JiÅÃ- MichÃ¡lek

List of Publications by Year
in descending order

73 papers	1,836 citations	293460 24 h-index	312153 41 g-index
75 all docs	75 docs citations	75 times ranked	3132 citing authors

#	Article	IF	Citations
1	Communicating macropores in PHEMA-based hydrogels for cell seeding: Probabilistic open pore simulation and direct micro-CT proof. Materials and Design, 2021, 198, 109312.	3.3	7
2	Hydrogel Tissue Expanders for Stomatology. Part II. Poly(styrene-maleic anhydride) Hydrogels. Polymers, 2019, 11, 1087.	2.0	4
3	Biomimetic modification of dual porosity poly(2-hydroxyethyl methacrylate) hydrogel scaffoldsâ€"porosity and stem cell growth evaluation. Biomedical Materials (Bristol), 2019, 14, 055004.	1.7	10
4	Poly(d,l-lactide)/polyethylene glycol micro/nanofiber mats as paclitaxel-eluting carriers: preparation and characterization of fibers, in vitro drug release, antiangiogenic activity and tumor recurrence prevention. Materials Science and Engineering C, 2019, 98, 982-993.	3.8	23
5	Zwitterionic Functionalizable Scaffolds with Gyroid Pore Architecture for Tissue Engineering. Macromolecular Bioscience, 2019, 19, e1800403.	2.1	5
6	Nanodrugs used in cancer therapy. Biomedical Papers of the Medical Faculty of the University Palacký, Olomouc, Czechoslovakia, 2019, 163, 122-131.	0.2	31
7	Embedding of Bacterial Cellulose Nanofibers within PHEMA Hydrogel Matrices: Tunable Stiffness Composites with Potential for Biomedical Applications. Journal of Nanomaterials, 2018, 2018, 1-11.	1.5	40
8	Hydrogel tissue expanders for stomatology. Part I. Methacrylate-based polymers. Journal of Materials Science: Materials in Medicine, 2017, 28, 12.	1.7	6
9	New type of gel polymer electrolytes based on selected methacrylates and their characteristics. Part II. Fluorinated Co-polymers. Electrochimica Acta, 2016, 208, 211-224.	2.6	3
10	The Synthesis and Characterization of the Poly[<i>N</i>â€vinylpyrrolidoneâ€<i>co</i>â€ethylideneâ€bisâ€3â€(<i>N</i>â€vinylâ€2â€pyrrolidone)] Hydrogel Matrix for Drug Delivery to the Gastrointestinal Tract. Macromolecular Symposia, 2016, 366, 14-22.	0.4	1
11	Nonâ€Fouling Biodegradable Poly(Ïµâ€caprolactone) Nanofibers for Tissue Engineering. Macromolecular Bioscience, 2016, 16, 83-94.	2.1	21
12	Non-Fouling Biodegradable Poly(Ïµ-caprolactone) Nanofi bers for Tissue Engineering. Macromolecular Bioscience, 2016, 16, 82-82.	2.1	0
13	Nanofibers for drug delivery â€“ incorporation and release of model molecules, influence of molecular weight and polymer structure. Beilstein Journal of Nanotechnology, 2015, 6, 1939-1945.	1.5	66
14	New type of gel polyelectrolytes based on selected methacrylates and their characteristics. Part I. Copolymers with (3-(trimethoxysilyl)propyl methacrylate). Electrochimica Acta, 2015, 155, 183-195.	2.6	4
15	Macroporous 2-hydroxyethyl methacrylate hydrogels of dual porosity for cell cultivation: morphology, swelling, permeability, and mechanical behavior. Journal of Polymer Research, 2014, 21, 1.	1.2	24
16	Adjusting the Chemical and Physical Properties of Hydrogels Leads to Improved Stem Cell Survival and Tissue Ingrowth in Spinal Cord Injury Reconstruction: A Comparative Study of Four Methacrylate Hydrogels. Stem Cells and Development, 2013, 22, 2794-2805.	1.1	27
17	Novel antifouling self-healing poly(carboxybetaine methacrylamide-co-HEMA) nanocomposite hydrogels with superior mechanical properties. Journal of Materials Chemistry B, 2013, 1, 5644.	2.9	69
18	Morphogical and swelling properties of porous hydrogels based on poly(hydroxyethyl methacrylate) and chitosan modulated by ice-templating process and porogen leaching. Journal of Polymer Research, 2013, 20, 1.	1.2	26

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19	The Reversibility of <scp>UV</scp>â€B Induced Alterations in Optical Properties of the Rabbit Cornea Depends on Dose of <scp>UV</scp> Irradiation. Photochemistry and Photobiology, 2013, 89, 474-482.	1.3	8
20	Ice-templated hydrogels based on chitosan with tailored porous morphology. Carbohydrate Polymers, 2013, 94, 170-178.	5.1	77
21	Biphasic Equilibrium Dialysis of Poly(N-Isopropyl Acrylamide) Nanogels Synthesized at Decreased Temperatures for Targeted Delivery of Thermosensitive Bioactives. International Journal of Polymer Science, 2013, 2013, 1-9.	1.2	1
22	Hepatocyte growth on polycapronolactone and 2-hydroxyethylmethacrylate nanofiber sheets enhanced by bone marrow-derived mesenchymal stromal cells. Hepato-Gastroenterology, 2013, 60, 1156-63.	0.5	3
23	Controlled gentamicin release from multi-layered electrospun nanofibrous structures of various thicknesses. International Journal of Nanomedicine, 2012, 7, 5315.	3.3	51
24	Morphological Characterization of Nanofibers: Methods and Application in Practice. Journal of Nanomaterials, 2012, 2012, 1-14.	1.5	84
25	Non-fouling Hydrogels of 2-Hydroxyethyl Methacrylate and Zwitterionic Carboxybetaine (Meth)acrylamides. Biomacromolecules, 2012, 13, 4164-4170.	2.6	63
26	Methacrylate hydrogels reinforced with bacterial cellulose. Polymer International, 2012, 61, 1193-1201.	1.6	32
27	Nanofibers prepared by needleless electrospinning technology as scaffolds for wound healing. Journal of Materials Science: Materials in Medicine, 2012, 23, 931-941.	1.7	96
28	A simple drug anchoring microfiber scaffold for chondrocyte seeding and proliferation. Journal of Materials Science: Materials in Medicine, 2012, 23, 555-563.	1.7	27
29	NMR Investigation of Li+ Ion Interactions in Some Precursors of the Lithium Polymer Battery System. ECS Transactions, 2012, 40, 45-52.	0.3	1
30	Hydration and Transparency of the Rabbit Cornea Irradiated with UVB-Doses of 0.25 J/cm²and 0.5 J/cm²Compared with Equivalent UVB Radiation Exposure Reaching the Human Cornea from Sunlight. Current Eye Research, 2011, 36, 607-613.	0.7	14
31	Bioactive support for cell cultivation and potential grafting. Part 1: Surface modification of 2-hydroxyethyl methacrylate hydrogels for avidin immobilization. E-Polymers, 2011, 11, .	1.3	2
32	Cyclosporine A-loaded and stem cell-seeded electrospun nanofibers for cell-based therapy and local immunosuppression. Journal of Controlled Release, 2011, 156, 406-412.	4.8	44
33	Hydrazone-based hydrogel hydrolytically degradable in acidic environment. Polymer Degradation and Stability, 2011, 96, 756-759.	2.7	15
34	A new type of irreversibly reductively biodegradable hydrogel. Polymer Degradation and Stability, 2011, 96, 892-897.	2.7	7
35	Recent Developments in the Research of Gel Polymer Electrolytes. ECS Transactions, 2011, 32, 155-159.	0.3	0
36	Treatment of Ocular Surface Injuries by Limbal and Mesenchymal Stem Cells Growing on Nanofiber Scaffolds. Cell Transplantation, 2010, 19, 1281-1290.	1.2	79

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37	The influence of various toxic effects on the cornea and changes in corneal light transmission. Graefe's Archive for Clinical and Experimental Ophthalmology, 2010, 248, 1749-1756.	1.0	7
38	The Effect of Actinoquinol with Hyaluronic Acid in Eye Drops on the Optical Properties and Oxidative Damage of the Rabbit Cornea Irradiated with UVB Rays. Photochemistry and Photobiology, 2010, 86, 1294-1306.	1.3	11
39	macroporous hydrogels based on 2-hydroxyethyl methacrylate. Part 7: Methods of preparation and comparison of resulting physical properties. E-Polymers, 2010, 10, .	1.3	4
40	HPMA-RGD Hydrogels Seeded with Mesenchymal Stem Cells Improve Functional Outcome in Chronic Spinal Cord Injury. Stem Cells and Development, 2010, 19, 1535-1546.	1.1	124
41	Hydrogels Contact Lenses. , 2010, , 303-315.		7
42	Reduced UVB-induced corneal damage caused by reactive oxygen and nitrogen species and decreased changes in corneal optics after trehalose treatment. Histology and Histopathology, 2010, 25, 1403-16.	0.5	24
43	Surface modification of hydrogels based on poly(2-hydroxyethyl methacrylate) with extracellular matrix proteins. Journal of Materials Science: Materials in Medicine, 2009, 20, 909-915.	1.7	22
44	Macroporous hydrogels based on 2-hydroxyethyl methacrylate. Part 6: 3D hydrogels with positive and negative surface charges and polyelectrolyte complexes in spinal cord injury repair. Journal of Materials Science: Materials in Medicine, 2009, 20, 1571-1577.	1.7	53
45	Effect of Two Different UVA Doses on the Rabbit Cornea and Lens. Photochemistry and Photobiology, 2009, 85, 794-800.	1.3	9
46	Surface Modification of Hydrogels and Cell Adhesion. Materials Science Forum, 2008, 567-568, 265-268.	0.3	2
47	Cultivation of human keratinocytes without feeder cells on polymer carriers containing ethoxyethyl methacrylate: inÂvitro study. Journal of Materials Science: Materials in Medicine, 2008, 19, 883-888.	1.7	11
48	Investigation of Chromatographic Behavior and Porous Properties of Butyl Methacrylate Monolithic Columns. Materials and Manufacturing Processes, 2008, 23, 591-596.	2.7	1
49	Acute and delayed implantation of positively charged 2-hydroxyethyl methacrylate scaffolds in spinal cord injury in the rat. Journal of Neurosurgery: Spine, 2008, 8, 67-73.	0.9	62
50	Morphological and chromatographic characterization of molecularly imprinted monolithic columns.. E-Polymers, 2007, 7, .	1.3	1
51	Amphiphilic conetworks. III. Poly(2,3â€dihydroxypropyl methacrylate)â€“polyisobutylene and poly(ethylene) Tj ETQq1 1 0.784314 rgBT Journal of Polymer Science Part A, 2007, 45, 4074-4081.	2.5	4
52	Light Absorption Properties of the Rabbit Cornea Repeatedly Irradiated with UVB Rays. Photochemistry and Photobiology, 2007, 83, 652-657.	1.3	22
53	Porous polyacrylamide monoliths in hydrophilic interaction capillary electrochromatography of oligosaccharides. Journal of Proteomics, 2007, 70, 3-13.	2.4	24
54	Electrospinning of the hydrophilic poly (2-hydroxyethyl methacrylate) and its copolymers with 2-ethoxyethyl methacrylate. Open Chemistry, 2007, 5, 779-792.	1.0	8

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55	One-pot synthesis of isocyanate and methacrylate multifunctionalized polyisobutylene and polyisobutylene-based amphiphilic networks. Journal of Polymer Science Part A, 2006, 44, 2891-2900.	2.5	10
56	New perfluoroalkylated amphiphilic methacrylates bearing sulfinyl group asÂmonomers forÂbiomedical applications: water content andÂoxygen permeability ofÂtheirÂcopolymers with DEGMA. European Journal of Medicinal Chemistry, 2006, 41, 1320-1326.	2.6	3
57	Ternary polymer electrolytes with 1-methylimidazole based ionic liquids and aprotic solvents. Electrochimica Acta, 2006, 52, 1398-1408.	2.6	71
58	Poly(ethyl methacrylate) and poly(2-ethoxyethyl methacrylate) based polymer gel electrolytes. Journal of Power Sources, 2006, 158, 509-517.	4.0	15
59	Macroporous hydrogels based on 2-hydroxyethyl methacrylate. Part 5: Hydrolytically degradable materials. Journal of Materials Science: Materials in Medicine, 2006, 17, 1357-1364.	1.7	26
60	Macroporous hydrogels based on 2-hydroxyethyl methacrylate. Part 4: Growth of rat bone marrow stromal cells in three-dimensional hydrogels with positive and negative surface charges and in polyelectrolyte complexes. Journal of Materials Science: Materials in Medicine, 2006, 17, 829-833.	1.7	51
61	Plasma modification of HEMA and EOEMA surface properties. Radiation Effects and Defects in Solids, 2006, 161, 15-19.	0.4	2
62	Determination of permeability and diffusivity of oxygen in polymers by polarographic method with inert gas. Polymer, 2005, 46, 9974-9986.	1.8	19
63	Perfluoroalkylated diblock-alkyl methacrylate monomers for biomedical applications. Journal of Fluorine Chemistry, 2005, 126, 593-598.	0.9	20
64	Macroporous hydrogels based on 2-hydroxyethyl methacrylate. Journal of Materials Science: Materials in Medicine, 2005, 16, 767-773.	1.7	30
65	Macroporous hydrogels based on 2-hydroxyethyl methacrylate. Journal of Materials Science: Materials in Medicine, 2005, 16, 783-786.	1.7	14
66	Topographical properties of polymer films deposited in capillaries for electrophoretic separations of large organic molecules. Journal of Separation Science, 2004, 27, 1121-1129.	1.3	8
67	Reconstruction of epidermis by grafting of keratinocytes cultured on polymer support - clinical study. International Journal of Dermatology, 2003, 42, 219-223.	0.5	22
68	Macroporous Hydrogels Based on 2-Hydroxyethyl Methacrylate. Part 1. Copolymers of 2-Hydroxyethyl Methacrylate with Methacrylic Acid. Collection of Czechoslovak Chemical Communications, 2003, 68, 812-822.	1.0	40
69	Polymer hydrogels usable for nervous tissue repair. Journal of Chemical Neuroanatomy, 2002, 23, 243-247.	1.0	84
70	2,4,4,5,7,7,8,8,9,9,9-Undecafluoro-2,5-bis(trifluoromethyl)-3,6-dioxanonyl methacrylate. Journal of Fluorine Chemistry, 2002, 114, 51-53.	0.9	10
71	Development of hydrogel implants for urinary incontinence treatment. Biomaterials, 2002, 23, 3711-3715.	5.7	10
72	Control of cellulose-supported hydrogel microstructures by three-dimensional graft polymerization of glycol methacrylates. Polymer, 2000, 41, 1551-1559.	1.8	24

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73	Hydrogels for biomedical use based on 1-vinyl-2-pyrrolidone crosslinked with macromonomers. Angewandte Makromolekulare Chemie, 1996, 239, 151-160.	0.3	4