

# Erfan Dashtimoghadam

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/290719/publications.pdf>

Version: 2024-02-01

68  
papers

2,599  
citations

109321

35  
h-index

197818

49  
g-index

69  
all docs

69  
docs citations

69  
times ranked

3237  
citing authors

#	ARTICLE	IF	CITATIONS
1	Microfluidic assisted self-assembly of chitosan based nanoparticles as drug delivery agents. Lab on A Chip, 2013, 13, 204-207.	6.0	121
2	On-Chip Fabrication of Paclitaxel-Loaded Chitosan Nanoparticles for Cancer Therapeutics. Advanced Functional Materials, 2014, 24, 432-441.	14.9	103
3	Microfluidic Directed Synthesis of Alginate Nanogels with Tunable Pore Size for Efficient Protein Delivery. Langmuir, 2016, 32, 4996-5003.	3.5	97
4	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
5	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
6	A current overview of materials and strategies for potential use in maxillofacial tissue regeneration. Materials Science and Engineering C, 2017, 70, 913-929.	7.3	71
7	Dextran hydrogels incorporated with bioactive glass-ceramic: Nanocomposite scaffolds for bone tissue engineering. Carbohydrate Polymers, 2018, 190, 281-294.	10.2	71
8	Novel nanocomposite proton exchange membranes based on Nafion® and AMPS-modified montmorillonite for fuel cell applications. Journal of Membrane Science, 2010, 365, 286-293.	8.2	70
9	Investigation of gelation mechanism of an injectable hydrogel based on chitosan by rheological measurements for a drug delivery application. Soft Matter, 2012, 8, 7128.	2.7	70
10	Microfluidic self-assembly of polymeric nanoparticles with tunable compactness for controlled drug delivery. Polymer, 2013, 54, 4972-4979.	3.8	70
11	Nafion®/bio-functionalized montmorillonite nanohybrids as novel polyelectrolyte membranes for direct methanol fuel cells. Journal of Power Sources, 2009, 190, 318-321.	7.8	67
12	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
13	Novel high-performance nanocomposite proton exchange membranes based on poly (ether sulfone). Renewable Energy, 2010, 35, 226-231.	8.9	63
14	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
15	Novel chitosan-based nanobiohybrid membranes for wound dressing applications. RSC Advances, 2016, 6, 7701-7711.	3.6	56
16	Bottlebrush Bridge between Soft Gels and Firm Tissues. ACS Central Science, 2020, 6, 413-419.	11.3	56
17	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
18	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

#	ARTICLE	IF	CITATIONS
19	Injectable bottlebrush hydrogels with tissue-mimetic mechanical properties. <i>Science Advances</i> , 2022, 8, eabm2469.	10.3	53
20	Nafion/chitosan-wrapped CNT nanocomposite membrane for high-performance direct methanol fuel cells. <i>RSC Advances</i> , 2013, 3, 7337.	3.6	52
21	Microfluidic-Assisted Self-Assembly of Complex Dendritic Polyethylene Drug Delivery Nanocapsules. <i>Advanced Materials</i> , 2014, 26, 3118-3123.	21.0	49
22	Enhanced osteogenic differentiation of stem cells via microfluidics synthesized nanoparticles. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2015, 11, 1809-1819.	3.3	49
23	Immunomodulatory microneedle patch for periodontal tissue regeneration. <i>Matter</i> , 2022, 5, 666-682.	10.0	49
24	Superacid-doped polybenzimidazole-decorated carbon nanotubes: a novel high-performance proton exchange nanocomposite membrane. <i>Nanoscale</i> , 2013, 5, 11710.	5.6	48
25	Enhancing cell seeding and osteogenesis of MSCs on 3D printed scaffolds through injectable BMP2 immobilized ECM-Mimetic gel. <i>Dental Materials</i> , 2019, 35, 990-1006.	3.5	48
26	Simulation of cortico-cancellous bone structure by 3D printing of bilayer calcium phosphate-based scaffolds. <i>Bioprinting</i> , 2017, 6, 1-7.	5.8	46
27	Fabrication and characterization of dextran/nanocrystalline $\beta$ -tricalcium phosphate nanocomposite hydrogel scaffolds. <i>International Journal of Biological Macromolecules</i> , 2020, 148, 434-448.	7.5	46
28	Cellulose nanowhiskers to regulate the microstructure of perfluorosulfonate ionomers for high-performance fuel cells. <i>Journal of Materials Chemistry A</i> , 2014, 2, 11334.	10.3	45
29	3D printed tissue engineered model for bone invasion of oral cancer. <i>Tissue and Cell</i> , 2018, 52, 71-77.	2.2	43
30	Effects of chain length of the cross-linking agent on rheological and swelling characteristics of dextran hydrogels. <i>Carbohydrate Polymers</i> , 2018, 181, 141-149.	10.2	43
31	In situ bone tissue engineering using gene delivery nanocomplexes. <i>Acta Biomaterialia</i> , 2020, 108, 326-336.	8.3	41
32	Direct methanol fuel cell performance of sulfonated poly (2,6-dimethyl-1,4-phenylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 227 Td (oxidation) Energy, 2011, 36, 3688-3696.	7.1	39
33	Preparation and characterization of nanocomposite polyelectrolyte membranes based on Nafion <sup>®</sup> ionomer and nanocrystalline hydroxyapatite. <i>Polymer</i> , 2011, 52, 1286-1296.	3.8	37
34	Characterization of nanohybrid membranes for direct methanol fuel cell applications. <i>Solid State Ionics</i> , 2009, 180, 1497-1504.	2.7	35
35	A high-performance chitosan-based double layer proton exchange membrane with reduced methanol crossover. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 6105-6111.	7.1	35
36	Ionic nanopeapods: Next-generation proton conducting membranes based on phosphotungstic acid filled carbon nanotube. <i>Nano Energy</i> , 2016, 23, 114-121.	16.0	32

#	ARTICLE	IF	CITATIONS
37	Injectable non-leaching tissue-mimetic bottlebrush elastomers as an advanced platform for reconstructive surgery. <i>Nature Communications</i> , 2021, 12, 3961.	12.8	32
38	Magnetically Aligned Nanodomains: Application in High-Performance Ion Conductive Membranes. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 7099-7107.	8.0	30
39	Nonlinear Elasticity and Swelling of Comb and Bottlebrush Networks. <i>Macromolecules</i> , 2019, 52, 5095-5101.	4.8	29
40	Organically modified montmorillonite and chitosan-phosphotungstic acid complex nanocomposites as high performance membranes for fuel cell applications. <i>Journal of Solid State Electrochemistry</i> , 2013, 17, 2123-2137.	2.5	27
41	Tissue-Adaptive Materials with Independently Regulated Modulus and Transition Temperature. <i>Advanced Materials</i> , 2020, 32, e2005314.	21.0	27
42	Collagenous matrix supported by a 3D-printed scaffold for osteogenic differentiation of dental pulp cells. <i>Dental Materials</i> , 2018, 34, 209-220.	3.5	26
43	Understanding biophysical behaviours of microfluidic-synthesized nanoparticles at nano-biointerface. <i>Colloids and Surfaces B: Biointerfaces</i> , 2016, 145, 802-811.	5.0	21
44	Nanomagnetic-mediated drug delivery for the treatment of dental disease. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2018, 14, 919-927.	3.3	21
45	Effects of organically modified nanoclay on the transport properties and electrochemical performance of acid-doped polybenzimidazole membranes. <i>Journal of Applied Polymer Science</i> , 2010, 117, 1227-1233.	2.6	20
46	Thermoresponsive biopolymer hydrogels with tunable gel characteristics. <i>RSC Advances</i> , 2014, 4, 39386-39393.	3.6	19
47	Experimental investigation and molecular dynamics simulation of acid-doped polybenzimidazole as a new membrane for air-breathing microbial fuel cells. <i>Journal of Membrane Science</i> , 2017, 535, 221-229.	8.2	19
48	Tissue-Mimetic Dielectric Actuators: Free-Standing, Stable, and Solvent-Free. <i>ACS Applied Polymer Materials</i> , 2020, 2, 1741-1745.	4.4	19
49	Air-breathing microbial fuel cell with enhanced performance using nanocomposite proton exchange membranes. <i>Polymer</i> , 2014, 55, 6102-6109.	3.8	18
50	Rheological Study and Molecular Dynamics Simulation of Biopolymer Blend Thermogels of Tunable Strength. <i>Biomacromolecules</i> , 2016, 17, 3474-3484.	5.4	18
51	A microfluidic approach to synthesizing high-performance microfibers with tunable anhydrous proton conductivity. <i>Lab on A Chip</i> , 2013, 13, 4549.	6.0	17
52	Brush Architecture and Network Elasticity: Path to the Design of Mechanically Diverse Elastomers. <i>Macromolecules</i> , 2022, 55, 2940-2951.	4.8	16
53	Engineered Delivery of Dental Stem-Cell-Derived Extracellular Vesicles for Periodontal Tissue Regeneration. <i>Advanced Healthcare Materials</i> , 2022, 11, e21102593.	7.6	15
54	Ultraviolet-induced surface grafting of octafluoropentyl methacrylate on polyether ether ketone for inducing antibiofilm properties. <i>Journal of Biomaterials Applications</i> , 2017, 32, 3-11.	2.4	14

#	ARTICLE	IF	CITATIONS
55	Nanoscale Optoregulation of Neural Stem Cell Differentiation by Intracellular Alteration of Redox Balance. <i>Advanced Functional Materials</i> , 2017, 27, 1701420.	14.9	14
56	Comparison of osteogenic differentiation potential of induced pluripotent stem cells and buccal fat pad stem cells on 3D-printed HA/ $\beta$ -TCP collagen-coated scaffolds. <i>Cell and Tissue Research</i> , 2021, 384, 403-421.	2.9	13
57	Oscillatory rheometric tracing of dextran crosslinking reaction in aqueous semidilute solutions “Effects of formulation on the gelation properties. <i>Polymer</i> , 2013, 54, 2999-3007.	3.8	12
58	Osteogenic differentiation of adipose-derived mesenchymal stem cells using 3D-Printed PDLLA/ $\beta$ -TCP nanocomposite scaffolds. <i>Bioprinting</i> , 2021, 21, e00117.	5.8	10
59	Mechanically Diverse Gels with Equal Solvent Content. <i>ACS Central Science</i> , 2022, 8, 845-852.	11.3	10
60	Wrapping carbon nanotubes by biopolymer chains: Role of nanointerfaces in detection of vapors in conductive polymer composite transducers. <i>Polymer Composites</i> , 2016, 37, 2803-2810.	4.6	9
61	Synthesis and temperature-induced self-assembly of a positively charged symmetrical pentablock terpolymer in aqueous solutions. <i>European Polymer Journal</i> , 2017, 97, 158-168.	5.4	9
62	Critical-sized bone defects regeneration using a bone-inspired 3D bilayer collagen membrane in combination with leukocyte and platelet-rich fibrin membrane (L-PRF): An in vivo study. <i>Tissue and Cell</i> , 2020, 63, 101326.	2.2	7
63	Regulating Tissue-Mimetic Mechanical Properties of Bottlebrush Elastomers by Magnetic Field. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 38783-38791.	8.0	6
64	Tunable viscoelastic features of aqueous mixtures of thermosensitive ethyl(hydroxyethyl)cellulose and cellulose nanowhiskers. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 590, 124489.	4.7	6
65	Vibrational and sonochemical characterization of ultrasonic endodontic activating devices for translation to clinical efficacy. <i>Materials Science and Engineering C</i> , 2020, 109, 110646.	7.3	5
66	Nanoscale Membrane Based on Filled Nanoporous Anodic Alumina with Proton-conducting Polymer for Fuel Cell Applications: Primary Morphological Evaluation. <i>ECS Transactions</i> , 2009, 25, 1085-1090.	0.5	3
67	On-chip detection of gel transition temperature using a novel micro-thermomechanical method. <i>PLoS ONE</i> , 2017, 12, e0183492.	2.5	3
68	Drug Delivery: On-Chip Fabrication of Paclitaxel-Loaded Chitosan Nanoparticles for Cancer Therapeutics ( <i>Adv. Funct. Mater.</i> 4/2014). <i>Advanced Functional Materials</i> , 2014, 24, 418-418.	14.9	2