

Xuan Zhang

List of Publications by Year in descending order

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57
papers

2,245
citations

201385

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docs citations

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times ranked

2123
citing authors

#	ARTICLE	IF	CITATIONS
1	Selective separation membranes for fractionating organics and salts for industrial wastewater treatment: Design strategies and process assessment. <i>Journal of Membrane Science</i> , 2022, 643, 120052.	4.1	53
2	Engineering a covalently constructed superomniphobic membrane for robust membrane distillation. <i>Journal of Membrane Science</i> , 2022, 644, 120124.	4.1	10
3	Surface-engineered sulfonation of ion-selective nanofiltration membrane with robust scaling resistance for seawater desalination. <i>Journal of Membrane Science</i> , 2022, 644, 120191.	4.1	17
4	Construction of omniphobic PVDF membranes for membrane distillation: Investigating the role of dimension, morphology, and coating technology of silica nanoparticles. <i>Desalination</i> , 2022, 525, 115498.	4.0	22
5	Designing polymeric membranes with coordination chemistry for high-precision ion separations. <i>Science Advances</i> , 2022, 8, eabm9436.	4.7	50
6	Tailoring pore size and interface of superhydrophobic nanofibrous membrane for robust scaling resistance and flux enhancement in membrane distillation. <i>Journal of Membrane Science</i> , 2022, 658, 120751.	4.1	35
7	High performance polyester reverse osmosis desalination membrane with chlorine resistance. <i>Nature Sustainability</i> , 2021, 4, 138-146.	11.5	185
8	Polymer brush-modified graphene oxide membrane with excellent structural stability for effective fractionation of textile wastewater. <i>Journal of Membrane Science</i> , 2021, 618, 118698.	4.1	25
9	Effective inhibition of gypsum using an ion-selective nanofiltration membrane pretreatment process for seawater desalination. <i>Journal of Membrane Science</i> , 2021, 632, 119358.	4.1	28
10	Graphene oxide nanofiltration membrane with trimethylamine-N-oxide zwitterions for robust biofouling resistance. <i>Journal of Membrane Science</i> , 2021, 640, 119855.	4.1	15
11	Loose nanofiltration membranes with assembled antifouling surfaces of organophosphonic acid/Fe(III) for managing textile dyeing effluents. <i>Journal of Membrane Science</i> , 2021, 640, 119821.	4.1	25
12	Symmetric forward osmosis membrane coupled with dendritic draw solute: New insights into sustainable properties. <i>Journal of Membrane Science</i> , 2021, 640, 119785.	4.1	2
13	Molecular Origin of the Biologically Accelerated Mineralization of Hydroxyapatite on Bacterial Cellulose for More Robust Nanocomposites. <i>Nano Letters</i> , 2021, 21, 10292-10300.	4.5	19
14	Janus membranes with asymmetric wettability via a layer-by-layer coating strategy for robust membrane distillation. <i>Journal of Membrane Science</i> , 2020, 603, 118031.	4.1	59
15	Feasibility of concentrating textile wastewater using a hybrid forward osmosis-membrane distillation (FO-MD) process: Performance and economic evaluation. <i>Water Research</i> , 2020, 172, 115488.	5.3	70
16	Do acid-base interactions really improve the ion conduction in a proton exchange membrane? A study on the effect of basic groups. <i>Journal of Materials Chemistry A</i> , 2019, 7, 19820-19830.	5.2	27
17	Sub-1 μ m Free-Standing Symmetric Membrane for Osmotic Separations. <i>Environmental Science and Technology Letters</i> , 2019, 6, 492-498.	3.9	20
18	Concentration and Recovery of Dyes from Textile Wastewater Using a Self-Standing, Support-Free Forward Osmosis Membrane. <i>Environmental Science & Technology</i> , 2019, 53, 3078-3086.	4.6	76

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19	Electrospun Nanofibrous Polyphenylene Oxide Membranes for High-Salinity Water Desalination by Direct Contact Membrane Distillation. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 20060-20069.	3.2	27
20	Carbon Nanotubes for Advancing Separation Membranes. , 2019, , 333-359.		1
21	Mechanically robust poly[vinyl-(4-benzyl-N,N,N-trimethylammonium bromide) ketone]/polybenzimidazole blend membranes for anion conductive solid electrolytes. <i>Journal of Membrane Science</i> , 2019, 572, 262-270.	4.1	11
22	Toward Enhancing the Chlorine Resistance of Reverse Osmosis Membranes: An Effective Strategy via an End-capping Technology. <i>Environmental Science & Technology</i> , 2019, 53, 1296-1304.	4.6	41
23	A novel sulfonated reverse osmosis membrane for seawater desalination: Experimental and molecular dynamics studies. <i>Journal of Membrane Science</i> , 2018, 550, 470-479.	4.1	32
24	A thermally crosslinked multiblock sulfonated poly(arylene ether ketone nitrile) copolymer with a 1,2,3-triazole pendant for proton conducting membranes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 3560-3570.	5.2	27
25	Developing new adsorptive membrane by modification of support layer with iron oxide microspheres for arsenic removal. <i>Journal of Colloid and Interface Science</i> , 2018, 514, 760-768.	5.0	75
26	A Self-Standing, Support-Free Membrane for Forward Osmosis with No Internal Concentration Polarization. <i>Environmental Science and Technology Letters</i> , 2018, 5, 266-271.	3.9	50
27	Synthesis and properties of poly(phenylene-co-arylene ether ketone)s with five quaternary ammonium groups on a phenyl unit for anion-exchange membranes. <i>Solid State Ionics</i> , 2018, 314, 187-194.	1.3	6
28	Multi-block sulfonated poly(arylene ether nitrile) polymers bearing oligomeric benzotriazole pendants with exceptionally high H ₂ /O ₂ fuel cell performance. <i>Journal of Membrane Science</i> , 2018, 564, 342-351.	4.1	22
29	A non-MPD-type reverse osmosis membrane with enhanced permselectivity for brackish water desalination. <i>Journal of Membrane Science</i> , 2018, 565, 104-111.	4.1	23
30	Fabrication of a Desalination Membrane with Enhanced Microbial Resistance through Vertical Alignment of Graphene Oxide. <i>Environmental Science and Technology Letters</i> , 2018, 5, 614-620.	3.9	37
31	Improved performance of thin-film composite membrane with PVDF/PFSA substrate for forward osmosis process. <i>Journal of Membrane Science</i> , 2017, 535, 188-199.	4.1	89
32	Positively Charged Nanofiltration Membrane with Dendritic Surface for Toxic Element Removal. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 784-792.	3.2	93
33	Zwitterionic carbon nanotube assisted thin-film nanocomposite membranes with excellent efficiency for separation of mono/divalent ions from brackish water. <i>Journal of Materials Chemistry A</i> , 2017, 5, 13730-13739.	5.2	58
34	Multiblock poly(Phenylene ether nitrile)s with pendant sulfoalkoxyl side chain for H ₂ /air fuel cells at low humidity condition. <i>Journal of Polymer Science Part A</i> , 2017, 55, 1940-1948.	2.5	11
35	Sulfonated reduced graphene oxide as a conductive layer in sulfonated poly(ether ether ketone) nanocomposite membranes. <i>Journal of Membrane Science</i> , 2017, 524, 663-672.	4.1	84
36	Sulfonated multiwall carbon nanotubes assisted thin-film nanocomposite membrane with enhanced water flux and anti-fouling property. <i>Journal of Membrane Science</i> , 2017, 524, 344-353.	4.1	180

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37	Poly(2,5-benzimidazole)-Grafted Graphene Oxide as an Effective Proton Conductor for Construction of Nanocomposite Proton Exchange Membrane. ACS Applied Materials & Interfaces, 2017, 9, 33049-33058.	4.0	64
38	Fractionation and Concentration of High-Salinity Textile Wastewater using an Ultra-Permeable Sulfonated Thin-film Composite. Environmental Science & Technology, 2017, 51, 9252-9260.	4.6	67
39	A comprehensive physico-chemical study on the molecular structure effects of sulfonated polyamide thin-film composites. Molecular Systems Design and Engineering, 2017, 2, 57-66.	1.7	7
40	Antifouling and High Flux Sulfonated Polyamide Thin-Film Composite Membrane for Nanofiltration. Industrial & Engineering Chemistry Research, 2016, 55, 4726-4733.	1.8	44
41	Alkaline stable anion exchange membranes based on poly(phenylene-co-arylene ether ketone) backbones. Polymer Chemistry, 2016, 7, 5988-5995.	1.9	25
42	Charge-aggregate induced (CAI) reverse osmosis membrane for seawater desalination and boron removal. Journal of Membrane Science, 2016, 520, 1-7.	4.1	47
43	Enhanced proton conductivity of multiblock poly(phenylene ether ketone)s via pendant sulfoalkoxyl side chains with excellent H ₂ /air fuel cell performance. Journal of Materials Chemistry A, 2016, 4, 2321-2331.	5.2	37
44	Fabrication of a high-flux sulfonated polyamide nanofiltration membrane: Experimental and dissipative particle dynamics studies. Journal of Membrane Science, 2016, 505, 119-129.	4.1	68
45	Polymer Electrolyte Membranes Based on Multiblock Poly(phenylene ether ketone)s with Pendant Alkylsulfonic Acids: Effects on the Isomeric Configuration and Ion Transport Mechanism. Journal of Physical Chemistry C, 2015, 119, 19596-19606.	1.5	11
46	Enhanced surface hydrophilicity of thin-film composite membranes for nanofiltration: an experimental and DFT study. Physical Chemistry Chemical Physics, 2015, 17, 24201-24209.	1.3	13
47	Sulfonated Polyphenylenes and the Related Copolymer Membranes. Electrochemical Energy Storage and Conversion, 2015, , 247-269.	0.0	0
48	Polymer electrolyte fuel cell performance of poly(arylene ether) Tj ETQqO O O rgBT /Overlock 10 Tf 50 307 Td (ketone)-graft-crosslinked-p 247, 932-938.	4.0	12
49	Polymer electrolyte membranes based on poly(phenylene ether)s with sulfonic acid via long alkyl side chains. Journal of Materials Chemistry A, 2013, 1, 11389.	5.2	24
50	Poly(phenylene) block copolymers bearing tri-sulfonated aromatic pendant groups for polymer electrolyte fuel cell applications. Journal of Materials Chemistry A, 2013, 1, 8178.	5.2	21
51	Poly(sulfonated phenylene)-block-poly(arylene ether sulfone) copolymer for polymer electrolyte fuel cell application. Polymer, 2013, 54, 236-245.	1.8	28
52	Polymer electrolyte membranes based on poly(m-phenylene)s with sulfonic acid via long alkyl side chains. Polymer Chemistry, 2013, 4, 1235-1242.	1.9	43
53	Preparation and properties of novel sulfonated poly(p-phenylene-co-aryl ether ketone)s for polymer electrolyte fuel cell applications. Journal of Power Sources, 2012, 216, 261-268.	4.0	31
54	Graft-crosslinked Copolymers Based on Poly(arylene ether ketone)-gc-sulfonated Poly(arylene ether) Tj ETQqO O O rgBT /Overlock 10 Tf 5	2.0	34

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55	Preparation and properties of crosslinked multiblock sulfonated poly(arylene ether sulfone) membranes for fuel cell applications. Journal of Applied Polymer Science, 2011, 121, 1707-1716.	1.3	20
56	Preparation and properties of sulfonated poly(phenylene arylene)/sulfonated polyimide (SPA/SPI) blend membranes for polymer electrolyte membrane fuel cell applications. Journal of Membrane Science, 2011, 371, 276-285.	4.1	42
57	Preparation and Properties of Novel Sulfonated Poly (phenylene arylene) (SPA) Membranes for Fuel Cell Applications. , 2011, , .		0