

Xuan Zhang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1508919/publications.pdf>

Version: 2024-02-01

57
papers

2,245
citations

201385

27
h-index

223531

46
g-index

58
all docs

58
docs citations

58
times ranked

2123
citing authors

#	ARTICLE	IF	CITATIONS
1	High performance polyester reverse osmosis desalination membrane with chlorine resistance. <i>Nature Sustainability</i> , 2021, 4, 138-146.	11.5	185
2	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
3	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
4	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
5	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
6	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
7	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
8	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
9	Fabrication of a high-flux sulfonated polyamide nanofiltration membrane: Experimental and dissipative particle dynamics studies. <i>Journal of Membrane Science</i> , 2016, 505, 119-129.	4.1	68
10	Fractionation and Concentration of High-Salinity Textile Wastewater using an Ultra-Permeable Sulfonated Thin-film Composite. <i>Environmental Science & Technology</i> , 2017, 51, 9252-9260.	4.6	67
11	Poly(2,5-benzimidazole)-Grafted Graphene Oxide as an Effective Proton Conductor for Construction of Nanocomposite Proton Exchange Membrane. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 33049-33058.	4.0	64
12	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
13	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
14	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
15	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
16	Designing polymeric membranes with coordination chemistry for high-precision ion separations. <i>Science Advances</i> , 2022, 8, eabm9436.	4.7	50
17	Charge-aggregate induced (CAI) reverse osmosis membrane for seawater desalination and boron removal. <i>Journal of Membrane Science</i> , 2016, 520, 1-7.	4.1	47
18	Antifouling and High Flux Sulfonated Polyamide Thin-Film Composite Membrane for Nanofiltration. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 4726-4733.	1.8	44

#	ARTICLE	IF	CITATIONS
19	Polymer electrolyte membranes based on poly(m-phenylene)s with sulfonic acid via long alkyl side chains. <i>Polymer Chemistry</i> , 2013, 4, 1235-1242.	1.9	43
20	Preparation and properties of sulfonated poly(phenylene arylene)/sulfonated polyimide (SPA/SPI) blend membranes for polymer electrolyte membrane fuel cell applications. <i>Journal of Membrane Science</i> , 2011, 371, 276-285.	4.1	42
21	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
22	Enhanced proton conductivity of multiblock poly(phenylene ether ketone)s via pendant sulfoalkoxyl side chains with excellent H ₂ /air fuel cell performance. <i>Journal of Materials Chemistry A</i> , 2016, 4, 2321-2331.	5.2	37
23	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
24	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
25	Graft-crosslinked Copolymers Based on Poly(arylene ether ketone)-g-c-sulfonated Poly(arylene ether) Tj ETQq1 1 0.784314 rgBT /Over 2.0 34	2.0	34
26	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
27	Preparation and properties of novel sulfonated poly(p-phenylene-co-aryl ether ketone)s for polymer electrolyte fuel cell applications. <i>Journal of Power Sources</i> , 2012, 216, 261-268.	4.0	31
28	Poly(sulfonated phenylene)-block-poly(arylene ether sulfone) copolymer for polymer electrolyte fuel cell application. <i>Polymer</i> , 2013, 54, 236-245.	1.8	28
29	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
30	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
31	Do acid-base interactions really improve the ion conduction in a proton exchange membrane? â€“ a study on the effect of basic groups. <i>Journal of Materials Chemistry A</i> , 2019, 7, 19820-19830.	5.2	27
32	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
33	Alkaline stable anion exchange membranes based on poly(phenylene-co-arylene ether ketone) backbones. <i>Polymer Chemistry</i> , 2016, 7, 5988-5995.	1.9	25
34	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
35	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
36	Polymer electrolyte membranes based on poly(phenylene ether)s with sulfonic acid via long alkyl side chains. <i>Journal of Materials Chemistry A</i> , 2013, 1, 11389.	5.2	24

#	ARTICLE	IF	CITATIONS
37	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
38	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
39	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
40	Poly(phenylene) block copolymers bearing tri-sulfonated aromatic pendant groups for polymer electrolyte fuel cell applications. <i>Journal of Materials Chemistry A</i> , 2013, 1, 8178.	5.2	21
41	Preparation and properties of crosslinked multiblock sulfonated poly(arylene ether sulfone) membranes for fuel cell applications. <i>Journal of Applied Polymer Science</i> , 2011, 121, 1707-1716.	1.3	20
42	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
43	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
44	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
45	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
46	Enhanced surface hydrophilicity of thin-film composite membranes for nanofiltration: an experimental and DFT study. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 24201-24209.	1.3	13
47	Polymer electrolyte fuel cell performance of poly(arylene ether) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 347 Td (ketone)-graft-c 247, 932-938.	4.0	12
48	Polymer Electrolyte Membranes Based on Multiblock Poly(phenylene ether ketone)s with Pendant Alkylsulfonic Acids: Effects on the Isomeric Configuration and Ion Transport Mechanism. <i>Journal of Physical Chemistry C</i> , 2015, 119, 19596-19606.	1.5	11
49	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
50	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
51	Engineering a covalently constructed superomniphobic membrane for robust membrane distillation. <i>Journal of Membrane Science</i> , 2022, 644, 120124.	4.1	10
52	A comprehensive physico-chemical study on the molecular structure effects of sulfonated polyamide thin-film composites. <i>Molecular Systems Design and Engineering</i> , 2017, 2, 57-66.	1.7	7
53	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
54	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

#	ARTICLE	IF	CITATIONS
55	Carbon Nanotubes for Advancing Separation Membranes. , 2019, , 333-359.		1
56	Preparation and Properties of Novel Sulfonated Poly (phenylene arylene) (SPA) Membranes for Fuel Cell Applications. , 2011, , .		0
57	Sulfonated Polyphenylenes and the Related Copolymer Membranes. Electrochemical Energy Storage and Conversion, 2015, , 247-269.	0.0	0