Mohammad Mahdi Hasani-Sadrabadi

List of Publications by Year
in descending order

84 papers	3,791 citations	81900 39 h-index	133252 59 g-index
89 all docs	89 docs citations	89 times ranked	4692 citing authors

#	Article	IF	Citations
1	Revisiting structure-property relationship of pH-responsive polymers for drug delivery applications. Journal of Controlled Release, 2017, 253, 46-63.	9.9	231
2	An engineered cell-laden adhesive hydrogel promotes craniofacial bone tissue regeneration in rats. Science Translational Medicine, 2020, 12, .	12.4	199
3	Engineered Hydrogels in Cancer Therapy and Diagnosis. Trends in Biotechnology, 2017, 35, 1074-1087.	9.3	136
4	Nanofiber-based polyelectrolytes as novel membranes for fuel cell applications. Journal of Membrane Science, 2011, 368, 233-240.	8.2	128
5	Microfluidic assisted self-assembly of chitosan based nanoparticles as drug delivery agents. Lab on A Chip, 2013, 13, 204-207.	6.0	121
6	Hierarchically Patterned Polydopamine-Containing Membranes for Periodontal Tissue Engineering. ACS Nano, 2019, 13, 3830-3838.	14.6	105
7	Onâ€Chip Fabrication of Paclitaxelâ€Loaded Chitosan Nanoparticles for Cancer Therapeutics. Advanced Functional Materials, 2014, 24, 432-441.	14.9	103
8	Microfluidic Directed Synthesis of Alginate Nanogels with Tunable Pore Size for Efficient Protein Delivery. Langmuir, 2016, 32, 4996-5003.	3.5	97
9	Electrochemical investigation of sulfonated poly(ether ether ketone)/clay nanocomposite membranes for moderate temperature fuel cell applications. Journal of Power Sources, 2010, 195, 2450-2456.	7.8	86
10	Nanocomposite Membranes Made from Sulfonated Poly(ether ether ketone) and Montmorillonite Clay for Fuel Cell Applications. Energy & Fuels, 2008, 22, 2539-2542.	5.1	82
11	Microfluidic Manipulation of Core/Shell Nanoparticles for Oral Delivery of Chemotherapeutics: A New Treatment Approach for Colorectal Cancer. Advanced Materials, 2016, 28, 4134-4141.	21.0	74
12	Microfluidic synthesis of chitosan-based nanoparticles for fuel cell applications. Chemical Communications, 2012, 48, 7744.	4.1	71
13	Novel nanocomposite proton exchange membranes based on NafionÂ® and AMPS-modified montmorillonite for fuel cell applications. Journal of Membrane Science, 2010, 365, 286-293.	8.2	70
14	NafionÂ®/bio-functionalized montmorillonite nanohybrids as novel polyelectrolyte membranes for direct methanol fuel cells. Journal of Power Sources, 2009, 190, 318-321.	7.8	67
15	Novel high-performance nanohybrid polyelectrolyte membranes based on bio-functionalized montmorillonite for fuel cell applications. Chemical Communications, 2010, 46, 6500.	4.1	65
16	Molecular dynamics simulation study of proton diffusion in polymer electrolyte membranes based on sulfonated poly (ether ether ketone). International Journal of Hydrogen Energy, 2012, 37, 10256-10264.	7.1	65
17	NafionÂ®/histidine functionalized carbon nanotube: High-performance fuel cell membranes. International Journal of Hydrogen Energy, 2013, 38, 5894-5902.	7.1	64
18	Novel high-performance nanocomposite proton exchange membranes based on poly (ether sulfone). Renewable Energy, 2010, 35, 226-231.	8.9	63

#	Article	IF	Citations
19	Structural modification of chitosan biopolymer as a novel polyelectrolyte membrane for green power generation. Polymers for Advanced Technologies, 2010, 21, 726-734.	3.2	63
20	Novel nanofiber-based triple-layer proton exchange membranes for fuel cell applications. Journal of Power Sources, 2011, 196, 4599-4603.	7.8	62
21	Magnetic field aligned nanocomposite proton exchange membranes based on sulfonated poly (ether) Tj ETQq1 1 0.784314 rgBT /Ove Hydrogen Energy, 2011, 36, 15323-15332.	7.1	61
22	T-cell activation is modulated by the 3D mechanical microenvironment. Biomaterials, 2020, 252, 120058.	11.4	60
23	Polyserotonin Nanoparticles as Multifunctional Materials for Biomedical Applications. ACS Nano, 2018, 12, 4761-4774.	14.6	57
24	Injectable Drugâ€Releasing Microporous Annealed Particle Scaffolds for Treating Myocardial Infarction. Advanced Functional Materials, 2020, 30, 2004307.	14.9	57
25	Novel chitosan-based nanobiohybrid membranes for wound dressing applications. RSC Advances, 2016, 6, 7701-7711.	3.6	56
26	Preparation and characterization of nanocomposite membranes made of poly(2,6-dimethyl-1,4-phenylene oxide) and montmorillonite for direct methanol fuel cells. Journal of Power Sources, 2008, 183, 551-556.	7.8	55
27	Morphological Tuning of Polymeric Nanoparticles via Microfluidic Platform for Fuel Cell Applications. Journal of the American Chemical Society, 2012, 134, 18904-18907.	13.7	55
28	Triple-layer proton exchange membranes based on chitosan biopolymer with reduced methanol crossover for high-performance direct methanol fuel cells application. Polymer, 2012, 53, 2643-2651.	3.8	54
29	Nafion/chitosan-wrapped CNT nanocomposite membrane for high-performance direct methanol fuel cells. RSC Advances, 2013, 3, 7337.	3.6	52
30	Microfluidicâ€Assisted Selfâ€Assembly of Complex Dendritic Polyethylene Drug Delivery Nanocapsules. Advanced Materials, 2014, 26, 3118-3123.	21.0	49
31	Enhanced osteogenic differentiation of stem cells via microfluidics synthesized nanoparticles. Nanomedicine: Nanotechnology, Biology, and Medicine, 2015, 11, 1809-1819.	3.3	49
32	Hydrogel elasticity and microarchitecture regulate dental-derived mesenchymal stem cell-host immune system cross-talk. Acta Biomaterialia, 2017, 60, 181-189.	8.3	49
33	Immunomodulatory microneedle patch for periodontal tissue regeneration. Matter, 2022, 5, 666-682.	10.0	49
34	Superacid-doped polybenzimidazole-decorated carbon nanotubes: a novel high-performance proton exchange nanocomposite membrane. Nanoscale, 2013, 5, 11710.	5.6	48
35	Enhancing cell seeding and osteogenesis of MSCs on 3D printed scaffolds through injectable BMP2 immobilized ECM-Mimetic gel. Dental Materials, 2019, 35, 990-1006.	3.5	48
36	Regulation of the fate of dentalâ€derived mesenchymal stem cells using engineered alginateâ€GelMA hydrogels. Journal of Biomedical Materials Research - Part A, 2017, 105, 2957-2967.	4.0	47

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37	Cellulose nanowhiskers to regulate the microstructure of perfluorosulfonate ionomers for high-performance fuel cells. Journal of Materials Chemistry A, 2014, 2, 11334.	10.3	45
38	On-chip synthesis of fine-tuned bone-seeking hybrid nanoparticles. Nanomedicine, 2015, 10, 3431-3449.	3.3	43
39	In situ bone tissue engineering using gene delivery nanocomplexes. Acta Biomaterialia, 2020, 108, 326-336.	8.3	41
40	Direct methanol fuel cell performance of sulfonated poly (2,6-dimethyl-1,4-phenylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Td (oxi Energy, 2011, 36, 3688-3696.	7.1	39
41	Preparation and characterization of nanocomposite polyelectrolyte membranes based on NafionÂ® ionomer and nanocrystalline hydroxyapatite. Polymer, 2011, 52, 1286-1296.	3.8	37
42	Understanding structure and transport characteristics in hydrated sulfonated poly(ether ether) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 54 Journal of Membrane Science, 2013, 429, 384-395.	8.2	37
43	Characterization of nanohybrid membranes for direct methanol fuel cell applications. Solid State Ionics, 2009, 180, 1497-1504.	2.7	35
44	A high-performance chitosan-based double layer proton exchange membrane with reduced methanol crossover. International Journal of Hydrogen Energy, 2011, 36, 6105-6111.	7.1	35
45	Magnetic responsive of paclitaxel delivery system based on SPION and palmitoyl chitosan. Journal of Magnetism and Magnetic Materials, 2017, 421, 316-325.	2.3	35
46	Nafion-based magnetically aligned nanocomposite proton exchange membranes for direct methanol fuel cells. Solid State Ionics, 2013, 232, 58-67.	2.7	33
47	High aspect ratio phospho-calcified rock candy-like cellulose nanowhiskers of wastepaper applicable in osteogenic differentiation of hMSCs. Carbohydrate Polymers, 2017, 175, 293-302.	10.2	33
48	Ionic nanopeapods: Next-generation proton conducting membranes based on phosphotungstic acid filled carbon nanotube. Nano Energy, 2016, 23, 114-121.	16.0	32
49	Augmentation of T-Cell Activation by Oscillatory Forces and Engineered Antigen-Presenting Cells. Nano Letters, 2019, 19, 6945-6954.	9.1	32
50	Magnetically Aligned Nanodomains: Application in High-Performance Ion Conductive Membranes. ACS Applied Materials & Interfaces, 2014, 6, 7099-7107.	8.0	30
51	Organically modified montmorillonite and chitosanâ€“phosphotungstic acid complex nanocomposites as high performance membranes for fuel cell applications. Journal of Solid State Electrochemistry, 2013, 17, 2123-2137.	2.5	27
52	Cytokine Secreting Microparticles Engineer the Fate and the Effector Functions of Tâ€Cells. Advanced Materials, 2018, 30, 1703178.	21.0	25
53	Investigation of the effects of AMPS-modified nanoclay on fuel cell performance of sulfonated aromatic proton exchange membranes. International Journal of Hydrogen Energy, 2013, 38, 14076-14084.	7.1	24
54	Exploring the hydrated microstructure and molecular mobility in blend polyelectrolyte membranes by quantum mechanics and molecular dynamics simulations. RSC Advances, 2016, 6, 35517-35526.	3.6	24

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55	Engineered hydrogels for brain tumor culture and therapy. Bio-Design and Manufacturing, 2020, 3, 203-226.	7.7	24
56	Investigation of the effects of methanol presence on characteristics of sulfonated aromatic electrolyte membranes: Molecular dynamics simulations. Journal of Power Sources, 2013, 243, 935-945.	7.8	22
57	Mechanobiological Mimicry of Helper T Lymphocytes to Evaluate Cellâ€“Biomaterials Crosstalk. Advanced Materials, 2018, 30, e1706780.	21.0	22
58	Understanding biophysical behaviours of microfluidic-synthesized nanoparticles at nano-biointerface. Colloids and Surfaces B: Biointerfaces, 2016, 145, 802-811.	5.0	21
59	Biomaterial-based immunoengineering to fight COVID-19 and infectious diseases. Matter, 2021, 4, 1528-1554.	10.0	21
60	Effects of organically modified nanoclay on the transport properties and electrochemical performance of acidâ€doped polybenzimidazole membranes. Journal of Applied Polymer Science, 2010, 117, 1227-1233.	2.6	20
61	Engineering natural heart valves: possibilities and challenges. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 1675-1683.	2.7	20
62	Experimental investigation and molecular dynamics simulation of acid-doped polybenzimidazole as a new membrane for air-breathing microbial fuel cells. Journal of Membrane Science, 2017, 535, 221-229.	8.2	19
63	Nafion/benzotriazole functionalized montmorillonite nanocomposites: novel high-performance proton exchange membranes. RSC Advances, 2013, 3, 19357.	3.6	18
64	Air-breathing microbial fuel cell with enhanced performance using nanocomposite proton exchange membranes. Polymer, 2014, 55, 6102-6109.	3.8	18
65	Rheological Study and Molecular Dynamics Simulation of Biopolymer Blend Thermogels of Tunable Strength. Biomacromolecules, 2016, 17, 3474-3484.	5.4	18
66	A microfluidic approach to synthesizing high-performance microfibers with tunable anhydrous proton conductivity. Lab on A Chip, 2013, 13, 4549.	6.0	17
67	Electromagnetic Fields and Stem Cell Fate: When Physics Meets Biology. Reviews of Physiology, Biochemistry and Pharmacology, 2016, 171, 63-97.	1.6	17
68	Polybenzimidazoleâ€decorated carbon nanotube: A highâ€performance proton conductor. Physica Status Solidi - Rapid Research Letters, 2012, 6, 318-320.	2.4	16
69	Photopolymerization of a dental nanocomposite as restorative material using the argon laser. Lasers in Medical Science, 2011, 26, 553-561.	2.1	15
70	Engineered Delivery of Dental Stemâ€Cellâ€Derived Extracellular Vesicles for Periodontal Tissue Regeneration. Advanced Healthcare Materials, 2022, 11, e2102593.	7.6	15
71	The effect of isopropanol addition on enhancement of transdermal controlled release of ibuprofen from ethylene vinyl acetate copolymer membranes. Journal of Applied Polymer Science, 2011, 122, 3048-3054.	2.6	14
72	Nanoscale Optoregulation of Neural Stem Cell Differentiation by Intracellular Alteration of Redox Balance. Advanced Functional Materials, 2017, 27, 1701420.	14.9	14

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73	Evaluation of Fuel Cell Performance of Nafion / Molecular Sieves Nanocomposite Membranes. ECS Transactions, 2009, 17, 269-276.	0.5	13
74	Nano-in-Micro Dual Delivery Platform for Chronic Wound Healing Applications. Micromachines, 2020, 11, 158.	2.9	10
75	Synthesis and temperature-induced self-assembly of a positively charged symmetrical pentablock terpolymer in aqueous solutions. European Polymer Journal, 2017, 97, 158-168.	5.4	9
76	Nanocomposite Proton Exchange Membranes Based on Sulfonated Poly (2,6-Dimethyl-1,4-Phenylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf Physics, 2011, 50, 1108-1120.	1.0	6
77	<scp>M</scp>orphological and transport characteristics of swollen chitosanâ€based proton exchange membranes studied by molecular modeling. Biopolymers, 2017, 107, 5-19.	2.4	6
78	Augmenting T-cell responses to tumors by in situ nanomanufacturing. Materials Horizons, 2020, 7, 3028-3033.	12.2	3
79	Drug Delivery: Onâ€Chip Fabrication of Paclitaxelâ€Loaded Chitosan Nanoparticles for Cancer Therapeutics (Adv. Funct. Mater. 4/2014). Advanced Functional Materials, 2014, 24, 418-418.	14.9	2
80	Drug Delivery: Injectable Drugâ€Releasing Microporous Annealed Particle Scaffolds for Treating Myocardial Infarction (Adv. Funct. Mater. 43/2020). Advanced Functional Materials, 2020, 30, 2070289.	14.9	2
81	Nafion/SAS-Modified Clay as a Novel Proton Exchange Nanocomposite Membranes for DMFC Applications. ECS Meeting Abstracts, 2010, , .	0.0	0
82	Investigation the Effect of Chitosan-Modified Montmorillonite Presence on Fuel Cell Performance of Partially Sulfonated Poly(2,6-dimethyl-1,4-Phenylene Oxide) at Elevated Temperatures. ECS Meeting Abstracts, 2010, , .	0.0	0
83	The 2015 Joseph W. Richards Summer Research Fellowship -- Summary Report: Tuning the Electrochemical Performance of Direct Methanol Fuel Cells (DMFCs) Using Aligned 1D Bionanomaterials. Electrochemical Society Interface, 2015, 24, 72-73.	0.4	0
84	Tumor-derived exosomes-based cancer early detection: a molecular dynamics simulation. , 2015, , .		0