBXWnYwaUhTc044bi96L21GMjlJVnFmbkFlNmNOUDlRbzNmczVMQTZKbz0=?utm_source=
,
Yuang Liu (https://sciprofiles.com/profile/author/bTJ5U2NlcDdtUk1ocW1VL2FDSm5uK3gzNVF5K2JYdVNjUU1ReGlQYmp0RT0=?utm_source=
,
Changxu Yang (https://sciprofiles.com/profile/author/Qi9aUmcxekNCQmZkNGFMWHpYazNqRnhWNFNxc1hzbGZYOUlwMmZXdC83VT0=?utm_
,
Shengwei Dai (https://sciprofiles.com/profile/author/VldmWFpCRnhaSC9mZ3dlTDkzVGcwdElKckFYQjQ5U1NrWlF0K2JONjNPOD0=?utm_sour
,
Xiaolei Wang (https://sciprofiles.com/profile/author/RmplYnRKUllSTE5jT280bzVtdHZQRHlHR25UVkVmUGpZRGJhQTZFQXZYND0=?utm_sourc
and
Jingang Liu (https://sciprofiles.com/profile/539609?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3881; https://doi.org/10.3390/polym14183881 (https://doi.org/10.3390/polym14183881) - 17 Sep 2022
Cited by 2 (/2073-4360/14/18/3881#metrics) | Viewed by 1463

Abstract Black polymer films with high thermal stability are highly desired in flexible electrical and electronic fields. Conventional black polymer films based on high-temperature resistant polymers and black inorganic dyes are usually suffered from the poor electrical and tensile properties. In the current work, **[...] Read more.**
(This article belongs to the Collection **Polyimide (/journal/polymers/topical_collections/H06JS4QSY0)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03881/article_deploy/html/images/polymers-14-03881-ag-550.jpg?1664252480)
(https://pub.mdpi-res.com/polymers/polymers-14-03881/article_deploy/html/images/polymers-14-03881-g001-550.jpg?1663661336)
(https://pub.mdpi-res.com/polymers/polymers-14-03881/article_deploy/html/images/polymers-14-03881-g002-550.jpg?1663661347)
(https://pub.mdpi-res.com/polymers/polymers-14-03881/article_deploy/html/images/polymers-14-03881-g003-550.jpg?1663661350)
(https://pub.mdpi-res.com/polymers/polymers-14-03881/article_deploy/html/images/polymers-14-03881-g004-550.jpg?1663661334)
(https://pub.mdpi-res.com/polymers/polymers-14-03881/article_deploy/html/images/polymers-14-03881-g005-550.jpg?1663661337)
(https://pub.mdpi-res.com/polymers/polymers-14-03881/article_deploy/html/images/polymers-14-03881-g006-550.jpg?1663661341)
(https://pub.mdpi-res.com/polymers/polymers-14-03881/article_deploy/html/images/polymers-14-03881-g007-550.jpg?1663661339)
(https://pub.mdpi-res.com/polymers/polymers-14-03881/article_deploy/html/images/polymers-14-03881-g008-550.jpg?1663661349)
(https://pub.mdpi-res.com/polymers/polymers-14-03881/article_deploy/html/images/polymers-14-03881-g009-550.jpg?1663661352)
(https://pub.mdpi-res.com/polymers/polymers-14-03881/article_deploy/html/images/polymers-14-03881-g010-550.jpg?1663661344)
(https://pub.mdpi-res.com/polymers/polymers-14-03881/article_deploy/html/images/polymers-14-03881-g011-550.jpg?1663661332)

Open Access Article (/2073-4360/14/18/3880/pdf?version=1663740097)

Flows of Dense Suspensions of Polymer Particles through Oblique Bifurcating Channels: Two Continua Approach (/2073-4360/14/18/3880)

by
Vladimir Shelukhin (https://sciprofiles.com/profile/609794?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Andrey Antonov (https://sciprofiles.com/profile/author/VWtkYjRBY1BvUEZRRDc1WGR1TjBtWEc2bjlVQkhQd1RvZm1DRGxJWjBNZVJpM3lrVV
Polymers **2022**, *14*(18), 3880; https://doi.org/10.3390/polym14183880 (https://doi.org/10.3390/polym14183880) - 17 Sep 2022
Viewed by 808

Abstract A two-velocity mathematical model is proposed for dense suspension flows through channel bifurcations. Equations agree with thermodynamic laws and they are suitable for both heavy and light particles. The pulsatile mode of injection of particles is considered. In the 2D-case, we address the **[...] Read more.**
(This article belongs to the Special Issue **Polymer Theory and Simulation (/journal/polymers/special_issues/polymer_theory_simulation)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03880/article_deploy/html/images/polymers-14-03880-g001-550.jpg?1663740176)
(https://pub.mdpi-res.com/polymers/polymers-14-03880/article_deploy/html/images/polymers-14-03880-g002-550.jpg?1663740170)
(https://pub.mdpi-res.com/polymers/polymers-14-03880/article_deploy/html/images/polymers-14-03880-g003-550.jpg?1663740170)
(https://pub.mdpi-res.com/polymers/polymers-14-03880/article_deploy/html/images/polymers-14-03880-g004-550.jpg?1663740170)
(https://pub.mdpi-res.com/polymers/polymers-14-03880/article_deploy/html/images/polymers-14-03880-g005-550.jpg?1663740162)
(https://pub.mdpi-res.com/polymers/polymers-14-03880/article_deploy/html/images/polymers-14-03880-g006-550.jpg?1663740172)
(https://pub.mdpi-res.com/polymers/polymers-14-03880/article_deploy/html/images/polymers-14-03880-g007-550.jpg?1663740163)
(https://pub.mdpi-res.com/polymers/polymers-14-03880/article_deploy/html/images/polymers-14-03880-g008-550.jpg?1663740168)
(https://pub.mdpi-res.com/polymers/polymers-14-03880/article_deploy/html/images/polymers-14-03880-g009-550.jpg?1663740167)
(https://pub.mdpi-res.com/polymers/polymers-14-03880/article_deploy/html/images/polymers-14-03880-g010-550.jpg?1663740164)
(https://pub.mdpi-res.com/polymers/polymers-14-03880/article_deploy/html/images/polymers-14-03880-g011-550.jpg?1663740174)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03880/article_deploy/html/images/polymers-14-03880-g012-550.jpg?1663740176)

(https://pub.mdpi-res.com/polymers/polymers-14-03880/article_deploy/html/images/polymers-14-03880-g013-550.jpg?1663740169)

(https://pub.mdpi-res.com/polymers/polymers-14-03880/article_deploy/html/images/polymers-14-03880-g014-550.jpg?1663740175)

Open Access Editor's Choice Article (/2073-4360/14/18/3879/pdf?version=1663402348)

Biobased Copolyamides 56/66: Synthesis, Characterization and Crystallization Kinetics (/2073-4360/14/18/3879)

by

Chia-Hsiung Tseng (https://sciprofiles.com/profile/1973232?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

and

Ping-Szu Tsai (https://sciprofiles.com/profile/1973124?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3879; https://doi.org/10.3390/polym14183879 (https://doi.org/10.3390/polym14183879) - 17 Sep 2022

Cited by 5 (/2073-4360/14/18/3879#metrics) | Viewed by 1741

Abstract This study synthesized a series of new biobased copolyamides (co-PAs), namely PA56/PA66 with various comonomer ratios, by using in situ polycondensation. The structures, compositions, behaviors, and crystallization kinetics of the co-PAs were investigated through proton nuclear magnetic resonance (^{1}H NMR) spectroscopy, **[...] Read more.**

(This article belongs to the Section **Polymer Analysis and Characterization (/journal/polymers/sections/Anal_Charact)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03879/article_deploy/html/images/polymers-14-03879-g001-550.jpg?1663402422)

(https://pub.mdpi-res.com/polymers/polymers-14-03879/article_deploy/html/images/polymers-14-03879-g002-550.jpg?1663402423)

(https://pub.mdpi-res.com/polymers/polymers-14-03879/article_deploy/html/images/polymers-14-03879-g003-550.jpg?1663402416)

(https://pub.mdpi-res.com/polymers/polymers-14-03879/article_deploy/html/images/polymers-14-03879-g004-550.jpg?1663402415)

(https://pub.mdpi-res.com/polymers/polymers-14-03879/article_deploy/html/images/polymers-14-03879-g005-550.jpg?1663402418)

(https://pub.mdpi-res.com/polymers/polymers-14-03879/article_deploy/html/images/polymers-14-03879-g006-550.jpg?1663402423)

(https://pub.mdpi-res.com/polymers/polymers-14-03879/article_deploy/html/images/polymers-14-03879-g007-550.jpg?1663402436)

(https://pub.mdpi-res.com/polymers/polymers-14-03879/article_deploy/html/images/polymers-14-03879-g008-550.jpg?1663402434)

(https://pub.mdpi-res.com/polymers/polymers-14-03879/article_deploy/html/images/polymers-14-03879-g009a-550.jpg?1663402438)

(https://pub.mdpi-res.com/polymers/polymers-14-03879/article_deploy/html/images/polymers-14-03879-g009b-550.jpg?1663402428)

(https://pub.mdpi-res.com/polymers/polymers-14-03879/article_deploy/html/images/polymers-14-03879-g010a-550.jpg?1663402414)

(https://pub.mdpi-res.com/polymers/polymers-14-03879/article_deploy/html/images/polymers-14-03879-g010b-550.jpg?1663402425)

(https://pub.mdpi-res.com/polymers/polymers-14-03879/article_deploy/html/images/polymers-14-03879-g011a-550.jpg?1663402418)

(https://pub.mdpi-res.com/polymers/polymers-14-03879/article_deploy/html/images/polymers-14-03879-g011b-550.jpg?1663402421)

(https://pub.mdpi-res.com/polymers/polymers-14-03879/article_deploy/html/images/polymers-14-03879-g012a-550.jpg?1663402429)

(https://pub.mdpi-res.com/polymers/polymers-14-03879/article_deploy/html/images/polymers-14-03879-g012b-550.jpg?1663402422)

(https://pub.mdpi-res.com/polymers/polymers-14-03879/article_deploy/html/images/polymers-14-03879-g013a-550.jpg?1663402420)

(https://pub.mdpi-res.com/polymers/polymers-14-03879/article_deploy/html/images/polymers-14-03879-g013b-550.jpg?1663402427)

(https://pub.mdpi-res.com/polymers/polymers-14-03879/article_deploy/html/images/polymers-14-03879-sch001-550.jpg?1663402426)

Open Access Article (/2073-4360/14/18/3878/pdf?version=1663733745)

Innovative Closed-Loop Recyclable Bio-Based Composites from Epoxidized Waste Flour and Recycled Carbon Fibers (/2073-4360/14/18/3878)

by Francesca Ferrari (https://sciprofiles.com/profile/622870?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Gloria Anna Carallo (https://sciprofiles.com/profile/2331076?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

and

Antonio Greco (https://sciprofiles.com/profile/33495?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3878; https://doi.org/10.3390/polym14183878 (https://doi.org/10.3390/polym14183878) - 16 Sep 2022

Cited by 2 (/2073-4360/14/18/3878#metrics) | Viewed by 1397

Abstract Epoxy-based composites are designed for long-lasting applications, though their wide use is in contrast with their poor recyclability, which poses serious end-of-life issues. In order to reduce their environmental impact, precursors derived from fossil fuel based raw materials should be replaced with eco-friendly **[...] Read more.**

(This article belongs to the Special Issue **Environment-Friendly Polymers and Composites: Synthesis, Processing and Applications (/journal/polymers/special_issues/C0Z809K22G)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03878/article_deploy/html/images/polymers-14-03878-ag-550.jpg?1663733832)

(https://pub.mdpi-res.com/polymers/polymers-14-03878/article_deploy/html/images/polymers-14-03878-g001-550.jpg?1663733826)

(https://pub.mdpi-res.com/polymers/polymers-14-03878/article_deploy/html/images/polymers-14-03878-g002-550.jpg?1663733831)

(https://pub.mdpi-res.com/polymers/polymers-14-03878/article_deploy/html/images/polymers-14-03878-g003-550.jpg?1663733824)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03878/article_deploy/html/images/polymers-14-03878-g004-550.jpg?1663733825)

(https://pub.mdpi-res.com/polymers/polymers-14-03878/article_deploy/html/images/polymers-14-03878-g005-550.jpg?1663733820)

(https://pub.mdpi-res.com/polymers/polymers-14-03878/article_deploy/html/images/polymers-14-03878-g006-550.jpg?1663733827)

(https://pub.mdpi-res.com/polymers/polymers-14-03878/article_deploy/html/images/polymers-14-03878-g007-550.jpg?1663733829)

(https://pub.mdpi-res.com/polymers/polymers-14-03878/article_deploy/html/images/polymers-14-03878-g008-550.jpg?1663733830)

(https://pub.mdpi-res.com/polymers/polymers-14-03878/article_deploy/html/images/polymers-14-03878-g009-550.jpg?1663733832)

(https://pub.mdpi-res.com/polymers/polymers-14-03878/article_deploy/html/images/polymers-14-03878-g010-550.jpg?1663733829)

Open Access Article (/2073-4360/14/18/3877/pdf?version=1663566804)

Effect of Aggregate Size on the Axial Compressive Behavior of FRP-Confined Coral Aggregate Concrete (/2073-4360/14/18/3877)

by Pengda Li (https://sciprofiles.com/profile/434312?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Deqing Huang (https://sciprofiles.com/profile/2452463?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Ruiyu Li (https://sciprofiles.com/profile/author/T2tJZzAwbmVLa09VL0JvUmpXUkhkR2pkR3FxYlFYUkc5ZHptaVR6UmUzUT0=?utm_source=mc , Rongkang Li (https://sciprofiles.com/profile/author/YXFsSFlZUkJmMVN6bm1zVDY0aDNiUjRlWVNhMWtCSis3OTJZbGNTL0tEYz0=?utm_sourc and Fang Yuan (https://sciprofiles.com/profile/2389630?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3877; https://doi.org/10.3390/polym14183877 (https://doi.org/10.3390/polym14183877) - 16 Sep 2022

Cited by 2 (/2073-4360/14/18/3877#metrics) | Viewed by 839

Abstract Using locally available raw materials for preparing concrete, such as coral reefs, seawater, and sea sand, is conducive to compensating for the shortage of construction materials used on remote islands. Jacketing fiber-reinforced polymer (FRP), as passive confinement, is a practical approach to enhance **[...] Read more.**

(This article belongs to the Special Issue **Mechanical Properties of Fiber Reinforced Polymer Composites (** /journal/polymers/special_issues/mechanical_properties_of_fiber_reinforced_polymer_composites))

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03877/article_deploy/html/images/polymers-14-03877-g001-550.jpg?1663566884)

(https://pub.mdpi-res.com/polymers/polymers-14-03877/article_deploy/html/images/polymers-14-03877-g002-550.jpg?1663566896)

(https://pub.mdpi-res.com/polymers/polymers-14-03877/article_deploy/html/images/polymers-14-03877-g003a-550.jpg?1663566872)

(https://pub.mdpi-res.com/polymers/polymers-14-03877/article_deploy/html/images/polymers-14-03877-g003b-550.jpg?1663566893)

(https://pub.mdpi-res.com/polymers/polymers-14-03877/article_deploy/html/images/polymers-14-03877-g004-550.jpg?1663566887)

(https://pub.mdpi-res.com/polymers/polymers-14-03877/article_deploy/html/images/polymers-14-03877-g005-550.jpg?1663566878)

(https://pub.mdpi-res.com/polymers/polymers-14-03877/article_deploy/html/images/polymers-14-03877-g006-550.jpg?1663566875)

(https://pub.mdpi-res.com/polymers/polymers-14-03877/article_deploy/html/images/polymers-14-03877-g007-550.jpg?1663566883)

(https://pub.mdpi-res.com/polymers/polymers-14-03877/article_deploy/html/images/polymers-14-03877-g008-550.jpg?1663566890)

(https://pub.mdpi-res.com/polymers/polymers-14-03877/article_deploy/html/images/polymers-14-03877-g009-550.jpg?1663566889)

(https://pub.mdpi-res.com/polymers/polymers-14-03877/article_deploy/html/images/polymers-14-03877-g010-550.jpg?1663566897)

(https://pub.mdpi-res.com/polymers/polymers-14-03877/article_deploy/html/images/polymers-14-03877-g011a-550.jpg?1663566895)

(https://pub.mdpi-res.com/polymers/polymers-14-03877/article_deploy/html/images/polymers-14-03877-g011b-550.jpg?1663566902)

(https://pub.mdpi-res.com/polymers/polymers-14-03877/article_deploy/html/images/polymers-14-03877-g012-550.jpg?1663566899)

(https://pub.mdpi-res.com/polymers/polymers-14-03877/article_deploy/html/images/polymers-14-03877-g013-550.jpg?1663566904)

(https://pub.mdpi-res.com/polymers/polymers-14-03877/article_deploy/html/images/polymers-14-03877-g014-550.jpg?1663566882)

Open Access Article (/2073-4360/14/18/3876/pdf?version=1663565937)

Development of Electrically Conductive Thermosetting Resin Composites through Optimizing the Thermal Doping of Polyaniline and Radical Polymerization Temperature (/2073-4360/14/18/3876)

by Kohei Takahashi (https://sciprofiles.com/profile/2357856?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Kazuki Nagura (https://sciprofiles.com/profile/author/KytDczZ0dk45c1NlK2NodmxaSGtseFJWOTFCM3kxMmpEVVZqNi85clBHbz0=?utm_sourc , Masumi Takamura (https://sciprofiles.com/profile/2450188?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Teruya Goto (https://sciprofiles.com/profile/author/RWY3c0VLbFlQRzVPWlo0dFd3dGdKS3R1KzlzaVR0UE5NMVlqZ0Zrc3VaOD0=?utm_source= and Tatsuhiro Takahashi (https://sciprofiles.com/profile/763914?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3876; https://doi.org/10.3390/polym14183876 (https://doi.org/10.3390/polym14183876) - 16 Sep 2022

Viewed by 902

Abstract This work developed an electrically conductive thermosetting resin composite that transitioned from a liquid to solid without using solvents in response to an increase in temperature. This material has applications as a matrix for carbon fiber reinforced plastics. The composite comprised polyaniline (PANI) **[...] Read more.**

(This article belongs to the Special Issue **Functional Polymer Composites: Synthesis, Characterization and Application (/journal/polymers/special_issues/Functional_Polymer_Composites_Synthesis_Characterization_Application)**)

► **Show Figures**

(https://pub.mdpi-res.com/polymers/polymers-14-03876/article_deploy/html/images/polymers-14-03876-ag-550.jpg?1663566030)
(https://pub.mdpi-res.com/polymers/polymers-14-03876/article_deploy/html/images/polymers-14-03876-g001a-550.jpg?1663566020)
(https://pub.mdpi-res.com/polymers/polymers-14-03876/article_deploy/html/images/polymers-14-03876-g001b-550.jpg?1663566015)
(https://pub.mdpi-res.com/polymers/polymers-14-03876/article_deploy/html/images/polymers-14-03876-g002-550.jpg?1663566021)
(https://pub.mdpi-res.com/polymers/polymers-14-03876/article_deploy/html/images/polymers-14-03876-g003-550.jpg?1663566027)
(https://pub.mdpi-res.com/polymers/polymers-14-03876/article_deploy/html/images/polymers-14-03876-g004-550.jpg?1663566027)
(https://pub.mdpi-res.com/polymers/polymers-14-03876/article_deploy/html/images/polymers-14-03876-g005-550.jpg?1663566015)
(https://pub.mdpi-res.com/polymers/polymers-14-03876/article_deploy/html/images/polymers-14-03876-g006a-550.jpg?1663566016)
(https://pub.mdpi-res.com/polymers/polymers-14-03876/article_deploy/html/images/polymers-14-03876-g006b-550.jpg?1663566018)
(https://pub.mdpi-res.com/polymers/polymers-14-03876/article_deploy/html/images/polymers-14-03876-g007-550.jpg?1663566029)
(https://pub.mdpi-res.com/polymers/polymers-14-03876/article_deploy/html/images/polymers-14-03876-g008-550.jpg?1663566024)

Open Access Article (/2073-4360/14/18/3875/pdf?version=1663338266)

Electrospinning Silk Fibroin/Graphene Nanofiber Membrane Used for 3D Wearable Pressure Sensor (/2073-4360/14/18/3875)

by
Zulan Liu (https://sciprofiles.com/profile/author/eXFPYjh5WjJ6MS9oZ2xVcGdTYlF0TjliYVVFZ1BxaVZKeEVKY0hUU0Mzbz0=?utm_source=mdp
,
Jiaxuan Wang (https://sciprofiles.com/profile/author/VTNkOWNuNjNuYlFkY0NMcDFxbjFYTUMxZUVkVzFCYkhqMUFOZVpoTkhydz0=?utm_sou
,
Qian Zhang (https://sciprofiles.com/profile/author/ZHhKN0JZRm03RjVrMXF2NWdvTFBzODBDMFpNUzJDU3gvYmJRWDRHRHFrVT0=?utm_so
,
Zheng Li (https://sciprofiles.com/profile/author/ZzJqcWUzSTU5M1RHckwyUmdoRml6alZWbndzRXU4MlRvK2dHU2xKQnNtTT0=?utm_source=
,
Zhi Li (https://sciprofiles.com/profile/718126?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Lan Cheng (https://sciprofiles.com/profile/author/eUVHWGRLTVQ2U3RNU0QxZ1RZRjJ6dFF4L3BqVmJRRnZKa254SnlwSVVCZz0=?utm_sourc
and
Fangyin Dai (https://sciprofiles.com/profile/327984?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3875; **https://doi.org/10.3390/polym14183875 (https://doi.org/10.3390/polym14183875)** - 16 Sep 2022
Cited by 6 (/2073-4360/14/18/3875#metrics) | Viewed by 1971

Abstract With the improvement of science and technology, flexible sensors have become a hot research topic. Flexible sensors have broad application in human health detection and motion detection and other fields. In this paper, the silk fibroin/graphene nanofiber membranes were prepared by double needle **[...] Read more.**
(This article belongs to the Special Issue **Advances in Fiber Materials and Manufacturing (/journal/polymers/special_issues/26C11F76N6)**)

► **Show Figures**

(https://pub.mdpi-res.com/polymers/polymers-14-03875/article_deploy/html/images/polymers-14-03875-ag-550.jpg?1663338363)
(https://pub.mdpi-res.com/polymers/polymers-14-03875/article_deploy/html/images/polymers-14-03875-g001-550.jpg?1663338351)
(https://pub.mdpi-res.com/polymers/polymers-14-03875/article_deploy/html/images/polymers-14-03875-g002-550.jpg?1663338356)
(https://pub.mdpi-res.com/polymers/polymers-14-03875/article_deploy/html/images/polymers-14-03875-g003-550.jpg?1663338355)
(https://pub.mdpi-res.com/polymers/polymers-14-03875/article_deploy/html/images/polymers-14-03875-g004-550.jpg?1663338349)
(https://pub.mdpi-res.com/polymers/polymers-14-03875/article_deploy/html/images/polymers-14-03875-g005-550.jpg?1663338348)
(https://pub.mdpi-res.com/polymers/polymers-14-03875/article_deploy/html/images/polymers-14-03875-g006-550.jpg?1663338354)
(https://pub.mdpi-res.com/polymers/polymers-14-03875/article_deploy/html/images/polymers-14-03875-g007-550.jpg?1663338350)
(https://pub.mdpi-res.com/polymers/polymers-14-03875/article_deploy/html/images/polymers-14-03875-g008-550.jpg?1663338347)
(https://pub.mdpi-res.com/polymers/polymers-14-03875/article_deploy/html/images/polymers-14-03875-g009-550.jpg?1663338352)
(https://pub.mdpi-res.com/polymers/polymers-14-03875/article_deploy/html/images/polymers-14-03875-g010-550.jpg?1663338344)
(https://pub.mdpi-res.com/polymers/polymers-14-03875/article_deploy/html/images/polymers-14-03875-sch001-550.jpg?1663338345)

Open Access Article (/2073-4360/14/18/3874/pdf?version=1663329137)

Impact of Graphene Oxide on Properties and Structure of Thin-Film Composite Forward Osmosis Membranes (/2073-4360/14/18/3874)

by
Chenglong Dai (https://sciprofiles.com/profile/author/ZG1UNmcrTW90RHFjWTFXYWoxbEdWZ2pBbXR3UG4rNm9WUzh0dXlUVWF4VT0=?utm_
,
Dan Zhao (https://sciprofiles.com/profile/2181185?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Back to TopTop

Yongqiang Wang (https://sciprofiles.com/profile/author/bVErSGlReERjamZqUVZxS0VHWE9wOTZDQ1VST25XdVNkeVJEbEtLZnBxYz0=?utm_s
,
Rui Zhao (https://sciprofiles.com/profile/2611142?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Hui Wang (https://sciprofiles.com/profile/2239420?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Xiangci Wu (https://sciprofiles.com/profile/author/QnUveXFnMFFTTzR4NkZaSkpsNytOUkh6WE01azlvN0xGOENsZFVxb1Rnaz0=?utm_source=
,
Shejiang Liu (https://sciprofiles.com/profile/2087399?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Huizhen Zhu (https://sciprofiles.com/profile/author/OE9Tak9FTkZoVzBJcDZodnJaUCtWeUYxSDRvSDJHYkMzbGcvcFFNWEFKdz0=?utm_sour
,
Jianfeng Fu (https://sciprofiles.com/profile/author/ektncDVLdndheDdnNTVhZWNRUzJSQT09?utm_source=mdpi.com&utm_medium=website&
,
Mengling Zhang (https://sciprofiles.com/profile/author/cVFVVUtlSTJBaUJ5RCtmekVBcytSMHd2TlFUU3RVTEd3dU44ZUpSUWtvMD0=?utm_so
and
Hui Ding (https://sciprofiles.com/profile/2186042?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3874; https://doi.org/10.3390/polym14183874 (https://doi.org/10.3390/polym14183874) - 16 Sep 2022
Cited by 2 (/2073-4360/14/18/3874#metrics) | Viewed by 1078

Abstract Forward osmosis (FO) membranes have the advantages of low energy consumption, high water recovery rate, and low membrane pollution trend, and they have been widely studied in many fields. However, the internal concentration polarization (ICP) caused by the accumulation of solutes in the **[...] Read more.**

(This article belongs to the Special Issue **Polymer-Based Nano/Bulk-Composites for Air and Water Remediation (/journal/polymers/special_issues/polym_air_water_remediat)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03874/article_deploy/html/images/polymers-14-03874-g001-550.jpg?1665714281)

(https://pub.mdpi-res.com/polymers/polymers-14-03874/article_deploy/html/images/polymers-14-03874-g002-550.jpg?1665714277)

(https://pub.mdpi-res.com/polymers/polymers-14-03874/article_deploy/html/images/polymers-14-03874-g003-550.jpg?1665714288)

(https://pub.mdpi-res.com/polymers/polymers-14-03874/article_deploy/html/images/polymers-14-03874-g004-550.jpg?1665714290)

(https://pub.mdpi-res.com/polymers/polymers-14-03874/article_deploy/html/images/polymers-14-03874-g005-550.jpg?1665714287)

(https://pub.mdpi-res.com/polymers/polymers-14-03874/article_deploy/html/images/polymers-14-03874-g006-550.jpg?1665714284)

(https://pub.mdpi-res.com/polymers/polymers-14-03874/article_deploy/html/images/polymers-14-03874-g007-550.jpg?1665714283)

(https://pub.mdpi-res.com/polymers/polymers-14-03874/article_deploy/html/images/polymers-14-03874-g008-550.jpg?1665714286)

Open Access Article (/2073-4360/14/18/3873/pdf?version=1663331224)

Melt-Crystallizations of α and γ Forms of Isotactic Polypropylene in Propene-Butene Copolymers (/2073-4360/14/18/3873)

by Miriam Scoti (https://sciprofiles.com/profile/2380028?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Fabio De Stefano (https://sciprofiles.com/profile/1985362?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Filomena Piscitelli (https://sciprofiles.com/profile/665885?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Giovanni Talarico (https://sciprofiles.com/profile/1738228?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Angelo Giordano (https://sciprofiles.com/profile/2112973?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Claudio De Rosa (https://sciprofiles.com/profile/1736469?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3873; https://doi.org/10.3390/polym14183873 (https://doi.org/10.3390/polym14183873) - 16 Sep 2022
Cited by 3 (/2073-4360/14/18/3873#metrics) | Viewed by 972

Abstract Random isotactic propene-butene copolymers (iPPC4) of different stereoregularity have been synthesized with three different homogeneous single center metallocene catalysts having different stereoselectivity. All samples crystallize from the polymerization solution in mixtures of α and γ forms, and the relative amount of γ form **[...] Read more.**

(This article belongs to the Special Issue **Advances and Applications of Block Copolymers (/journal/polymers/special_issues/Advances_and_Applications_of_Block_Copolymers)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03873/article_deploy/html/images/polymers-14-03873-ag-550.jpg?1663741253)

(https://pub.mdpi-res.com/polymers/polymers-14-03873/article_deploy/html/images/polymers-14-03873-g001-550.jpg?1663331330)

(https://pub.mdpi-res.com/polymers/polymers-14-03873/article_deploy/html/images/polymers-14-03873-g002-550.jpg?1663331311)

(https://pub.mdpi-res.com/polymers/polymers-14-03873/article_deploy/html/images/polymers-14-03873-g003-550.jpg?1663331321)

(https://pub.mdpi-res.com/polymers/polymers-14-03873/article_deploy/html/images/polymers-14-03873-g004-550.jpg?1663331319)

(https://pub.mdpi-res.com/polymers/polymers-14-03873/article_deploy/html/images/polymers-14-03873-g005-550.jpg?1663331302)

(https://pub.mdpi-res.com/polymers/polymers-14-03873/article_deploy/html/images/polymers-14-03873-g006-550.jpg?1663331308)

(https://pub.mdpi-res.com/polymers/polymers-14-03873/article_deploy/html/images/polymers-14-03873-g007-550.jpg?1663331324)

(https://pub.mdpi-res.com/polymers/polymers-14-03873/article_deploy/html/images/polymers-14-03873-g008-550.jpg?1663331327)

(https://pub.mdpi-res.com/polymers/polymers-14-03873/article_deploy/html/images/polymers-14-03873-g009-550.jpg?1663331315)

(https://pub.mdpi-res.com/polymers/polymers-14-03873/article_deploy/html/images/polymers-14-03873-sch001-550.jpg?1663331309)

Back to TopTop

Open Access Article (/2073-4360/14/18/3872/pdf?version=1663324773)

Oriented Tapes of Incompatible Polymers Using a Novel Multiplication Co-Extrusion Process (/2073-4360/14/18/3872)

by Jianting Wang (https://sciprofiles.com/profile/2453823?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Erik J. Price (https://sciprofiles.com/profile/1739030?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Gary E. Wnek (https://sciprofiles.com/profile/683609?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Andrew Olah (https://sciprofiles.com/profile/2265626?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Eric Baer (https://sciprofiles.com/profile/author/c0dmZW5GUVplMmNkYm1xRFRoNGZiUT09?utm_source=mdpi.com&utm_medium=website&u

Polymers **2022**, *14*(18), 3872; https://doi.org/10.3390/polym14183872 (https://doi.org/10.3390/polym14183872) - 16 Sep 2022

Viewed by 1068

Abstract Continuous tapes of polypropylene (PP) and high-density polyethylene (HDPE) were produced using a novel multiplication co-extrusion process. The structure of the PP/HDPE tapes consists of co-continuous PP and HDPE domains aligned in the extrusion direction, forming a fiber-like composite structure with individual domain **[...] Read more.**

(This article belongs to the Special Issue **Polymer Thin Films and Coatings (/journal/polymers/special_issues/Polymer_Thin_Films_and_Coatings)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03872/article_deploy/html/images/polymers-14-03872-g001-550.jpg?1663324852)

(https://pub.mdpi-res.com/polymers/polymers-14-03872/article_deploy/html/images/polymers-14-03872-g002-550.jpg?1663324876)

(https://pub.mdpi-res.com/polymers/polymers-14-03872/article_deploy/html/images/polymers-14-03872-g003-550.jpg?1663324872)

(https://pub.mdpi-res.com/polymers/polymers-14-03872/article_deploy/html/images/polymers-14-03872-g004-550.jpg?1663324881)

(https://pub.mdpi-res.com/polymers/polymers-14-03872/article_deploy/html/images/polymers-14-03872-g005-550.jpg?1663324870)

(https://pub.mdpi-res.com/polymers/polymers-14-03872/article_deploy/html/images/polymers-14-03872-g006-550.jpg?1663324855)

(https://pub.mdpi-res.com/polymers/polymers-14-03872/article_deploy/html/images/polymers-14-03872-g007-550.jpg?1663324868)

(https://pub.mdpi-res.com/polymers/polymers-14-03872/article_deploy/html/images/polymers-14-03872-g008-550.jpg?1663324865)

(https://pub.mdpi-res.com/polymers/polymers-14-03872/article_deploy/html/images/polymers-14-03872-g009-550.jpg?1663324874)

(https://pub.mdpi-res.com/polymers/polymers-14-03872/article_deploy/html/images/polymers-14-03872-g010-550.jpg?1663324861)

(https://pub.mdpi-res.com/polymers/polymers-14-03872/article_deploy/html/images/polymers-14-03872-g011-550.jpg?1663324857)

Open Access Article (/2073-4360/14/18/3871/pdf?version=1663323807)

Effect of Impregnation with Natural Shellac Polymer on the Mechanical Properties of Fast-Growing Chinese Fir (/2073-4360/14/18/3871)

by Qinzhi Zeng (https://sciprofiles.com/profile/1921683?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Xiya Yu (https://sciprofiles.com/profile/2444164?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Nianfeng Wei (https://sciprofiles.com/profile/author/T1cvM3BaRjc0RUhodlJoSDNBNFFYSFM1alA3V1RFZHFLQUdNNy9ZK204az0=?utm_sourc , Zhiyong Wu (https://sciprofiles.com/profile/author/bGlXemNvaVdjMG1vaWRTR0dxbGNMd1ZLTGZacFZtcnRCTWxxNWVkUUQrND0=?utm_sou , Qisong Liu (https://sciprofiles.com/profile/author/dmFac0RBRjAxRy9adlBTdGVkd1B2VllHK2hwUlY0VkFuWHMzZ0Q1RW9wVT0=?utm_source , Nairong Chen (https://sciprofiles.com/profile/author/MEt0dXNxckNjKzRuNnREb1pOYURsQ1h1dU1UWlVKUlVuczAvRU5mSTlaQT0=?utm_sour and Weigang Zhao (https://sciprofiles.com/profile/279734?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3871; https://doi.org/10.3390/polym14183871 (https://doi.org/10.3390/polym14183871) - 16 Sep 2022

Cited by 1 (/2073-4360/14/18/3871#metrics) | Viewed by 945

Abstract Fast-growing Chinese fir wood has shortfalls such as loose structure and low strength because it grows faster than natural trees. Resin impregnation is a great way to increase the strength of fast-growing fir. However, the resin used for impregnation is a kind of **[...] Read more.**

(This article belongs to the Special Issue **Wood Polymer Composites: Processing, Properties, and Applications (/journal/polymers/special_issues/Wood_Polymer_Composites_Processing_Properties_and_Applications)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03871/article_deploy/html/images/polymers-14-03871-g001-550.jpg?1663323891)

(https://pub.mdpi-res.com/polymers/polymers-14-03871/article_deploy/html/images/polymers-14-03871-g002-550.jpg?1663323898)

(https://pub.mdpi-res.com/polymers/polymers-14-03871/article_deploy/html/images/polymers-14-03871-g003-550.jpg?1663323904)

(https://pub.mdpi-res.com/polymers/polymers-14-03871/article_deploy/html/images/polymers-14-03871-g004-550.jpg?1663323896)

(https://pub.mdpi-res.com/polymers/polymers-14-03871/article_deploy/html/images/polymers-14-03871-g005-550.jpg?1663323886)

(https://pub.mdpi-res.com/polymers/polymers-14-03871/article_deploy/html/images/polymers-14-03871-g006-550.jpg?1663323889)

(https://pub.mdpi-res.com/polymers/polymers-14-03871/article_deploy/html/images/polymers-14-03871-g007-550.jpg?1663323892)

(https://pub.mdpi-res.com/polymers/polymers-14-03871/article_deploy/html/images/polymers-14-03871-g008-550.jpg?1663323885)

(https://pub.mdpi-res.com/polymers/polymers-14-03871/article_deploy/html/images/polymers-14-03871-g009a-550.jpg?1663323899)

(https://pub.mdpi-res.com/polymers/polymers-14-03871/article_deploy/html/images/polymers-14-03871-g009b-550.jpg?1663323903)

Back to TopTop

Open Access Article (/2073-4360/14/18/3870/pdf?version=1663557926)

Multi-Walled Carbon Nanotubes Functionalized with Hydroxamic Acid Derivatives for the Removal of Lead from Wastewater: Kinetics, Isotherm, and Thermodynamic Studies (/2073-4360/14/18/3870)

by

Yasair S. S. Al-Faiyz (https://sciprofiles.com/profile/95714?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and **Mohamed Gouda (https://sciprofiles.com/profile/127029?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**

Polymers **2022**, *14*(18), 3870; **https://doi.org/10.3390/polym14183870 (https://doi.org/10.3390/polym14183870)** - 16 Sep 2022

Cited by 5 (/2073-4360/14/18/3870#metrics) | Viewed by 1131

Abstract Hydroxamic acids are recognized chelators for various metals; however, using them as functional groups on carbon nanotubes (CNTs) is rare. In this study, novel multi-walled carbon nanotubes (MWCNTs) functionalized with hydroxamic acid derivatives were developed. The MWCNTs were first oxidized, and the resulting **[...] Read more.**

(This article belongs to the Collection **Polymer Applications in Environmental Science (/journal/polymers/topical_collections/Polym_Appl_Environ_Sci)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03870/article_deploy/html/images/polymers-14-03870-g001-550.jpg?1663558021)

(https://pub.mdpi-res.com/polymers/polymers-14-03870/article_deploy/html/images/polymers-14-03870-g002-550.jpg?1663558013)

(https://pub.mdpi-res.com/polymers/polymers-14-03870/article_deploy/html/images/polymers-14-03870-g003-550.jpg?1663558004)

(https://pub.mdpi-res.com/polymers/polymers-14-03870/article_deploy/html/images/polymers-14-03870-g004-550.jpg?1663558016)

(https://pub.mdpi-res.com/polymers/polymers-14-03870/article_deploy/html/images/polymers-14-03870-g005a-550.jpg?1663558020)

(https://pub.mdpi-res.com/polymers/polymers-14-03870/article_deploy/html/images/polymers-14-03870-g005b-550.jpg?1663558007)

(https://pub.mdpi-res.com/polymers/polymers-14-03870/article_deploy/html/images/polymers-14-03870-g006-550.jpg?1663558001)

(https://pub.mdpi-res.com/polymers/polymers-14-03870/article_deploy/html/images/polymers-14-03870-g007-550.jpg?1663558015)

(https://pub.mdpi-res.com/polymers/polymers-14-03870/article_deploy/html/images/polymers-14-03870-g008-550.jpg?1663558017)

(https://pub.mdpi-res.com/polymers/polymers-14-03870/article_deploy/html/images/polymers-14-03870-g009-550.jpg?1663558009)

(https://pub.mdpi-res.com/polymers/polymers-14-03870/article_deploy/html/images/polymers-14-03870-g010-550.jpg?1663558021)

(https://pub.mdpi-res.com/polymers/polymers-14-03870/article_deploy/html/images/polymers-14-03870-g011-550.jpg?1663558006)

(https://pub.mdpi-res.com/polymers/polymers-14-03870/article_deploy/html/images/polymers-14-03870-sch001-550.jpg?1663558006)

Open Access Article (/2073-4360/14/18/3869/pdf?version=1663579099)

Design and Preparation of a Biobased Colorimetric pH Indicator from Cellulose and Pigments of Bacterial Origin, for Potential Application as Smart Food Packaging (/2073-4360/14/18/3869)

by

Lúcia F. A. Amorim (https://sciprofiles.com/profile/1832303?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), **Ana P. Gomes (https://sciprofiles.com/profile/159453?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)** and **Isabel C. Gouveia (https://sciprofiles.com/profile/47223?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**

Polymers **2022**, *14*(18), 3869; **https://doi.org/10.3390/polym14183869 (https://doi.org/10.3390/polym14183869)** - 15 Sep 2022

Cited by 2 (/2073-4360/14/18/3869#metrics) | Viewed by 1262

Abstract Nowadays, worldwide challenges such as global warming, pollution, unsustainable consumption patterns, and scarcity of natural resources are key drivers toward future-oriented bioeconomy strategies, which rely on renewable biobased resources, such as bacterial pigments and bacterial cellulose (BC), for materials production. Therefore, the purpose **[...] Read more.**

(This article belongs to the Special Issue **Sustainability and Circularity for Novel Bioactive and Biobased Solutions: Materials, Polymers, Coatings, and Processing (/journal/polymers/special_issues/3AUVJSI214)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03869/article_deploy/html/images/polymers-14-03869-g001-550.jpg?1663579184)

(https://pub.mdpi-res.com/polymers/polymers-14-03869/article_deploy/html/images/polymers-14-03869-g002-550.jpg?1663579182)

(https://pub.mdpi-res.com/polymers/polymers-14-03869/article_deploy/html/images/polymers-14-03869-g003-550.jpg?1663579177)

Open Access Article (/2073-4360/14/18/3868/pdf?version=1663653647)

Isosorbide and 2,5-Furandicarboxylic Acid Based (Co)Polyesters: Synthesis, Characterization, and Environmental Degradation (/2073-4360/14/18/3868)

by

Chaima Bouyahya (https://sciprofiles.com/profile/2367700?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), **Rafael Patrício (https://sciprofiles.com/profile/2439522?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Ana Paço (https://sciprofiles.com/profile/1711503?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Mafalda S. Lima (https://sciprofiles.com/profile/author/dkp1UmRXU05MQ2ZmTndERno2bEx6SlpXMlVrVEhaMUkvbjEzakt5NXVkaz0=?utm_sou**

,

Ana C. Fonseca (https://sciprofiles.com/profile/230019?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), **Teresa Rocha-Santos (https://sciprofiles.com/profile/114405?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Mustapha Majdoub (https://sciprofiles.com/profile/author/RUlaeFB6R0JBVDlVa2dZN0wyMTNwb2ZiUFI4T29mOVV6MDU0anltNXdwZz0=?utm_s**

,

Back to TopTop

Armando J. D. Silvestre (https://sciprofiles.com/profile/93280?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Andreia F. Sousa (https://sciprofiles.com/profile/473944?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3868; https://doi.org/10.3390/polym14183868 (https://doi.org/10.3390/polym14183868) - 15 Sep 2022
Cited by 1 (/2073-4360/14/18/3868#metrics) | Viewed by 1471

Abstract Poly(2,5-furandicarboxylate)s incorporating aliphatic moieties represent a promising family of polyesters, typically entirely based on renewable resources and with tailored properties, notably degradability. This study aims to go beyond by developing poly(isosorbide 2,5-furandicarboxylate-*co*-dodecanedioate) copolyesters derived from isosorbide (Is), 2,5-furandicarboxylic acid (FDCA), and **[...] Read more.**
(This article belongs to the Special Issue **Women in Polymer Science and Technology: Sustainable Polymers (** /journal/polymers/special_issues/Women_Sustain_Polym))

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03868/article_deploy/html/images/polymers-14-03868-g001-550.jpg?1663653733)

(https://pub.mdpi-res.com/polymers/polymers-14-03868/article_deploy/html/images/polymers-14-03868-g002-550.jpg?1663653730)

(https://pub.mdpi-res.com/polymers/polymers-14-03868/article_deploy/html/images/polymers-14-03868-g003-550.jpg?1663653731)

(https://pub.mdpi-res.com/polymers/polymers-14-03868/article_deploy/html/images/polymers-14-03868-g004-550.jpg?1663653734)

(https://pub.mdpi-res.com/polymers/polymers-14-03868/article_deploy/html/images/polymers-14-03868-g005-550.jpg?1663653739)

(https://pub.mdpi-res.com/polymers/polymers-14-03868/article_deploy/html/images/polymers-14-03868-g006-550.jpg?1663653745)

(https://pub.mdpi-res.com/polymers/polymers-14-03868/article_deploy/html/images/polymers-14-03868-sch001-550.jpg?1663653736)

Open Access Article (/2073-4360/14/18/3867/pdf?version=1663565182)

Electrical Tree Characteristics of Bisphenol A Epoxy Resin/Maleopimaric Anhydride Curing System (/2073-4360/14/18/3867)

by Hechen Liu (https://sciprofiles.com/profile/457298?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Xuan Wu (https://sciprofiles.com/profile/author/S1VIRlp2ZHp3b0c2cWoxa05xenY2Y0djQUlVQkd2d29hQ1FYNzRIRUdyMD0=?utm_source=mdp
,
Zhanpeng Guo (https://sciprofiles.com/profile/author/akhkTTJVdXBFWHN1aHozc0xBNUJ4bXZNK3MxL3hmb3cwRkxVblNhZE1WMD0=?utm_s
,
Peng Dong (https://sciprofiles.com/profile/author/aWNMWW5wK29MUUdqMEVtSVB1eDRTSUNwb0E0eVN0ZVJUQWViU1JmZy9FOD0=?utm_s
,
Qi Ge (https://sciprofiles.com/profile/author/eUwyVklPRlFCRHY1blJ6NXo0eHlGZz09?utm_source=mdpi.com&utm_medium=website&utm_can
,
Liwei Wei (https://sciprofiles.com/profile/2314583?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Zhanglin Sun (https://sciprofiles.com/profile/2451117?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3867; https://doi.org/10.3390/polym14183867 (https://doi.org/10.3390/polym14183867) - 15 Sep 2022
Cited by 2 (/2073-4360/14/18/3867#metrics) | Viewed by 1335

Abstract Epoxy resin insulation materials are mainly derived from petrochemical materials which have the disadvantages of resource consumption and environmental pollution. In order to cure bisphenol A epoxy resin, a maleopimaric anhydride (MPA) curing agent was prepared from rosin, a renewable resource, and blended **[...] Read more.**
(This article belongs to the Special Issue **Advances in Bio-Based Polymeric Materials (/journal/polymers/special_issues/Adv_Bio-Based_Polym_Mater)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03867/article_deploy/html/images/polymers-14-03867-g001-550.jpg?1663565265)

(https://pub.mdpi-res.com/polymers/polymers-14-03867/article_deploy/html/images/polymers-14-03867-g002-550.jpg?1663565269)

(https://pub.mdpi-res.com/polymers/polymers-14-03867/article_deploy/html/images/polymers-14-03867-g003-550.jpg?1663565264)

(https://pub.mdpi-res.com/polymers/polymers-14-03867/article_deploy/html/images/polymers-14-03867-g004-550.jpg?1663565267)

(https://pub.mdpi-res.com/polymers/polymers-14-03867/article_deploy/html/images/polymers-14-03867-g005-550.jpg?1663565273)

(https://pub.mdpi-res.com/polymers/polymers-14-03867/article_deploy/html/images/polymers-14-03867-g006-550.jpg?1663565261)

(https://pub.mdpi-res.com/polymers/polymers-14-03867/article_deploy/html/images/polymers-14-03867-g007-550.jpg?1663565260)

(https://pub.mdpi-res.com/polymers/polymers-14-03867/article_deploy/html/images/polymers-14-03867-g008-550.jpg?1663565266)

(https://pub.mdpi-res.com/polymers/polymers-14-03867/article_deploy/html/images/polymers-14-03867-g009-550.jpg?1663565262)

(https://pub.mdpi-res.com/polymers/polymers-14-03867/article_deploy/html/images/polymers-14-03867-g010-550.jpg?1663565268)

(https://pub.mdpi-res.com/polymers/polymers-14-03867/article_deploy/html/images/polymers-14-03867-g011-550.jpg?1663565270)

Open Access Article (/2073-4360/14/18/3866/pdf?version=1663672058)

Synthesis of Controlled-Release Calcium Peroxide Nanoparticles Coated with Dextran for Removal of Doxycycline from Aqueous System (/2073-4360/14/18/3866)

by
Nurul Nazihah Amerhaider Nuar (https://sciprofiles.com/profile/1539103?utm_source=mdpi.com&utm_medium=website&utm_campaign=avata
,

Back to TopTop

Siti Nurul Ain Md. Jamil (https://sciprofiles.com/profile/534617?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) (), Fan Li (https://sciprofiles.com/profile/2447519?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Iylia Diana Mat Azmi (https://sciprofiles.com/profile/1208727?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Pen-Chi Chiang (https://sciprofiles.com/profile/460889?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Thomas Shean Yaw Choong (https://sciprofiles.com/profile/264144?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_na

Polymers **2022**, *14*(18), 3866; https://doi.org/10.3390/polym14183866 (https://doi.org/10.3390/polym14183866) - 15 Sep 2022

Cited by 3 (/2073-4360/14/18/3866#metrics) | Viewed by 1222

Abstract Nanoscale calcium peroxide (nCP) has turned out to be one of the effective and environmentally friendly approaches for wastewater remediation purposes. The rapid hydrolysis of nCPs and burst oxygen release caused by the high surface-to-volume ratio of nCPs could surpass the appropriate demand **[...] Read more.**

(This article belongs to the Special Issue **Advances in Functional Polymer Matrix Composites (/journal/polymers/special_issues/advances_functional_polym_matrix_compo)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03866/article_deploy/html/images/polymers-14-03866-g001-550.jpg?1663672132)

(https://pub.mdpi-res.com/polymers/polymers-14-03866/article_deploy/html/images/polymers-14-03866-g002-550.jpg?1663672133)

(https://pub.mdpi-res.com/polymers/polymers-14-03866/article_deploy/html/images/polymers-14-03866-g003-550.jpg?1663672124)

(https://pub.mdpi-res.com/polymers/polymers-14-03866/article_deploy/html/images/polymers-14-03866-g004-550.jpg?1663672136)

(https://pub.mdpi-res.com/polymers/polymers-14-03866/article_deploy/html/images/polymers-14-03866-g005-550.jpg?1663672145)

(https://pub.mdpi-res.com/polymers/polymers-14-03866/article_deploy/html/images/polymers-14-03866-g006-550.jpg?1663672144)

(https://pub.mdpi-res.com/polymers/polymers-14-03866/article_deploy/html/images/polymers-14-03866-g007a-550.jpg?1663672139)

(https://pub.mdpi-res.com/polymers/polymers-14-03866/article_deploy/html/images/polymers-14-03866-g007b-550.jpg?1663672141)

(https://pub.mdpi-res.com/polymers/polymers-14-03866/article_deploy/html/images/polymers-14-03866-g008-550.jpg?1663672130)

(https://pub.mdpi-res.com/polymers/polymers-14-03866/article_deploy/html/images/polymers-14-03866-g009-550.jpg?1663672142)

(https://pub.mdpi-res.com/polymers/polymers-14-03866/article_deploy/html/images/polymers-14-03866-g010-550.jpg?1663672128)

(https://pub.mdpi-res.com/polymers/polymers-14-03866/article_deploy/html/images/polymers-14-03866-g011-550.jpg?1663672143)

(https://pub.mdpi-res.com/polymers/polymers-14-03866/article_deploy/html/images/polymers-14-03866-g012-550.jpg?1663672131)

(https://pub.mdpi-res.com/polymers/polymers-14-03866/article_deploy/html/images/polymers-14-03866-g013-550.jpg?1663672135)

Open Access Article (/2073-4360/14/18/3865/pdf?version=1663301419)

Interfacial Forces in Free-Standing Layers of Melted Polyethylene, from Critical to Nanoscopic Thicknesses (/2073-4360/14/18/3865)

by Fernando Iguazú Ramírez-Zavaleta (https://sciprofiles.com/profile/author/N2p2VHE1bzE5ZjBhMk50VEVSc1hBUEVKSTh6dVNOdUI3U3dwNGJZ), Victor Manuel Torres-Dominguez (https://sciprofiles.com/profile/author/NDcxeVU2N2RWMml2V29HdURicnJPWWR2c2ZPMzhib1BSTEdzOWRC), Gonzalo Viramontes-Gamboa (https://sciprofiles.com/profile/976001?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_n and José Luis Rivera (https://sciprofiles.com/profile/628525?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3865; https://doi.org/10.3390/polym14183865 (https://doi.org/10.3390/polym14183865) - 15 Sep 2022

Cited by 1 (/2073-4360/14/18/3865#metrics) | Viewed by 843

Abstract Molecular dynamics simulations of ultrathin free-standing layers made of melted (373.15–673.15 K) polyethylene chains, which exhibit a lower melting temperature (compared to the bulk value), were carried out to investigate the dominant pressure forces that shape the conformation of chains at the interfacial **[...] Read more.**

(This article belongs to the Special Issue **Advanced Multi-Functional Polymer Composites (/journal/polymers/special_issues/multi_functional_polymer_composites)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03865/article_deploy/html/images/polymers-14-03865-g001-550.jpg?1663301499)

(https://pub.mdpi-res.com/polymers/polymers-14-03865/article_deploy/html/images/polymers-14-03865-g002-550.jpg?1663301502)

(https://pub.mdpi-res.com/polymers/polymers-14-03865/article_deploy/html/images/polymers-14-03865-g003-550.jpg?1663301500)

(https://pub.mdpi-res.com/polymers/polymers-14-03865/article_deploy/html/images/polymers-14-03865-g004-550.jpg?1663301504)

(https://pub.mdpi-res.com/polymers/polymers-14-03865/article_deploy/html/images/polymers-14-03865-g005-550.jpg?1663301512)

(https://pub.mdpi-res.com/polymers/polymers-14-03865/article_deploy/html/images/polymers-14-03865-g006-550.jpg?1663301506)

(https://pub.mdpi-res.com/polymers/polymers-14-03865/article_deploy/html/images/polymers-14-03865-g007-550.jpg?1663301509)

(https://pub.mdpi-res.com/polymers/polymers-14-03865/article_deploy/html/images/polymers-14-03865-g008-550.jpg?1663301503)

(https://pub.mdpi-res.com/polymers/polymers-14-03865/article_deploy/html/images/polymers-14-03865-g009-550.jpg?1663301507)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03865/article_deploy/html/images/polymers-14-03865-g010-550.jpg?1663301511)

(https://pub.mdpi-res.com/polymers/polymers-14-03865/article_deploy/html/images/polymers-14-03865-g011-550.jpg?1663301508)

Open Access Article (/2073-4360/14/18/3864/pdf?version=1663723239)

Design, Fabrication and Characterization of Biodegradable Composites Containing *Closo*-Borates as Potential Materials for Boron Neutron Capture Therapy (/2073-4360/14/18/3864)

by Mariia Stepanova (https://sciprofiles.com/profile/1740296?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Anatoliy Dobrodumov (https://sciprofiles.com/profile/938943?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Ilia Averianov (https://sciprofiles.com/profile/author/Z1Jjc25QQ29sZkY4Y0VyUDRwSklTak9MdjlId2grSWZWNEp6MXlpdmFQYz0=?utm_source=
, Iosif Gofman (https://sciprofiles.com/profile/author/L1ltNmwvZ2lvUVNVcUN2ZlVKaXlCTEFPdGpKRGp5WFQ2dFgyN011WGh0ST0=?utm_sourc
, Juliya Nashchekina (https://sciprofiles.com/profile/author/SGo5N0lqdGxWNXppNDJCdGhzMm90QT09?utm_source=mdpi.com&utm_medium=
, Ivan Guryanov (https://sciprofiles.com/profile/1190771?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Ilya Klyukin (https://sciprofiles.com/profile/1387789?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Andrey Zhdanov (https://sciprofiles.com/profile/1337536?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Evgenia Korzhikova-Vlakh (https://sciprofiles.com/profile/1374290?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_na
and
Konstantin Zhizhin (https://sciprofiles.com/profile/1528633?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3864; https://doi.org/10.3390/polym14183864 (https://doi.org/10.3390/polym14183864) - 15 Sep 2022

Cited by 6 (/2073-4360/14/18/3864#metrics) | Viewed by 1512

Abstract Boron neutron capture therapy (BNCT) has been recognized as a very promising approach for cancer treatment. In the case of osteosarcoma, boron-containing scaffolds can be a powerful tool to combine boron delivery to the tumor cells and the repair of postoperative bone defects. **[...] Read more.**

(This article belongs to the Special Issue **Advanced Polymer Composites for Medical Applications (/journal/polymers/special_issues/Polym_Compos_Med)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03864/article_deploy/html/images/polymers-14-03864-g001-550.jpg?1663723312)

(https://pub.mdpi-res.com/polymers/polymers-14-03864/article_deploy/html/images/polymers-14-03864-g002-550.jpg?1663723323)

(https://pub.mdpi-res.com/polymers/polymers-14-03864/article_deploy/html/images/polymers-14-03864-g003-550.jpg?1663723320)

(https://pub.mdpi-res.com/polymers/polymers-14-03864/article_deploy/html/images/polymers-14-03864-g004-550.jpg?1663723313)

(https://pub.mdpi-res.com/polymers/polymers-14-03864/article_deploy/html/images/polymers-14-03864-g005-550.jpg?1663723318)

(https://pub.mdpi-res.com/polymers/polymers-14-03864/article_deploy/html/images/polymers-14-03864-g006-550.jpg?1663723324)

(https://pub.mdpi-res.com/polymers/polymers-14-03864/article_deploy/html/images/polymers-14-03864-g007-550.jpg?1663723305)

(https://pub.mdpi-res.com/polymers/polymers-14-03864/article_deploy/html/images/polymers-14-03864-g008-550.jpg?1663723314)

(https://pub.mdpi-res.com/polymers/polymers-14-03864/article_deploy/html/images/polymers-14-03864-g009-550.jpg?1663723321)

(https://pub.mdpi-res.com/polymers/polymers-14-03864/article_deploy/html/images/polymers-14-03864-g010-550.jpg?1663723325)

(https://pub.mdpi-res.com/polymers/polymers-14-03864/article_deploy/html/images/polymers-14-03864-g011-550.jpg?1663723303)

(https://pub.mdpi-res.com/polymers/polymers-14-03864/article_deploy/html/images/polymers-14-03864-g012-550.jpg?1663723309)

(https://pub.mdpi-res.com/polymers/polymers-14-03864/article_deploy/html/images/polymers-14-03864-g013-550.jpg?1663723306)

(https://pub.mdpi-res.com/polymers/polymers-14-03864/article_deploy/html/images/polymers-14-03864-g014-550.jpg?1663723326)

(https://pub.mdpi-res.com/polymers/polymers-14-03864/article_deploy/html/images/polymers-14-03864-g015-550.jpg?1663723315)

(https://pub.mdpi-res.com/polymers/polymers-14-03864/article_deploy/html/images/polymers-14-03864-g016-550.jpg?1663723314)

(https://pub.mdpi-res.com/polymers/polymers-14-03864/article_deploy/html/images/polymers-14-03864-g017-550.jpg?1663723310)

Open Access Article (/2073-4360/14/18/3863/pdf?version=1663248683)

Production and Potential Application of Pyroligneous Acids from Rubberwood and Oil Palm Trunk as Wood Preservatives through Vacuum-Pressure Impregnation Treatment (/2073-4360/14/18/3863)

by Chuan Li Lee (https://sciprofiles.com/profile/1736941?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Kit Ling Chin (https://sciprofiles.com/profile/1149069?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Pui San Khoo (https://sciprofiles.com/profile/2714754?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Mohd Sahfani Hafizuddin (https://sciprofiles.com/profile/author/L2FHRnhFckpaSStvM1MxNkwybVpaanFyclphaE0yeHQ4SkZOcFF4TEd3ND0=?
and
Paik San H'ng (https://sciprofiles.com/profile/1149232?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3863; https://doi.org/10.3390/polym14183863 (https://doi.org/10.3390/polym14183863) - 15 Sep 2022

Cited by 2 (/2073-4360/14/18/3863#metrics) | Viewed by 1133

Back to TopTop

Abstract The development of low-environmental-impact technologies for the elimination of biological damage is one of the vital goals of the wood protection industry. The possibility of utilizing pyroligneous acid as a wood preservative can be a great solution to extend the application of the **[...] Read more.**

(This article belongs to the Special Issue **Durability and Modification of Wood Surfaces (/journal/polymers/special_issues/Durab_Modif_Wood_Surf)**)

► Show Figures

Open Access Article **(/2073-4360/14/18/3862/pdf?version=1663300808)**

Comparison of Titanium and PEEK Medical Plastic Implant Materials for Their Bacterial Biofilm Formation Properties (/2073-4360/14/18/3862)

by **Sonia Sarfraz (https://sciprofiles.com/profile/2025900?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Pilvi-Helinä Mäntynen (https://sciprofiles.com/profile/author/QktueU9tOUE2MmJWSDI2QnBjMDNnUmlhUENBUThrR09lVXA4Sm1FWlNjbz0=?u**, **Marisa Laurila (https://sciprofiles.com/profile/author/VlIBcXBLVnhya1hxT0ZaZHN1Q2N2QTdJZWRNS2dlUmZwRHNQTUc3Uy9OST0=?utm_sou**, **Sami Rossi (https://sciprofiles.com/profile/author/RVpBSWFRM0ZuY1R3OVdLMkRNYnYvU2RvbkRzc0xWbDhCa0hlOUdsMCszOD0=?utm_sou**, **Junnu Leikola (https://sciprofiles.com/profile/author/cTRMQjU4Q1M0eWJUdlF1U2FDRE9HNmFkcStYSVRoNU1wM2FTbjdtS05Wbz0=?utm_sou**, **Mika Kaakinen (https://sciprofiles.com/profile/author/TWZSMjJ4bTMvN2ZlREFZbHlwbGYzVTRKRFpSRlR1d0wvenVLMXhvdk40RT0=?utm_sou**, **Juho Suojanen (https://sciprofiles.com/profile/author/Q2F5c1oyM0hkNlRaeHI5SnAzUXh0ZHVxeFNvU1dET25ScUpKSElMMWU2OD0=?utm_sou** and **Justus Reunanen (https://sciprofiles.com/profile/1186267?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**

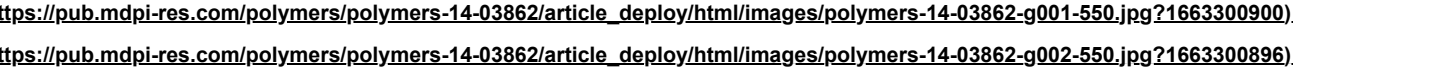
Polymers **2022**, *14*(18), 3862; **https://doi.org/10.3390/polym14183862 (https://doi.org/10.3390/polym14183862)** - 15 Sep 2022

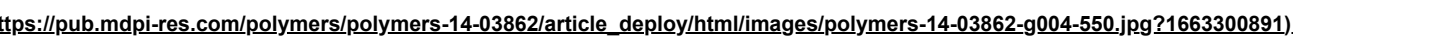
Cited by 4 (/2073-4360/14/18/3862#metrics) | Viewed by 1809

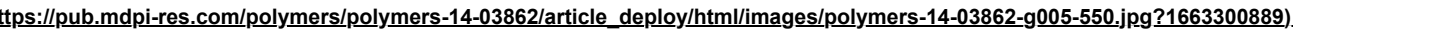
Abstract This study investigated two of the most commonly used CAD–CAM materials for patient-specific reconstruction in craniomaxillofacial surgery. The aim of this study was to access the biofilm formation of *Staphylococcus aureus*, *Streptococcus mutans*, *Enterococcus faecalis*, and *Escherichia coli* on titanium **[...] Read more.**

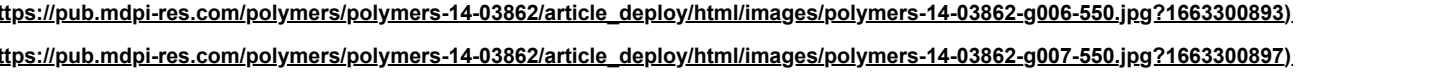
(This article belongs to the Special Issue **Polymeric Structures for Biomedical Use (/journal/polymers/special_issues/Polymeric_Structures_Biomedical_Use)**)

► Show Figures









Open Access Review **(/2073-4360/14/18/3861/pdf?version=1663249211)**

Activation Mechanism of Coal Gangue and Its Impact on the Properties of Geopolymers: A Review (/2073-4360/14/18/3861)

by **Ruicong Han (https://sciprofiles.com/profile/1801110?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Xiaoning Guo (https://sciprofiles.com/profile/2173651?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Junfeng Guan (https://sciprofiles.com/profile/878398?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Xianhua Yao (https://sciprofiles.com/profile/878346?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)** and **Ying Hao (https://sciprofiles.com/profile/291069?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**

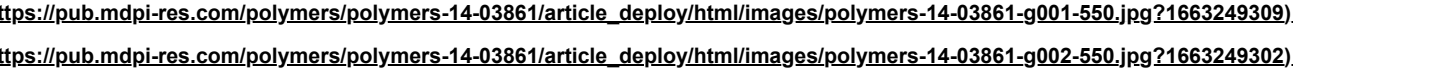
Polymers **2022**, *14*(18), 3861; **https://doi.org/10.3390/polym14183861 (https://doi.org/10.3390/polym14183861)** - 15 Sep 2022

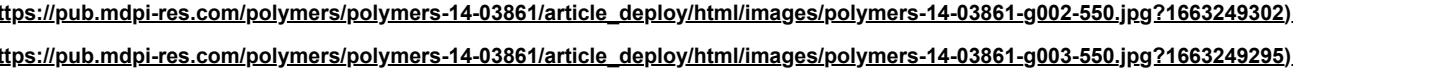
Cited by 9 (/2073-4360/14/18/3861#metrics) | Viewed by 1930

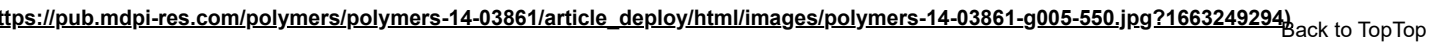
Abstract Coal gangue is one of the industrial solid wastes that may harm the human body through the ecosystem for a long time. Using coal gangue in geopolymer preparation can effectively reduce cement output and meet the sustainability requirements. In this paper, the physical **[...] Read more.**

(This article belongs to the Special Issue **Fiber-Reinforced Composite (/journal/polymers/special_issues/Fiber_Reinforced_Compos)**)

► Show Figures







Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03861/article_deploy/html/images/polymers-14-03861-g006-550.jpg?1663249285)

(https://pub.mdpi-res.com/polymers/polymers-14-03861/article_deploy/html/images/polymers-14-03861-g007-550.jpg?1663249293)

(https://pub.mdpi-res.com/polymers/polymers-14-03861/article_deploy/html/images/polymers-14-03861-g008-550.jpg?1663249288)

(https://pub.mdpi-res.com/polymers/polymers-14-03861/article_deploy/html/images/polymers-14-03861-g009-550.jpg?1663249284)

(https://pub.mdpi-res.com/polymers/polymers-14-03861/article_deploy/html/images/polymers-14-03861-g010a-550.jpg?1663249291)

(https://pub.mdpi-res.com/polymers/polymers-14-03861/article_deploy/html/images/polymers-14-03861-g010b-550.jpg?1663249290)

(https://pub.mdpi-res.com/polymers/polymers-14-03861/article_deploy/html/images/polymers-14-03861-g011-550.jpg?1663249299)

(https://pub.mdpi-res.com/polymers/polymers-14-03861/article_deploy/html/images/polymers-14-03861-g012-550.jpg?1663249310)

(https://pub.mdpi-res.com/polymers/polymers-14-03861/article_deploy/html/images/polymers-14-03861-g013-550.jpg?1663249307)

(https://pub.mdpi-res.com/polymers/polymers-14-03861/article_deploy/html/images/polymers-14-03861-g014-550.jpg?1663249303)

(https://pub.mdpi-res.com/polymers/polymers-14-03861/article_deploy/html/images/polymers-14-03861-g015-550.jpg?1663249297)

(https://pub.mdpi-res.com/polymers/polymers-14-03861/article_deploy/html/images/polymers-14-03861-g016-550.jpg?1663249296)

(https://pub.mdpi-res.com/polymers/polymers-14-03861/article_deploy/html/images/polymers-14-03861-g017-550.jpg?1663249305)

Open Access Article (/2073-4360/14/18/3860/pdf?version=1663318979)

Synthesis of Highly Conductive Poly(3-hexylthiophene) by Chemical Oxidative Polymerization Using Surfactant Templates (/2073-4360/14/18/3860)

by
Sanhanut Kesornsit (https://sciprofiles.com/profile/author/MXRPcTdSQUplckx2RFBxS01JUHB0L3ErdFREVlhzckZiSXVkMy83VFJCUT0=?utm_
,
Chatrawee Direksilp (https://sciprofiles.com/profile/author/L0wxQ2w0cEd0MHpYL2F6dFpXdjVpbENWbWgremhpUTc3VGNKczl1Zzl2Zz0=?utm
,
Katesara Phasuksom (https://sciprofiles.com/profile/2408867?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Natlita Thummarungsan (https://sciprofiles.com/profile/author/dzVhNy85MUlvdGlQTzNVdGNQSTBQQWRGVE9yY1VickNRcUwzckhTek9XOD0
,
Phimchanok Sakunpongpitiporn (https://sciprofiles.com/profile/author/K2lxMlJWSTRBeWQ1YWZHQ2lmclZQWnlraDlib2N2ZzlQNjZsait1Zm9Ml
,
Kornkanok Rotjanasuworapong (https://sciprofiles.com/profile/1551069?utm_source=mdpi.com&utm_medium=website&utm_campaign=avata
,
Anuvat Sirivat (https://sciprofiles.com/profile/157524?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Sumonman Niamlang (https://sciprofiles.com/profile/16360?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3860; https://doi.org/10.3390/polym14183860 (https://doi.org/10.3390/polym14183860) - 15 Sep 2022
Cited by 3 (/2073-4360/14/18/3860#metrics) | Viewed by 1261

Abstract Poly(3-hexylthiophene) (P3HT) was systematically synthesized by chemical oxidative polymerization in chloroform with ferric chloride ($FeCl_3$) as the oxidizing agent and various surfactants of the shape templates. The effects of 3HT: $FeCl_3$ mole ratios, polymerization times, and surfactant types and concentrations **[...] Read more.**

(This article belongs to the Special Issue **Polymeric Materials for Environmental and Biomedical Application (/journal/polymers/special_issues/polymeric_materials_environmental_biomedical_application)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03860/article_deploy/html/images/polymers-14-03860-ag-550.jpg?1664162638)

(https://pub.mdpi-res.com/polymers/polymers-14-03860/article_deploy/html/images/polymers-14-03860-g001-550.jpg?1663319050)

(https://pub.mdpi-res.com/polymers/polymers-14-03860/article_deploy/html/images/polymers-14-03860-g002-550.jpg?1663319056)

(https://pub.mdpi-res.com/polymers/polymers-14-03860/article_deploy/html/images/polymers-14-03860-g003-550.jpg?1663319061)

(https://pub.mdpi-res.com/polymers/polymers-14-03860/article_deploy/html/images/polymers-14-03860-g004-550.jpg?1663319068)

(https://pub.mdpi-res.com/polymers/polymers-14-03860/article_deploy/html/images/polymers-14-03860-g005-550.jpg?1663319066)

(https://pub.mdpi-res.com/polymers/polymers-14-03860/article_deploy/html/images/polymers-14-03860-g006-550.jpg?1663319064)

(https://pub.mdpi-res.com/polymers/polymers-14-03860/article_deploy/html/images/polymers-14-03860-g007-550.jpg?1663319060)

(https://pub.mdpi-res.com/polymers/polymers-14-03860/article_deploy/html/images/polymers-14-03860-g008-550.jpg?1663319049)

(https://pub.mdpi-res.com/polymers/polymers-14-03860/article_deploy/html/images/polymers-14-03860-g009-550.jpg?1663319071)

(https://pub.mdpi-res.com/polymers/polymers-14-03860/article_deploy/html/images/polymers-14-03860-g010-550.jpg?1663319052)

Open Access Article (/2073-4360/14/18/3859/pdf?version=1663241986)

Influence of Loading Rate and Temperature on the Energy Absorption of 3D-Printed Polymeric Origami Tubes under Quasi-Static Loading (/2073-4360/14/18/3859)

by Xiubin Zuo (https://sciprofiles.com/profile/2436552?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Chengjie Guo (https://sciprofiles.com/profile/author/bzgvcmlCV3N5WStZdUlhRjQ3eCtLRXlDVWl1bDJpMTg4Q0l2K1FTQmZiRT0=?utm_source
,

Back to TopTop

Weidong Chen (https://sciprofiles.com/profile/author/c2hPSnlDL1RpV1VUTUUvTHBkU05UWFJrM3M2WEV2TTkvd0hCaFJKMmNsQT0=?utm_s
,
Yixiao Wang (https://sciprofiles.com/profile/author/SEFIM2dOcXR5Rzc1ZS9meURlcnVKTmVYZUxlTmdmbld3eVMyUmRFQzlNdz0=?utm_sourc
,
Jian Zhao (https://sciprofiles.com/profile/2417525?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Huanlin Lv (https://sciprofiles.com/profile/2417526?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3859; https://doi.org/10.3390/polym14183859 (https://doi.org/10.3390/polym14183859) - 15 Sep 2022
Cited by 1 (/2073-4360/14/18/3859#metrics) | Viewed by 1138

Abstract Owing to deformation in the form of the diamond mode with high-energy absorption capacity, origami thin-walled tubes have attracted considerable attention in recent years. Stamping and welding are mainly employed to produce different types of origami thin-walled tubes. The processing defects and geometric **[...] Read more.**

(This article belongs to the Special Issue **Advances in Polymer Processing and Molding (/journal/polymers/special_issues/Advances_Polymer_Processing_Molding)**)

► **Show Figures**

(https://pub.mdpi-res.com/polymers/polymers-14-03859/article_deploy/html/images/polymers-14-03859-g001-550.jpg?1663242064)

(https://pub.mdpi-res.com/polymers/polymers-14-03859/article_deploy/html/images/polymers-14-03859-g002-550.jpg?1663242074)

(https://pub.mdpi-res.com/polymers/polymers-14-03859/article_deploy/html/images/polymers-14-03859-g003-550.jpg?1663242086)

(https://pub.mdpi-res.com/polymers/polymers-14-03859/article_deploy/html/images/polymers-14-03859-g004-550.jpg?1663242070)

(https://pub.mdpi-res.com/polymers/polymers-14-03859/article_deploy/html/images/polymers-14-03859-g005-550.jpg?1663242072)

(https://pub.mdpi-res.com/polymers/polymers-14-03859/article_deploy/html/images/polymers-14-03859-g006-550.jpg?1663242067)

(https://pub.mdpi-res.com/polymers/polymers-14-03859/article_deploy/html/images/polymers-14-03859-g007a-550.jpg?1663242085)

(https://pub.mdpi-res.com/polymers/polymers-14-03859/article_deploy/html/images/polymers-14-03859-g007b-550.jpg?1663242080)

(https://pub.mdpi-res.com/polymers/polymers-14-03859/article_deploy/html/images/polymers-14-03859-g008-550.jpg?1663242079)

(https://pub.mdpi-res.com/polymers/polymers-14-03859/article_deploy/html/images/polymers-14-03859-g009-550.jpg?1663242063)

(https://pub.mdpi-res.com/polymers/polymers-14-03859/article_deploy/html/images/polymers-14-03859-g010-550.jpg?1663242081)

(https://pub.mdpi-res.com/polymers/polymers-14-03859/article_deploy/html/images/polymers-14-03859-g011-550.jpg?1663242076)

(https://pub.mdpi-res.com/polymers/polymers-14-03859/article_deploy/html/images/polymers-14-03859-g012a-550.jpg?1663242083)

(https://pub.mdpi-res.com/polymers/polymers-14-03859/article_deploy/html/images/polymers-14-03859-g012b-550.jpg?1663242073)

(https://pub.mdpi-res.com/polymers/polymers-14-03859/article_deploy/html/images/polymers-14-03859-g013-550.jpg?1663242062)

Open Access Article (/2073-4360/14/18/3858/pdf?version=1663387304)

Pierre Robin Sequence and 3D Printed Personalized Composite Appliances in Interdisciplinary Approach (/2073-4360/14/18/3858)

by Andrej Thurzo (https://sciprofiles.com/profile/1796053?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Barbora Šufliarsky (https://sciprofiles.com/profile/2394782?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Wanda Urbanová (https://sciprofiles.com/profile/2309858?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Martin Čverha (https://sciprofiles.com/profile/2384480?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Martin Strunga (https://sciprofiles.com/profile/2385366?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Ivan Varga (https://sciprofiles.com/profile/581171?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3858; https://doi.org/10.3390/polym14183858 (https://doi.org/10.3390/polym14183858) - 15 Sep 2022
Cited by 14 (/2073-4360/14/18/3858#metrics) | Viewed by 3340

Abstract This paper introduces a complex novel concept and methodology for the creation of personalized biomedical appliances 3D-printed from certified biocompatible photopolymer resin Dental LT Clear (V2). The explained workflow includes intraoral and CT scanning, patient virtualization, digital appliance design, additive manufacturing, and clinical **[...] Read more.**

(This article belongs to the Special Issue **Biomedical Applications of Polymer and Composite Based Additive Manufacturing (/journal/polymers/special_issues/Biomed_Appl_Polym_Compos_Based_Addit_Manuf)**)

► **Show Figures**

(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-ag-550.jpg?1663387452)

(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g001-550.jpg?1663387404)

(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g002-550.jpg?1663387420)

(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g003-550.jpg?1663387426)

(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g004-550.jpg?1663387448)

(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g005-550.jpg?1663387397)

(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g006-550.jpg?1663387443)

(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g007-550.jpg?1663387402)

(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g008-550.jpg?1663387441)

(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g009-550.jpg?1663387433)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g010-550.jpg?1663387408)
(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g011-550.jpg?1663387436)
(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g012-550.jpg?1663387417)
(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g013-550.jpg?1663387446)
(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g014-550.jpg?1663387411)
(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g015-550.jpg?1663387429)
(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g016-550.jpg?1663387400)
(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g017-550.jpg?1663387395)
(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g018-550.jpg?1663387419)
(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g019-550.jpg?1663387410)
(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g020-550.jpg?1663387430)
(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g021-550.jpg?1663387423)
(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g022-550.jpg?1663387406)
(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g0A1-550.jpg?1663387414)
(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g0A2-550.jpg?1663387439)
(https://pub.mdpi-res.com/polymers/polymers-14-03858/article_deploy/html/images/polymers-14-03858-g0A3-550.jpg?1663387451)

Open Access Article (/2073-4360/14/18/3857/pdf?version=1663239873)

Comparative Study on Blast Damage Features of Reinforced Concrete Slabs with Polyurethane Sacrificial Cladding Based on Different Numerical Simulation Methods (/2073-4360/14/18/3857)

by Zhidong Liu (https://sciprofiles.com/profile/2300340?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Xiaohua Zhao (https://sciprofiles.com/profile/1603485?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Da Liu (https://sciprofiles.com/profile/2305011?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Gaohui Wang (https://sciprofiles.com/profile/2091639?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Mingsheng Shi (https://sciprofiles.com/profile/726604?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3857; https://doi.org/10.3390/polym14183857 (https://doi.org/10.3390/polym14183857) - 15 Sep 2022
Cited by 1 (/2073-4360/14/18/3857#metrics) | Viewed by 1097

Abstract The defense effects of sacrificial cladding have been extensively studied in the field of blast resistance. As a polymer material with a cellular structure, polyurethane also has the potential to act as sacrificial cladding due to its good mechanical properties. The purpose of **[...] Read more.**
(This article belongs to the Special Issue **Recent Developments in Geopolymer Composites (** /journal/polymers/special_issues/recent_adv_geopoly_compos **)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g001-550.jpg?1663239968)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g002-550.jpg?1663239959)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g003-550.jpg?1663239958)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g004-550.jpg?1663239961)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g005-550.jpg?1663239967)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g006-550.jpg?1663239966)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g007-550.jpg?1663239968)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g008-550.jpg?1663239970)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g009-550.jpg?1663239966)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g010-550.jpg?1663239969)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g011-550.jpg?1663239957)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g012-550.jpg?1663239967)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g013-550.jpg?1663239955)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g014-550.jpg?1663239956)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g015-550.jpg?1663239970)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g016-550.jpg?1663239962)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g017-550.jpg?1663239955)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g018-550.jpg?1663239964)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g019-550.jpg?1663239959)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g020-550.jpg?1663239965)
(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g021-550.jpg?1663239953)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g022-550.jpg?1663239958)

(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g023-550.jpg?1663239963)

(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g024-550.jpg?1663239960)

(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g025-550.jpg?1663239951)

(https://pub.mdpi-res.com/polymers/polymers-14-03857/article_deploy/html/images/polymers-14-03857-g026-550.jpg?1663239953)

Open Access Article (/2073-4360/14/18/3856/pdf?version=1663563027)

The Effect of Solvent Hydrophilicity on the Enzymatic Ring-Opening Polymerization of L-Lactide by *Candida rugosa* Lipase (/2073-4360/14/18/3856)

by Catia Angli Curie (https://sciprofiles.com/profile/2359573?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Muhammad Arif Darmawan (https://sciprofiles.com/profile/author/UEJuanVWanBEZmY2U1ZlWENnZm5XRENCTmhwS1Q0V2NWQS93OHdjeUt, Dianursanti Dianursanti (https://sciprofiles.com/profile/author/VXBKTDBYSlY1aEJDeCtST0U4S1VoLzE5Y1k4RTh1dGFVdWlJL0lWU1VMMD0=?, Wiratni Budhijanto (https://sciprofiles.com/profile/1192207?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Misri Gozan (https://sciprofiles.com/profile/1892703?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3856; https://doi.org/10.3390/polym14183856 (https://doi.org/10.3390/polym14183856) - 15 Sep 2022

Cited by 2 (/2073-4360/14/18/3856#metrics) | Viewed by 1083

Abstract Contradictions have been reported on the effect of organic solvents, especially toluene, on enzymatic ring-opening polymerization (eROP) of L-lactide. Studies have shown that log P, a common measure of hydrophilicity, affects enzyme activity. This study examines the effect of solvents with various log **[...] Read more.**

(This article belongs to the Special Issue **Biodegradable Polyesters: Synthesis, Properties, Applications (/journal/polymers/special_issues/Biodegradable_Polyesters)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03856/article_deploy/html/images/polymers-14-03856-g001-550.jpg?1663563100)

(https://pub.mdpi-res.com/polymers/polymers-14-03856/article_deploy/html/images/polymers-14-03856-g002-550.jpg?1663563095)

(https://pub.mdpi-res.com/polymers/polymers-14-03856/article_deploy/html/images/polymers-14-03856-g003-550.jpg?1663563100)

(https://pub.mdpi-res.com/polymers/polymers-14-03856/article_deploy/html/images/polymers-14-03856-g004-550.jpg?1663563098)

(https://pub.mdpi-res.com/polymers/polymers-14-03856/article_deploy/html/images/polymers-14-03856-g005-550.jpg?1663563097)

(https://pub.mdpi-res.com/polymers/polymers-14-03856/article_deploy/html/images/polymers-14-03856-g006-550.jpg?1663563101)

(https://pub.mdpi-res.com/polymers/polymers-14-03856/article_deploy/html/images/polymers-14-03856-g007-550.jpg?1663563098)

Open Access Article (/2073-4360/14/18/3855/pdf?version=1663742710)

Preparation and Physiochemical Characterization of Bitter Orange Oil Loaded Sodium Alginate and Casein Based Edible Films (/2073-4360/14/18/3855)

by Saurabh Bhatia (https://sciprofiles.com/profile/2101820?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Ahmed Al-Harrasi (https://sciprofiles.com/profile/25352?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Mohammed Said Al-Azri (https://sciprofiles.com/profile/2679958?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name, Sana Ullah (https://sciprofiles.com/profile/1201138?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Alaa El-Din Ahmed Bekhit (https://sciprofiles.com/profile/273770?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nam, Anubhav Pratap-Singh (https://sciprofiles.com/profile/70528?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Manish Kumar Chatli (https://sciprofiles.com/profile/author/T2h0VnlxMFRERHNGUkF0Qk5PbFg0UHJOSGJObnBFNVNDaXhnZlIMcU5lRT0=?ut, Md. Khalid Anwer (https://sciprofiles.com/profile/975548?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Mohammed F. Aldawsari (https://sciprofiles.com/profile/855201?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3855; https://doi.org/10.3390/polym14183855 (https://doi.org/10.3390/polym14183855) - 15 Sep 2022

Cited by 15 (/2073-4360/14/18/3855#metrics) | Viewed by 1489

Abstract Biopolymers-based composite edible films are gaining interest in the food packaging industry due to their sustainable nature and diverse biological activities. In the current study, we used sodium alginate (SA) and casein (CA) for the fabrication of composite film using the casting method. **[...] Read more.**

(This article belongs to the Special Issue **Development and Characterization of Edible Films (/journal/polymers/special_issues/6140H7O37N)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03855/article_deploy/html/images/polymers-14-03855-ag-550.jpg?1663742799)

(https://pub.mdpi-res.com/polymers/polymers-14-03855/article_deploy/html/images/polymers-14-03855-g001-550.jpg?1663742799)

(https://pub.mdpi-res.com/polymers/polymers-14-03855/article_deploy/html/images/polymers-14-03855-g002-550.jpg?1663742789)

(https://pub.mdpi-res.com/polymers/polymers-14-03855/article_deploy/html/images/polymers-14-03855-g003-550.jpg?1663742794)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03855/article_deploy/html/images/polymers-14-03855-g004-550.jpg?1663742795)

(https://pub.mdpi-res.com/polymers/polymers-14-03855/article_deploy/html/images/polymers-14-03855-g005-550.jpg?1663742792)

Open Access Article (/2073-4360/14/18/3854/pdf?version=1663329086)

Freeze Moisture Treatment and Ozonation of Adlay Starch (*Coix lacryma-jobi*): Effect on Functional, Pasting, and Physicochemical Properties (/2073-4360/14/18/3854)

by Edy Subroto (https://sciprofiles.com/profile/2363108?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Nisyrah Sitha (https://sciprofiles.com/profile/author/UHRhZmFTWUo0amluLzVLVlZYV0pmR3UxWEZGQXhsbEV2MDRLNGxnOC9vbz0=?utm_s , Fitry Filianty (https://sciprofiles.com/profile/author/eFVMamRlZFhtNlBodFU2Y0hTMlh0aC9QbGV6ZTV0WDhCT0FwM2RrYVVDdz0=?utm_sourc , Rossi Indiarto (https://sciprofiles.com/profile/401666?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Nandi Sukri (https://sciprofiles.com/profile/2509874?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3854; https://doi.org/10.3390/polym14183854 (https://doi.org/10.3390/polym14183854) - 15 Sep 2022

Cited by 3 (/2073-4360/14/18/3854#metrics) | Viewed by 1158

Abstract Adlay starch has great potential as a cereal starch, but it has several weaknesses, namely a low swelling volume, low solubility, and low stability. The purpose of this study was to improve the characteristics of adlay starch, such as porosity, functional properties, and **[...] Read more.**

(This article belongs to the Special Issue **Polysaccharides: From Basic Research to Advanced Applications (** /journal/polymers/special_issues/polysaccharides_basic_research_advanced_application **)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03854/article_deploy/html/images/polymers-14-03854-g001-550.jpg?1663329164)

(https://pub.mdpi-res.com/polymers/polymers-14-03854/article_deploy/html/images/polymers-14-03854-g002-550.jpg?1663329161)

(https://pub.mdpi-res.com/polymers/polymers-14-03854/article_deploy/html/images/polymers-14-03854-g003-550.jpg?1663329162)

(https://pub.mdpi-res.com/polymers/polymers-14-03854/article_deploy/html/images/polymers-14-03854-g004-550.jpg?1663329159)

(https://pub.mdpi-res.com/polymers/polymers-14-03854/article_deploy/html/images/polymers-14-03854-g005-550.jpg?1663329152)

(https://pub.mdpi-res.com/polymers/polymers-14-03854/article_deploy/html/images/polymers-14-03854-g006-550.jpg?1663329158)

(https://pub.mdpi-res.com/polymers/polymers-14-03854/article_deploy/html/images/polymers-14-03854-g007-550.jpg?1663329151)

Open Access Article (/2073-4360/14/18/3853/pdf?version=1663233797)

Effect of the Coupling Agent (3-Aminopropyl) Triethoxysilane on the Structure and Fire Behavior of Solvent-Free One-Pot Synthesized Silica-Epoxy Nanocomposites (/2073-4360/14/18/3853)

by Francesco Branda (https://sciprofiles.com/profile/189073?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Dambarudhar Parida (https://sciprofiles.com/profile/772654?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Robin Pauer (https://sciprofiles.com/profile/author/R1FUQXRvdVkwQTAvT3AwWjVvY2YwbitlR0EvL1BFbEZjUEcrNmk1S2pPbz0=?utm_source= , Massimo Durante (https://sciprofiles.com/profile/author/eXNVYUpjQnJrNWxUWWZXYW5iL09EYWl0alB1bURYYmlLWmpjdjFtMVJDUT0=?utm_ , Sabyasachi Gaan (https://sciprofiles.com/profile/89063?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Giulio Malucelli (https://sciprofiles.com/profile/150333?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Aurelio Bifulco (https://sciprofiles.com/profile/1296774?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3853; https://doi.org/10.3390/polym14183853 (https://doi.org/10.3390/polym14183853) - 15 Sep 2022

Cited by 3 (/2073-4360/14/18/3853#metrics) | Viewed by 1325

Abstract Uniformly distributed silica/epoxy nanocomposites (2 and 6 wt.% silica content) were obtained through a “solvent-free one-pot” process. The inorganic phases were obtained through “in situ” sol-gel chemistry from two precursors, tetraethyl orthosilicate (TEOS) and (3-aminopropyl)-triethoxysilane (APTES). APTES acts as a coupling agent. Surprisingly **[...] Read more.**

(This article belongs to the Collection **Polymer/Biopolymer Stabilization and Degradation (** /journal/polymers/topical_collections/Stabilization_and_Degradation **)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03853/article_deploy/html/images/polymers-14-03853-ag-550.jpg?1663233909)

(https://pub.mdpi-res.com/polymers/polymers-14-03853/article_deploy/html/images/polymers-14-03853-g001a-550.jpg?1663233900)

(https://pub.mdpi-res.com/polymers/polymers-14-03853/article_deploy/html/images/polymers-14-03853-g001b-550.jpg?1663233896)

(https://pub.mdpi-res.com/polymers/polymers-14-03853/article_deploy/html/images/polymers-14-03853-g002-550.jpg?1663233907)

(https://pub.mdpi-res.com/polymers/polymers-14-03853/article_deploy/html/images/polymers-14-03853-g003-550.jpg?1663233893)

(https://pub.mdpi-res.com/polymers/polymers-14-03853/article_deploy/html/images/polymers-14-03853-g004-550.jpg?1663233894)

(https://pub.mdpi-res.com/polymers/polymers-14-03853/article_deploy/html/images/polymers-14-03853-g005-550.jpg?1663233897)

(https://pub.mdpi-res.com/polymers/polymers-14-03853/article_deploy/html/images/polymers-14-03853-g006a-550.jpg?1663233892)

(https://pub.mdpi-res.com/polymers/polymers-14-03853/article_deploy/html/images/polymers-14-03853-g006b-550.jpg?1663233898)

(https://pub.mdpi-res.com/polymers/polymers-14-03853/article_deploy/html/images/polymers-14-03853-g007-550.jpg?1663233909)

Back to TopTop

Open Access Article (/2073-4360/14/18/3852/pdf?version=1663224330)

The Ability of Biodegradable Thermosensitive Hydrogel Composite Calcium-Silicon-Based Bioactive Bone Cement in Promoting Osteogenesis and Repairing Rabbit Distal Femoral Defects (/2073-4360/14/18/3852)

by Chao Guo (https://sciprofiles.com/profile/1561985?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Junqiang Qi (https://sciprofiles.com/profile/author/ODRZSzMxb3lqYVJzTFVyRDZHWmJwQT09?utm_source=mdpi.com&utm_medium=website, Jia Liu (https://sciprofiles.com/profile/author/KzR5QVgxNjhoN3lGY3o3UEZYcnlrNUhNenpOdE5mZUxFYk9NdTl2ZHFPZz0=?utm_source=mdpi, Haotian Wang (https://sciprofiles.com/profile/author/L1o5akxyZWhPZkFHOHUzVkVsckJLQT09?utm_source=mdpi.com&utm_medium=website, Yifei Liu (https://sciprofiles.com/profile/author/S2Q5MkxyOElzZXArNlUzZ2FnTVBvRzBsVFErWVBEdGRDL2lrS05ZaFVpdz0=?utm_source=mdp, Yingying Feng (https://sciprofiles.com/profile/author/Zis4V2UwQzVnT3NUS2JPanlBYkN6VW1qYlZkNkl5cGhQUTdCcERqRFFldz0=?utm_sourc and Guohua Xu (https://sciprofiles.com/profile/1328954?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3852; https://doi.org/10.3390/polym14183852 (https://doi.org/10.3390/polym14183852) - 15 Sep 2022

Cited by 3 (/2073-4360/14/18/3852#metrics) | Viewed by 1413

Abstract Osteoporotic vertebral compression fractures are a global issue affecting the elderly population. To explore a new calcium silicate bone cement, polylactic acid (PLGA)–polyethylene glycol (PEG)–PLGA hydrogel was compounded with tricalcium silicate (C_3S)/dicalcium silicate (C_2S)/plaster of Paris (POP) to observe **[...] Read more.**

(This article belongs to the Special Issue **Polymer-Based Hybrid Composites (/journal/polymers/special_issues/Polymer_Based_Hybrid_Composites)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03852/article_deploy/html/images/polymers-14-03852-g001-550.jpg?1663225293)

(https://pub.mdpi-res.com/polymers/polymers-14-03852/article_deploy/html/images/polymers-14-03852-g002-550.jpg?1663225312)

(https://pub.mdpi-res.com/polymers/polymers-14-03852/article_deploy/html/images/polymers-14-03852-g003-550.jpg?1663225292)

(https://pub.mdpi-res.com/polymers/polymers-14-03852/article_deploy/html/images/polymers-14-03852-g004-550.jpg?1663225303)

(https://pub.mdpi-res.com/polymers/polymers-14-03852/article_deploy/html/images/polymers-14-03852-g005-550.jpg?1663225313)

(https://pub.mdpi-res.com/polymers/polymers-14-03852/article_deploy/html/images/polymers-14-03852-g006-550.jpg?1663225296)

(https://pub.mdpi-res.com/polymers/polymers-14-03852/article_deploy/html/images/polymers-14-03852-g007-550.jpg?1663225311)

(https://pub.mdpi-res.com/polymers/polymers-14-03852/article_deploy/html/images/polymers-14-03852-g008-550.jpg?1663225314)

(https://pub.mdpi-res.com/polymers/polymers-14-03852/article_deploy/html/images/polymers-14-03852-g009-550.jpg?1663225294)

(https://pub.mdpi-res.com/polymers/polymers-14-03852/article_deploy/html/images/polymers-14-03852-g010-550.jpg?1663225291)

(https://pub.mdpi-res.com/polymers/polymers-14-03852/article_deploy/html/images/polymers-14-03852-g011-550.jpg?1663225305)

(https://pub.mdpi-res.com/polymers/polymers-14-03852/article_deploy/html/images/polymers-14-03852-g012-550.jpg?1663225297)

(https://pub.mdpi-res.com/polymers/polymers-14-03852/article_deploy/html/images/polymers-14-03852-g013-550.jpg?1663225308)

(https://pub.mdpi-res.com/polymers/polymers-14-03852/article_deploy/html/images/polymers-14-03852-g014-550.jpg?1663225301)

(https://pub.mdpi-res.com/polymers/polymers-14-03852/article_deploy/html/images/polymers-14-03852-g015-550.jpg?1663225307)

(https://pub.mdpi-res.com/polymers/polymers-14-03852/article_deploy/html/images/polymers-14-03852-g016-550.jpg?1663225300)

Open Access Article (/2073-4360/14/18/3851/pdf?version=1663219809)

A Molecular Dynamics Simulation of Polymers' Interactions with Kaolinite (010) Surfaces in Saline Solutions (/2073-4360/14/18/3851)

by Gonzalo R. Quezada (https://sciprofiles.com/profile/945891?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Williams Leiva (https://sciprofiles.com/profile/author/WEozc2JXSGpZanNCZXBqTzhVVWNYdz09?utm_source=mdpi.com&utm_medium=webs, Jorge H. Saavedra (https://sciprofiles.com/profile/1630999?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Pedro Robles (https://sciprofiles.com/profile/674556?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Edelmira Gálvez (https://sciprofiles.com/profile/470241?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Ricardo I. Jeldres (https://sciprofiles.com/profile/505383?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3851; https://doi.org/10.3390/polym14183851 (https://doi.org/10.3390/polym14183851) - 15 Sep 2022

Cited by 1 (/2073-4360/14/18/3851#metrics) | Viewed by 1224

Abstract The search for polymers that meet the demands of the water recovery process in mining is a contingent challenge. Both the presence of clays and saline waters can impair water recovery from tailings when conventional flocculants are used. In this work, the adsorption **[...] Read more.**

(This article belongs to the Special Issue **Status and Progress of Soluble Polymers (/journal/polymers/special_issues/Status_Process_Soluble_Polymer)**)

► Show Figures

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03851/article_deploy/html/images/polymers-14-03851-g001-550.jpg?1663285486)

(https://pub.mdpi-res.com/polymers/polymers-14-03851/article_deploy/html/images/polymers-14-03851-g002-550.jpg?1663285489)

(https://pub.mdpi-res.com/polymers/polymers-14-03851/article_deploy/html/images/polymers-14-03851-g003-550.jpg?1663285487)

(https://pub.mdpi-res.com/polymers/polymers-14-03851/article_deploy/html/images/polymers-14-03851-g004-550.jpg?1663285484)

(https://pub.mdpi-res.com/polymers/polymers-14-03851/article_deploy/html/images/polymers-14-03851-g005-550.jpg?1663285494)

(https://pub.mdpi-res.com/polymers/polymers-14-03851/article_deploy/html/images/polymers-14-03851-g006-550.jpg?1663285496)

Open Access Article (/2073-4360/14/18/3850/pdf?version=1663229961)

Polymer Conductive Membrane-Based Circular Capacitive Pressure Sensors from Non-Touch Mode of Operation to Touch Mode of Operation: An Analytical Solution-Based Method for Design and Numerical Calibration (/2073-4360/14/18/3850)

by

Qi Zhang (https://sciprofiles.com/profile/author/VE9QaUkvMHdtMzlTbVJTZ1liNERpVFRHVUlJWS9Sb2FNOC9WYWFzVnhKaz0=?utm_source=r

,

Fei-Yan Li (https://sciprofiles.com/profile/author/N1hTa1Q0cFpENDhETDNxQmNFbmErTWNRS0l2dUoyRTREMjZUVEhpWnc2RT0=?utm_sourc

,

Xue Li (https://sciprofiles.com/profile/1238569?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Xiao-Ting He (https://sciprofiles.com/profile/421735?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and

Jun-Yi Sun (https://sciprofiles.com/profile/335620?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3850; https://doi.org/10.3390/polym14183850 (https://doi.org/10.3390/polym14183850) - 14 Sep 2022

Viewed by 1137

Abstract Polymer-based conductive membranes play an important role in the development of elastic deflection-based pressure sensors. In this paper, an analytical solution-based method is presented for the design and numerical calibration of polymer conductive membrane-based circular capacitive pressure sensors from non-touch mode of operation **[...] Read more.**

(This article belongs to the Special Issue **Polymers' Role in Sensors: Resistant Solid Supports or Multi-Purpose Sensing Units? (/journal/polymers/special_issues/Poly_Sensor_Resistant)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03850/article_deploy/html/images/polymers-14-03850-g001-550.jpg?1663315729)

(https://pub.mdpi-res.com/polymers/polymers-14-03850/article_deploy/html/images/polymers-14-03850-g002-550.jpg?1663315736)

(https://pub.mdpi-res.com/polymers/polymers-14-03850/article_deploy/html/images/polymers-14-03850-g003-550.jpg?1663315731)

(https://pub.mdpi-res.com/polymers/polymers-14-03850/article_deploy/html/images/polymers-14-03850-g004-550.jpg?1663315734)

(https://pub.mdpi-res.com/polymers/polymers-14-03850/article_deploy/html/images/polymers-14-03850-g005-550.jpg?1663315733)

(https://pub.mdpi-res.com/polymers/polymers-14-03850/article_deploy/html/images/polymers-14-03850-g006-550.jpg?1663315735)

(https://pub.mdpi-res.com/polymers/polymers-14-03850/article_deploy/html/images/polymers-14-03850-g007-550.jpg?1663315733)

(https://pub.mdpi-res.com/polymers/polymers-14-03850/article_deploy/html/images/polymers-14-03850-g008-550.jpg?1663315730)

(https://pub.mdpi-res.com/polymers/polymers-14-03850/article_deploy/html/images/polymers-14-03850-g009-550.jpg?1663315727)

Open Access Article (/2073-4360/14/18/3849/pdf?version=1663228233)

Histological Evaluation of Cassava Starch/Chicken Gelatin Membranes (/2073-4360/14/18/3849)

by

Carlos Humberto Valencia-Llano (https://sciprofiles.com/profile/1333997?utm_source=mdpi.com&utm_medium=website&utm_campaign=avat

,

Jorge Iván Castro (https://sciprofiles.com/profile/989254?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Marcela Saavedra (https://sciprofiles.com/profile/author/YlM3ejZCbGt5WitxTUhmMytrSHdLUWJJb0VXZlRNaFlMWUZURmZjV3E5RT0=?utm_s

,

Paula A. Zapata (https://sciprofiles.com/profile/563260?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Diana Paola Navia-Porras (https://sciprofiles.com/profile/2140736?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nam

,

Edwin Flórez-López (https://sciprofiles.com/profile/2442066?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Carolina Caicedo (https://sciprofiles.com/profile/author/anRrR1NSbGd1Mys5OXBDTUFKTUg1NWxYNWJlM24yb1lnVnFCYkxaWElvWT0=?utm_

,

Heidy Lorena Calambas (https://sciprofiles.com/profile/author/YWI3MlFUMkJiWUxkcE82YzRPRUxaenEwdXJPRVZqTyswRnhQZXVnYjdoOD0=

and

Carlos David Grande-Tovar (https://sciprofiles.com/profile/508489?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nam

Polymers **2022**, *14*(18), 3849; https://doi.org/10.3390/polym14183849 (https://doi.org/10.3390/polym14183849) - 14 Sep 2022

Viewed by 1258

Abstract The use of biopolymers for tissue engineering has recently gained attention due to the need for safer and highly compatible materials. Starch is one of the most used biopolymers for membrane preparation. However, incorporating other polymers into starch membranes introduces improvements, such as **[...] Read more.**

(This article belongs to the Special Issue **Bio-Based Polymers for Biomedical Applications (/journal/polymers/special_issues/bio_based_polymers_biomedical_applications)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03849/article_deploy/html/images/polymers-14-03849-g001-550.jpg?1663230109)

(https://pub.mdpi-res.com/polymers/polymers-14-03849/article_deploy/html/images/polymers-14-03849-g002-550.jpg?1663230102)

(https://pub.mdpi-res.com/polymers/polymers-14-03849/article_deploy/html/images/polymers-14-03849-g003-550.jpg?1663230106)

(https://pub.mdpi-res.com/polymers/polymers-14-03849/article_deploy/html/images/polymers-14-03849-g004-550.jpg?1663230094)

(https://pub.mdpi-res.com/polymers/polymers-14-03849/article_deploy/html/images/polymers-14-03849-g005-550.jpg?1663230095)

(https://pub.mdpi-res.com/polymers/polymers-14-03849/article_deploy/html/images/polymers-14-03849-g006-550.jpg?1663230105)

(https://pub.mdpi-res.com/polymers/polymers-14-03849/article_deploy/html/images/polymers-14-03849-g007-550.jpg?1663230108)

(https://pub.mdpi-res.com/polymers/polymers-14-03849/article_deploy/html/images/polymers-14-03849-g008-550.jpg?1663230104)

(https://pub.mdpi-res.com/polymers/polymers-14-03849/article_deploy/html/images/polymers-14-03849-g009-550.jpg?1663230100)

(https://pub.mdpi-res.com/polymers/polymers-14-03849/article_deploy/html/images/polymers-14-03849-g010-550.jpg?1663230089)

(https://pub.mdpi-res.com/polymers/polymers-14-03849/article_deploy/html/images/polymers-14-03849-g011-550.jpg?1663230098)

(https://pub.mdpi-res.com/polymers/polymers-14-03849/article_deploy/html/images/polymers-14-03849-sch001-550.jpg?1663230097)

Open Access Article (/2073-4360/14/18/3848/pdf?version=1663298224)

Preparation of Waste-LDPE/SBS Composite High-Viscosity Modifier and Its Effect on the Rheological Properties and Microstructure of Asphalt (/2073-4360/14/18/3848)

by Haosheng Yu (https://sciprofiles.com/profile/2375984?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Yong Jin (https://sciprofiles.com/profile/2375812?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Xingmin Liang (https://sciprofiles.com/profile/author/bmF1T2ZoMkZnbWl3RVFmSDd2SnBPd2xEbXRENDFINTRUbmg4SjNWWGo1UT0=?utm_s and Fuqiang Dong (https://sciprofiles.com/profile/1358892?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3848; https://doi.org/10.3390/polym14183848 (https://doi.org/10.3390/polym14183848) - 14 Sep 2022

Cited by 2 (/2073-4360/14/18/3848#metrics) | Viewed by 1027

Abstract To reduce the cost of high-viscosity modifier (HVM) and alleviate white pollution problems, we prepared the environment-friendly HVM (E-HVM) by using waste-low density polyethylene/styrene-butadiene-styrene (waste-LDPE/SBS) composite. The physical characteristics of the E-HVM modifier were first investigated. Additionally, the effects of E-HVM modifier dosage **[...] Read more.**

(This article belongs to the Section **Polymer Applications (/journal/polymers/sections/Polymer_Applications)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03848/article_deploy/html/images/polymers-14-03848-g001-550.jpg?1663298315)

(https://pub.mdpi-res.com/polymers/polymers-14-03848/article_deploy/html/images/polymers-14-03848-g002-550.jpg?1663298307)

(https://pub.mdpi-res.com/polymers/polymers-14-03848/article_deploy/html/images/polymers-14-03848-g003-550.jpg?1663298318)

(https://pub.mdpi-res.com/polymers/polymers-14-03848/article_deploy/html/images/polymers-14-03848-g004-550.jpg?1663298317)

(https://pub.mdpi-res.com/polymers/polymers-14-03848/article_deploy/html/images/polymers-14-03848-g005-550.jpg?1663298299)

(https://pub.mdpi-res.com/polymers/polymers-14-03848/article_deploy/html/images/polymers-14-03848-g006-550.jpg?1663298306)

(https://pub.mdpi-res.com/polymers/polymers-14-03848/article_deploy/html/images/polymers-14-03848-g007-550.jpg?1663298309)

(https://pub.mdpi-res.com/polymers/polymers-14-03848/article_deploy/html/images/polymers-14-03848-g008-550.jpg?1663298313)

(https://pub.mdpi-res.com/polymers/polymers-14-03848/article_deploy/html/images/polymers-14-03848-g009-550.jpg?1663298296)

(https://pub.mdpi-res.com/polymers/polymers-14-03848/article_deploy/html/images/polymers-14-03848-g010-550.jpg?1663298294)

(https://pub.mdpi-res.com/polymers/polymers-14-03848/article_deploy/html/images/polymers-14-03848-g011a-550.jpg?1663298304)

(https://pub.mdpi-res.com/polymers/polymers-14-03848/article_deploy/html/images/polymers-14-03848-g011b-550.jpg?1663298312)

Open Access Article (/2073-4360/14/18/3847/pdf?version=1663581772)

Antimicrobial Efficacy of Quercetin against *Vibrio parahaemolyticus* Biofilm on Food Surfaces and Downregulation of Virulence Genes (/2073-4360/14/18/3847)

by Pantu Kumar Roy (https://sciprofiles.com/profile/622368?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Sung-Hee Park (https://sciprofiles.com/profile/536141?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Min Gyu Song (https://sciprofiles.com/profile/1870814?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Shin Young Park (https://sciprofiles.com/profile/928392?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3847; https://doi.org/10.3390/polym14183847 (https://doi.org/10.3390/polym14183847) - 14 Sep 2022

Cited by 6 (/2073-4360/14/18/3847#metrics) | Viewed by 1703

Abstract For the seafood industry, *Vibrio parahaemolyticus*, one of the most prevalent food-borne pathogenic bacteria that forms biofilms, is a constant cause of concern. There are numerous techniques used throughout the food supply chain to manage biofilms, but none are entirely effective. Through **[...] Read more.**

(This article belongs to the Special Issue **Bioactive Polymer Materials with Antibacterial Properties (/journal/polymers/special_issues/Bioact_Mater_Antibact_Prop)**)

Back to TopTop

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03847/article_deploy/html/images/polymers-14-03847-g001-550.jpg?1663581865)

(https://pub.mdpi-res.com/polymers/polymers-14-03847/article_deploy/html/images/polymers-14-03847-g002-550.jpg?1663581860)

(https://pub.mdpi-res.com/polymers/polymers-14-03847/article_deploy/html/images/polymers-14-03847-g003-550.jpg?1663581859)

(https://pub.mdpi-res.com/polymers/polymers-14-03847/article_deploy/html/images/polymers-14-03847-g004-550.jpg?1663581864)

(https://pub.mdpi-res.com/polymers/polymers-14-03847/article_deploy/html/images/polymers-14-03847-g005-550.jpg?1663581861)

(https://pub.mdpi-res.com/polymers/polymers-14-03847/article_deploy/html/images/polymers-14-03847-g006-550.jpg?1663581863)

Open Access Article (/2073-4360/14/18/3846/pdf?version=1663747539)

Improving the Heat and Ablation Resistance of Silicone Rubber Composites by Incorporating Hollow Microspheres (/2073-4360/14/18/3846)

by

Jinfeng Tian (https://sciprofiles.com/profile/author/cWpJWlhVWmZSbUx6TTJwZDVESTBzNDFWTW02YmJldDViNGJMZ2l0dVRlRT0=?utm_sou

,

Liwei Yan (https://sciprofiles.com/profile/2383229?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Hao Zhang (https://sciprofiles.com/profile/author/SG0vQy9ieDR5TFVxZmlrNHUrUCtXbGRnNUV5b2l4RVdBZlhaeDNmSWh4OD0=?utm_source=

,

Shengtai Zhou (https://sciprofiles.com/profile/894425?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Shuang Xia (https://sciprofiles.com/profile/1911059?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and

Huawei Zou (https://sciprofiles.com/profile/1911060?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3846; https://doi.org/10.3390/polym14183846 (https://doi.org/10.3390/polym14183846) - 14 Sep 2022

Cited by 3 (/2073-4360/14/18/3846#metrics) | Viewed by 1384

Abstract For thermal protection materials (TPMs) which are used to protect space vehicles from extreme thermomechanical environments, the thermal conductivity of the original material and the char layer that has formed during ablation plays a significant role in determining the ablation performance. In order **[...] Read more.**

(This article belongs to the Special Issue **Rubber/Silica Composites (/journal/polymers/special_issues/rub_sil_comp)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03846/article_deploy/html/images/polymers-14-03846-ag-550.jpg?1663749697)

(https://pub.mdpi-res.com/polymers/polymers-14-03846/article_deploy/html/images/polymers-14-03846-g001-550.jpg?1663749685)

(https://pub.mdpi-res.com/polymers/polymers-14-03846/article_deploy/html/images/polymers-14-03846-g002-550.jpg?1663749693)

(https://pub.mdpi-res.com/polymers/polymers-14-03846/article_deploy/html/images/polymers-14-03846-g003-550.jpg?1663749682)

(https://pub.mdpi-res.com/polymers/polymers-14-03846/article_deploy/html/images/polymers-14-03846-g004-550.jpg?1663749696)

(https://pub.mdpi-res.com/polymers/polymers-14-03846/article_deploy/html/images/polymers-14-03846-g005-550.jpg?1663749679)

(https://pub.mdpi-res.com/polymers/polymers-14-03846/article_deploy/html/images/polymers-14-03846-g006-550.jpg?1663749680)

(https://pub.mdpi-res.com/polymers/polymers-14-03846/article_deploy/html/images/polymers-14-03846-g007-550.jpg?1663749686)

(https://pub.mdpi-res.com/polymers/polymers-14-03846/article_deploy/html/images/polymers-14-03846-g008-550.jpg?1663749692)

Open Access Article (/2073-4360/14/18/3845/pdf?version=1663220894)

Stress Concentration Analysis of the Corroded Steel Plate Strengthened with Carbon Fiber Reinforced Polymer (CFRP) Plates (/2073-4360/14/18/3845)

by Anbang Li (https://sciprofiles.com/profile/2266596?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Hao Wang (https://sciprofiles.com/profile/author/cjczZG9aOTNDSUJqSlVPdEJSZGRRMjc2S0Z5Zjc2WFJWRTBCMHUrSDZ1VT0=?utm_source=

,

Han Li (https://sciprofiles.com/profile/author/OWdOSWp6LzNYamY0MkE4b1VTU3QrM0gwZ1B3NlZJMm5mN2QyYmcwQ2Uybz0=?utm_source=

,

Deliang Kong (https://sciprofiles.com/profile/author/SGNSN0dVVHVzUENSMkVxZ1MxTWk3V3QyNmVFSGZ0TllacTdXNUo3cjNpWT0=?utm_so

and

Shanhua Xu (https://sciprofiles.com/profile/2387099?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3845; https://doi.org/10.3390/polym14183845 (https://doi.org/10.3390/polym14183845) - 14 Sep 2022

Cited by 4 (/2073-4360/14/18/3845#metrics) | Viewed by 1111

Abstract The purpose of this study is to investigate the stress concentration of a corroded steel plate strengthened with carbon fiber reinforced polymer (CFRP) plates. An accelerated corrosion experiment was first executed to acquire corroded steel plates, and then surface profile measurements were conducted **[...] Read more.**

(This article belongs to the Section **Polymer Fibers (/journal/polymers/sections/Fiber)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g001-550.jpg?1663229216)

(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g002a-550.jpg?1663229213)

(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g002b-550.jpg?1663229201)

(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g003-550.jpg?1663229204)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g004-550.jpg?1663229232)
(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g005-550.jpg?1663229211)
(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g006-550.jpg?1663229226)
(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g007-550.jpg?1663229227)
(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g008-550.jpg?1663229224)
(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g009-550.jpg?1663229217)
(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g010-550.jpg?1663229234)
(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g011-550.jpg?1663229203)
(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g012-550.jpg?1663229206)
(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g013a-550.jpg?1663229221)
(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g013b-550.jpg?1663229235)
(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g014-550.jpg?1663229228)
(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g015-550.jpg?1663229208)
(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g016-550.jpg?1663229200)
(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g017-550.jpg?1663229230)
(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g018-550.jpg?1663229223)
(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g019a-550.jpg?1663229198)
(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g019b-550.jpg?1663229210)
(https://pub.mdpi-res.com/polymers/polymers-14-03845/article_deploy/html/images/polymers-14-03845-g020-550.jpg?1663229219)

Open Access Article (/2073-4360/14/18/3844/pdf?version=1663750915)

Enhanced Antibacterial Performance of Chitosan/Corn Starch Films Containing TiO_2/Graphene for Food Packaging (/2073-4360/14/18/3844)

by **Zhiyuan Liu (https://sciprofiles.com/profile/600148?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)** and **Xueqin Liu (https://sciprofiles.com/profile/author/T2lDNWdzT3hkWkRLcG0yQ0hXejNlMEJRNGFzSGMzaEZwYmJRMVpnMldRbz0=?utm_sourc**

Polymers **2022**, *14*(18), 3844; **https://doi.org/10.3390/polym14183844 (https://doi.org/10.3390/polym14183844)** - 14 Sep 2022

Cited by 3 (/2073-4360/14/18/3844#metrics) | Viewed by 1417

Abstract Chitosan (CTS)/corn starch (CSH)/nano-TiO_2/graphene (Gr) antibacterial active packaging films were prepared by ultrasonic-assisted electrospray deposition and solution-casting methods, and the effects of the TiO_2:Gr mass ratio and ultrasonication power on their morphology and mechanical, optical, thermal, barrier, and antibacterial **[...] Read more.**

(This article belongs to the Section **Polymer Applications (/journal/polymers/sections/Polymer_Applications)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03844/article_deploy/html/images/polymers-14-03844-g001-550.jpg?1663750985)
(https://pub.mdpi-res.com/polymers/polymers-14-03844/article_deploy/html/images/polymers-14-03844-g002-550.jpg?1663750983)
(https://pub.mdpi-res.com/polymers/polymers-14-03844/article_deploy/html/images/polymers-14-03844-g003-550.jpg?1663750987)
(https://pub.mdpi-res.com/polymers/polymers-14-03844/article_deploy/html/images/polymers-14-03844-g004-550.jpg?1663750989)
(https://pub.mdpi-res.com/polymers/polymers-14-03844/article_deploy/html/images/polymers-14-03844-g005-550.jpg?1663750991)
(https://pub.mdpi-res.com/polymers/polymers-14-03844/article_deploy/html/images/polymers-14-03844-g006-550.jpg?1663750988)

Open Access Article (/2073-4360/14/18/3843/pdf?version=1663227271)

Relationships between Size Distribution, Morphological Characteristics, and Viscosity of Cellulose Nanofibril Dispersions (/2073-4360/14/18/3843)

by
Gregory Albornoz-Palma (https://sciprofiles.com/profile/author/OHFlZkpaaFlqa2k1bUFaQWZHM2lZM0d1MWhaU2VsTDVCKytZNFo1QitTMD0=
,
Daniel Ching (https://sciprofiles.com/profile/author/d0pROHdSNlB3dDNTWGNlcXVNaTBSdz09?utm_source=mdpi.com&utm_medium=website
,
Andrea Andrade (https://sciprofiles.com/profile/author/dHNNclhnUWtwdG9XN3lwYk9xV0FiSy9TeW9MWkxBczRlRTdON3JNVEM4TT0=?utm_sc
,
Sergio Henríquez-Gallegos (https://sciprofiles.com/profile/1807563?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_na
,
Regis Teixeira Mendonça (https://sciprofiles.com/profile/2252229?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nam
and
Miguel Pereira (https://sciprofiles.com/profile/506965?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3843; **https://doi.org/10.3390/polym14183843 (https://doi.org/10.3390/polym14183843)** - 14 Sep 2022

Cited by 1 (/2073-4360/14/18/3843#metrics) | Viewed by 1065

Back to TopTop

Abstract Rheological parameters of cellulose nanofibril dispersions (CNF) are relevant and commonly used as quality control for producing of this type of material. These parameters are affected by morphological features and size distribution of the nanofibrils. Understanding the effect of size distribution is essential **[...] Read more.**

(This article belongs to the Special Issue **Sustainable Polymer Composites: Properties, Characterizations and Applications (/journal/polymers/special_issues/Sustainable_Polymer_Composite_Properties_Characterization_Applications)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03843/article_deploy/html/images/polymers-14-03843-ag-550.jpg?1663740907)

(https://pub.mdpi-res.com/polymers/polymers-14-03843/article_deploy/html/images/polymers-14-03843-g001-550.jpg?1663311938)

(https://pub.mdpi-res.com/polymers/polymers-14-03843/article_deploy/html/images/polymers-14-03843-g002-550.jpg?1663311941)

(https://pub.mdpi-res.com/polymers/polymers-14-03843/article_deploy/html/images/polymers-14-03843-g003-550.jpg?1663311939)

(https://pub.mdpi-res.com/polymers/polymers-14-03843/article_deploy/html/images/polymers-14-03843-g004-550.jpg?1663311938)

(https://pub.mdpi-res.com/polymers/polymers-14-03843/article_deploy/html/images/polymers-14-03843-g005-550.jpg?1663311940)

Open Access Article **(/2073-4360/14/18/3842/pdf?version=1663163065)**

Computational Approach to the Surface-Crosslinking Process of Superabsorbent Polymer via Central Composite Design (/2073-4360/14/18/3842)

by **Hae-Chan Kim (https://sciprofiles.com/profile/1781407?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Yong-Rok Kwon (https://sciprofiles.com/profile/author/c2NtNzZ6US8zV3NoWXRtMk5ZSzdpdDZyWFgxQmM2QU9sWlVzVUhqSEpVND0=?utm_s**, **Jung-Soo Kim (https://sciprofiles.com/profile/122393?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Miyeon Kwon (https://sciprofiles.com/profile/719700?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Jong-Ho Kim (https://sciprofiles.com/profile/author/RENFUW9NSTMwYXJMOCtHbnBid2djWmpCN01TRFdTYldpaGt0cldueWsvdz0=?utm_sour** and **Dong-Hyun Kim (https://sciprofiles.com/profile/33249?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**

Polymers **2022**, *14*(18), 3842; **https://doi.org/10.3390/polym14183842 (https://doi.org/10.3390/polym14183842)** - 14 Sep 2022

Cited by 1 (/2073-4360/14/18/3842#metrics) | Viewed by 967

Abstract The improvement of gel strength and absorption properties through the surface-crosslinking of superabsorbent polymers (SAPs) is essential for sanitary industry applications. We prepared core-SAP via aqueous solution copolymerization, and then surface-crosslinked the core-SAP under various conditions. The structure of the SAP was characterized **[...] Read more.**

(This article belongs to the Section **Polymer Physics and Theory (/journal/polymers/sections/Phys_Theory)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03842/article_deploy/html/images/polymers-14-03842-ag-550.jpg?1663209853)

(https://pub.mdpi-res.com/polymers/polymers-14-03842/article_deploy/html/images/polymers-14-03842-g001-550.jpg?1663163145)

(https://pub.mdpi-res.com/polymers/polymers-14-03842/article_deploy/html/images/polymers-14-03842-g002-550.jpg?1663163146)

(https://pub.mdpi-res.com/polymers/polymers-14-03842/article_deploy/html/images/polymers-14-03842-g003-550.jpg?1663163142)

(https://pub.mdpi-res.com/polymers/polymers-14-03842/article_deploy/html/images/polymers-14-03842-g004-550.jpg?1663163137)

(https://pub.mdpi-res.com/polymers/polymers-14-03842/article_deploy/html/images/polymers-14-03842-g005-550.jpg?1663163141)

(https://pub.mdpi-res.com/polymers/polymers-14-03842/article_deploy/html/images/polymers-14-03842-g006-550.jpg?1663163138)

Open Access Article **(/2073-4360/14/18/3841/pdf?version=1663572959)**

Facile Synthesis of Functionalised Hyperbranched Polymers for Application as Novel, Low Viscosity Lubricant Formulation Components (/2073-4360/14/18/3841)

by **Sophie R. Goodwin (https://sciprofiles.com/profile/author/dkJ3bVNjNHo4a0tiWDVJdy8rWXhXNnJQdWNtSWlOTmJicGJwaWY5bi9LTT0=?utm_**, **Amy Stimpson (https://sciprofiles.com/profile/3116676?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Richard Moon (https://sciprofiles.com/profile/author/L2ITSTJTM1E1K25UOERVZ25iaGd4Yk1wdjlxK2VWay9wcW1yRXM2cFo3RT0=?utm_sourc**, **Lauren Cowie (https://sciprofiles.com/profile/author/cEZMT0huRFZHWUlqdG5PMHMxcE9WZUNsQUlvTk5pWTd6a1RJQVQyNnNvQT0=?utm_s**, **Najib Aragrag (https://sciprofiles.com/profile/2433833?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Sorin V. Filip (https://sciprofiles.com/profile/author/dzlIVGJiUEJpbE1xV0hnVk5mY3VvdHk0SWNLVUlrVVd3SzRnUnZ0cnJqdz0=?utm_source=r**, **Andrew G. Smith (https://sciprofiles.com/profile/author/R095VFF0UzN0MStFaVZ1bjR1OW9TUT09?utm_source=mdpi.com&utm_medium=webs** and **Derek J. Irvine (https://sciprofiles.com/profile/137253?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**

Polymers **2022**, *14*(18), 3841; **https://doi.org/10.3390/polym14183841 (https://doi.org/10.3390/polym14183841)** - 14 Sep 2022

Cited by 1 (/2073-4360/14/18/3841#metrics) | Viewed by 1489

Abstract A novel, previously unreported, method for synthesising hyperbranched (HB) materials is detailed. Their use as additives to produce lubricant formulations that exhibit enhanced levels of wear protection and improved low-temperature oil viscosity and flow is also reported. The lubricant

Back to TopTop

formulations containing HB additives **[...] Read more.**
(This article belongs to the Special Issue **Feature Papers in Polymer Applications (/journal/polymers/special_issues/polymer_applications)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03841/article_deploy/html/images/polymers-14-03841-ag-550.jpg?1663820776)

(https://pub.mdpi-res.com/polymers/polymers-14-03841/article_deploy/html/images/polymers-14-03841-g001-550.jpg?1663573035)

(https://pub.mdpi-res.com/polymers/polymers-14-03841/article_deploy/html/images/polymers-14-03841-g002-550.jpg?1663573033)

(https://pub.mdpi-res.com/polymers/polymers-14-03841/article_deploy/html/images/polymers-14-03841-g003-550.jpg?1663573044)

(https://pub.mdpi-res.com/polymers/polymers-14-03841/article_deploy/html/images/polymers-14-03841-g004-550.jpg?1663573043)

(https://pub.mdpi-res.com/polymers/polymers-14-03841/article_deploy/html/images/polymers-14-03841-g005-550.jpg?1663573036)

(https://pub.mdpi-res.com/polymers/polymers-14-03841/article_deploy/html/images/polymers-14-03841-g006-550.jpg?1663573039)

(https://pub.mdpi-res.com/polymers/polymers-14-03841/article_deploy/html/images/polymers-14-03841-g007-550.jpg?1663573041)

(https://pub.mdpi-res.com/polymers/polymers-14-03841/article_deploy/html/images/polymers-14-03841-g008-550.jpg?1663573037)

Open Access Article **(/2073-4360/14/18/3840/pdf?version=1663155791)**

Analysis of the Polymer Two-Layer Protective Coating Impact on Panda-Type Optical Fiber under Bending (/2073-4360/14/18/3840)

by
Yulia I. Lesnikova (https://sciprofiles.com/profile/author/c2lDMHhEWVhOcEU1b1BleDZBTjVvNmFYNE5RVGF4M1N5NS9lcDNHWTY2RT0=?utm
,
Aleksandr N. Trufanov (https://sciprofiles.com/profile/1596925?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
and
Anna A. Kamenskikh (https://sciprofiles.com/profile/1988736?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3840; **https://doi.org/10.3390/polym14183840 (https://doi.org/10.3390/polym14183840)** - 14 Sep 2022
Cited by 2 (/2073-4360/14/18/3840#metrics) | Viewed by 1263

Abstract The article discusses the effects of thermal-force on the Panda-type optical fiber. The studies used a wide temperature range. The research used two thermal cycles with exposures to temperatures of 23, 60 and −60 °C. The field of residual stresses in the fiber **[...] Read more.**
(This article belongs to the Special Issue **State-of-the-Art Polymeric Surfaces and Coatings (/journal/polymers/special_issues/polymer_surface_coating)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03840/article_deploy/html/images/polymers-14-03840-g001-550.jpg?1663155862)

(https://pub.mdpi-res.com/polymers/polymers-14-03840/article_deploy/html/images/polymers-14-03840-g002-550.jpg?1663155866)

(https://pub.mdpi-res.com/polymers/polymers-14-03840/article_deploy/html/images/polymers-14-03840-g003-550.jpg?1663155863)

(https://pub.mdpi-res.com/polymers/polymers-14-03840/article_deploy/html/images/polymers-14-03840-g004-550.jpg?1663155869)

(https://pub.mdpi-res.com/polymers/polymers-14-03840/article_deploy/html/images/polymers-14-03840-g005a-550.jpg?1663155859)

(https://pub.mdpi-res.com/polymers/polymers-14-03840/article_deploy/html/images/polymers-14-03840-g005b-550.jpg?1663155864)

(https://pub.mdpi-res.com/polymers/polymers-14-03840/article_deploy/html/images/polymers-14-03840-g006-550.jpg?1663155867)

(https://pub.mdpi-res.com/polymers/polymers-14-03840/article_deploy/html/images/polymers-14-03840-g007-550.jpg?1663155871)

(https://pub.mdpi-res.com/polymers/polymers-14-03840/article_deploy/html/images/polymers-14-03840-g008-550.jpg?1663155872)

(https://pub.mdpi-res.com/polymers/polymers-14-03840/article_deploy/html/images/polymers-14-03840-g009-550.jpg?1663155868)

(https://pub.mdpi-res.com/polymers/polymers-14-03840/article_deploy/html/images/polymers-14-03840-g010-550.jpg?1663155865)

(https://pub.mdpi-res.com/polymers/polymers-14-03840/article_deploy/html/images/polymers-14-03840-g011a-550.jpg?1663155863)

(https://pub.mdpi-res.com/polymers/polymers-14-03840/article_deploy/html/images/polymers-14-03840-g011b-550.jpg?1663155860)

Open Access Article **(/2073-4360/14/18/3839/pdf?version=1663164132)**

Influence of Light-Intensity-Dependent Droplet Directionality on Dimensions of Structures Constructed Using an In Situ Light-Guided 3D Printing Method (/2073-4360/14/18/3839)

by
Jongkyeong Lim (https://sciprofiles.com/profile/2345399?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Sangmin Lee (https://sciprofiles.com/profile/2372623?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3839; **https://doi.org/10.3390/polym14183839 (https://doi.org/10.3390/polym14183839)** - 14 Sep 2022
Viewed by 904

Abstract As an alternative to conventional 3D printing methods that require supports, a new 3D printing strategy that utilizes guided light in situ has been developed for fabricating freestanding overhanging structures without supports. Light intensity has been found to be a crucial factor in **[...] Read more.**
(This article belongs to the Special Issue **Polymer-Based Sensor II (/journal/polymers/special_issues/4965GZB6H5)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03839/article_deploy/html/images/polymers-14-03839-g001-550.jpg?1663164210)

(https://pub.mdpi-res.com/polymers/polymers-14-03839/article_deploy/html/images/polymers-14-03839-g002-550.jpg?1663164209)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03839/article_deploy/html/images/polymers-14-03839-g003-550.jpg?1663164208)

(https://pub.mdpi-res.com/polymers/polymers-14-03839/article_deploy/html/images/polymers-14-03839-g004-550.jpg?1663164207)

Open Access Article (/2073-4360/14/18/3838/pdf?version=1663596207)

Insights into Stoichiometry Adjustments Governing the Performance of Flexible Foamed Polyurethane/Ground Tire Rubber Composites (/2073-4360/14/18/3838)

by Adam Olszewski (https://sciprofiles.com/profile/996419?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Paulina Kosmela (https://sciprofiles.com/profile/997649?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Wiktoria Żukowska (https://sciprofiles.com/profile/author/d0F1Qjg5RnhsbVdrbGo4M0JPV0lZdFlwVUVYQ1YraG1PRlhYdEZMSlpVZz0=?utm_sc , Paweł Wojtasz (https://sciprofiles.com/profile/2398578?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Mariusz Szczepański (https://sciprofiles.com/profile/author/RE1ldjcvRERyUmpKcWlyaWREMU5mOUpVTGFFWlBoNlISdnd1NmdBRUNPaz0=?u , Mateusz Barczewski (https://sciprofiles.com/profile/410196?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Łukasz Zedler (https://sciprofiles.com/profile/author/eGRQYkVlVHdveUg3bFJqS1RTTVhHZ0NWVVlMd3Fsb3ZuK3JkUGJ3NXJGND0=?utm_sou , Krzysztof Formela (https://sciprofiles.com/profile/263603?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Aleksander Hejna (https://sciprofiles.com/profile/774445?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3838; https://doi.org/10.3390/polym14183838 (https://doi.org/10.3390/polym14183838) - 14 Sep 2022

Cited by 7 (/2073-4360/14/18/3838#metrics) | Viewed by 1106

Abstract Polyurethanes (PU) are widely applied in the industry due to their tunable performance adjusted by changes in the isocyanate index—stoichiometric balance between isocyanate and hydroxyl groups. This balance is affected by the incorporation of modifiers of fillers into the PU matrix and is **[...] Read more.**

(This article belongs to the Special Issue **Progress in Polymer Composites for Different Applications** (/journal/polymers/special_issues/polymer_compo_applications))

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g001a-550.jpg?1663596294)

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g001b-550.jpg?1663596293)

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g002a-550.jpg?1663596289)

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g002b-550.jpg?1663596302)

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g003-550.jpg?1663596300)

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g004-550.jpg?1663596290)

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g005-550.jpg?1663596297)

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g006-550.jpg?1663596287)

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g007-550.jpg?1663596292)

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g008-550.jpg?1663596296)

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g009-550.jpg?1663596284)

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g010a-550.jpg?1663596298)

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g010b-550.jpg?1663596277)

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g011a-550.jpg?1663596274)

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g011b-550.jpg?1663596281)

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g012a-550.jpg?1663596278)

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g012b-550.jpg?1663596280)

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g013a-550.jpg?1663596285)

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g013b-550.jpg?1663596276)

(https://pub.mdpi-res.com/polymers/polymers-14-03838/article_deploy/html/images/polymers-14-03838-g014-550.jpg?1663596283)

Open Access Article (/2073-4360/14/18/3837/pdf?version=1663153704)

Fabrication and Characterization of Flexible Solid Polymers Electrolytes for Supercapacitor Application (/2073-4360/14/18/3837)

by Nacer Badi (https://sciprofiles.com/profile/812696?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Azemtsop Manfo Theodore (https://sciprofiles.com/profile/2237584?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_na , Saleh A. Alghamdi (https://sciprofiles.com/profile/2355814?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Hatem A. Al-Aoh (https://sciprofiles.com/profile/author/R21xdVl4SDFQcDVJanpKQUlEdVltSHk3V0RPQkhvdXdoQWMwVXQrdmlHbz0=?utm_sc , Abderrahim Lakhouit (https://sciprofiles.com/profile/2159236?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Aashis S. Roy (https://sciprofiles.com/profile/2386892?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Back to TopTop

Ayshah S. Alatawi (https://sciprofiles.com/profile/2107400?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Alex Ignatiev (https://sciprofiles.com/profile/author/ZTVjdzZKdDVRTmpTTlJyTWx6cGRpdz09?utm_source=mdpi.com&utm_medium=website&

Polymers **2022**, *14*(18), 3837; https://doi.org/10.3390/polym14183837 (https://doi.org/10.3390/polym14183837) - 14 Sep 2022
Cited by 5 (/2073-4360/14/18/3837#metrics) | Viewed by 1504

Abstract In this work, solid flexible polymer blend electrolytes (PBE) composed of polyvinyl alcohol (PVA) and polyvinyl pyrrolidone (PVP) with different amounts of sodium thiocyanate (NaSCN) salt mixed in double-distilled water (solvent) are prepared via solution casting method. The obtained films are characterized using **[...] Read more.**

(This article belongs to the Special Issue **Polymers and Hybrid Materials for Energy Conversion and Storage (/journal/polymers/special_issues/hybrid_mater_energy)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03837/article_deploy/html/images/polymers-14-03837-g001-550.jpg?1663153799)

(https://pub.mdpi-res.com/polymers/polymers-14-03837/article_deploy/html/images/polymers-14-03837-g002-550.jpg?1663153794)

(https://pub.mdpi-res.com/polymers/polymers-14-03837/article_deploy/html/images/polymers-14-03837-g003-550.jpg?1663153791)

(https://pub.mdpi-res.com/polymers/polymers-14-03837/article_deploy/html/images/polymers-14-03837-g004-550.jpg?1663153798)

(https://pub.mdpi-res.com/polymers/polymers-14-03837/article_deploy/html/images/polymers-14-03837-g005-550.jpg?1663153793)

(https://pub.mdpi-res.com/polymers/polymers-14-03837/article_deploy/html/images/polymers-14-03837-g006-550.jpg?1663153790)

(https://pub.mdpi-res.com/polymers/polymers-14-03837/article_deploy/html/images/polymers-14-03837-g007-550.jpg?1663153786)

(https://pub.mdpi-res.com/polymers/polymers-14-03837/article_deploy/html/images/polymers-14-03837-g008-550.jpg?1663153788)

(https://pub.mdpi-res.com/polymers/polymers-14-03837/article_deploy/html/images/polymers-14-03837-g009-550.jpg?1663153797)

(https://pub.mdpi-res.com/polymers/polymers-14-03837/article_deploy/html/images/polymers-14-03837-g010-550.jpg?1663153796)

(https://pub.mdpi-res.com/polymers/polymers-14-03837/article_deploy/html/images/polymers-14-03837-g011-550.jpg?1663153787)

(https://pub.mdpi-res.com/polymers/polymers-14-03837/article_deploy/html/images/polymers-14-03837-g012-550.jpg?1663153784)

(https://pub.mdpi-res.com/polymers/polymers-14-03837/article_deploy/html/images/polymers-14-03837-g013-550.jpg?1663153794)

Open Access Article (/2073-4360/14/18/3836/pdf?version=1663567860)

Assessment of Acute Oral Toxicity of Thiolated Gum Ghatti in Rats (/2073-4360/14/18/3836)

by Vivek Puri (https://sciprofiles.com/profile/1182223?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Ameya Sharma (https://sciprofiles.com/profile/1345797?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Pradeep Kumar (https://sciprofiles.com/profile/307165?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Kamal Dua (https://sciprofiles.com/profile/814240?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Kampanart Huanbutta (https://sciprofiles.com/profile/1468095?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Inderbir Singh (https://sciprofiles.com/profile/487501?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Tanikan Sangnim (https://sciprofiles.com/profile/1608810?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3836; https://doi.org/10.3390/polym14183836 (https://doi.org/10.3390/polym14183836) - 14 Sep 2022
Cited by 1 (/2073-4360/14/18/3836#metrics) | Viewed by 1233

Abstract Various drug delivery systems were developed using a modified form of gum ghatti. Modifying gum ghatti using thioglycolic acid improves its mucoadhesive property, and hence, it is a suitable approach for the fabrication and development of controlled drug delivery systems. In accordance with **[...] Read more.**

(This article belongs to the Special Issue **Synthesis, Characterization and Applications of Natural Polymers (/journal/polymers/special_issues/21RGIPC9U6)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03836/article_deploy/html/images/polymers-14-03836-ag-550.jpg?1663567938)

(https://pub.mdpi-res.com/polymers/polymers-14-03836/article_deploy/html/images/polymers-14-03836-g001-550.jpg?1663567936)

(https://pub.mdpi-res.com/polymers/polymers-14-03836/article_deploy/html/images/polymers-14-03836-g002-550.jpg?1663567937)

(https://pub.mdpi-res.com/polymers/polymers-14-03836/article_deploy/html/images/polymers-14-03836-g003-550.jpg?1663567933)

(https://pub.mdpi-res.com/polymers/polymers-14-03836/article_deploy/html/images/polymers-14-03836-g004-550.jpg?1663567935)

Open Access Article (/2073-4360/14/18/3835/pdf?version=1663300070)

Efficient All-Polymer Solar Cells Enabled by Interface Engineering (/2073-4360/14/18/3835)

by
Guoping Zhang (https://sciprofiles.com/profile/author/UEVjbFp3YWJuT0ZZbnJrVjFydXpHaFg2K3hOU2hOaUM2Y0NaTFJRTWJQcmVHTVRMW
,
Lihong Wang (https://sciprofiles.com/profile/author/bml4RXBOWk50dmwxdCtyT2VVb1Yvcm5yL3lSMHdyOUg3UWFRWm11RXBxcz0=?utm_so
,
Chaoyue Zhao (https://sciprofiles.com/profile/author/ODZtUVZPZVJsSVJOYjhyQ3RjWkUrOG80dEhkTXU5L3lGMUljY20xWGw0Mmx0WXN5dEIf
,
Yajie Wang (https://sciprofiles.com/profile/3101067?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Back to TopTop

Ruiyu Hu (https://sciprofiles.com/profile/author/STJzYVJDRnFZcGd1OUFaNmxLM1psdGQ3QUhuMklnV1dibENzQ1RnTHd0TTkxTEVyKzhWRU
,
Jiaxu Che (https://sciprofiles.com/profile/author/dUpWUDN4aGs0aXV1QU5HNVFzUTJ1NVZhbDBkTzJPbys3alBHdzR3NHpnUnRTeXQ5bTR4Rk
,
Siying He (https://sciprofiles.com/profile/author/Wll2dFNTTk1ELzB1TC93bWJOdlpGaUNXOVNFODhTT3g5NjZOK2pEV1p3OXJnaFFIdm5qTGdj
,
Wei Chen (https://sciprofiles.com/profile/1905742?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Leifeng Cao (https://sciprofiles.com/profile/author/ZG1SYVk1Y09rallPVDdxV2VUaDk0TWM2eU5hdVRGSWRGcmNQN0Z2Z0tTWT0=?utm_sour
,
Zhenghui Luo (https://sciprofiles.com/profile/2403082?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Mingxia Qiu (https://sciprofiles.com/profile/2128604?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Shunpu Li (https://sciprofiles.com/profile/2403083?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Guangye Zhang (https://sciprofiles.com/profile/2195993?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3835; https://doi.org/10.3390/polym14183835 (https://doi.org/10.3390/polym14183835) - 14 Sep 2022
Cited by 5 (/2073-4360/14/18/3835#metrics) | Viewed by 1492

Abstract All-polymer solar cells (all-PSCs) are organic solar cells in which both the electron donor and the acceptor are polymers and are considered more promising in large-scale production. Thanks to the polymerizing small molecule acceptor strategy, the power conversion efficiency of all-PSCs has ushered **[...] Read more.**

(This article belongs to the Special Issue **Polymers/Their Hybrid Materials for Optoelectronic Applications (/journal/polymers/special_issues/Conducting_Organic_Polymer_Materials_Photovoltaic_Application)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03835/article_deploy/html/images/polymers-14-03835-g001-550.jpg?1663300144)

(https://pub.mdpi-res.com/polymers/polymers-14-03835/article_deploy/html/images/polymers-14-03835-g002-550.jpg?1663300149)

(https://pub.mdpi-res.com/polymers/polymers-14-03835/article_deploy/html/images/polymers-14-03835-g003-550.jpg?1663300145)

(https://pub.mdpi-res.com/polymers/polymers-14-03835/article_deploy/html/images/polymers-14-03835-g004-550.jpg?1663300152)

(https://pub.mdpi-res.com/polymers/polymers-14-03835/article_deploy/html/images/polymers-14-03835-g005-550.jpg?1663300146)

(https://pub.mdpi-res.com/polymers/polymers-14-03835/article_deploy/html/images/polymers-14-03835-g006-550.jpg?1663300147)

(https://pub.mdpi-res.com/polymers/polymers-14-03835/article_deploy/html/images/polymers-14-03835-g007-550.jpg?1663300151)

Open Access Review (/2073-4360/14/18/3834/pdf?version=1663163068)

Preparation and Characteristics of Alginate Microparticles for Food, Pharmaceutical and Cosmetic Applications (/2073-4360/14/18/3834)

by Anna Łętocha (https://sciprofiles.com/profile/2196515?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Małgorzata Miastkowska (https://sciprofiles.com/profile/494220?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name
and
Elżbieta Sikora (https://sciprofiles.com/profile/510909?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3834; https://doi.org/10.3390/polym14183834 (https://doi.org/10.3390/polym14183834) - 14 Sep 2022
Cited by 19 (/2073-4360/14/18/3834#metrics) | Viewed by 5319

Abstract Alginates are the most widely used natural polymers in the pharmaceutical, food and cosmetic industries. Usually, they are applied as a thickening, gel-forming and stabilizing agent. Moreover, the alginate-based formulations such as matrices, membranes, nanospheres or microcapsules are often used as delivery systems. **[...] Read more.**

(This article belongs to the Special Issue **Research Progress in Polymer Hydrogels (/journal/polymers/special_issues/Research_Progress_in_Polymer_Hydrogels)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03834/article_deploy/html/images/polymers-14-03834-g001-550.jpg?1663163149)

(https://pub.mdpi-res.com/polymers/polymers-14-03834/article_deploy/html/images/polymers-14-03834-g002-550.jpg?1663163142)

(https://pub.mdpi-res.com/polymers/polymers-14-03834/article_deploy/html/images/polymers-14-03834-g003-550.jpg?1663163147)

(https://pub.mdpi-res.com/polymers/polymers-14-03834/article_deploy/html/images/polymers-14-03834-g004-550.jpg?1663163148)

(https://pub.mdpi-res.com/polymers/polymers-14-03834/article_deploy/html/images/polymers-14-03834-g005-550.jpg?1663163144)

(https://pub.mdpi-res.com/polymers/polymers-14-03834/article_deploy/html/images/polymers-14-03834-g006-550.jpg?1663163145)

Open Access Article (/2073-4360/14/18/3833/pdf?version=1663737158)

Membranes Based on Polyvinylidene Fluoride and Radiation-Grafted Sulfonated Polystyrene and Their Performance in Proton-Exchange Membrane Fuel Cells (/2073-4360/14/18/3833)

by
Daniil V. Golubenko (https://sciprofiles.com/profile/2060227?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Oleg V. Korchagin (https://sciprofiles.com/profile/1170670?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Daria Yu. Voropaeva (https://sciprofiles.com/profile/541535?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Vera A. Bogdanovskaya (https://sciprofiles.com/profile/481287?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
and
Andrey B. Yaroslavtsev (https://sciprofiles.com/profile/1144325?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3833; **https://doi.org/10.3390/polym14183833 (https://doi.org/10.3390/polym14183833)** - 14 Sep 2022
Cited by 4 (/2073-4360/14/18/3833#metrics) | Viewed by 1322

Abstract Proton-exchange membranes based on gamma-irradiated films of PVDF and radiation-grafted sulfonated polystyrene with an ion-exchange capacity of 1.8 meq/g and crosslinking degrees of 0 and 3% were synthesized. A solvent-free, environmentally friendly method of styrene grafting from its aqueous emulsion, with a styrene **[...] Read more.**

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03833/article_deploy/html/images/polymers-14-03833-g001-550.jpg?1663737233)

(https://pub.mdpi-res.com/polymers/polymers-14-03833/article_deploy/html/images/polymers-14-03833-g002a-550.jpg?1663737236)

(https://pub.mdpi-res.com/polymers/polymers-14-03833/article_deploy/html/images/polymers-14-03833-g002b-550.jpg?1663737232)

(https://pub.mdpi-res.com/polymers/polymers-14-03833/article_deploy/html/images/polymers-14-03833-g003-550.jpg?1663737230)

(https://pub.mdpi-res.com/polymers/polymers-14-03833/article_deploy/html/images/polymers-14-03833-g004-550.jpg?1663737238)

(https://pub.mdpi-res.com/polymers/polymers-14-03833/article_deploy/html/images/polymers-14-03833-g005-550.jpg?1663737228)

(https://pub.mdpi-res.com/polymers/polymers-14-03833/article_deploy/html/images/polymers-14-03833-g006-550.jpg?1663737239)

(https://pub.mdpi-res.com/polymers/polymers-14-03833/article_deploy/html/images/polymers-14-03833-g007-550.jpg?1663737229)

(https://pub.mdpi-res.com/polymers/polymers-14-03833/article_deploy/html/images/polymers-14-03833-g008-550.jpg?1663737237)

Open Access Article **(/2073-4360/14/18/3832/pdf?version=1664537094)**

Use of *Opuntia ficus-indica* Fruit Peel as a Novel Source of Mucilage with Coagulant Physicochemical/Molecular Characteristics (/2073-4360/14/18/3832)

by
Maria Carolina Otálora (https://sciprofiles.com/profile/1144611?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
,
Andrea Wilches-Torres (https://sciprofiles.com/profile/1221087?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
,
Carlos Rafael Lara (https://sciprofiles.com/profile/2446010?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Gabriel Ricardo Cifuentes (https://sciprofiles.com/profile/1608332?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nan
and
Jovanny A. Gómez Castaño (https://sciprofiles.com/profile/388504?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_na
Polymers **2022**, *14*(18), 3832; **https://doi.org/10.3390/polym14183832 (https://doi.org/10.3390/polym14183832)** - 14 Sep 2022
Cited by 10 (/2073-4360/14/18/3832#metrics) | Viewed by 1997

Abstract The peels obtained as a byproduct from the processing of fruits (prickly pears) of the Cactaceae family are a rich source of mucilage, a hydrocolloid biopolymer that may have potential application in water/wastewater treatment as a natural coagulant. In this study, the structural **[...] Read more.**
(This article belongs to the Special Issue **Polymer Composites for Water Treatment (
/journal/polymers/special_issues/Polymer_Composites_Water_Treatment)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03832/article_deploy/html/images/polymers-14-03832-ag-550.jpg?1684152632)

(https://pub.mdpi-res.com/polymers/polymers-14-03832/article_deploy/html/images/polymers-14-03832-g001-550.jpg?1684152632)

(https://pub.mdpi-res.com/polymers/polymers-14-03832/article_deploy/html/images/polymers-14-03832-g002-550.jpg?1684152622)

(https://pub.mdpi-res.com/polymers/polymers-14-03832/article_deploy/html/images/polymers-14-03832-g003-550.jpg?1684152621)

(https://pub.mdpi-res.com/polymers/polymers-14-03832/article_deploy/html/images/polymers-14-03832-g004-550.jpg?1684152620)

(https://pub.mdpi-res.com/polymers/polymers-14-03832/article_deploy/html/images/polymers-14-03832-g005-550.jpg?1684152630)

(https://pub.mdpi-res.com/polymers/polymers-14-03832/article_deploy/html/images/polymers-14-03832-g006-550.jpg?1684152627)

(https://pub.mdpi-res.com/polymers/polymers-14-03832/article_deploy/html/images/polymers-14-03832-g007-550.jpg?1684152629)

Open Access Article **(/2073-4360/14/18/3831/pdf?version=1663554500)**

Hybrid Nanofillers Creating the Stable PVDF Nanocomposite Films and Their Effect on the Friction and Mechanical Properties (/2073-4360/14/18/3831)

by
Karla Čech Barabaszová (https://sciprofiles.com/profile/803315?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
,
Sylva Holešová (https://sciprofiles.com/profile/829464?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Lukáš Plesník (https://sciprofiles.com/profile/3005303?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Zdeňka Kolská (https://sciprofiles.com/profile/author/ZVlVZElrZzdra1M3QVlydWJGSGgray9saCtRTHplTjh3bzhSRmp6V1R1ST0=?utm_source=
,
Kamil Joszko (https://sciprofiles.com/profile/1137974?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Bożena Gzik-Zroska (https://sciprofiles.com/profile/author/aURqOTdERlUrNVBXaHdydmVpS1FaWmtsTVExWkVCTVkxRDRlOUYxWnk2RT0=?u
Polymers **2022**, *14*(18), 3831; **https://doi.org/10.3390/polym14183831 (https://doi.org/10.3390/polym14183831)** - 14 Sep 2022
Cited by 3 (/2073-4360/14/18/3831#metrics) | Viewed by 1128

Back to TopTop

Abstract The solvent casting method was used for five types of polyvinylidene difluoride (PVDF) nanocomposite film preparation. The effect of nanofillers in PVDF nanocomposite films on the structural, phase, and friction and mechanical properties was examined and compared with that of the natural PVDF **[...] Read more.**

(This article belongs to the Special Issue **Structure and Properties of Polymer Composites (/journal/polymers/special_issues/Structure_Properties_Polymer_Composites)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03831/article_deploy/html/images/polymers-14-03831-g001-550.jpg?1663554579)

(https://pub.mdpi-res.com/polymers/polymers-14-03831/article_deploy/html/images/polymers-14-03831-g002-550.jpg?1663554573)

(https://pub.mdpi-res.com/polymers/polymers-14-03831/article_deploy/html/images/polymers-14-03831-g003-550.jpg?1663554577)

(https://pub.mdpi-res.com/polymers/polymers-14-03831/article_deploy/html/images/polymers-14-03831-g004-550.jpg?1663554574)

(https://pub.mdpi-res.com/polymers/polymers-14-03831/article_deploy/html/images/polymers-14-03831-g005-550.jpg?1663554581)

(https://pub.mdpi-res.com/polymers/polymers-14-03831/article_deploy/html/images/polymers-14-03831-g006-550.jpg?1663554576)

(https://pub.mdpi-res.com/polymers/polymers-14-03831/article_deploy/html/images/polymers-14-03831-g007-550.jpg?1663554580)

Open Access Article **(/2073-4360/14/18/3830/pdf?version=1663143946)**

Tribological and Rheological Properties of Poly(vinyl alcohol)-Gellan Gum Composite Hydrogels (/2073-4360/14/18/3830)

by **Yang Feng (https://sciprofiles.com/profile/2329489?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Shao-Cong Dai (https://sciprofiles.com/profile/2380645?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Khoon Lim (https://sciprofiles.com/profile/233877?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Yogambha Ramaswamy (https://sciprofiles.com/profile/432346?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)** and **Ahmad Jabbarzadeh (https://sciprofiles.com/profile/820081?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**

Polymers **2022**, *14*(18), 3830; **https://doi.org/10.3390/polym14183830 (https://doi.org/10.3390/polym14183830)** - 14 Sep 2022

Cited by 2 (/2073-4360/14/18/3830#metrics) | Viewed by 1409

Abstract Polymeric poly(vinyl alcohol) (PVA)-based composite hydrogels are promising materials with various biomedical applications. However, their mechanical and tribological properties should be tailored for such applications. In this study, we report the fabrication of PVA-gellan gum (GG) composite hydrogels and determine the effect of **[...] Read more.**

(This article belongs to the Special Issue **Advances in the Mechanical Behavior of Polymeric Materials (/journal/polymers/special_issues/Advances_Mechanical_Behavior_Polymeric_Materials)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03830/article_deploy/html/images/polymers-14-03830-ag-550.jpg?1663144029)

(https://pub.mdpi-res.com/polymers/polymers-14-03830/article_deploy/html/images/polymers-14-03830-g001-550.jpg?1663144028)

(https://pub.mdpi-res.com/polymers/polymers-14-03830/article_deploy/html/images/polymers-14-03830-g002-550.jpg?1663144025)

(https://pub.mdpi-res.com/polymers/polymers-14-03830/article_deploy/html/images/polymers-14-03830-g003-550.jpg?1663144026)

(https://pub.mdpi-res.com/polymers/polymers-14-03830/article_deploy/html/images/polymers-14-03830-g004-550.jpg?1663144029)

(https://pub.mdpi-res.com/polymers/polymers-14-03830/article_deploy/html/images/polymers-14-03830-g005-550.jpg?1663144022)

(https://pub.mdpi-res.com/polymers/polymers-14-03830/article_deploy/html/images/polymers-14-03830-g006-550.jpg?1663144024)

(https://pub.mdpi-res.com/polymers/polymers-14-03830/article_deploy/html/images/polymers-14-03830-g007-550.jpg?1663144023)

Open Access Article **(/2073-4360/14/18/3829/pdf?version=1663124316)**

Solvent-Free Production by Extrusion of Bio-Based Poly(glycerol-co-diacids) Sheets for the Development of Biocompatible and Electroconductive Elastomer Composites (/2073-4360/14/18/3829)

by **Shengzhi Ji (https://sciprofiles.com/profile/2341155?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Mathilde Stricher (https://sciprofiles.com/profile/1868776?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Frédéric Nadaud (https://sciprofiles.com/profile/author/aHlUdFM5S1h1WnRxTU9QNGYzL0hNbzh3Kzl4YStoSDdLL21PaEo5ZWliZz0=?utm_sou**, **Erwann Guenin (https://sciprofiles.com/profile/519239?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Christophe Egles (https://sciprofiles.com/profile/337703?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)** and **Frédéric Delbecq (https://sciprofiles.com/profile/199111?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**

Polymers **2022**, *14*(18), 3829; **https://doi.org/10.3390/polym14183829 (https://doi.org/10.3390/polym14183829)** - 13 Sep 2022

Viewed by 1164

Abstract Faced with growing global demand for new potent, bio-based, biocompatible elastomers, the present study reports the solvent-free production of 13 pure and derived poly(glycerol-co-diacid) composite sheets exclusively using itaconic acid, sebacic acid, and 2,5-furandicarboxylic acid (FDCA) with glycerol. Herein, modified melt polycondensation and **[...] Read more.**

(This article belongs to the Special Issue **Smart and Functional Polymer Composites (/journal/polymers/special_issues/smart_function_polymer_composite)**)

► Show Figures

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03829/article_deploy/html/images/polymers-14-03829-g001-550.jpg?1663124743)
(https://pub.mdpi-res.com/polymers/polymers-14-03829/article_deploy/html/images/polymers-14-03829-g002-550.jpg?1663124729)
(https://pub.mdpi-res.com/polymers/polymers-14-03829/article_deploy/html/images/polymers-14-03829-g003-550.jpg?1663124755)
(https://pub.mdpi-res.com/polymers/polymers-14-03829/article_deploy/html/images/polymers-14-03829-g004-550.jpg?1663124726)
(https://pub.mdpi-res.com/polymers/polymers-14-03829/article_deploy/html/images/polymers-14-03829-g005-550.jpg?1663124750)
(https://pub.mdpi-res.com/polymers/polymers-14-03829/article_deploy/html/images/polymers-14-03829-g006-550.jpg?1663124736)
(https://pub.mdpi-res.com/polymers/polymers-14-03829/article_deploy/html/images/polymers-14-03829-g007-550.jpg?1663124758)
(https://pub.mdpi-res.com/polymers/polymers-14-03829/article_deploy/html/images/polymers-14-03829-g008-550.jpg?1663124754)
(https://pub.mdpi-res.com/polymers/polymers-14-03829/article_deploy/html/images/polymers-14-03829-g009-550.jpg?1663124751)
(https://pub.mdpi-res.com/polymers/polymers-14-03829/article_deploy/html/images/polymers-14-03829-g010a-550.jpg?1663124728)
(https://pub.mdpi-res.com/polymers/polymers-14-03829/article_deploy/html/images/polymers-14-03829-g010b-550.jpg?1663124731)
(https://pub.mdpi-res.com/polymers/polymers-14-03829/article_deploy/html/images/polymers-14-03829-g011-550.jpg?1663124756)
(https://pub.mdpi-res.com/polymers/polymers-14-03829/article_deploy/html/images/polymers-14-03829-g012-550.jpg?1663124752)
(https://pub.mdpi-res.com/polymers/polymers-14-03829/article_deploy/html/images/polymers-14-03829-g013-550.jpg?1663124741)
(https://pub.mdpi-res.com/polymers/polymers-14-03829/article_deploy/html/images/polymers-14-03829-g014-550.jpg?1663124744)

Open Access Article (/2073-4360/14/18/3828/pdf?version=1663323164)

Experimental Investigation on Hygroscopic Aging of Glass Fiber Reinforced Vinylester Resin Composites (/2073-4360/14/18/3828)

by
Weiping He (https://sciprofiles.com/profile/author/YU1weWl6UDh0VFJVaTh4S2diN29xbWgvZHdaYnNRMGU2NXRKNFRybkZ3Zz0=?utm_sourc
,
Xu Li (https://sciprofiles.com/profile/author/WE1CL25PTjk2SFFOYUs2cW9pZGRhamk3S0JMcTEwRWc4aEt1VWx5bHhSUT0=?utm_source=md
,
Piao Li (https://sciprofiles.com/profile/author/Y3JlNVl4eU1LN3VZTktldllYZ1Y4SXUwVTUyOTg1N1J5U3UyaWwyT2E2cz0=?utm_source=mdpi.c
,
Shirui Fang (https://sciprofiles.com/profile/author/eU5vakRyY013dGxpVVJKR3c3bk1yMWJ1THJMa0JpamJndllvOS9DM01uRT0=?utm_source=
and
Anxin Ding (https://sciprofiles.com/profile/2390294?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3828; **https://doi.org/10.3390/polym14183828 (https://doi.org/10.3390/polym14183828)** - 13 Sep 2022
Cited by 2 (/2073-4360/14/18/3828#metrics) | Viewed by 1036

Abstract The hygroscopic behavior of vinylester resin and high strength glass fiber reinforced vinylester resin composites were examined here, including weight change and the resulting degradation of mechanical properties. The prepared resin and composites specimens were immersed in deionized water and artificial seawater with **[...] Read more.**

(This article belongs to the Section **Polymer Composites and Nanocomposites (/journal/polymers/sections/polymer_composites_nanocomposites)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03828/article_deploy/html/images/polymers-14-03828-g001-550.jpg?1663401594)
(https://pub.mdpi-res.com/polymers/polymers-14-03828/article_deploy/html/images/polymers-14-03828-g002-550.jpg?1663401584)
(https://pub.mdpi-res.com/polymers/polymers-14-03828/article_deploy/html/images/polymers-14-03828-g003-550.jpg?1663401599)
(https://pub.mdpi-res.com/polymers/polymers-14-03828/article_deploy/html/images/polymers-14-03828-g004-550.jpg?1663401588)
(https://pub.mdpi-res.com/polymers/polymers-14-03828/article_deploy/html/images/polymers-14-03828-g005-550.jpg?1663401581)
(https://pub.mdpi-res.com/polymers/polymers-14-03828/article_deploy/html/images/polymers-14-03828-g006-550.jpg?1663401587)
(https://pub.mdpi-res.com/polymers/polymers-14-03828/article_deploy/html/images/polymers-14-03828-g007-550.jpg?1663401609)
(https://pub.mdpi-res.com/polymers/polymers-14-03828/article_deploy/html/images/polymers-14-03828-g008-550.jpg?1663401605)
(https://pub.mdpi-res.com/polymers/polymers-14-03828/article_deploy/html/images/polymers-14-03828-g009-550.jpg?1663401603)
(https://pub.mdpi-res.com/polymers/polymers-14-03828/article_deploy/html/images/polymers-14-03828-g010-550.jpg?1663401582)
(https://pub.mdpi-res.com/polymers/polymers-14-03828/article_deploy/html/images/polymers-14-03828-g011-550.jpg?1663401608)
(https://pub.mdpi-res.com/polymers/polymers-14-03828/article_deploy/html/images/polymers-14-03828-g012-550.jpg?1663401592)
(https://pub.mdpi-res.com/polymers/polymers-14-03828/article_deploy/html/images/polymers-14-03828-g013-550.jpg?1663401594)
(https://pub.mdpi-res.com/polymers/polymers-14-03828/article_deploy/html/images/polymers-14-03828-g014-550.jpg?1663401597)
(https://pub.mdpi-res.com/polymers/polymers-14-03828/article_deploy/html/images/polymers-14-03828-g015-550.jpg?1663401590)
(https://pub.mdpi-res.com/polymers/polymers-14-03828/article_deploy/html/images/polymers-14-03828-g016-550.jpg?1663401600)
(https://pub.mdpi-res.com/polymers/polymers-14-03828/article_deploy/html/images/polymers-14-03828-g017-550.jpg?1663401579)
(https://pub.mdpi-res.com/polymers/polymers-14-03828/article_deploy/html/images/polymers-14-03828-g018-550.jpg?1663401580)

Back to TopTop

Open Access Article (/2073-4360/14/18/3827/pdf?version=1663123336)

Interlaminar Shear Characteristics of Typical Polyurethane Mixture Pavement (/2073-4360/14/18/3827)

by Guohua Gao (https://sciprofiles.com/profile/author/VU9hcy96VkVlbVBxeWNORUttQ29COFlzcnVsMmxnbzNRMW1UZGFwYnVWVT0=?utm_sou
, Min Sun (https://sciprofiles.com/profile/561498?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Chuanchang Xu (https://sciprofiles.com/profile/author/ZkNaakVQeW1BcWZtM0hQNTlKV0NYamplaGZNejdlY1RCMEg1S1VMYkt6VT0=?utm_so
, Guangzhen Qu (https://sciprofiles.com/profile/1002944?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Yaohui Yang (https://sciprofiles.com/profile/2963087?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3827; https://doi.org/10.3390/polym14183827 (https://doi.org/10.3390/polym14183827) - 13 Sep 2022
Cited by 3 (/2073-4360/14/18/3827#metrics) | Viewed by 869

Abstract Polyurethane (PU) can be used as a road material binder, and its mechanical properties, durability, temperature stability, and other road performance metrics are good. However, the interlayer bonding between PU mixtures and asphalt mixtures is poor. The influence of the pavement structure, interlayer **[...] Read more.**

(This article belongs to the Special Issue **Advances in Polymer-Reinforced and Fibre-Reinforced Concrete (/journal/polymers/special_issues/polymer_fiber_concrete_composite_diagnostics)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03827/article_deploy/html/images/polymers-14-03827-g001-550.jpg?1663123415)

(https://pub.mdpi-res.com/polymers/polymers-14-03827/article_deploy/html/images/polymers-14-03827-g002-550.jpg?1663123405)

(https://pub.mdpi-res.com/polymers/polymers-14-03827/article_deploy/html/images/polymers-14-03827-g003-550.jpg?1663123417)

(https://pub.mdpi-res.com/polymers/polymers-14-03827/article_deploy/html/images/polymers-14-03827-g004-550.jpg?1663123406)

(https://pub.mdpi-res.com/polymers/polymers-14-03827/article_deploy/html/images/polymers-14-03827-g005-550.jpg?1663123411)

(https://pub.mdpi-res.com/polymers/polymers-14-03827/article_deploy/html/images/polymers-14-03827-g006-550.jpg?1663123410)

(https://pub.mdpi-res.com/polymers/polymers-14-03827/article_deploy/html/images/polymers-14-03827-g007-550.jpg?1663123414)

(https://pub.mdpi-res.com/polymers/polymers-14-03827/article_deploy/html/images/polymers-14-03827-g008-550.jpg?1663123416)

(https://pub.mdpi-res.com/polymers/polymers-14-03827/article_deploy/html/images/polymers-14-03827-g009-550.jpg?1663123412)

(https://pub.mdpi-res.com/polymers/polymers-14-03827/article_deploy/html/images/polymers-14-03827-g010-550.jpg?1663123404)

(https://pub.mdpi-res.com/polymers/polymers-14-03827/article_deploy/html/images/polymers-14-03827-g011-550.jpg?1663123402)

(https://pub.mdpi-res.com/polymers/polymers-14-03827/article_deploy/html/images/polymers-14-03827-g012-550.jpg?1663123401)

(https://pub.mdpi-res.com/polymers/polymers-14-03827/article_deploy/html/images/polymers-14-03827-g013-550.jpg?1663123407)

Open Access Article (/2073-4360/14/18/3826/pdf?version=1663311444)

Effects of Acid Modulators on the Microwave-Assisted Synthesis of Cr/Sn Metal-Organic Frameworks (/2073-4360/14/18/3826)

by Wei Mao (https://sciprofiles.com/profile/2400147?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Renting Huang (https://sciprofiles.com/profile/author/VzZiUHRmdjFyVkRURjEyV3E3eU0xM2pQYks0SkVGaEF0UEFwclNOEpwaz0=?utm_sour
, Hao Xu (https://sciprofiles.com/profile/author/R1VoYkxvUEhSakJEQmF1NjhvYjhrVDB6TWZud1F5ZFVnUjlRRi9hQTRtMD0=?utm_source=mdpi
, Hao Wang (https://sciprofiles.com/profile/author/T2Q0NURGdUNyS3VsenpxTFFiNlZ1aHZQZUoxWHJ3SWlzZ0pUNGFxT3lhOD0=?utm_source=
, Yi Huang (https://sciprofiles.com/profile/author/UDNmVGlUTGJTM3lEVWFiamtkMnJmZll0QUgrVzNGMWE5ejk3cThUd0NlUT0=?utm_source=m
, Shurong Huang (https://sciprofiles.com/profile/author/ZFl0enBXRmMwdk56SE1Ua0dkdW1yZDdnR0VuZHVOS3oxSmFYZElrcXlpdz0=?utm_sou
and Jinghong Zhou (https://sciprofiles.com/profile/650550?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3826; https://doi.org/10.3390/polym14183826 (https://doi.org/10.3390/polym14183826) - 13 Sep 2022
Cited by 3 (/2073-4360/14/18/3826#metrics) | Viewed by 1412

Abstract Metal-organic frameworks (MOFs) have attracted remarkable attention for their distinguished structural designability. Precisely controlling the particle size and improving the structural stability of MOF nanoparticles influence their catalytic activity significantly. In this study, six acids (nitric, hydrochloric, formic, acetic, succinic, and citric acids) **[...] Read more.**

(This article belongs to the Section **Polymer Applications (/journal/polymers/sections/Polymer_Applications)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03826/article_deploy/html/images/polymers-14-03826-g001-550.jpg?1663311512)

(https://pub.mdpi-res.com/polymers/polymers-14-03826/article_deploy/html/images/polymers-14-03826-g002-550.jpg?1663311520)

(https://pub.mdpi-res.com/polymers/polymers-14-03826/article_deploy/html/images/polymers-14-03826-g003-550.jpg?1663311514)

(https://pub.mdpi-res.com/polymers/polymers-14-03826/article_deploy/html/images/polymers-14-03826-g004-550.jpg?1663311513)

(https://pub.mdpi-res.com/polymers/polymers-14-03826/article_deploy/html/images/polymers-14-03826-g005-550.jpg?1663311516)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03826/article_deploy/html/images/polymers-14-03826-g006-550.jpg?1663311511)

(https://pub.mdpi-res.com/polymers/polymers-14-03826/article_deploy/html/images/polymers-14-03826-g007-550.jpg?1663311515)

(https://pub.mdpi-res.com/polymers/polymers-14-03826/article_deploy/html/images/polymers-14-03826-g008-550.jpg?1663311522)

Open Access Article (/2073-4360/14/18/3825/pdf?version=1663654756)

Crystal Violet Adsorption on Eco-Friendly Lignocellulosic Material Obtained from Motherwort (*Leonurus cardiaca* L.) Biomass (/2073-4360/14/18/3825)

by Giannin Mosoarca (https://sciprofiles.com/profile/1212574?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Cosmin Vancea (https://sciprofiles.com/profile/1280167?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Simona Popa (https://sciprofiles.com/profile/94698?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Mircea Dan (https://sciprofiles.com/profile/1622543?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Sorina Boran (https://sciprofiles.com/profile/1907127?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3825; https://doi.org/10.3390/polym14183825 (https://doi.org/10.3390/polym14183825) - 13 Sep 2022
Cited by 7 (/2073-4360/14/18/3825#metrics) | Viewed by 991

Abstract The performance of a new eco-friendly adsorbent, obtained from motherwort (*Leonurus cardiaca* L.) biomass after minimum processing, in crystal violet dye removal from aqueous solutions was studied. Firstly, the adsorbent material was characterized using several technics, such as FTIR, pH_{PZC} determination, **[...] Read more.**

(This article belongs to the Special Issue **Adsorption Behavior of Polymer Materials (/journal/polymers/special_issues/Adsorpt_Behav_Polym_Mater)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03825/article_deploy/html/images/polymers-14-03825-g001-550.jpg?1663654849)

(https://pub.mdpi-res.com/polymers/polymers-14-03825/article_deploy/html/images/polymers-14-03825-g002-550.jpg?1663654845)

(https://pub.mdpi-res.com/polymers/polymers-14-03825/article_deploy/html/images/polymers-14-03825-g003-550.jpg?1663654851)

(https://pub.mdpi-res.com/polymers/polymers-14-03825/article_deploy/html/images/polymers-14-03825-g004-550.jpg?1663654845)

(https://pub.mdpi-res.com/polymers/polymers-14-03825/article_deploy/html/images/polymers-14-03825-g005-550.jpg?1663654853)

(https://pub.mdpi-res.com/polymers/polymers-14-03825/article_deploy/html/images/polymers-14-03825-g006-550.jpg?1663654838)

(https://pub.mdpi-res.com/polymers/polymers-14-03825/article_deploy/html/images/polymers-14-03825-g007-550.jpg?1663654847)

(https://pub.mdpi-res.com/polymers/polymers-14-03825/article_deploy/html/images/polymers-14-03825-g008-550.jpg?1663654855)

(https://pub.mdpi-res.com/polymers/polymers-14-03825/article_deploy/html/images/polymers-14-03825-g009-550.jpg?1663654843)

(https://pub.mdpi-res.com/polymers/polymers-14-03825/article_deploy/html/images/polymers-14-03825-g010-550.jpg?1663654840)

(https://pub.mdpi-res.com/polymers/polymers-14-03825/article_deploy/html/images/polymers-14-03825-g011-550.jpg?1663654841)

Open Access Article (/2073-4360/14/18/3824/pdf?version=1663211706)

Effect of the Particle Size and Layer Thickness of GNP Fillers on the Dielectric Properties and Actuated Strain of GNP–PDMS Composites (/2073-4360/14/18/3824)

by Jin-Sung Seo (https://sciprofiles.com/profile/2436302?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Do-Hyeon Kim (https://sciprofiles.com/profile/author/VUl2V2U3eFFxaWtFS01oalFlRG9kMXYwOGl4cGVDWmdheloyTWxvRE5zOD0=?utm_sour, Heon-Seob Jung (https://sciprofiles.com/profile/author/bCs0QUYvam9JTHJmZ3RnNjQ3WXNsZGdKYXlyTEZlZXlsRzJrZFJXc3BJMD0=?utm_so, Ho-Dong Kim (https://sciprofiles.com/profile/author/N05XeCs0NzB0TnVnVDZ5RmFKM091cHB2Y2o4bGFEdlFQQVMyUWhlclM4OD0=?utm_sou, Jaewon Choi (https://sciprofiles.com/profile/2168661?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Minjae Kim (https://sciprofiles.com/profile/author/a3drK0QzZUgrUVYvaHdyajhrNXlvcEgzT3B4dFpySU5xandVTEtZZ1FoUT0=?utm_source=md, Sung-Hyeon Baeck (https://sciprofiles.com/profile/author/Z0RzT2dKTGt1RjlMdGlFYkJlV1l1Rkh4cjBlaE84WXFZN3pGUmdNRUlZVT0=?utm_sou and Sang-Eun Shim (https://sciprofiles.com/profile/821923?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3824; https://doi.org/10.3390/polym14183824 (https://doi.org/10.3390/polym14183824) - 13 Sep 2022
Cited by 1 (/2073-4360/14/18/3824#metrics) | Viewed by 1091

Abstract Dielectric elastomer actuators (DEAs), a type of electroactive polymers (EAPs), are smart materials that are used in various fields such as artificial muscles and biomimetic robots. In this study, graphene nanoplatelets (GNPs), which are conductive carbon fillers, were added to a widely used **[...] Read more.**

(This article belongs to the Special Issue **RubberCon 2021: Innovative Pioneers for Smart and Sustainable Rubber Technology (/journal/polymers/special_issues/RubberCon_2021)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03824/article_deploy/html/images/polymers-14-03824-g001-550.jpg?1663228985)

(https://pub.mdpi-res.com/polymers/polymers-14-03824/article_deploy/html/images/polymers-14-03824-g002-550.jpg?1663228984)

(https://pub.mdpi-res.com/polymers/polymers-14-03824/article_deploy/html/images/polymers-14-03824-g003-550.jpg?1663228986)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03824/article_deploy/html/images/polymers-14-03824-g004-550.jpg?1663228991)

(https://pub.mdpi-res.com/polymers/polymers-14-03824/article_deploy/html/images/polymers-14-03824-g005-550.jpg?1663228994)

(https://pub.mdpi-res.com/polymers/polymers-14-03824/article_deploy/html/images/polymers-14-03824-g006-550.jpg?1663228993)

(https://pub.mdpi-res.com/polymers/polymers-14-03824/article_deploy/html/images/polymers-14-03824-g007-550.jpg?1663228983)

(https://pub.mdpi-res.com/polymers/polymers-14-03824/article_deploy/html/images/polymers-14-03824-g008-550.jpg?1663228988)

Open Access Article (/2073-4360/14/18/3823/pdf?version=1663144757)

Laser-Generated Guided Waves for Damage Detection in Metal-Lined Composite-Overwrapped Pressure Vessels (/2073-4360/14/18/3823)

by Jinling Zhao (https://sciprofiles.com/profile/3057336?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Lehui Yang (https://sciprofiles.com/profile/2401022?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Hongyuan Wang (https://sciprofiles.com/profile/author/TkVheXhqTjVyeWJ0YjlidFlXRmJFeWpOUnF2bVRsN3dZUVlvQ2t4Q1FOZz0=?utm_sour

, Jianping Zhao (https://sciprofiles.com/profile/642663?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Nian Li (https://sciprofiles.com/profile/1303407?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Le Chang (https://sciprofiles.com/profile/2421803?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Hongli Ji (https://sciprofiles.com/profile/1870640?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Jinhao Qiu (https://sciprofiles.com/profile/2669131?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3823; https://doi.org/10.3390/polym14183823 (https://doi.org/10.3390/polym14183823) - 13 Sep 2022

Cited by 4 (/2073-4360/14/18/3823#metrics) | Viewed by 1007

Abstract This paper characterizes laser-generated guided waves in a metal-lined composite-overwrapped pressure vessel (COPV) to assess typical damage, including interfacial debonding and low-velocity impact damage. First, an eigenfrequency approach that avoids additional coding is utilized to theoretically analyze the dispersion characteristics of a COPV. **[...] Read more.**

(This article belongs to the Section **Polymer Applications (/journal/polymers/sections/Polymer_Applications)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03823/article_deploy/html/images/polymers-14-03823-g001-550.jpg?1663228985)

(https://pub.mdpi-res.com/polymers/polymers-14-03823/article_deploy/html/images/polymers-14-03823-g002-550.jpg?1663228992)

(https://pub.mdpi-res.com/polymers/polymers-14-03823/article_deploy/html/images/polymers-14-03823-g003-550.jpg?1663228983)

(https://pub.mdpi-res.com/polymers/polymers-14-03823/article_deploy/html/images/polymers-14-03823-g004-550.jpg?1663228984)

(https://pub.mdpi-res.com/polymers/polymers-14-03823/article_deploy/html/images/polymers-14-03823-g005-550.jpg?1663228980)

(https://pub.mdpi-res.com/polymers/polymers-14-03823/article_deploy/html/images/polymers-14-03823-g006-550.jpg?1663228991)

(https://pub.mdpi-res.com/polymers/polymers-14-03823/article_deploy/html/images/polymers-14-03823-g007-550.jpg?1663228987)

(https://pub.mdpi-res.com/polymers/polymers-14-03823/article_deploy/html/images/polymers-14-03823-g008-550.jpg?1663228990)

(https://pub.mdpi-res.com/polymers/polymers-14-03823/article_deploy/html/images/polymers-14-03823-g009-550.jpg?1663228989)

(https://pub.mdpi-res.com/polymers/polymers-14-03823/article_deploy/html/images/polymers-14-03823-g010-550.jpg?1663228986)

(https://pub.mdpi-res.com/polymers/polymers-14-03823/article_deploy/html/images/polymers-14-03823-g011-550.jpg?1663228993)

(https://pub.mdpi-res.com/polymers/polymers-14-03823/article_deploy/html/images/polymers-14-03823-g012-550.jpg?1663228982)

Open Access Article (/2073-4360/14/18/3822/pdf?version=1663295970)

Failure Locus of an ABS-Based Compound Manufactured through Photopolymerization (/2073-4360/14/18/3822)

by Dan-Andrei Șerban (https://sciprofiles.com/profile/1645524?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Alexandru Viorel Coșa (https://sciprofiles.com/profile/2368435?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

, George Belgiu (https://sciprofiles.com/profile/1668826?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Radu Negru (https://sciprofiles.com/profile/1357543?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3822; https://doi.org/10.3390/polym14183822 (https://doi.org/10.3390/polym14183822) - 13 Sep 2022

Viewed by 1035

Abstract This work investigates the critical plastic strain variation with stress triaxiality and the Lode angle parameter for an Acrylonitrile butadiene styrene (ABS)-based proprietary blend compound (commercial name VeroWhitePlus™ RGD835) manufactured through photopolymerization. Various triaxial states of stress and Lode angles were obtained with **[...] Read more.**

(This article belongs to the Special Issue **Advances in the Mechanical Behavior of Polymeric Materials (/journal/polymers/special_issues/Advances_Mechanical_Behavior_Polymeric_Materials)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03822/article_deploy/html/images/polymers-14-03822-ag-550.jpg?1663296061)

(https://pub.mdpi-res.com/polymers/polymers-14-03822/article_deploy/html/images/polymers-14-03822-g001-550.jpg?1663296048)

(https://pub.mdpi-res.com/polymers/polymers-14-03822/article_deploy/html/images/polymers-14-03822-g002-550.jpg?1663296042)

(https://pub.mdpi-res.com/polymers/polymers-14-03822/article_deploy/html/images/polymers-14-03822-g003-550.jpg?1663296043)

(https://pub.mdpi-res.com/polymers/polymers-14-03822/article_deploy/html/images/polymers-14-03822-g004-550.jpg?1663296057)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03822/article_deploy/html/images/polymers-14-03822-g005-550.jpg?1663296054)

(https://pub.mdpi-res.com/polymers/polymers-14-03822/article_deploy/html/images/polymers-14-03822-g006-550.jpg?1663296058)

(https://pub.mdpi-res.com/polymers/polymers-14-03822/article_deploy/html/images/polymers-14-03822-g007-550.jpg?1663296060)

(https://pub.mdpi-res.com/polymers/polymers-14-03822/article_deploy/html/images/polymers-14-03822-g008-550.jpg?1663296051)

(https://pub.mdpi-res.com/polymers/polymers-14-03822/article_deploy/html/images/polymers-14-03822-g009-550.jpg?1663296056)

(https://pub.mdpi-res.com/polymers/polymers-14-03822/article_deploy/html/images/polymers-14-03822-g010-550.jpg?1663296052)

(https://pub.mdpi-res.com/polymers/polymers-14-03822/article_deploy/html/images/polymers-14-03822-g011-550.jpg?1663296049)

(https://pub.mdpi-res.com/polymers/polymers-14-03822/article_deploy/html/images/polymers-14-03822-g012-550.jpg?1663296050)

(https://pub.mdpi-res.com/polymers/polymers-14-03822/article_deploy/html/images/polymers-14-03822-g013-550.jpg?1663296059)

(https://pub.mdpi-res.com/polymers/polymers-14-03822/article_deploy/html/images/polymers-14-03822-g014-550.jpg?1663296046)

(https://pub.mdpi-res.com/polymers/polymers-14-03822/article_deploy/html/images/polymers-14-03822-g015-550.jpg?1663296040)

(https://pub.mdpi-res.com/polymers/polymers-14-03822/article_deploy/html/images/polymers-14-03822-g016-550.jpg?1663296047)

(https://pub.mdpi-res.com/polymers/polymers-14-03822/article_deploy/html/images/polymers-14-03822-g017-550.jpg?1663296043)

(https://pub.mdpi-res.com/polymers/polymers-14-03822/article_deploy/html/images/polymers-14-03822-g018-550.jpg?1663296044)

Open Access Article (/2073-4360/14/18/3821/pdf?version=1663073602)

Development of Multifunctional Nano-Graphene-Grafted Polyester to Enhance Thermal Insulation and Performance of Modified Polyesters (/2073-4360/14/18/3821)

by

Shih-Hsiung Chen (https://sciprofiles.com/profile/author/MEU0VUtYd3dDODd0eXdtZG9RdzgvNVk4Qm9KSEc4UHExT2JSZHprWlV6cz0=?utm_

,

Naveed Ahmad (https://sciprofiles.com/profile/2331784?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and

Chung-Feng Jeffrey Kuo (https://sciprofiles.com/profile/365663?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3821; https://doi.org/10.3390/polym14183821 (https://doi.org/10.3390/polym14183821) - 13 Sep 2022

Viewed by 1160

Abstract Nano-graphene materials have improved many thermal properties based on polymer systems. The additive polymers' thermal insulation cannot be significantly increased for use as a reinforcement in multifunctional thermally insulating polymer foam. Herein, we present the development of far-infrared emissivity and antistatic properties using **[...] Read more.**

(This article belongs to the Special Issue **Fiber and Polymer Composites: Processing, Simulation, Properties and Applications (/journal/polymers/special_issues/Fiber_Polymer_Composites)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03821/article_deploy/html/images/polymers-14-03821-g001-550.jpg?1663073679)

(https://pub.mdpi-res.com/polymers/polymers-14-03821/article_deploy/html/images/polymers-14-03821-g002-550.jpg?1663073688)

(https://pub.mdpi-res.com/polymers/polymers-14-03821/article_deploy/html/images/polymers-14-03821-g003a-550.jpg?1663073685)

(https://pub.mdpi-res.com/polymers/polymers-14-03821/article_deploy/html/images/polymers-14-03821-g003b-550.jpg?1663073691)

(https://pub.mdpi-res.com/polymers/polymers-14-03821/article_deploy/html/images/polymers-14-03821-g004-550.jpg?1663073682)

(https://pub.mdpi-res.com/polymers/polymers-14-03821/article_deploy/html/images/polymers-14-03821-g005-550.jpg?1663073680)

(https://pub.mdpi-res.com/polymers/polymers-14-03821/article_deploy/html/images/polymers-14-03821-g006-550.jpg?1663073687)

(https://pub.mdpi-res.com/polymers/polymers-14-03821/article_deploy/html/images/polymers-14-03821-g007-550.jpg?1663073679)

Open Access Article (/2073-4360/14/18/3820/pdf?version=1663073357)

Attapulgite Structure Reset to Accelerate the Crystal Transformation of Isotactic Polybutene (/2073-4360/14/18/3820)

by Shuang-Dan Mao (https://sciprofiles.com/profile/2410511?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Mi Zhang (https://sciprofiles.com/profile/2307158?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Fu-Hua Lin (https://sciprofiles.com/profile/2423030?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Xiang-Yang Li (https://sciprofiles.com/profile/author/TkRUNHRDMDdZYTdCZWRiQ1FtbkJwalRCbk9NRUVuejM1WEFEY3JVRnNlRT0=?utm_sou

,

Yu-Ying Zhao (https://sciprofiles.com/profile/author/RHFnMGJYSXNmWGh5bUlFSllGQ1NEbjh4bE1JSHd3bVBXQXpGVDI1aGZUND0=?utm_sou

,

Yan-Li Zhang (https://sciprofiles.com/profile/author/UE5NYlhzbHRlNEY2SGhOcWZaeHZWYW9pdytPME9TN3YzS2p0cU5QalJhQT0=?utm_sour

,

Yi-Fan Gao (https://sciprofiles.com/profile/author/YXdlSTBUc2UyZ25GRytNQzBiTDlxMFNTMG03eUJXZE5GWHlNbENFZnNDVT0=?utm_source

,

Jun Luo (https://sciprofiles.com/profile/167335?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Xin-De Chen (https://sciprofiles.com/profile/146112?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Bo Wang (https://sciprofiles.com/profile/203835?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3820; https://doi.org/10.3390/polym14183820 (https://doi.org/10.3390/polym14183820) - 13 Sep 2022

Back to TopTop

Cited by 4 (/2073-4360/14/18/3820#metrics) | Viewed by 984

Abstract Isotactic polybutene (iPB) has a wide application in the water pipe field. However, the most valuable form I, needs 7 days to complete the transformation. In this study, the attapulgite (ATP), which produces lattice matching of the iPB form I, was selected to **[...] Read more.**

(This article belongs to the Special Issue **Recent Development of Polymer Additives (/journal/polymers/special_issues/JXJ1015DGI)**)

► Show Figures

Open Access Article (/2073-4360/14/18/3819/pdf?version=1663582305)

Optimizing the Composition of Silicone Enamel to Ensure Maximum Aggregative Stability of Its Suspensions Using Surfactant Obtained from Oil Refining Waste (/2073-4360/14/18/3819)

by Vitaliy Tyukanko (https://sciprofiles.com/profile/1703529?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Alexandr Demyanenko (https://sciprofiles.com/profile/1695044?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Antonina Dyuryagina (https://sciprofiles.com/profile/2195274?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Kirill Ostrovnoy (https://sciprofiles.com/profile/2195275?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Gulsim Aubakirova (https://sciprofiles.com/profile/2195277?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3819; https://doi.org/10.3390/polym14183819 (https://doi.org/10.3390/polym14183819) - 13 Sep 2022

Cited by 3 (/2073-4360/14/18/3819#metrics) | Viewed by 954

Abstract The aim of this study was to optimize the composition of enamel consisting of aluminum pigment and polyphenylsiloxane polymer, in order to achieve the maximum aggregative stability of suspensions. Sedimentation rate (SR) was used as a criterion for assessing the aggregative stability of **[...] Read more.**

(This article belongs to the Special Issue **Advances in Polymer Based Composite Coatings II (/journal/polymers/special_issues/Adv_Polym_Coat_II)**)

► Show Figures

Open Access Article (/2073-4360/14/18/3818/pdf?version=1663049639)

Fibrous Structures from Starch and Gluten (/2073-4360/14/18/3818)

Back to TopTop

by Jan M. Buhler (https://sciprofiles.com/profile/author/aTU2SE9LVklLQmc1N25hU0ZEMzgyOURCaDQ0c1l1OTVOM2djMnBERzV2Zz0=?utm_sour
, Arie Jan van der Goot (https://sciprofiles.com/profile/1117880?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
and
Marieke E. Bruins (https://sciprofiles.com/profile/2280794?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3818; https://doi.org/10.3390/polym14183818 (https://doi.org/10.3390/polym14183818) - 13 Sep 2022
Viewed by 1193

Abstract Starch is added to meat analogues for binding and water holding. In this study, we investigate whether starch can have an additional role as a structuring agent. Therefore, different types of starch were combined with wheat gluten at various amounts and sheared in **[...] Read more.**
(This article belongs to the Special Issue **Advance in Shaping Rheological and Functional Properties of Systems Based on Cereal Biopolymers (/journal/polymers/special_issues/Cereal_Biopolym)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03818/article_deploy/html/images/polymers-14-03818-g001-550.jpg?1663049716)

(https://pub.mdpi-res.com/polymers/polymers-14-03818/article_deploy/html/images/polymers-14-03818-g002-550.jpg?1663049717)

(https://pub.mdpi-res.com/polymers/polymers-14-03818/article_deploy/html/images/polymers-14-03818-g003-550.jpg?1663049713)

(https://pub.mdpi-res.com/polymers/polymers-14-03818/article_deploy/html/images/polymers-14-03818-g004-550.jpg?1663049720)

(https://pub.mdpi-res.com/polymers/polymers-14-03818/article_deploy/html/images/polymers-14-03818-g005-550.jpg?1663049718)

(https://pub.mdpi-res.com/polymers/polymers-14-03818/article_deploy/html/images/polymers-14-03818-g0A1-550.jpg?1663049717)

(https://pub.mdpi-res.com/polymers/polymers-14-03818/article_deploy/html/images/polymers-14-03818-g0A2-550.jpg?1663049712)

Open Access Article (/2073-4360/14/18/3817/pdf?version=1663047757)

Breast Tissue Restoration after the Partial Mastectomy Using Polycaprolactone Scaffold (/2073-4360/14/18/3817)

by Seung-Jun Jwa (https://sciprofiles.com/profile/2307521?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Jong-Min Won (https://sciprofiles.com/profile/author/WHJoZVJ1ZS9pUmVFVUJuTndsbXllQT09?utm_source=mdpi.com&utm_medium=websit
, Do-Hyun Kim (https://sciprofiles.com/profile/author/aU5VcTNaeTJERTdZWXNSRVY5dWVlWUZlZEdUN0lvWEtTZ3Z3c01IOU1mWT0=?utm_sou
, Ki-Bum Kim (https://sciprofiles.com/profile/author/VW5sdDZDQklobEhBK3RkV0VyTStyZVdCbkY4ampEOEY3TXk5a3JXRFpJOD0=?utm_sourc
, Jung-Bok Lee (https://sciprofiles.com/profile/author/TXc4YkJraWo1UjBoYWg4RFYzVWdsTE9zKzZMcGYySWhETWFKSjZmdnd0az0=?utm_sou
, Min Heo (https://sciprofiles.com/profile/author/YTc2YnNTTGRnVVcrMVd1VUdJL0tmdnJwVmJqS0R4eXlnT3F3R2xiVmlaZz0=?utm_source=mdp
, Kyu-Sik Shim (https://sciprofiles.com/profile/author/dURMVkJnWlQyam1CdUEwVVc5WVY1dz09?utm_source=mdpi.com&utm_medium=webs
, Han-Saem Jo (https://sciprofiles.com/profile/author/Qng1QnNNczlXWEd0VThtUGlkSk9GV055di9NMm9jS096a2xqZlhmeEx4RT0=?utm_source=
, Won-Jai Lee (https://sciprofiles.com/profile/author/RlJjbS9lc2tCNE9GRXlzbG5xZko5QT09?utm_source=mdpi.com&utm_medium=website&utm
, Tai-Suk Roh (https://sciprofiles.com/profile/1643316?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Woo-Yeol Baek (https://sciprofiles.com/profile/1029446?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3817; https://doi.org/10.3390/polym14183817 (https://doi.org/10.3390/polym14183817) - 13 Sep 2022
Cited by 4 (/2073-4360/14/18/3817#metrics) | Viewed by 1466

Abstract As breast conserving surgery increases in the surgical treatment of breast cancer, partial mastectomy is also increasing. Polycaprolactone (PCL) is a polymer that is used as an artifact in various parts of the human body based on the biocompatibility and mechanical properties of **[...] Read more.**
(This article belongs to the Special Issue **Advanced Biodegradable Polymer Scaffolds for Tissue Engineering (/journal/polymers/special_issues/Advanced_Biodegradable_Polymer_Scaffolds_Tissue_Engineering)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03817/article_deploy/html/images/polymers-14-03817-g001-550.jpg?1663047835)

(https://pub.mdpi-res.com/polymers/polymers-14-03817/article_deploy/html/images/polymers-14-03817-g002-550.jpg?1663047833)

(https://pub.mdpi-res.com/polymers/polymers-14-03817/article_deploy/html/images/polymers-14-03817-g003-550.jpg?1663047840)

(https://pub.mdpi-res.com/polymers/polymers-14-03817/article_deploy/html/images/polymers-14-03817-g004-550.jpg?1663047828)

(https://pub.mdpi-res.com/polymers/polymers-14-03817/article_deploy/html/images/polymers-14-03817-sch001-550.jpg?1663047829)

Open Access Article (/2073-4360/14/18/3816/pdf?version=1663832511)

Polyetherimide-Reinforced Smart Inlays for Bondline Surveillance in Composites (/2073-4360/14/18/3816)

by
Chresten von der Heide (https://sciprofiles.com/profile/1474923?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name
,

Back to TopTop

Julian Steinmetz (https://sciprofiles.com/profile/1429224?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Oliver Volkerink (https://sciprofiles.com/profile/1451895?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Patrick Makiela (https://sciprofiles.com/profile/author/NjVZZ1V4aHJUZnlXdDkzOG5pOE15TE10M1B6N29rcExlWTJnZkxudmo1az0=?utm_sourc
, Christian Hühne (https://sciprofiles.com/profile/1467835?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Michael Sinapius (https://sciprofiles.com/profile/367828?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Andreas Dietzel (https://sciprofiles.com/profile/429196?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3816; https://doi.org/10.3390/polym14183816 (https://doi.org/10.3390/polym14183816) - 13 Sep 2022
Viewed by 1195

Abstract An integrable sensor inlay for monitoring crack initiation and growth inside bondlines of structural carbon fiber-reinforced plastic (CFRP) components is presented. The sensing structures are sandwiched between crack-stopping poly(vinyliden fluoride) (PVDF) and a thin reinforcing polyetherimide (PEI) layer. Good adhesion at all interfaces **[...] Read more.**

(This article belongs to the Special Issue **Polymer-Based Materials for Sensors (/journal/polymers/special_issues/polymer_based_materials_for_sensors)**)

► Show Figures

Open Access Article (/2073-4360/14/18/3815/pdf?version=1663569736)

Drug Delivery System Based on Carboxymethyl Cellulose Containing Metal-Organic Framework and Its Evaluation for Antibacterial Activity (/2073-4360/14/18/3815)

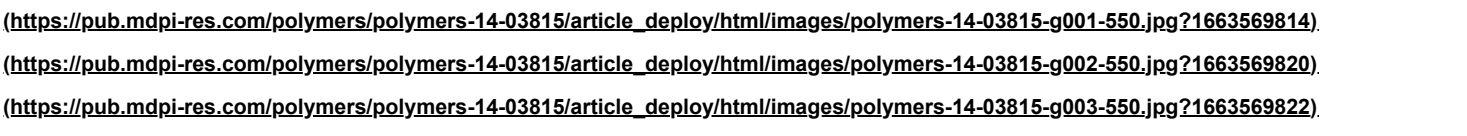
by Fatimah A. T. Alsaaed (https://sciprofiles.com/profile/author/aXBtNWx6ZGwrUDlFSGNqSWhDemVEQWtGQ3k2Mnh1S1hHYWlYUytTdWRhdz0=
, Hany M. Abd El-Lateef (https://sciprofiles.com/profile/1297819?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
, Mai M. Khalaf (https://sciprofiles.com/profile/834195?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Ibrahim M. A. Mohamed (https://sciprofiles.com/profile/1982496?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name
, Mohammed A. Al-Omair (https://sciprofiles.com/profile/99544?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Mohamed Gouda (https://sciprofiles.com/profile/1654723?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3815; https://doi.org/10.3390/polym14183815 (https://doi.org/10.3390/polym14183815) - 12 Sep 2022
Cited by 1 (/2073-4360/14/18/3815#metrics) | Viewed by 1430

Abstract A novel drug delivery system based on carboxymethyl cellulose containing copper oxide at melamine and zinc oxide at melamine framework (CMC-Cu-MEL and CMC-Zn-MEL) was prepared by the hydrothermal route. Synthesized nanocomposites were characterized by FTIR, SEM, and Raman spectroscopy. In addition, transmission electron **[...] Read more.**

(This article belongs to the Special Issue **MOFs/ Polymer Nanocomposites and Its Advanced Application (/journal/polymers/special_issues/MOFs_Polym_Nanocompos_Adv_Appl)**)

► Show Figures



Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03815/article_deploy/html/images/polymers-14-03815-g005-550.jpg?1663569825)

(https://pub.mdpi-res.com/polymers/polymers-14-03815/article_deploy/html/images/polymers-14-03815-g006-550.jpg?1663569824)

(https://pub.mdpi-res.com/polymers/polymers-14-03815/article_deploy/html/images/polymers-14-03815-g007-550.jpg?1663569821)

(https://pub.mdpi-res.com/polymers/polymers-14-03815/article_deploy/html/images/polymers-14-03815-g008-550.jpg?1663569816)

Open Access Article (/2073-4360/14/18/3814/pdf?version=1662994543)

Fatigue Analysis of CFRP-Reinforced Concrete Ribbed Girder Bridge Deck Slabs (/2073-4360/14/18/3814)

by

Shuai Tian (https://sciprofiles.com/profile/author/SytEZXZLby83OFVseXByZzdFaExUdGN3UXRXK2ZTOGlVQ3pPNzB0dFNFVT0=?utm_source=

,

Xiaotao Zhang (https://sciprofiles.com/profile/author/M0VzTlNESEtBa2lrcFVodkhKYWxuMTVVRDRGWFY1N1piVDJrU1h4aTk4az0=?utm_sourc

and

Wenjing Hu (https://sciprofiles.com/profile/author/YWFGTEx1ejVTNy9rb0o5ZWNGcmU1UT09?utm_source=mdpi.com&utm_medium=website&

Polymers **2022**, *14*(18), 3814; https://doi.org/10.3390/polym14183814 (https://doi.org/10.3390/polym14183814) - 12 Sep 2022

Cited by 1 (/2073-4360/14/18/3814#metrics) | Viewed by 1343

Abstract This study aims to improve the operational safety of reinforced concrete-ribbed beam bridge decks and prolong their service life by performing fatigue analysis of deck slabs reinforced with carbon-fiber-reinforced polymers (CFRP) and other materials. Based on a 16-m-span ribbed girder bridge, five test **[...] Read more.**

(This article belongs to the Special Issue **Fiber Reinforced Polymer Materials (** /journal/polymers/special_issues/Fiber_Reinforced_Polymer_Materials **)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g001a-550.jpg?1662994623)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g001b-550.jpg?1662994654)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g002-550.jpg?1662994630)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g003-550.jpg?1662994653)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g004-550.jpg?1662994649)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g005a-550.jpg?1662994643)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g005b-550.jpg?1662994635)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g006-550.jpg?1662994626)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g007-550.jpg?1662994661)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g008-550.jpg?1662994639)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g009-550.jpg?1662994660)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g010-550.jpg?1662994629)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g011-550.jpg?1662994645)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g012-550.jpg?1662994651)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g013-550.jpg?1662994621)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g014-550.jpg?1662994637)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g015-550.jpg?1662994647)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g016-550.jpg?1662994640)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g017-550.jpg?1662994658)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g018-550.jpg?1662994646)

(https://pub.mdpi-res.com/polymers/polymers-14-03814/article_deploy/html/images/polymers-14-03814-g019-550.jpg?1662994656)

Open Access Article (/2073-4360/14/18/3813/pdf?version=1663568015)

Comprehensive Investigation of Stoichiometry–Structure–Performance Relationships in Flexible Polyurethane Foams (/2073-4360/14/18/3813)

by Adam Olszewski (https://sciprofiles.com/profile/996419?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Paulina Kosmela (https://sciprofiles.com/profile/997649?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Adam Piasecki (https://sciprofiles.com/profile/546497?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Wiktoria Żukowska (https://sciprofiles.com/profile/author/d0F1Qjg5RnhsbVdrbGo4M0JPV0lZdFlwVUVYQ1YraG1PRlhYdEZMSlpVZz0=?utm_sc

,

Mariusz Szczepański (https://sciprofiles.com/profile/author/RE1IdjcvRERyUmpKcWlyaWREMU5mOUpVTGFFWlBoNllSdnd1NmdBRUNPaz0=?

,

Paweł Wojtasz (https://sciprofiles.com/profile/2398578?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Mateusz Barczewski (https://sciprofiles.com/profile/410196?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Back to TopTop

Roman Barczewski (https://sciprofiles.com/profile/author/cUdTZ1hCMkJ4T2tYVnBaWXNFWmNMZkZkMEFBaHhsYk1OTFR5ZE9KaFl5cz0=?utm
and
Aleksander Hejna (https://sciprofiles.com/profile/774445?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3813; https://doi.org/10.3390/polym14183813 (https://doi.org/10.3390/polym14183813) - 12 Sep 2022
Cited by 6 (/2073-4360/14/18/3813#metrics) | Viewed by 1798

Abstract Polyurethane (PU) foams are versatile materials with a broad application range. Their performance is driven by the stoichiometry of polymerization reaction, which has been investigated in several works. However, the analysis was often limited only to selected properties and compared samples differing in **[...] Read more.**
(This article belongs to the Special Issue **Recent Advances in Polyurethane Materials (/journal/polymers/special_issues/polyurethane_material)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03813/article_deploy/html/images/polymers-14-03813-g001-550.jpg?1663568098)

(https://pub.mdpi-res.com/polymers/polymers-14-03813/article_deploy/html/images/polymers-14-03813-g002-550.jpg?1663568114)

(https://pub.mdpi-res.com/polymers/polymers-14-03813/article_deploy/html/images/polymers-14-03813-g003-550.jpg?1663568110)

(https://pub.mdpi-res.com/polymers/polymers-14-03813/article_deploy/html/images/polymers-14-03813-g004a-550.jpg?1663568106)

(https://pub.mdpi-res.com/polymers/polymers-14-03813/article_deploy/html/images/polymers-14-03813-g004b-550.jpg?1663568111)

(https://pub.mdpi-res.com/polymers/polymers-14-03813/article_deploy/html/images/polymers-14-03813-g005-550.jpg?1663568100)

(https://pub.mdpi-res.com/polymers/polymers-14-03813/article_deploy/html/images/polymers-14-03813-g006-550.jpg?1663568115)

(https://pub.mdpi-res.com/polymers/polymers-14-03813/article_deploy/html/images/polymers-14-03813-g007-550.jpg?1663568104)

(https://pub.mdpi-res.com/polymers/polymers-14-03813/article_deploy/html/images/polymers-14-03813-g008-550.jpg?1663568109)

(https://pub.mdpi-res.com/polymers/polymers-14-03813/article_deploy/html/images/polymers-14-03813-g009-550.jpg?1663568107)

(https://pub.mdpi-res.com/polymers/polymers-14-03813/article_deploy/html/images/polymers-14-03813-g010-550.jpg?1663568112)

Open Access Article (/2073-4360/14/18/3812/pdf?version=1663138403)

Alkyl Chain Engineering of Low Bandgap Non-Fullerene Acceptors for High-Performance Organic Solar Cells: Branched vs. Linear Alkyl Side Chains (/2073-4360/14/18/3812)

by
Youngwan Lee (https://sciprofiles.com/profile/author/YXl4eDZ2cGlhVnlwWnplQUl4R1NNM1dlNkRFTEVWYVJsejh2RzgzVXFPYz0=?utm_source
,
Telugu Bhim Raju (https://sciprofiles.com/profile/2327980?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Hyerim Yeom (https://sciprofiles.com/profile/author/MUVqRzVzVGFITE5NU2VsbXQvQ0E3eVBqR2g4aXR0QnNKODFjcm1zT0FiZz0=?utm_sourc
,
Peddaboodi Gopikrishna (https://sciprofiles.com/profile/author/NFFBWVdpc2NtNmpnRFFSTWNQREFSMllpOUxzMDVTQy9pYmc0VXZ4R0FPY
,
Kwangmin Kim (https://sciprofiles.com/profile/author/TmxrREhjVkJJNzQ3bkkwTEtBUGk3TVN0ck9KVGhUK0t2eDZnOGFOcEVVRT0=?utm_so
,
Hye Won Cho (https://sciprofiles.com/profile/author/MWtRUXJZUU16Z1NPbllDVWZrcFdaRU1heXRPOHpzcllkV2xndnJkbG5raz0=?utm_source
,
Jung Woo Moon (https://sciprofiles.com/profile/author/V09vU0NpZnNSUno1ZHErZS83amhXdzNvUEh3WE5nTWVXYllZUFhnOXlxRT0=?utm_sc
,
Jeong Ho Cho (https://sciprofiles.com/profile/1512551?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Jin Young Kim (https://sciprofiles.com/profile/2304240?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
BongSoo Kim (https://sciprofiles.com/profile/2153881?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3812; https://doi.org/10.3390/polym14183812 (https://doi.org/10.3390/polym14183812) - 12 Sep 2022
Cited by 2 (/2073-4360/14/18/3812#metrics) | Viewed by 1701

Abstract In this work, we report the synthesis and photovoltaic properties of IEBICO-4F, IEHICO-4F, IOICO-4F, and IDICO-4F non-fullerene acceptors (NFAs) bearing different types of alkyl chains (2-ehtylhexyl (EH), 2-ethylbutyl (EB), *n*-octyl (O), and *n*-decyl (D), respectively). These NFAs are based on the **[...] Read more.**
(This article belongs to the Special Issue **Polymers for Energy Conversion and Storage (/journal/polymers/special_issues/poly_energy_conversion_storage)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03812/article_deploy/html/images/polymers-14-03812-ag-550.jpg?1663138497)

(https://pub.mdpi-res.com/polymers/polymers-14-03812/article_deploy/html/images/polymers-14-03812-g001-550.jpg?1663138493)

(https://pub.mdpi-res.com/polymers/polymers-14-03812/article_deploy/html/images/polymers-14-03812-g002-550.jpg?1663138491)

(https://pub.mdpi-res.com/polymers/polymers-14-03812/article_deploy/html/images/polymers-14-03812-g003-550.jpg?1663138482)

(https://pub.mdpi-res.com/polymers/polymers-14-03812/article_deploy/html/images/polymers-14-03812-g004-550.jpg?1663138480)

(https://pub.mdpi-res.com/polymers/polymers-14-03812/article_deploy/html/images/polymers-14-03812-g005-550.jpg?1663138497)

(https://pub.mdpi-res.com/polymers/polymers-14-03812/article_deploy/html/images/polymers-14-03812-sch001-550.jpg?1663138487)

Back to TopTop

Open Access Article (/2073-4360/14/18/3811/pdf?version=1662989618)

Novel Method for Failure Modes Detection in UV-Cured Clear Coated Polymer for Automotive Interior Mechatronic Devices (/2073-4360/14/18/3811)

by Ion Cristian Braga (https://sciprofiles.com/profile/678172?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Razvan Udroiu (https://sciprofiles.com/profile/603099?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Anisor Nedelcu (https://sciprofiles.com/profile/926249?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3811; https://doi.org/10.3390/polym14183811 (https://doi.org/10.3390/polym14183811) - 12 Sep 2022

Cited by 1 (/2073-4360/14/18/3811#metrics) | Viewed by 1484

Abstract Plastic parts used in automotive interior are difficult to coat, due to their low surface energies as well as their sensitivity to temperature and solvents, rendering the development of coating systems for such substrates challenging. Automotive customer requirements are explicit and clear, mainly **[...] Read more.**

(This article belongs to the Special Issue **Injection Molding of Polymers (/journal/polymers/special_issues/Injection_Molding_Poly)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03811/article_deploy/html/images/polymers-14-03811-g001-550.jpg?1662989711)

(https://pub.mdpi-res.com/polymers/polymers-14-03811/article_deploy/html/images/polymers-14-03811-g002-550.jpg?1662989716)

(https://pub.mdpi-res.com/polymers/polymers-14-03811/article_deploy/html/images/polymers-14-03811-g003-550.jpg?1662989722)

(https://pub.mdpi-res.com/polymers/polymers-14-03811/article_deploy/html/images/polymers-14-03811-g004-550.jpg?1662989710)

(https://pub.mdpi-res.com/polymers/polymers-14-03811/article_deploy/html/images/polymers-14-03811-g005-550.jpg?1662989713)

(https://pub.mdpi-res.com/polymers/polymers-14-03811/article_deploy/html/images/polymers-14-03811-g006-550.jpg?1662989712)

(https://pub.mdpi-res.com/polymers/polymers-14-03811/article_deploy/html/images/polymers-14-03811-g007-550.jpg?1662989707)

(https://pub.mdpi-res.com/polymers/polymers-14-03811/article_deploy/html/images/polymers-14-03811-g008a-550.jpg?1662989720)

(https://pub.mdpi-res.com/polymers/polymers-14-03811/article_deploy/html/images/polymers-14-03811-g008b-550.jpg?1662989706)

(https://pub.mdpi-res.com/polymers/polymers-14-03811/article_deploy/html/images/polymers-14-03811-g009-550.jpg?1662989714)

(https://pub.mdpi-res.com/polymers/polymers-14-03811/article_deploy/html/images/polymers-14-03811-g010-550.jpg?1662989709)

(https://pub.mdpi-res.com/polymers/polymers-14-03811/article_deploy/html/images/polymers-14-03811-g011-550.jpg?1662989709)

(https://pub.mdpi-res.com/polymers/polymers-14-03811/article_deploy/html/images/polymers-14-03811-g012-550.jpg?1662989718)

(https://pub.mdpi-res.com/polymers/polymers-14-03811/article_deploy/html/images/polymers-14-03811-g013-550.jpg?1662989721)

(https://pub.mdpi-res.com/polymers/polymers-14-03811/article_deploy/html/images/polymers-14-03811-g014-550.jpg?1662989716)

(https://pub.mdpi-res.com/polymers/polymers-14-03811/article_deploy/html/images/polymers-14-03811-g015-550.jpg?1662989717)

Open Access Article (/2073-4360/14/18/3810/pdf?version=1663067088)

Radio-Oxidation Ageing of XLPE Containing Different Additives and Filler: Principal Component Analyses of Gases Emission and Consumption (/2073-4360/14/18/3810)

by Lea Hippolyte (https://sciprofiles.com/profile/author/cVFPc2NVNFcrR1IBQ1cwV3FPMW84REhiRHBpV0o4U2F3U0szSDZMRWJndz0=?utm_sou, Sandrine Amat (https://sciprofiles.com/profile/author/QVdDdTJQd21JNnJFYlp0SnJhU0s4NXJ5em01RW1vR1U0M1Q4OHJBZGR3az0=?utm_so, Nathalie Dupuy (https://sciprofiles.com/profile/1227965?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Muriel Ferry (https://sciprofiles.com/profile/1685883?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3810; https://doi.org/10.3390/polym14183810 (https://doi.org/10.3390/polym14183810) - 12 Sep 2022

Viewed by 787

Abstract In the context of lifetime extension of Nuclear Power Plants (NPPs), electric cable ageing has to be checked to evaluate their performance during normal operation. These electric cables are complex materials, with a conductor and insulating shield in the metal and insulating layer **[...] Read more.**

(This article belongs to the Special Issue **Polymer-Based Dielectric Composites (/journal/polymers/special_issues/Poly_Die)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g001-550.jpg?1663067173)

(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g002-550.jpg?1663067172)

(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g003-550.jpg?1663067175)

(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g004-550.jpg?1663067153)

(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g005-550.jpg?1663067162)

(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g006-550.jpg?1663067178)

(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g007-550.jpg?1663067168)

(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g008-550.jpg?1663067160)

(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g009-550.jpg?1663067179)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g010-550.jpg?1663067156)
(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g011-550.jpg?1663067177)
(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g012-550.jpg?1663067180)
(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g013-550.jpg?1663067169)
(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g014-550.jpg?1663067155)
(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g015-550.jpg?1663067164)
(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g016-550.jpg?1663067167)
(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g017-550.jpg?1663067161)
(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g018-550.jpg?1663067157)
(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g019-550.jpg?1663067158)
(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g020-550.jpg?1663067165)
(https://pub.mdpi-res.com/polymers/polymers-14-03810/article_deploy/html/images/polymers-14-03810-g021-550.jpg?1663067174)

Open Access Review (/2073-4360/14/18/3809/pdf?version=1662978542)

Recent Advances in the Copolymerization of Ethylene with Polar Comonomers by Nickel Catalysts (/2073-4360/14/18/3809)

by Randi Zhang (https://sciprofiles.com/profile/2135241?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Rong Gao (https://sciprofiles.com/profile/1461333?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Qingqiang Gou (https://sciprofiles.com/profile/author/Y0k5RHo4RHRBbFI2RWRNYmhBVmRyL1VtNElJWWtDZVpJb1p2d0YwaXE5MD0=?utm_s , Jingjing Lai (https://sciprofiles.com/profile/author/YWlsSlpiV0hBYmZMWkI3dThqcU1Oc2pad2p1dUJiRklHK3FZUFlNd0pDST0=?utm_source=m and Xinyang Li (https://sciprofiles.com/profile/author/K1dKZ091dk9iVFhPSnFPZzY3V3lBUExDWUpqZzFmMzFzNGovQk9BZVkvcz0=?utm_source=

Polymers **2022**, *14*(18), 3809; https://doi.org/10.3390/polym14183809 (https://doi.org/10.3390/polym14183809) - 12 Sep 2022
Cited by 7 (/2073-4360/14/18/3809#metrics) | Viewed by 1858

Abstract The less-expensive and earth-abundant nickel catalyst is highly promising in the copolymerization of ethylene with polar monomers and has thus attracted increasing attention in both industry and academia. Herein, we have summarized the recent advancements made in the state-of-the-art nickel catalysts with different **[...] Read more.**

(This article belongs to the Special Issue **Advanced Functional Polymer Composites: Preparation, Processing and Properties II (/journal/polymers/special_issues/adv_funct_polym_compos_ii)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-ag-550.jpg?1662978635)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g001-550.jpg?1662978631)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g002-550.jpg?1662978629)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g003-550.jpg?1662978616)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g004-550.jpg?1662978615)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g005-550.jpg?1662978624)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g006-550.jpg?1662978633)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g007-550.jpg?1662978612)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g008-550.jpg?1662978615)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g009-550.jpg?1662978619)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g010-550.jpg?1662978634)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g011-550.jpg?1662978625)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g012-550.jpg?1662978623)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g013-550.jpg?1662978612)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g014-550.jpg?1662978614)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g015-550.jpg?1662978613)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g016-550.jpg?1662978622)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g017-550.jpg?1662978631)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g018-550.jpg?1662978618)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g019-550.jpg?1662978611)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g020-550.jpg?1662978632)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g021-550.jpg?1662978609)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g022-550.jpg?1662978607)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g023-550.jpg?1662978626)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g024-550.jpg?1662978608)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g025-550.jpg?1662978619)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g026-550.jpg?1662978610)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g027-550.jpg?1662978620)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g028-550.jpg?1662978607)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g029-550.jpg?1662978613)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g030-550.jpg?1662978623)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g031-550.jpg?1662978609)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g032-550.jpg?1662978608)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g033-550.jpg?1662978621)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g034-550.jpg?1662978621)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-g035-550.jpg?1662978630)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-sch001-550.jpg?1662978628)
(https://pub.mdpi-res.com/polymers/polymers-14-03809/article_deploy/html/images/polymers-14-03809-sch002-550.jpg?1662978617)

Open Access Article (/2073-4360/14/18/3808/pdf?version=1662974859)

Controlled Release of Tea Tree Oil from a Chitosan Matrix Containing Gold Nanoparticles (/2073-4360/14/18/3808)

by
Frederic Matussek (https://sciprofiles.com/profile/author/UFZBT1hmc1k4NlZOSXlLMFhpODBiR2cxOXV3N2pEY2twTklYWmZWandNcTliT3ZPY
,
Adriana Pavinatto (https://sciprofiles.com/profile/author/ZDNicVdGVjFiODFUcmRveTJndEJHWkRJMHYyS2ROTFFGVjJ1emhiVCsxUT0=?utm_
,
Peggy Knospe (https://sciprofiles.com/profile/author/TGtvV0RxODhTZkNMMHlxcFlnMkY3UjE2UFBwTTlRSWJXdnN1Q1ljd1Fqcz0=?utm_sourc
,
Sabine Beuermann (https://sciprofiles.com/profile/282908?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Rafaela Cristina Sanfelice (https://sciprofiles.com/profile/1751567?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nan
Polymers **2022**, *14*(18), 3808; https://doi.org/10.3390/polym14183808 (https://doi.org/10.3390/polym14183808) - 12 Sep 2022
Cited by 1 (/2073-4360/14/18/3808#metrics) | Viewed by 1115

Abstract Chitosan is a biopolymer that, due to its versatile bioactive properties, has applications in several areas, including food, medicine and pharmaceuticals. In the field of tissue engineering, chitosan can be used, for example, as a dressing to treat wounds or dermal damage, such **[...] Read more.**

(This article belongs to the Special Issue **Advanced Bio-Based Polymers and Nanocomposites (/journal/polymers/special_issues/bio-based_polymers_nanocomposites)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03808/article_deploy/html/images/polymers-14-03808-g001-550.jpg?1662974951)
(https://pub.mdpi-res.com/polymers/polymers-14-03808/article_deploy/html/images/polymers-14-03808-g002-550.jpg?1662974955)
(https://pub.mdpi-res.com/polymers/polymers-14-03808/article_deploy/html/images/polymers-14-03808-g003-550.jpg?1662974952)
(https://pub.mdpi-res.com/polymers/polymers-14-03808/article_deploy/html/images/polymers-14-03808-g004-550.jpg?1662974958)
(https://pub.mdpi-res.com/polymers/polymers-14-03808/article_deploy/html/images/polymers-14-03808-g005-550.jpg?1662974949)

Open Access Article (/2073-4360/14/18/3807/pdf?version=1663043328)

Mechanical Properties, Critical Length, and Interfacial Strength of Seven-Islands-Sedge Fibers (*Cyperus malaccensis*) for Possible Epoxy Matrix Reinforcement (/2073-4360/14/18/3807)

by
Lucas de Mendonça Neuba (https://sciprofiles.com/profile/1199239?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_na
,
Raí Felipe Pereira Junio (https://sciprofiles.com/profile/2798270?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name
,
Andressa Teixeira Souza (https://sciprofiles.com/profile/2354993?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nam
,
Matheus Pereira Ribeiro (https://sciprofiles.com/profile/1650130?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name
,
Pedro Henrique Poubel Mendonça da Silveira (https://sciprofiles.com/profile/1211758?utm_source=mdpi.com&utm_medium=website&utm_ca
,
Thuane Teixeira da Silva (https://sciprofiles.com/profile/author/QlZUS1dtUWlmL1FoZG9VV0hYcGR6eWRieEdUbUVDaVFZQnhCRURnUE1aOD
,

Back to TopTop

Artur Camposo Pereira (https://sciprofiles.com/profile/386697?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Sergio Neves Monteiro (https://sciprofiles.com/profile/912212?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3807; https://doi.org/10.3390/polym14183807 (https://doi.org/10.3390/polym14183807) - 12 Sep 2022
Cited by 4 (/2073-4360/14/18/3807#metrics) | Viewed by 1106

Abstract The growing concern about the limitation of non-renewable resources has brought a focus on the development of environmentally sustainable and biodegradable composite materials. In this context, a trend in the development of natural fibers used as a reinforcement in composites is ever-increasing. In **[...] Read more.**
(This article belongs to the Section **Polymer Applications (/journal/polymers/sections/Polymer_Applications)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03807/article_deploy/html/images/polymers-14-03807-g001-550.jpg?1663043395)
(https://pub.mdpi-res.com/polymers/polymers-14-03807/article_deploy/html/images/polymers-14-03807-g002-550.jpg?1663043401)
(https://pub.mdpi-res.com/polymers/polymers-14-03807/article_deploy/html/images/polymers-14-03807-g003-550.jpg?1663043403)
(https://pub.mdpi-res.com/polymers/polymers-14-03807/article_deploy/html/images/polymers-14-03807-g004-550.jpg?1663043402)
(https://pub.mdpi-res.com/polymers/polymers-14-03807/article_deploy/html/images/polymers-14-03807-g005-550.jpg?1663043397)
(https://pub.mdpi-res.com/polymers/polymers-14-03807/article_deploy/html/images/polymers-14-03807-g006-550.jpg?1663043399)
(https://pub.mdpi-res.com/polymers/polymers-14-03807/article_deploy/html/images/polymers-14-03807-g007-550.jpg?1663043400)
(https://pub.mdpi-res.com/polymers/polymers-14-03807/article_deploy/html/images/polymers-14-03807-g008-550.jpg?1663043398)

Open Access Review (/2073-4360/14/18/3806/pdf?version=1662970202)

Hybrid-Based Wound Dressings: Combination of Synthetic and Biopolymers (/2073-4360/14/18/3806)

by
Blessing Atim Aderibigbe (https://sciprofiles.com/profile/439825?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name
Polymers **2022**, *14*(18), 3806; https://doi.org/10.3390/polym14183806 (https://doi.org/10.3390/polym14183806) - 12 Sep 2022
Cited by 6 (/2073-4360/14/18/3806#metrics) | Viewed by 2117

Abstract Most commercialized wound dressings are polymer-based. Synthetic and natural polymers have been utilized widely for the development of wound dressings. However, the use of natural polymers is limited by their poor mechanical properties, resulting in their combination with synthetic polymers and other materials **[...] Read more.**
(This article belongs to the Special Issue **Polymers for Wound Dressings (/journal/polymers/special_issues/Po_Wo_Dress)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03806/article_deploy/html/images/polymers-14-03806-g001-550.jpg?1662970270)
(https://pub.mdpi-res.com/polymers/polymers-14-03806/article_deploy/html/images/polymers-14-03806-g002-550.jpg?1662970275)
(https://pub.mdpi-res.com/polymers/polymers-14-03806/article_deploy/html/images/polymers-14-03806-g003-550.jpg?1662970276)
(https://pub.mdpi-res.com/polymers/polymers-14-03806/article_deploy/html/images/polymers-14-03806-g004-550.jpg?1662970271)
(https://pub.mdpi-res.com/polymers/polymers-14-03806/article_deploy/html/images/polymers-14-03806-g005-550.jpg?1662970271)
(https://pub.mdpi-res.com/polymers/polymers-14-03806/article_deploy/html/images/polymers-14-03806-g006-550.jpg?1662970273)
(https://pub.mdpi-res.com/polymers/polymers-14-03806/article_deploy/html/images/polymers-14-03806-g007-550.jpg?1662970277)

Open Access Article (/2073-4360/14/18/3805/pdf?version=1662955013)

Effects of Radiation on Cross-Linking Reaction, Microstructure, and Microbiological Properties of Whey Protein-Based Tissue Adhesive Development (/2073-4360/14/18/3805)

by Ning Liu (https://sciprofiles.com/profile/2164398?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Guorong Wang (https://sciprofiles.com/profile/188106?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Mingruo Guo (https://sciprofiles.com/profile/64565?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3805; https://doi.org/10.3390/polym14183805 (https://doi.org/10.3390/polym14183805) - 12 Sep 2022
Viewed by 1235

Abstract Whey proteins are mainly a group of small globular proteins. Their structures can be modified by physical, chemical, and other means to improve their functionality. The objectives of this study are to investigate the effect of radiation on protein–protein interaction, microstructure, and microbiological **[...] Read more.**
(This article belongs to the Special Issue **Protein-Based Biopolymers (/journal/polymers/special_issues/protein_based_biopolymers)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03805/article_deploy/html/images/polymers-14-03805-g001-550.jpg?1662955099)
(https://pub.mdpi-res.com/polymers/polymers-14-03805/article_deploy/html/images/polymers-14-03805-g002-550.jpg?1662955107)
(https://pub.mdpi-res.com/polymers/polymers-14-03805/article_deploy/html/images/polymers-14-03805-g003-550.jpg?1662955103)
(https://pub.mdpi-res.com/polymers/polymers-14-03805/article_deploy/html/images/polymers-14-03805-g004-550.jpg?1662955105)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03805/article_deploy/html/images/polymers-14-03805-g005-550.jpg?1662955097)

(https://pub.mdpi-res.com/polymers/polymers-14-03805/article_deploy/html/images/polymers-14-03805-g006-550.jpg?1662955095)

Open Access Article (/2073-4360/14/18/3804/pdf?version=1663061007)

Preparation and Properties of Fluorosilicone Fouling-Release Coatings (/2073-4360/14/18/3804)

by

Tong Wu (https://sciprofiles.com/profile/author/bmZRZCtYWllxbHY2d3lBUGl4YVhuOGhqb2k4cDBrTkVtTnB6VGpnUHJ1ND0=?utm_source=mc

,

Yuhong Qi (https://sciprofiles.com/profile/388546?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Qi'an Chen (https://sciprofiles.com/profile/2442734?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Chuanjun Gu (https://sciprofiles.com/profile/author/Z1lmK1dMZzZFZnRNL0NoK29DY1RsUT09?utm_source=mdpi.com&utm_medium=website

and

Zhanping Zhang (https://sciprofiles.com/profile/388547?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3804; https://doi.org/10.3390/polym14183804 (https://doi.org/10.3390/polym14183804) - 11 Sep 2022

Cited by 1 (/2073-4360/14/18/3804#metrics) | Viewed by 1567

Abstract To improve the antifouling performance of silicone fouling-release coatings, some fluorosilicone and silicone fouling-release coatings were prepared and cured at room temperature with hydroxyl-terminated fluoropolysiloxane (FPS) or hydroxy-terminated polydimethylsiloxane (PDMS) as a film-forming resin, tetraethyl orthosilicate (TEOS) as a crosslinking agent, and dibutyltin **[...] Read more.**

(This article belongs to the Special Issue Organic-Inorganic Hybrid Materials II (/journal/polymers/special_issues/Organic_Inorganic_Hybrid_II))

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03804/article_deploy/html/images/polymers-14-03804-g001-550.jpg?1663142697)

(https://pub.mdpi-res.com/polymers/polymers-14-03804/article_deploy/html/images/polymers-14-03804-g002-550.jpg?1663142701)

(https://pub.mdpi-res.com/polymers/polymers-14-03804/article_deploy/html/images/polymers-14-03804-g003-550.jpg?1663142696)

(https://pub.mdpi-res.com/polymers/polymers-14-03804/article_deploy/html/images/polymers-14-03804-g004-550.jpg?1663142695)

(https://pub.mdpi-res.com/polymers/polymers-14-03804/article_deploy/html/images/polymers-14-03804-g005-550.jpg?1663142698)

(https://pub.mdpi-res.com/polymers/polymers-14-03804/article_deploy/html/images/polymers-14-03804-g006-550.jpg?1663142714)

(https://pub.mdpi-res.com/polymers/polymers-14-03804/article_deploy/html/images/polymers-14-03804-g007-550.jpg?1663142702)

(https://pub.mdpi-res.com/polymers/polymers-14-03804/article_deploy/html/images/polymers-14-03804-g008-550.jpg?1663142709)

(https://pub.mdpi-res.com/polymers/polymers-14-03804/article_deploy/html/images/polymers-14-03804-g009-550.jpg?1663142708)

(https://pub.mdpi-res.com/polymers/polymers-14-03804/article_deploy/html/images/polymers-14-03804-g010-550.jpg?1663142700)

(https://pub.mdpi-res.com/polymers/polymers-14-03804/article_deploy/html/images/polymers-14-03804-g011-550.jpg?1663142704)

(https://pub.mdpi-res.com/polymers/polymers-14-03804/article_deploy/html/images/polymers-14-03804-g012-550.jpg?1663142715)

(https://pub.mdpi-res.com/polymers/polymers-14-03804/article_deploy/html/images/polymers-14-03804-g013-550.jpg?1663142713)

(https://pub.mdpi-res.com/polymers/polymers-14-03804/article_deploy/html/images/polymers-14-03804-g014-550.jpg?1663142710)

(https://pub.mdpi-res.com/polymers/polymers-14-03804/article_deploy/html/images/polymers-14-03804-g015-550.jpg?1663142712)

(https://pub.mdpi-res.com/polymers/polymers-14-03804/article_deploy/html/images/polymers-14-03804-g016-550.jpg?1663142706)

Open Access Article (/2073-4360/14/18/3803/pdf?version=1662895273)

Development and Processing of New Composite Materials Based on High-Performance Semicrystalline Polyimide for Fused Filament Fabrication (FFF) and Their Biocompatibility (/2073-4360/14/18/3803)

by Igor Polyakov (https://sciprofiles.com/profile/2422498?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Gleb Vaganov (https://sciprofiles.com/profile/2335174?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Andrey Didenko (https://sciprofiles.com/profile/1358590?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Elena Ivan'kova (https://sciprofiles.com/profile/1064856?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Elena Popova (https://sciprofiles.com/profile/author/UDlLdHc2YUdneDZ3YVlxbUxXRnhwN0o5V0swcHJjcjQxY2tzS2o1OVpiST0=?utm_source=

,

Yuliya Nashchekina (https://sciprofiles.com/profile/author/WHpYTFpmZ3B2M1dXaFFkbGNzdGZoQT09?utm_source=mdpi.com&utm_medium=

,

Vladimir Elokhovskiy (https://sciprofiles.com/profile/1942905?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Valentin Svetlichnyi (https://sciprofiles.com/profile/683703?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

and

Vladimir Yudin (https://sciprofiles.com/profile/332850?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3803; https://doi.org/10.3390/polym14183803 (https://doi.org/10.3390/polym14183803) - 11 Sep 2022

Cited by 5 (/2073-4360/14/18/3803#metrics) | Viewed by 1282

Abstract Samples of composite materials based on high-performance semicrystalline polyimide R-BAPB (based on the dianhydride R: 1,3-bis-(3′,4,-dicarboxyphenoxy)benzene and diamine BAPB: 4,4′-bis-(4″-aminophenoxy)diphenyl)) filled with carbon nanofibers and micron-sized discrete carbon fibers were obtained by FFF printing for the first time. The viscosity of melts of **[...] Read more.**

(This article belongs to the Special Issue Additive Manufacturing of Polymer Composites (/journal/polymers/special_issues/Addit_Manuf_Polym_Compos))

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03803/article_deploy/html/images/polymers-14-03803-g001-550.jpg?1662895358)

(https://pub.mdpi-res.com/polymers/polymers-14-03803/article_deploy/html/images/polymers-14-03803-g002-550.jpg?1662895372)

(https://pub.mdpi-res.com/polymers/polymers-14-03803/article_deploy/html/images/polymers-14-03803-g003-550.jpg?1662895359)

(https://pub.mdpi-res.com/polymers/polymers-14-03803/article_deploy/html/images/polymers-14-03803-g004-550.jpg?1662895373)

(https://pub.mdpi-res.com/polymers/polymers-14-03803/article_deploy/html/images/polymers-14-03803-g005-550.jpg?1662895372)

(https://pub.mdpi-res.com/polymers/polymers-14-03803/article_deploy/html/images/polymers-14-03803-g006-550.jpg?1662895367)

(https://pub.mdpi-res.com/polymers/polymers-14-03803/article_deploy/html/images/polymers-14-03803-g007-550.jpg?1662895368)

(https://pub.mdpi-res.com/polymers/polymers-14-03803/article_deploy/html/images/polymers-14-03803-g008a-550.jpg?1662895370)

(https://pub.mdpi-res.com/polymers/polymers-14-03803/article_deploy/html/images/polymers-14-03803-g008b-550.jpg?1662895362)

(https://pub.mdpi-res.com/polymers/polymers-14-03803/article_deploy/html/images/polymers-14-03803-g009-550.jpg?1662895371)

(https://pub.mdpi-res.com/polymers/polymers-14-03803/article_deploy/html/images/polymers-14-03803-g010-550.jpg?1662895366)

Open Access Article (/2073-4360/14/18/3802/pdf?version=1662894318)

Design of Robust FEP Porous Ultrafiltration Membranes by Electrospinning-Sintered Technology (/2073-4360/14/18/3802)

by Kaikai Chen (https://sciprofiles.com/profile/2365908?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Haoyang Ling (https://sciprofiles.com/profile/author/NWJTSHdXS1NrL1F5NkFxY2ZlcFBJK1lSTnhUZFhFVjY1ZVdOUFZMd0dKOD0=?utm_sour, Hailiang Liu (https://sciprofiles.com/profile/2055712?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Wei Zhao (https://sciprofiles.com/profile/author/RjRxazJzeE1xTFppb3o0MXh2dHNsbnZSRXZVSmpzc09NNGc4d0FQREhyZz0=?utm_source=m and Changfa Xiao (https://sciprofiles.com/profile/384502?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3802; https://doi.org/10.3390/polym14183802 (https://doi.org/10.3390/polym14183802) - 11 Sep 2022

Cited by 1 (/2073-4360/14/18/3802#metrics) | Viewed by 1119

Abstract Perfluoropolymer membranes are widely used because of their good environmental adaptability. Herein, the ultrafine fibrous FEP porous membranes were fabricated with electrospinning-sintered technology. The effects of PVA content and sintering temperature on the fabricated membranes' morphologies and properties were investigated. The results indicate **[...] Read more.**

(This article belongs to the Special Issue **Advanced Polymer Membranes for Adsorption and Separation Applications (/journal/polymers/special_issues/Polymer_Membranes_Adsorption_Separation)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03802/article_deploy/html/images/polymers-14-03802-g001-550.jpg?1663312531)

(https://pub.mdpi-res.com/polymers/polymers-14-03802/article_deploy/html/images/polymers-14-03802-g002-550.jpg?1663312532)

(https://pub.mdpi-res.com/polymers/polymers-14-03802/article_deploy/html/images/polymers-14-03802-g003-550.jpg?1663312540)

(https://pub.mdpi-res.com/polymers/polymers-14-03802/article_deploy/html/images/polymers-14-03802-g004-550.jpg?1663312542)

(https://pub.mdpi-res.com/polymers/polymers-14-03802/article_deploy/html/images/polymers-14-03802-g005-550.jpg?1663312538)

(https://pub.mdpi-res.com/polymers/polymers-14-03802/article_deploy/html/images/polymers-14-03802-g006-550.jpg?1663312545)

(https://pub.mdpi-res.com/polymers/polymers-14-03802/article_deploy/html/images/polymers-14-03802-g007-550.jpg?1663312540)

(https://pub.mdpi-res.com/polymers/polymers-14-03802/article_deploy/html/images/polymers-14-03802-g008-550.jpg?1663312534)

(https://pub.mdpi-res.com/polymers/polymers-14-03802/article_deploy/html/images/polymers-14-03802-g009-550.jpg?1663312539)

(https://pub.mdpi-res.com/polymers/polymers-14-03802/article_deploy/html/images/polymers-14-03802-g010-550.jpg?1663312541)

(https://pub.mdpi-res.com/polymers/polymers-14-03802/article_deploy/html/images/polymers-14-03802-g011-550.jpg?1663312532)

Open Access Article (/2073-4360/14/18/3801/pdf?version=1662891001)

Controllable Construction of Temperature-Sensitive Supramolecular Hydrogel Based on Cellulose and Cyclodextrin (/2073-4360/14/18/3801)

by Jiayin Wu (https://sciprofiles.com/profile/author/aVdHQzZKTzBQTElEZHVJdkRCOGhuME1HSU5nR3NEazQ3Qk9sUEt4NXkyQT0=?utm_source, Qilin Lu (https://sciprofiles.com/profile/1056578?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Hanchen Wang (https://sciprofiles.com/profile/author/dmFZeUE1MzlmQ1dNWmo0SDVTRjlRckR6Y2pBd1JRS3JwOVlXcXRWcTc2az0=?utm_so, Beili Lu (https://sciprofiles.com/profile/696472?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Biao Huang (https://sciprofiles.com/profile/185311?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3801; https://doi.org/10.3390/polym14183801 (https://doi.org/10.3390/polym14183801) - 11 Sep 2022

Cited by 5 (/2073-4360/14/18/3801#metrics) | Viewed by 1452

Abstract In temperature sensitive hydrogels, the swelling degree or light transmittance of the gel itself changes with variations in ambient temperature, prompting its wide application in controlled drug release, tissue engineering, and material separation. Considering the amphiphilic structure of β-cyclodextrin (β-CD), a cellulose-based supramolecular **[...] Read more.**

Back to TopTop

(This article belongs to the Special Issue **Recent Advances in Hydrogels (/journal/polymers/special_issues/Adv_Hydrogels)**)

► Show Figures

Open Access Article (/2073-4360/14/18/3800/pdf?version=1663553069)

The Shape Memory Properties and Actuation Performances of 4D Printing Poly (Ether-Ether-Ketone) (/2073-4360/14/18/3800)

by
Yuting Zhou (https://sciprofiles.com/profile/author/MU1iN1lqSGFjS0hQeVZPWUpsVm1PWTA0ZnA5eXEyNFB5Y0tNZy9XeCt6OD0=?utm_sourc
,
Luquan Ren (https://sciprofiles.com/profile/2544506?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Jianfeng Zang (https://sciprofiles.com/profile/332707?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Zhihui Zhang (https://sciprofiles.com/profile/713573?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3800; **https://doi.org/10.3390/polym14183800 (https://doi.org/10.3390/polym14183800)** - 11 Sep 2022
Cited by 3 (/2073-4360/14/18/3800#metrics) | Viewed by 1784

Abstract Shape-memory polymers (SMPs) have gradually emerged in the mechanism and biomedical fields and facilitate the upgrading of industrial mechanisms and the breakthrough of technical bottlenecks. However, most of the SMPs are infeasible in harsh environments, such as aerospace, due to the low glass **[...] Read more.**
(This article belongs to the Special Issue **Soft Materials and Systems II (/journal/polymers/special_issues/Soft_Mater_Syst_II)**)

► Show Figures

Open Access Article (/2073-4360/14/18/3799/pdf?version=1663000172)

Two-Way Shear Resistance of FRP Reinforced-Concrete Slabs: Data and a Comparative Study (/2073-4360/14/18/3799)

by **Fahid Aslam (https://sciprofiles.com/profile/1196319?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**,
Mohamed AbdelMongy (https://sciprofiles.com/profile/1535701?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
,
Majed Alzara (https://sciprofiles.com/profile/2159077?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Taha Ibrahim (https://sciprofiles.com/profile/365577?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Ahmed Farouk Deifalla (https://sciprofiles.com/profile/1702487?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
and
Ahmed M. Yosri (https://sciprofiles.com/profile/1400465?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3799; **https://doi.org/10.3390/polym14183799 (https://doi.org/10.3390/polym14183799)** - 11 Sep 2022
Cited by 2 (/2073-4360/14/18/3799#metrics) | Viewed by 1276

Abstract This study aims to investigate the two-way shear strength of concrete slabs with FRP reinforcements. Twenty-one strength models were briefly outlined and compared. In addition, information on a total of 248 concrete slabs with FRP reinforcements were collected from 50 different research studies. **[...] Read more.**

Back to TopTop

(This article belongs to the Special Issue **Fibre Reinforced Polymer (FRP) Composites in Structural Applications (/journal/polymers/special_issues/Fibre_Reinf_Polym_Compos_Struct_Appl)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03799/article_deploy/html/images/polymers-14-03799-g001-550.jpg?1663000258)
(https://pub.mdpi-res.com/polymers/polymers-14-03799/article_deploy/html/images/polymers-14-03799-g002-550.jpg?1663000247)
(https://pub.mdpi-res.com/polymers/polymers-14-03799/article_deploy/html/images/polymers-14-03799-g003-550.jpg?1663000245)
(https://pub.mdpi-res.com/polymers/polymers-14-03799/article_deploy/html/images/polymers-14-03799-g004-550.jpg?1663000256)
(https://pub.mdpi-res.com/polymers/polymers-14-03799/article_deploy/html/images/polymers-14-03799-g005-550.jpg?1663000254)
(https://pub.mdpi-res.com/polymers/polymers-14-03799/article_deploy/html/images/polymers-14-03799-g006-550.jpg?1663000248)
(https://pub.mdpi-res.com/polymers/polymers-14-03799/article_deploy/html/images/polymers-14-03799-g007-550.jpg?1663000248)
(https://pub.mdpi-res.com/polymers/polymers-14-03799/article_deploy/html/images/polymers-14-03799-g008-550.jpg?1663000251)
(https://pub.mdpi-res.com/polymers/polymers-14-03799/article_deploy/html/images/polymers-14-03799-g009-550.jpg?1663000251)
(https://pub.mdpi-res.com/polymers/polymers-14-03799/article_deploy/html/images/polymers-14-03799-g010-550.jpg?1663000259)
(https://pub.mdpi-res.com/polymers/polymers-14-03799/article_deploy/html/images/polymers-14-03799-g011-550.jpg?1663000246)

Open Access Article (/2073-4360/14/18/3798/pdf?version=1663293699)

Preparation and Application of In-Situ Loaded Silver Nanoparticles Antibacterial Fresh-Keeping Composite Paper (/2073-4360/14/18/3798)

by **Guangzhi Lin (https://sciprofiles.com/profile/2404843?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Xia Li (https://sciprofiles.com/profile/author/OStuWnhmdERza0luY3MyeE9oc2pMeG80NEVnaE9hanY2N01QUjJycHV5cz0=?utm_source=mdpi.** and **Chuanshan Zhao (https://sciprofiles.com/profile/2409548?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**

Polymers **2022**, *14*(18), 3798; **https://doi.org/10.3390/polym14183798 (https://doi.org/10.3390/polym14183798)** - 11 Sep 2022

Cited by 1 (/2073-4360/14/18/3798#metrics) | Viewed by 1423

Abstract The freshness and safety of fruits and vegetables affect our daily life. Paper products are often used in the packaging and transportation of fruits and vegetables, and these can provide other functions besides packaging after certain modifications and additions. In this study, the **[...] Read more.**

(This article belongs to the Special Issue **Synthesis and Application of Cellulose-Based Composites (/journal/polymers/special_issues/Synthesis_Application_Cellulose_Based_Composites)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03798/article_deploy/html/images/polymers-14-03798-g001-550.jpg?1663315294)
(https://pub.mdpi-res.com/polymers/polymers-14-03798/article_deploy/html/images/polymers-14-03798-g002-550.jpg?1663315302)
(https://pub.mdpi-res.com/polymers/polymers-14-03798/article_deploy/html/images/polymers-14-03798-g003-550.jpg?1663315292)
(https://pub.mdpi-res.com/polymers/polymers-14-03798/article_deploy/html/images/polymers-14-03798-g004-550.jpg?1663315277)
(https://pub.mdpi-res.com/polymers/polymers-14-03798/article_deploy/html/images/polymers-14-03798-g005-550.jpg?1663315281)
(https://pub.mdpi-res.com/polymers/polymers-14-03798/article_deploy/html/images/polymers-14-03798-g006-550.jpg?1663315297)
(https://pub.mdpi-res.com/polymers/polymers-14-03798/article_deploy/html/images/polymers-14-03798-g007-550.jpg?1663315288)
(https://pub.mdpi-res.com/polymers/polymers-14-03798/article_deploy/html/images/polymers-14-03798-g008-550.jpg?1663315283)

Open Access Article (/2073-4360/14/18/3797/pdf?version=1663470346)

Chitosan–Gelatin Films: Plasticizers/Nanofillers Affect Chain Interactions and Material Properties in Different Ways (/2073-4360/14/18/3797)

by **Qingfei Duan (https://sciprofiles.com/profile/author/bmF1R2JFSjB3VWMzeUlzeVB6aDlRUzRtVUdoOUNCVkpRZWx5NWhrMzRsTT0=?utm_sour**, **Ying Chen (https://sciprofiles.com/profile/author/SXpqTDc2VmNOdmliZFZ2SGh1WG5USzNLMmNOQkl3UjU4UTZrekpYbkY2MD0=?utm_source**, **Long Yu (https://sciprofiles.com/profile/author/Z0F6UmF6T1pQZEpMRFZPcnJmNzkwNTI5TER5M3lZRnVnQThMRGsraHR0dz0=?utm_source=r** and **Fengwei Xie (https://sciprofiles.com/profile/484632?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**

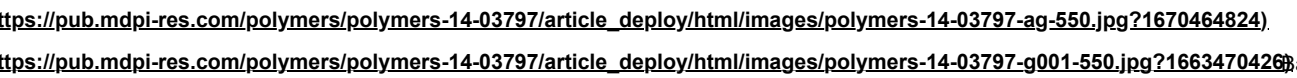
Polymers **2022**, *14*(18), 3797; **https://doi.org/10.3390/polym14183797 (https://doi.org/10.3390/polym14183797)** - 11 Sep 2022

Cited by 5 (/2073-4360/14/18/3797#metrics) | Viewed by 2140

Abstract Biopolymers, which are biodegradable and inherently functional, have high potential for specialized applications (e.g., disposable and transient systems and biomedical treatment). For this, it is important to create composite materials with precisely defined chain interactions and tailored properties. This work shows that for **[...] Read more.**

(This article belongs to the Collection **Biopolymers and Biobased Polymers: Chemistry and Engineering (/journal/polymers/topical_collections/biopolymers_biobased_polymers)**)

► Show Figures


(https://pub.mdpi-res.com/polymers/polymers-14-03797/article_deploy/html/images/polymers-14-03797-ag-550.jpg?1670464824)
(https://pub.mdpi-res.com/polymers/polymers-14-03797/article_deploy/html/images/polymers-14-03797-g001-550.jpg?1663470426)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03797/article_deploy/html/images/polymers-14-03797-g002-550.jpg?1663470436)

(https://pub.mdpi-res.com/polymers/polymers-14-03797/article_deploy/html/images/polymers-14-03797-g003-550.jpg?1663470439)

(https://pub.mdpi-res.com/polymers/polymers-14-03797/article_deploy/html/images/polymers-14-03797-g004-550.jpg?1663470428)

(https://pub.mdpi-res.com/polymers/polymers-14-03797/article_deploy/html/images/polymers-14-03797-g005-550.jpg?1663470430)

(https://pub.mdpi-res.com/polymers/polymers-14-03797/article_deploy/html/images/polymers-14-03797-g006-550.jpg?1663470432)

(https://pub.mdpi-res.com/polymers/polymers-14-03797/article_deploy/html/images/polymers-14-03797-g007-550.jpg?1663470429)

(https://pub.mdpi-res.com/polymers/polymers-14-03797/article_deploy/html/images/polymers-14-03797-g008-550.jpg?1663470438)

(https://pub.mdpi-res.com/polymers/polymers-14-03797/article_deploy/html/images/polymers-14-03797-g009-550.jpg?1663470437)

Open Access Article (/2073-4360/14/18/3796/pdf?version=1663125343)

Effect of Water-Resistant Properties of Kraft Paper (KP) Using Sulfur Hexafluoride (SF_6) Plasma Coating (/2073-4360/14/18/3796)

by

Pornchai Rachtanapun (https://sciprofiles.com/profile/473572?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Dheerawan Boonyawan (https://sciprofiles.com/profile/2196534?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name
,
Rafael A. Auras (https://sciprofiles.com/profile/339365?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Gopinath Kasi (https://sciprofiles.com/profile/2274193?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3796; https://doi.org/10.3390/polym14183796 (https://doi.org/10.3390/polym14183796) - 10 Sep 2022

Cited by 1 (/2073-4360/14/18/3796#metrics) | Viewed by 1171

Abstract Sulfur hexafluoride (SF_6) plasma at different pressures, powers, and times was used to treat Kraft paper (KP) to enhance its water resistance. The KP was treated with SF_6 plasma from 20–300 mTorr of pressure at powers from 25–75 Watts and **[...] Read more.**

(This article belongs to the Special Issue **Advances in Polymer Based Composite Coatings II (/journal/polymers/special_issues/Adv_Polym_Coat_II)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03796/article_deploy/html/images/polymers-14-03796-g001-550.jpg?1663142691)

(https://pub.mdpi-res.com/polymers/polymers-14-03796/article_deploy/html/images/polymers-14-03796-g002-550.jpg?1663142672)

(https://pub.mdpi-res.com/polymers/polymers-14-03796/article_deploy/html/images/polymers-14-03796-g003-550.jpg?1663142688)

(https://pub.mdpi-res.com/polymers/polymers-14-03796/article_deploy/html/images/polymers-14-03796-g004-550.jpg?1663142680)

(https://pub.mdpi-res.com/polymers/polymers-14-03796/article_deploy/html/images/polymers-14-03796-g005-550.jpg?1663142685)

(https://pub.mdpi-res.com/polymers/polymers-14-03796/article_deploy/html/images/polymers-14-03796-g006-550.jpg?1663142693)

(https://pub.mdpi-res.com/polymers/polymers-14-03796/article_deploy/html/images/polymers-14-03796-g007-550.jpg?1663142683)

(https://pub.mdpi-res.com/polymers/polymers-14-03796/article_deploy/html/images/polymers-14-03796-g008-550.jpg?1663142679)

(https://pub.mdpi-res.com/polymers/polymers-14-03796/article_deploy/html/images/polymers-14-03796-g009-550.jpg?1663142699)

(https://pub.mdpi-res.com/polymers/polymers-14-03796/article_deploy/html/images/polymers-14-03796-g010-550.jpg?1663142706)

(https://pub.mdpi-res.com/polymers/polymers-14-03796/article_deploy/html/images/polymers-14-03796-g011-550.jpg?1663142696)

(https://pub.mdpi-res.com/polymers/polymers-14-03796/article_deploy/html/images/polymers-14-03796-g012-550.jpg?1663142677)

Open Access Article (/2073-4360/14/18/3795/pdf?version=1663308691)

Polymer Nanocomposite Containing Palladium Nanoparticles: Synthesis, Characterization, and Properties (/2073-4360/14/18/3795)

by Gleb Yurkov (https://sciprofiles.com/profile/1370721?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Yury Koksharov (https://sciprofiles.com/profile/author/RHk1UFZtVlVNM0d1eUdhWitwQ1F4K3E4eko1eVZqam9lNU9YWGtwZnBUbz0=?utm_sou
,
Alexander Fionov (https://sciprofiles.com/profile/3159759?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Nikolai Taratanov (https://sciprofiles.com/profile/2179098?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Vladimir Kolesov (https://sciprofiles.com/profile/869082?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Vladislav Kirillov (https://sciprofiles.com/profile/2079293?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Mstislav Makeev (https://sciprofiles.com/profile/1881097?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Pavel Mikhalev (https://sciprofiles.com/profile/author/SHY2U29tQ3pkMW9VK0l1NkNLQTVHUT09?utm_source=mdpi.com&utm_medium=webs
,
Dmitriy Ryzhenko (https://sciprofiles.com/profile/1893736?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Vitaliy Solodilov (https://sciprofiles.com/profile/2517747?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3795; https://doi.org/10.3390/polym14183795 (https://doi.org/10.3390/polym14183795) - 10 Sep 2022

Cited by 2 (/2073-4360/14/18/3795#metrics) | Viewed by 1199

Abstract Composite nanomaterials have been prepared through thermal decomposition of palladium diacetate. The composite contains palladium nanoparticles embedded in high-pressure polyethylene. The materials were studied by a number of different physico-chemical methods, such as transmission electron microscopy, X-ray diffraction, X-ray absorption spectroscopy, electron paramagnetic **[...] Read more.**

(This article belongs to the Special Issue **Polymer Nanocomposites and Their Applications in Device and Construction (/journal/polymers/special_issues/polymer_nanocomposites_and_their_applications_in_device_and_construction)**)

Back to TopTop

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03795/article_deploy/html/images/polymers-14-03795-g001-550.jpg?1663308776)

(https://pub.mdpi-res.com/polymers/polymers-14-03795/article_deploy/html/images/polymers-14-03795-g002-550.jpg?1663308774)

(https://pub.mdpi-res.com/polymers/polymers-14-03795/article_deploy/html/images/polymers-14-03795-g003-550.jpg?1663308763)

(https://pub.mdpi-res.com/polymers/polymers-14-03795/article_deploy/html/images/polymers-14-03795-g004-550.jpg?1663308771)

(https://pub.mdpi-res.com/polymers/polymers-14-03795/article_deploy/html/images/polymers-14-03795-g005-550.jpg?1663308770)

(https://pub.mdpi-res.com/polymers/polymers-14-03795/article_deploy/html/images/polymers-14-03795-g006-550.jpg?1663308768)

(https://pub.mdpi-res.com/polymers/polymers-14-03795/article_deploy/html/images/polymers-14-03795-g007-550.jpg?1663308764)

(https://pub.mdpi-res.com/polymers/polymers-14-03795/article_deploy/html/images/polymers-14-03795-g008-550.jpg?1663308769)

(https://pub.mdpi-res.com/polymers/polymers-14-03795/article_deploy/html/images/polymers-14-03795-g009-550.jpg?1663308772)

(https://pub.mdpi-res.com/polymers/polymers-14-03795/article_deploy/html/images/polymers-14-03795-g010-550.jpg?1663308766)

(https://pub.mdpi-res.com/polymers/polymers-14-03795/article_deploy/html/images/polymers-14-03795-g0A1-550.jpg?1663308762)

Open Access Article (/2073-4360/14/18/3794/pdf?version=1662804534)

In Situ Coating of Polydopamine-AgNPs on Polyester Fabrics Producing Antibacterial and Antioxidant Properties (/2073-4360/14/18/3794)

by Esam S. Allehyani (https://sciprofiles.com/profile/2557459?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Yaaser Q. Almulaiky (https://sciprofiles.com/profile/936792?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Sami A. Al-Harbi (https://sciprofiles.com/profile/2442162?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Reda M. El-Shishtawy (https://sciprofiles.com/profile/79680?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3794; https://doi.org/10.3390/polym14183794 (https://doi.org/10.3390/polym14183794) - 10 Sep 2022

Cited by 8 (/2073-4360/14/18/3794#metrics) | Viewed by 1562

Abstract Nanoparticles are increasingly utilized as coating materials to improve the properties of polyester textiles. In this work, polyester textiles were successfully fabricated, with hydrazide groups serving as ligands for the entrapment of sliver ions and subsequent reduction to AgNPs. Polydopamine (PDA) was used **[...] Read more.**

(This article belongs to the Special Issue **Polymeric Fibers in Textiles (/journal/polymers/special_issues/Polymeric_Fibers_Textiles)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03794/article_deploy/html/images/polymers-14-03794-g001-550.jpg?1662804627)

(https://pub.mdpi-res.com/polymers/polymers-14-03794/article_deploy/html/images/polymers-14-03794-g002-550.jpg?1662804623)

(https://pub.mdpi-res.com/polymers/polymers-14-03794/article_deploy/html/images/polymers-14-03794-g003-550.jpg?1662804635)

(https://pub.mdpi-res.com/polymers/polymers-14-03794/article_deploy/html/images/polymers-14-03794-g004-550.jpg?1662804633)

(https://pub.mdpi-res.com/polymers/polymers-14-03794/article_deploy/html/images/polymers-14-03794-g005-550.jpg?1662804622)

(https://pub.mdpi-res.com/polymers/polymers-14-03794/article_deploy/html/images/polymers-14-03794-g006-550.jpg?1662804631)

(https://pub.mdpi-res.com/polymers/polymers-14-03794/article_deploy/html/images/polymers-14-03794-g007-550.jpg?1662804629)

(https://pub.mdpi-res.com/polymers/polymers-14-03794/article_deploy/html/images/polymers-14-03794-g008-550.jpg?1662804630)

(https://pub.mdpi-res.com/polymers/polymers-14-03794/article_deploy/html/images/polymers-14-03794-g009-550.jpg?1662804624)

Open Access Review (/2073-4360/14/18/3793/pdf?version=1662804038)

Functional Polymer and Packaging Technology for Bakery Products (/2073-4360/14/18/3793)

by Horman San (https://sciprofiles.com/profile/2414286?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Yeyen Laorenza (https://sciprofiles.com/profile/2404646?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Ehsan Behzadfar (https://sciprofiles.com/profile/author/dmluZmVSTnE3dUc3dW9LTHFnbUhXN3o4ckc5MnVqV09WcitFMXN3UUZiWT0=?utm_s

, Uruchaya Sonchaeng (https://sciprofiles.com/profile/2433129?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Kiattichai Wadaugsorn (https://sciprofiles.com/profile/author/WnFWRGtNaWc5MVM1SW1raC9qdi9lbEprQjViemVtU2JqZTQ3blBBcmM5RT0=?u

, Janenutch Sodsai (https://sciprofiles.com/profile/author/TytkNlB2b0VrQUxBc3ExOHRQSjBER3ZwaVZsWXUwNXl0bjlNY2dOblFwST0=?utm_so

, Thitiporn Kaewpetch (https://sciprofiles.com/profile/author/elVoMjkxbzVYWWZNQjdZeEhFWitPYTR5TmN5SWVwdHB6WjhSUFZ2T2JDUT0=?u

, Khwanchat Promhuad (https://sciprofiles.com/profile/2496159?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

, Atcharawan Srisa (https://sciprofiles.com/profile/2462473?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Phanwipa Wongphan (https://sciprofiles.com/profile/2404635?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Nathdanai Harnkarnsujarit (https://sciprofiles.com/profile/1750650?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nar

Polymers **2022**, *14*(18), 3793; https://doi.org/10.3390/polym14183793 (https://doi.org/10.3390/polym14183793) - 10 Sep 2022

Cited by 8 (/2073-4360/14/18/3793#metrics) | Viewed by 2555

Back to TopTop

Abstract Polymeric materials including plastic and paper are commonly used as packaging for bakery products. The incorporation of active substances produces functional polymers that can effectively retain the quality and safety of packaged products. Polymeric materials can be used to produce a variety of **[...] Read more.**

(This article belongs to the Special Issue **Smart Polymeric Films and Coatings for Food Packaging Applications (/journal/polymers/special_issues/Smart_Polym_Film_Coat_Food_Packag_Appl)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03793/article_deploy/html/images/polymers-14-03793-g001-550.jpg?1662804115)

(https://pub.mdpi-res.com/polymers/polymers-14-03793/article_deploy/html/images/polymers-14-03793-g002-550.jpg?1662804117)

(https://pub.mdpi-res.com/polymers/polymers-14-03793/article_deploy/html/images/polymers-14-03793-g003-550.jpg?1662804114)

(https://pub.mdpi-res.com/polymers/polymers-14-03793/article_deploy/html/images/polymers-14-03793-g004-550.jpg?1662804113)

Open Access Article **(/2073-4360/14/18/3792/pdf?version=1662803751)**

Fabrication of Conductive Tissue Engineering Nanocomposite Films Based on Chitosan and Surfactant-Stabilized Graphene Dispersions (/2073-4360/14/18/3792)

by

Aleksandr S. Buinov (https://sciprofiles.com/profile/2355107?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Elvira R. Gafarova (https://sciprofiles.com/profile/2367995?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Ekaterina A. Grebenik (https://sciprofiles.com/profile/author/UFpmYVErcXBZT09DWDVpZmVhWEJ2NmVnSXlGV0lSank5Qi92THo4SW5HRT0=
,
Kseniia N. Bardakova (https://sciprofiles.com/profile/550886?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Bato Ch. Kholkhoev (https://sciprofiles.com/profile/1972882?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Nadezhda N. Veryasova (https://sciprofiles.com/profile/author/a292QTJwNVdiN2p3cjJMUlVaN0FoWCthNk1iUGNxRExTN0FLclpiODF3RT0=?utr
,
Pavel V. Nikitin (https://sciprofiles.com/profile/author/THB2czk5dm5zSGs2aldhUTJSeG1HQU1RRU5LSnJGR1BEdWJFOFZLdHREbz0=?utm_sc
,
Nastasia V. Kosheleva (https://sciprofiles.com/profile/author/eHRxYmk3KzNDTlJaY25aQXRnV3NHNUNjN0tPL29tMXBoZ3NkNUgraURqUT0=?u
,
Boris S. Shavkuta (https://sciprofiles.com/profile/author/Q2ZnakhvcHpNTU9SdjY4V3NPNi9QeW1Ybi9TdE1WMnFGb2pFbDJFZDJXcz0=?utm_s
,
Anastasia S. Kuryanova (https://sciprofiles.com/profile/2464545?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name
,
Vitalii F. Burdukovskii (https://sciprofiles.com/profile/author/R2k4bllwbTd3eG9OMWhtQ0NiUkVvUT09?utm_source=mdpi.com&utm_medium=v
and
Peter S. Timashev (https://sciprofiles.com/profile/1628795?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3792; **https://doi.org/10.3390/polym14183792 (https://doi.org/10.3390/polym14183792)** - 10 Sep 2022

Cited by 1 (/2073-4360/14/18/3792#metrics) | Viewed by 1614

Abstract Chitosan (CS)/graphene nanocomposite films with tunable biomechanics, electroconductivity and biocompatibility using polyvinylpyrrolidone (PVP) and Pluronic F108 (Plu) as emulsion stabilizers for the purpose of conductive tissue engineering were successfully obtained. In order to obtain a composite solution, aqueous dispersions of multilayered graphene stabilized **[...] Read more.**

(This article belongs to the Special Issue **Polymer Materials for Bioprinting and Tissue Engineering (/journal/polymers/special_issues/AF8BZ3W4MH)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03792/article_deploy/html/images/polymers-14-03792-g001-550.jpg?1662803835)

(https://pub.mdpi-res.com/polymers/polymers-14-03792/article_deploy/html/images/polymers-14-03792-g002-550.jpg?1662803830)

(https://pub.mdpi-res.com/polymers/polymers-14-03792/article_deploy/html/images/polymers-14-03792-g003-550.jpg?1662803827)

(https://pub.mdpi-res.com/polymers/polymers-14-03792/article_deploy/html/images/polymers-14-03792-g004-550.jpg?1662803828)

(https://pub.mdpi-res.com/polymers/polymers-14-03792/article_deploy/html/images/polymers-14-03792-g005-550.jpg?1662803838)

(https://pub.mdpi-res.com/polymers/polymers-14-03792/article_deploy/html/images/polymers-14-03792-g006-550.jpg?1662803841)

(https://pub.mdpi-res.com/polymers/polymers-14-03792/article_deploy/html/images/polymers-14-03792-g007-550.jpg?1662803832)

(https://pub.mdpi-res.com/polymers/polymers-14-03792/article_deploy/html/images/polymers-14-03792-g008-550.jpg?1662803837)

Open Access Review **(/2073-4360/14/18/3791/pdf?version=1662802967)**

Application of Nano-Inspired Scaffolds-Based Biopolymer Hydrogel for Bone and Periodontal Tissue Regeneration (/2073-4360/14/18/3791)

by

Sheikha A. Alkhursani (https://sciprofiles.com/profile/author/QXNMaUQ1ZmhTZ1Z3VUUxM2ZLbWtXemcxTERvNTY2MThubEFVRnF1K2dHMD0
,
Mohamed Mohamady Ghobashy (https://sciprofiles.com/profile/378506?utm_source=mdpi.com&utm_medium=website&utm_campaign=avata
,
Samera Ali Al-Gahtany (https://sciprofiles.com/profile/author/M3NsR1dZOFRUVzV1UFdJYmNQeWREY0drcTBNOWtibGRhQ3FBYXZCUVVDaz0
,

Back to TopTop

Abeer S. Meganid (https://sciprofiles.com/profile/1946955?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Shady M. Abd El-Halim (https://sciprofiles.com/profile/author/VHV1N2Vwc3lNc0V4Z0lLcVVmbTBnekJWM3RaNzdzWDNrcERBZ0s1RDJZND0=?

, Zaheer Ahmad (https://sciprofiles.com/profile/646395?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Farhat S. Khan (https://sciprofiles.com/profile/author/WlZhMUs3ZWR0ZU1TRE9SQ2hhNzlDVElxMytVZ2VyMENJVW9UZU1BNVN6RT0=?utm_s

, Gamal Abdel Nasser Atia (https://sciprofiles.com/profile/2277580?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nam and Simona Cavalu (https://sciprofiles.com/profile/618912?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3791; https://doi.org/10.3390/polym14183791 (https://doi.org/10.3390/polym14183791) - 10 Sep 2022

Cited by 5 (/2073-4360/14/18/3791#metrics) | Viewed by 3023

Abstract This review's objectives are to provide an overview of the various kinds of biopolymer hydrogels that are currently used for bone tissue and periodontal tissue regeneration, to list the advantages and disadvantages of using them, to assess how well they might be used **[...] Read more.**

(This article belongs to the Special Issue **Stimulus-Responsive Materials for Biomedical Applications (/journal/polymers/special_issues/Stimulus_Responsive_Materials_Biomedical)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03791/article_deploy/html/images/polymers-14-03791-g001-550.jpg?1662803068)

(https://pub.mdpi-res.com/polymers/polymers-14-03791/article_deploy/html/images/polymers-14-03791-g002-550.jpg?1662803057)

(https://pub.mdpi-res.com/polymers/polymers-14-03791/article_deploy/html/images/polymers-14-03791-g003-550.jpg?1662803065)

(https://pub.mdpi-res.com/polymers/polymers-14-03791/article_deploy/html/images/polymers-14-03791-g004-550.jpg?1662803067)

(https://pub.mdpi-res.com/polymers/polymers-14-03791/article_deploy/html/images/polymers-14-03791-g005-550.jpg?1662803059)

(https://pub.mdpi-res.com/polymers/polymers-14-03791/article_deploy/html/images/polymers-14-03791-g006-550.jpg?1662803072)

(https://pub.mdpi-res.com/polymers/polymers-14-03791/article_deploy/html/images/polymers-14-03791-g007a-550.jpg?1662803071)

(https://pub.mdpi-res.com/polymers/polymers-14-03791/article_deploy/html/images/polymers-14-03791-g007b-550.jpg?1662803062)

Open Access Article (/2073-4360/14/18/3790/pdf?version=1662802051)

Enhanced Mechanical Properties and Anti–Inflammation of Poly(L–Lactic Acid) by Stereocomplexes of PLLA/PDLA and Surface–Modified Magnesium Hydroxide Nanoparticles (/2073-4360/14/18/3790)

by Seung-Woon Baek (https://sciprofiles.com/profile/author/RmtGU0U1YmJDUE1oRGgvMEpDTDVMaFlkMUh5S1ZYdGJwV3kzUElMU0s0ST0=?ut

, Jun Hyuk Kim (https://sciprofiles.com/profile/author/RGpMdHV1bzludHVNL1lqL1pUdjQ3eHM3NHFLTXBhYysxRCtyNEhXU0pZYz0=?utm_sour

, Duck Hyun Song (https://sciprofiles.com/profile/1822659?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Da-Seul Kim (https://sciprofiles.com/profile/2291647?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Chun Gwon Park (https://sciprofiles.com/profile/526700?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Dong Keun Han (https://sciprofiles.com/profile/1105595?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3790; https://doi.org/10.3390/polym14183790 (https://doi.org/10.3390/polym14183790) - 10 Sep 2022

Cited by 8 (/2073-4360/14/18/3790#metrics) | Viewed by 1611

Abstract Poly(L–lactic acid) (PLLA), as a biodegradable polymer, has attracted attention for use as a biomaterial. In order to apply PLLA as a cardiovascular stent, stronger mechanical properties and anti–inflammatory effects against acidic by–products are required. In this study, PLLA/PDLA stereocomplex microparticles (SC) were **[...] Read more.**

(This article belongs to the Special Issue **Advances in Biocompatible and Biodegradable Polymers (/journal/polymers/special_issues/biocompat_biodegrad_polym)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03790/article_deploy/html/images/polymers-14-03790-g001-550.jpg?1662802168)

(https://pub.mdpi-res.com/polymers/polymers-14-03790/article_deploy/html/images/polymers-14-03790-g002-550.jpg?1662802165)

(https://pub.mdpi-res.com/polymers/polymers-14-03790/article_deploy/html/images/polymers-14-03790-g003-550.jpg?1662802163)

(https://pub.mdpi-res.com/polymers/polymers-14-03790/article_deploy/html/images/polymers-14-03790-g004-550.jpg?1662802166)

(https://pub.mdpi-res.com/polymers/polymers-14-03790/article_deploy/html/images/polymers-14-03790-g005-550.jpg?1662802161)

(https://pub.mdpi-res.com/polymers/polymers-14-03790/article_deploy/html/images/polymers-14-03790-g006-550.jpg?1662802163)

(https://pub.mdpi-res.com/polymers/polymers-14-03790/article_deploy/html/images/polymers-14-03790-g007-550.jpg?1662802161)

(https://pub.mdpi-res.com/polymers/polymers-14-03790/article_deploy/html/images/polymers-14-03790-g008-550.jpg?1662802167)

Open Access Article (/2073-4360/14/18/3789/pdf?version=1663157155)

Model for Aqueous Polymer Solutions with Damping Term: Solvability and Vanishing Relaxation Limit (/2073-4360/14/18/3789)

by Evgenii S. Baranovskii (https://sciprofiles.com/profile/613916?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and

Back to TopTop

Mikhail A. Artemov (https://sciprofiles.com/profile/681553?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3789; https://doi.org/10.3390/polym14183789 (https://doi.org/10.3390/polym14183789) - 10 Sep 2022

Cited by 3 (/2073-4360/14/18/3789#metrics) | Viewed by 679

Abstract The main aim of this paper is to investigate the solvability of the steady-state flow model for low-concentrated aqueous polymer solutions with a damping term in a bounded domain under the no-slip boundary condition. Mathematically, the model under consideration is a boundary value **[...] Read more.**

(This article belongs to the Special Issue **Polymer Theory and Simulation (/journal/polymers/special_issues/polymer_theory_simulation)**)

Open Access Editor's Choice Article (/2073-4360/14/18/3788/pdf?version=1662800704)

Cell-Laden Composite Hydrogel Bioinks with Human Bone Allograft Particles to Enhance Stem Cell Osteogenesis (/2073-4360/14/18/3788)

by
Hadis Gharacheh (https://sciprofiles.com/profile/2392789?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Murat Guvendiren (https://sciprofiles.com/profile/221098?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3788; https://doi.org/10.3390/polym14183788 (https://doi.org/10.3390/polym14183788) - 10 Sep 2022

Cited by 2 (/2073-4360/14/18/3788#metrics) | Viewed by 2014

Abstract There is a growing demand for bone graft substitutes that mimic the extracellular matrix properties of the native bone tissue to enhance stem cell osteogenesis. Composite hydrogels containing human bone allograft particles are particularly interesting due to inherent bioactivity of the allograft tissue. **[...] Read more.**

(This article belongs to the Special Issue **Composite Hydrogels towards Next-Generation Functional Materials and Devices (/journal/polymers/special_issues/compo_hydrogel_material_device)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03788/article_deploy/html/images/polymers-14-03788-ag-550.jpg?1662800789)
(https://pub.mdpi-res.com/polymers/polymers-14-03788/article_deploy/html/images/polymers-14-03788-g001-550.jpg?1662800782)
(https://pub.mdpi-res.com/polymers/polymers-14-03788/article_deploy/html/images/polymers-14-03788-g002-550.jpg?1662800773)
(https://pub.mdpi-res.com/polymers/polymers-14-03788/article_deploy/html/images/polymers-14-03788-g003-550.jpg?1662800783)
(https://pub.mdpi-res.com/polymers/polymers-14-03788/article_deploy/html/images/polymers-14-03788-g004-550.jpg?1662800787)
(https://pub.mdpi-res.com/polymers/polymers-14-03788/article_deploy/html/images/polymers-14-03788-g005-550.jpg?1662800778)
(https://pub.mdpi-res.com/polymers/polymers-14-03788/article_deploy/html/images/polymers-14-03788-g006-550.jpg?1662800785)
(https://pub.mdpi-res.com/polymers/polymers-14-03788/article_deploy/html/images/polymers-14-03788-g007-550.jpg?1662800777)
(https://pub.mdpi-res.com/polymers/polymers-14-03788/article_deploy/html/images/polymers-14-03788-g008-550.jpg?1662800788)
(https://pub.mdpi-res.com/polymers/polymers-14-03788/article_deploy/html/images/polymers-14-03788-g009-550.jpg?1662800781)
(https://pub.mdpi-res.com/polymers/polymers-14-03788/article_deploy/html/images/polymers-14-03788-g010-550.jpg?1662800780)

Open Access Review (/2073-4360/14/18/3787/pdf?version=1662794310)

Electrospun-Based Membranes as a Key Tool to Prevent Respiratory Infections (/2073-4360/14/18/3787)

by
Sara F. C. Guerreiro (https://sciprofiles.com/profile/2215946?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Carolina A. M. Ferreira (https://sciprofiles.com/profile/1498983?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
,
Joana F. A. Valente (https://sciprofiles.com/profile/680055?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Tatiana M. F. Patrício (https://sciprofiles.com/profile/2027681?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Nuno M. F. Alves (https://sciprofiles.com/profile/624680?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Juliana R. Dias (https://sciprofiles.com/profile/161804?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3787; https://doi.org/10.3390/polym14183787 (https://doi.org/10.3390/polym14183787) - 10 Sep 2022

Viewed by 1203

Abstract The use of electrospun meshes has been proposed as highly efficient protective equipment to prevent respiratory infections. Those infections can result from the activity of micro-organisms and other small dust particles, such as those resulting from air pollution, that impair the respiratory tract, **[...] Read more.**

(This article belongs to the Special Issue **Biobased Polymers: Design, Synthesis and Applications (/journal/polymers/special_issues/Biobased_Polym_Des_Synth_Appl)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03787/article_deploy/html/images/polymers-14-03787-g001-550.jpg?1662794400)
(https://pub.mdpi-res.com/polymers/polymers-14-03787/article_deploy/html/images/polymers-14-03787-g002-550.jpg?1662794394)
(https://pub.mdpi-res.com/polymers/polymers-14-03787/article_deploy/html/images/polymers-14-03787-g003-550.jpg?1662794393)
(https://pub.mdpi-res.com/polymers/polymers-14-03787/article_deploy/html/images/polymers-14-03787-g004-550.jpg?1662794391)
(https://pub.mdpi-res.com/polymers/polymers-14-03787/article_deploy/html/images/polymers-14-03787-g005-550.jpg?1662794396)
(https://pub.mdpi-res.com/polymers/polymers-14-03787/article_deploy/html/images/polymers-14-03787-g006-550.jpg?1662794398)
(https://pub.mdpi-res.com/polymers/polymers-14-03787/article_deploy/html/images/polymers-14-03787-g007-550.jpg?1662794399)

Back to TopTop

Open Access Article (/2073-4360/14/18/3786/pdf?version=1663234587)

Polymer Foam Concrete FC500 Material Behavior and Its Interaction in a Composite Structure with Standard Cement Concrete Using Small Scale Tests (/2073-4360/14/18/3786)

by Daniel Papán (https://sciprofiles.com/profile/2365891?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Daniel Ďugel (https://sciprofiles.com/profile/2454508?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Zuzana Papánová (https://sciprofiles.com/profile/1994614?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Martin Ščotka (https://sciprofiles.com/profile/author/QUxFL3Fmd1dhWUwybkhTclMyWndsOExXcnNmYURld3JQckZEL29vTG85UT0=?utm_sou

Polymers **2022**, *14*(18), 3786; https://doi.org/10.3390/polym14183786 (https://doi.org/10.3390/polym14183786) - 10 Sep 2022

Cited by 1 (/2073-4360/14/18/3786#metrics) | Viewed by 1098

Abstract This paper focuses on the investigation of the material properties of FC500 foam concrete. Innovation is very important for the solution of cast-in-place concrete forms in practice today. Part of its innovative construction application is the possibility of using foam concrete in a **[...] Read more.**

(This article belongs to the Special Issue **Preparation, Structure and Characterization of Polymer/Cement Composites (/journal/polymers/special_issues/Poly_Cement_Cha)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g001-550.jpg?1663234718)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g002-550.jpg?1663234711)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g003-550.jpg?1663234689)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g004-550.jpg?1663234709)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g005-550.jpg?1663234687)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g006-550.jpg?1663234690)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g007-550.jpg?1663234707)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g008-550.jpg?1663234693)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g009-550.jpg?1663234675)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g010-550.jpg?1663234712)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g011-550.jpg?1663234707)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g012-550.jpg?1663234679)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g013-550.jpg?1663234685)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g014-550.jpg?1663234697)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g015-550.jpg?1663234716)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g016-550.jpg?1663234700)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g017-550.jpg?1663234713)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g018-550.jpg?1663234705)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g019-550.jpg?1663234703)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g020-550.jpg?1663234681)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g021-550.jpg?1663234692)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g022-550.jpg?1663234703)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g023-550.jpg?1663234696)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g024-550.jpg?1663234686)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g025-550.jpg?1663234701)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g026-550.jpg?1663234710)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g027-550.jpg?1663234676)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g028-550.jpg?1663234680)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g029-550.jpg?1663234682)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g030-550.jpg?1663234676)
(https://pub.mdpi-res.com/polymers/polymers-14-03786/article_deploy/html/images/polymers-14-03786-g031-550.jpg?1663234698)

Open Access Article (/2073-4360/14/18/3785/pdf?version=1663063532)

Locating Method for Electrical Tree Degradation in XLPE Cable Insulation Based on Broadband Impedance Spectrum (/2073-4360/14/18/3785)

by Tao Han (https://sciprofiles.com/profile/389818?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Yufei Yao (https://sciprofiles.com/profile/2394420?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Qiang Li (https://sciprofiles.com/profile/author/L0ppWjVROVU5RzFPRmhEendNa1MyZz09?utm_source=mdpi.com&utm_medium=website&utr , Youcong Huang (https://sciprofiles.com/profile/author/YlFtZlJDbjJrV0QyT2dZOGpmV3RhYUdFMUcySkd4Qk1zajZQcUlyeEplWT0=?utm_sourc ,

Back to TopTop

Zhongnan Zheng (https://sciprofiles.com/profile/author/QzlRWU5yYmJ3RlJjdHlxRTA0UmVyNm1YVEFYUE5icWoxd1BQYUxpOXRPMD0=?utm_
and
Yu Gao (https://sciprofiles.com/profile/365073?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3785; https://doi.org/10.3390/polym14183785 (https://doi.org/10.3390/polym14183785) - 09 Sep 2022
Cited by 1 (/2073-4360/14/18/3785#metrics) | Viewed by 1570

Abstract Electrical treeing is one of the main causes of crosslinked polyethylene (XLPE) cable failure. The current methods for locating electrical trees are mainly based on the partial discharge (PD) signal. However, PD signals are easily attenuated in the long cable and the PD **[...] Read more.**
(This article belongs to the Special Issue **Detection and Diagnosis of Polymer Composites for Electrical and Electronic Engineering Application (/journal/polymers/special_issues/Detect_Diagn_Polym_Compos_Electr_Electron_Eng_Appl)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03785/article_deploy/html/images/polymers-14-03785-g001-550.jpg?1663142560)
(https://pub.mdpi-res.com/polymers/polymers-14-03785/article_deploy/html/images/polymers-14-03785-g002-550.jpg?1663142545)
(https://pub.mdpi-res.com/polymers/polymers-14-03785/article_deploy/html/images/polymers-14-03785-g003-550.jpg?1663142552)
(https://pub.mdpi-res.com/polymers/polymers-14-03785/article_deploy/html/images/polymers-14-03785-g004-550.jpg?1663142548)
(https://pub.mdpi-res.com/polymers/polymers-14-03785/article_deploy/html/images/polymers-14-03785-g005-550.jpg?1663142561)
(https://pub.mdpi-res.com/polymers/polymers-14-03785/article_deploy/html/images/polymers-14-03785-g006-550.jpg?1663142546)
(https://pub.mdpi-res.com/polymers/polymers-14-03785/article_deploy/html/images/polymers-14-03785-g007-550.jpg?1663142559)
(https://pub.mdpi-res.com/polymers/polymers-14-03785/article_deploy/html/images/polymers-14-03785-g008-550.jpg?1663142544)
(https://pub.mdpi-res.com/polymers/polymers-14-03785/article_deploy/html/images/polymers-14-03785-g009-550.jpg?1663142553)
(https://pub.mdpi-res.com/polymers/polymers-14-03785/article_deploy/html/images/polymers-14-03785-g010-550.jpg?1663142556)
(https://pub.mdpi-res.com/polymers/polymers-14-03785/article_deploy/html/images/polymers-14-03785-g011-550.jpg?1663142551)
(https://pub.mdpi-res.com/polymers/polymers-14-03785/article_deploy/html/images/polymers-14-03785-g012-550.jpg?1663142550)
(https://pub.mdpi-res.com/polymers/polymers-14-03785/article_deploy/html/images/polymers-14-03785-g013-550.jpg?1663142555)
(https://pub.mdpi-res.com/polymers/polymers-14-03785/article_deploy/html/images/polymers-14-03785-g014-550.jpg?1663142562)

Open Access Article (/2073-4360/14/18/3784/pdf?version=1663638813)

Effect of Hardener Type on the Photochemical and Antifungal Performance of Epoxy and Oligophosphonate S–IPNs (/2073-4360/14/18/3784)

by
Cristian-Dragos Varganici (https://sciprofiles.com/profile/528345?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nam
,
Liliana Rosu (https://sciprofiles.com/profile/1669642?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Dan Rosu (https://sciprofiles.com/profile/1106830?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Corneliu Hamciuc (https://sciprofiles.com/profile/1623982?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Irina Rosca (https://sciprofiles.com/profile/439755?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Ana-Lavinia Vasiliu (https://sciprofiles.com/profile/2239244?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3784; https://doi.org/10.3390/polym14183784 (https://doi.org/10.3390/polym14183784) - 09 Sep 2022
Cited by 1 (/2073-4360/14/18/3784#metrics) | Viewed by 1009

Abstract Due to their highly reactive character and multiple crosslinking capacity, epoxy resins are one of the worldwide market-dominating classes of thermosetting polymers and are present in a wide range of technical applications, including structural adhesives, coatings and polymer matrices for composite materials. Despite **[...] Read more.**
(This article belongs to the Collection **Polymer/Biopolymer Stabilization and Degradation (/journal/polymers/topical_collections/Stabilization_and_Degradation)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03784/article_deploy/html/images/polymers-14-03784-g001-550.jpg?1663638909)
(https://pub.mdpi-res.com/polymers/polymers-14-03784/article_deploy/html/images/polymers-14-03784-g002-550.jpg?1663638896)
(https://pub.mdpi-res.com/polymers/polymers-14-03784/article_deploy/html/images/polymers-14-03784-g003-550.jpg?1663638900)
(https://pub.mdpi-res.com/polymers/polymers-14-03784/article_deploy/html/images/polymers-14-03784-g004-550.jpg?1663638884)
(https://pub.mdpi-res.com/polymers/polymers-14-03784/article_deploy/html/images/polymers-14-03784-g005-550.jpg?1663638881)
(https://pub.mdpi-res.com/polymers/polymers-14-03784/article_deploy/html/images/polymers-14-03784-g006-550.jpg?1663638883)
(https://pub.mdpi-res.com/polymers/polymers-14-03784/article_deploy/html/images/polymers-14-03784-g007-550.jpg?1663638887)
(https://pub.mdpi-res.com/polymers/polymers-14-03784/article_deploy/html/images/polymers-14-03784-g008-550.jpg?1663638901)
(https://pub.mdpi-res.com/polymers/polymers-14-03784/article_deploy/html/images/polymers-14-03784-g009-550.jpg?1663638892)
(https://pub.mdpi-res.com/polymers/polymers-14-03784/article_deploy/html/images/polymers-14-03784-g010-550.jpg?1663638885)
(https://pub.mdpi-res.com/polymers/polymers-14-03784/article_deploy/html/images/polymers-14-03784-g011-550.jpg?1663638908)
(https://pub.mdpi-res.com/polymers/polymers-14-03784/article_deploy/html/images/polymers-14-03784-g012-550.jpg?1663638899)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03784/article_deploy/html/images/polymers-14-03784-g013-550.jpg?1663638895)

(https://pub.mdpi-res.com/polymers/polymers-14-03784/article_deploy/html/images/polymers-14-03784-g014-550.jpg?1663638906)

(https://pub.mdpi-res.com/polymers/polymers-14-03784/article_deploy/html/images/polymers-14-03784-sch001-550.jpg?1663638911)

(https://pub.mdpi-res.com/polymers/polymers-14-03784/article_deploy/html/images/polymers-14-03784-sch002-550.jpg?1663638903)

Open Access Article (/2073-4360/14/18/3783/pdf?version=1663036550)

Modeling and Simulation of the Impact of Feed Gas Perturbation on CO_2 Removal in a Polymeric Hollow Fiber Membrane (/2073-4360/14/18/3783)

by Nayef Ghasem (https://sciprofiles.com/profile/744890?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3783; https://doi.org/10.3390/polym14183783 (https://doi.org/10.3390/polym14183783) - 09 Sep 2022
Cited by 2 (/2073-4360/14/18/3783#metrics) | Viewed by 1107

Abstract A membrane contactor is a device that attains the transfer of gas/liquid or liquid/liquid mass without dispersion of one phase within another. Membrane contactor modules generally provide 30 times more surface area than can be achieved in traditional gas absorption towers and 500 **[...] Read more.**

(This article belongs to the Section Polymer Physics and Theory (/journal/polymers/sections/Phys_Theory))

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03783/article_deploy/html/images/polymers-14-03783-g001-550.jpg?1663036651)

(https://pub.mdpi-res.com/polymers/polymers-14-03783/article_deploy/html/images/polymers-14-03783-g002-550.jpg?1663036643)

(https://pub.mdpi-res.com/polymers/polymers-14-03783/article_deploy/html/images/polymers-14-03783-g003-550.jpg?1663036649)

(https://pub.mdpi-res.com/polymers/polymers-14-03783/article_deploy/html/images/polymers-14-03783-g004-550.jpg?1663036651)

(https://pub.mdpi-res.com/polymers/polymers-14-03783/article_deploy/html/images/polymers-14-03783-g005-550.jpg?1663036646)

(https://pub.mdpi-res.com/polymers/polymers-14-03783/article_deploy/html/images/polymers-14-03783-g006-550.jpg?1663036641)

(https://pub.mdpi-res.com/polymers/polymers-14-03783/article_deploy/html/images/polymers-14-03783-g007-550.jpg?1663036645)

(https://pub.mdpi-res.com/polymers/polymers-14-03783/article_deploy/html/images/polymers-14-03783-g008-550.jpg?1663036648)

Open Access Article (/2073-4360/14/18/3782/pdf?version=1662726728)

New Hybrid Nanocomposites with Catalytic Properties Obtained by In Situ Preparation of Gold Nanoparticles on Poly (Ionic Liquid)/Poly (4-Vinylpyridine) Nanofibers (/2073-4360/14/18/3782)

by Oscar Ramírez (https://sciprofiles.com/profile/2413918?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Matías Leal (https://sciprofiles.com/profile/2423495?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Ximena Briones (https://sciprofiles.com/profile/2423511?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Marcela Urzúa (https://sciprofiles.com/profile/2924259?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Sebastián Bonardd (https://sciprofiles.com/profile/1187271?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Cesar Saldías (https://sciprofiles.com/profile/589705?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Angel Leiva (https://sciprofiles.com/profile/471809?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3782; https://doi.org/10.3390/polym14183782 (https://doi.org/10.3390/polym14183782) - 09 Sep 2022
Viewed by 1091

Abstract In this work, we report the obtaining of new hybrid nanocomposites with catalytic activity formed by nanofibers of polymer blends and gold nanoparticles. The nanofibers were obtained by electrospinning blends of a poly (ionic liquid) (PIL) and its precursor polymer, poly (4-vinyl pyridine) **[...] Read more.**

(This article belongs to the Special Issue Advanced Polymer Nanocomposites II (/journal/polymers/special_issues/Advanced_Polymer_NanocompositesII))

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03782/article_deploy/html/images/polymers-14-03782-ag-550.jpg?1662726843)

(https://pub.mdpi-res.com/polymers/polymers-14-03782/article_deploy/html/images/polymers-14-03782-g001-550.jpg?1662726836)

(https://pub.mdpi-res.com/polymers/polymers-14-03782/article_deploy/html/images/polymers-14-03782-g002-550.jpg?1662726833)

(https://pub.mdpi-res.com/polymers/polymers-14-03782/article_deploy/html/images/polymers-14-03782-g003-550.jpg?1662726835)

(https://pub.mdpi-res.com/polymers/polymers-14-03782/article_deploy/html/images/polymers-14-03782-g004-550.jpg?1662726840)

(https://pub.mdpi-res.com/polymers/polymers-14-03782/article_deploy/html/images/polymers-14-03782-g005-550.jpg?1662726838)

(https://pub.mdpi-res.com/polymers/polymers-14-03782/article_deploy/html/images/polymers-14-03782-g006-550.jpg?1662726838)

(https://pub.mdpi-res.com/polymers/polymers-14-03782/article_deploy/html/images/polymers-14-03782-g007-550.jpg?1662726841)

(https://pub.mdpi-res.com/polymers/polymers-14-03782/article_deploy/html/images/polymers-14-03782-g008-550.jpg?1662726830)

(https://pub.mdpi-res.com/polymers/polymers-14-03782/article_deploy/html/images/polymers-14-03782-g009a-550.jpg?1662726842)

(https://pub.mdpi-res.com/polymers/polymers-14-03782/article_deploy/html/images/polymers-14-03782-g009b-550.jpg?1662726834)

Open Access Article (/2073-4360/14/18/3781/pdf?version=1662728453)

Back to TopTop

Trimetallic Nanoalloy of NiFeCo Embedded in Phosphidated Nitrogen Doped Carbon Catalyst for Efficient Electro-Oxidation of Kraft Lignin (/2073-4360/14/18/3781)

by
Ana Maria Borges Honorato (https://sciprofiles.com/profile/author/L2k5dTU3NTZQV0tLV1JsZHJSV05tQkNUdDFsdERFNFN1UmhuZ1E3VFA2NI
,
Mohmmad Khalid (https://sciprofiles.com/profile/author/TWVZbitmek1zS2QyZ3gwL3kwc0NFY05Qb2QwRGh0QmFYNEd0RTFZSXFvND0=?utm
,
Antonio Aprigio da Silva Curvelo (https://sciprofiles.com/profile/author/ZkpkVmZiZkw2bm5tUlhPT2R2dkFaZTJZNTNwVnpuQmlybINZVTZidHJ(
,
Hamilton Varela (https://sciprofiles.com/profile/1708512?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Samaneh Shahgaldi (https://sciprofiles.com/profile/2406428?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3781; https://doi.org/10.3390/polym14183781 (https://doi.org/10.3390/polym14183781) - 09 Sep 2022
Cited by 3 (/2073-4360/14/18/3781#metrics) | Viewed by 1282

Abstract Recently, electro-oxidation of kraft lignin has been reported as a prominent electrochemical reaction to generate hydrogen at lower overpotential in alkaline water electrolysis. However, this reaction is highly limited by the low performance of existing electrocatalysts. Herein, we report a novel yet effective **[...] Read more.**

(This article belongs to the Special Issue **Recent Advances in Bioinspired Polymers (/journal/polymers/special_issues/Recent_Advances_Bioinspired_Nanomaterials)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03781/article_deploy/html/images/polymers-14-03781-ag-550.jpg?1662728539)
(https://pub.mdpi-res.com/polymers/polymers-14-03781/article_deploy/html/images/polymers-14-03781-g001-550.jpg?1662728536)
(https://pub.mdpi-res.com/polymers/polymers-14-03781/article_deploy/html/images/polymers-14-03781-g002-550.jpg?1662728534)
(https://pub.mdpi-res.com/polymers/polymers-14-03781/article_deploy/html/images/polymers-14-03781-g003-550.jpg?1662728528)
(https://pub.mdpi-res.com/polymers/polymers-14-03781/article_deploy/html/images/polymers-14-03781-g004-550.jpg?1662728530)
(https://pub.mdpi-res.com/polymers/polymers-14-03781/article_deploy/html/images/polymers-14-03781-g005-550.jpg?1662728524)
(https://pub.mdpi-res.com/polymers/polymers-14-03781/article_deploy/html/images/polymers-14-03781-g006-550.jpg?1662728539)
(https://pub.mdpi-res.com/polymers/polymers-14-03781/article_deploy/html/images/polymers-14-03781-g007-550.jpg?1662728527)
(https://pub.mdpi-res.com/polymers/polymers-14-03781/article_deploy/html/images/polymers-14-03781-g008-550.jpg?1662728538)
(https://pub.mdpi-res.com/polymers/polymers-14-03781/article_deploy/html/images/polymers-14-03781-g009-550.jpg?1662728526)

Open Access Article (/2073-4360/14/18/3780/pdf?version=1663056058)

Electrospun Collagen Scaffold Bio-Functionalized with Recombinant ICOS-Fc: An Advanced Approach to Promote Bone Remodelling (/2073-4360/14/18/3780)

by Priscila Melo (https://sciprofiles.com/profile/2587060?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Giorgia Montalbano (https://sciprofiles.com/profile/1227244?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Elena Boggio (https://sciprofiles.com/profile/363687?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Casimiro Luca Gigliotti (https://sciprofiles.com/profile/691301?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Chiara Dianzani (https://sciprofiles.com/profile/672012?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Umberto Dianzani (https://sciprofiles.com/profile/572852?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Chiara Vitale-Brovarone (https://sciprofiles.com/profile/1835678?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name
and
Sonia Fiorilli (https://sciprofiles.com/profile/798224?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3780; https://doi.org/10.3390/polym14183780 (https://doi.org/10.3390/polym14183780) - 09 Sep 2022
Cited by 1 (/2073-4360/14/18/3780#metrics) | Viewed by 1370

Abstract The treatment of osteoporotic fractures is a severe clinical issue, especially in cases where low support is provided, e.g., pelvis. New treatments aim to stimulate bone formation in compromised scenarios by using multifunctional biomaterials combined with biofabrication techniques to produce 3D structures (scaffolds) **[...] Read more.**

(This article belongs to the Special Issue **Multi-Functional Collagen-Based Biomaterials for Biomedical Applications (/journal/polymers/special_issues/multi_functional_collagen_based_biomaterials_for_biomedical_applications)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03780/article_deploy/html/images/polymers-14-03780-ag-550.jpg?1663056175)
(https://pub.mdpi-res.com/polymers/polymers-14-03780/article_deploy/html/images/polymers-14-03780-g001-550.jpg?1663056172)
(https://pub.mdpi-res.com/polymers/polymers-14-03780/article_deploy/html/images/polymers-14-03780-g002-550.jpg?1663056175)
(https://pub.mdpi-res.com/polymers/polymers-14-03780/article_deploy/html/images/polymers-14-03780-g003-550.jpg?1663056169)
(https://pub.mdpi-res.com/polymers/polymers-14-03780/article_deploy/html/images/polymers-14-03780-g004-550.jpg?1663056173)
(https://pub.mdpi-res.com/polymers/polymers-14-03780/article_deploy/html/images/polymers-14-03780-g005-550.jpg?1663056170)
(https://pub.mdpi-res.com/polymers/polymers-14-03780/article_deploy/html/images/polymers-14-03780-g006-550.jpg?1663056171)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03780/article_deploy/html/images/polymers-14-03780-g007-550.jpg?1663056164)

(https://pub.mdpi-res.com/polymers/polymers-14-03780/article_deploy/html/images/polymers-14-03780-g008-550.jpg?1663056174)

Open Access Article (/2073-4360/14/18/3779/pdf?version=1663039562)

Investigating the Deformation Characteristics of Buried High-Density Polyethylene Pipes: Considering the Effect of Sequentially Applying Pressure and Elevating Temperature (/2073-4360/14/18/3779)

by Yuchen Zhang (https://sciprofiles.com/profile/2143221?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Jianyong Shi (https://sciprofiles.com/profile/2286541?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Zhanlei Liu (https://sciprofiles.com/profile/author/NHZxUDlZTTNyUlJhRGZzUmR2UzNTV01vRlFXU3F5bWRwZmJDSGpLVVhHYz0=?utm_sourc , Zhenming Sun (https://sciprofiles.com/profile/author/WjBaa3p3K1kvcVdoWk9RQ1YrSnpUZnFiOW9COHF3MUxyUGJEb0JwOGZMcz0=?utm_sc and Xun Wu (https://sciprofiles.com/profile/2386841?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3779; https://doi.org/10.3390/polym14183779 (https://doi.org/10.3390/polym14183779) - 09 Sep 2022

Viewed by 834

Abstract High-density polyethylene (HDPE) materials have many applications in the municipal solid waste (MSW) landfills. HDPE gravity drainage pipes are commonly utilized in MSW landfills because of the polymer's resistance to harsh chemical conditions. When landfill wastes are freshly filled, the weight acting on **[...] Read more.**

(This article belongs to the Section **Polymer Analysis and Characterization (/journal/polymers/sections/Anal_Charact)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03779/article_deploy/html/images/polymers-14-03779-g001a-550.jpg?1663039650)

(https://pub.mdpi-res.com/polymers/polymers-14-03779/article_deploy/html/images/polymers-14-03779-g001b-550.jpg?1663039655)

(https://pub.mdpi-res.com/polymers/polymers-14-03779/article_deploy/html/images/polymers-14-03779-g002a-550.jpg?1663039653)

(https://pub.mdpi-res.com/polymers/polymers-14-03779/article_deploy/html/images/polymers-14-03779-g002b-550.jpg?1663039652)

(https://pub.mdpi-res.com/polymers/polymers-14-03779/article_deploy/html/images/polymers-14-03779-g003-550.jpg?1663039662)

(https://pub.mdpi-res.com/polymers/polymers-14-03779/article_deploy/html/images/polymers-14-03779-g004-550.jpg?1663039659)

(https://pub.mdpi-res.com/polymers/polymers-14-03779/article_deploy/html/images/polymers-14-03779-g005a-550.jpg?1663039647)

(https://pub.mdpi-res.com/polymers/polymers-14-03779/article_deploy/html/images/polymers-14-03779-g005b-550.jpg?1663039665)

(https://pub.mdpi-res.com/polymers/polymers-14-03779/article_deploy/html/images/polymers-14-03779-g006a-550.jpg?1663039655)

(https://pub.mdpi-res.com/polymers/polymers-14-03779/article_deploy/html/images/polymers-14-03779-g006b-550.jpg?1663039663)

Open Access Editorial (/2073-4360/14/18/3778/pdf?version=1662723107)

Bio and Synthetic Based Polymer Composite Materials (/2073-4360/14/18/3778)

by R. A. Ilyas (https://sciprofiles.com/profile/1386740?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), S. M. Sapuan (https://sciprofiles.com/profile/512036?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Emin Bayraktar (https://sciprofiles.com/profile/409365?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3778; https://doi.org/10.3390/polym14183778 (https://doi.org/10.3390/polym14183778) - 09 Sep 2022

Viewed by 1127

Abstract *Bio and Synthetic Based Polymer Composite Materials* is a newly opened Special Issue of *Polymers*, which aims to publish original and review papers on new scientific and applied research and make contributions to the findings and understanding of the reinforcing effects of **[...] Read more.**

(This article belongs to the Special Issue **Bio and Synthetic Based Polymer Composite Materials (/journal/polymers/special_issues/recycling_of_bio_and_synthetic_polymer_based_materials)**)

Open Access Article (/2073-4360/14/18/3777/pdf?version=1662722465)

Polyurethane/Vermiculite Foam Composite as Sustainable Material for Vertical Flame Retardant (/2073-4360/14/18/3777)

by Lívia R. P. Silva Tenório Alves (https://sciprofiles.com/profile/author/YkdLVVc4d0txZTB3S1pHWmFHUmk3NjE2aXpPOHc3eXN0dGpNbUNKUDl , Márcio Davi Tenório C. Alves (https://sciprofiles.com/profile/author/K0JxVUFxQXYyWCtFRzllallkOW9aQkR6TlJlMjBRVFJMQm1nSEJnejdxQT0 , Luzia M. Castro Honorio (https://sciprofiles.com/profile/author/YWlVRlIMZjZuZjhZU1pCYS9BYXVEWG5heURoRG1kNm9PU1d5anZVMmF6ND0 , Alan I. Moraes (https://sciprofiles.com/profile/898046?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Edson C. Silva-Filho (https://sciprofiles.com/profile/35173?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Ramón Peña-Garcia (https://sciprofiles.com/profile/1059819?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Marcelo B. Furtini (https://sciprofiles.com/profile/author/cU1LRHUxRkQ4cXFiL1FsWGZ3UWhXS1luekIRRnBEYXhhWjYyUG1nS20rVT0=?utm_s , Durcilene A. da Silva (https://sciprofiles.com/profile/2296147?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Josy A. Osajima (https://sciprofiles.com/profile/805497?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Back to TopTop

Polymers **2022**, *14*(18), 3777; **https://doi.org/10.3390/polym14183777 (https://doi.org/10.3390/polym14183777)** - 09 Sep 2022
Cited by 3 (/2073-4360/14/18/3777#metrics) | Viewed by 1224

Abstract Rigid polyurethane foams were prepared by the one-step expandable foam method using casting molding followed by forming clay-based composites. Polyurethane/vermiculite foam composites (PU/VMT) were controlled based on adding the percentage of clay in the formulation. The effects of composite modifications were evaluated by **[...] Read more.**
(This article belongs to the Special Issue **Advances in Sustainable Polyurethanes (/journal/polymers/special_issues/polyurethanes)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03777/article_deploy/html/images/polymers-14-03777-ag-550.jpg?1662722544)

(https://pub.mdpi-res.com/polymers/polymers-14-03777/article_deploy/html/images/polymers-14-03777-g001-550.jpg?1662722532)

(https://pub.mdpi-res.com/polymers/polymers-14-03777/article_deploy/html/images/polymers-14-03777-g002-550.jpg?1662722543)

(https://pub.mdpi-res.com/polymers/polymers-14-03777/article_deploy/html/images/polymers-14-03777-g003-550.jpg?1662722542)

(https://pub.mdpi-res.com/polymers/polymers-14-03777/article_deploy/html/images/polymers-14-03777-g004-550.jpg?1662722539)

(https://pub.mdpi-res.com/polymers/polymers-14-03777/article_deploy/html/images/polymers-14-03777-g005-550.jpg?1662722531)

(https://pub.mdpi-res.com/polymers/polymers-14-03777/article_deploy/html/images/polymers-14-03777-g006-550.jpg?1662722528)

Open Access Article **(/2073-4360/14/18/3776/pdf?version=1663636058)**

Lignocellulosic-Based Materials from Bean and Pistachio Pod Wastes for Dye-Contaminated Water Treatment: Optimization and Modeling of Indigo Carmine Sorption (/2073-4360/14/18/3776)

by
Gaël Ferdinand Kazé Nindjio (https://sciprofiles.com/profile/author/aU5xVkZCSDlsWlFscm1SaUJicmhMM3BJTU1uTGtNbHpqQWx3R0ZoM05Y
,
Rufis Fregue Tiegam Tagne (https://sciprofiles.com/profile/799546?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nar
,
Sherman Lesly Zambou Jiokeng (https://sciprofiles.com/profile/1189709?utm_source=mdpi.com&utm_medium=website&utm_campaign=avat
,
Cyrille Ghislain Fotsop (https://sciprofiles.com/profile/1319932?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
,
Aurelien Bopda (https://sciprofiles.com/profile/author/VEczVVN4UE5DLysreXh0cXhkblBjTWtncXVJL1NxSnlNK0JDNFFuQlgzbz0=?utm_source
,
Giscard Doungmo (https://sciprofiles.com/profile/2220482?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Ranil Clément Tonleu Temgoua (https://sciprofiles.com/profile/2276870?utm_source=mdpi.com&utm_medium=website&utm_campaign=avata
,
Ingo Doench (https://sciprofiles.com/profile/2392349?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Estella Tamungang Njoyim (https://sciprofiles.com/profile/author/R1lmUTU5Q3l0b283OWpzRGN4YVRQMERyekZJbXhxcE9Bd1RHNlQ0MDBldz
,
Arnaud Kamdem Tamo (https://sciprofiles.com/profile/1556614?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
,
Anayancy Osorio-Madrazo (https://sciprofiles.com/profile/258649?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nam
and
Ignas Kenfack Tonle (https://sciprofiles.com/profile/2219601?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3776; **https://doi.org/10.3390/polym14183776 (https://doi.org/10.3390/polym14183776)** - 09 Sep 2022
Cited by 4 (/2073-4360/14/18/3776#metrics) | Viewed by 1253

Abstract In this work, biomass lignocellulosic materials extracted via chemical and physical treatments from bean and pistachio pod waste were used for the optimized elimination of Indigo Carmine (IC) from aqueous medium, using a design of experiments methodology. The physicochemical properties of the studied **[...] Read more.**
(This article belongs to the Special Issue **Chitosan, Chitin, and Cellulose Nanofiber Biomaterials II (/journal/polymers/special_issues/LG3OL55E2F)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03776/article_deploy/html/images/polymers-14-03776-g001-550.jpg?1663636158)

(https://pub.mdpi-res.com/polymers/polymers-14-03776/article_deploy/html/images/polymers-14-03776-g002-550.jpg?1663636152)

(https://pub.mdpi-res.com/polymers/polymers-14-03776/article_deploy/html/images/polymers-14-03776-g003-550.jpg?1663636154)

(https://pub.mdpi-res.com/polymers/polymers-14-03776/article_deploy/html/images/polymers-14-03776-g004-550.jpg?1663636156)

(https://pub.mdpi-res.com/polymers/polymers-14-03776/article_deploy/html/images/polymers-14-03776-g005-550.jpg?1663636150)

(https://pub.mdpi-res.com/polymers/polymers-14-03776/article_deploy/html/images/polymers-14-03776-g006-550.jpg?1663636164)

(https://pub.mdpi-res.com/polymers/polymers-14-03776/article_deploy/html/images/polymers-14-03776-g007-550.jpg?1663636143)

(https://pub.mdpi-res.com/polymers/polymers-14-03776/article_deploy/html/images/polymers-14-03776-g008-550.jpg?1663636141)

(https://pub.mdpi-res.com/polymers/polymers-14-03776/article_deploy/html/images/polymers-14-03776-g009-550.jpg?1663636161)

(https://pub.mdpi-res.com/polymers/polymers-14-03776/article_deploy/html/images/polymers-14-03776-g010-550.jpg?1663636162)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03776/article_deploy/html/images/polymers-14-03776-g011-550.jpg?1663636153)

(https://pub.mdpi-res.com/polymers/polymers-14-03776/article_deploy/html/images/polymers-14-03776-g012-550.jpg?1663636159)

(https://pub.mdpi-res.com/polymers/polymers-14-03776/article_deploy/html/images/polymers-14-03776-sch001-550.jpg?1663636140)

Open Access Article (/2073-4360/14/18/3775/pdf?version=1662721262)

Quality Definition in Micro Injection Molding Process by Means of Surface Characterization Parameters (/2073-4360/14/18/3775)

by

Vincenzo Bellantone (https://sciprofiles.com/profile/210651?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Rossella Surace (https://sciprofiles.com/profile/514219?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Irene Fassi (https://sciprofiles.com/profile/17270?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3775; https://doi.org/10.3390/polym14183775 (https://doi.org/10.3390/polym14183775) - 09 Sep 2022

Cited by 4 (/2073-4360/14/18/3775#metrics) | Viewed by 1111

Abstract Quality evaluation of micro injection molded products is a complex task, in particular when instruments basing on contact methods are used and issues in measurements could arise due to the contact tool dimension not fitting well with extremely narrow features. Therefore, in these **[...] Read more.**

(This article belongs to the Special Issue **Recent Advances in Injection Molding of Polymers (** /journal/polymers/special_issues/injection_molding_polym **)**)

Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03775/article_deploy/html/images/polymers-14-03775-ag-550.jpg?1662721353)

(https://pub.mdpi-res.com/polymers/polymers-14-03775/article_deploy/html/images/polymers-14-03775-g001-550.jpg?1662721336)

(https://pub.mdpi-res.com/polymers/polymers-14-03775/article_deploy/html/images/polymers-14-03775-g002-550.jpg?1662721338)

(https://pub.mdpi-res.com/polymers/polymers-14-03775/article_deploy/html/images/polymers-14-03775-g003-550.jpg?1662721344)

(https://pub.mdpi-res.com/polymers/polymers-14-03775/article_deploy/html/images/polymers-14-03775-g004-550.jpg?1662721347)

(https://pub.mdpi-res.com/polymers/polymers-14-03775/article_deploy/html/images/polymers-14-03775-g005-550.jpg?1662721345)

(https://pub.mdpi-res.com/polymers/polymers-14-03775/article_deploy/html/images/polymers-14-03775-g006-550.jpg?1662721345)

(https://pub.mdpi-res.com/polymers/polymers-14-03775/article_deploy/html/images/polymers-14-03775-g007-550.jpg?1662721334)

(https://pub.mdpi-res.com/polymers/polymers-14-03775/article_deploy/html/images/polymers-14-03775-g008-550.jpg?1662721341)

(https://pub.mdpi-res.com/polymers/polymers-14-03775/article_deploy/html/images/polymers-14-03775-g009-550.jpg?1662721338)

(https://pub.mdpi-res.com/polymers/polymers-14-03775/article_deploy/html/images/polymers-14-03775-g010-550.jpg?1662721349)

(https://pub.mdpi-res.com/polymers/polymers-14-03775/article_deploy/html/images/polymers-14-03775-g011-550.jpg?1662721351)

(https://pub.mdpi-res.com/polymers/polymers-14-03775/article_deploy/html/images/polymers-14-03775-g012-550.jpg?1662721340)

(https://pub.mdpi-res.com/polymers/polymers-14-03775/article_deploy/html/images/polymers-14-03775-g013-550.jpg?1662721342)

Open Access Article (/2073-4360/14/18/3774/pdf?version=1662715150)

Mechanical Properties and In Vitro Biocompatibility of Hybrid Polymer-HA/BAG Ceramic Dental Materials (/2073-4360/14/18/3774)

by Yuanyuan Chen (https://sciprofiles.com/profile/2346309?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Cheng Sun (https://sciprofiles.com/profile/author/U0hkOUt1Qmxva3RPNndvQlIGY0JvbUl3KzNWbmNzSXUwNW9ob3c5NGo4bz0=?utm_source

, Jinfang Cao (https://sciprofiles.com/profile/author/b2xPRkVxUk5ra09OR0kvekErZEZ4dz09?utm_source=mdpi.com&utm_medium=website&ut

, Yuanyuan Wu (https://sciprofiles.com/profile/author/dGdRWTQ1VFF5YWt4RzF4enRaR1RHVXk3UHQ4d3N0VmRjdEM1TDJkM285UT0=?utm_so

, Bencang Cui (https://sciprofiles.com/profile/325388?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Jianfeng Ma (https://sciprofiles.com/profile/889505?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Huining Wang (https://sciprofiles.com/profile/author/RXp6NS9PQnBOdUVxd3pzdFFMTWtWT2VDdFF4SzlaeFAyUE5zMUlSc09LWT0=?utm_sou

Polymers **2022**, *14*(18), 3774; https://doi.org/10.3390/polym14183774 (https://doi.org/10.3390/polym14183774) - 09 Sep 2022

Cited by 2 (/2073-4360/14/18/3774#metrics) | Viewed by 1279

Abstract The aim of this study is to prepare hybrid polymer–ceramic dental materials for chairside computer-aided design/computer-aided manufacturing (CAD/CAM) applications. The hybrid polymer–ceramic materials were fabricated via infiltrating polymerizable monomer mixtures into sintered hydroxyapatite/bioactive glass (HA/BAG) ceramic blocks and thermo-curing. The microstructure was observed **[...] Read more.**

(This article belongs to the Special Issue **Polymer Materials and Technology: Dental 3D Printing (** /journal/polymers/special_issues/3P18757Z1X **)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03774/article_deploy/html/images/polymers-14-03774-g001-550.jpg?1662715245)

(https://pub.mdpi-res.com/polymers/polymers-14-03774/article_deploy/html/images/polymers-14-03774-g002-550.jpg?1662715247)

(https://pub.mdpi-res.com/polymers/polymers-14-03774/article_deploy/html/images/polymers-14-03774-g003-550.jpg?1662715234)

(https://pub.mdpi-res.com/polymers/polymers-14-03774/article_deploy/html/images/polymers-14-03774-g004-550.jpg?1662715242)

(https://pub.mdpi-res.com/polymers/polymers-14-03774/article_deploy/html/images/polymers-14-03774-g005-550.jpg?1662715236)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03774/article_deploy/html/images/polymers-14-03774-g006-550.jpg?1662715238)

(https://pub.mdpi-res.com/polymers/polymers-14-03774/article_deploy/html/images/polymers-14-03774-g007-550.jpg?1662715240)

(https://pub.mdpi-res.com/polymers/polymers-14-03774/article_deploy/html/images/polymers-14-03774-g008-550.jpg?1662715235)

(https://pub.mdpi-res.com/polymers/polymers-14-03774/article_deploy/html/images/polymers-14-03774-g009-550.jpg?1662715229)

(https://pub.mdpi-res.com/polymers/polymers-14-03774/article_deploy/html/images/polymers-14-03774-g010-550.jpg?1662715227)

(https://pub.mdpi-res.com/polymers/polymers-14-03774/article_deploy/html/images/polymers-14-03774-g011-550.jpg?1662715248)

(https://pub.mdpi-res.com/polymers/polymers-14-03774/article_deploy/html/images/polymers-14-03774-g012-550.jpg?1662715238)

(https://pub.mdpi-res.com/polymers/polymers-14-03774/article_deploy/html/images/polymers-14-03774-g013-550.jpg?1662715228)

(https://pub.mdpi-res.com/polymers/polymers-14-03774/article_deploy/html/images/polymers-14-03774-g014-550.jpg?1662715244)

(https://pub.mdpi-res.com/polymers/polymers-14-03774/article_deploy/html/images/polymers-14-03774-g015-550.jpg?1662715247)

(https://pub.mdpi-res.com/polymers/polymers-14-03774/article_deploy/html/images/polymers-14-03774-g016-550.jpg?1662715237)

Open Access Article (/2073-4360/14/18/3773/pdf?version=1663229831)

Protection against Paraquat-Induced Oxidative Stress by *Curcuma longa* Extract-Loaded Polymeric Nanoparticles in Zebrafish Embryos (/2073-4360/14/18/3773)

by Ana Teixeira (https://sciprofiles.com/profile/2279231?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Marisa P. Sárria (https://sciprofiles.com/profile/504577?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Inês Pinto (https://sciprofiles.com/profile/2436576?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Begoña Espiña (https://sciprofiles.com/profile/588489?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Andreia C. Gomes (https://sciprofiles.com/profile/819903?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Alberto C. P. Dias (https://sciprofiles.com/profile/2639333?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3773; https://doi.org/10.3390/polym14183773 (https://doi.org/10.3390/polym14183773) - 09 Sep 2022

Cited by 3 (/2073-4360/14/18/3773#metrics) | Viewed by 1830

Abstract The link between oxidative stress and environmental factors plays an important role in chronic degenerative diseases; therefore, exogenous antioxidants could be an effective alternative to combat disease progression and/or most significant symptoms. *Curcuma longa* L. (CL), commonly known as turmeric, is mostly composed **[...] Read more.**

(This article belongs to the Special Issue **Organic Polymers for Encapsulation of Drugs, Food Ingredients and Agrochemicals (/journal/polymers/special_issues/organic_poly_encapsulation)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03773/article_deploy/html/images/polymers-14-03773-ag-550.jpg?1664162453)

(https://pub.mdpi-res.com/polymers/polymers-14-03773/article_deploy/html/images/polymers-14-03773-g001-550.jpg?1663284727)

(https://pub.mdpi-res.com/polymers/polymers-14-03773/article_deploy/html/images/polymers-14-03773-g002-550.jpg?1663284728)

(https://pub.mdpi-res.com/polymers/polymers-14-03773/article_deploy/html/images/polymers-14-03773-g003-550.jpg?1663284722)

(https://pub.mdpi-res.com/polymers/polymers-14-03773/article_deploy/html/images/polymers-14-03773-g004-550.jpg?1663284724)

Open Access Review (/2073-4360/14/18/3772/pdf?version=1662711951)

Polymer-Based Hydrogels Enriched with Essential Oils: A Promising Approach for the Treatment of Infected Wounds (/2073-4360/14/18/3772)

by Sibusiso Alven (https://sciprofiles.com/profile/777438?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Sijongesonke Peter (https://sciprofiles.com/profile/781603?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Blessing Atim Aderibigbe (https://sciprofiles.com/profile/439825?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name

Polymers **2022**, *14*(18), 3772; https://doi.org/10.3390/polym14183772 (https://doi.org/10.3390/polym14183772) - 09 Sep 2022

Cited by 4 (/2073-4360/14/18/3772#metrics) | Viewed by 2249

Abstract Among the factors that delay the wound healing process in chronic wounds, bacterial infections are a common cause of acute wounds becoming chronic. Various therapeutic agents, such as antibiotics, metallic nanoparticles, and essential oils have been employed to treat infected wounds and also **[...] Read more.**

(This article belongs to the Section **Biomacromolecules, Biobased and Biodegradable Polymers (/journal/polymers/sections/Biomacromol_Biobased_Biodegradable_Polymers)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03772/article_deploy/html/images/polymers-14-03772-g001-550.jpg?1662712037)

(https://pub.mdpi-res.com/polymers/polymers-14-03772/article_deploy/html/images/polymers-14-03772-g002-550.jpg?1662712026)

(https://pub.mdpi-res.com/polymers/polymers-14-03772/article_deploy/html/images/polymers-14-03772-g003-550.jpg?1662712033)

(https://pub.mdpi-res.com/polymers/polymers-14-03772/article_deploy/html/images/polymers-14-03772-g004-550.jpg?1662712036)

(https://pub.mdpi-res.com/polymers/polymers-14-03772/article_deploy/html/images/polymers-14-03772-g005-550.jpg?1662712024)

(https://pub.mdpi-res.com/polymers/polymers-14-03772/article_deploy/html/images/polymers-14-03772-g006-550.jpg?1662712025)

(https://pub.mdpi-res.com/polymers/polymers-14-03772/article_deploy/html/images/polymers-14-03772-g007-550.jpg?1662712023)

Open Access Article (/2073-4360/14/18/3771/pdf?version=1662704606) Back to TopTop

Compressive Mechanical Properties of Larch Wood in Different Grain Orientations (/2073-4360/14/18/3771)

by

Jingcheng Sun (https://sciprofiles.com/profile/author/QmE2ekQwQ2toaWJmb2FwdjkzS3NhNTlOT3RiQmxRNTBuL2ZNeit0eHNCST0=?utm_sou
,
Rongjun Zhao (https://sciprofiles.com/profile/439535?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Yong Zhong (https://sciprofiles.com/profile/134781?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Yongping Chen (https://sciprofiles.com/profile/2378639?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3771; **https://doi.org/10.3390/polym14183771 (https://doi.org/10.3390/polym14183771)** - 09 Sep 2022

Cited by 5 (/2073-4360/14/18/3771#metrics) | Viewed by 1243

Abstract As a green and low-carbon natural polymer material, wood has always been popular in engineering applications owing to its excellent physical and mechanical properties. In this study, compression tests in conjunction with in situ test methods (DIC method) were used to investigate the **[...] Read more.**

(This article belongs to the Special Issue **Eco-Friendly Supramolecular Polymeric Materials (/journal/polymers/special_issues/70240C03D9)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03771/article_deploy/html/images/polymers-14-03771-g001-550.jpg?1662704689)

(https://pub.mdpi-res.com/polymers/polymers-14-03771/article_deploy/html/images/polymers-14-03771-g002-550.jpg?1662704689)

(https://pub.mdpi-res.com/polymers/polymers-14-03771/article_deploy/html/images/polymers-14-03771-g003-550.jpg?1662704693)

(https://pub.mdpi-res.com/polymers/polymers-14-03771/article_deploy/html/images/polymers-14-03771-g004-550.jpg?1662704687)

(https://pub.mdpi-res.com/polymers/polymers-14-03771/article_deploy/html/images/polymers-14-03771-g005-550.jpg?1662704688)

(https://pub.mdpi-res.com/polymers/polymers-14-03771/article_deploy/html/images/polymers-14-03771-g006-550.jpg?1662704694)

(https://pub.mdpi-res.com/polymers/polymers-14-03771/article_deploy/html/images/polymers-14-03771-g007-550.jpg?1662704691)

(https://pub.mdpi-res.com/polymers/polymers-14-03771/article_deploy/html/images/polymers-14-03771-g008-550.jpg?1662704688)

(https://pub.mdpi-res.com/polymers/polymers-14-03771/article_deploy/html/images/polymers-14-03771-g009-550.jpg?1662704690)

Open Access Article **(/2073-4360/14/18/3770/pdf?version=1663288888)**

Formulation of Modified-Release Bilayer Tablets of Atorvastatin and Ezetimibe: An *In-Vitro* and *In-Vivo* Analysis (/2073-4360/14/18/3770)

by

Iqra Mubeen (https://sciprofiles.com/profile/author/eXlnek9FN0ZtbHNYV3dXREQ1akplc0QzYk9LRFJQOWdOK1VJQTdTR2pWVT0=?utm_sourc
,
Muhammad Zaman (https://sciprofiles.com/profile/214383?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Muhammad Farooq (https://sciprofiles.com/profile/2234017?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Asim Mehmood (https://sciprofiles.com/profile/236784?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Fahad Khan Azeez (https://sciprofiles.com/profile/author/QWZ1T25WOVFHaW95c09Db0Q0RWFiM2JYQjlmRWcvWjRHM3FDSXAzeWxSND0=?u
,
Wajiha Rehman (https://sciprofiles.com/profile/author/ZlRhRnR6Y0xBeExxUHVPTzdoRGo2Ui9xdzQvZVI5cWd2Yktla25NbGdYZz0=?utm_sourc
,
Sohail Akhtar (https://sciprofiles.com/profile/2253009?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Mueen Ahmad Chaudhry (https://sciprofiles.com/profile/author/amxzUDZJUlpEWVhVSTk3NmZ2M09kZVhYdm0yUUVabUI1cGRFT1lHNzR6bz0=
,
Muhammad Hammad Butt (https://sciprofiles.com/profile/1644741?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nar
,
Qurat-ul-ain Shamim (https://sciprofiles.com/profile/author/Zk5aSHJVRmZYN21yaWdUWDFHTXgvckVGd3RUZktlb3pGK2ZzODNadGVsRT0=?u
,
Sherjeel Adnan (https://sciprofiles.com/profile/author/NmRWR04vZEp1S0k2c29NblVxcEZiY0tHRHRNc2dRRVI1MUNKTm1xSllaZz0=?utm_sour
,
Muhammad Rizwan Khan (https://sciprofiles.com/profile/author/eU4zT0hTMkFzeVB0QmxSZWZyTEI1VlZlVk41ZU0zaldKUXJlNmQ0NnpxVT0=?
and
Atta-ur-Rehman (https://sciprofiles.com/profile/author/QlBRZGJUclp1cGZTT2YrQkcwUGVnNmY1ZkNhallROXlJdFoxQmN1RDFzQT0=?utm_so

Polymers **2022**, *14*(18), 3770; **https://doi.org/10.3390/polym14183770 (https://doi.org/10.3390/polym14183770)** - 09 Sep 2022

Cited by 1 (/2073-4360/14/18/3770#metrics) | Viewed by 1590

Abstract The objective of this work was to formulate co-loaded bilayer tablets containing ezetimibe (EZB) and atorvastatin (ATC). ATC loaded in the immediate-release (IR) layer is an HMG CoA reductase inhibitor, while EZB, added in the sustained-release (SR) layer, is a lipid-lowering agent. This **[...] Read more.**

(This article belongs to the Special Issue **Advances in Sustainable Polymers: Processing, Modeling, Properties and Applications (/journal/polymers/special_issues/0264U0K965)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03770/article_deploy/html/images/polymers-14-03770-g001-550.jpg?1663288965)

(https://pub.mdpi-res.com/polymers/polymers-14-03770/article_deploy/html/images/polymers-14-03770-g002-550.jpg?1663288977)

(https://pub.mdpi-res.com/polymers/polymers-14-03770/article_deploy/html/images/polymers-14-03770-g003-550.jpg?1663288970)

(https://pub.mdpi-res.com/polymers/polymers-14-03770/article_deploy/html/images/polymers-14-03770-g004-550.jpg?1663288964)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03770/article_deploy/html/images/polymers-14-03770-g005-550.jpg?1663288968)

(https://pub.mdpi-res.com/polymers/polymers-14-03770/article_deploy/html/images/polymers-14-03770-g006-550.jpg?1663288963)

(https://pub.mdpi-res.com/polymers/polymers-14-03770/article_deploy/html/images/polymers-14-03770-g007-550.jpg?1663288967)

(https://pub.mdpi-res.com/polymers/polymers-14-03770/article_deploy/html/images/polymers-14-03770-g008-550.jpg?1663288975)

Open Access Article (/2073-4360/14/18/3769/pdf?version=1663314540)

Characterization of High Molecular Weight Pneumococcal Conjugate by SEC-MALS and AF4-MALS (/2073-4360/14/18/3769)

by James Z. Deng (https://sciprofiles.com/profile/2352310?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Jason Lin (https://sciprofiles.com/profile/author/UFdrRDdodi9FSUJLU1R5VUFud0w4dz09?utm_source=mdpi.com&utm_medium=website&utm, Michelle Chen (https://sciprofiles.com/profile/author/OWNXeVRVYURMeE5JSHVtSklCQkNHQT09?utm_source=mdpi.com&utm_medium=webs, Catherine Lancaster (https://sciprofiles.com/profile/author/MkNhZDRZbElrRzlrUkphUDRobjBleE9YT2ZsRWNZTGd2aHF1STlkY0tCdz0=?utm_s and Ping Zhuang (https://sciprofiles.com/profile/author/cXNiSmFaMWkvVHBlZUM1U1QzbzNoWjBZZ0s1OFF1UWszZ1ljUVhKbnpGMD0=?utm_sour

Polymers **2022**, *14*(18), 3769; https://doi.org/10.3390/polym14183769 (https://doi.org/10.3390/polym14183769) - 09 Sep 2022

Cited by 4 (/2073-4360/14/18/3769#metrics) | Viewed by 2011

Abstract Infections by Streptococcus pneumoniae can cause serious pneumococcal diseases and other medical complications among patients. Polysaccharide-based vaccines have been successfully developed as prophylactic agents against such deadly bacterial infections. In the 1980s, PNEUMOVAX® 23 were introduced as the first pneumococcal polysaccharide vaccines **[...] Read more.**

(This article belongs to the Special Issue **Advanced Pharmaceutical Polymers (/journal/polymers/special_issues/pharmaceutical_poly)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03769/article_deploy/html/images/polymers-14-03769-g001-550.jpg?1663314618)

(https://pub.mdpi-res.com/polymers/polymers-14-03769/article_deploy/html/images/polymers-14-03769-g002-550.jpg?1663314614)

(https://pub.mdpi-res.com/polymers/polymers-14-03769/article_deploy/html/images/polymers-14-03769-g003-550.jpg?1663314617)

(https://pub.mdpi-res.com/polymers/polymers-14-03769/article_deploy/html/images/polymers-14-03769-g004-550.jpg?1663314616)

(https://pub.mdpi-res.com/polymers/polymers-14-03769/article_deploy/html/images/polymers-14-03769-g005-550.jpg?1663314617)

(https://pub.mdpi-res.com/polymers/polymers-14-03769/article_deploy/html/images/polymers-14-03769-g006-550.jpg?1663314615)

Open Access Article (/2073-4360/14/18/3768/pdf?version=1662648074)

Fire-Retardant Property of Hexasubstituted Cyclotriphosphazene Derivatives with Schiff Base Linking Unit Applied as an Additives in Polyurethane Coating for Wood Fabrication (/2073-4360/14/18/3768)

by Nurul Atiqah Mohd Taip (https://sciprofiles.com/profile/2402218?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Zuhair Jamain (https://sciprofiles.com/profile/1042222?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Ismawati Palle (https://sciprofiles.com/profile/2257894?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3768; https://doi.org/10.3390/polym14183768 (https://doi.org/10.3390/polym14183768) - 08 Sep 2022

Cited by 3 (/2073-4360/14/18/3768#metrics) | Viewed by 1078

Abstract A series of new hexasubstituted cyclotriphosphaze derivatives containing Schiff base linkages were successfully synthesized and characterized. The series contains different terminal substituents of pentyl and tetradecyl. Fourier transform infrared spectroscopy (FTIR), nuclear magnetic resonance spectroscopy (NMR), and carbon, hydrogen, and nitrogen (CHN) elemental **[...] Read more.**

(This article belongs to the Special Issue **Polymer Surface Modification: From Structure to Properties (/journal/polymers/special_issues/surface_modifi_structure_properties)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03768/article_deploy/html/images/polymers-14-03768-g001-550.jpg?1662648137)

(https://pub.mdpi-res.com/polymers/polymers-14-03768/article_deploy/html/images/polymers-14-03768-g002-550.jpg?1662648137)

(https://pub.mdpi-res.com/polymers/polymers-14-03768/article_deploy/html/images/polymers-14-03768-g003-550.jpg?1662648146)

(https://pub.mdpi-res.com/polymers/polymers-14-03768/article_deploy/html/images/polymers-14-03768-g004-550.jpg?1662648141)

(https://pub.mdpi-res.com/polymers/polymers-14-03768/article_deploy/html/images/polymers-14-03768-g005-550.jpg?1662648143)

(https://pub.mdpi-res.com/polymers/polymers-14-03768/article_deploy/html/images/polymers-14-03768-g006-550.jpg?1662648145)

(https://pub.mdpi-res.com/polymers/polymers-14-03768/article_deploy/html/images/polymers-14-03768-sch001-550.jpg?1662648147)

(https://pub.mdpi-res.com/polymers/polymers-14-03768/article_deploy/html/images/polymers-14-03768-sch002-550.jpg?1662648147)

(https://pub.mdpi-res.com/polymers/polymers-14-03768/article_deploy/html/images/polymers-14-03768-sch003-550.jpg?1662648139)

Open Access Article (/2073-4360/14/18/3767/pdf?version=1662689460)

Influence of Incorporating 5% Weight Titanium Oxide Nanoparticles on Flexural Strength, Micro-Hardness, Surface Roughness and Water Sorption of Dental Self-Cured Acrylic Resin (/2073-4360/14/18/3767)

Back to TopTop

by Rasha M. Abdelraouf (https://sciprofiles.com/profile/1566517?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Rania E. Bayoumi (https://sciprofiles.com/profile/author/T3lOSi8rckE5VThoWWpjWDFhQUlXZ1VWUWcvVk1YNVZpSDZ4L2xvRy9BWT0=?utm_ and Tamer M. Hamdy (https://sciprofiles.com/profile/358006?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3767; https://doi.org/10.3390/polym14183767 (https://doi.org/10.3390/polym14183767) - 08 Sep 2022

Cited by 7 (/2073-4360/14/18/3767#metrics) | Viewed by 1291

Abstract Background: Polymethyl methacrylate (PMMA) is used in fabricating acrylic denture bases. Repairing a fractured acrylic denture base can be done by self-cured PMMA, yet this is still a weak point after repair. The aim of this study was to evaluate the effect of **[...] Read more.**

(This article belongs to the Special Issue **Chemical and Mechano-Chemical Modification of Polymers and Organic Materials** (/journal/polymers/special_issues/mechanochemical_treat_polym_organic_mater))

► **Show Figures**

(https://pub.mdpi-res.com/polymers/polymers-14-03767/article_deploy/html/images/polymers-14-03767-g001-550.jpg?1662689538)

(https://pub.mdpi-res.com/polymers/polymers-14-03767/article_deploy/html/images/polymers-14-03767-g002-550.jpg?1662689537)

(https://pub.mdpi-res.com/polymers/polymers-14-03767/article_deploy/html/images/polymers-14-03767-g003-550.jpg?1662689542)

Open Access Article (/2073-4360/14/18/3766/pdf?version=1662640150)

Stretchable and Self-Healable Graphene–Polymer Conductive Composite for Wearable EMG Sensor (/2073-4360/14/18/3766)

by Jihyang Song (https://sciprofiles.com/profile/2366160?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Yewon Kim (https://sciprofiles.com/profile/2366155?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Kyumin Kang (https://sciprofiles.com/profile/1643382?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Sangkyu Lee (https://sciprofiles.com/profile/937717?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Mikyung Shin (https://sciprofiles.com/profile/1176823?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Donghee Son (https://sciprofiles.com/profile/302799?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3766; https://doi.org/10.3390/polym14183766 (https://doi.org/10.3390/polym14183766) - 08 Sep 2022

Cited by 7 (/2073-4360/14/18/3766#metrics) | Viewed by 2389

Abstract In bioelectronics, stretchable and self-healable electrodes can reliably measure electrophysiological signals from the human body because they have good modulus matching with tissue and high durability. In particular, the polymer–graphene composite has advantages when it is used as an electrode for bioelectronic sensor **[...] Read more.**

(This article belongs to the Special Issue **Polymers in Sensors and Biosensors Design** (/journal/polymers/special_issues/polymers_sensors_biosensors_design))

► **Show Figures**

(https://pub.mdpi-res.com/polymers/polymers-14-03766/article_deploy/html/images/polymers-14-03766-ag-550.jpg?1662640218)

(https://pub.mdpi-res.com/polymers/polymers-14-03766/article_deploy/html/images/polymers-14-03766-g001-550.jpg?1662640216)

(https://pub.mdpi-res.com/polymers/polymers-14-03766/article_deploy/html/images/polymers-14-03766-g002-550.jpg?1662640216)

(https://pub.mdpi-res.com/polymers/polymers-14-03766/article_deploy/html/images/polymers-14-03766-g003-550.jpg?1662640218)

(https://pub.mdpi-res.com/polymers/polymers-14-03766/article_deploy/html/images/polymers-14-03766-g004-550.jpg?1662640215)

Open Access Article (/2073-4360/14/18/3765/pdf?version=1662717533)

Effect of Single and Synergistic Reinforcement of PVA Fiber and Nano-SiO_2 on Workability and Compressive Strength of Geopolymer Composites (/2073-4360/14/18/3765)

by Peng Zhang (https://sciprofiles.com/profile/693873?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Shiyao Wei (https://sciprofiles.com/profile/author/Z1dNeWJhNUJkZDdOYXNkUnNyZmk3YlJQeDk5cGNJYzFUTjVpMDdKWW5XRT0=?utm_sour , Yuanxun Zheng (https://sciprofiles.com/profile/677937?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Fei Wang (https://sciprofiles.com/profile/2399568?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Shaowei Hu (https://sciprofiles.com/profile/723776?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3765; https://doi.org/10.3390/polym14183765 (https://doi.org/10.3390/polym14183765) - 08 Sep 2022

Cited by 36 (/2073-4360/14/18/3765#metrics) | Viewed by 1464

Abstract Geopolymer composites can be used as a proper substitute for ordinary Portland cement, which can reduce carbon dioxide (CO_2) emissions and make rational use of industrial waste. In this study, an investigation of the workability and compressive strength of geopolymer composites **[...] Read more.**

(This article belongs to the Special Issue **Recent Developments in Geopolymer Composites** (/journal/polymers/special_issues/recent_adv_geopoly_compos))

► **Show Figures**

(https://pub.mdpi-res.com/polymers/polymers-14-03765/article_deploy/html/images/polymers-14-03765-g001-550.jpg?1662717608)

(https://pub.mdpi-res.com/polymers/polymers-14-03765/article_deploy/html/images/polymers-14-03765-g002-550.jpg?1662717613)

(https://pub.mdpi-res.com/polymers/polymers-14-03765/article_deploy/html/images/polymers-14-03765-g003-550.jpg?1662717612)

(https://pub.mdpi-res.com/polymers/polymers-14-03765/article_deploy/html/images/polymers-14-03765-g004-550.jpg?1662717606)

(https://pub.mdpi-res.com/polymers/polymers-14-03765/article_deploy/html/images/polymers-14-03765-g005-550.jpg?1662717614)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03765/article_deploy/html/images/polymers-14-03765-g006-550.jpg?1662717605)

(https://pub.mdpi-res.com/polymers/polymers-14-03765/article_deploy/html/images/polymers-14-03765-g007-550.jpg?1662717612)

(https://pub.mdpi-res.com/polymers/polymers-14-03765/article_deploy/html/images/polymers-14-03765-g008a-550.jpg?1662717607)

(https://pub.mdpi-res.com/polymers/polymers-14-03765/article_deploy/html/images/polymers-14-03765-g008b-550.jpg?1662717609)

(https://pub.mdpi-res.com/polymers/polymers-14-03765/article_deploy/html/images/polymers-14-03765-g009a-550.jpg?1662717610)

(https://pub.mdpi-res.com/polymers/polymers-14-03765/article_deploy/html/images/polymers-14-03765-g009b-550.jpg?1662717611)

Open Access Article (/2073-4360/14/18/3764/pdf?version=1662636463)

Effect of Diatomite on the Thermal Degradation Behavior of Polypropylene and Formation of Graphene Products (/2073-4360/14/18/3764)

by Yankun Chen (https://sciprofiles.com/profile/2012108?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Biao Wang (https://sciprofiles.com/profile/2012438?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3764; https://doi.org/10.3390/polym14183764 (https://doi.org/10.3390/polym14183764) - 08 Sep 2022

Viewed by 1295

Abstract In this work, the thermogravimetry–Fourier transform infrared spectroscopy (TG–FTIR) and gas chromatography–mass spectrometry (GC–MS) techniques are used to investigate the thermal degradation behavior of polypropylene (PP) with 20 wt.% diatomite (DM). The initial decomposition temperature of these blends was 17 °C lower than **[...] Read more.**

(This article belongs to the Special Issue **Polymer and Composites: Degradation, Recycling and Application (/journal/polymers/special_issues/degradation_recycling)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03764/article_deploy/html/images/polymers-14-03764-g001-550.jpg?1662636547)

(https://pub.mdpi-res.com/polymers/polymers-14-03764/article_deploy/html/images/polymers-14-03764-g002-550.jpg?1662636542)

(https://pub.mdpi-res.com/polymers/polymers-14-03764/article_deploy/html/images/polymers-14-03764-g003a-550.jpg?1662636541)

(https://pub.mdpi-res.com/polymers/polymers-14-03764/article_deploy/html/images/polymers-14-03764-g003b-550.jpg?1662636548)

(https://pub.mdpi-res.com/polymers/polymers-14-03764/article_deploy/html/images/polymers-14-03764-g004-550.jpg?1662636540)

(https://pub.mdpi-res.com/polymers/polymers-14-03764/article_deploy/html/images/polymers-14-03764-g005-550.jpg?1662636549)

(https://pub.mdpi-res.com/polymers/polymers-14-03764/article_deploy/html/images/polymers-14-03764-g006-550.jpg?1662636544)

Open Access Article (/2073-4360/14/18/3763/pdf?version=1662637722)

Fabrication of Graphene-Modified Styrene–Acrylic Emulsion by In Situ Aqueous Polymerization (/2073-4360/14/18/3763)

by Yalin Li (https://sciprofiles.com/profile/2294167?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Jieling Luo (https://sciprofiles.com/profile/author/SllrbkNQL3QzNW9pUzEwUnB3VEMxV2dhWWZPWEpmSm1aWjhGeGlqbUdwST0=?utm_sou, Baoquan Huang (https://sciprofiles.com/profile/848561?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Hongjun Jin (https://sciprofiles.com/profile/2294170?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Xiaoli Sun (https://sciprofiles.com/profile/1896577?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Changlin Cao (https://sciprofiles.com/profile/1633751?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Qinghua Chen (https://sciprofiles.com/profile/718241?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Qingrong Qian (https://sciprofiles.com/profile/628681?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3763; https://doi.org/10.3390/polym14183763 (https://doi.org/10.3390/polym14183763) - 08 Sep 2022

Cited by 4 (/2073-4360/14/18/3763#metrics) | Viewed by 1550

Abstract With the aim of developing green coatings, styrene–acrylic emulsion has been widely used in architectural coatings due to its excellent environmental protection and energy conservation. Nevertheless, the lack of water and oxygen resistance of water-based styrofoam coatings has promoted various nanomaterials being studied **[...] Read more.**

(This article belongs to the Special Issue **Graphene-Based Polymer Composites and Their Applications (/journal/polymers/special_issues/Graphene_based_Polymer_Composites_Applications)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03763/article_deploy/html/images/polymers-14-03763-g001-550.jpg?1662637787)

(https://pub.mdpi-res.com/polymers/polymers-14-03763/article_deploy/html/images/polymers-14-03763-g002-550.jpg?1662637796)

(https://pub.mdpi-res.com/polymers/polymers-14-03763/article_deploy/html/images/polymers-14-03763-g003-550.jpg?1662637789)

(https://pub.mdpi-res.com/polymers/polymers-14-03763/article_deploy/html/images/polymers-14-03763-g004-550.jpg?1662637794)

(https://pub.mdpi-res.com/polymers/polymers-14-03763/article_deploy/html/images/polymers-14-03763-g005-550.jpg?1662637792)

(https://pub.mdpi-res.com/polymers/polymers-14-03763/article_deploy/html/images/polymers-14-03763-sch001-550.jpg?1662637798)

Open Access Article (/2073-4360/14/18/3762/pdf?version=1663567292)

Predictive Shapes of Ellipsoid PPDL-PTHF Copolymer Particles Prepared by the Phantom Stretching Technique (/2073-4360/14/18/3762)

by Christian Wischke (https://sciprofiles.com/profile/2354417?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and

Back to TopTop

Dieter Hofmann (https://sciprofiles.com/profile/author/Rk1QVjlSeXBPNzcwdnF3Njgxd2M2dXkyU2lJQS84VEZyclRhOTMxV09oQT0=?utm_sourc

Polymers **2022**, *14*(18), 3762; https://doi.org/10.3390/polym14183762 (https://doi.org/10.3390/polym14183762) - 08 Sep 2022

Cited by 1 (/2073-4360/14/18/3762#metrics) | Viewed by 900

Abstract Ellipsoidal polymer particles can be prepared from spheres by unidirectional stretching at elevated temperatures, while the particles' aspect ratios (*AR*) that result from this phantom stretching methodology are often not precisely predictable. Here, an elastic deformation model was exemplarily evaluated for **[...] Read more.**

(This article belongs to the Section **Polymer Chemistry (/journal/polymers/sections/Polymer_Chemistry)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03762/article_deploy/html/images/polymers-14-03762-g001-550.jpg?1663567360)

(https://pub.mdpi-res.com/polymers/polymers-14-03762/article_deploy/html/images/polymers-14-03762-g002-550.jpg?1663567357)

(https://pub.mdpi-res.com/polymers/polymers-14-03762/article_deploy/html/images/polymers-14-03762-g003-550.jpg?1663567355)

(https://pub.mdpi-res.com/polymers/polymers-14-03762/article_deploy/html/images/polymers-14-03762-g004-550.jpg?1663567359)

(https://pub.mdpi-res.com/polymers/polymers-14-03762/article_deploy/html/images/polymers-14-03762-g005-550.jpg?1663567358)

Open Access Article (/2073-4360/14/18/3761/pdf?version=1662689016)

Thermal Degradation Characteristics of Styrene-Butadiene-Styrene Copolymer Asphalt Binder Filled with an Inorganic Flame-Retarding Agent (/2073-4360/14/18/3761)

by Xiaobing Chen (https://sciprofiles.com/profile/1029934?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Zhenyu Ma (https://sciprofiles.com/profile/2211476?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Jianguang Zhou (https://sciprofiles.com/profile/author/RDg0OEVRRmlxeFpBdjVleVpUbkRaUT09?utm_source=mdpi.com&utm_medium=webs, Juntian Wang (https://sciprofiles.com/profile/1483334?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Xiaorui Zhang (https://sciprofiles.com/profile/1482983?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Ronglong Zhao (https://sciprofiles.com/profile/author/NGo4cHpVTDFRZ0k5NnhlRG41R0ZjRDdlak5WUDNMUitlVC8yS0Q4NjltUT0=?utm_sourc and Jinhu Tong (https://sciprofiles.com/profile/author/NjZJZnVXM0lYaXBoeGludGYwWnV5MGJOSHM2L08ra056TTJpQ3BQZzd0WT0=?utm_source

Polymers **2022**, *14*(18), 3761; https://doi.org/10.3390/polym14183761 (https://doi.org/10.3390/polym14183761) - 08 Sep 2022

Cited by 3 (/2073-4360/14/18/3761#metrics) | Viewed by 1179

Abstract Asphalt binder is a complex mixture of dark brown polymers composed of hydrocarbons with generally poor fire resistance. To improve its flame retardancy when used in tunnel asphalt pavements, a new inorganic flame-retardant filler (FR) containing magnesium hydroxide, aluminum hydroxide, inorganic phosphate, and **[...] Read more.**

(This article belongs to the Special Issue **Advanced Polymers for Pavement Application (/journal/polymers/special_issues/poly_pavement_application)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03761/article_deploy/html/images/polymers-14-03761-g001-550.jpg?1662710734)

(https://pub.mdpi-res.com/polymers/polymers-14-03761/article_deploy/html/images/polymers-14-03761-g002-550.jpg?1662710741)

(https://pub.mdpi-res.com/polymers/polymers-14-03761/article_deploy/html/images/polymers-14-03761-g003-550.jpg?1662710733)

(https://pub.mdpi-res.com/polymers/polymers-14-03761/article_deploy/html/images/polymers-14-03761-g004a-550.jpg?1662710750)

(https://pub.mdpi-res.com/polymers/polymers-14-03761/article_deploy/html/images/polymers-14-03761-g004b-550.jpg?1662710758)

(https://pub.mdpi-res.com/polymers/polymers-14-03761/article_deploy/html/images/polymers-14-03761-g005-550.jpg?1662710738)

(https://pub.mdpi-res.com/polymers/polymers-14-03761/article_deploy/html/images/polymers-14-03761-g006-550.jpg?1662710739)

(https://pub.mdpi-res.com/polymers/polymers-14-03761/article_deploy/html/images/polymers-14-03761-g007-550.jpg?1662710736)

(https://pub.mdpi-res.com/polymers/polymers-14-03761/article_deploy/html/images/polymers-14-03761-g008-550.jpg?1662710743)

(https://pub.mdpi-res.com/polymers/polymers-14-03761/article_deploy/html/images/polymers-14-03761-g009-550.jpg?1662710752)

Open Access Article (/2073-4360/14/18/3760/pdf?version=1662637282)

Headspace Extraction of Chlorobenzenes from Water Using Electrospun Nanofibers Fabricated with Calix[4]arene-Doped Polyurethane–Polysulfone (/2073-4360/14/18/3760)

by Hamid Najarzadekan (https://sciprofiles.com/profile/author/UmJ1aW9FSGFlSWxOOWtESXVCbkNvckdGNEVUNFlNUGJWN2hzVnlzeWhxWT0=, Muhammad Afzal Kamboh (https://sciprofiles.com/profile/author/VnoxSTNYY1FWbEFrNmZkcVBWd0V1YzdLa1ZTdXoxUzU3UENScWhkSElOO, Hassan Sereshti (https://sciprofiles.com/profile/1057101?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Irfan Ahmad (https://sciprofiles.com/profile/620706?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Nanthini Sridewi (https://sciprofiles.com/profile/685718?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Syed Shahabuddin (https://sciprofiles.com/profile/82556?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Hamid Rashidi Nodeh (https://sciprofiles.com/profile/1039637?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3760; https://doi.org/10.3390/polym14183760 (https://doi.org/10.3390/polym14183760) - 08 Sep 2022

Back to TopTop

Viewed by 1009

Abstract Chlorobenzenes (CBs) are persistent and potentially have a carcinogenic effect on mammals. Thus, the determination of CBs is essential for human health. Hence, in this study, novel polyurethane–polysulfone/calix[4]arene (PU-PSU/calix[4]arene) nanofibers were synthesized using an electrospinning approach over in-situ coating on a stainless-steel wire. **[...] Read more.**

(This article belongs to the Special Issue **Novel Wastewater Treatment Applications Using Polymeric Materials (/journal/polymers/special_issues/Novel_Wastewater_Treatment_Applications_Using_Polymeric_Materials)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03760/article_deploy/html/images/polymers-14-03760-g001-550.jpg?1662637352)

(https://pub.mdpi-res.com/polymers/polymers-14-03760/article_deploy/html/images/polymers-14-03760-g002-550.jpg?1662637353)

(https://pub.mdpi-res.com/polymers/polymers-14-03760/article_deploy/html/images/polymers-14-03760-g003-550.jpg?1662637351)

(https://pub.mdpi-res.com/polymers/polymers-14-03760/article_deploy/html/images/polymers-14-03760-g004-550.jpg?1662637349)

(https://pub.mdpi-res.com/polymers/polymers-14-03760/article_deploy/html/images/polymers-14-03760-g005-550.jpg?1662637350)

Open Access Review **(/2073-4360/14/18/3759/pdf?version=1662716191)**

A Review on Research Progress in Plasma-Controlled Superwetting Surface Structure and Properties (/2073-4360/14/18/3759)

by **Dayu Li (https://sciprofiles.com/profile/416625?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Kai Xu (https://sciprofiles.com/profile/author/Mm8rWXpEYThLVmFwakQ4VGkvT0tSMHNzcXlubIY4SmVuSFNTOTBoR0h6Yz0=?utm_source=m** and **Yanjun Zhang (https://sciprofiles.com/profile/author/eFVuZ1duNFZBemFoUE5UZmw5Wm5tM0dLWVRWKzZzMEF2MmJhUjhkaHV6RT0=?utm_s**

Polymers **2022**, *14*(18), 3759; **https://doi.org/10.3390/polym14183759 (https://doi.org/10.3390/polym14183759)** - 08 Sep 2022

Cited by 4 (/2073-4360/14/18/3759#metrics) | Viewed by 1523

Abstract Superwetting surface can be divided into (super) hydrophilic surface and (super) hydrophobic surface. There are many methods to control superwetting surface, among which plasma technology is a safe and convenient one. This paper first summarizes the plasma technologies that control the surface superwettability, **[...] Read more.**

(This article belongs to the Section **Polymer Applications (/journal/polymers/sections/Polymer_Applications)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03759/article_deploy/html/images/polymers-14-03759-g001-550.jpg?1662716270)

(https://pub.mdpi-res.com/polymers/polymers-14-03759/article_deploy/html/images/polymers-14-03759-g002-550.jpg?1662716278)

(https://pub.mdpi-res.com/polymers/polymers-14-03759/article_deploy/html/images/polymers-14-03759-g003-550.jpg?1662716263)

(https://pub.mdpi-res.com/polymers/polymers-14-03759/article_deploy/html/images/polymers-14-03759-g004-550.jpg?1662716275)

(https://pub.mdpi-res.com/polymers/polymers-14-03759/article_deploy/html/images/polymers-14-03759-g005-550.jpg?1662716272)

(https://pub.mdpi-res.com/polymers/polymers-14-03759/article_deploy/html/images/polymers-14-03759-g006-550.jpg?1662716277)

(https://pub.mdpi-res.com/polymers/polymers-14-03759/article_deploy/html/images/polymers-14-03759-g007-550.jpg?1662716269)

(https://pub.mdpi-res.com/polymers/polymers-14-03759/article_deploy/html/images/polymers-14-03759-g008-550.jpg?1662716276)

(https://pub.mdpi-res.com/polymers/polymers-14-03759/article_deploy/html/images/polymers-14-03759-g009-550.jpg?1662716274)

(https://pub.mdpi-res.com/polymers/polymers-14-03759/article_deploy/html/images/polymers-14-03759-g010-550.jpg?1662716268)

(https://pub.mdpi-res.com/polymers/polymers-14-03759/article_deploy/html/images/polymers-14-03759-g011-550.jpg?1662716262)

Open Access Article **(/2073-4360/14/18/3758/pdf?version=1662706366)**

Development of a Curcumin-Loaded Lecithin/Chitosan Nanoparticle Utilizing a Box-Behnken Design of Experiment: Formulation Design and Influence of Process Parameters (/2073-4360/14/18/3758)

by **Ismail A. Walbi (https://sciprofiles.com/profile/1636775?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Mohammad Zaki Ahmad (https://sciprofiles.com/profile/1643663?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name** , **Javed Ahmad (https://sciprofiles.com/profile/1066194?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Mohammed S. Algahtani (https://sciprofiles.com/profile/1037059?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name** , **Amer S. Alali (https://sciprofiles.com/profile/1415859?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Samar A. Alsudir (https://sciprofiles.com/profile/author/L0xDT2thV1ZYajBsaEx1K2d3ZlRqWXNrcEw4SDNUbDF6U0xrWWErN3F4Yz0=?utm_so** , **Alhassan H. Aodah (https://sciprofiles.com/profile/1655276?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)** and **Hassan A. Albarqi (https://sciprofiles.com/profile/2370473?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**

Polymers **2022**, *14*(18), 3758; **https://doi.org/10.3390/polym14183758 (https://doi.org/10.3390/polym14183758)** - 08 Sep 2022

Cited by 10 (/2073-4360/14/18/3758#metrics) | Viewed by 1712

Abstract Curcumin (CUR) has impressive pharmacologic properties, including cardioprotective, neuroprotective, antimicrobial, and anticancer activity. However, the pharmaceutical application of CUR is limited due to its poor aqueous solubility and low bioavailability. The development of novel formulations has attracted considerable attention to the idea of **[...] Read more.**

Back to TopTop

(This article belongs to the Special Issue **Polymers for Biomedical Imaging and Therapy (/journal/polymers/special_issues/Polym_Biomed_Imaging_Ther)**)

► Show Figures

Open Access Article (/2073-4360/14/18/3757/pdf?version=1662630646)

Identification and Characterization of Fibronectin-Binding Peptides in Gelatin (/2073-4360/14/18/3757)

by Yuying Liu (https://sciprofiles.com/profile/2200493?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Jianping Gao (https://sciprofiles.com/profile/2579924?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Lin Liu (https://sciprofiles.com/profile/author/b0V2Unc3cVpSdTAvL1ZPd1JrVXgyai9pTzNjaTBvVGpXWFdFYWxsRFM1UT0=?utm_source=mdp, Jiyao Kang (https://sciprofiles.com/profile/2934682?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Xi Luo (https://sciprofiles.com/profile/author/Y2pOSDJpazZMcFhRL2ZUWWozeDBGQT09?utm_source=mdpi.com&utm_medium=website&utm, Yingjun Kong (https://sciprofiles.com/profile/author/WGhLNitrODdaTjc1ZU9VS214ZXlIY2hwSzd6Zjg2VTdXVHlrdnZxM1AyND0=?utm_source=r and Guifeng Zhang (https://sciprofiles.com/profile/2374988?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3757; **https://doi.org/10.3390/polym14183757 (https://doi.org/10.3390/polym14183757)** - 08 Sep 2022

Viewed by 1158

Abstract Collagen and fibronectin (FN) are important components in the extracellular matrix (ECM). Collagen-FN binding belongs to protein-protein interaction and plays a key role in regulating cell behaviors. In this study, FN-binding peptides were isolated from gelatin (degraded collagen) using affinity chromatography, and the **[...] Read more.**

(This article belongs to the Special Issue **Multi-Functional Collagen-Based Biomaterials for Biomedical Applications (/journal/polymers/special_issues/multi_functional_collagen_based_biomaterials_for_biomedical_applications)**)

► Show Figures

Open Access Article (/2073-4360/14/18/3756/pdf?version=1662629664)

Sustainable Polymer Composites Manufacturing through 3D Printing Technologies by Using Recycled Polymer and Filler (/2073-4360/14/18/3756)

by Daniela Fico (https://sciprofiles.com/profile/1943697?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Daniela Rizzo (https://sciprofiles.com/profile/2202309?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Valentina De Carolis (https://sciprofiles.com/profile/author/ZkRWRHE1K0pMUUhtZGNhZjgyOFdPdnEwOTJCVDBRVEU0bjJ4VDNFckp3bVJFcjl, Francesco Montagna (https://sciprofiles.com/profile/author/VVJLUWZ1d3RpOUdSOWtGelFHZmdqK0NYdkloekRWOUh4SzRxOWZzNE5Hc1A5l and Carola Esposito Corcione (https://sciprofiles.com/profile/33507?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name

Polymers **2022**, *14*(18), 3756; **https://doi.org/10.3390/polym14183756 (https://doi.org/10.3390/polym14183756)** - 08 Sep 2022

Cited by 10 (/2073-4360/14/18/3756#metrics) | Viewed by 2378

Back to TopTop

Abstract In the last years, the excessive use of plastic and other synthetic materials, that are generally difficult to dispose of, has caused growing ecological worries. These are contributing to redirecting the world's attention to sustainable materials and a circular economy (CE) approach using **[...] Read more.**

(This article belongs to the Special Issue **Progress in 3D Printing (/journal/polymers/special_issues/Prog_3D_Print)**)

► Show Figures

Open Access Article **(/2073-4360/14/18/3755/pdf?version=1662623468)**

Analysis of Force Sensing Accuracy by Using SHM Methods on Conventionally Manufactured and Additively Manufactured Small Polymer Parts (/2073-4360/14/18/3755)

by **Alireza Modir (https://sciprofiles.com/profile/1267813?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)** and **Ibrahim Tansel (https://sciprofiles.com/profile/1412375?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**

Polymers **2022**, *14*(18), 3755; **https://doi.org/10.3390/polym14183755 (https://doi.org/10.3390/polym14183755)** - 08 Sep 2022

Cited by 2 (/2073-4360/14/18/3755#metrics) | Viewed by 889

Abstract Fabricating complex parts using additive manufacturing is becoming more popular in diverse engineering sectors. Structural Health Monitoring (SHM) methods can be implemented to reduce inspection costs and ensure structural integrity and safety in these parts. In this study, the Surface Response to Excitation **[...] Read more.**

(This article belongs to the Special Issue **Advances and Machine Learning Approaches for the Health Monitoring and Integrity Assessment of Structures (/journal/polymers/special_issues/machine_learning_for_health_monitoring_and_intergrity_assessment_of_structures)**)

► Show Figures

Open Access Article **(/2073-4360/14/18/3754/pdf?version=1663491625)**

Matrix Regeneration Ability In Situ Induced by a Silk Fibroin Small-Caliber Artificial Blood Vessel In Vivo (/2073-4360/14/18/3754)

by **Helei Li (https://sciprofiles.com/profile/2379298?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Mengnan Dai (https://sciprofiles.com/profile/author/RFo5ekdha2s5ZW43dE9GMVJzWElPZ0xIM1NEMEp1MHhqMUczc3NiTlNQQT0=?utm_sourc**, **Meng Li (https://sciprofiles.com/profile/author/OEZyY3YzelF3K1hkdU1ORVJSSzBCNVo4dldBNC9tRFM0eGJhc0Fpd3czTT0=?utm_source=mdp**, **Lingpeng Meng (https://sciprofiles.com/profile/2321551?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Yangxiao Yu (https://sciprofiles.com/profile/2379244?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Jianmei Xu (https://sciprofiles.com/profile/author/eVdMMXVuZVdya291bndXNWV5bzZPYnBkMEcrUk14UG5BTDZNT3VDaGF2QT0=?utm_sourc**, **Fenglin Dong (https://sciprofiles.com/profile/author/RW8wU29QRngzd1dpMmV2aFhSR0dxQjhkdTZacnJwcVdoT21heXJVdTlwdz0=?utm_sourc**, **Qingmin Fan (https://sciprofiles.com/profile/author/N3ZTRWVHYmFWVzNsSDdQaWliakg4aTVCb2ZTL0VNYWNlQVdZLytzMWJNST0=?utm_sou**, **Yin Yin (https://sciprofiles.com/profile/author/bXEyL25vaHh6T2JjSnlvbGpmYlppc0JWR0Q3ZnFKSHg4U3NnWi9NTDVqcz0=?utm_source=mdp**,

Back to TopTop

Jiqing Wang (https://sciprofiles.com/profile/author/MGlubXJjUnBVY1JtVThOSCtWVzRsUGVYeCtTelZyajVoeW44Q1Y5ZEdVTT0=?utm_source=
and
Jiannan Wang (https://sciprofiles.com/profile/293357?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3754; https://doi.org/10.3390/polym14183754 (https://doi.org/10.3390/polym14183754) - 08 Sep 2022
Cited by 1 (/2073-4360/14/18/3754#metrics) | Viewed by 1062

Abstract The success of a small-caliber artificial vascular graft in the host in order to obtain functional tissue regeneration and remodeling remains a great challenge in clinical application. In our previous work, a silk-based, small-caliber tubular scaffold (SFTS) showed excellent mechanical properties, long-term patency **[...] Read more.**
(This article belongs to the Section **Biomacromolecules, Biobased and Biodegradable Polymers (/journal/polymers/sections/Biomacromol_Biobased_Biodegradable_Polymers)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03754/article_deploy/html/images/polymers-14-03754-g001-550.jpg?1663491726)
(https://pub.mdpi-res.com/polymers/polymers-14-03754/article_deploy/html/images/polymers-14-03754-g002-550.jpg?1663491737)
(https://pub.mdpi-res.com/polymers/polymers-14-03754/article_deploy/html/images/polymers-14-03754-g003-550.jpg?1663491729)
(https://pub.mdpi-res.com/polymers/polymers-14-03754/article_deploy/html/images/polymers-14-03754-g004-550.jpg?1663491741)
(https://pub.mdpi-res.com/polymers/polymers-14-03754/article_deploy/html/images/polymers-14-03754-g005-550.jpg?1663491723)
(https://pub.mdpi-res.com/polymers/polymers-14-03754/article_deploy/html/images/polymers-14-03754-g006-550.jpg?1663491742)
(https://pub.mdpi-res.com/polymers/polymers-14-03754/article_deploy/html/images/polymers-14-03754-g007-550.jpg?1663491732)
(https://pub.mdpi-res.com/polymers/polymers-14-03754/article_deploy/html/images/polymers-14-03754-g008-550.jpg?1663491734)

Open Access Article (/2073-4360/14/18/3753/pdf?version=1662619671)

Comparison of Various Antimicrobial Agents for Thermoplastic Polymeric Retainers (/2073-4360/14/18/3753)

by
Kanket Kiatwarawut (https://sciprofiles.com/profile/2131626?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Jintakorn Kuvatanasuchati (https://sciprofiles.com/profile/author/VnRWTTUwc3Y2b2JUV1ZMSmhMZmZyV1oyYW5ZZzJjNGY2dGNPNFh5NmJI
,
Boonyanit Thaweboon (https://sciprofiles.com/profile/author/eE91WHhiNG5TN1ZNUHYrY2pHeCtlMEw4ZDcvSVM2SmpLdWxRNGdjVlRvRT0=?
and
Irin Sirisoontorn (https://sciprofiles.com/profile/2159618?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3753; https://doi.org/10.3390/polym14183753 (https://doi.org/10.3390/polym14183753) - 08 Sep 2022
Cited by 1 (/2073-4360/14/18/3753#metrics) | Viewed by 1414

Abstract The thermoplastic retainers indicated a rising incidence of cariogenic bacteria such as *Streptococcus mutans*. A report suggested the case of a patient with severe gingival inflammation and dental caries as a result of inadequate appliance cleaning. This study aims to compare the various **[...] Read more.**
(This article belongs to the Special Issue **Current Novelty of Polymer Based-Composites Used for Dental Applications (/journal/polymers/special_issues/poly_compo_dental)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03753/article_deploy/html/images/polymers-14-03753-ag-550.jpg?1663068765)
(https://pub.mdpi-res.com/polymers/polymers-14-03753/article_deploy/html/images/polymers-14-03753-g001-550.jpg?1662619752)
(https://pub.mdpi-res.com/polymers/polymers-14-03753/article_deploy/html/images/polymers-14-03753-g002-550.jpg?1662619756)
(https://pub.mdpi-res.com/polymers/polymers-14-03753/article_deploy/html/images/polymers-14-03753-g003-550.jpg?1662619751)
(https://pub.mdpi-res.com/polymers/polymers-14-03753/article_deploy/html/images/polymers-14-03753-g004-550.jpg?1662619758)

Open Access Article (/2073-4360/14/18/3752/pdf?version=1663731312)

3D Multicellular Tumor Spheroids in a Microfluidic Droplet System for Investigation of Drug Resistance (/2073-4360/14/18/3752)

by
Sang Ik Lee (https://sciprofiles.com/profile/author/OHoyZUJiNmVyTzczQjM0eXZMeU8wMitKT2M3QUR6N2lXOG84V2NoZEdiaz0=?utm_source=
,
Yoon Young Choi (https://sciprofiles.com/profile/author/amM0ODVNcnlid1RSSDM3NXFEOUFqblFLZzVQbjlpWUJJU1RMZ3hkbmVBUT0=?utm_
,
Seong Goo Kang (https://sciprofiles.com/profile/author/Mi96cTY3a09zd3RlekxSLzcxaW1XVTQ1dkZzVW1zOHRxcWV0d2dqWHltVT0=?utm_sou
,
Tae Hyeon Kim (https://sciprofiles.com/profile/author/aTV2QnNuRFJYQldDRTkwelN2ZXViZkhRV3FUOEsxK0g0L2hLS1V2bkVmdz0=?utm_sou
,
Ji Wook Choi (https://sciprofiles.com/profile/2167806?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Young Jae Kim (https://sciprofiles.com/profile/author/aWg3M2tpakRDNnc1WVlUQk5SQ0JVcmZKb0g4dTV4Q0dyQnlEYzJVZURFVT0=?utm_so
,
Tae-Hyung Kim (https://sciprofiles.com/profile/233434?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Taewook Kang (https://sciprofiles.com/profile/author/T2VCWEhOYk1jd1oySWEzTWlza1dqeUE0R05HSFk0cy9McFYrSmYyYzBLZz0=?utm_sou
and
Bong Geun Chung (https://sciprofiles.com/profile/897585?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3752; https://doi.org/10.3390/polym14183752 (https://doi.org/10.3390/polym14183752) - 08 Sep 2022
Cited by 3 (/2073-4360/14/18/3752#metrics) | Viewed by 1962

Abstract A three-dimensional (3D) tumor spheroid model plays a critical role in mimicking tumor microenvironments in vivo. However, the conventional culture methods lack the ability to manipulate the 3D tumor spheroids in a homogeneous manner. To address this limitation, we developed a microfluidic-based droplet **[...] Read more.**

(This article belongs to the Special Issue **Polymers for Designing Drug Delivery Systems (/journal/polymers/special_issues/drugdelivery_systems)**)

► Show Figures

Open Access Article (/2073-4360/14/18/3751/pdf?version=1662615716)

Determination of Frequency-Dependent Shear Modulus of Viscoelastic Layer via a Constrained Sandwich Beam (/2073-4360/14/18/3751)

by
Ludi Kang (https://sciprofiles.com/profile/author/QmlPZWhFazRELzJ3UHNCYVdHOWZObnRMeU56ZC9OOGJxUEFJc1Z3SW1NWT0=?utm_sou
,
Chengpu Sun (https://sciprofiles.com/profile/2326160?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Haosheng Liu (https://sciprofiles.com/profile/author/YXV2dzNxbW9VekhJUVBrS1RIN3A3dz09?utm_source=mdpi.com&utm_medium=website
and
Bilong Liu (https://sciprofiles.com/profile/728472?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3751; https://doi.org/10.3390/polym14183751 (https://doi.org/10.3390/polym14183751) - 08 Sep 2022
Cited by 4 (/2073-4360/14/18/3751#metrics) | Viewed by 1306

Abstract Viscoelastic material can significantly reduce the vibration energy and radiated noise of a structure, so it is widely used in lightweight sandwich structures. The accurate and efficient determination of the frequency-dependent complex modulus of viscoelastic material is the basis for the correct analysis **[...] Read more.**

(This article belongs to the Special Issue **Mechanical and Dynamic Characterization of Polymeric Composites (/journal/polymers/special_issues/Mech_Dyn_Charact_Polym_Compos)**)

► Show Figures

Open Access Article (/2073-4360/14/18/3750/pdf?version=1662613582)

Effect of Carbon Fibres on Electromagnetic-Interference-Shielding Properties of Geopolymer Composites (/2073-4360/14/18/3750)

by
Dimuthu Wanasinghe (https://sciprofiles.com/profile/994995?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Farhad Aslani (https://sciprofiles.com/profile/349964?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Guowei Ma (https://sciprofiles.com/profile/author/OWhMRHpoMEg5cWk4T0ZqZ2hlNHowVTlzVmtkVHdkaGFwU0plOUNuU3g1ND0=?utm_sourc
Polymers **2022**, *14*(18), 3750; https://doi.org/10.3390/polym14183750 (https://doi.org/10.3390/polym14183750) - 08 Sep 2022
Cited by 4 (/2073-4360/14/18/3750#metrics) | Viewed by 1123

Abstract Many of the construction materials available are known to cause a drastic level of damage to the environment during their manufacturing stages. Hence, many researchers have attempted to formulate construction materials that are more environmentally friendly. Additionally, the rise in wireless communications in **[...] Read more.**

(This article belongs to the Special Issue **Development in Geopolymers (/journal/polymers/special_issues/development_of_geopolymers)**)

Back to TopTop

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03750/article_deploy/html/images/polymers-14-03750-g001-550.jpg?1662613669)

(https://pub.mdpi-res.com/polymers/polymers-14-03750/article_deploy/html/images/polymers-14-03750-g002-550.jpg?1662613678)

(https://pub.mdpi-res.com/polymers/polymers-14-03750/article_deploy/html/images/polymers-14-03750-g003-550.jpg?1662613680)

(https://pub.mdpi-res.com/polymers/polymers-14-03750/article_deploy/html/images/polymers-14-03750-g004-550.jpg?1662613665)

(https://pub.mdpi-res.com/polymers/polymers-14-03750/article_deploy/html/images/polymers-14-03750-g005-550.jpg?1662613671)

(https://pub.mdpi-res.com/polymers/polymers-14-03750/article_deploy/html/images/polymers-14-03750-g006-550.jpg?1662613673)

(https://pub.mdpi-res.com/polymers/polymers-14-03750/article_deploy/html/images/polymers-14-03750-g007-550.jpg?1662613667)

(https://pub.mdpi-res.com/polymers/polymers-14-03750/article_deploy/html/images/polymers-14-03750-g008-550.jpg?1662613668)

(https://pub.mdpi-res.com/polymers/polymers-14-03750/article_deploy/html/images/polymers-14-03750-g009-550.jpg?1662613676)

Open Access Article (/2073-4360/14/18/3749/pdf?version=1662610670)

Curaua–Aramid Hybrid Laminated Composites for Impact Applications: Flexural, Charpy Impact and Elastic Properties (/2073-4360/14/18/3749)

by

Natalin Michele Meliande (https://sciprofiles.com/profile/1656313?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nam

,

Michelle Souza Oliveira (https://sciprofiles.com/profile/1356771?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

,

Pedro Henrique Poubel Mendonça da Silveira (https://sciprofiles.com/profile/1211758?utm_source=mdpi.com&utm_medium=website&utm_ca

,

Rafael Rodrigues Dias (https://sciprofiles.com/profile/author/Vk9rdERsS29Gb1lOYTJrSEJVNDZCeDJjMzA4MTFOVnN5d0M3MG1nbmVaVT0=?

,

Rubens Lincoln Santana Blazutti Marçal (https://sciprofiles.com/profile/author/Uk4wNVNWZnJMUHYra2N1eWFKampzVlhlQitZMGNmUytONkx

,

Sergio Neves Monteiro (https://sciprofiles.com/profile/912212?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

and

Lucio Fabio Cassiano Nascimento (https://sciprofiles.com/profile/2711886?utm_source=mdpi.com&utm_medium=website&utm_campaign=av

Polymers **2022**, *14*(18), 3749; https://doi.org/10.3390/polym14183749 (https://doi.org/10.3390/polym14183749) - 08 Sep 2022

Cited by 4 (/2073-4360/14/18/3749#metrics) | Viewed by 1499

Abstract Curaua, as a leaf-based natural fiber, appears to be a promising component with aramid fabric reinforcement of hybrid composites. This work deals with the investigation of flexural, impact and elastic properties of non-woven curaua–aramid fabric hybrid epoxy composites. Five configurations of hybrid composites **[...] Read more.**

(This article belongs to the Section **Polymer Applications (/journal/polymers/sections/Polymer_Applications)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03749/article_deploy/html/images/polymers-14-03749-g001-550.jpg?1662610750)

(https://pub.mdpi-res.com/polymers/polymers-14-03749/article_deploy/html/images/polymers-14-03749-g002-550.jpg?1662610751)

(https://pub.mdpi-res.com/polymers/polymers-14-03749/article_deploy/html/images/polymers-14-03749-g003-550.jpg?1662610756)

(https://pub.mdpi-res.com/polymers/polymers-14-03749/article_deploy/html/images/polymers-14-03749-g004-550.jpg?1662610755)

(https://pub.mdpi-res.com/polymers/polymers-14-03749/article_deploy/html/images/polymers-14-03749-g005-550.jpg?1662610748)

(https://pub.mdpi-res.com/polymers/polymers-14-03749/article_deploy/html/images/polymers-14-03749-g006-550.jpg?1662610754)

(https://pub.mdpi-res.com/polymers/polymers-14-03749/article_deploy/html/images/polymers-14-03749-g007-550.jpg?1662610753)

Open Access Article (/2073-4360/14/18/3748/pdf?version=1662689423)

Enhancing Toughness of PLA/ZrP Nanocomposite through Reactive Melt-Mixing by Ethylene-Methyl Acrylate-Glycidyl Methacrylate Copolymer (/2073-4360/14/18/3748)

by

Chuanbiao Zhu (https://sciprofiles.com/profile/author/OFR0KzJZaU1VUzd6cmpVZStKQmRtRkRzUjRlZ0h3dlYzaDZyNnNQUXZyZz0=?utm_sour

,

Xiang Lu (https://sciprofiles.com/profile/3187980?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Yi Li (https://sciprofiles.com/profile/3187981?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Yanhong Deng (https://sciprofiles.com/profile/author/SDRRZkoyVmlIRzFjMnh3c3k5Vzk4VXpwVWVzbIN6TmhGQm1ZeThqODIwTT0=?utm_sou

,

Jiuling Lu (https://sciprofiles.com/profile/author/UXM2Y29LbU1PTG5Zd3FhTld0L3pOTCtNVEozai93UkJ0MGtwZGx0UlVPdz0=?utm_source=mc

,

Zhigang Liu (https://sciprofiles.com/profile/author/ckl2c09WMFRKV2ZxMGU2Y2FaT2YzTmRFbTlydnVxU0dGNVJuMGhoMXBGYz0=?utm_sour

,

Hao Wu (https://sciprofiles.com/profile/1971365?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Yi Tong (https://sciprofiles.com/profile/488045?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and

Jinping Qu (https://sciprofiles.com/profile/author/NDZVYmo2NkR5dHh1TFFFQkN2dGhFVkRZTzdxNmVodFJ5NGpaaTlIZXJiMD0=?utm_source=

Back to TopTop

Polymers **2022**, *14*(18), 3748; **https://doi.org/10.3390/polym14183748 (https://doi.org/10.3390/polym14183748)** - 07 Sep 2022
Cited by 1 (/2073-4360/14/18/3748#metrics) | Viewed by 1059

Abstract The nanofiller zirconium phosphate (ZrP) was mixed into poly(lactic acid) (PLA) to ameliorate its thermal stability. The elastomer ethylene-methyl acrylate-glycidyl methacrylate copolymer (E-MA-GMA) was introduced into the PLA/ZrP nanocomposite through melt-mixing to improve its toughness and obtain a super-tough PLA/ZrP/E-MA-GMA nanocomposite. The impact **[...] Read more.**
(This article belongs to the Section **Polymer Composites and Nanocomposites (/journal/polymers/sections/polymer_composites_nanocomposites)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03748/article_deploy/html/images/polymers-14-03748-g001-550.jpg?1662689516)

(https://pub.mdpi-res.com/polymers/polymers-14-03748/article_deploy/html/images/polymers-14-03748-g002-550.jpg?1662689515)

(https://pub.mdpi-res.com/polymers/polymers-14-03748/article_deploy/html/images/polymers-14-03748-g003-550.jpg?1662689510)

(https://pub.mdpi-res.com/polymers/polymers-14-03748/article_deploy/html/images/polymers-14-03748-g004-550.jpg?1662689512)

(https://pub.mdpi-res.com/polymers/polymers-14-03748/article_deploy/html/images/polymers-14-03748-g005-550.jpg?1662689516)

(https://pub.mdpi-res.com/polymers/polymers-14-03748/article_deploy/html/images/polymers-14-03748-g006-550.jpg?1662689511)

(https://pub.mdpi-res.com/polymers/polymers-14-03748/article_deploy/html/images/polymers-14-03748-g007-550.jpg?1662689513)

(https://pub.mdpi-res.com/polymers/polymers-14-03748/article_deploy/html/images/polymers-14-03748-g008-550.jpg?1662689507)

Open Access Article **(/2073-4360/14/18/3747/pdf?version=1662627162)**

Comparative Structure–Property Relationship between Nanoclay and Cellulose Nanofiber Reinforced Natural Rubber Nanocomposites (/2073-4360/14/18/3747)

by
Bunsita Wongvasana (https://sciprofiles.com/profile/2448877?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Bencha Thongnuanchan (https://sciprofiles.com/profile/author/ZmhZdis3ckJlU0RrZlhQdERXd3RPQ3RoS0U2UVJXZmNhUWczM09hS0YwYz0=
,
Abdulhakim Masa (https://sciprofiles.com/profile/1856889?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Hiromu Saito (https://sciprofiles.com/profile/362538?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Tadamoto Sakai (https://sciprofiles.com/profile/2431187?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Natinee Lopattananon (https://sciprofiles.com/profile/2406278?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3747; **https://doi.org/10.3390/polym14183747 (https://doi.org/10.3390/polym14183747)** - 07 Sep 2022
Cited by 2 (/2073-4360/14/18/3747#metrics) | Viewed by 1256

Abstract Natural rubber (NR) nanocomposites reinforced with five parts per hundred rubber (phr) of two different nano-fillers, i.e., nanoclay (abbrev. NC) and cellulose nanofiber (abbrev. CNF), were prepared by using latex mixing approach, followed by mill-compounding and molding. The morphology, stress–strain behavior, strain-induced crystallization, **[...] Read more.**
(This article belongs to the Special Issue **Multiphase Systems with Polymeric Matrices: Polymer Blends and Composites (/journal/polymers/special_issues/multiph_syst_polym_matrice)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03747/article_deploy/html/images/polymers-14-03747-ag-550.jpg?1663333359)

(https://pub.mdpi-res.com/polymers/polymers-14-03747/article_deploy/html/images/polymers-14-03747-g001-550.jpg?1663333333)

(https://pub.mdpi-res.com/polymers/polymers-14-03747/article_deploy/html/images/polymers-14-03747-g002-550.jpg?1663333329)

(https://pub.mdpi-res.com/polymers/polymers-14-03747/article_deploy/html/images/polymers-14-03747-g003-550.jpg?1663333321)

(https://pub.mdpi-res.com/polymers/polymers-14-03747/article_deploy/html/images/polymers-14-03747-g004-550.jpg?1663333330)

(https://pub.mdpi-res.com/polymers/polymers-14-03747/article_deploy/html/images/polymers-14-03747-g005-550.jpg?1663333336)

(https://pub.mdpi-res.com/polymers/polymers-14-03747/article_deploy/html/images/polymers-14-03747-g006-550.jpg?1663333331)

(https://pub.mdpi-res.com/polymers/polymers-14-03747/article_deploy/html/images/polymers-14-03747-g007-550.jpg?1663333323)

(https://pub.mdpi-res.com/polymers/polymers-14-03747/article_deploy/html/images/polymers-14-03747-g008-550.jpg?1663333340)

(https://pub.mdpi-res.com/polymers/polymers-14-03747/article_deploy/html/images/polymers-14-03747-g009-550.jpg?1663333337)

(https://pub.mdpi-res.com/polymers/polymers-14-03747/article_deploy/html/images/polymers-14-03747-g010-550.jpg?1663333339)

Open Access Article **(/2073-4360/14/18/3746/pdf?version=1662621587)**

Synthesis and Characterization of Bipyridine-Based Polyaminal Network for CO_2 Capture (/2073-4360/14/18/3746)

by **Nazeeha S. Alkayal (https://sciprofiles.com/profile/2066085?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**,
Maha M. Alotaibi (https://sciprofiles.com/profile/2352403?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Nada Y. Tashkandi (https://sciprofiles.com/profile/author/d1hFRytVR2xrRE5RN3A0OGQ1eG5ickZFQ2RtYXkwMlhiRGNvWDc4Vit0cz0=?utm_so
and
Maymounah A. Alrayyani (https://sciprofiles.com/profile/author/TEorU3JEQVJjYVdkMGdsM295dVZBYzBzemE3RHF2Z3ozWVRwLzZWZjZQUT0
Polymers **2022**, *14*(18), 3746; **https://doi.org/10.3390/polym14183746 (https://doi.org/10.3390/polym14183746)** - 07 Sep 2022
Viewed by 1066

Back to TopTop

Abstract The response to the high demand for decreasing the amount of CO_2 in the atmosphere, a new polyaminal-based polymer network was designed and successfully prepared through one-pot polycondensation reaction of melamine and [2,2′-Bipyridine]-5,5′-dicarbaldehyde. The formation of the polymer structure was confirmed by **[...] Read more.**

(This article belongs to the Special Issue **Advances in Functional Polymeric Materials: Applications in Applied Technologies (/journal/polymers/special_issues/Appl_Technol)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03746/article_deploy/html/images/polymers-14-03746-g001-550.jpg?1662621667)

(https://pub.mdpi-res.com/polymers/polymers-14-03746/article_deploy/html/images/polymers-14-03746-g002-550.jpg?1662621663)

(https://pub.mdpi-res.com/polymers/polymers-14-03746/article_deploy/html/images/polymers-14-03746-g003-550.jpg?1662621657)

(https://pub.mdpi-res.com/polymers/polymers-14-03746/article_deploy/html/images/polymers-14-03746-g004-550.jpg?1662621660)

(https://pub.mdpi-res.com/polymers/polymers-14-03746/article_deploy/html/images/polymers-14-03746-g005-550.jpg?1662621664)

(https://pub.mdpi-res.com/polymers/polymers-14-03746/article_deploy/html/images/polymers-14-03746-g006-550.jpg?1662621666)

(https://pub.mdpi-res.com/polymers/polymers-14-03746/article_deploy/html/images/polymers-14-03746-g007-550.jpg?1662621662)

(https://pub.mdpi-res.com/polymers/polymers-14-03746/article_deploy/html/images/polymers-14-03746-sch001-550.jpg?1662621665)

Open Access Article **(/2073-4360/14/18/3745/pdf?version=1662622878)**

A Highly Selective and Sensitive Nano-Silver sol Sensor for Hg^{2+} and Fe^{3+}: Green Preparation and Mechanism (/2073-4360/14/18/3745)

by

Yining Yang (https://sciprofiles.com/profile/author/NzJlaEVnRGFpS2VlbnJlL0hjakhCQT09?utm_source=mdpi.com&utm_medium=website&utn

,

Xiaodong Zhou (https://sciprofiles.com/profile/author/TEJDUXMzajR1VHVyOWlkZ09lbjFJOVEyME5scjM0UFdldHdKcVN4b1dzVT0=?utm_sourc

,

Ruitao Dong (https://sciprofiles.com/profile/author/VWYySWRSeENxSWVvTHU1TmR6ZjFlc0trY2JXd08rT0oxeEJuMzc1elZ2ND0=?utm_source=

,

Yanwei Wang (https://sciprofiles.com/profile/author/UzNNa1pBTWxCSmlMdms4NlQ1NjlScjg1YWh2ZzBpallvRFNiQUR2Y3pBUT0=?utm_source

,

Zichao Li (https://sciprofiles.com/profile/238887?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Yun Xue (https://sciprofiles.com/profile/2355565?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Qun Li (https://sciprofiles.com/profile/235045?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3745; **https://doi.org/10.3390/polym14183745 (https://doi.org/10.3390/polym14183745)** - 07 Sep 2022

Cited by 1 (/2073-4360/14/18/3745#metrics) | Viewed by 982

Abstract The development of highly selective and highly sensitive nanometer colorimetric chemical sensors is an urgent requirement in the immediate detection of heavy metal ions. In this work, silver-nanoparticle (Ag NPs)-based chemosensors were prepared by a simple and green method, in which the silver **[...] Read more.**

(This article belongs to the Section **Circular and Green Polymer Science (/journal/polymers/sections/Circ_Green)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03745/article_deploy/html/images/polymers-14-03745-ag-550.jpg?1662622958)

(https://pub.mdpi-res.com/polymers/polymers-14-03745/article_deploy/html/images/polymers-14-03745-g001-550.jpg?1662622948)

(https://pub.mdpi-res.com/polymers/polymers-14-03745/article_deploy/html/images/polymers-14-03745-g002-550.jpg?1662622947)

(https://pub.mdpi-res.com/polymers/polymers-14-03745/article_deploy/html/images/polymers-14-03745-g003-550.jpg?1662622950)

(https://pub.mdpi-res.com/polymers/polymers-14-03745/article_deploy/html/images/polymers-14-03745-g004-550.jpg?1662622956)

(https://pub.mdpi-res.com/polymers/polymers-14-03745/article_deploy/html/images/polymers-14-03745-g005-550.jpg?1662622954)

(https://pub.mdpi-res.com/polymers/polymers-14-03745/article_deploy/html/images/polymers-14-03745-g006-550.jpg?1662622953)

(https://pub.mdpi-res.com/polymers/polymers-14-03745/article_deploy/html/images/polymers-14-03745-g007-550.jpg?1662622944)

(https://pub.mdpi-res.com/polymers/polymers-14-03745/article_deploy/html/images/polymers-14-03745-g008-550.jpg?1662622955)

(https://pub.mdpi-res.com/polymers/polymers-14-03745/article_deploy/html/images/polymers-14-03745-sch001-550.jpg?1662622957)

Open Access Article **(/2073-4360/14/18/3744/pdf?version=1662605780)**

Novel Rubber Composites Based on Copper Particles, Multi-Wall Carbon Nanotubes and Their Hybrid for Stretchable Devices (/2073-4360/14/18/3744)

by **Vineet Kumar (https://sciprofiles.com/profile/1457895?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**,
Siraj Azam (https://sciprofiles.com/profile/2430280?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Md. Najib Alam (https://sciprofiles.com/profile/1497944?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Won-Beom Hong (https://sciprofiles.com/profile/author/S0pyS1VUVkdNYm1xQkw1K21ENURFa210akR4MHNBWCtoL25zUkVtQkZhST0=?utm_
and
Sang-Shin Park (https://sciprofiles.com/profile/255891?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3744; **https://doi.org/10.3390/polym14183744 (https://doi.org/10.3390/polym14183744)** - 07 Sep 2022

Cited by 3 (/2073-4360/14/18/3744#metrics) | Viewed by 1171

Back to TopTop

Abstract New technologies are constantly addressed in the scientific community for updating novel stretchable devices, such as flexible electronics, electronic packaging, and piezo-electric energy-harvesting devices. The device promoted in the present work was found to generate promising ~6V and durability of >0.4 million cycles. **[...] Read more.**

(This article belongs to the Special Issue **Advances in Functional Rubber and Elastomer Composites (/journal/polymers/special_issues/Adv_Funct_Rubber_Elastomer_Compos)**)

► Show Figures

Open Access Article (/2073-4360/14/18/3743/pdf?version=1662604467)

Thermally Resistant, Self-Extinguishing Thermoplastic Composites Enabled by Tannin-Based Carbonaceous Particulate (/2073-4360/14/18/3743)

by **André L. Missio (https://sciprofiles.com/profile/1317526?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Rafael A. Delucis (https://sciprofiles.com/profile/944481?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Caio Gomide Otoni (https://sciprofiles.com/profile/1457581?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Pedro H. G. de Cademartori (https://sciprofiles.com/profile/616760?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_na**, **Rodrigo Coldebella (https://sciprofiles.com/profile/1530951?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Arthur B. Aramburu (https://sciprofiles.com/profile/2427612?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Bruno D. Mattos (https://sciprofiles.com/profile/author/T3lTSko3ZGJnSUovb0Qyb21qOGVtTm9ucGVneTRBdGR6S0ZlMVNtMkZRQT0=?utm_sc**, **Marlon B. B. Rodrigues (https://sciprofiles.com/profile/2355417?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Nayara Lunkes (https://sciprofiles.com/profile/author/TU5YazN5OEdRVVM2RCtYQUdlYWFJS2k4dnNwYWlhQXZOQTF2N1BScEUwaz0=?utm_s**, **Darci A. Gatto (https://sciprofiles.com/profile/1175672?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)** and **Jalel Labidi (https://sciprofiles.com/profile/175403?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**

Polymers **2022**, *14*(18), 3743; **https://doi.org/10.3390/polym14183743 (https://doi.org/10.3390/polym14183743)** - 07 Sep 2022

Viewed by 1171

Abstract Flame-resistant materials are key components in buildings and several other engineering applications. In this study, flame retardancy and thermal stability were conferred to a highly flammable technical thermoplastic—polypropylene (PP)—upon compositing with a carbonaceous tannin-based particulate (CTP). Herein, we report on a straightforward, facile, **[...] Read more.**

(This article belongs to the Special Issue **Flame-Retardant Polymer Composites (/journal/polymers/special_issues/Flame_Retard_Polym_Compos)**)

► Show Figures

Open Access Article (/2073-4360/14/18/3742/pdf?version=1663038226)

3D Printing of Triamcinolone Acetonide in Triblock Copolymers of Styrene–Isobutylene–Styrene as a Slow-Release System (/2073-4360/14/18/3742)

by **Philipp S. Hilgeroth (https://sciprofiles.com/profile/author/Sm83OTN4NUtjeVpveFhOWmVBd3Q2djJRNUhWNFNTdkZGb2FaRjB5Z1luMXhZMSt**, **Justus F. Thümmler (https://sciprofiles.com/profile/author/cVZMaExMdGJKUVVxd0FpUUEwSWJHZVR3L0VNNklsZ3Y3dm5jNFR6OHBUUzJVM(** and **Wolfgang H. Binder (https://sciprofiles.com/profile/166302?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**

Polymers **2022**, *14*(18), 3742; **https://doi.org/10.3390/polym14183742 (https://doi.org/10.3390/polym14183742)** - 07 Sep 2022

Back to TopTop

Cited by 1 (/2073-4360/14/18/3742#metrics) | Viewed by 1385

Abstract Additive manufacturing has a wide range of applications and has opened up new methods of drug formulation, in turn achieving attention in medicine. We prepared styrene–isobutylene–styrene triblock copolymers (SIBS; Mn = 10 kDa–25 kDa, PDI 1,3–1,6) as a drug carrier for triamcinolone acetonide **[...] Read more.**

(This article belongs to the Special Issue **Insights into Biodegradable Polymer-Based Delivery Vehicles for Pharmaceutical Applications: Traditional and Current Approaches (** /journal/polymers/special_issues/Insights_Biodegradable_Polymer_Based_Delivery_Vehicles_Pharmaceutical_Applications_Traditional_Current **)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03742/article_deploy/html/images/polymers-14-03742-ag-550.jpg?1663147999)

(https://pub.mdpi-res.com/polymers/polymers-14-03742/article_deploy/html/images/polymers-14-03742-g001-550.jpg?1663147979)

(https://pub.mdpi-res.com/polymers/polymers-14-03742/article_deploy/html/images/polymers-14-03742-g002-550.jpg?1663147981)

(https://pub.mdpi-res.com/polymers/polymers-14-03742/article_deploy/html/images/polymers-14-03742-g003-550.jpg?1663147978)

(https://pub.mdpi-res.com/polymers/polymers-14-03742/article_deploy/html/images/polymers-14-03742-g004-550.jpg?1663147988)

(https://pub.mdpi-res.com/polymers/polymers-14-03742/article_deploy/html/images/polymers-14-03742-g005-550.jpg?1663147985)

(https://pub.mdpi-res.com/polymers/polymers-14-03742/article_deploy/html/images/polymers-14-03742-g006-550.jpg?1663147986)

(https://pub.mdpi-res.com/polymers/polymers-14-03742/article_deploy/html/images/polymers-14-03742-sch001-550.jpg?1663147980)

Open Access Article (/2073-4360/14/18/3741/pdf?version=1663256911)

Analysis of Permeation and Diffusion Coefficients to Infer Aging Attributes in Polymers Subjected to Supercritical CO_2 and H_2 Gas at High Pressures (/2073-4360/14/18/3741)

by Hamad Raheem (https://sciprofiles.com/profile/1616037?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Bernadette Craster (https://sciprofiles.com/profile/566198?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Ashwin Seshia (https://sciprofiles.com/profile/1070390?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3741; https://doi.org/10.3390/polym14183741 (https://doi.org/10.3390/polym14183741) - 07 Sep 2022

Cited by 1 (/2073-4360/14/18/3741#metrics) | Viewed by 1876

Abstract There is a need to understand the permeation flux behavior of polymers exposed to high-pressure and -temperature fluids continuously for long time intervals. This study investigates evidence of structural alterations in polymer specimens as indicators of material aging through the monitoring of transport **[...] Read more.**

(This article belongs to the Special Issue **Aging of Polymer Materials (** /journal/polymers/special_issues/aging_polym_mater **)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03741/article_deploy/html/images/polymers-14-03741-g001-550.jpg?1663256984)

(https://pub.mdpi-res.com/polymers/polymers-14-03741/article_deploy/html/images/polymers-14-03741-g002-550.jpg?1663256988)

(https://pub.mdpi-res.com/polymers/polymers-14-03741/article_deploy/html/images/polymers-14-03741-g003-550.jpg?1663256979)

(https://pub.mdpi-res.com/polymers/polymers-14-03741/article_deploy/html/images/polymers-14-03741-g004-550.jpg?1663256990)

(https://pub.mdpi-res.com/polymers/polymers-14-03741/article_deploy/html/images/polymers-14-03741-g005-550.jpg?1663256981)

(https://pub.mdpi-res.com/polymers/polymers-14-03741/article_deploy/html/images/polymers-14-03741-g006-550.jpg?1663256983)

(https://pub.mdpi-res.com/polymers/polymers-14-03741/article_deploy/html/images/polymers-14-03741-g007-550.jpg?1663256985)

(https://pub.mdpi-res.com/polymers/polymers-14-03741/article_deploy/html/images/polymers-14-03741-g008-550.jpg?1663256977)

(https://pub.mdpi-res.com/polymers/polymers-14-03741/article_deploy/html/images/polymers-14-03741-g009-550.jpg?1663256980)

Open Access Article (/2073-4360/14/18/3740/pdf?version=1662609935)

Effect of Fiber Wrapping on Bending Behavior of Reinforced Concrete Filled Pultruded GFRP Composite Hybrid Beams (/2073-4360/14/18/3740)

by Lokman Gemi (https://sciprofiles.com/profile/1894709?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Emrah Madenci (https://sciprofiles.com/profile/2207905?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Yasin Onuralp Özkılıç (https://sciprofiles.com/profile/2422175?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Şakir Yazman (https://sciprofiles.com/profile/author/dHFDWkhmRVc0S1FBQ2Q0UDZzd3l0a3Q1akVKZUg1cUJLM21id2JCREowQT0=?utm_sou and Alexander Safonov (https://sciprofiles.com/profile/735816?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3740; https://doi.org/10.3390/polym14183740 (https://doi.org/10.3390/polym14183740) - 07 Sep 2022

Cited by 33 (/2073-4360/14/18/3740#metrics) | Viewed by 1774

Abstract The application of pultruded fiber reinforced polymer (FRP) composites in civil engineering is increasing as a high-performance structural element or reinforcing material for rehabilitation purposes. The advantageous aspects of the pultrusion production technique and the weaknesses arising from the 0° fiber orientation in **[...] Read more.**

(This article belongs to the Special Issue **Fiber Reinforced Polymer Materials (** /journal/polymers/special_issues/Fiber_Reinforced_Polymer_Materials **)**)

► Show Figures

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03740/article_deploy/html/images/polymers-14-03740-g001-550.jpg?1662710550)
(https://pub.mdpi-res.com/polymers/polymers-14-03740/article_deploy/html/images/polymers-14-03740-g002-550.jpg?1662710542)
(https://pub.mdpi-res.com/polymers/polymers-14-03740/article_deploy/html/images/polymers-14-03740-g003-550.jpg?1662710547)
(https://pub.mdpi-res.com/polymers/polymers-14-03740/article_deploy/html/images/polymers-14-03740-g004-550.jpg?1662710581)
(https://pub.mdpi-res.com/polymers/polymers-14-03740/article_deploy/html/images/polymers-14-03740-g005-550.jpg?1662710570)
(https://pub.mdpi-res.com/polymers/polymers-14-03740/article_deploy/html/images/polymers-14-03740-g006-550.jpg?1662710603)
(https://pub.mdpi-res.com/polymers/polymers-14-03740/article_deploy/html/images/polymers-14-03740-g007-550.jpg?1662710552)
(https://pub.mdpi-res.com/polymers/polymers-14-03740/article_deploy/html/images/polymers-14-03740-g008-550.jpg?1662710558)
(https://pub.mdpi-res.com/polymers/polymers-14-03740/article_deploy/html/images/polymers-14-03740-g009-550.jpg?1662710601)
(https://pub.mdpi-res.com/polymers/polymers-14-03740/article_deploy/html/images/polymers-14-03740-g010-550.jpg?1662710562)
(https://pub.mdpi-res.com/polymers/polymers-14-03740/article_deploy/html/images/polymers-14-03740-g011-550.jpg?1662710595)
(https://pub.mdpi-res.com/polymers/polymers-14-03740/article_deploy/html/images/polymers-14-03740-g012-550.jpg?1662710576)
(https://pub.mdpi-res.com/polymers/polymers-14-03740/article_deploy/html/images/polymers-14-03740-g013-550.jpg?1662710568)
(https://pub.mdpi-res.com/polymers/polymers-14-03740/article_deploy/html/images/polymers-14-03740-g014-550.jpg?1662710557)
(https://pub.mdpi-res.com/polymers/polymers-14-03740/article_deploy/html/images/polymers-14-03740-g015-550.jpg?1662710599)
(https://pub.mdpi-res.com/polymers/polymers-14-03740/article_deploy/html/images/polymers-14-03740-g016-550.jpg?1662710588)

Open Access Review (/2073-4360/14/18/3739/pdf?version=1662605451)

Conductive Hydrogels Based on Industrial Lignin: Opportunities and Challenges (/2073-4360/14/18/3739)

by Chao Liu (https://sciprofiles.com/profile/2383881?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Yu Li (https://sciprofiles.com/profile/author/T2ZHdi9vdmRoK05rMmoydmtSc3p3RVorcEwwUjBJQTZxQ3VDalljRjZmQT0=?utm_source=mdpi.c
, Jingshun Zhuang (https://sciprofiles.com/profile/author/WS9USmRyNERaY2x4cCt0bTlJVGtqSXMrNnZKMHhmNnE4Wmp3WVRoY3Yxdz0=?utr
, Zhouyang Xiang (https://sciprofiles.com/profile/801816?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Weikun Jiang (https://sciprofiles.com/profile/author/djMwUzV4N2R3amVqV3UrWXlUM1l6K2p5Q2p5UXRGNW92NVg3dU0rZytyZz0=?utm_sourc
, Shuaiming He (https://sciprofiles.com/profile/2078453?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Huining Xiao (https://sciprofiles.com/profile/96261?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3739; https://doi.org/10.3390/polym14183739 (https://doi.org/10.3390/polym14183739) - 07 Sep 2022
Cited by 14 (/2073-4360/14/18/3739#metrics) | Viewed by 2180

Abstract The development of green materials, especially the preparation of high-performance conductive hydrogels from biodegradable biomass materials, is of great importance and has received worldwide attention. As an aromatic polymer found in many natural biomass resources, lignin has the advantage of being renewable, biodegradable, **[...] Read more.**

(This article belongs to the Special Issue **Flexible Conductive Hydrogel (/journal/polymers/special_issues/Flex_Conduct_Hydrogel)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03739/article_deploy/html/images/polymers-14-03739-g001-550.jpg?1662605519)
(https://pub.mdpi-res.com/polymers/polymers-14-03739/article_deploy/html/images/polymers-14-03739-g002-550.jpg?1662605523)
(https://pub.mdpi-res.com/polymers/polymers-14-03739/article_deploy/html/images/polymers-14-03739-g003-550.jpg?1662605538)
(https://pub.mdpi-res.com/polymers/polymers-14-03739/article_deploy/html/images/polymers-14-03739-g004-550.jpg?1662605529)
(https://pub.mdpi-res.com/polymers/polymers-14-03739/article_deploy/html/images/polymers-14-03739-g005-550.jpg?1662605526)
(https://pub.mdpi-res.com/polymers/polymers-14-03739/article_deploy/html/images/polymers-14-03739-g006-550.jpg?1662605521)
(https://pub.mdpi-res.com/polymers/polymers-14-03739/article_deploy/html/images/polymers-14-03739-g007-550.jpg?1662605531)

Open Access Article (/2073-4360/14/18/3738/pdf?version=1662547071)

Bio-Nanocomposite Based on Edible Gelatin Film as Active Packaging from *Clarias gariepinus* Fish Skin with the Addition of Cellulose Nanocrystalline and Nanopropolis (/2073-4360/14/18/3738)

by
Ratna (https://sciprofiles.com/profile/author/bGtpWlNuaHRzTGxRM2UzclNFSjJvMEZOZUJiQ1ptVWtBMFREbUM0eUtDcz0=?utm_source=mdpi
, Sri Aprilia (https://sciprofiles.com/profile/1193116?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Nasrul Arahman (https://sciprofiles.com/profile/173206?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Muhammad Roil Bilad (https://sciprofiles.com/profile/668823?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Hazwani Suhaimi (https://sciprofiles.com/profile/2164539?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Agus Arip Munawar (https://sciprofiles.com/profile/2126312?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Indera Sakti Nasution (https://sciprofiles.com/profile/2438970?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Back to TopTop

Polymers **2022**, *14*(18), 3738; **https://doi.org/10.3390/polym14183738 (https://doi.org/10.3390/polym14183738)** - 07 Sep 2022
Cited by 3 (/2073-4360/14/18/3738#metrics) | Viewed by 1480

Abstract This study develops bio-nano composite gelatin-based edible film (NEF) by combining nanogelatin, cellulose nanocrystal (CNC), and nanopropolis (NP) fillers to improve the resulting film characteristics. The NEF was characterized in terms of thickness, swelling, pH, water content, solubility, vapor and oxygen permeability, mechanical **[...] Read more.**
(This article belongs to the Special Issue **Polymers in Food Technology and Food Packaging (/journal/polymers/special_issues/polym_food_technol_food_packag)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03738/article_deploy/html/images/polymers-14-03738-g001-550.jpg?1662547144)

(https://pub.mdpi-res.com/polymers/polymers-14-03738/article_deploy/html/images/polymers-14-03738-g002-550.jpg?1662547149)

(https://pub.mdpi-res.com/polymers/polymers-14-03738/article_deploy/html/images/polymers-14-03738-g003-550.jpg?1662547146)

(https://pub.mdpi-res.com/polymers/polymers-14-03738/article_deploy/html/images/polymers-14-03738-g004-550.jpg?1662547150)

(https://pub.mdpi-res.com/polymers/polymers-14-03738/article_deploy/html/images/polymers-14-03738-g005-550.jpg?1662547156)

(https://pub.mdpi-res.com/polymers/polymers-14-03738/article_deploy/html/images/polymers-14-03738-g006-550.jpg?1662547153)

Open Access Review **(/2073-4360/14/18/3737/pdf?version=1662547838)**

Factors Affecting Mechanical Properties of Reinforced Bioplastics: A Review (/2073-4360/14/18/3737)

by **Jet Yin Boey (https://sciprofiles.com/profile/1517676?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Chee Keong Lee (https://sciprofiles.com/profile/1554801?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)** and **Guan Seng Tay (https://sciprofiles.com/profile/1533494?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**
Polymers **2022**, *14*(18), 3737; **https://doi.org/10.3390/polym14183737 (https://doi.org/10.3390/polym14183737)** - 07 Sep 2022
Cited by 13 (/2073-4360/14/18/3737#metrics) | Viewed by 4847

Abstract The short life cycle and recalcitrant nature of petroleum-based plastics have been associated with plastic waste accumulation due to their composition rather than worldwide overproduction. The drive to replace single-use products has sparked a considerable amount of research work to discover sustainable options **[...] Read more.**
(This article belongs to the Special Issue **Mechanical Performance of Sustainable Bio-Based Compounds (/journal/polymers/special_issues/mech_perform_bio_compd)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03737/article_deploy/html/images/polymers-14-03737-ag-550.jpg?1662547907)

(https://pub.mdpi-res.com/polymers/polymers-14-03737/article_deploy/html/images/polymers-14-03737-g001-550.jpg?1662547905)

(https://pub.mdpi-res.com/polymers/polymers-14-03737/article_deploy/html/images/polymers-14-03737-g002-550.jpg?1662547903)

(https://pub.mdpi-res.com/polymers/polymers-14-03737/article_deploy/html/images/polymers-14-03737-g003-550.jpg?1662547906)

(https://pub.mdpi-res.com/polymers/polymers-14-03737/article_deploy/html/images/polymers-14-03737-g004-550.jpg?1662547902)

(https://pub.mdpi-res.com/polymers/polymers-14-03737/article_deploy/html/images/polymers-14-03737-g005-550.jpg?1662547904)

Open Access Article **(/2073-4360/14/18/3736/pdf?version=1662546843)**

Biodegradability Assessment of Polyester Copolymers Based on Poly(ethylene adipate) and Poly(ε-caprolactone) (/2073-4360/14/18/3736)

by
Leonard Ionut Atanase (https://sciprofiles.com/profile/13622?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Slim Salhi (https://sciprofiles.com/profile/author/TXphdjhyZGd1M3ozUFBEd3E5UDg4NUFPNkE3K0ZBTTRXV1FYQklidmhPcz0=?utm_source=r
,
Oana Cucoveica (https://sciprofiles.com/profile/author/NmliWkE1SzBqaTk5a3JRRitzU1BMSmkrTHJuUFBoeXRtUjVPSTRmUmRpcz0=?utm_so
,
Marijana Ponjavic (https://sciprofiles.com/profile/1884675?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Jasmina Nikodinovic-Runic (https://sciprofiles.com/profile/448662?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_na
and
Christelle Delaite (https://sciprofiles.com/profile/3023926?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3736; **https://doi.org/10.3390/polym14183736 (https://doi.org/10.3390/polym14183736)** - 07 Sep 2022
Cited by 2 (/2073-4360/14/18/3736#metrics) | Viewed by 1211

Abstract Biodegradable polymers contain chains that are hydrolytically or enzymatically cleaved, resulting in soluble degradation products. Biodegradability is particularly desired in biomedical applications, in which degradation of the polymer ensures clearance from the body and eliminates the need for retrieval or explant. In this **[...] Read more.**
(This article belongs to the Special Issue **Advanced Materials with Application in Modern Medicine (/journal/polymers/special_issues/mod_med)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03736/article_deploy/html/images/polymers-14-03736-g001-550.jpg?1662546909)

(https://pub.mdpi-res.com/polymers/polymers-14-03736/article_deploy/html/images/polymers-14-03736-g002-550.jpg?1662546916)

(https://pub.mdpi-res.com/polymers/polymers-14-03736/article_deploy/html/images/polymers-14-03736-g003-550.jpg?1662546914)

(https://pub.mdpi-res.com/polymers/polymers-14-03736/article_deploy/html/images/polymers-14-03736-g004-550.jpg?1662546911)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03736/article_deploy/html/images/polymers-14-03736-g005-550.jpg?1662546921)

(https://pub.mdpi-res.com/polymers/polymers-14-03736/article_deploy/html/images/polymers-14-03736-g006-550.jpg?1662546913)

(https://pub.mdpi-res.com/polymers/polymers-14-03736/article_deploy/html/images/polymers-14-03736-g007-550.jpg?1662546911)

(https://pub.mdpi-res.com/polymers/polymers-14-03736/article_deploy/html/images/polymers-14-03736-g008-550.jpg?1662546918)

(https://pub.mdpi-res.com/polymers/polymers-14-03736/article_deploy/html/images/polymers-14-03736-g009-550.jpg?1662546922)

(https://pub.mdpi-res.com/polymers/polymers-14-03736/article_deploy/html/images/polymers-14-03736-sch001-550.jpg?1662546917)

(https://pub.mdpi-res.com/polymers/polymers-14-03736/article_deploy/html/images/polymers-14-03736-sch002-550.jpg?1662546920)

Open Access Article (/2073-4360/14/18/3735/pdf?version=1663749433)

Development of a New Eco-Friendly Copolymer Based on Chitosan for Enhanced Removal of Pb and Cd from Water (/2073-4360/14/18/3735)

by
Iolanda-Veronica Ganea (https://sciprofiles.com/profile/1471853?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name
,
Alexandrina Nan (https://sciprofiles.com/profile/208581?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Carmen Roba (https://sciprofiles.com/profile/1448248?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Iulia Neamțiu (https://sciprofiles.com/profile/2353619?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Eugen Gurzău (https://sciprofiles.com/profile/author/SkphbWVXOWROdHBqTHo4Z1FlaG1Qdz09?utm_source=mdpi.com&utm_medium=webs
,
Rodica Turcu (https://sciprofiles.com/profile/181821?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Xenia Filip (https://sciprofiles.com/profile/1717280?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Călin Baciu (https://sciprofiles.com/profile/252450?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3735; https://doi.org/10.3390/polym14183735 (https://doi.org/10.3390/polym14183735) - 07 Sep 2022
Viewed by 1459

Abstract Worldwide, concerns about heavy metal contamination from manmade and natural sources have increased in recent decades. Metals released into the environment threaten human health, mostly due to their integration into the food chain and persistence. Nature offers a large range of materials with **[...] Read more.**

(This article belongs to the Special Issue **Advances in Biocompatible and Biodegradable Polymers II (/journal/polymers/special_issues/biocompat_biodegrad_polym_II)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g001-550.jpg?1663750263)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g002-550.jpg?1663750224)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g003-550.jpg?1663750244)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g004-550.jpg?1663750256)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g005-550.jpg?1663750227)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g006-550.jpg?1663750212)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g007-550.jpg?1663750216)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g008-550.jpg?1663750230)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g009-550.jpg?1663750253)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g010-550.jpg?1663750250)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g011-550.jpg?1663750223)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g012-550.jpg?1663750238)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g013-550.jpg?1663750241)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g014-550.jpg?1663750214)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g015-550.jpg?1663750218)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g016-550.jpg?1663750234)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g017a-550.jpg?1663750243)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g017b-550.jpg?1663750245)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g018-550.jpg?1663750259)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-g019-550.jpg?1663750235)

(https://pub.mdpi-res.com/polymers/polymers-14-03735/article_deploy/html/images/polymers-14-03735-sch001-550.jpg?1663750255)

Open Access Article (/2073-4360/14/18/3734/pdf?version=1662551223)

Reconstruction and Removal Mechanisms of Gel-like Membrane Fouling for Seawater Desalination: Experiments and Molecular Dynamics Simulations (/2073-4360/14/18/3734)

Back to TopTop

by Qi Wang (https://sciprofiles.com/profile/2364462?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Xiaoyu Yang (https://sciprofiles.com/profile/2439670?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Ronghui Qi (https://sciprofiles.com/profile/1647739?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Lijun Zhang (https://sciprofiles.com/profile/579638?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3734; https://doi.org/10.3390/polym14183734 (https://doi.org/10.3390/polym14183734) - 07 Sep 2022

Viewed by 1205

Abstract Anti-gel fouling is a key problem faced by membrane desalination, especially for applications in organic acid-rich seawater. In this paper, a chemical crosslinking-based method was used to reconstruct and characterize the gel pollutants produced under the actual operating conditions of seawater desalination. In **[...] Read more.**

(This article belongs to the Special Issue **High Performance Polymer Membranes (** /journal/polymers/special_issues/High_Performance_Polymer_Membranes))

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03734/article_deploy/html/images/polymers-14-03734-ag-550.jpg?1662551321)

(https://pub.mdpi-res.com/polymers/polymers-14-03734/article_deploy/html/images/polymers-14-03734-g001-550.jpg?1662551318)

(https://pub.mdpi-res.com/polymers/polymers-14-03734/article_deploy/html/images/polymers-14-03734-g002-550.jpg?1662551306)

(https://pub.mdpi-res.com/polymers/polymers-14-03734/article_deploy/html/images/polymers-14-03734-g003-550.jpg?1662551312)

(https://pub.mdpi-res.com/polymers/polymers-14-03734/article_deploy/html/images/polymers-14-03734-g004-550.jpg?1662551318)

(https://pub.mdpi-res.com/polymers/polymers-14-03734/article_deploy/html/images/polymers-14-03734-g005-550.jpg?1662551313)

(https://pub.mdpi-res.com/polymers/polymers-14-03734/article_deploy/html/images/polymers-14-03734-g006-550.jpg?1662551308)

(https://pub.mdpi-res.com/polymers/polymers-14-03734/article_deploy/html/images/polymers-14-03734-g007-550.jpg?1662551317)

(https://pub.mdpi-res.com/polymers/polymers-14-03734/article_deploy/html/images/polymers-14-03734-g008a-550.jpg?1662551310)

(https://pub.mdpi-res.com/polymers/polymers-14-03734/article_deploy/html/images/polymers-14-03734-g008b-550.jpg?1662551310)

(https://pub.mdpi-res.com/polymers/polymers-14-03734/article_deploy/html/images/polymers-14-03734-g009-550.jpg?1662551320)

(https://pub.mdpi-res.com/polymers/polymers-14-03734/article_deploy/html/images/polymers-14-03734-g010-550.jpg?1662551314)

(https://pub.mdpi-res.com/polymers/polymers-14-03734/article_deploy/html/images/polymers-14-03734-g011-550.jpg?1662551314)

Open Access Article (/2073-4360/14/18/3733/pdf?version=1662545070)

Intrinsically Negative Photosensitive Polyimides with Enhanced High-Temperature Dimensional Stability and Optical Transparency for Advanced Optical Applications via Simultaneous Incorporation of Trifluoromethyl and Benzanilide Units: Preparation and Properties (/2073-4360/14/18/3733)

by Yanshuang Gao (https://sciprofiles.com/profile/author/cDlyQWo1NzZJWWplMDh6amRjMHNXWGhoMFZGczQxN21VZTVhRnhueWdrbz0=?utm_, Huasen Wang (https://sciprofiles.com/profile/1732277?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Jie Jia (https://sciprofiles.com/profile/author/K3lvMnQxL1NrUEFtOWdRUVAyZ3pwM3JEVUxMSGJyYjZnNU9lWExZMDRhcz0=?utm_source=mc, Zhen Pan (https://sciprofiles.com/profile/author/WHVhL0pOQTQ4MFA2SWVUQWtWTm1RSUkvUENtTXlqaXBPYmNSSVNrRWUwRT0=?utm_so, Xi Ren (https://sciprofiles.com/profile/author/a3VsUEpNZWNlZFkzWmxkM2JobTdQckxoSUFJcWk1MjVjTEJSODF6NzBFND0=?utm_source=mc, Xinxin Zhi (https://sciprofiles.com/profile/author/U2FXRm52bUQvZERnUWVYSmhpbWlYQWxrK1l3RVM4a1NpNTBCMWVPamcxaz0=?utm_sou, Yan Zhang (https://sciprofiles.com/profile/author/SDBXWnYwaUhTc044bi96L21GMjlJVnFmbkFlNmNOUDlRbzNmczVMQTZKbz0=?utm_source=, Xuanzhe Du (https://sciprofiles.com/profile/author/WWJLT1BhWTBUU1VBZmNvN3lMNWNJZEZWZUxzMklyM0JsOTVtNDNyMjYxOD0=?utm_so, Xiaolei Wang (https://sciprofiles.com/profile/author/RmplYnRKUllSTE5jT280bzVtdHZQRHlHR25UVkVmUGpZRGJhQTZFQXZYND0=?utm_sourc and Jingang Liu (https://sciprofiles.com/profile/539609?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3733; https://doi.org/10.3390/polym14183733 (https://doi.org/10.3390/polym14183733) - 07 Sep 2022

Cited by 2 (/2073-4360/14/18/3733#metrics) | Viewed by 1499

Abstract Negative photosensitive polyimides (PSPIs) with the photo-patterned ability via the photocrosslinking reactions induced by the i-line (365 nm) and h-line (426 nm) emitting wavelengths in high-pressure mercury lamps have been paid increasing attention in semiconductor fabrication, optical fiber communications, and other advanced optoelectronic **[...] Read more.**

(This article belongs to the Special Issue **Advanced Polymer Composite for Energy Applications (** /journal/polymers/special_issues/Polymer_Composite_Energy_Applications))

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03733/article_deploy/html/images/polymers-14-03733-ag-550.jpg?1662545157)

(https://pub.mdpi-res.com/polymers/polymers-14-03733/article_deploy/html/images/polymers-14-03733-g001-550.jpg?1662545154)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03733/article_deploy/html/images/polymers-14-03733-g002-550.jpg?1662545156)

(https://pub.mdpi-res.com/polymers/polymers-14-03733/article_deploy/html/images/polymers-14-03733-g003-550.jpg?1662545146)

(https://pub.mdpi-res.com/polymers/polymers-14-03733/article_deploy/html/images/polymers-14-03733-g004-550.jpg?1662545147)

(https://pub.mdpi-res.com/polymers/polymers-14-03733/article_deploy/html/images/polymers-14-03733-g005-550.jpg?1662545148)

(https://pub.mdpi-res.com/polymers/polymers-14-03733/article_deploy/html/images/polymers-14-03733-g006-550.jpg?1662545144)

(https://pub.mdpi-res.com/polymers/polymers-14-03733/article_deploy/html/images/polymers-14-03733-g007-550.jpg?1662545155)

(https://pub.mdpi-res.com/polymers/polymers-14-03733/article_deploy/html/images/polymers-14-03733-g008-550.jpg?1662545153)

(https://pub.mdpi-res.com/polymers/polymers-14-03733/article_deploy/html/images/polymers-14-03733-g009-550.jpg?1662545150)

Open Access Editorial (/2073-4360/14/18/3732/pdf?version=1662541847)

Fibre-Reinforced Polymer Composites: Mechanical Properties and Applications (/2073-4360/14/18/3732)

by R. A. Ilyas (https://sciprofiles.com/profile/1386740?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), S. M. Sapuan (https://sciprofiles.com/profile/512036?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Emin Bayraktar (https://sciprofiles.com/profile/409365?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Shukur Abu Hassan (https://sciprofiles.com/profile/2306548?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Nabil Hayeemasae (https://sciprofiles.com/profile/274120?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), M. S. N. Atikah (https://sciprofiles.com/profile/author/ZGRBVTRpTWpQRXMvRVJCWko0R1VVZjVKQnljaitXUGgvaE9RVFkwL3BFST0=?utm_so and Khubab Shaker (https://sciprofiles.com/profile/1917701?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3732; https://doi.org/10.3390/polym14183732 (https://doi.org/10.3390/polym14183732) - 07 Sep 2022

Cited by 1 (/2073-4360/14/18/3732#metrics) | Viewed by 2045

Abstract *"Fibre-Reinforced Polymer Composites: Mechanical Properties and Applications"* is a newly open Special Issue of *Polymers*, which aims to publish original and review papers on new scientific and applied research and make boundless contributions to the finding and understanding of the reinforcing effects **[...] Read more.**

(This article belongs to the Special Issue **Fiber Reinforced Polymer Composites: Mechanical Properties and Applications (/journal/polymers/special_issues/HK8P7953V9)**)

Open Access Article (/2073-4360/14/18/3731/pdf?version=1662542166)

Influence of the Synergistic Effect of Multi-Walled Carbon Nanotubes and Carbon Fibers in the Rubber Matrix on the Friction and Wear of Metals during the Mixing Process (/2073-4360/14/18/3731)

by Lin Wang (https://sciprofiles.com/profile/author/dk0ybkNHKzlweFRzb0RGZjVvdmg5ZlFrUXZzOWFqanhzdjhsbmdOcnFWZz0=?utm_source=mc , Yi Pan (https://sciprofiles.com/profile/author/TDBKNVFBMm9KTVFUQUgwSitEcThGNWJEcis1WXVYcVR5ckpJVmhtV3pCbz0=?utm_source=m , Yihui Chen (https://sciprofiles.com/profile/author/Y0dhdy9HZWxtMEl1OVVPUXRJa3hET0J1SkpsQUhvUTV4WHFYeFpUYThPUT0=?utm_source , Jian Qiu (https://sciprofiles.com/profile/2485257?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Aihua Du (https://sciprofiles.com/profile/author/NXc5R1dKQzB1Z3gzemRJUGZxdk1Wb0toMjdOMjJnb0ppaVlON3FmcjZ1az0=?utm_source=mc , Deshang Han (https://sciprofiles.com/profile/2082790?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Chuansheng Wang (https://sciprofiles.com/profile/author/SXZDL09YanEyZlQ2TWhoRUtWeXFRTGFHR0NOd24yZFoxa3hLeHJvTW1vTT0=?utm

Polymers **2022**, *14*(18), 3731; https://doi.org/10.3390/polym14183731 (https://doi.org/10.3390/polym14183731) - 07 Sep 2022

Viewed by 874

Abstract As a piece of high-intensity running equipment, the wear of an internal mixer determines the quality of rubber and its life. In general, the wear of an internal mixer is caused by the friction between the rubber and metal during the mixing process, **[...] Read more.**

(This article belongs to the Special Issue **Advances in Structure-Property Relationship of Polymer Materials (/journal/polymers/special_issues/655TMJTE9V)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03731/article_deploy/html/images/polymers-14-03731-g001-550.jpg?1662542265)

(https://pub.mdpi-res.com/polymers/polymers-14-03731/article_deploy/html/images/polymers-14-03731-g002-550.jpg?1662542244)

(https://pub.mdpi-res.com/polymers/polymers-14-03731/article_deploy/html/images/polymers-14-03731-g003-550.jpg?1662542248)

(https://pub.mdpi-res.com/polymers/polymers-14-03731/article_deploy/html/images/polymers-14-03731-g004a-550.jpg?1662542236)

(https://pub.mdpi-res.com/polymers/polymers-14-03731/article_deploy/html/images/polymers-14-03731-g004b-550.jpg?1662542252)

(https://pub.mdpi-res.com/polymers/polymers-14-03731/article_deploy/html/images/polymers-14-03731-g005-550.jpg?1662542246)

(https://pub.mdpi-res.com/polymers/polymers-14-03731/article_deploy/html/images/polymers-14-03731-g006-550.jpg?1662542254)

(https://pub.mdpi-res.com/polymers/polymers-14-03731/article_deploy/html/images/polymers-14-03731-g007-550.jpg?1662542263)

(https://pub.mdpi-res.com/polymers/polymers-14-03731/article_deploy/html/images/polymers-14-03731-g008a-550.jpg?1662542237)

(https://pub.mdpi-res.com/polymers/polymers-14-03731/article_deploy/html/images/polymers-14-03731-g008b-550.jpg?1662542253)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03731/article_deploy/html/images/polymers-14-03731-g009a-550.jpg?1662542240)

(https://pub.mdpi-res.com/polymers/polymers-14-03731/article_deploy/html/images/polymers-14-03731-g009b-550.jpg?1662542233)

(https://pub.mdpi-res.com/polymers/polymers-14-03731/article_deploy/html/images/polymers-14-03731-g010a-550.jpg?1662542259)

(https://pub.mdpi-res.com/polymers/polymers-14-03731/article_deploy/html/images/polymers-14-03731-g010b-550.jpg?1662542256)

(https://pub.mdpi-res.com/polymers/polymers-14-03731/article_deploy/html/images/polymers-14-03731-g011-550.jpg?1662542250)

Open Access Feature Paper Review (/2073-4360/14/18/3730/pdf?version=1662541870)

Recent Developments and Implementations of Conductive Polymer-Based Flexible Devices in Sensing Applications (/2073-4360/14/18/3730)

by Vinh Van Tran (https://sciprofiles.com/profile/827069?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Sanghyuck Lee (https://sciprofiles.com/profile/1197743?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Daeho Lee (https://sciprofiles.com/profile/150778?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Thanh-Hai Le (https://sciprofiles.com/profile/261713?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3730; https://doi.org/10.3390/polym14183730 (https://doi.org/10.3390/polym14183730) - 07 Sep 2022

Cited by 11 (/2073-4360/14/18/3730#metrics) | Viewed by 3975

Abstract Flexible sensing devices have attracted significant attention for various applications, such as medical devices, environmental monitoring, and healthcare. Numerous materials have been used to fabricate flexible sensing devices and improve their sensing performance in terms of their electrical and mechanical properties. Among the **[...] Read more.**

(This article belongs to the Special Issue **Conjugated Polymer Nanocomposites: Synthesis, Characterization, and Applications (/journal/polymers/special_issues/conjug_polym)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03730/article_deploy/html/images/polymers-14-03730-g001-550.jpg?1662541946)

(https://pub.mdpi-res.com/polymers/polymers-14-03730/article_deploy/html/images/polymers-14-03730-g002-550.jpg?1662541957)

(https://pub.mdpi-res.com/polymers/polymers-14-03730/article_deploy/html/images/polymers-14-03730-g003-550.jpg?1662541943)

(https://pub.mdpi-res.com/polymers/polymers-14-03730/article_deploy/html/images/polymers-14-03730-g004-550.jpg?1662541954)

(https://pub.mdpi-res.com/polymers/polymers-14-03730/article_deploy/html/images/polymers-14-03730-g005-550.jpg?1662541950)

Open Access Editor's Choice Article (/2073-4360/14/18/3729/pdf?version=1662540031)

Generation of Polyamide 12 Coatings on Stainless Steel Substrates by Directed Energy Deposition with a Thulium-Doped Fiber Laser (DED-LB/P) (/2073-4360/14/18/3729)

by Alexander Wittmann (https://sciprofiles.com/profile/2367849?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Oliver Hentschel (https://sciprofiles.com/profile/488576?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Alexander Sommereyns (https://sciprofiles.com/profile/1722330?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name and Michael Schmidt (https://sciprofiles.com/profile/2483683?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3729; https://doi.org/10.3390/polym14183729 (https://doi.org/10.3390/polym14183729) - 07 Sep 2022

Cited by 1 (/2073-4360/14/18/3729#metrics) | Viewed by 1498

Abstract Due to their good material properties (e.g., corrosion and wear resistance, biocompatibility), thermoplastic materials like polyamide 12 (PA12) are interesting for functional coatings on metallic components. To ensure a spatially resolved coating and to shorten the process chain, directed energy deposition of polymer **[...] Read more.**

(This article belongs to the Section **Polymer Processing and Engineering (/journal/polymers/sections/Process_Eng)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03729/article_deploy/html/images/polymers-14-03729-g001-550.jpg?1662540108)

(https://pub.mdpi-res.com/polymers/polymers-14-03729/article_deploy/html/images/polymers-14-03729-g002-550.jpg?1662540101)

(https://pub.mdpi-res.com/polymers/polymers-14-03729/article_deploy/html/images/polymers-14-03729-g003-550.jpg?1662540109)

(https://pub.mdpi-res.com/polymers/polymers-14-03729/article_deploy/html/images/polymers-14-03729-g004-550.jpg?1662540105)

(https://pub.mdpi-res.com/polymers/polymers-14-03729/article_deploy/html/images/polymers-14-03729-g005-550.jpg?1662540104)

(https://pub.mdpi-res.com/polymers/polymers-14-03729/article_deploy/html/images/polymers-14-03729-g006-550.jpg?1662540103)

(https://pub.mdpi-res.com/polymers/polymers-14-03729/article_deploy/html/images/polymers-14-03729-g007-550.jpg?1662540110)

(https://pub.mdpi-res.com/polymers/polymers-14-03729/article_deploy/html/images/polymers-14-03729-g008-550.jpg?1662540100)

(https://pub.mdpi-res.com/polymers/polymers-14-03729/article_deploy/html/images/polymers-14-03729-g009-550.jpg?1662540107)

Open Access Article (/2073-4360/14/18/3728/pdf?version=1662538682)

Structural, Thermal, and Electrical Properties of Poly(Ethylene Oxide)—Tetramethyl Succinonitrile Blend for Redox Mediators (/2073-4360/14/18/3728)

by Ravindra Kumar Gupta (https://sciprofiles.com/profile/2021479?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

,

Back to TopTop

Hamid Shaikh (https://sciprofiles.com/profile/538216?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Ahamad Imran (https://sciprofiles.com/profile/440647?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Idriss Bedja (https://sciprofiles.com/profile/author/T01SSzlXYjJJUGc2Y3lxRTRnazFLMnUvT3ZESmZOWmlnM1Zvd3lnWnAwST0=?utm_source
and
Abdullah Saleh Aldwayyan (https://sciprofiles.com/profile/1016267?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_na

Polymers **2022**, *14*(18), 3728; https://doi.org/10.3390/polym14183728 (https://doi.org/10.3390/polym14183728) - 07 Sep 2022
Viewed by 1127

Abstract An all-solid–state dye-sensitized solar cell is one of the non-fossil fuel-based electrochemical devices for electricity generation in a high-temperature region. This device utilizes a redox mediator, which is a fast ion-conducting solid polymer electrolyte (SPE). The SPE makes the device economical, thinner, and **[...] Read more.**

(This article belongs to the Special Issue **Polymer Films for Photovoltaic Applications II (/journal/polymers/special_issues/poly_films_photovol_appli_II)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03728/article_deploy/html/images/polymers-14-03728-g001-550.jpg?1662538758)
(https://pub.mdpi-res.com/polymers/polymers-14-03728/article_deploy/html/images/polymers-14-03728-g002-550.jpg?1662538765)
(https://pub.mdpi-res.com/polymers/polymers-14-03728/article_deploy/html/images/polymers-14-03728-g003-550.jpg?1662538773)
(https://pub.mdpi-res.com/polymers/polymers-14-03728/article_deploy/html/images/polymers-14-03728-g004-550.jpg?1662538771)
(https://pub.mdpi-res.com/polymers/polymers-14-03728/article_deploy/html/images/polymers-14-03728-g005-550.jpg?1662538762)
(https://pub.mdpi-res.com/polymers/polymers-14-03728/article_deploy/html/images/polymers-14-03728-g006-550.jpg?1662538767)
(https://pub.mdpi-res.com/polymers/polymers-14-03728/article_deploy/html/images/polymers-14-03728-g007-550.jpg?1662538764)
(https://pub.mdpi-res.com/polymers/polymers-14-03728/article_deploy/html/images/polymers-14-03728-g008-550.jpg?1662538760)
(https://pub.mdpi-res.com/polymers/polymers-14-03728/article_deploy/html/images/polymers-14-03728-g009-550.jpg?1662538774)
(https://pub.mdpi-res.com/polymers/polymers-14-03728/article_deploy/html/images/polymers-14-03728-g010-550.jpg?1662538769)

Open Access Article (/2073-4360/14/18/3727/pdf?version=1662537575)

Synthesis of Iron(II) Clathrochelate-Based Poly(vinylene sulfide) with Tetraphenylbenzene Bridging Units and Their Selective Oxidation into Their Corresponding Poly(vinylene sulfone) Copolymers: Promising Materials for Iodine Capture (/2073-4360/14/18/3727)

by Noorullah Baig (https://sciprofiles.com/profile/2366932?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Suchetha Shetty (https://sciprofiles.com/profile/author/bmdBVU51S2VxanpWaGVSQk1vSklzN0FjRHJVbTJ6Nk52NE1YenlBMXpyND0=?utm_so
,
Sameh S. Habib (https://sciprofiles.com/profile/author/blVMaUFJWWY1Vnc0UWR1OURNZWJ5dVp6Y1B0U2Q3OENaOE12Tk9rSUwwOD0=?utn
,
Ali A. Husain (https://sciprofiles.com/profile/author/RktNSzNsZ3JQTmhCUGx4d1VENWtHa0xsalM4K1AxeExaZXJiaDRwS2FwUT0=?utm_sourc
,
Saleh Al-Mousawi (https://sciprofiles.com/profile/author/TTFndUlKcjFFcFduRGxKQm1qMUorRWl3aTc1bGxyalBKzAzUDdPeG5ycz0=?utm_so
and
Bassam Alameddine (https://sciprofiles.com/profile/2363368?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3727; https://doi.org/10.3390/polym14183727 (https://doi.org/10.3390/polym14183727) - 07 Sep 2022
Cited by 5 (/2073-4360/14/18/3727#metrics) | Viewed by 1446

Abstract The development of a simple and efficient synthetic methodology to engineer functional polymer materials for gas adsorption is necessary due to its relevance for various applications. Herein, we report the synthesis of metalorganic poly(vinylene sulfide) copolymers CTP1-3 with iron(II) clathrochelate of various side **[...] Read more.**

(This article belongs to the Special Issue **Synthesis, Processing, Structure and Properties of Polymer Materials II (/journal/polymers/special_issues/H4Q4U14CJR)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03727/article_deploy/html/images/polymers-14-03727-ag-550.jpg?1662538156)
(https://pub.mdpi-res.com/polymers/polymers-14-03727/article_deploy/html/images/polymers-14-03727-g001-550.jpg?1662538154)
(https://pub.mdpi-res.com/polymers/polymers-14-03727/article_deploy/html/images/polymers-14-03727-g002-550.jpg?1662538141)
(https://pub.mdpi-res.com/polymers/polymers-14-03727/article_deploy/html/images/polymers-14-03727-g003-550.jpg?1662538155)
(https://pub.mdpi-res.com/polymers/polymers-14-03727/article_deploy/html/images/polymers-14-03727-g004-550.jpg?1662538147)
(https://pub.mdpi-res.com/polymers/polymers-14-03727/article_deploy/html/images/polymers-14-03727-g005-550.jpg?1662538149)
(https://pub.mdpi-res.com/polymers/polymers-14-03727/article_deploy/html/images/polymers-14-03727-g006-550.jpg?1662538151)
(https://pub.mdpi-res.com/polymers/polymers-14-03727/article_deploy/html/images/polymers-14-03727-g007-550.jpg?1662538156)
(https://pub.mdpi-res.com/polymers/polymers-14-03727/article_deploy/html/images/polymers-14-03727-g008-550.jpg?1662538148)
(https://pub.mdpi-res.com/polymers/polymers-14-03727/article_deploy/html/images/polymers-14-03727-g009-550.jpg?1662538153)
(https://pub.mdpi-res.com/polymers/polymers-14-03727/article_deploy/html/images/polymers-14-03727-g010-550.jpg?1662538149)
(https://pub.mdpi-res.com/polymers/polymers-14-03727/article_deploy/html/images/polymers-14-03727-g011-550.jpg?1662538145)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03727/article_deploy/html/images/polymers-14-03727-g012-550.jpg?1662538144)

(https://pub.mdpi-res.com/polymers/polymers-14-03727/article_deploy/html/images/polymers-14-03727-sch001-550.jpg?1662538142)

(https://pub.mdpi-res.com/polymers/polymers-14-03727/article_deploy/html/images/polymers-14-03727-sch002-550.jpg?1662538143)

(https://pub.mdpi-res.com/polymers/polymers-14-03727/article_deploy/html/images/polymers-14-03727-sch003-550.jpg?1662538140)

Open Access Communication (/2073-4360/14/18/3726/pdf?version=1662532886)

Super-Hydrophobic Magnetic Fly Ash Coated Polydimethylsiloxane (MFA@PDMS) Sponge as an Absorbent for Rapid and Efficient Oil/Water Separation (/2073-4360/14/18/3726)

by
Mengqi Zhao (https://sciprofiles.com/profile/author/cGNtVHNRWGdwZ1phUUM4bUg0WGs4WGNzQTFnYjFHUGxnU3V3c0d5UU1taz0=?utm_so
,
Xiaoqing Ma (https://sciprofiles.com/profile/author/UWJTdFNFby9UdE1oTEZRVG51aDJYMDhaR2l3WHI2eXlEdmVGWW9WeHplST0=?utm_sou
,
Yuxi Chao (https://sciprofiles.com/profile/2429953?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Dejun Chen (https://sciprofiles.com/profile/author/dmZleFd4bzl0Y0NLdDJ1L05RZ0czOGtjQS94ZXRNSWloSlRDcHh5UWVrTT0=?utm_source=n
and
Yinnian Liao (https://sciprofiles.com/profile/author/NFp2T280Qnc1V1ZNMkxoUGJzWDVOTDYvUmxuVERyb0hKY3FzQVY4K3NGbz0=?utm_sou
Polymers **2022**, *14*(18), 3726; https://doi.org/10.3390/polym14183726 (https://doi.org/10.3390/polym14183726) - 07 Sep 2022
Cited by 2 (/2073-4360/14/18/3726#metrics) | Viewed by 1373

Abstract In this study, magnetic fly ash was prepared with fly ash and nano-magnetic Fe_3O_4, obtained by co-precipitation. Then, a magnetic fly ash/polydimethylsiloxane (MFA@PDMS) sponge was prepared via simple dip-coating PDMS containing ethanol in magnetic fly ash aqueous suspension and **[...] Read more.**
(This article belongs to the Topic **Polymers from Renewable Resources (/topics/polymers_renewable)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03726/article_deploy/html/images/polymers-14-03726-ag-550.jpg?1662532969)

(https://pub.mdpi-res.com/polymers/polymers-14-03726/article_deploy/html/images/polymers-14-03726-g001-550.jpg?1662532961)

(https://pub.mdpi-res.com/polymers/polymers-14-03726/article_deploy/html/images/polymers-14-03726-g002-550.jpg?1662532965)

(https://pub.mdpi-res.com/polymers/polymers-14-03726/article_deploy/html/images/polymers-14-03726-g003-550.jpg?1662532952)

(https://pub.mdpi-res.com/polymers/polymers-14-03726/article_deploy/html/images/polymers-14-03726-g004-550.jpg?1662532953)

(https://pub.mdpi-res.com/polymers/polymers-14-03726/article_deploy/html/images/polymers-14-03726-g005-550.jpg?1662532967)

(https://pub.mdpi-res.com/polymers/polymers-14-03726/article_deploy/html/images/polymers-14-03726-g006-550.jpg?1662532956)

(https://pub.mdpi-res.com/polymers/polymers-14-03726/article_deploy/html/images/polymers-14-03726-g007-550.jpg?1662532954)

(https://pub.mdpi-res.com/polymers/polymers-14-03726/article_deploy/html/images/polymers-14-03726-g008-550.jpg?1662532963)

(https://pub.mdpi-res.com/polymers/polymers-14-03726/article_deploy/html/images/polymers-14-03726-g009-550.jpg?1662532955)

(https://pub.mdpi-res.com/polymers/polymers-14-03726/article_deploy/html/images/polymers-14-03726-g010-550.jpg?1662532957)

(https://pub.mdpi-res.com/polymers/polymers-14-03726/article_deploy/html/images/polymers-14-03726-g011-550.jpg?1662532966)

(https://pub.mdpi-res.com/polymers/polymers-14-03726/article_deploy/html/images/polymers-14-03726-g012-550.jpg?1662532962)

(https://pub.mdpi-res.com/polymers/polymers-14-03726/article_deploy/html/images/polymers-14-03726-g013-550.jpg?1662532958)

Open Access Review (/2073-4360/14/18/3725/pdf?version=1662534600)

Electrospun Nanofiber Composites for Drug Delivery: A Review on Current Progresses (/2073-4360/14/18/3725)

by Renatha Jiffrin (https://sciprofiles.com/profile/1901174?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Saiful Izwan Abd Razak (https://sciprofiles.com/profile/121072?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
,
Mohamad Ikhwan Jamaludin (https://sciprofiles.com/profile/2195996?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_r
,
Amir Syahir Amir Hamzah (https://sciprofiles.com/profile/109402?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name
,
Muadz Ahmad Mazian (https://sciprofiles.com/profile/author/MzBKRjNMbUpVYXorTkNlMVhoZ1ZQb2k2L2tyci8rMXFmcDF2OFRMZGZZRT0=?ut
,
Muhammad Azan Tamar Jaya (https://sciprofiles.com/profile/author/emtLYVVEb1dCdVcxaE9laURLVDhvRWhKSzRkckVuVGx2S2FGbDA5M0JM
,
Mohammed Z. Nasrullah (https://sciprofiles.com/profile/1162120?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name
,
Mohammed Majrashi (https://sciprofiles.com/profile/1462737?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Abdulrahman Theyab (https://sciprofiles.com/profile/2195701?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Ahmed A. Aldarmahi (https://sciprofiles.com/profile/1502297?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Zuhier Awan (https://sciprofiles.com/profile/2233485?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Back to TopTop

Mohamed M. Abdel-Daim (https://sciprofiles.com/profile/34280?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Abul Kalam Azad (https://sciprofiles.com/profile/1259470?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3725; https://doi.org/10.3390/polym14183725 (https://doi.org/10.3390/polym14183725) - 07 Sep 2022
Cited by 12 (/2073-4360/14/18/3725#metrics) | Viewed by 2982

Abstract A medication's approximate release profile should be sustained in order to generate the desired therapeutic effect. The drug's release site, duration, and rate must all be adjusted to the drug's therapeutic aim. However, when designing drug delivery systems, this may be a considerable **[...] Read more.**
(This article belongs to the Collection **Electrospun Nanofibers (/journal/polymers/topical_collections/applications_electrospun_nanofibers)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03725/article_deploy/html/images/polymers-14-03725-g001-550.jpg?1662534672)

(https://pub.mdpi-res.com/polymers/polymers-14-03725/article_deploy/html/images/polymers-14-03725-g002-550.jpg?1662534675)

(https://pub.mdpi-res.com/polymers/polymers-14-03725/article_deploy/html/images/polymers-14-03725-g003-550.jpg?1662534674)

(https://pub.mdpi-res.com/polymers/polymers-14-03725/article_deploy/html/images/polymers-14-03725-g004-550.jpg?1662534671)

(https://pub.mdpi-res.com/polymers/polymers-14-03725/article_deploy/html/images/polymers-14-03725-g005-550.jpg?1662534680)

(https://pub.mdpi-res.com/polymers/polymers-14-03725/article_deploy/html/images/polymers-14-03725-g006-550.jpg?1662534678)

(https://pub.mdpi-res.com/polymers/polymers-14-03725/article_deploy/html/images/polymers-14-03725-g007-550.jpg?1662534670)

(https://pub.mdpi-res.com/polymers/polymers-14-03725/article_deploy/html/images/polymers-14-03725-g008-550.jpg?1662534677)

(https://pub.mdpi-res.com/polymers/polymers-14-03725/article_deploy/html/images/polymers-14-03725-g009-550.jpg?1662534676)

Open Access Article **(/2073-4360/14/18/3724/pdf?version=1662515488)**

Effect of Crystallinity on Young's Modulus of Porous Materials Composed of Polyethylene Terephthalate Fibers in the Presence of Carbon Dioxide (/2073-4360/14/18/3724)

by Takafumi Aizawa (https://sciprofiles.com/profile/569770?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3724; https://doi.org/10.3390/polym14183724 (https://doi.org/10.3390/polym14183724) - 06 Sep 2022
Cited by 2 (/2073-4360/14/18/3724#metrics) | Viewed by 994

Abstract Carbon dioxide (CO_2)-assisted polymer compression method is used for plasticizing polymers with subcritical CO_2 and then crimping the polymer fibers. Given that this method is based on crimping after plasticization by CO_2, it is very important to know **[...] Read more.**
(This article belongs to the Special Issue **Porous Polymeric Materials: Design and Applications (/journal/polymers/special_issues/Porous_Polym_Mater_Des_Appl)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03724/article_deploy/html/images/polymers-14-03724-g001-550.jpg?1662515568)

(https://pub.mdpi-res.com/polymers/polymers-14-03724/article_deploy/html/images/polymers-14-03724-g002-550.jpg?1662515570)

(https://pub.mdpi-res.com/polymers/polymers-14-03724/article_deploy/html/images/polymers-14-03724-g003-550.jpg?1662515582)

(https://pub.mdpi-res.com/polymers/polymers-14-03724/article_deploy/html/images/polymers-14-03724-g004-550.jpg?1662515580)

(https://pub.mdpi-res.com/polymers/polymers-14-03724/article_deploy/html/images/polymers-14-03724-g005-550.jpg?1662515577)

(https://pub.mdpi-res.com/polymers/polymers-14-03724/article_deploy/html/images/polymers-14-03724-g006-550.jpg?1662515570)

(https://pub.mdpi-res.com/polymers/polymers-14-03724/article_deploy/html/images/polymers-14-03724-g007-550.jpg?1662515573)

(https://pub.mdpi-res.com/polymers/polymers-14-03724/article_deploy/html/images/polymers-14-03724-g008-550.jpg?1662515579)

(https://pub.mdpi-res.com/polymers/polymers-14-03724/article_deploy/html/images/polymers-14-03724-g009-550.jpg?1662515573)

Open Access Article **(/2073-4360/14/18/3723/pdf?version=1663671008)**

Development and Characterization of LLDPE Blends with Different UHMWPE Concentrations Obtained by Hot Pressing (/2073-4360/14/18/3723)

by
Pollyana Melo Cardoso (https://sciprofiles.com/profile/author/dmJmKzhwK0lRb3lNN29FRmJXYkFXbmp1dzhVSTBuS05mcTl3VUtPd3UzQT0=?
,
Marcelo Massayoshi Ueki (https://sciprofiles.com/profile/author/Ukx2RzlFSGZQWDJSRk11NWFaSW92RjdBak1nWUVLaUdxTWZ1TTlhV3pJMD
,
Josiane Dantas Viana Barbosa (https://sciprofiles.com/profile/636293?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_
,
Willams Teles Barbosa (https://sciprofiles.com/profile/author/Y3VYNXkrWmM5UmRRVDhZUG0ydTNaSTZRWENScVRyOW1meFY2bHdwaFVYY
,
Benjamin Lazarus (https://sciprofiles.com/profile/2397293?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Joyce Batista Azevedo (https://sciprofiles.com/profile/1750132?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3723; https://doi.org/10.3390/polym14183723 (https://doi.org/10.3390/polym14183723) - 06 Sep 2022
Viewed by 1106

Abstract To modify its characteristics, expand its applicability, and, in some cases, its processability, new blends using ultra-high-molecular-weight polyethylene (UHMWPE) have been developed. In this study, three different formulations of linear low-density polyethylene (LLDPE) and UHMWPE blends

Back to TopTop

were prepared with 15, 30, and 45% **[...] Read more.**

(This article belongs to the Special Issue **Polymer Blends and Composites (/journal/polymers/special_issues/Polymer_Blends_Composites_2022)**)

► Show Figures

Open Access Article **(/2073-4360/14/18/3722/pdf?version=1662541297)**

Synergistic Effect between Piperazine Pyrophosphate and Melamine Polyphosphate in Flame Retardant Coatings for Structural Steel (/2073-4360/14/18/3722)

by **Lianliang Li (https://sciprofiles.com/profile/2368751?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Yating Huang (https://sciprofiles.com/profile/2369391?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Wei Tang (https://sciprofiles.com/profile/1068809?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Yi Zhang (https://sciprofiles.com/profile/3129348?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)** and **Lijun Qian (https://sciprofiles.com/profile/2369392?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**

Polymers **2022**, *14*(18), 3722; **https://doi.org/10.3390/polym14183722 (https://doi.org/10.3390/polym14183722)** - 06 Sep 2022

Cited by 3 (/2073-4360/14/18/3722#metrics) | Viewed by 1611

Abstract Piperazine pyrophosphate (PAPP) combined with melamine polyphosphate (MPP) was adopted to prepare a waterborne fire retardant intumescent coating (IC) for structural steel. Silicone acrylic emulsion was used as binder. In the 2-h torch test, PAPP/MPP-IC coating presented excellent fire resistance performance. The equilibrium **[...] Read more.**

(This article belongs to the Collection **Polymeric Coatings (/journal/polymers/topical_collections/Polymeric_Coatings_Collection)**)

► Show Figures

Open Access Article **(/2073-4360/14/18/3721/pdf?version=1662769937)**

Anti-Freezing Nanocomposite Organohydrogels with High Strength and Toughness (/2073-4360/14/18/3721)

by **Huijuan Zheng (https://sciprofiles.com/profile/author/ak9GMjBzcFltandJRDAvNGNVOURJZDdaUCtPWlMzdDBCd2VyOTNMT0tlQT0=?utm_sou**, **Qiqi Huang (https://sciprofiles.com/profile/author/VUNVYjRNa2VqQTYxb1h5cGhHNmwrc05sWkk3RUJ5RCthODlQKzFHZFVaWT0=?utm_sourc**, **Meijun Lu (https://sciprofiles.com/profile/author/WFh0cmVBdk0vSVhWaE1rODRlWTA5VVFBRXdkbnQ2bFNacDAybWNiMWQrZz0=?utm_sourc**, **Jiaxin Fu (https://sciprofiles.com/profile/author/Y2FHdld1MWl1QmhEb3ROMWc1QjAzdGlTNUVmSTZyS1kxQ2ZGN25ERWtiaz0=?utm_source=**, **Zhen Liang (https://sciprofiles.com/profile/author/elhBU05ydnFPeHh4Yk9XY1hPTUlRUitNejVlemE2VHdpME5YVG13azh6MD0=?utm_source=m**, **Tong Zhang (https://sciprofiles.com/profile/author/RnBUZEtnSmhjdEhma2lBU1RBNml1b0hTbjZoVjg2VmgxbDFoVjN2ZEsvND0=?utm_source=**, **Di Wang (https://sciprofiles.com/profile/2357454?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)** and **Chengpeng Li (https://sciprofiles.com/profile/author/dHd4VVdMQ20wTTZRRDZKSUpGZWcvbVFyQzN6b05JMFN5dHlrWGNncG4wUT0=?utm_s**

Polymers **2022**, *14*(18), 3721; **https://doi.org/10.3390/polym14183721 (https://doi.org/10.3390/polym14183721)** - 06 Sep 2022

Viewed by 1028

Back to TopTop

Abstract Hydrogels based on nanocomposites (NC) structure have acquired a great deal of interest, but they are still limited by relatively low mechanical strength, inevitably losing elasticity when applied below subzero temperatures, due to the formation of ice crystallization. In this study, an anti-freezing **[...] Read more.**

(This article belongs to the Section **Polymer Composites and Nanocomposites (/journal/polymers/sections/polymer_composites_nanocomposites)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03721/article_deploy/html/images/polymers-14-03721-ag-550.jpg?1662770045)

(https://pub.mdpi-res.com/polymers/polymers-14-03721/article_deploy/html/images/polymers-14-03721-g001-550.jpg?1662770040)

(https://pub.mdpi-res.com/polymers/polymers-14-03721/article_deploy/html/images/polymers-14-03721-g002-550.jpg?1662770044)

(https://pub.mdpi-res.com/polymers/polymers-14-03721/article_deploy/html/images/polymers-14-03721-g003-550.jpg?1662770033)

(https://pub.mdpi-res.com/polymers/polymers-14-03721/article_deploy/html/images/polymers-14-03721-g004-550.jpg?1662770037)

(https://pub.mdpi-res.com/polymers/polymers-14-03721/article_deploy/html/images/polymers-14-03721-g005-550.jpg?1662770034)

(https://pub.mdpi-res.com/polymers/polymers-14-03721/article_deploy/html/images/polymers-14-03721-g006-550.jpg?1662770036)

(https://pub.mdpi-res.com/polymers/polymers-14-03721/article_deploy/html/images/polymers-14-03721-g007-550.jpg?1662770030)

(https://pub.mdpi-res.com/polymers/polymers-14-03721/article_deploy/html/images/polymers-14-03721-g008-550.jpg?1662770039)

Open Access Article **(/2073-4360/14/18/3720/pdf?version=1662524425)**

Synthesis and Application of Levofloxacin–Tin Complexes as New Photostabilizers for Polyvinyl Chloride (/2073-4360/14/18/3720)

by

Marwa Fadhil (https://sciprofiles.com/profile/author/WTlBbjNMV2tkMjBUdDRmOTdwUE5UREtwdEF5MXFBdGlMeklxTEVZSitsZjRYQnQzMVFFM

,

Emad Yousif (https://sciprofiles.com/profile/1552750?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Dina S. Ahmed (https://sciprofiles.com/profile/2398714?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Benson M. Kariuki (https://sciprofiles.com/profile/1708300?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Gamal A. El-Hiti (https://sciprofiles.com/profile/113754?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3720; **https://doi.org/10.3390/polym14183720 (https://doi.org/10.3390/polym14183720)** - 06 Sep 2022

Cited by 9 (/2073-4360/14/18/3720#metrics) | Viewed by 1149

Abstract Polyvinyl chloride (PVC) is a synthetic polymer with a wide range of applications with impact on our daily life. It can undergo photodegradation with toxic products that are hazardous to both human health and the environment. In addition, photodegradation shortens the useful lifetime **[...] Read more.**

(This article belongs to the Special Issue **Sustainable Polymeric Composites: Fabrication and Application (/journal/polymers/special_issues/sustain_polym_composite)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03720/article_deploy/html/images/polymers-14-03720-ag-550.jpg?1662524540)

(https://pub.mdpi-res.com/polymers/polymers-14-03720/article_deploy/html/images/polymers-14-03720-g001-550.jpg?1662524509)

(https://pub.mdpi-res.com/polymers/polymers-14-03720/article_deploy/html/images/polymers-14-03720-g002-550.jpg?1662524525)

(https://pub.mdpi-res.com/polymers/polymers-14-03720/article_deploy/html/images/polymers-14-03720-g003-550.jpg?1662524516)

(https://pub.mdpi-res.com/polymers/polymers-14-03720/article_deploy/html/images/polymers-14-03720-g004-550.jpg?1662524513)

(https://pub.mdpi-res.com/polymers/polymers-14-03720/article_deploy/html/images/polymers-14-03720-g005-550.jpg?1662524539)

(https://pub.mdpi-res.com/polymers/polymers-14-03720/article_deploy/html/images/polymers-14-03720-g006-550.jpg?1662524515)

(https://pub.mdpi-res.com/polymers/polymers-14-03720/article_deploy/html/images/polymers-14-03720-g007-550.jpg?1662524517)

(https://pub.mdpi-res.com/polymers/polymers-14-03720/article_deploy/html/images/polymers-14-03720-g008-550.jpg?1662524531)

(https://pub.mdpi-res.com/polymers/polymers-14-03720/article_deploy/html/images/polymers-14-03720-g009-550.jpg?1662524535)

(https://pub.mdpi-res.com/polymers/polymers-14-03720/article_deploy/html/images/polymers-14-03720-g010-550.jpg?1662524519)

(https://pub.mdpi-res.com/polymers/polymers-14-03720/article_deploy/html/images/polymers-14-03720-g011-550.jpg?1662524524)

(https://pub.mdpi-res.com/polymers/polymers-14-03720/article_deploy/html/images/polymers-14-03720-sch001-550.jpg?1662524526)

(https://pub.mdpi-res.com/polymers/polymers-14-03720/article_deploy/html/images/polymers-14-03720-sch002-550.jpg?1662524521)

(https://pub.mdpi-res.com/polymers/polymers-14-03720/article_deploy/html/images/polymers-14-03720-sch003-550.jpg?1662524536)

Open Access Review **(/2073-4360/14/18/3719/pdf?version=1662475161)**

Electrospinning of Biomedical Nanofibers/Nanomembranes: Effects of Process Parameters (/2073-4360/14/18/3719)

by

Balaji Ayyanar Chinnappan (https://sciprofiles.com/profile/264805?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nar

,

Marimuthu Krishnaswamy (https://sciprofiles.com/profile/author/KzgwNURPSGNDVmJ1c1FoaTNNK0FHWTJEVnR4RC9NU1BYRjZZcUZSaFlqS

,

Back to TopTop

Huaizhong Xu (https://sciprofiles.com/profile/2019155?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Md Enamul Hoque (https://sciprofiles.com/profile/1478530?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3719; https://doi.org/10.3390/polym14183719 (https://doi.org/10.3390/polym14183719) - 06 Sep 2022
Cited by 21 (/2073-4360/14/18/3719#metrics) | Viewed by 3172

Abstract Nanotechnology has attracted great attention from researchers in modern science because nanomaterials have innovative and superior physical, chemical, and biological properties, and they can be altered and modified accordingly. As particles get smaller, their surface area increases compared to their volume. Electrospinning is **[...] Read more.**
(This article belongs to the Special Issue **Fabrication and Application of Electrospun Nanofibers (/journal/polymers/special_issues/Fabrication_Application_Electrospun_Nanofibers)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03719/article_deploy/html/images/polymers-14-03719-g001-550.jpg?1662475228)
(https://pub.mdpi-res.com/polymers/polymers-14-03719/article_deploy/html/images/polymers-14-03719-g002-550.jpg?1662475231)
(https://pub.mdpi-res.com/polymers/polymers-14-03719/article_deploy/html/images/polymers-14-03719-g003-550.jpg?1662475235)
(https://pub.mdpi-res.com/polymers/polymers-14-03719/article_deploy/html/images/polymers-14-03719-g004-550.jpg?1662475234)
(https://pub.mdpi-res.com/polymers/polymers-14-03719/article_deploy/html/images/polymers-14-03719-g005-550.jpg?1662475239)
(https://pub.mdpi-res.com/polymers/polymers-14-03719/article_deploy/html/images/polymers-14-03719-g006-550.jpg?1662475229)
(https://pub.mdpi-res.com/polymers/polymers-14-03719/article_deploy/html/images/polymers-14-03719-g007-550.jpg?1662475237)
(https://pub.mdpi-res.com/polymers/polymers-14-03719/article_deploy/html/images/polymers-14-03719-g008-550.jpg?1662475232)

Open Access Article (/2073-4360/14/18/3718/pdf?version=1662620097)

Analysis of Ionic Domain Evolution on a Nafion-Sulfonated Silica Composite Membrane Using a Numerical Approximation Model Based on Electrostatic Force Microscopy (/2073-4360/14/18/3718)

by Osung Kwon (https://sciprofiles.com/profile/1473270?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
JaeHyoung Park (https://sciprofiles.com/profile/2362514?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3718; https://doi.org/10.3390/polym14183718 (https://doi.org/10.3390/polym14183718) - 06 Sep 2022
Cited by 2 (/2073-4360/14/18/3718#metrics) | Viewed by 812

Abstract It is important to characterize the proton transport mechanisms of proton exchange membranes (PEMs). Electrostatic force microscopy (EFM) is used to characterize the ionic structures of membranes. In this study, we attempted to quantitatively analyze the proton conductivity enhancement of Nafion-sulfonated silica (SSA) **[...] Read more.**
(This article belongs to the Section **Polymer Analysis and Characterization (/journal/polymers/sections/Anal_Charact)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03718/article_deploy/html/images/polymers-14-03718-g001-550.jpg?1662620168)
(https://pub.mdpi-res.com/polymers/polymers-14-03718/article_deploy/html/images/polymers-14-03718-g002-550.jpg?1662620178)
(https://pub.mdpi-res.com/polymers/polymers-14-03718/article_deploy/html/images/polymers-14-03718-g003-550.jpg?1662620175)
(https://pub.mdpi-res.com/polymers/polymers-14-03718/article_deploy/html/images/polymers-14-03718-g004-550.jpg?1662620172)
(https://pub.mdpi-res.com/polymers/polymers-14-03718/article_deploy/html/images/polymers-14-03718-g005-550.jpg?1662620180)
(https://pub.mdpi-res.com/polymers/polymers-14-03718/article_deploy/html/images/polymers-14-03718-g006-550.jpg?1662620169)
(https://pub.mdpi-res.com/polymers/polymers-14-03718/article_deploy/html/images/polymers-14-03718-g007-550.jpg?1662620179)

Open Access Article (/2073-4360/14/18/3717/pdf?version=1662461947)

Hydroxypropyltrimethyl Ammonium Chloride Chitosan Nanoparticles Coatings for Reinforcement and Concomitant Inhibition of Anionic Water-Sensitive Dyes Migration on Fragile Paper Documents (/2073-4360/14/18/3717)

by Huiping Xing (https://sciprofiles.com/profile/1332237?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Jianwei Wang (https://sciprofiles.com/profile/author/K3oxTFlJZ1VqWTVrWFhrV0NJS29oYUNMUnBlbmJJZXdqNStVS3RuZ1FXND0=?utm_sour
,
Ouya Ma (https://sciprofiles.com/profile/author/encxZ25HYTUzVysvVWpoLytZNG9RTnpZZFZQYjFsQytXNVZPU01XTUtXdz0=?utm_source=md
,
Xiaolian Chao (https://sciprofiles.com/profile/1908413?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Yajun Zhou (https://sciprofiles.com/profile/author/WktnazI4bjFZc20vdVRzMFpjTENXc0QrNm9vMDgvTHpQbGdYRnFkdE9ZYz0=?utm_source=r
,
Yuhu Li (https://sciprofiles.com/profile/1151066?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Zhihui Jia (https://sciprofiles.com/profile/1694759?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3717; https://doi.org/10.3390/polym14183717 (https://doi.org/10.3390/polym14183717) - 06 Sep 2022
Cited by 1 (/2073-4360/14/18/3717#metrics) | Viewed by 739

Abstract The fragile paper is treated to improve the stability and appearance of the paper artifact, such as washing, lining, deacidification, and reinforcement. During the above treatments, paper documents inevitably make contact with water directly, leading to the appearance change, stability decrease, and migration **[...] Read more.**
(This article belongs to the Section **Polymer Applications (/journal/polymers/sections/Polymer_Applications)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03717/article_deploy/html/images/polymers-14-03717-g001-550.jpg?1662462032)
(https://pub.mdpi-res.com/polymers/polymers-14-03717/article_deploy/html/images/polymers-14-03717-g002-550.jpg?1662462030)
(https://pub.mdpi-res.com/polymers/polymers-14-03717/article_deploy/html/images/polymers-14-03717-g003-550.jpg?1662462025)
(https://pub.mdpi-res.com/polymers/polymers-14-03717/article_deploy/html/images/polymers-14-03717-g004-550.jpg?1662462039)
(https://pub.mdpi-res.com/polymers/polymers-14-03717/article_deploy/html/images/polymers-14-03717-g005-550.jpg?1662462041)
(https://pub.mdpi-res.com/polymers/polymers-14-03717/article_deploy/html/images/polymers-14-03717-g006-550.jpg?1662462034)
(https://pub.mdpi-res.com/polymers/polymers-14-03717/article_deploy/html/images/polymers-14-03717-g007-550.jpg?1662462041)
(https://pub.mdpi-res.com/polymers/polymers-14-03717/article_deploy/html/images/polymers-14-03717-g008-550.jpg?1662462034)
(https://pub.mdpi-res.com/polymers/polymers-14-03717/article_deploy/html/images/polymers-14-03717-g009-550.jpg?1662462032)
(https://pub.mdpi-res.com/polymers/polymers-14-03717/article_deploy/html/images/polymers-14-03717-g010-550.jpg?1662462030)
(https://pub.mdpi-res.com/polymers/polymers-14-03717/article_deploy/html/images/polymers-14-03717-g011-550.jpg?1662462037)
(https://pub.mdpi-res.com/polymers/polymers-14-03717/article_deploy/html/images/polymers-14-03717-g012-550.jpg?1662462035)
(https://pub.mdpi-res.com/polymers/polymers-14-03717/article_deploy/html/images/polymers-14-03717-g013-550.jpg?1662462028)
(https://pub.mdpi-res.com/polymers/polymers-14-03717/article_deploy/html/images/polymers-14-03717-g014-550.jpg?1662462029)
(https://pub.mdpi-res.com/polymers/polymers-14-03717/article_deploy/html/images/polymers-14-03717-g015-550.jpg?1662462037)
(https://pub.mdpi-res.com/polymers/polymers-14-03717/article_deploy/html/images/polymers-14-03717-g016-550.jpg?1662462030)

Open Access Article (/2073-4360/14/18/3716/pdf?version=1662625173)

Experimental Investigation of the Tribological Behaviors of Carbon Fiber Reinforced Polymer Composites under Boundary Lubrication (/2073-4360/14/18/3716)

by Corina Birleanu (https://sciprofiles.com/profile/303736?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Marius Pustan (https://sciprofiles.com/profile/333311?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Grigore Pop (https://sciprofiles.com/profile/2361202?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Mircea Cioaza (https://sciprofiles.com/profile/2945999?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Florin Popa (https://sciprofiles.com/profile/878798?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Lucian Lazarescu (https://sciprofiles.com/profile/607467?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and Glad Contiu (https://sciprofiles.com/profile/2946000?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Polymers **2022**, *14*(18), 3716; https://doi.org/10.3390/polym14183716 (https://doi.org/10.3390/polym14183716) - 06 Sep 2022
Cited by 4 (/2073-4360/14/18/3716#metrics) | Viewed by 1255

Abstract Friction and wear experiments were performed on carbon fiber-reinforced polymer (CFRP) composites, and the tribological behavior of these materials under boundary lubrication (based on the 5100 4T 10 W-30 engine oil with TiO_2 Degussa P25 nanoparticles) was investigated. Experiments were carried out **[...] Read more.**
(This article belongs to the Special Issue **Advances in the Mechanical Behavior of Polymeric Materials (/journal/polymers/special_issues/Advances_Mechanical_Behavior_Polymeric_Materials)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g001-550.jpg?1662625285)
(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g002-550.jpg?1662625280)
(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g003a-550.jpg?1662625288)
(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g003b-550.jpg?1662625301)
(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g004-550.jpg?1662625295)
(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g005-550.jpg?1662625282)
(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g006-550.jpg?1662625277)
(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g007-550.jpg?1662625288)
(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g008-550.jpg?1662625284)
(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g009-550.jpg?1662625296)
(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g010-550.jpg?1662625293)
(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g011-550.jpg?1662625281)
(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g012-550.jpg?1662625290)
(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g013-550.jpg?1662625292)
(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g014-550.jpg?1662625283)
(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g015-550.jpg?1662625281)
(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g016-550.jpg?1662625279)
(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g017-550.jpg?1662625297)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g018-550.jpg?1662625289)

(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g019-550.jpg?1662625294)

(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g020-550.jpg?1662625292)

(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g021-550.jpg?1662625277)

(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g022-550.jpg?1662625279)

(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g023-550.jpg?1662625299)

(https://pub.mdpi-res.com/polymers/polymers-14-03716/article_deploy/html/images/polymers-14-03716-g024-550.jpg?1662625296)

Open Access Article (/2073-4360/14/18/3715/pdf?version=1662461448)

Synthesis of Jatropha-Oil-Based Polyester Polyol as Sustainable Biobased Material for Waterborne Polyurethane Dispersion (/2073-4360/14/18/3715)

by Murni Sundang (https://sciprofiles.com/profile/2160924?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Nur Sjanrah Nurdin (https://sciprofiles.com/profile/author/eUkrMGxQaEJGZDdsQnY4WlA0eXUraG5WeHB0WENtbTdRRGMyTEl2SFU5MD0=?u

, Sariah Saalah (https://sciprofiles.com/profile/241194?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Yamunah Jaibalah Singam (https://sciprofiles.com/profile/author/eFdsWkNydUdxV2VaQUd4Ty9rY2t2YnNRMDN6YXBSRitHNWhjZ1ZJamszOD0

, Syeed SaifulAzry Osman Al Edrus (https://sciprofiles.com/profile/1081144?utm_source=mdpi.com&utm_medium=website&utm_campaign=ava

, Noor Maizura Ismail (https://sciprofiles.com/profile/1213942?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Coswald Stephen Sipaut (https://sciprofiles.com/profile/1577520?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nam

and Luqman Chuah Abdullah (https://sciprofiles.com/profile/257440?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name

Polymers **2022**, *14*(18), 3715; **https://doi.org/10.3390/polym14183715 (https://doi.org/10.3390/polym14183715)** - 06 Sep 2022

Cited by 4 (/2073-4360/14/18/3715#metrics) | Viewed by 1311

Abstract The utilization of vegetable oil in the production of polymeric material has gained interest due to its proven ability to replace nonrenewable petroleum sources, as it is readily modified via chemical reaction to produce polyol and subsequently for polyurethane production. Jatropha oil (JO), **[...] Read more.**

(This article belongs to the Special Issue **Advances in Sustainable Polyurethanes (/journal/polymers/special_issues/polyurethanes)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03715/article_deploy/html/images/polymers-14-03715-g001-550.jpg?1662461557)

(https://pub.mdpi-res.com/polymers/polymers-14-03715/article_deploy/html/images/polymers-14-03715-g002-550.jpg?1662461551)

(https://pub.mdpi-res.com/polymers/polymers-14-03715/article_deploy/html/images/polymers-14-03715-g003-550.jpg?1662461559)

(https://pub.mdpi-res.com/polymers/polymers-14-03715/article_deploy/html/images/polymers-14-03715-g004-550.jpg?1662461566)

(https://pub.mdpi-res.com/polymers/polymers-14-03715/article_deploy/html/images/polymers-14-03715-g005-550.jpg?1662461545)

(https://pub.mdpi-res.com/polymers/polymers-14-03715/article_deploy/html/images/polymers-14-03715-g006-550.jpg?1662461561)

(https://pub.mdpi-res.com/polymers/polymers-14-03715/article_deploy/html/images/polymers-14-03715-g007-550.jpg?1662461560)

(https://pub.mdpi-res.com/polymers/polymers-14-03715/article_deploy/html/images/polymers-14-03715-g008-550.jpg?1662461553)

(https://pub.mdpi-res.com/polymers/polymers-14-03715/article_deploy/html/images/polymers-14-03715-sch001-550.jpg?1662461564)

(https://pub.mdpi-res.com/polymers/polymers-14-03715/article_deploy/html/images/polymers-14-03715-sch002-550.jpg?1662461549)

Open Access Article (/2073-4360/14/18/3714/pdf?version=1662464313)

Preparation and Properties of Asymmetric Polyvinyl Pyrroli-Done/Polycaprolactone Composite Nanofiber Loaded with Tea Tree Extract (/2073-4360/14/18/3714)

by Yu Xu (https://sciprofiles.com/profile/2549270?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Lei Xie (https://sciprofiles.com/profile/author/dnVPdnFlaVVrMU9yKzBNUWF5Tzc1QT09?utm_source=mdpi.com&utm_medium=website&utm_

, Tingting Hou (https://sciprofiles.com/profile/2306656?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Di Wang (https://sciprofiles.com/profile/2357454?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Tong Zhang (https://sciprofiles.com/profile/author/RnBUZEtnSmhjdEhma2lBU1RBNml1b0hTbjZoVjg2VmgxbDFoVjN2ZEsvND0=?utm_source=

and Chengpeng Li (https://sciprofiles.com/profile/author/dHd4VVdMQ20wTTZRRDZKSUpGZWcvbVFyQzN6b05JMFN5dHlrWGNncG4wUT0=?utm_s

Polymers **2022**, *14*(18), 3714; **https://doi.org/10.3390/polym14183714 (https://doi.org/10.3390/polym14183714)** - 06 Sep 2022

Cited by 1 (/2073-4360/14/18/3714#metrics) | Viewed by 891

Abstract To develop a novel asymmetric nanofiber membrane with antioxidant and antibacterial activities, biocompatible polyvinyl pyrrolidone (PVP) and polycaprolactone (PCL) were used as carriers to load water-soluble tea tree extract (TTE) and hydrophobic tea tree oil (TTO) via electrospinning and electrostatic spraying, respectively, which **[...] Read more.**

(This article belongs to the Section **Polymer Composites and Nanocomposites (/journal/polymers/sections/polymer_composites_nanocomposites)**)

Back to TopTop

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03714/article_deploy/html/images/polymers-14-03714-ag-550.jpg?1662464396)

(https://pub.mdpi-res.com/polymers/polymers-14-03714/article_deploy/html/images/polymers-14-03714-g001-550.jpg?1662464394)

(https://pub.mdpi-res.com/polymers/polymers-14-03714/article_deploy/html/images/polymers-14-03714-g002-550.jpg?1662464391)

(https://pub.mdpi-res.com/polymers/polymers-14-03714/article_deploy/html/images/polymers-14-03714-g003-550.jpg?1662464385)

(https://pub.mdpi-res.com/polymers/polymers-14-03714/article_deploy/html/images/polymers-14-03714-g004-550.jpg?1662464392)

(https://pub.mdpi-res.com/polymers/polymers-14-03714/article_deploy/html/images/polymers-14-03714-g005-550.jpg?1662464387)

Open Access Article (/2073-4360/14/18/3713/pdf?version=1662459631)

Design of Arbitrary Magnetic Patterns on Magnetic Polymer Composite Objects: A Finite Element Modelling Tool (/2073-4360/14/18/3713)

by

Pedro González-Losada (https://sciprofiles.com/profile/2091478?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name

,

Marco Martins (https://sciprofiles.com/profile/1439581?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Elvira Paz (https://sciprofiles.com/profile/2450944?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

K. B. Vinayakumar (https://sciprofiles.com/profile/386612?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Domingos Pereira (https://sciprofiles.com/profile/author/U3hxZlJZMjJUSEYrd2NoQnkrd3NWaytieWJPWHdnekFnSWhwREt2R2JlOD0=?utm_so

,

Ana R. Cortez (https://sciprofiles.com/profile/author/UGF3N0pFUHVXb3lIMmhUWEYzZkVlOTdMTmYrWE1OY1E3WklSWUxJaHhYcz0=?utm_so

and

Diogo Elói Aguiam (https://sciprofiles.com/profile/1567936?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3713; https://doi.org/10.3390/polym14183713 (https://doi.org/10.3390/polym14183713) - 06 Sep 2022

Viewed by 955

Abstract Magnetic sensor systems integrate a sensing element and magnetic field generators to determine their relative position or to measure movement. Typically, the magnetic fields are produced by permanent magnets, which have high intensity but are hard to machine into custom shapes. However, novel **[...] Read more.**

(This article belongs to the Special Issue **Magnetic Polymer Composites: Design and Application (** /journal/polymers/special_issues/Magn_Polym_Compos_Des_Appl))

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03713/article_deploy/html/images/polymers-14-03713-g001-550.jpg?1662459735)

(https://pub.mdpi-res.com/polymers/polymers-14-03713/article_deploy/html/images/polymers-14-03713-g002-550.jpg?1662459737)

(https://pub.mdpi-res.com/polymers/polymers-14-03713/article_deploy/html/images/polymers-14-03713-g003-550.jpg?1662459734)

(https://pub.mdpi-res.com/polymers/polymers-14-03713/article_deploy/html/images/polymers-14-03713-g004-550.jpg?1662459729)

(https://pub.mdpi-res.com/polymers/polymers-14-03713/article_deploy/html/images/polymers-14-03713-g005-550.jpg?1662459733)

(https://pub.mdpi-res.com/polymers/polymers-14-03713/article_deploy/html/images/polymers-14-03713-g006-550.jpg?1662459731)

(https://pub.mdpi-res.com/polymers/polymers-14-03713/article_deploy/html/images/polymers-14-03713-g007-550.jpg?1662459739)

Open Access Review (/2073-4360/14/18/3712/pdf?version=1663332398)

Tissue Engineering with Stem Cell from Human Exfoliated Deciduous Teeth (SHED) and Collagen Matrix, Regulated by Growth Factor in Regenerating the Dental Pulp (/2073-4360/14/18/3712)

by Vinna K. Sugiaman (https://sciprofiles.com/profile/2376105?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Rudy Djuanda (https://sciprofiles.com/profile/2429061?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Natallia Pranata (https://sciprofiles.com/profile/2403279?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),

Silvia Naliani (https://sciprofiles.com/profile/author/NDIwWm8zT1hEVHpSa1IpelovU1hzOUlCaERJYTgrTGptSis2bGhUeTJiZz0=?utm_source=n

,

Wayan L. Demolsky (https://sciprofiles.com/profile/author/SlBwVnlGVHZVN2xidUVuVVJpeWVVY0p2OEduQjloMnJNRjd1SS9wQ214cz0=?utm_

and

Jeffrey (https://sciprofiles.com/profile/2376191?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3712; https://doi.org/10.3390/polym14183712 (https://doi.org/10.3390/polym14183712) - 06 Sep 2022

Cited by 3 (/2073-4360/14/18/3712#metrics) | Viewed by 2205

Abstract Maintaining dental pulp vitality and preventing tooth loss are two challenges in endodontic treatment. A tooth lacking a viable pulp loses its defense mechanism and regenerative ability, making it more vulnerable to severe damage and eventually necessitating extraction. The tissue engineering approach has **[...] Read more.**

(This article belongs to the Special Issue **Multi-Functional Collagen-Based Biomaterials for Biomedical Applications (** /journal/polymers/special_issues/multi_functional_collagen_based_biomaterials_for_biomedical_applications))

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03712/article_deploy/html/images/polymers-14-03712-g001-550.jpg?1663332480)

Open Access Article (/2073-4360/14/18/3711/pdf?version=1662461579)

Back to TopTop

Optimization of Polyacrylic Acid Coating on Graphene Oxide-Functionalized Reverse-Osmosis Membrane Using UV Radiation through Response Surface Methodology (/2073-4360/14/18/3711)

by

Mohammad Yousaf Ashfaq (https://sciprofiles.com/profile/author/dmdDT2pYTGdjMWZlNm9mSTJFblRlQ0ZMVzUzbHM5MlAzS1Q5SUdKUHVuM

and

Mohammad A. Al-Ghouti (https://sciprofiles.com/profile/763255?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3711; **https://doi.org/10.3390/polym14183711 (https://doi.org/10.3390/polym14183711)** - 06 Sep 2022

Cited by 1 (/2073-4360/14/18/3711#metrics) | Viewed by 1145

Abstract Reverse osmosis (RO) is affected by multiple types of fouling such as biofouling, scaling, and organic fouling. Therefore, a multi-functional membrane capable of reducing more than one type of fouling is a need of the hour. The polyacrylic acid and graphene oxide (PAA-GO) **[...] Read more.**

(This article belongs to the Special Issue **Photopolymerization in Advanced Materials (/journal/polymers/special_issues/Photopoly_Mater)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03711/article_deploy/html/images/polymers-14-03711-g001-550.jpg?1662461667)

(https://pub.mdpi-res.com/polymers/polymers-14-03711/article_deploy/html/images/polymers-14-03711-g002a-550.jpg?1662461651)

(https://pub.mdpi-res.com/polymers/polymers-14-03711/article_deploy/html/images/polymers-14-03711-g002b-550.jpg?1662461650)

(https://pub.mdpi-res.com/polymers/polymers-14-03711/article_deploy/html/images/polymers-14-03711-g003-550.jpg?1662461653)

(https://pub.mdpi-res.com/polymers/polymers-14-03711/article_deploy/html/images/polymers-14-03711-g004-550.jpg?1662461672)

(https://pub.mdpi-res.com/polymers/polymers-14-03711/article_deploy/html/images/polymers-14-03711-g005-550.jpg?1662461663)

(https://pub.mdpi-res.com/polymers/polymers-14-03711/article_deploy/html/images/polymers-14-03711-g006-550.jpg?1662461661)

(https://pub.mdpi-res.com/polymers/polymers-14-03711/article_deploy/html/images/polymers-14-03711-g007-550.jpg?1662461665)

(https://pub.mdpi-res.com/polymers/polymers-14-03711/article_deploy/html/images/polymers-14-03711-g008-550.jpg?1662461658)

(https://pub.mdpi-res.com/polymers/polymers-14-03711/article_deploy/html/images/polymers-14-03711-g009-550.jpg?1662461677)

(https://pub.mdpi-res.com/polymers/polymers-14-03711/article_deploy/html/images/polymers-14-03711-g010-550.jpg?1662461674)

(https://pub.mdpi-res.com/polymers/polymers-14-03711/article_deploy/html/images/polymers-14-03711-g011-550.jpg?1662461660)

(https://pub.mdpi-res.com/polymers/polymers-14-03711/article_deploy/html/images/polymers-14-03711-g012-550.jpg?1662461670)

Open Access Article **(/2073-4360/14/18/3710/pdf?version=1662474013)**

Effect of Ultrasonication on the Morphology, Mechanical Property, Ionic Conductivity, and Flame Retardancy of PEO-$LiCF_3SO_3$-Halloysite Nanotube Composites for Use as Solid Polymer Electrolyte (/2073-4360/14/18/3710)

by

Pattranuch Pongsuk (https://sciprofiles.com/profile/author/VHdhZzhHY0V4N2JQeGhKL2dwelJsdUR6dlcwU05jajBqVVRNVk1qZTRSZz0=?utm_

and

Jantrawan Pumchusak (https://sciprofiles.com/profile/1451760?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3710; **https://doi.org/10.3390/polym14183710 (https://doi.org/10.3390/polym14183710)** - 06 Sep 2022

Cited by 3 (/2073-4360/14/18/3710#metrics) | Viewed by 1435

Abstract PEO-$LiCF_3SO_3$-halloysite nanotube (HNT) composites were fabricated by solution casting together with hot compression to form a solid polymer electrolyte (SPE) membrane. Different ultrasonic exposure times were used to disperse HNT nanoparticles in the PEO-20%$LiCF_3SO_3$-HNT composite **[...] Read more.**

(This article belongs to the Special Issue **Polymers for Electrochemical Applications (/journal/polymers/special_issues/polym_electrochemical_applica)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03710/article_deploy/html/images/polymers-14-03710-g001-550.jpg?1662474105)

(https://pub.mdpi-res.com/polymers/polymers-14-03710/article_deploy/html/images/polymers-14-03710-g002-550.jpg?1662474095)

(https://pub.mdpi-res.com/polymers/polymers-14-03710/article_deploy/html/images/polymers-14-03710-g003-550.jpg?1662474102)

(https://pub.mdpi-res.com/polymers/polymers-14-03710/article_deploy/html/images/polymers-14-03710-g004-550.jpg?1662474108)

(https://pub.mdpi-res.com/polymers/polymers-14-03710/article_deploy/html/images/polymers-14-03710-g005-550.jpg?1662474090)

(https://pub.mdpi-res.com/polymers/polymers-14-03710/article_deploy/html/images/polymers-14-03710-g006-550.jpg?1662474100)

(https://pub.mdpi-res.com/polymers/polymers-14-03710/article_deploy/html/images/polymers-14-03710-g007-550.jpg?1662474085)

(https://pub.mdpi-res.com/polymers/polymers-14-03710/article_deploy/html/images/polymers-14-03710-g008-550.jpg?1662474092)

(https://pub.mdpi-res.com/polymers/polymers-14-03710/article_deploy/html/images/polymers-14-03710-g009-550.jpg?1662474097)

(https://pub.mdpi-res.com/polymers/polymers-14-03710/article_deploy/html/images/polymers-14-03710-g010-550.jpg?1662474087)

(https://pub.mdpi-res.com/polymers/polymers-14-03710/article_deploy/html/images/polymers-14-03710-g011-550.jpg?1662474103)

Open Access Article **(/2073-4360/14/18/3709/pdf?version=1663232163)**

Mode of Action of Zn-DOPOx and Melamine Polyphosphate as Flame Retardants in Glass Fiber-Reinforced Polyamide 66 (/2073-4360/14/18/3709)

Back to TopTop

by
Johannes Klitsch (https://sciprofiles.com/profile/author/bFdMVzg1cHlrZllZekF0eFlFN0hndmROcDhsRU94UWpEZGtRZjl0NGVwZGlrMHdkQzFr
,
Rudolf Pfaendner (https://sciprofiles.com/profile/812081?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name),
Claudia Fasel (https://sciprofiles.com/profile/2374487?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) and
Frank Schönberger (https://sciprofiles.com/profile/765442?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3709; https://doi.org/10.3390/polym14183709 (https://doi.org/10.3390/polym14183709) - 06 Sep 2022
Viewed by 1229

Abstract In this study, the flame retardant effect of the Zn salt of 10-hydroxy-9,10-dihydro-9-oxa-10-phosphaphenanthrene-10-oxide (Zn-DOPOx), melamine polyphosphate (MPP) and their mixture was investigated towards the mode of action in glass fiber-reinforced polyamide 66 (PA 66 GF). The flammability was evaluated using UL 94 V **[...] Read more.**

(This article belongs to the Special Issue **Advances in Flame Retardant Polymeric Materials II (/journal/polymers/special_issues/adv_flame_retard_polym_mater-II)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03709/article_deploy/html/images/polymers-14-03709-g001-550.jpg?1663284481)
(https://pub.mdpi-res.com/polymers/polymers-14-03709/article_deploy/html/images/polymers-14-03709-g002-550.jpg?1663284488)
(https://pub.mdpi-res.com/polymers/polymers-14-03709/article_deploy/html/images/polymers-14-03709-g003-550.jpg?1663284475)
(https://pub.mdpi-res.com/polymers/polymers-14-03709/article_deploy/html/images/polymers-14-03709-g004-550.jpg?1663284474)
(https://pub.mdpi-res.com/polymers/polymers-14-03709/article_deploy/html/images/polymers-14-03709-g005-550.jpg?1663284478)
(https://pub.mdpi-res.com/polymers/polymers-14-03709/article_deploy/html/images/polymers-14-03709-g006-550.jpg?1663284487)
(https://pub.mdpi-res.com/polymers/polymers-14-03709/article_deploy/html/images/polymers-14-03709-g007-550.jpg?1663284483)
(https://pub.mdpi-res.com/polymers/polymers-14-03709/article_deploy/html/images/polymers-14-03709-g008-550.jpg?1663284477)
(https://pub.mdpi-res.com/polymers/polymers-14-03709/article_deploy/html/images/polymers-14-03709-sch001-550.jpg?1663284479)

Open Access Article (/2073-4360/14/18/3708/pdf?version=1662515093)

Influence of Gamma Radiation on the Damping Property of Magnetorheological Elastomer (/2073-4360/14/18/3708)

by
Guojiang Liao (https://sciprofiles.com/profile/author/L2dKMXBGdHBxWkVkNm1ZelE0WGNNTjNMTXlPM1Roc2lsUVBMaUtrcUNtYz0=?utm_sou
,
Wenzheng Zhang (https://sciprofiles.com/profile/author/NW5iQ1luazNJZThTQkZFZ2t4ZCtrVTY5VlpnRUhBNk95aVdFZklzRWMvQT0=?utm_sou
,
Qingna Zeng (https://sciprofiles.com/profile/author/cEgxQ2ZpUWJGWUFmNE9qa1FPb3lyVEhkRmNYQ1h1RXFlaFMwQ001dHl0Zz0=?utm_sou
,
Xiangfeng Peng (https://sciprofiles.com/profile/author/ZlhSN3dvdFZyU2RSS2l3Rkh3ZDRvRWJaUlJGTFFQNHdyMlprS2VCQ29FND0=?utm_sou
,
Wanjun Wu (https://sciprofiles.com/profile/author/bElycjY0Z2ZleVpYSXl4SDAySk5RYldQQXFsTE9VSXhOaGdVWXBmK1RpYz0=?utm_source=
,
Shuai Liu (https://sciprofiles.com/profile/author/cnNGQTd4VlNzM2dtQnpabkVSUGFYTDVLeUFJMEJhYVRFS3AxYjFkMDY1UT0=?utm_source=
,
Bin Lan (https://sciprofiles.com/profile/author/RzlQQU9OU2l3WFRqalhnMGl3T2dTRWE5NUlVemthUEtRYS9xNzBGWXFtWT0=?utm_source=m
and
Yixiong Zhang (https://sciprofiles.com/profile/author/WG00aDVZaTN4Q00vY3FZcEhvQkdLZz09?utm_source=mdpi.com&utm_medium=websit

Polymers **2022**, *14*(18), 3708; https://doi.org/10.3390/polym14183708 (https://doi.org/10.3390/polym14183708) - 06 Sep 2022
Viewed by 917

Abstract Magnetorheological elastomer (MRE) is a kind of smart material, whose mechanical property can be controlled by the external magnetic field quickly and reversibly. The damping property of MRE is one of the most concerned properties when designing MRE based devices. In this work, **[...] Read more.**

(This article belongs to the Section **Polymer Analysis and Characterization (/journal/polymers/sections/Anal_Charact)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03708/article_deploy/html/images/polymers-14-03708-g001-550.jpg?1662515216)
(https://pub.mdpi-res.com/polymers/polymers-14-03708/article_deploy/html/images/polymers-14-03708-g002-550.jpg?1662515214)
(https://pub.mdpi-res.com/polymers/polymers-14-03708/article_deploy/html/images/polymers-14-03708-g003-550.jpg?1662515212)
(https://pub.mdpi-res.com/polymers/polymers-14-03708/article_deploy/html/images/polymers-14-03708-g004-550.jpg?1662515208)
(https://pub.mdpi-res.com/polymers/polymers-14-03708/article_deploy/html/images/polymers-14-03708-g005-550.jpg?1662515209)
(https://pub.mdpi-res.com/polymers/polymers-14-03708/article_deploy/html/images/polymers-14-03708-g006-550.jpg?1662515214)
(https://pub.mdpi-res.com/polymers/polymers-14-03708/article_deploy/html/images/polymers-14-03708-g007-550.jpg?1662515211)
(https://pub.mdpi-res.com/polymers/polymers-14-03708/article_deploy/html/images/polymers-14-03708-g008-550.jpg?1662515216)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03708/article_deploy/html/images/polymers-14-03708-g009-550.jpg?1662515211)

(https://pub.mdpi-res.com/polymers/polymers-14-03708/article_deploy/html/images/polymers-14-03708-g010-550.jpg?1662515210)

Open Access Article (/2073-4360/14/18/3707/pdf?version=1662459708)

Experimental Research and Numerical Analysis of CFRP Retrofitted Masonry Triplets under Shear Loading (/2073-4360/14/18/3707)

by Houria Hernoune (https://sciprofiles.com/profile/2170269?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Benchaa Benabed (https://sciprofiles.com/profile/1064878?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Rajab Abousnina (https://sciprofiles.com/profile/1746041?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Abdalrahman Alajmi (https://sciprofiles.com/profile/2211699?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Abdullah M GH Alfadhili (https://sciprofiles.com/profile/author/OXhDcktwRzg2SklVUXZuU3d5VWVuVXFybVJ1T3JRdzRucHhJN1p5anF4RT0=?
and
Abdullah Shalwan (https://sciprofiles.com/profile/331925?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)

Polymers **2022**, *14*(18), 3707; https://doi.org/10.3390/polym14183707 (https://doi.org/10.3390/polym14183707) - 06 Sep 2022

Cited by 1 (/2073-4360/14/18/3707#metrics) | Viewed by 1390

Abstract This paper presents an experimental and numerical study into the shear response of brick masonry triplet prisms under different levels of precompression, as well as samples reinforced with carbon fiber-reinforced polymer (CFRP) strips. Masonry triplets were constructed with two different mortar mix ratios **[...] Read more.**

(This article belongs to the Special Issue **Polymer Fiber and Nanowire Reinforced Materials (
/journal/polymers/special_issues/Polym_Fiber_Nanowire_Reinf_Mater)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03707/article_deploy/html/images/polymers-14-03707-g001-550.jpg?1662459789)

(https://pub.mdpi-res.com/polymers/polymers-14-03707/article_deploy/html/images/polymers-14-03707-g002-550.jpg?1662459801)

(https://pub.mdpi-res.com/polymers/polymers-14-03707/article_deploy/html/images/polymers-14-03707-g003-550.jpg?1662459778)

(https://pub.mdpi-res.com/polymers/polymers-14-03707/article_deploy/html/images/polymers-14-03707-g004-550.jpg?1662459782)

(https://pub.mdpi-res.com/polymers/polymers-14-03707/article_deploy/html/images/polymers-14-03707-g005-550.jpg?1662459795)

(https://pub.mdpi-res.com/polymers/polymers-14-03707/article_deploy/html/images/polymers-14-03707-g006-550.jpg?1662459785)

(https://pub.mdpi-res.com/polymers/polymers-14-03707/article_deploy/html/images/polymers-14-03707-g007-550.jpg?1662459796)

(https://pub.mdpi-res.com/polymers/polymers-14-03707/article_deploy/html/images/polymers-14-03707-g008-550.jpg?1662459791)

(https://pub.mdpi-res.com/polymers/polymers-14-03707/article_deploy/html/images/polymers-14-03707-g009-550.jpg?1662459803)

(https://pub.mdpi-res.com/polymers/polymers-14-03707/article_deploy/html/images/polymers-14-03707-g010-550.jpg?1662459799)

(https://pub.mdpi-res.com/polymers/polymers-14-03707/article_deploy/html/images/polymers-14-03707-g011a-550.jpg?1662459805)

(https://pub.mdpi-res.com/polymers/polymers-14-03707/article_deploy/html/images/polymers-14-03707-g011b-550.jpg?1662459780)

(https://pub.mdpi-res.com/polymers/polymers-14-03707/article_deploy/html/images/polymers-14-03707-g012-550.jpg?1662459787)

Open Access Review (/2073-4360/14/18/3706/pdf?version=1662516170)

Polymeric Packaging Applications for Seafood Products: Packaging-Deterioration Relevance, Technology and Trends (/2073-4360/14/18/3706)

by Yeyen Laorenza (https://sciprofiles.com/profile/2404646?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Vanee Chonhenchob (https://sciprofiles.com/profile/2154095?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Nattinee Bumbudsanpharoke (https://sciprofiles.com/profile/author/ZlR6dDZBNTVvMnRyb3VrT0JDRXpqWjNUbSsxb3BleUtWaHNlTzNVaVQ5V
,
Weerachet Jittanit (https://sciprofiles.com/profile/author/NjJmZ0p3QTNvUXo2STcvYXMvVXM2eEpoQWtCZ1RHYm8xdmpTbXVnc2NEST0=?utr
,
Sudathip Sae-tan (https://sciprofiles.com/profile/1442346?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Chitsiri Rachtanapun (https://sciprofiles.com/profile/904492?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Wasaporn Pretescille Chanput (https://sciprofiles.com/profile/author/QXZJQ3VHWTJ5VmVWT3lVODFjd1p2MXZ1UnFIMUh1NENZbTV1NGNGYl
,
Suvimol Charoensiddhi (https://sciprofiles.com/profile/723190?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
,
Atcharawan Srisa (https://sciprofiles.com/profile/2462473?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name), Khwanchat Promhuad (https://sciprofiles.com/profile/2496159?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
,
Phanwipa Wongphan (https://sciprofiles.com/profile/2404635?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
and
Nathdanai Harnkarnsujarit (https://sciprofiles.com/profile/1750650?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_nar

Polymers **2022**, *14*(18), 3706; https://doi.org/10.3390/polym14183706 (https://doi.org/10.3390/polym14183706) - 06 Sep 2022

Cited by 6 (/2073-4360/14/18/3706#metrics) | Viewed by 2454

Abstract Seafood is a highly economical product worldwide. Primary modes of deterioration include autolysis, oxidation of protein and lipids, formation of biogenic amines and melanosis, and microbial deterioration. These post-harvest losses can be properly handled if the appropriate packaging technology has been applied. Therefore, **[...] Read more.**

Back to TopTop

(This article belongs to the Special Issue **Smart Polymeric Films and Coatings for Food Packaging Applications (/journal/polymers/special_issues/Smart_Polym_Film_Coat_Food_Packag_Appl)**)

► Show Figures

Open Access Article (/2073-4360/14/18/3705/pdf?version=1662525501)

Harnessing Lipid Polymer Hybrid Nanoparticles for Enhanced Oral Bioavailability of Thymoquinone: In Vitro and In Vivo Assessments (/2073-4360/14/18/3705)

by **Syed Sarim Imam (https://sciprofiles.com/profile/335242?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Sadaf Jamal Gilani (https://sciprofiles.com/profile/1409721?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **May Nasser Bin Jumah (https://sciprofiles.com/profile/2166057?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)** , **Md. Rizwanullah**, **Ameeduzzafar Zafar (https://sciprofiles.com/profile/1713082?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Mohammed Muqtader Ahmed (https://sciprofiles.com/profile/1691146?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_** and **Sultan Alshehri (https://sciprofiles.com/profile/author/OVBvd2FrOFY1U0NaV1d3S0dNWnNEOWlyNkx0dGM4Nlc1WDV1MHNtOUhmTT0=?utm_**

Polymers **2022**, *14*(18), 3705; **https://doi.org/10.3390/polym14183705 (https://doi.org/10.3390/polym14183705)** - 06 Sep 2022

Cited by 4 (/2073-4360/14/18/3705#metrics) | Viewed by 1404

Abstract The clinical application of phytochemicals such as thymoquinone (THQ) is restricted due to their limited aqueous solubility and oral bioavailability. Developing mucoadhesive nanocarriers to deliver these natural compounds might provide new hope to enhance their oral bioavailability. Herein, this investigation aimed to develop **[...] Read more.**

(This article belongs to the Section **Polymer Applications (/journal/polymers/sections/Polymer_Applications)**)

► Show Figures

Open Access Article (/2073-4360/14/18/3704/pdf?version=1662456732)

Utilisation of Paunch Waste as a Natural Fibre in Biocomposites (/2073-4360/14/18/3704)

by **Clement Matthew Chan (https://sciprofiles.com/profile/397332?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)** , **Darren Martin (https://sciprofiles.com/profile/539773?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Emilie Gauthier (https://sciprofiles.com/profile/940101?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Paul Jensen (https://sciprofiles.com/profile/author/WnkwN3NnSzlFZS8veHhPUUM0eGZmM3lNOExCbDF6Mk5lVjBzYWRTbzM4WT0=?utm_sou** , **Bronwyn Laycock (https://sciprofiles.com/profile/1145107?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)** and **Steven Pratt (https://sciprofiles.com/profile/147364?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**

Polymers **2022**, *14*(18), 3704; **https://doi.org/10.3390/polym14183704 (https://doi.org/10.3390/polym14183704)** - 06 Sep 2022

Back to TopTop

Cited by 2 (/2073-4360/14/18/3704#metrics) | Viewed by 1174

Abstract Paunch is a fibrous solid residue consisting of partially digested feed from the stomachs of processed cattle. It is the largest untapped solid waste stream from animals at meat processing plants, and potentially a valuable source of fibres for the production of sustainable **[...] Read more.**

(This article belongs to the Special Issue **Plastic and Natural Fiber Materials (/journal/polymers/special_issues/Plastic_Natural_Fiber_Materials)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03704/article_deploy/html/images/polymers-14-03704-ag-550.jpg?1662535969)

(https://pub.mdpi-res.com/polymers/polymers-14-03704/article_deploy/html/images/polymers-14-03704-g001-550.jpg?1662456823)

(https://pub.mdpi-res.com/polymers/polymers-14-03704/article_deploy/html/images/polymers-14-03704-g002-550.jpg?1662456842)

(https://pub.mdpi-res.com/polymers/polymers-14-03704/article_deploy/html/images/polymers-14-03704-g003-550.jpg?1662456849)

(https://pub.mdpi-res.com/polymers/polymers-14-03704/article_deploy/html/images/polymers-14-03704-g004-550.jpg?1662456829)

(https://pub.mdpi-res.com/polymers/polymers-14-03704/article_deploy/html/images/polymers-14-03704-g005-550.jpg?1662456840)

(https://pub.mdpi-res.com/polymers/polymers-14-03704/article_deploy/html/images/polymers-14-03704-g006-550.jpg?1662456826)

(https://pub.mdpi-res.com/polymers/polymers-14-03704/article_deploy/html/images/polymers-14-03704-g007-550.jpg?1662456837)

(https://pub.mdpi-res.com/polymers/polymers-14-03704/article_deploy/html/images/polymers-14-03704-g008-550.jpg?1662456833)

Open Access Article **(/2073-4360/14/18/3703/pdf?version=1663317530)**

Structural and Mechanical Properties of Konjac Glucomannan Gels and Influence of Freezing-Thawing Treatments on Them (/2073-4360/14/18/3703)

by **Hiroyuki Takeno (https://sciprofiles.com/profile/218214?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Ryuki Hashimoto (https://sciprofiles.com/profile/author/VzRobndCbXA2ZFZVSURMVFk5ZUEzNnhUQlZqcW5LY3cweHU0MzBTbmorYz0=?utm_** , **Yunqiao Lu (https://sciprofiles.com/profile/author/aDdjY0ZsbU13TVJxWGk1MDMyTmgrRFBORDdYREhrYmtpSWVFUkEwOEZXTT0=?utm_sou** and **Wen-Chuan Hsieh (https://sciprofiles.com/profile/162975?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**

Polymers **2022**, *14*(18), 3703; **https://doi.org/10.3390/polym14183703 (https://doi.org/10.3390/polym14183703)** - 06 Sep 2022

Cited by 2 (/2073-4360/14/18/3703#metrics) | Viewed by 1325

Abstract Freezing has been widely used for long-term food preservation. However, freezing-thawing (FT) treatment usually influences the texture and structure of food gels such as konjac. For their texture control after FT treatment, it is important to clarify the structural change of food gels **[...] Read more.**

(This article belongs to the Special Issue **Self-Assembling Structure and Dynamics of Multicomponent Polymer Systems (/journal/polymers/special_issues/Self_Assem_Struct_Dyn_Multicomponent)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03703/article_deploy/html/images/polymers-14-03703-g001-550.jpg?1663317623)

(https://pub.mdpi-res.com/polymers/polymers-14-03703/article_deploy/html/images/polymers-14-03703-g002-550.jpg?1663317624)

(https://pub.mdpi-res.com/polymers/polymers-14-03703/article_deploy/html/images/polymers-14-03703-g003-550.jpg?1663317627)

(https://pub.mdpi-res.com/polymers/polymers-14-03703/article_deploy/html/images/polymers-14-03703-g004a-550.jpg?1663317628)

(https://pub.mdpi-res.com/polymers/polymers-14-03703/article_deploy/html/images/polymers-14-03703-g004b-550.jpg?1663317633)

(https://pub.mdpi-res.com/polymers/polymers-14-03703/article_deploy/html/images/polymers-14-03703-g005-550.jpg?1663317625)

(https://pub.mdpi-res.com/polymers/polymers-14-03703/article_deploy/html/images/polymers-14-03703-g006-550.jpg?1663317629)

(https://pub.mdpi-res.com/polymers/polymers-14-03703/article_deploy/html/images/polymers-14-03703-g007-550.jpg?1663317626)

(https://pub.mdpi-res.com/polymers/polymers-14-03703/article_deploy/html/images/polymers-14-03703-g008-550.jpg?1663317630)

(https://pub.mdpi-res.com/polymers/polymers-14-03703/article_deploy/html/images/polymers-14-03703-g009-550.jpg?1663317631)

Open Access Article **(/2073-4360/14/18/3702/pdf?version=1663313742)**

Understanding Electrical Failure of Polyimide-Based Flexible Neural Implants: The Role of Thin Film Adhesion (/2073-4360/14/18/3702)

by **Marcel Tintelott (https://sciprofiles.com/profile/2370346?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**, **Andreas Schander (https://sciprofiles.com/profile/298421?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)** and **Walter Lang (https://sciprofiles.com/profile/11484?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)**

Polymers **2022**, *14*(18), 3702; **https://doi.org/10.3390/polym14183702 (https://doi.org/10.3390/polym14183702)** - 06 Sep 2022

Cited by 4 (/2073-4360/14/18/3702#metrics) | Viewed by 1284

Abstract The lack of long-term stability of polymeric neural interfaces remains one of the most important and less tackled issues in this research field. To address this issue, we fabricated two test structures based on interdigitated electrodes (IDEs) encapsulated with polyimide (PI). One of **[...] Read more.**

(This article belongs to the Section **Polymer Processing and Engineering (/journal/polymers/sections/Process_Eng)**)

► Show Figures

(https://pub.mdpi-res.com/polymers/polymers-14-03702/article_deploy/html/images/polymers-14-03702-g001-550.jpg?1663313813)

(https://pub.mdpi-res.com/polymers/polymers-14-03702/article_deploy/html/images/polymers-14-03702-g002-550.jpg?1663313813)

Back to TopTop

(https://pub.mdpi-res.com/polymers/polymers-14-03702/article_deploy/html/images/polymers-14-03702-g003-550.jpg?1663313817)

(https://pub.mdpi-res.com/polymers/polymers-14-03702/article_deploy/html/images/polymers-14-03702-g004-550.jpg?1663313817)

(https://pub.mdpi-res.com/polymers/polymers-14-03702/article_deploy/html/images/polymers-14-03702-g005-550.jpg?1663313818)

(https://pub.mdpi-res.com/polymers/polymers-14-03702/article_deploy/html/images/polymers-14-03702-g006-550.jpg?1663313818)

(https://pub.mdpi-res.com/polymers/polymers-14-03702/article_deploy/html/images/polymers-14-03702-g007-550.jpg?1663313812)

(https://pub.mdpi-res.com/polymers/polymers-14-03702/article_deploy/html/images/polymers-14-03702-g008-550.jpg?1663313816)

(https://pub.mdpi-res.com/polymers/polymers-14-03702/article_deploy/html/images/polymers-14-03702-g009-550.jpg?1663313815)

Show export options

Displaying articles 1-222

Previous Issue
Volume 14, September-1 (/2073-4360/14/17)

Next Issue
Volume 14, October-1 (/2073-4360/14/19)

Polymers (/journal/polymers), EISSN 2073-4360, Published by MDPI

RSS (/rss/journal/polymers) Content Alert (/journal/polymers/toc-alert)

Subscribe to receive issue release notifications and newsletters from MDPI journals

Select options

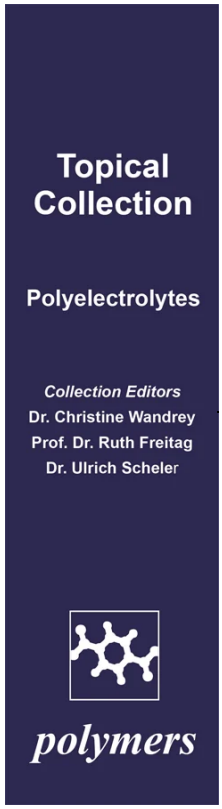
Enter your email address...
Subscribe

© 1996-2023 MDPI (Basel, Switzerland) unless otherwise stated

Disclaimer Terms and Conditions (/about/terms-and-conditions) Privacy Policy (/about/privacy)

Forthcoming issue (/2073-4360/15/20)
Current issue (/2073-4360/15/19)

Vol. 15 (2023) (/2073-4360/15)
Vol. 14 (2022) (/2073-4360/14)
Vol. 13 (2021) (/2073-4360/13)
Vol. 12 (2020) (/2073-4360/12)
Vol. 11 (2019) (/2073-4360/11)
Vol. 10 (2018) (/2073-4360/10)
Vol. 9 (2017) (/2073-4360/9)
Vol. 8 (2016) (/2073-4360/8)
Vol. 7 (2015) (/2073-4360/7)
Vol. 6 (2014) (/2073-4360/6)
Vol. 5 (2013) (/2073-4360/5)
Vol. 4 (2012) (/2073-4360/4)
Vol. 3 (2011) (/2073-4360/3)
Vol. 2 (2010) (/2073-4360/2)
Vol. 1 (2009) (/2073-4360/1)



Affiliated Society:
(https://serve.mdpi.com/www/my_files/cliiik.php?oaparams=0bannerid=7653zoneid=4cb=1d78240e6boad

Editorial Board

- Polymer Chemistry Section (/journal/polymers/sectioneditors/Polymer_Chemistry)
- Polymer Analysis and Characterization Section (/journal/polymers/sectioneditors/Anal_Charact)
- Polymer Physics and Theory Section (/journal/polymers/sectioneditors/Phys_Theory)
- Polymer Processing and Engineering Section (/journal/polymers/sectioneditors/Process_Eng)
- Polymer Applications Section (/journal/polymers/sectioneditors/Polymer_Applications)
- Biomacromolecules, Biobased and Biodegradable Polymers Section (/journal/polymers/sectioneditors/Biomacromol_Biobased_Biodegradable_Polymers)
- Circular and Green Polymer Science Section (/journal/polymers/sectioneditors/Circ_Green)
- Polymer Composites and Nanocomposites Section (/journal/polymers/sectioneditors/polymer_composites_nanocomposites)
- Polymer Networks Section (/journal/polymers/sectioneditors/netw)
- Polymer Membranes and Films Section (/journal/polymers/sectioneditors/Membr_Film)
- Polymer Fibers Section (/journal/polymers/sectioneditors/Fiber)
- Smart and Functional Polymers Section (/journal/polymers/sectioneditors/Smart_Funct)

- **Innovation of Polymer Science and Technology Section (/journal/polymers/sectioneditors/Innov_Polym_Technol)**

Please note that the order in which the Editors appear on this page is alphabetical, and follows the structure of the editorial board presented on the MDPI website under information for editors: **editorial board responsibilities (/editors#Editorial_Board_Responsibilities)**.

Members

Search by first name, last name, affiliation,

Prof. Alexander Böker (https://sciprofiles.com/profile/159961?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Website (https://www.chem.uni-potsdam.de/groups/boeker/)
Editor-in-Chief
Lehrstuhl für Polymermaterialien und Polymertechnologie, University of Potsdam, 14476 Potsdam-Golm, Germany
Interests: self-assembly of block copolymers and nanoparticles; multi-functional patchy particles; Pickering-Emulsions; protein-polymer conjugates; integration of biological functions into polymeric materials
* Founding Editor-in-Chief of Polymers

Prof. Dimitrios Bikiaris (https://sciprofiles.com/profile/8950?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Website (https://www.chem.auth.gr/en/staff/dbikiaris/)
Section Editor-in-Chief
Laboratory of Polymer Chemistry and Technology, Department of Chemistry, Aristotle University of Thessaloniki, GR 54124 Thessaloniki, Greece
Interests: synthesis and characterization of polyesters; development of biobased polymers; biodegradable polymers; polymer composites and nanocomposites; synthesis and characterization of copolymers; polymer blends; recycling of polymers with various techniques; enzymatic hydrolysis studies; modification of natural polymers; polymer for wastewater treatment pollutant removal; polymers for tissue engineering and drug delivery applications; drug–polymer solid dispersions; drug targeting; drug nanoencapsulation and microencapsulation
Special Issues, Collections and Topics in MDPI journals

Prof. Martin Kröger *
Website (http://www.complexfluids.ethz.ch)
Section Editor-in-Chief
Polymer Physics, Department of Materials, ETH Zurich, Leopold-Ruzicka-Weg 4, CH-8093 Zurich, Switzerland
Interests: polymer physics; computational physics; applied mathematics; stochastic differential equations; coarse-graining; biophysics
* Section: Polymer Physics and Theory
Special Issues, Collections and Topics in MDPI journals

Prof. Francesco Paolo La Mantia (https://sciprofiles.com/profile/225420?utm_source=mdpi.com&utm_medium=website&utm_campaign=avat
Website1 (https://www.unipa.it/persone/docenti/l/francescopaolo.lamantia) **Website2 (https://orcid.org/0000-0002-0452-0519)**
Section Editor-in-Chief
Department of Engineering, University of Palermo, RU INSTM, Viale delle Scienze, 90128 Palermo, Italy
Interests: polymer processing; mechanical behaviour of polymer-based systems; rheological behaviour of polymer-based systems; green composites; biocomposites; nanocomposites; biodegradable polymers; polymer blends; degradation and recycling of polymer-based systems
Special Issues, Collections and Topics in MDPI journals

Prof. Yuekun Lai (https://sciprofiles.com/profile/504586?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
https://clarivate.com/highly-cited-researchers/2022) **Website (http://yklai.fzu.edu.cn/)**
Section Editor-in-Chief
College of Chemical Engineering, Fuzhou University, Fuzhou 350116, China
Interests: TiO_2-based functional materials; surface and interface; biomimetics; water treatment; energy storage and conversion
Special Issues, Collections and Topics in MDPI journals

Prof. Miguel Ángel López Manchado (https://sciprofiles.com/profile/452354?utm_source=mdpi.com&utm_medium=website&utm_campaign=a
Website (http://www.nanocomp.ictp.csic.es/bio/MALM.html)
Section Editor-in-Chief
Institute of Polymer Science and Technology (ICTP), CSIC, C/Juan de la Cierva, 3, 28006 Madrid, Spain
Interests: processing and characterization of composite materials and nanocomposites; evaluation of structure-properties relationships in composite materials; study of elastomer compounds
* Section: Polymer Composites and Nanocomposites
Special Issues, Collections and Topics in MDPI journals

Prof. Giulio Malucelli (https://sciprofiles.com/profile/150333?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Website (https://www.polito.it/en/staff?p=002168)
Section Editor-in-Chief

Department of Applied Science and Technology, Politecnico di Torino, 10129 Turin, Italy
Interests: biomacromolecules; flame retardance; structure-property relationships; thermal degradation; polymer (nano)composites; biopolymers
Special Issues, Collections and Topics in MDPI journals

Prof. Dr. Vlasis Mavrantzas
Website1 (https://www.chemeng.upatras.gr/en/personnel/faculty/53) **Website2 (https://scholar.google.com/citations?user=ToQyWQcAAAAJ&hl=en)**
Section Editor-in-Chief
1. Department of Chemical Engineering, University of Patras & FORTH-ICE/HT, GR 26504 Patras, Greece
2. Particle Technology Laboratory, Department of Mechanical and Process Engineering, ETH-Z, CH-8093 Zürich, Switzerland
Interests: polymer physics; polymer rheology; molecular simulations; statistical mechanics; nonequilibrium thermodynamics; constitutive modelling; dissipative quantum field theory
Special Issues, Collections and Topics in MDPI journals

Prof. Antonio Pizzi (https://sciprofiles.com/profile/90476?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) *
Website (http://lermab.univ-lorraine.fr/membres/pizzi-antonio)
Section Editor-in-Chief
LERMAB, Laboratoire d'Etude et de Recherche sur le MAteriau Bois, Université de Lorraine, 27 rue Philippe Seguin, CS60036, 88021 Epinal, France
Interests: polycondensation; resins; adhesives; thermosetting polymers for adhesives; natural polymers for industrial use; fibrous and wood composites; polymeric wood constituents (cellulose, lignin, tannins)
* Section: Circular and Green Polymer Science
Special Issues, Collections and Topics in MDPI journals

Prof. Dr. Marcel Popa (https://sciprofiles.com/profile/1092003?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Website (http://www.didactic.icpm.tuiasi.ro/cv/popamarcel/contact.html)
Section Editor-in-Chief
Faculty of Chemical Engineering and Environment Protection, "Gheorghe Asachi" Technical University, Iasi, Romania
Interests: polysaccharide modification; bioactive polymers; biomaterials; hydrogels; interpenetrated networks; micro- and nanoparticles (spheres and capsules); hybrid and functionalized nanoparticles for drug targeting; drug delivery; polymer–drug conjugates
Special Issues, Collections and Topics in MDPI journals

Prof. Dr. Frank Wiesbrock (https://sciprofiles.com/profile/2148447?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Website (https://www.pccl.at/en/news/news/86-dr-wiesbrock-joins-pccl.html)
Section Editor-in-Chief
Institute for Chemistry and Technology of Materials, University of Technology Graz, NAWI Graz, 8010 Graz, Austria
Interests: functional polymers; ring-opening polymerizations; crosslinked polymers; biopolyesters; polymeranalogous modifications
* Section: Circular and Green Polymer Science
Special Issues, Collections and Topics in MDPI journals

Prof. Dr. Hyeonseok Yoon (https://sciprofiles.com/profile/53824?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) *
Website (http://funlab.jnu.ac.kr/people.html)
Section Editor-in-Chief
1. School of Polymer Science and Engineering, Chonnam National University, 77 Yongbong-ro, Buk-gu, Gwangju 61186, Republic of Korea
2. Department of Polymer Engineering, Graduate School, Chonnam National University, 77 Yongbong-ro, Buk-gu, Gwangju 61186, Republic of Korea
Interests: conducting polymers; nanoparticles; composites; sensors; electrochemistry
* Section: Polymer Applications
Special Issues, Collections and Topics in MDPI journals

Prof. Dr. Shin-Ichi Yusa (https://sciprofiles.com/profile/6791?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Website (http://www.eng.u-hyogo.ac.jp/msc/yusa/index.html)
Section Editor-in-Chief
Department of Materials Science and Chemistry, University of Hyogo, Shosha, Himeji 2167, Hyogo, Japan
Interests: controlled/living radical polymerization; RAFT; TERP; water-soluble polymer; self-organization; polymer micelle; bioconjugate polymer
Special Issues, Collections and Topics in MDPI journals

Prof. Dr. Wei Zhang (https://sciprofiles.com/profile/617712?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Website1 (https://publons.com/researcher/1219336/wei-zhang) **Website2 (https://orcid.org/0000-0001-5778-9936)**
Section Editor-in-Chief
State Key Laboratory of Polymer Materials Engineering, Polymer Research Institute at Sichuan University, Chengdu 610065, China
Interests: nanofibers; UHMWPE fibers; electrospinning; gel spinning; 3D printing; polymer composites; water treatment; biomaterials; energy storage materials
Special Issues, Collections and Topics in MDPI journals

Prof. Dr. Qixun Zheng (https://sciprofiles.com/profile/1262222?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Website (https://scce.sjtu.edu.cn/en/jiaoshi.php?aid=51&c=3)
Section Editor-in-Chief
Department of Polymer Science and Engineering, Shanghai Jiao Tong University, Shanghai 200240, China
Interests: microphase separation and self-assembly in multicomponent polymer systems; synthesis and characterization of polyhedral oligomeric silsesquioxane (POSS) monomers and POSS-containing polymers; shape memory, self-healing, and reprocessing properties of polymers; dynamics of polymers in bulk by solid NMR spectroscopy (1H, 13C, 29Si, 15N and 2H NMR)
Special Issues, Collections and Topics in MDPI journals

Prof. Dr. Rafael Antonio Balart Gimeno (https://sciprofiles.com/profile/335440?utm_source=mdpi.com&utm_medium=website&utm_campaign=av
Website (http://www.upv.es/ficha-personal/rbalart)
Section Associate Editor
Technological Institute of Materials (ITM), Universitat Politècnica de València (UPV), 03801 Alcoy, Spain
Interests: aliphatic polyesters; blends; compatibilization; advanced characterization; functional additives; unsaturated polyester resins; composites
Special Issues, Collections and Topics in MDPI journals

Prof. Dr. Ilker S. Bayer (https://sciprofiles.com/profile/223098?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Website (https://www.iit.it/people/ilker-bayer)
Section Associate Editor
Istituto Italiano di Tecnologia, Genoa, Italy
Interests: bioinspired surfaces; wetting; biopolymers; polymer nanocomposites
Special Issues, Collections and Topics in MDPI journals

Prof. Dr. Nadka T. Dintcheva (https://sciprofiles.com/profile/390552?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Website (https://www.unipa.it/persone/docenti/d/nadka.dintcheva/)
Section Associate Editor
Department of Engineering, University of Palermo, 90128 Palermo, Italy
Interests: structure/processing/properties relationships in polymers; biopolymers; micro- and nano- composites; polymers and biopolymers degradation and stabilization
Special Issues, Collections and Topics in MDPI journals

Prof. Dr. Mariaenrica Frigione (https://sciprofiles.com/profile/33550?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name
Website (https://www.unisalento.it/scheda-utente/-/people/mariaenrica.frigione/biografia)
Section Associate Editor
Innovation Engineering Department, University of Salento, Prov.le Lecce-Monteroni, 73100 Lecce, Italy
Interests: cold-cured adhesives and matrices for FRP employed in constructions; polymeric nanostructured adhesives and coatings; hydrophobic coatings for stone conservation and wood protection; durability of polymers, adhesives and coatings; eco-efficient materials for construction and cultural heritage
Special Issues, Collections and Topics in MDPI journals

Prof. Dr. Peter Griffiths (https://sciprofiles.com/profile/556701?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Website (https://www.gre.ac.uk/people/rep/faculty-of-engineering-and-science/peter-griffiths)
Section Associate Editor
School of Science, Faculty of Engineering and Science, University of Greenwich, Chatham Maritime, Kent ME4 4TB, UK
Interests: formulation; polymer–surfactant mixtures; polymer–particle interactions; polymer complexation; self-assembly; pulsed-gradient spin-echo NMR; neutron scattering
Special Issues, Collections and Topics in MDPI journals

Prof. Dr. Vitaliy V. Khutoryanskiy (https://sciprofiles.com/profile/365743?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_
Website (https://www.reading.ac.uk/pharmacy/about/staff/v-khutoryanskiy.aspx)
Section Associate Editor
Reading School of Pharmacy, University of Reading, Reading RG6 6AD, UK
Interests: water-soluble polymers; hydrogels; polymer complexes; drug delivery; mucoadhesion; nanomaterials
Special Issues, Collections and Topics in MDPI journals

Dr. Marta Otero (https://sciprofiles.com/profile/104751?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name)
Website (https://www.cesam-la.pt/search-results/?searchwp=Marta+Otero)
Section Associate Editor
CESAM (Centre for Environmental and Marine Studies) & Department of Environment and Planning, University of Aveiro, Campus de Santiago, 3810-193 Aveiro, Portugal
Interests: pollution and contamination of water, soil and sediments; decontamination and purification of water: global treatment systems; sustainable treatment processes; clean and alternative technologies; biowastes management and valorization; novel materials: production, characterization and utilization; thermal analysis
Special Issues, Collections and Topics in MDPI journals

Prof. George Z. Papageorgiou (https://sciprofiles.com/profile/494038?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) Website (https://chem.uoi.gr/meli-dep/papageorgiou-georgios/)

Section Associate Editor

1. Department of Chemistry, University of Ioannina, P.O. Box 1186, GR-45110 Ioannina, Greece
2. Institute of Materials Science and Computing, University Research Center of Ioannina (URCI), 45110 Ioannina, Greece

Interests: sustainable and green industrial chemistry; polymer nanocomposites; materials characterization

Special Issues, Collections and Topics in MDPI journals

Prof. Dr. Bernhard V. K. J. Schmidt (https://sciprofiles.com/profile/286458?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) Website (https://www.gla.ac.uk/schools/chemistry/staff/bernhardschmidt/)

Section Associate Editor

1. Max Planck Institute of Colloids and Interfaces, 14476 Potsdam, Germany
2. School of Chemistry, University of Glasgow, Glasgow G128QQ, UK

Interests: double-hydrophilic block copolymer self-assembly; polymerizations in confined spaces; polymers from renewable lignin feedstocks; carbon nitride-based soft polymer materials

Special Issues, Collections and Topics in MDPI journals

Prof. Dr. Andrea Sorrentino (https://sciprofiles.com/profile/291266?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) Website (https://www.researchgate.net/profile/Andrea-Sorrentino)

Section Associate Editor

Institute of Polymers, Composites and Biomaterials (IPCB), National Research Council of Italy (CNR), Via Previati 1/C, 23900 Lecco, Italy

Interests: process–properties relashionships; morphology and properties of polymeric materials; polymer processing; injection and compression moulding; nanofunctionalized polymer materials for barrier and electrical applications; polymer (bio/photo)-degradation; bionanocomposites materials; thermomechanical properties; biodegradable materials; high performances composite materials; materials for sensing; materials for drug delivery; self-healing materials

Special Issues, Collections and Topics in MDPI journals

Prof. Dr. Kazumi Teramoto (https://sciprofiles.com/profile/10936?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) Website1 (http://www.le.it-chiba.ac.jp/env-org/index.html) Website2 (http://www.appchem.it-chiba.ac.jp/env-org/index.html)

Section Associate Editor

Department of Life and Environmental Sciences, Faculty of Engineering, Chiba Institute of Technology, 2-17-1 Tsudanuma, Narashino, Chiba 275-0016, Japan

Interests: biomaterial; bio-based polymers; bioplastics; biodegradable polymers; biopolymers; composite materials comprising a polymer matrix

Special Issues, Collections and Topics in MDPI journals

Prof. Dr. Manuel Verdejo (https://sciprofiles.com/profile/638214?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) Website (http://www.nanocomp.ictp.csic.es/bio/RV.html)

Section Associate Editor

Instituto de Ciencia y Tecnologia de Polimeros, Madrid, Spain

Interests: polymer composites and nanocomposites; polymer foams; smart polymers: dielectric elastomer actuators

Special Issues, Collections and Topics in MDPI journals

Prof. Dr. Ilaria Armentano (https://sciprofiles.com/profile/479040?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) Website (http://unitus-public.gomp.it/Docenti/Render.aspx?UID=6f822dd4-c2cc-4a08-a47e-075feaa3dd6e)

Advisory Board Member

Department of Economics, Engineering, Society and Business Organization (DEIM), University of Tuscia, 01100 Viterbo, Italy

Interests: carbon nanotubes; biomaterials; polymer nanocomposites; surface properties; tissue enginneering; biodegradable polymers

Special Issues, Collections and Topics in MDPI journals

Prof. Dr. Jean-François Carpentier (https://sciprofiles.com/profile/12001?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) Website (http://scienceschimiques.univ-rennes1.fr/catalyse/carpentier/index.html)

Advisory Board Member

Institute of Chemistry, Organometallics: Materials and Catalysis Group, UMR 6226, University of Rennes, 1 – 35042 Rennes Cedex, France

Interests: metal-based polymerization catalysis; coordination-insertion polymerization; metallocenes; post metallocene catalysts; stereoselective polymerization; polyolefins; ring-opening polymerization; chemical modification of polymers

Dr. Jeffrey W. Darling (https://sciprofiles.com/profile/12022?utm_source=mdpi.com&utm_medium=website&utm_campaign=avatar_name) Website (http://nano.anl.gov)

Advisory Board Member

Argonne National Laboratory, Institute for Molecular Engineering, 9700 S. Cass Ave., Argonne, IL 60439, USA

Interests: block copolymers; self-assembly; membranes; sequential infiltration synthesis; sorbents

Displaying Editorial board member 1-30 on page 1 of 31.

Go to page ‹ (/journal/polymers/editors?page_no=1) 1 2 (/journal/polymers/editors?page_no=2) 3 (/journal/polymers/editors?page_no=3) 4 (/journal/polymers/editors?page_no=4) 5 (/journal/polymers/editors?page_no=5) › (/journal/polymers/editors?page_no=2) ›| (/journal/polymers/editors?page_no=31)

Polymers (/journal/polymers), EISSN 2073-4360, Published by MDPI

RSS (/rss/journal/polymers) **Content Alert (/journal/polymers/toc-alert)**

Further Information

Article Processing Charges (/apc)

Pay an Invoice (/about/payment)

Open Access Policy (/openaccess)

Contact MDPI (/about/contact)

Jobs at MDPI (https://careers.mdpi.com)

Guidelines

For Authors (/authors)

For Reviewers (/reviewers)

For Editors (/editors)

For Librarians (/librarians)

For Publishers (/publishing_services)

For Societies (/societies)

For Conference Organizers (/conference_organizers)

MDPI Initiatives

Sciforum (https://sciforum.net)

MDPI Books (https://www.mdpi.com/books)

Preprints.org (https://www.preprints.org)

Scilit (https://www.scilit.net)

SciProfiles (https://sciprofiles.com?utm_source=mpdi.com&utm_medium=bottom_menu&utm_campaign=initiative)

Encyclopedia (https://encyclopedia.pub)

JAMS (https://jams.pub)

Proceedings Series (/about/proceedings)

Follow MDPI

LinkedIn (https://www.linkedin.com/company/mdpi)

Facebook (https://www.facebook.com/MDPIOpenAccessPublishing)

Twitter (https://twitter.com/MDPIOpenAccess)

Subscribe to receive issue release notifications and newsletters from MDPI journals

Select options

Enter your email address...

Subscribe

© 1996-2023 MDPI (Basel, Switzerland) unless otherwise stated

Disclaimer **Terms and Conditions (/about/terms-and-conditions)** **Privacy Policy (/about/privacy)**

polymers

MDPI

Review

Tissue Engineering with Stem Cell from Human Exfoliated Deciduous Teeth (SHED) and Collagen Matrix, Regulated by Growth Factor in Regenerating the Dental Pulp

Vinna K. Sugiaman [1], Rudy Djuanda [2], Natallia Pranata [1], Silvia Naliani [3], Wayan L. Demolsky [1] and Jeffrey [4,*]

[1] Department of Oral Biology, Faculty of Dentistry, Maranatha Christian University, Bandung 40164, Indonesia
[2] Department of Conservative Dentistry and Endodontic, Faculty of Dentistry, Maranatha Christian University, Bandung 40164, Indonesia
[3] Department of Prosthodontics, Faculty of Dentistry, Maranatha Christian University, Bandung 40164, Indonesia
[4] Department of Pediatric Dentistry, Faculty of Dentistry, Jenderal Achmad Yani University, Cimahi 40531, Indonesia
* Correspondence: jeffrey_dent2000@yahoo.com

Abstract: Maintaining dental pulp vitality and preventing tooth loss are two challenges in endodontic treatment. A tooth lacking a viable pulp loses its defense mechanism and regenerative ability, making it more vulnerable to severe damage and eventually necessitating extraction. The tissue engineering approach has drawn attention as an alternative therapy as it can regenerate dentin-pulp complex structures and functions. Stem cells or progenitor cells, extracellular matrix, and signaling molecules are triad components of this approach. Stem cells from human exfoliated deciduous teeth (SHED) are a promising, noninvasive source of stem cells for tissue regeneration. Not only can SHEDs regenerate dentin-pulp tissues (comprised of fibroblasts, odontoblasts, endothelial cells, and nerve cells), but SHEDs also possess immunomodulatory and immunosuppressive properties. The collagen matrix is a material of choice to provide structural and microenvironmental support for SHED-to-dentin pulp tissue differentiation. Growth factors regulate cell proliferation, migration, and differentiation into specific phenotypes via signal-transduction pathways. This review provides current concepts and applications of the tissue engineering approach, especially SHEDs, in endodontic treatment.

Keywords: dentin-pulp complex regeneration; signalling molecules; stem cell from human exfoliated deciduous teeth (SHED); tissue engineering

check for updates

Citation: Sugiaman, V.K.; Djuanda, R.; Pranata, N.; Naliani, S.; Demolsky, W.L.; Jeffrey. Tissue Engineering with Stem Cell from Human Exfoliated Deciduous Teeth (SHED) and Collagen Matrix, Regulated by Growth Factor in Regenerating the Dental Pulp. *Polymers* **2022**, *14*, 3712. https://doi.org/10.3390/polym14183712

Academic Editors: Dimitrios Bikiaris and Nunzia Gallo

Received: 7 August 2022
Accepted: 2 September 2022
Published: 6 September 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

1. Introduction

Tissue injury can occur when tissue is exposed to various stimuli, including microbial infections, mechanical damage (fractures, cracks, thermal factors), and chemical damage. This condition can cause cell apoptosis or necrosis, as well as microvasculature and stroma damage, leading to the activation of inflammation and wound healing mechanisms. During wound healing, mesenchymal stem cells are recruited to the site of injury to differentiate into stromal cells and replace damaged cells. However, if severe inflammation occurs in the dental pulp, the damaged cells cannot be effectively replaced or healed, a condition called irreversible pulpitis. In this condition, endodontic treatment must be carried out to remove the damaged pulp and prevent the spread of the damage [1–4].

Endodontic treatment involves partial or complete pulp removal (pulp extirpation) and filling the empty root canal with artificial material. Even so, the endodontic treatment causes the tooth to become more fragile, susceptible to caries and periapical infection and more likely to fracture as the tooth losses its vitality due to the absence of blood supply and innervation [5–11].

Therefore, it is crucial to maintain the vitality of the pulp. A tooth without a viable pulp loses its defense mechanism and regenerative ability, making it more prone to severe damage and ultimately leading to extraction. Dentin-pulp complex reconstruction is an ideal approach to restoring pulp vitality by using mesenchymal stem cell or progenitor cells and signalling molecules added to the extracellular matrix to recover fibroblasts, odontoblasts, endothelial cells and nerve fiber functions [8,10–14]. Stem cells can be obtained from various tissues, including teeth, buccal mucosa, skin, fat, and bone [15,16]. The pulp of deciduous teeth, rich in stem cells known as stem cells from human exfoliated deciduous teeth (SHED), is a promising, easy-to-get, and noninvasive source of stem cells for tissue regeneration [17–21]. Not only do they have the regenerative ability to generate dentin-pulp tissues but SHEDs also possess immunomodulatory and immunosuppressive properties [20,22].

Scaffolds are 3-dimensional microstructural materials that provide a biological environment and structural support to facilitate cell growth, desirable interactions, and the formation of functional tissues [8,23,24]. One popular scaffold material is collagen. Collagen is a natural extracellular matrix built from protein and abundant in hard and soft tissues [23]. Collagen is biocompatible, permeable, and biodegradable, so it can function in helping migration, adhesion, proliferation, and cell differentiation [8,12].

Growth factors are polypeptides that play a very important role in the signaling process that occurs during tissue formation and regeneration of the dentin-pulp complex [25,26]. In the dentin-pulp complex regeneration, several growth factors work together through different signalling mechanisms, including Transforming Growth Factor-β (TGFβ), Vascular Endothelial Growth Factor (VEGF),Bone Morphogenic Protein (BMP), Fibroblast Growth Factor (FGF),Platelet-Derived Growth Factor (PDGF), and Nerve Growth Factor(NGF) [25,27,28]. Growth factors will bind to cell surface receptors that subsequently induce cellular processes such as cell proliferation, angiogenesis, neovascularization, and all important steps in the regeneration process [28,29].

Growth Factorplays a role in various stages of the healing process and tissue regeneration, including cell migration, angiogenesis, and neurogenesis [26]. It can also induce odontogenic differentiation through ALK5/Smad2/3, TAK1, p38, and MEK/ERK signalling pathways, supporting cell proliferation and collagen formation [30,31].Tissue engineering applications in endodontic treatment are expected to replace damaged or lost tissue with new natural pulp tissue and reduce the use of artificial materials, making teeth fully functional again [14].

2. Tissue Engineering (TE) in Endodontic Treatment

As mentioned before, one challenge in endodontic treatment is maintaining dental pulp vitality and preventing tooth loss. Regenerative endodontics can overcome this hurdle [32]. According to the American Association of Endodontists, regenerative endodontics is a procedure designed based on biological principles to physiologically replace damaged tooth structures, including root and dentin structures, as well as cells in the pulp-dentin complex [10,32–34].

There are two concepts in regenerative endodontics, namely [35]:(1) guided tissue regeneration (GTR), also known as the revascularization or revitalization approach, and (2) tissue engineering (TE), an interdisciplinary approach to repairing damaged tissue using by combining three components: (1) cells (especially stem cells) capable of forming pulp tissue, root dentin, and tooth-supporting tissues, (2) scaffolds to facilitate cell proliferation and differentiation, and (3) bioactive molecules (generally growth factors) as shown in Figure 1 [28,35–38].

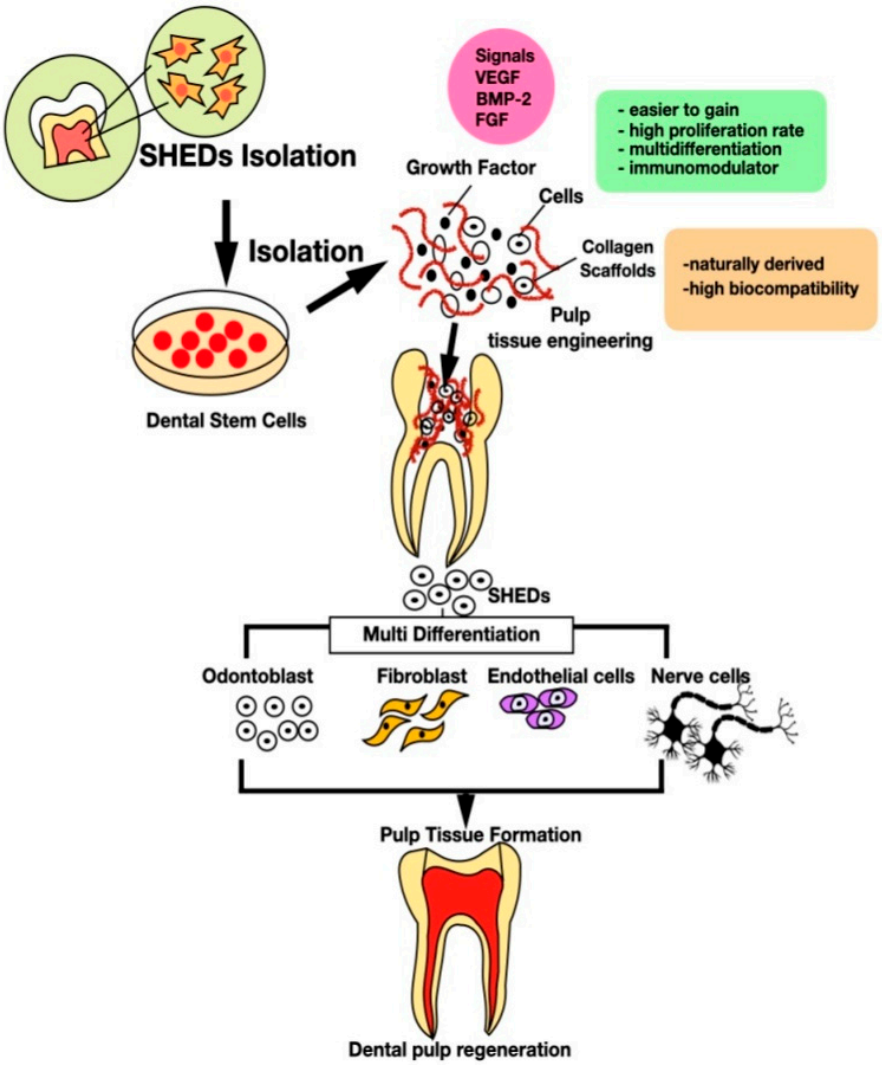


Figure 1. Tissue engineering technology in dental pulp regeneration.

3. Stem Cells

Stem cells are unique cells that possess self-renewal and differentiation properties into another cell type. Based on their differentiation potency, stem cells are divided into the following groups [39–42].

3.1. Totipotent Stem Cells

Totipotent stem cells are stem cells that can generate all types of cells and tissues that exist in organisms and can usually be obtained from embryonic stem cells (from embryos 1–3 days old). Totipotent cells have the highest differentiation potential and allow cells to form embryonic and extra-embryonic structures. An example of a totipotent cell is the zygote, formed after a sperm fertilizes an egg. These cells can later develop into one of the three germ layers or form the placenta. After about four days, the cell mass in the blastocyst becomes pluripotent. This structure is a source of pluripotent cells [35,43].

3.2. Pluripotent Stem Cells

Pluripotent stem cells are stem cells that can generate most cell types (over 200) and tissues found in organisms and have the ability to differentiate into cells of ectodermal, mesodermal, and endodermal origin. They can be obtained from a 5–14 day old blastocyst [35,44,45].

3.3. Multipotent Stem Cells

Multipotent stem cells are stem cells that can generate a limited number of cell and tissue types depending on their origin. These cells can be obtained from cord blood, fetal tissue and postnatal stem cells, including dental pulp stem cells [35,45,46].

3.4. Unipotent Stem Cell

Unipotent stem cells are stem cells that have the narrowest differentiation ability; the can only differentiate into one cell type but are able to divide repeatedly [43,45].

3.5. Induced Pluripotent Cells

Induced Pluripotent Cells are pluripotent stem cells formed by the induction of multipotent cells or adult somatic cells with pluripotent factors such as Oct4, Nanog, Sox2, Klf4, and C-myc [45,47].

There are two approaches to delivering stem cells into the root canal. The first approach is cell transplantation, where autologous or allologous stem cells are applied directly to the root canal. The major obstacle to this process is the immune rejection of allologous stem cells. The second obstacle is cell homing, where stem cells are sent to the injured area; this process is influenced by many factors, such as age, cell number, culture conditions, and method of application. This condition involves the use of chemotactic factors such as stromal cell-derived factor (SDF)-1 are injected into the site of injury to induce stem cell migration from the periapical area to the root canal [27,48].

Based on their stage of development and origin, stem cells can be broadly classified into [32,35,41,47]: (1) embryonic stem cells, which are stem cells derived from embryos, mainly from blastocysts. These cells are capable of dividing and renewing themselves over a long period; (2) adult stem cells, which are stem cells derived from postnatal tissue, can be isolated from various body tissues, such as bone marrow, adipose tissue, encephalon, epithelium, dental pulp, etc.

Tissue injury is always associated with the activation of the immune system or inflammatory cells, including macrophages, neutrophils, CD4+ T cells, CD8+ T cells, and B cells, triggered by cell apoptosis, necrotic cells, microvascular damage, and stroma [40,49–51]. Mesenchymal stem cells can regulate specific and non-specific immune systems by suppressing T cells and dendritic cell maturation, decreasing B cell proliferation and activation, inhibiting NK cell proliferation and cytotoxicity, and increasing T regulatory (Treg) cell formation [49,50].

There are two mechanisms of stem cell immunomodulation: soluble factor secretion and cell-to-cell direct contact. Prostaglandin E2 (PGE2), indoleamine 2,3-dioxygenase (IDO), nitric oxide (NO), interleukin-10 (IL-10), hepatocyte growth factor (HGF), and transforming growth factor 1 (TGFβ1) are secreted factors that have immunomodulatory properties. The cell-to-cell direct contact mechanism involves CD274 (programmed dead ligand 1), vascular cell adhesion molecule-1, and galectin-1 expression. These molecules reduce effector T cell proliferation and increase the proportion of regulatory T cells (Treg) [49,50,52].

Various stem cells can be found in teeth and their associate tissues, such as stem cells from human exfoliated deciduous teeth (SHED), dental pulp stem cells (DPSC), stem cells from the apical papilla (SCAP), periodontal ligament stem cells (PDLC), dental follicle precursor cells (DFPC), dental papilla cells (DPC), dental mesenchymal stem cells (DMSCs), and dental epithelial stem cells (DESCs). For pulp regeneration purposes, SHED, DPSC, and SCAP have strong potential [35,41,53–55].

4. Stem Cells from Human Exfoliated Deciduous Teeth (SHED)

Stem cells from human exfoliated deciduous teeth (SHED) were first obtained by Miura et al. in 2003. SHED expresses cell surface markers STRO-1, CD10, CD29, CD 31, CD44, CD73, CD90, CD105, CD146, CD13, CD166, Nestin, DCX, -tubulin, NeuN, GFAP, S-100, A2B5, CNPaseNanog, Oct3/4 and SSEAs (-3, -4) and does not express CD14, CD15, CD19, CD34, CD45, and CD43 [41,56–59].

SHEDs have two major advantages compared to other stem cells derived from dental tissue: they are easier to gain through noninvasive procedures and have a high proliferation rate [34,41,56,60,61]. SHEDs exhibit higher proliferation rates compared to dental pulp stem cells (DPSCs) and bone marrow-derived mesenchymal stem cells (BMMSCs) [41,45,58,62–64].

SHEDs possess higher potential in forming dentin-pulp complex cells, namely osteoblasts, chondroblasts, adipocytes, endothelial cells, nerve cells, and odontoblasts [57,58,65–67]. The ability of SHEDs to differentiate into odontoblasts is characterized by the expression of dentin matrix protein-1 (DMP-1) and dentin sialophosphoprotein (DSPP) [45,58]. DSPP induces stem cells to odontoblast differentiation through SMAD 1/5/8 phosphorylation and nuclear translocation via the P38 and ERK1/2 pathways. DMP-1 involves maintaining dentin mineralization [68,69].

As for the potential for neural regeneration, SHEDs show more intensive expression of neural differentiation markers than DPSCs, such as b-III-tubulin, and nestin, in neural induction cell culture [37]. SHEDs are also able to increase the angiogenesis process by forming vascular connective tissue structures and expressing and synthesizing VEGF [70].This ability is crucial to maintaining pulp viability as it can supply oxygen and nutrients needed for cell metabolism for tissue regeneration [71].

SHED also functioned as an immunomodulator by suppressing T helper 17 (Th17) cell function and upregulating CD206+ M2 macrophages [57,62]. SHEDs are able to induce the secretion of proinflammatory cytokines, such as interleukin 1b (IL-1b), interleukin 6 (IL-6), interleukin 10 (IL-10), and tumor necrosis factor- a. SHEDs are also capable of inhibiting lymphocyte CD178 expression, suppressing the proliferation of lymphocytes, and decreasing the secretion of IL-4 and IFN-g while sequentially increasing the number of T-reg cells [37,72,73].

5. Collagen Scaffold

Scaffolds are required for regeneration or tissue engineering to facilitate cell growth and functions in the transplanted area [74–76]. Interaction of the cell with the extracellular matrix influences many signalling pathways that change cell behaviours, i.e., adhesion, proliferation, and differentiation [76,77]. Scaffolds can be made of both natural and synthetic materials. Nanoscale proteins are the primary natural scaffolding materials. Nanoscale proteins include collagen, fibronectin, and vitronectin. Synthetic polymers are popular materials because they are biocompatible, biodegradable, mechanically stable, and can be designed in a variety of compositions and shapes [77,78]. These properties enable polymers to biologically affiliate and mimic the natural cell-extracellular matrix [76,79]. Natural scaffolds, such as collagen, have better biocompatibility, whereas synthetic polymers can be controlled for their physicochemical properties, such as their solubility, microstructure, and mechanical strength [76,79].

Nanofibrous scaffolds are more popular than microfiber scaffolds due to their high surface area, interconnected porosity, and positively stimulating extracellular cell-matrix interactions [76]. Nanofibrous scaffolds are made by three methods, namely electrospinning, self-assembly, and separation phase [77]. Electrospinning is the tissue engineering application method most frequently used to synthesize collagen or synthetic scaffolds and/or transport systems for drugs [76].

Collagen is a hydrogel material with high biocompatibility, viscoelasticy similar to soft connective tissue, the ability to transport nutrients and waste, uniform cell encapsulation, in situ gelation ability, and compatibility to be modified by biofunctional molecules or growth factors [80]. Collagen contains arginine-glycine-aspartic acid (RGD) adhesion ligands, which enable cell-biomaterial interactions, leading to cell adhesion [75]. Collagen matrices are compatible with dental pulp stem cell proliferation, adhesion, and differentiation, as shown by the formation of capillary-like microvessels [76,81,82]. Two commercial injectable scaffolds, self-assembling peptide hydrogel and rHCollagen type I, were evaluated. It was found that both of those scaffolds promote SHED cell survival, and when injected into the root canal, these materials promoted odontoblast putative marker expression [83].

Different collagen materials have been compared, such as collagen type I and III, alginate, and chitosan, generating a good result in the proliferative and mineralizing activity of type I collagen. After implanting these cells, the formation of vascularized pulp-like tissue, odontoblast-like cells, and new dentin is produced. SHEDs adhere to PLA cells in dentinal discs [80].

Collagen is a biocompatible material that can be degraded by enzymes; however, natural polymers are difficult to produce and may transmit pathogens from animals (as they are usually produced from animal products) or stimulate an immune response. No scaffold materials have ideal structures and properties that totally resemble natural extracellular matrix as natural ECM comprises complex architecture made up of structural proteins (collagen and elastin), specialized proteins, and glycosaminoglycans. This architecture provides not only structural support for tissue but also a selective dynamic environment that is remodeled via biochemical signals to direct cellular responses [84]. A scaffold should combine the best properties of biomaterials and be as close to the physiological environment of the ECM as possible [80].

6. Growth Factor as Regulator

Regulating molecules are required for SHED to generate endothelial cells, odontoblasts, and neurons that will form the dentin-pulp complex architecture [71,85,86]. They work in signal transduction pathways to regulate cell proliferation, migration, and differentiation into specific phenotypes. BMPs, PDGF, FGF, TGF, EGF, and IGFs are the most common WNT proteins [87–89].

VEGF stimulates SHEDs to undergo endothelial cell differentiation. In an experiment described by Annibali (2014), SHED was incubated in an endothelial cell growth medium (EGM-2MV). This medium contains ascorbic acid, hydrocortisone, rhEGF, FBS, R3-IGF-1, rhbFGF, rhVEGF, and VEGF [71,85]. MEK1/VEGF/ErK, Wnt/VEGF/-catenin, and Notch-EphrinB2/VEGF-DLL4 signaling pathway regulation in response to VEGF stimulation and the expression of VE-Cadherin (endothelial markers), VEGFR2, and CD31 increased dramatically [71,85]. Furthermore, the endothelial-like cells generated by SHEDs could anastomose with the host vascular network, which was demonstrated by an experiment using LacZ tags and galactosidase staining [85].

Odontoblast differentiation was observed after BMP-2 stimulation. This regulatory molecule involves the production of tubular dentin, odontogenesis and morphogenesis. Dentin sialophosphoprotein (DSPP) marker will be abundantly expressed for this distinction [85,90–92]. The production of DSPP is also influenced by two catalytic subunit signaling complexes that target rapamycin complexes 1 and 2 (TORC1 and TORC2). TORC1, which is also required for protein synthesis and translation, regulates and directs cell cycle, growth, and proliferation. Suppression of TORC1 prevented mineralized matrix deposition, which also severely limited the synthesis of DSPP. TORC2 influences both cell survival and cytoskeleton rearrangement. Inhibition of TORC2 promoted mineralization [85,93].

SHED culture in DMEM supplemented with vitamin D3, ascorbic 2-phosphate, dexamethasone, and glycerol phosphate resulted in the expression of odontoblast-specific genes, DMP1 and DSPP. Culture also showed mineralized matrix as visualized using Alizarin red [85,94].

Different techniques for isolating SHEDs revealed various traits for odontoblast differentiation. Despite having functioning odontoblast phenotypes, SHEDs isolated by direct outgrowth showed a decreased rate of mineralization and abnormal cell elongation and polarization due to the vertical orientation of the cell body alongside the dentin-like matrix. SHEDs isolated using enzymatic dissociation quickly formed mineralized tissue and kept their spindle-shaped morphology [85,90]

In immunocompromised mice, the ability of SHEDs to develop into odontoblasts was examined. The dorsum of subcutaneous tissue was implanted with ceramic tricalcium phosphate/hydroxyapatite (TCP/HA) powder and SHED combinations [85].

This resulted in the formation of dentin-like structures. However, the transplant could not form a complete dentin-pulp-like complex. Only 25% of the clones from one of the colony-derived SHED strains transplanted were found to produce ectopic dentin [85].

In another study, slices of extracted third molar teeth were used. To create a porous biodegradable scaffold, poly-L-lactic acid was used to fill the pulp chamber, which was in close contact with the predentin layer. After 1428 days, cells adjacent to the predentin exhibited an active dentin-secreting odontoblast. DSP was also expressed. The cell nuclear location is thought to be polarized eccentrically. The cells displayed cell-cell gap junctions, a well-developed rough endoplasmic reticulum, the Golgi complex, and a large number of vesicles [85].

SHEDs have also been confirmed to be able to develop into neurons. Several neuronal markers, including glutamic acid decarboxylase (GAD), III-tubulin, nestin, 2′,3′-cyclic nucleotide-3′phosphodiesterase (CNPase), tyrosine-hydroxylase (TH), polysialylated-neural cell adhesion molecule (PSA-NCAM), and glial fibrillary acidic protein (GFAP) were expressed by SHED-derived neurons.10–12 Several cytokines, including FGF8, SHH, bFGF, and GDNF, influence SHED neuronal regeneration [86,95,96].

FGF8 is responsible for the dorsalization of the anterior neural tube [96]. The notochord secretes SHH during development to induce a general ventral cell destiny in order to generate floor plate and motor neurons. bFGF acts as a proliferation and differentiation regulator. After five days of culture on poly-L-lysine coated dishes without serum, the cells rapidly lost their mesenchymal appearance and took on a more neuronal appearance, including neurite-like outgrowth. Continued injection of SHH/FGF8 generated neurons with developed and extended axon- or dendrite-like structures [85,96].

Upregulation of lncRNA C21orf121 and the downregulation of miR140-5p aid in the differentiation of SHEDs into neuronal cells. lncRNA C21orf121 prevents BMP2 from binding to miR140-5p, which subsequently increases BMP2 production and promotes SHED neurogenesis [86,97]. Table 1 shown several researches that have been conducted using tissue engineering technology in pulp regeneration.

Table 1. Stem cells for dental pulp regeneration [83,98–110].

Article (Author, Year)	Type of Stem Cell	Type of Scaffold	Types of Studies	Evaluation Technique	Outcome
Cordeiro, 2008 [98]	SHED	Poly-L-lactic acid (PLLA)	In-vivo (mice)	Transmission electron microscopy and immunohistochemistry	Odontoblast and endothelial-like cells can be differentiated from SHED
Demarco, 2010 [99]	DPSC	Poly-L-lactic acid (PLLA)	In-vivo (mice)	Immunohistochemistry	Differentiation was determined by evaluation of three putative odontoblastic markers (DSPP, DMP1, and MEPE)
Kodonas, 2012 [100]	DPSCs	- Type I atelocollagen honeycomb sponge (organic) - PLGA (synthetic)	In vivo (mini-pigs)	Histological and immunohistochemistry	The formation of new organic matrix deposits and odontoblast-like cell differentiation occurred.
Rosa, 2013 [83]	SHED	- Self-assembling peptide hydrogel - rhCollagen type I	In vivo (mice)	Histological and immunohistochemistry	Differentiation and proliferative activity to form microvessels and cellular density, expressed odontoblastic differentiation markers(DSPP, DMP-1, MEPE).
Wang Y, 2013 [101]	DPSC	Gelfoam	In vivo (dog)	Radiographic and histologic analyses	Generating pulp-like tissues containing dentin-like tissue and blood vessels.
Iohara K, 2014 [102]	DPSC	Atelocollagen	In vivo (dog)	Immunohistochemically evaluated	Regenerated pulp-like loose connective tissue with vasculature. Odontoblastlike cells attached to the dentinal wall, angiogenesis and re-innervation

Table 1. *Cont.*

Article (Author, Year)	Type of Stem Cell	Type of Scaffold	Types of Studies	Evaluation Technique	Outcome
Qu, 2014 [103]	DPSC	- NF-gelatin/MgP - NF-gelatin	In vitro In vivo (mice)	Immunohistochemical X-ray SEM ALP activity	NF-gelatin/MgP act better as scaffold than Nf-gelatin
Murakami, 2015 [104]	DPSCs/BMMSCs/ ADSCs	Atelocollagen	In-vivo (dog)	Immunohistochemistry	Neovascularization occurs, and nerve fibers form in the regenerated pulp tissue. The MDPSC transplantation showed a higher area of vascularization and innervation compared to the MBMSC and MADSC.
Y. S. Kwon, 2015 [105]	DPSC	Collagen hydrogel scaffold cross-linked with cinnamaldehyde (CA)	In vitro	Real-time polymerase chain reaction (PCR) gene expression analysis	Cross-linking of collagen scaffolds with CA is a new strategy for regenerative endodontic therapy regarding hDPC attachment, proliferation and differentiation.
Piva, 2017 [106]	DPSC	Medical-grade poly(L-lactide) (PLLA)	In vivo (mice)	Histology and Immunohistochemistry	Capable of differentiating into endothelial cells,
Widbiller, 2018 [107]	Extraction of dentin matrix protein (eDMP)	- Custom-made fibrin from fibrinogen and thrombin - Fibrin sealant - Self-assembling peptide (SAP) - Plasma rich in growth factor (PRGF)	In vivo (mice)	Histological and immunohistochemistry	eDMP + fibrin and fibrin sealant increased tissue formation than PRGF and SAP
Chang, 2020 [108]	DPSC	Autoclaved treated dentin matrix (a-TDM)	In vivo (mice and goats)	ALP activity spectrophotometer immunohistochemistry	a-TDM + DPSC effective in proliferating and differentiate
Chen H, 2020 [109]	DSC	Matrigel	In vivo (mice)	H&E staining	Microvessel formation, which resembled the natural pulp tissue.
Jang JH, 2020 [110]	DPSC	- Gelatin (GM)- based hemostatic hydrogels (GM) - Fibrin-based hemostatic hydrogels (FM)	In vivo (mini- pig)	Radiographic and histologic	- GM: absence of periapical inflammation and newly formed tertiary dentin with apex maturation - FM: exhibited higher incidences of inflammatory changes (periapical radiolucency and internal root resorption). - Showed microvasculature and odontoblastic layers

7. Dentin Pulp Regeneration

Dentin pulp regeneration aims to revitalize necrotic, infected, or lost pulp teeth by restoring the morphology and function of the pulp. Ideal pulp regeneration should possess natural structures such as nerve fibers and blood vessels, allowing nutritional, defense, sensation, and immunological functions to be restored [10,111]. Growth factors, scaffolds, plasma, or other associated cells such as dentin/odontoblasts, fibroblasts, or endothelial cells may provide regenerative signals in this regeneration process, resulting in cell migration, proliferation, differentiation, angiogenesis and extracellular matrix deposition [28,112].

Endothelial cells differentiate into mesodermal precursor cells (angioblasts) during vasculogenesis, whereas new blood vessels are formed from previously existing blood vessels during angiogenesis. VEGF is the main regulator of angiogenesis and can also increase vascular permeability [28,113]. FGF, another growth factor with an angiogenic role, can attract DPSCs to migrate and proliferate [28]. PDGF can significantly boost cell proliferation, angiogenesis, and odontoblast differentiation [114,115]. BMP7 promotes the formation of dentin (dentinogenesis) [116].

Nerve growth factor (NGF) plays an important role in the nervous system's growth, differentiation, and defense mechanisms by preventing apoptosis and reducing neuronal degradation. NGF expression is typically increased in damaged and developing teeth; this growth factor promotes the proliferation of sensory and sympathetic nerve cells [28]. NGF is also involved in the processes of angiogenesis by inducing VEGF upregulation. NGF binds to tyrosine kinase receptor (TrkA) on the cell surface, resulting in TrkA phosphorylation and activation of multiple signaling pathways, including PI3K/Akt, Ras/Raf/MEK/ERK

1/2, and PLC/PKC. Activation of each of these pathways results in a variety of biological functions, including the prevention of apoptosis [117–119].

In this review, we focus on regenerative endodontic treatment using SHED, collagen scaffold, and growth factors to regenerate dental pulp tissue through tissue engineering technology. The concept of tissue engineering is expected to answer the challenges in dentistry in maintaining the vitality of the dental pulp. Various studies and research are being continuously carried out in order to obtain the best strategy in tissue engineering and regenerative endodontics. This is achieved by understanding the behavior of cells, the suitability of the material with the scaffolds, as well as the growth supporting factors for each specific tissue or organ to be created; these factors are the keys to the success of tissue engineering.

8. Conclusions

In responding to the challenges in dentistry to maintain pulp tissue and prevent tooth loss with irreversible or necrotic pulpitis, regenerative endodontics utilizing tissue engineering technology can be developed. In this technology, the utilization of SHEDs, which have excellent potential with high proliferation speed and ability to differentiate into various cell-forming dental pulp cells, collagen scaffolds as a medium for cell growth and function, and growth factor as a regulator can be utilized to repair and regenerate pulp tissue by regenerating pulp tissue naturally to be fully functional again.

Author Contributions: Conceptualization, V.K.S. and J.; methodology, S.N.; software, R.D.; validation, V.K.S., J. and W.L.D.; formal analysis, N.P.; investigation, V.K.S. and W.L.D.; resources, N.P.; data curation, S.N.; writing—original draft preparation, V.K.S., R.D., N.P., S.N., W.L.D. and J.; writing—review and editing, J. and W.L.D.; visualization, R.D.; supervision, V.K.S.; project administration, J. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Acknowledgments: The authors would like to thank the Faculty of Dentistry, Maranatha Christian University and Faculty of Dentistry, JenderalAchmadYani University.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Lu, Y.; Liu, Z.; Huang, J.; Liu, C. Therapeutic effect of one-time root canal treatment for irreversible pulpitis. *J. Int. Med. Res.* **2019**, *48*, 0300060519879287. [CrossRef]
2. Guan, X.; Zhou, Y.; Yang, Q.; Zhu, T.; Chen, X.; Deng, S.; Zhang, D. Vital pulp therapy in permanent teeth with irreversible pulpitis caused by caries: A prospective cohort study. *J. Pers. Med.* **2021**, *11*, 1125. [CrossRef] [PubMed]
3. Rechenberg, D.K.; Galicia, J.C.; Peters, O.A. Biological markers for pulpal inflammation: A systematic review. *PLoS ONE* **2016**, *11*, e0167289. [CrossRef] [PubMed]
4. Andreasen, F.M.; Kahler, B. Pulpal response after acute dental injury in the permanent dentition: Clinical implications—A review. *J. Endod.* **2015**, *41*, 299–308. [CrossRef]
5. Goldberg, M. Root Canal Treatment (RCT): From Traditional Endodontic Therapies to Innovating Pulp Regeneration. *J. Dent. Oral Disord. Ther.* **2016**, *4*, 1–6. [CrossRef]
6. Eliyas, S.; Jalili, J.; Martin, N. Restoration of the root canal treated tooth. *Br. Dent. J.* **2015**, *218*, 53–62. [CrossRef] [PubMed]
7. Mazumdar, P.; Choudhury, S.R. Moisture Analysis of Endodontically Treated and Sound Teeth Using Moisture Analyser and Indirect Gravimetric Analysis. *J. Evol. Med. Dent. Sci.* **2020**, *9*, 3721–3725. [CrossRef]
8. Ahmed, G.M.; Abouauf, E.A.; Abubakr, N.; Dörfer, C.E.; El-Sayed, K.F. Tissue Engineering Approaches for Enamel, Dentin, and Pulp Regeneration: An Update. *Stem Cells Int.* **2020**, *2020*, 5734539. [CrossRef] [PubMed]
9. Gong, T.; Heng, B.C.; Lo, E.C.M.; Zhang, C. Current Advance and Future Prospects of Tissue Engineering Approach to Dentin/Pulp Regenerative Therapy. *Stem Cells Int.* **2016**, *2016*, 9204574. [CrossRef] [PubMed]
10. Xie, Z.; Shen, Z.; Zhan, P.; Yang, J.; Huang, Q.; Huang, S.; Chen, L.; Lin, Z. Functional dental pulp regeneration: Basic research and clinical translation. *Int. J. Mol. Sci.* **2021**, *22*, 8991. [CrossRef]

11. Huang, G.T.J.; Liu, J.; Zhu, X.; Yu, Z.; Li, D.; Chen, C.; Azim, A.A. Pulp/Dentin Regeneration: It Should Be Complicated. *J. Endod.* **2020**, *46*, S128–S134. [CrossRef] [PubMed]
12. Bakhtiar, H.; Mazidi, S.A.; Mohammadi Asl, S.; Ellini, M.R.; Moshiri, A.; Nekoofar, M.H.; Dummer, P.M.H. The role of stem cell therapy in regeneration of dentine-pulp complex: A systematic review. *Prog. Biomater.* **2018**, *7*, 249–268. [CrossRef] [PubMed]
13. Shah, R.; Hiremutt, D.; Jajoo, S.; Kamble, A. Dental tissue engineering: Future of regenerative dentistry. *J. Dent. Res. Sci. Dev.* **2016**, *3*, 31. [CrossRef]
14. Kwack, K.H.; Lee, H.W. Clinical Potential of Dental Pulp Stem Cells in Pulp Regeneration: Current Endodontic Progress and Future Perspectives. *Front. Cell Dev. Biol.* **2022**, *10*, 734. [CrossRef] [PubMed]
15. Mitsiadis, T.A.; Orsini, G. Stem Cell-Based Approaches in Dentistry. *Eur. Cells Mater.* **2015**, *30*, 248–257. [CrossRef]
16. Narang, S.; Sehgal, N. Stem cells: A potential regenerative future in dentistry. *Indian J. Hum. Genet.* **2012**, *18*, 150–154. [CrossRef]
17. Nakajima, K.; Kunimatsu, R.; Ando, K.; Hiraki, T.; Rikitake, K.; Tsuka, Y.; Abe, T.; Tanimoto, K. Success rates in isolating mesenchymal stem cells from permanent and deciduous teeth. *Sci. Rep.* **2019**, *9*, 16764. [CrossRef]
18. Shetty, R.M.; Prasad, P.; Shetty, S.; Patil, V.; Ramprasad, V.; Deoghare, A.; Boddun, M. SHED (Stem Cells from Human Exfoliated Deciduous teeth)—A new source of stem cells in dentistry. *Chhattisgarh J. Helath Sci.* **2013**, *1*, 66–68.
19. Rosa, V.; Dubey, N.; Islam, I.; Min, K.S.; Nör, J.E. Pluripotency of Stem Cells from Human Exfoliated Deciduous Teeth for Tissue Engineering. *Stem Cells Int.* **2016**, *2016*, 5957806. [CrossRef] [PubMed]
20. Taguchi, T.; Yanagi, Y.; Yoshimaru, K.; Zhang, X.Y.; Matsuura, T.; Nakayama, K.; Kobayashi, E.; Yamaza, H.; Nonaka, K.; Ohga, S.; et al. Regenerative medicine using stem cells from human exfoliated deciduous teeth (SHED): A promising new treatment in pediatric surgery. *Surg. Today* **2019**, *49*, 316–322. [CrossRef]
21. Jindal, L.; Bhat, N.; Vyas, D.; Thakur, K.; Mehta, S. Stem Cells from Human Exfoliated Deciduous Teeth (SHED)—Turning Useless into Miracle: A Review Article. *Acta Sci. Dent.Sci.* **2019**, *3*, 49–54. [CrossRef]
22. Wang, H.; Zhong, Q.; Yang, T.; Qi, Y.; Fu, M.; Yang, X.; Xiao, L.; Ling, Q.; Liu, S.; Zhao, Y. Comparative characterization of SHED and DPSCs during extended cultivation in vitro. *Mol. Med. Rep.* **2018**, *17*, 6551–6559. [CrossRef]
23. Dong, C.; Lv, Y. Application of collagen scaffold in tissue engineering: Recent advances and new perspectives. *Polymers* **2016**, *8*, 42. [CrossRef] [PubMed]
24. Joseph, N.V. Mesenchymal Stem Cells Seeded Decellularized Tendon Scaffold for Tissue Engineering. *Curr. Stem Cell Res. Ther.* **2021**, *16*, 155–164.
25. Fiorillo, L.; Cervino, G.; Galindo-Moreno, P.; Herford, A.S.; Spagnuolo, G.; Cicciù, M. Growth Factors in Oral Tissue Engineering: New Perspectives and Current Therapeutic Options. *Biomed. Res. Int.* **2021**, *2021*, 8840598. [CrossRef] [PubMed]
26. Duncan, H.F.; Kobayashi, Y.; Shimizu, E. Growth Factors and Cell Homing in Dental Tissue Regeneration. *Curr. Oral Health Rep.* **2018**, *5*, 276–285. [CrossRef]
27. Nosrat, A.; Kim, J.R.; Verma, P.; Chand, P.S. Tissue engineering considerations in dental pulp regeneration. *Iran Endod. J.* **2013**, *9*, 30–39. [PubMed]
28. Siddiqui, Z.; Acevedo-Jake, A.M.; Griffith, A.; Kadincesme, N.; Dabek, K.; Hindi, D.; Kim, K.K.; Kobayashi, Y.; Shimizu, E.; Kumar, V. Cells and material-based strategies for regenerative endodontics. *Bioact. Mater.* **2022**, *14*, 234–249. [CrossRef] [PubMed]
29. Retana-Lobo, C. Dental Pulp Regeneration: Insights from Biological Processes. *Odovtos Int. J. Dent. Sci.* **2017**, *20*, 10–16. [CrossRef]
30. Machla, F.; Angelopoulos, I.; Epple, M.; Chatzinikolaidou, M.; Bakopoulou, A. Biomolecule-Mediated Therapeutics of the Dentin–Pulp Complex: A Systematic Review. *Biomolecules* **2022**, *12*, 285. [CrossRef]
31. Nakashima, M.; Iohara, K.; Murakami, M.; Nakamura, H.; Sato, Y.; Ariji, Y.; Matsushita, K. Pulp regeneration by transplantation of dental pulp stem cells in pulpitis: A pilot clinical study. *Stem Cell Res. Ther.* **2017**, *8*, 1–13. [CrossRef] [PubMed]
32. Chandra Mouli, P.E.; Manoj Kumar, S.; Senthil, B.; Parthiban, S.; Priya, R.; Subha, R. Stem cells in dentistry—A review. *J. Pharm. Sci. Res.* **2012**, *4*, 1872–1876. [CrossRef]
33. Schmalz, G.; Smith, A.J. Pulp development, repair, and regeneration: Challenges of the transition from traditional dentistry to biologically based therapies. *J. Endod.* **2014**, *40* (Suppl. S4), S2–S5. [CrossRef] [PubMed]
34. Saskianti, T.; Ramadhani, R.; Budipramana, E.S.; Pradopo, S.; Suardita, K. Potential Proliferation of Stem Cell from Human Exfoliated Deciduous Teeth (SHED) in Carbonate Apatite and Hydroxyapatite Scaffold. *J. Int. Dent. Med. Res.* **2017**, *10*, 350–353.
35. Kumar, K.P.; Manjunath, S. Regenerative Endodontics: An Update. *J. Int. Acad. Res. Multidiscip.* **2014**, *2*, 139–147.
36. Farzin, A.; Bahrami, N.; Mohamadnia, A.; Mousavi, S.; Gholami, M.; Ai, J.; Moayeri, R.S. Scaffolds in Dental Tissue Engineering: A Review. *Arch. Neurosci.* **2019**, *7*, 1–5. [CrossRef]
37. Cui, D.; Yu, S.; Zhou, X.; Liu, Y.; Gan, L.; Pan, Y.; Zheng, L.; Wan, M. Roles of Dental Mesenchymal Stem Cells in the Management of Immature Necrotic Permanent Teeth. *Front. Cell Dev. Biol.* **2021**, 1030. [CrossRef]
38. Bjørge, I.M.; Kim, S.Y.; Mano, J.F.; Kalionis, B.; Chrzanowski, W. Extracellular vesicles, Exosomes and Shedding Vesicles in Regenerative Medicine—A new paradigm for tissue repair. *Biomater. Sci.* **2017**, *6*, 60–78. [CrossRef]
39. Sreelatha, A.; Nair, U.; Thavarajah, R.; Ranganathan, K. Saliva and dental practice. *J. Dr. NTR Univ. Health Sci.* **2012**, *1*, 72–76. [CrossRef]
40. Wang, S.; Qu, X.; Zhao, R.C. Clinical applications of mesenchymal stem cells. *J. Hematol. Oncol.* **2012**, *5*, 19. [CrossRef]
41. Abdullah, M.F. DPSCs and SHED in Tissue Engineering and Regenerative Medicine. *Open Stem Cell J.* **2013**, *4*, 1–6. [CrossRef]
42. Aljamie, M.; Alessa, L.; Noah, R.; Elsayed, L. Dental Pulp Stem Cells, a New Era in Regenerative Medicine: A Literature Review. *Open J. Stomatol.* **2016**, *6*, 155–163. [CrossRef]

43. Olaru, M.; Sachelarie, L.; Calin, G. Hard dental tissues regeneration—Approaches and challenges. *Materials* **2021**, *14*, 2558. [CrossRef]
44. Romito, A.; Cobellis, G. Pluripotent stem cells: Current understanding and future directions. *Stem Cells Int.* **2016**, *2016*, 9451492. [CrossRef]
45. Obuli Ganesh Kishore, S.; Don, K.R.; Jothi Priya, A. Therapeutic potential of stem cells from human exfoliated deciduous teeth(Shed)—A review. *Indian J. Forensic Med. Toxicol.* **2020**, *14*, 4624–4629. [CrossRef]
46. Mirzaei, H.; Sahebkar, A.; Shiri, L.; Moridikia, A.; Nazari, S.; Nahand, J.S.; Salehi, H.; Stenvang, J.; Masoudifar, A.; Mirzaei, H.R.; et al. Therapeutic application of multipotent stem cells. *J. Cell Physiol.* **2018**, *233*, 2815–2823. [CrossRef] [PubMed]
47. Horst, O.V.; Chavez, M.G.; Jheon, A.H.; Desai, T.; Klein, O.D. Stem Cell and Biomaterials Research in Dental Tissue Engineering and Regeneration. *Dent. Clin. N. Am.* **2012**, *56*, 495–520. [CrossRef] [PubMed]
48. Sohni, A.; Verfaillie, C.M. Mesenchymal stem cells migration homing and tracking. *Stem Cells Int.* **2013**, *2013*, 14–16. [CrossRef]
49. Ma, S.; Xie, N.; Li, W.; Yuan, B.; Shi, Y.; Wang, Y. Immunobiology of mesenchymal stem cells. *Cell Death Differ.* **2014**, *21*, 216–225. [CrossRef]
50. Gao, F.; Chiu, S.M.; Motan, D.A.L.; Zhang, Z.; Chen, L.; Ji, H.L.; Tse, H.F.; Fu, Q.L.; Lian, Q. Mesenchymal stem cells and immunomodulation: Current status and future prospects. *Cell Death Dis.* **2016**, *7*, e2062. [CrossRef]
51. Jacobs, S.A.; Roobrouck, V.D.; Verfaillie, C.M.; Van Gool, S.W. Immunological characteristics of human mesenchymal stem cells and multipotent adult progenitor cells. *Immunol. Cell Biol.* **2013**, *91*, 32–39. [CrossRef] [PubMed]
52. Zhao, Q.; Ren, H.; Han, Z. Mesenchymal stem cells: Immunomodulatory capability and clinical potential in immune diseases. *J. Cell Immunother.* **2016**, *2*, 3–20. [CrossRef]
53. Kim, J.Y.; Kim, M.R.; Kim, S.J. Modulation of osteoblastic/odontoblastic differentiation of adult mesenchymal stem cells through gene introduction: A brief review. *J. Korean Assoc. Oral Maxillofac. Surg.* **2013**, *39*, 55. [CrossRef] [PubMed]
54. Osman, Z.F.; Ahmad, A.; Noordin, K.B.A.A. Naturally derived scaffolds for dental pulp regeneration: A review. *Gulhane Med. J.* **2019**, *61*, 81–88. [CrossRef]
55. Botelho, J.; Cavacas, M.A.; Machado, V.; Mendes, J.J.; Cavacas, M.A.; Machado, V. Dental stem cells: Recent progresses in tissue engineering and regenerative medicine medicine. *Ann. Med.* **2017**, *49*, 644–651. [CrossRef]
56. Feter, Y.; Afiana, N.S.; Chandra, J.N.; Abdullah, K.; Shafira, J.; Sandra, F. Dental Mesenchymal Stem Cell: Its role in tooth development, types, surface antigens and differentiation potential. *Mol. Cell Biomed. Sci.* **2017**, *1*, 50. [CrossRef]
57. Smojver, I.; Katalinić, I.; Bjelica, R.; Gabric, D.; Matisic, V.; Molnar, V.; Primorac, D. Mesenchymal Stem Cells Based Treatment in Dental Medicine: A Narrative Review. *Int. J. Mol. Sci.* **2022**, *23*, 1662. [CrossRef]
58. Anggrarista, K.N.; Cecilia, P.H.N.A.; Saskianti, T.S.M. SHED, PRF, and Chitosan as Three-Dimensional of Tissue Engineering for Dental Pulp Regeneration. *Dent.Hypotheses* **2021**, *12*, 43–46.
59. Mori, G.; Brunetti, G.; Ballini, A.; Benedetto, A.D.; Tarantino, U.; Colucci, S.; Grano, M. Biological characteristics of dental stem cells for tissue engineering. *Key Eng. Mater.* **2013**, *541*, 51–59. [CrossRef]
60. Miura, M.; Gronthos, S.; Zhao, M.; Lu, B.; Fisher, L.W.; Robey, P.G.; Shi, S. SHED: Stem cells from human exfoliated deciduous teeth. *Proc. Natl. Acad. Sci. USA* **2003**, *100*, 5807–5812. [CrossRef] [PubMed]
61. Leyendecker, A., Jr.; Gomes Pinheiro, C.C.; Lazzaretti Fernandes, T.; Franco Bueno, D. The use of human dental pulp stem cells for in vivo bone tissue engineering: A systematic review. *J. Tissue Eng.* **2018**, *9*, 2041731417752766. [CrossRef] [PubMed]
62. Cao, L.; Su, H.; Si, M.; Xu, J.; Chang, X.; Jiajia, L.; Zhai, Y. Tissue Engineering in Stomatology: A Review of Potential Approaches for Oral Disease Treatments. *Front. Bioeng. Biotechnol.* **2021**, *9*, 662418. [CrossRef]
63. Karim, E.; Analysis, F.T.A.C.; Potential, O. A Comparative Analysis of the Osteogenic Potential of Dental Mesenchymal Stem Cells. *Stem Cells Dev.* **2019**, *28*, 1050–1058.
64. Prahasanti, C.; Ulfah, N.; Kusuma, I.I.; Hayati, N. Transforming Growth Factor-β 1 and Runt-related Transcription Factor 2 as Markers of Osteogenesis in Stem Cells from Human Exfoliated Deciduous Teeth Enriched Bone Grafting. *Contemp. Clin. Dent.* **2019**, *9*, 574–576. [CrossRef] [PubMed]
65. Elsayed, I.S.M. Mitigation of the urban heat island of the city of Kuala Lumpur, Malaysia. *Middle East J. Sci. Res.* **2012**, *11*, 1602–1613. [CrossRef]
66. Han, Y.; Zang, L.; Zhang, C.; Dissanayaka, W.L. Guiding Lineage Specific Differention of SHED for Target Tissue/Organ Regeneration. *Curr. Stem Cell Res. Ther.* **2021**, *16*, 518–584. [CrossRef] [PubMed]
67. Esrefoglu, M. Exfoliated Deciduous Teeth Pulp Stem Cells: Data on Experimental and Clinical Potential. *J. Gastroenterol. Hepatol. Res.* **2021**, *10*, 3548–3553. Available online: http://www.ghmet.org/index.php/joghr/article/view/3194 (accessed on 6 August 2022).
68. Khazaei, S.; Khademi, A.; Torabinejad, M.; Nasr Esfahani, M.H.; Khazaei, M.; Razavi, S.M. Improving pulp revascularization outcomes with buccal fat autotransplantation. *J. Tissue Eng. Regen. Med.* **2020**, *14*, 1227–1235. [CrossRef]
69. Vu, H.T.; Han, M.; Lee, J.; Kim, J.S.; Shin, J.S.; Yoon, J.Y.; Park, J.H.; Dashnyam, K.; Knowles, J.C.; Lee, H.H.; et al. Investigating the Effects of Conditioned Media from Stem Cells of Human Exfoliated Deciduous Teeth on Dental Pulp Stem Cells. *Biomedicines.* **2022**, *10*, 906. [CrossRef] [PubMed]
70. de Cara, S.P.H.M.; Origassa, C.S.T.; de Sá Silva, F.; Moreira, M.S.N.A.; de Almeida, D.C.; Pedroni, A.C.F.; Carvalho, G.L.; Cury, D.P.; Camara, N.O.S.; Marques, M.M. Angiogenic properties of dental pulp stem cells conditioned medium on endothelial cells in vitro and in rodent orthotopic dental pulp regeneration. *Heliyon.* **2019**, *5*, e01560. [CrossRef] [PubMed]

71. Bento, L.W.; Zhang, Z.; Imai, A.; Nor, F.; Dong, Z.; Shi, S.; Araujo, F.B.; Nor, J.E. Endothelial differentiation of SHED requires MEK1/ERK signaling. *J. Dent. Res.* **2013**, *92*, 51–57. [CrossRef] [PubMed]
72. Yildirim, S.; Zibandeh, N.; Genc, D.; Ozcan, E.M.; Goker, K.; Akkoc, T. The comparison of the immunologic properties of stem cells isolated from human exfoliated deciduous teeth, dental pulp, and dental follicles. *Stem Cells Int.* **2016**, *2016*, 11–13. [CrossRef]
73. Bhandi, S.; Khatani, A.A.; Sumayli, H.A.; Sabyei, M.Y.; Zailai, A.M.A.; Sumaili, M.A.; Hakami, H.I.; Jafer, M.A.; Vyas, N.; Baeshen, H.A.; et al. Comparative analysis of cytokines and growth factors in the conditioned media of stem cells from the pulp of deciduous, young, and old permanent tooth. *Saudi J. Biol. Sci.* **2021**, *28*, 3559–3565. [CrossRef] [PubMed]
74. Diogenes, A.; Henry, M.A.; Teixeira, F.B.; Hargreaves, K.M. An update on clinical regenerative endodontics. *Br. Dent. J.* **2013**, *215*, 289. [CrossRef]
75. Wu, D.T.; Munguia-Lopez, J.G.; Cho, Y.W.; Ma, X.; Song, V.; Zhu, Z.; Tran, S.D. Polymeric scaffolds for dental, oral, and craniofacial regenerative medicine. *Molecules.* **2021**, *26*, 7043. [CrossRef] [PubMed]
76. Albuquerque, M.T.P.; Valera, M.C.; Nakashima, M.; Nör, J.E.; Bottino, M.C. Tissue-engineering-based strategies for regenerative endodontics. *J. Dent. Res.* **2014**, *93*, 1222–1231. [CrossRef] [PubMed]
77. Gupte, M.J.; Ma, P.X. Nanofibrous scaffolds for dental and craniofacial applications. *J. Dent. Res.* **2012**, *91*, 227–234. [CrossRef] [PubMed]
78. Hagar, M.N.; Yazid, F.; Luchman, N.A.; Hisham, S.; Ariffin, Z. Comparative evaluation of osteogenic differentiation potential of stem cells derived from dental pulp and exfoliated deciduous teeth cultured over granular hydroxyapatite based scaffold. *BMC Oral Health.* **2021**, *21*, 1–13. [CrossRef] [PubMed]
79. Dayı, B.; Sezlev Bilecen, D.; Eröksüz, H.; Yalçın, M.; Hasırcı, V. Evaluation of a collagen-bioaggregate composite scaffold in the repair of sheep pulp tissue. *Eur. Oral Res.* **2021**, *55*, 152–161. [CrossRef] [PubMed]
80. Galler, K.M.; D'Souza, R.N.; Hartgerink, J.D.; Schmalz, G. Scaffolds for dental pulp tissue engineering. *Adv. Dent. Res.* **2011**, *23*, 333–339. [CrossRef] [PubMed]
81. Rosa, V. What and where are the stem cells for Dentistry? *Singap. Dent. J.* **2013**, *34*, 13–18. [CrossRef]
82. Bottino, M.C.; Pankajakshan, D.; Nör, J.E. Advanced Scaffolds for Dental Pulp and Periodontal Regeneration. *Dent. Clin. N. Am.* **2017**, *61*, 689–711. [CrossRef]
83. Rosa, V.; Zhang, Z.; Grande, R.H.M.; Nör, J.E. Dental pulp tissue engineering in full-length human root canals. *J. Dent. Res.* **2013**, *92*, 970–975. [CrossRef] [PubMed]
84. Moussa, D.G.; Aparicio, C. Present and future of tissue engineering scaffolds for dentin-pulp complex regeneration. *J. Tissue Eng. Regen. Med.* **2019**, *13*, 58–75. [CrossRef] [PubMed]
85. Annibali, S.; Cristalli, M.P.; Tonoli, F.; Polimeni, A. Stem cells derived from human exfoliated deciduous teeth: A narrative synthesis of literature. *Eur. Rev. Med. Pharmacol. Sci.* **2014**, *18*, 2863–2881. [PubMed]
86. Xie, F.; He, J.; Chen, Y.; Hu, Z.; Qin, M.; Hui, T. Multi-lineage differentiation and clinical application of stem cells from exfoliated deciduous teeth. *Hum. Cell.* **2020**, *33*, 295–302. [CrossRef] [PubMed]
87. Arany, P.R.; Huang, G.X.; Gadish, O.; Feliz, J.; Weaver, J.C.; Kim, J.; Yuen, W.W.; Mooney, D.J. Multi-lineage MSC differentiation via engineered morphogen fields. *J. Dent. Res.* **2014**, *93*, 1250–1257. [CrossRef] [PubMed]
88. Gupta, S.; Sharma, C.; Dinda, A.K.; Ray, A.K.; Mishra, N.C. Tooth tissue engineering: Potential and piffalls. *J. Biomim. Biomater. Tissue Eng.* **2012**, *12*, 59–81. [CrossRef]
89. y Baena, A.R.; Casasco, A.; Monti, M. Hypes and Hopes of Stem Cell Therapies in Dentistry: A Review. *Stem Cell Rev.Rep.* **2022**, *18*, 1294–1308. [CrossRef] [PubMed]
90. Kerkis, I.; Caplan, A.I. Stem cells in dental pulp of deciduous teeth. *Tissue Eng. Part B Rev.* **2012**, *18*, 129–138. [CrossRef] [PubMed]
91. Hara, K.; Yamada, Y.; Nakamura, S.; Umemura, E.; Ito, K.; Ueda, M. Potential characteristics of stem cells from human exfoliated deciduous teeth compared with bone marrow-derived mesenchymal stem cells for mineralized tissue-forming cell biology. *J. Endod.* **2011**, *37*, 1647–1652. [CrossRef] [PubMed]
92. Koh, B.; Sulaiman, N.; Nursyazwani, S.; Ramli, R.; Yunus, S.S.; Idrus, R.; Arifin, S.H.Z.; Wahab, R.M.A.; Yasid, M.D. Mesenchymal stem cells: A comprehensive methods for odontoblastic induction. *Biol. Proc.Online* **2021**, *23*, 18. [CrossRef] [PubMed]
93. Kim, J.K.; Baker, J.; Nor, J.E.; Hill, E.E. MTor plays an important role in odontoblast differentiation. *J. Endod.* **2011**, *37*, 1081–1085. [CrossRef] [PubMed]
94. Dahake, P.T.; Panpaliya, N.P.; Kale, Y.J.; Dadpe, M.V.; Kendre, S.B.; Bogar, C. Response of stem cells from human exfoliated deciduous teeth (SHED) to three bioinductive materials—An in vitro experimental study. *Saudi Dent. J.* **2020**, *32*, 43–51. [CrossRef] [PubMed]
95. Fujii, H.; Matsubara, K.; Sakai, K.; Ito, M.; Ohno, K.; Ueda, M.; Yamamoto, A. Dopaminergic differentiation of stem cells from human deciduous teeth and their therapeutic benefits for Parkinsonian rats. *Brain Res.* **2015**, *1613*, 59–72. [CrossRef]
96. Nourbakhsh, N.; Soleimani, M.; Taghipour, Z.; Karbalaie, K.; Mousavi, S.B.; Talebi, A.; Nadali, F.; Tanhaei, S.; Kiyani, G.A.; Nematollahi, M.; et al. Induced in vitro differentiation of neural-like cells from human exfoliated deciduous teeth-derived stem cells. *Int. J. Dev. Biol.* **2011**, *55*, 189–195. [CrossRef]
97. Liu, J.; Zhang, Z.Y.; Yu, H.; Yang, A.P.; Hu, P.F.; Liu, Z.; Wang, M. Long noncoding RNA C21orf121/bone morphogenetic protein 2/microRNA-140-5p gene network promotes directed differentiation of stem cells from human exfoliated deciduous teeth to neuronal cells. *J. Cell Biochem.* **2019**, *120*, 1464–1476. [CrossRef]

98. Cordeiro, M.M.; Dong, Z.; Kaneko, T.; Zhang, Z.; Miyazawa, M.; Shi, S.; Smith, A.J.; Nor, J.E. Dental Pulp Tissue Engineering with Stem Cells from Exfoliated Deciduous Teeth. *J. Endod.* **2008**, *34*, 962–969. [CrossRef]
99. Demarco, F.F.; Casagrande, L.; Zhang, Z.; Dong, Z.; Tarquinio, S.B.; Zeitlin, B.D.; Shi, S.; Smith, A.J.; Nor, J.E. Effects of morphogen and scaffold porogen on the differentiation of dental pulp stem cells. *J. Endod.* **2010**, *36*, 1805–1811. [CrossRef]
100. Kodonas, K.; Gogos, C.; Papadimitriou, S.; Kouzi-Koliakou, K.; Tziafas, D. Experimental formation of dentin-like structure in the root canal implant model using cryopreserved swine dental pulp progenitor cells. *J. Endod.* **2012**, *38*, 913–919. [CrossRef]
101. Wang, Y.; Zhao, Y.; Jia, W.; Yang, J.; Ge, L. Preliminary study on dental pulp stem cell-mediated pulp regeneration in canine immature permanent teeth. *J. Endod.* **2013**, *39*, 195–201. [CrossRef] [PubMed]
102. Iohara, K.; Murakami, M.; Nakata, K.; Nakashima, M. Age-dependent decline in dental pulp regeneration after pulpectomy in dogs. *Exp. Gerontol.* **2014**, *52*, 39–45. [CrossRef]
103. Qu, T.; Jing, J.; Jiang, Y.; Tailor, R.J.; Feng, J.Q.; Geiger, B.; Liu, X. Magnesium-containing nanostructured hybrid scaffolds for enhanced dentin regeneration. *Tissue Eng. Part A.* **2014**, *20*, 2422–2433. [CrossRef] [PubMed]
104. Murakami, M.; Hayashi, Y.; Iohara, K.; Osako, Y.; Hirose, Y.; Nakashima, M. Trophic effects and regenerative potential of mobilized mesenchymal stem cells from bone marrow and adipose tissue as alternative cell sources for pulp/dentin regeneration. *Cell Transplant.* **2015**, *24*, 1753–1765. [CrossRef]
105. Kwon, Y.S.; Lee, S.H.; Hwang, Y.C.; Rosa, V.; Lee, K.W.; Min, K.S. Behaviour of human dental pulp cells cultured in a collagen hydrogel scaffold cross-linked with cinnamaldehyde. *Int. Endod. J.* **2017**, *50*, 58–66. [CrossRef]
106. Piva, E.; Tarlé, S.A.; Nör, J.E.; Zou, D.; Hatfield, E.; Guinn, T.; Eubanks, E.J.; Kaigler, D. Dental Pulp Tissue Regeneration Using Dental Pulp Stem Cells Isolated and Expanded in Human Serum. *J. Endod.* **2017**, *43*, 568–574. [CrossRef]
107. Widbiller, M.; Driesen, R.B.; Eidt, A.; Lambrichts, I.; Hiller, K.; Buchalla, W.; Schmalz, G.; Galle, K. Cell Homing for Pulp Tissue Engineering with Endogenous Dentin Matrix Proteins. *J. Endod.* **2018**, *44*, 956–962.e2. [CrossRef] [PubMed]
108. Chang, C.C.; Lin, T.A.; Wu, S.Y.; Lin, C.P.; Chang, H.H. Regeneration of Tooth with Allogenous, Autoclaved Treated Dentin Matrix with Dental Pulpal Stem Cells: An In Vivo Study. *J. Endod.* **2020**, *46*, 1256–1264. [CrossRef]
109. Chen, H.; Fu, H.; Wu, X.; Duan, Y.; Zhang, S.; Hu, H.; Liao, Y.; Wang, T.; Yang, Y.; Chen, G.; et al. Regeneration of pulpo-dentinal-like complex by a group of unique multipotent CD24a+ stem cells. *Sci. Adv.* **2020**, *6*, 1–15. [CrossRef]
110. Jang, J.H.; Moon, J.H.; Kim, S.G.; Kim, S.Y. Pulp regeneration with hemostatic matrices as a scaffold in an immature tooth minipig model. *Sci. Rep.* **2020**, *10*, 12536. [CrossRef]
111. Gl, S.P.; Ramalingam, S.; Udhayakumar, Y. Human dental pulp stem cells and its applications in regenerative medicine—A literature review. *J.Glob. Oral Health* **2019**, *1*, 59–67. [CrossRef]
112. Cooper, P.R.; Holder, M.J.; Smith, A.J. Inflammation and regeneration in the dentin-pulp complex: A double-edged sword. *J. Endod.* **2014**, *40* (Suppl. S4), S46–S51. [CrossRef] [PubMed]
113. Janebodin, K.; Chavanachat, R.; Hays, A. Silencing VEGFR-2 Hampers Odontoblastic Differentiation of Dental Pulp Stem Cells. *Front. Cell Dev. Biol.* **2021**, *9*, 1–14. [CrossRef]
114. Hu, L.; Liu, Y.; Wang, S. Stem cell based tooth and periodontal regeneration. *Oral Dis.* **2018**, *24*, 696–705. [CrossRef]
115. Morotomi, T.; Washio, A.; Kitamura, C. Current and future options for dental pulp therapy. *Jpn. Dent. Sci. Rev.* **2019**, *55*, 5–11. [CrossRef] [PubMed]
116. Malik, Z.; Roth, D.M.; Eaton, F.; Theodor, J.M.; Graf, D. Mesenchymal Bmp7 Controls Onset of Tooth Mineralization: A Novel Way to Regulate Molar Cusp Shape. *Front. Physiol.* **2020**, *11*, 1–13. [CrossRef]
117. Vera, C.; Tapia, V.; Vega, M.; Romero, C. Role of nerve growth factor and its TRKA receptor in normal ovarian and epithelial ovarian cancer angiogenesis. *J.Ovarian Res.* **2014**, *7*, 1–8. [CrossRef]
118. Wang, H.; Wang, R.; Thrimawithana, T.; Little, P.J.; Xu, J.; Feng, Z.; Zheng, W. The Nerve Growth Factor Signaling and Its Potential as Therapeutic Target for Glaucoma. *Biomed. Res. Int.* **2014**, *2014*, 759473. [CrossRef] [PubMed]
119. Zha, K.; Yang, Y.; Tian, G.; Sun, Z.; Yang, Z.; Li, X.; Sui, X.; Liu, S.; Zhao, J.; Guo, Q. Nerve growth factor (NGF) and NGF receptors in mesenchymal stem/stromal cells: Impact on potential therapies. *Stem Cells Transl. Med.* **2021**, *10*, 1008–1020. [CrossRef]