Zheng-Jin Yang

List of Publications by Year
in descending order

92	4,884	87723 38	98622 67
papers	citations	h-index	g-index

93	93	93	3535
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ion exchange membranes: New developments and applications. Journal of Membrane Science, 2017, 522, 267-291.	4.1	650
2	Mixed matrix proton exchange membranes for fuel cells: State of the art and perspectives. Progress in Polymer Science, 2016, 57, 103-152.	11.8	262
3	Highly Conductive Anionâ€Exchange Membranes from Microporous TrÃ¶ger's Base Polymers. Angewandte Chemie - International Edition, 2016, 55, 11499-11502.	7.2	206
4	A Long-Lifetime All-Organic Aqueous Flow Battery Utilizing TMAP-TEMPO Radical. CheM, 2019, 5, 1861-1870.	5.8	196
5	Alkaline Benzoquinone Aqueous Flow Battery for Largeâ€Scale Storage of Electrical Energy. Advanced Energy Materials, 2018, 8, 1702056.	10.2	161
6	Sulfonated Microporous Polymer Membranes with Fast and Selective Ion Transport for Electrochemical Energy Conversion and Storage. Angewandte Chemie - International Edition, 2020, 59, 9564-9573.	7.2	145
7	ZIF-8/PDMS mixed matrix membranes for propane/nitrogen mixture separation: Experimental result and permeation model validation. Journal of Membrane Science, 2015, 474, 103-113.	4.1	140
8	Self-aggregating cationic-chains enable alkaline stable ion-conducting channels for anion-exchange membrane fuel cells. Journal of Materials Chemistry A, 2021, 9, 327-337.	5.2	116
9	Alkaline Anionâ€Exchange Membranes Containing Mobile Ion Shuttles. Advanced Materials, 2016, 28, 3467-3472.	11.1	98
10	A strategy to construct alkali-stable anion exchange membranes bearing ammonium groups via flexible spacers. Journal of Materials Chemistry A, 2015, 3, 15015-15019.	5.2	95
11	A mechanically robust anion exchange membrane with high hydroxide conductivity. Journal of Membrane Science, 2016, 504, 47-54.	4.1	92
12	Thermal crosslinking of an alkaline anion exchange membrane bearing unsaturated side chains. Journal of Membrane Science, 2015, 490, 1-8.	4.1	87
13	Endowing gâ€C₃N₄ Membranes with Superior Permeability and Stability by Using Acid Spacers. Angewandte Chemie - International Edition, 2019, 58, 16463-16468.	7.2	85
14	Click Chemistry Finds Its Way in Constructing an Ionic Highway in Anion-Exchange Membrane. ACS Applied Materials & Interfaces, 2015, 7, 28545-28553.	4.0	84
15	Development of BPPO-based anion exchange membranes for electrodialysis desalination applications. Desalination, 2016, 391, 61-68.	4.0	83
16	Facile and cost effective PVA based hybrid membrane fabrication for acid recovery. Separation and Purification Technology, 2014, 136, 250-257.	3.9	80
17	Screening Viologen Derivatives for Neutral Aqueous Organic Redox Flow Batteries. ChemSusChem, 2020, 13, 2245-2249.	3.6	75
18	A Novel Methodology to Synthesize Highly Conductive Anion Exchange Membranes. Scientific Reports, 2015, 5, 13417.	1.6	74

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19	Anion exchange membrane crosslinked in the easiest way stands out for fuel cells. Journal of Power Sources, 2018, 390, 234-241.	4.0	74
20	Dual-cation comb-shaped anion exchange membranes: Structure, morphology and properties. Journal of Membrane Science, 2016, 515, 189-195.	4.1	72
21	Anion exchange membranes with branched ionic clusters for fuel cells. Journal of Materials Chemistry A, 2018, 6, 5993-5998.	5.2	70
22	Novel quaternized aromatic amine based hybrid PVA membranes for acid recovery. Journal of Membrane Science, 2015, 490, 29-37.	4.1	68
23	Hydrophobic Side Chains Impart Anion Exchange Membranes with High Monovalentâ€“Divalent Anion Selectivity in Electrodialysis. ACS Sustainable Chemistry and Engineering, 2019, 7, 4429-4442.	3.2	65
24	Stability challenge in anion exchange membrane for fuel cells. Current Opinion in Chemical Engineering, 2016, 12, 22-30.	3.8	63
25	Diffusion dialysis membranes with semi-interpenetrating network for acid recovery. Journal of Membrane Science, 2015, 493, 645-653.	4.1	57
26	Ionomer Cross-Linking Immobilization of Catalyst Nanoparticles for High Performance Alkaline Membrane Fuel Cells. Chemistry of Materials, 2019, 31, 7812-7820.	3.2	57
27	Hyper-branched anion exchange membranes with high conductivity and chemical stability. Chemical Communications, 2016, 52, 10141-10143.	2.2	55
28	Recyclable cross-linked anion exchange membrane for alkaline fuel cell application. Journal of Power Sources, 2018, 375, 404-411.	4.0	53
29	Comb-shaped anion exchange membrane with densely grafted short chains or loosely grafted long chains?. Journal of Membrane Science, 2019, 585, 150-156.	4.1	52
30	Guiding the self-assembly of hyperbranched anion exchange membranes utilized in alkaline fuel cells. Journal of Membrane Science, 2019, 573, 595-601.	4.1	49
31	Monovalent cations permselective membranes with zwitterionic side chains. Journal of Membrane Science, 2018, 563, 320-325.	4.1	48
32	Highly conductive and vanadium sieving Microporous TrÃ¶ger's Base Membranes for vanadium redox flow battery. Journal of Membrane Science, 2021, 620, 118832.	4.1	48
33	Highly Conductive Anionâ€Exchange Membranes from Microporous TrÃ¶ger's Base Polymers. Angewandte Chemie, 2016, 128, 11671-11674.	1.6	47
34	Development of novel PVA-QUDAP based anion exchange membranes for diffusion dialysis and theoretical analysis therein. Separation and Purification Technology, 2017, 178, 269-278.	3.9	47
35	Biomimetic Nanocones that Enable High Ion Permselectivity. Angewandte Chemie - International Edition, 2019, 58, 12646-12654.	7.2	47
36	Designer Ferrocene Catholyte for Aqueous Organic Flow Batteries. ChemSusChem, 2021, 14, 1295-1301.	3.6	45

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37	Current Challenges and Perspectives of Polymer Electrolyte Membranes. Macromolecules, 2022, 55, 3773-3787.	2.2	45
38	One-pot solvent-free synthesis of cross-linked anion exchange membranes for electrodialysis. Journal of Membrane Science, 2016, 515, 115-124.	4.1	43
39	Organic Electrolytes for pHâ€Neutral Aqueous Organic Redox Flow Batteries. Advanced Functional Materials, 2022, 32, 2108777.	7.8	43
40	Reclamation of Aniline Wastewater and CO₂ Capture Using Bipolar Membrane Electrodialysis. ACS Sustainable Chemistry and Engineering, 2016, 4, 5743-5751.	3.2	42
41	Wittig reaction constructed an alkaline stable anion exchange membrane. Journal of Membrane Science, 2016, 518, 282-288.	4.1	40
42	Achieving high anion conductivity by densely grafting of ionic strings. Journal of Membrane Science, 2018, 559, 35-41.	4.1	38
43	Functioning Waterâ€Insoluble Ferrocenes for Aqueous Organic Flow Battery via Hostâ€“Guest Inclusion. ChemSusChem, 2021, 14, 745-752.	3.6	37
44	Improved thiophene solution selectivity by Cu2+, Pb2+ and Mn2+ ions in pervaporative poly[bis(p-methyl phenyl) phosphazene]desulfurization membrane. Journal of Membrane Science, 2014, 454, 463-469.	4.1	36
45	Advances in Artificial Layers for Stable Lithium Metal Anodes. Chemistry - A European Journal, 2020, 26, 4193-4203.	1.7	36
46	Polyphosphazene membrane for desulfurization: Selecting poly[bis(trifluoroethoxy) phosphazene] for pervaporative removal of thiophene. Separation and Purification Technology, 2012, 93, 15-24.	3.9	34
47	Cationic metalâ€“organic framework porous membranes with high hydroxide conductivity and alkaline resistance for fuel cells. Journal of Materials Chemistry A, 2016, 4, 14545-14549.	5.2	34
48	Sulfonated poly(2,6-dimethyl-1,4-phenyleneoxide)/nano silica hybrid membranes for alkali recovery via diffusion dialysis. Separation and Purification Technology, 2015, 141, 307-313.	3.9	31
49	Flow Batteries: Alkaline Benzoquinone Aqueous Flow Battery for Largeâ€Scale Storage of Electrical Energy (Adv. Energy Mater. 8/2018). Advanced Energy Materials, 2018, 8, 1870034.	10.2	30
50	Hyperbranched Polystyrene Copolymer Makes Superior Anion Exchange Membrane. ACS Applied Polymer Materials, 2019, 1, 76-82.	2.0	28
51	Highly hydroxide conductive ionomers with fullerene functionalities. Chemical Communications, 2016, 52, 2788-2791.	2.2	25
52	110th Anniversary: Unleashing the Full Potential of Quinones for High Performance Aqueous Organic Flow Battery. Industrial & Engineering Chemistry Research, 2019, 58, 3994-3999.	1.8	25
53	Thermally triggered polyrotaxane translational motion helps proton transfer. Nature Communications, 2018, 9, 2297.	5.8	24
54	An Interfacial Layer Based on Polymers of Intrinsic Microporosity to Suppress Dendrite Growth on Li Metal Anodes. Chemistry - A European Journal, 2019, 25, 12052-12057.	1.7	24

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55	Poly(phenylene oxide)-Based Ion-Exchange Membranes for Aqueous Organic Redox Flow Battery. Industrial & Engineering Chemistry Research, 2019, 58, 10707-10712.	1.8	24
56	Enhancing FCC gasoline desulfurization performance in a polyphosphazene pervaporative membrane. Separation and Purification Technology, 2013, 109, 48-54.	3.9	22
57	Poly[bis(p-methyl phenyl) phosphazene] Pervaporative Membranes for Separating Organosulfur Compounds from n-Heptane and Its Surface Functionalization. Industrial & Engineering Chemistry Research, 2013, 52, 13801-13809.	1.8	22
58	Water-Dissociation-Assisted Electrolysis for Hydrogen Production in a Salinity Power Cell. ACS Sustainable Chemistry and Engineering, 2019, 7, 13023-13030.	3.2	21
59	Degradation of electrochemical active compounds in aqueous organic redox flow batteries. Current Opinion in Electrochemistry, 2022, 32, 100895.	2.5	21
60	Biomimetic Nanocones that Enable High Ion Permselectivity. Angewandte Chemie, 2019, 131, 12776-12784.	1.6	20
61	Sulfonated Microporous Polymer Membranes with Fast and Selective Ion Transport for Electrochemical Energy Conversion and Storage. Angewandte Chemie, 2020, 132, 9651-9660.	1.6	20
62	Ion exchange membranes from poly(2,6-dimethyl-1,4-phenylene oxide) and related applications. Science China Chemistry, 2018, 61, 1062-1087.	4.2	19
63	Self-healing anion exchange membrane for pH 7 redox flow batteries. Chemical Engineering Science, 2019, 201, 167-174.	1.9	19
64	Biselective microporous TrÓ§ger's base membrane for effective ion separation. Journal of Membrane Science, 2021, 627, 119246.	4.1	19
65	Bipolar membrane-assisted reverse electrodialysis for high power density energy conversion via acid-base neutralization. Journal of Membrane Science, 2022, 647, 120288.	4.1	19
66	Hydrophilic Microporous Polymer Membranes: Synthesis and Applications. ChemPlusChem, 2020, 85, 1893-1904.	1.3	18
67	Towards the gemini cation anion exchange membranes by nucleophilic substitution reaction. Science China Materials, 2019, 62, 973-981.	3.5	18
68	Designing Robust Two-Electron Storage Extended Bipyridinium Anolytes for pH-Neutral Aqueous Organic Redox Flow Batteries. Jacs Au, 2022, 2, 1214-1222.	3.6	18
69	Polyphosphazene membranes with phenoxyls for enhanced desulfurization. RSC Advances, 2012, 2, 11432.	1.7	17
70	Pilot-scale integrated membrane system for the treatment of acrylonitrile wastewater. Desalination, 2015, 357, 215-224.	4.0	17
71	Development of heterogeneous cation exchange membranes using functional polymer powders for desalination applications. Journal of the Taiwan Institute of Chemical Engineers, 2016, 67, 435-442.	2.7	17
72	Endowing gâ€C₃N₄ Membranes with Superior Permeability and Stability by Using Acid Spacers. Angewandte Chemie, 2019, 131, 16615-16620.	1.6	17

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73	Mathematical modelling and experimental investigation of CO2 absorber recovery using an electro-acidification method. Chemical Engineering Journal, 2019, 360, 654-664.	6.6	17
74	Waterborne polyurethane/poly(vinyl alcohol) membranes: Preparation, characterization, and potential application for pervaporation. Journal of Applied Polymer Science, 2012, 124, E216.	1.3	16
75	One-pot preparation of anion exchange membranes from bromomethylated poly(2,6-dimethyl-1,4-phenylene oxide) for electrodialysis. Chemical Engineering Science, 2015, 135, 526-531.	1.9	16
76	Development of PVA/MIDA based hybrid cation exchange membranes for alkali recovery via Diffusion Dialysis. Separation and Purification Technology, 2016, 164, 63-69.	3.9	16
77	Hybrid membranes from sulphonated poly (2, 6-dimethyl-1, 4-phenylene oxide) and sulphonated nano silica for alkali recovery. Journal of Membrane Science, 2016, 498, 201-207.	4.1	14
78	The preparation and application of a low-cost multi-channel tubular inorganicâ€“organic composite microfiltration membrane. Separation and Purification Technology, 2015, 151, 131-138.	3.9	13
79	Highly Water Resistant Anion Exchange Membrane for Fuel Cells. Macromolecular Rapid Communications, 2015, 36, 1362-1367.	2.0	12
80	Enhancing acid recovery efficiency by implementing oligomer ionic bridge in the membrane matrix. Journal of Membrane Science, 2016, 518, 263-272.	4.1	12
81	Tetrazole tethered polymers for alkaline anion exchange membranes. Frontiers of Chemical Science and Engineering, 2018, 12, 306-310.	2.3	11
82	Highly Conductive and Water-Swelling Resistant Anion Exchange Membrane for Alkaline Fuel Cells. International Journal of Molecular Sciences, 2019, 20, 3470.	1.8	11
83	An isoporous ion exchange membrane for selective Na+ transport. Journal of Membrane Science, 2022, 659, 120805.	4.1	9
84	Preparation and characterization of PEG/PVDF composite membranes and effects of solvents on its pervaporation performance in heptane desulfurization. Desalination and Water Treatment, 2012, 46, 321-331.	1.0	8
85	Ion Exchange Membrane â€œ<scp>ABC</scp>â€•â€“ A Key Material for Upgrading Process Industries. Chinese Journal of Chemistry, 2021, 39, 825-837.	2.6	8
86	Introducing a new generation of anion conducting membrane using swelling induced fabrication of covalent methanol barrier layer. Journal of Membrane Science, 2021, 620, 118840.	4.1	4
87	A highly stable aliphatic backbone from visible light-induced RAFT polymerization for anion exchange membranes. Polymer Chemistry, 2021, 12, 5574-5582.	1.9	4
88	Eu-based anolytes for high-voltage and long-lifetime aqueous flow batteries. Journal of Energy Chemistry, 2021, 60, 368-375.	7.1	3
89	èšç”µè§£è¯ç‡ƒæ–™ç”µæ±ä¸šç„¸è¯åäºæ¢è†œç”©è¿›å±•. Chinese Science Bulletin, 2022, , .	0.4	1
90	Frontispiece: Advances in Artificial Layers for Stable Lithium Metal Anodes. Chemistry - A European Journal, 2020, 26, .	1.7	0

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91	Ion Exchange Membranes for Pervaporation A Patents Review. Recent Patents on Chemical Engineering, 2011, 4, 161-169.	0.5	0
92	Anion Exchange Membrane Crosslinked In The Easiest Way Exhibits High Alkaline Stability. , 2018, , .		0