

# Zheng-Jin Yang

## List of Publications by Year in descending order

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92  
papers

4,884  
citations

87723

38  
h-index

98622

67  
g-index

93  
all docs

93  
docs citations

93  
times ranked

3535  
citing authors

#	ARTICLE	IF	CITATIONS
1	Organic Electrolytes for pH-Neutral Aqueous Organic Redox Flow Batteries. <i>Advanced Functional Materials</i> , 2022, 32, 2108777.	7.8	43
2	Degradation of electrochemical active compounds in aqueous organic redox flow batteries. <i>Current Opinion in Electrochemistry</i> , 2022, 32, 100895.	2.5	21
3	Bipolar membrane-assisted reverse electrodialysis for high power density energy conversion via acid-base neutralization. <i>Journal of Membrane Science</i> , 2022, 647, 120288.	4.1	19
4	èšç”µèš£èè”ç†fæ–™ç”µæ±ä,çš,,è”ãè°æç†œç”ç©¶è¿&å±•. <i>Chinese Science Bulletin</i> , 2022, , .	0.4	1
5	Designing Robust Two-Electron Storage Extended Bipyridinium Anolytes for pH-Neutral Aqueous Organic Redox Flow Batteries. <i>Jacs Au</i> , 2022, 2, 1214-1222.	3.6	18
6	Current Challenges and Perspectives of Polymer Electrolyte Membranes. <i>Macromolecules</i> , 2022, 55, 3773-3787.	2.2	45
7	An isoporous ion exchange membrane for selective Na <sup>+</sup> transport. <i>Journal of Membrane Science</i> , 2022, 659, 120805.	4.1	9
8	Highly conductive and vanadium sieving Microporous TrÃ¶ger's Base Membranes for vanadium redox flow battery. <i>Journal of Membrane Science</i> , 2021, 620, 118832.	4.1	48
9	Designer Ferrocene Catholyte for Aqueous Organic Flow Batteries. <i>ChemSusChem</i> , 2021, 14, 1295-1301.	3.6	45
10	Self-aggregating cationic-chains enable alkaline stable ion-conducting channels for anion-exchange membrane fuel cells. <i>Journal of Materials Chemistry A</i> , 2021, 9, 327-337.	5.2	116
11	Functioning Water-Insoluble Ferrocenes for Aqueous Organic Flow Battery via Host-Guest Inclusion. <i>ChemSusChem</i> , 2021, 14, 745-752.	3.6	37
12	Introducing a new generation of anion conducting membrane using swelling induced fabrication of covalent methanol barrier layer. <i>Journal of Membrane Science</i> , 2021, 620, 118840.	4.1	4
13	Ion Exchange Membrane â€œ<scp>ABC</scp>â€œ A Key Material for Upgrading Process Industries. <i>Chinese Journal of Chemistry</i> , 2021, 39, 825-837.	2.6	8
14	Biselective microporous TrÃ¶ger's base membrane for effective ion separation. <i>Journal of Membrane Science</i> , 2021, 627, 119246.	4.1	19
15	Eu-based anolytes for high-voltage and long-lifetime aqueous flow batteries. <i>Journal of Energy Chemistry</i> , 2021, 60, 368-375.	7.1	3
16	A highly stable aliphatic backbone from visible light-induced RAFT polymerization for anion exchange membranes. <i>Polymer Chemistry</i> , 2021, 12, 5574-5582.	1.9	4
17	Advances in Artificial Layers for Stable Lithium Metal Anodes. <i>Chemistry - A European Journal</i> , 2020, 26, 4193-4203.	1.7	36
18	Frontispiece: Advances in Artificial Layers for Stable Lithium Metal Anodes. <i>Chemistry - A European Journal</i> , 2020, 26, .	1.7	0

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19	Hydrophilic Microporous Polymer Membranes: Synthesis and Applications. ChemPlusChem, 2020, 85, 1893-1904.	1.3	18
20	Screening Viologen Derivatives for Neutral Aqueous Organic Redox Flow Batteries. ChemSusChem, 2020, 13, 2245-2249.	3.6	75
21	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
22	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
23	Highly Conductive and Water-Swelling Resistant Anion Exchange Membrane for Alkaline Fuel Cells. International Journal of Molecular Sciences, 2019, 20, 3470.	1.8	11
24	Biomimetic Nanocones that Enable High Ion Permselectivity. Angewandte Chemie, 2019, 131, 12776-12784.	1.6	20
25	Biomimetic Nanocones that Enable High Ion Permselectivity. Angewandte Chemie - International Edition, 2019, 58, 12646-12654.	7.2	47
26	Water-Dissociation-Assisted Electrolysis for Hydrogen Production in a Salinity Power Cell. ACS Sustainable Chemistry and Engineering, 2019, 7, 13023-13030.	3.2	21
27	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
28	Endowing $\text{C}_{3\text{N}_4}$ Membranes with Superior Permeability and Stability by Using Acid Spacers. Angewandte Chemie - International Edition, 2019, 58, 16463-16468.	7.2	85
29	Endowing $\text{C}_{3\text{N}_4}$ Membranes with Superior Permeability and Stability by Using Acid Spacers. Angewandte Chemie, 2019, 131, 16615-16620.	1.6	17
30	Ionomer Cross-Linking Immobilization of Catalyst Nanoparticles for High Performance Alkaline Membrane Fuel Cells. Chemistry of Materials, 2019, 31, 7812-7820.	3.2	57
31	Hydrophobic Side Chains Impart Anion Exchange Membranes with High Monovalent/Divalent Anion Selectivity in Electrodialysis. ACS Sustainable Chemistry and Engineering, 2019, 7, 4429-4442.	3.2	65
32	Poly(phenylene oxide)-Based Ion-Exchange Membranes for Aqueous Organic Redox Flow Battery. Industrial & Engineering Chemistry Research, 2019, 58, 10707-10712.	1.8	24
33	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
34	A Long-Lifetime All-Organic Aqueous Flow Battery Utilizing TMAP-TEMPO Radical. Chem, 2019, 5, 1861-1870.	5.8	196
35	<i>110th Anniversary</i> : Unleashing the Full Potential of Quinones for High Performance Aqueous Organic Flow Battery. Industrial & Engineering Chemistry Research, 2019, 58, 3994-3999.	1.8	25
36	Self-healing anion exchange membrane for pH 7 redox flow batteries. Chemical Engineering Science, 2019, 201, 167-174.	1.9	19

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37	Guiding the self-assembly of hyperbranched anion exchange membranes utilized in alkaline fuel cells. <i>Journal of Membrane Science</i> , 2019, 573, 595-601.	4.1	49
38	Hyperbranched Polystyrene Copolymer Makes Superior Anion Exchange Membrane. <i>ACS Applied Polymer Materials</i> , 2019, 1, 76-82.	2.0	28
39	Mathematical modelling and experimental investigation of CO <sub>2</sub> absorber recovery using an electro-acidification method. <i>Chemical Engineering Journal</i> , 2019, 360, 654-664.	6.6	17
40	Towards the gemini cation anion exchange membranes by nucleophilic substitution reaction. <i>Science China Materials</i> , 2019, 62, 973-981.	3.5	18
41	Tetrazole tethered polymers for alkaline anion exchange membranes. <i>Frontiers of Chemical Science and Engineering</i> , 2018, 12, 306-310.	2.3	11
42	Anion exchange membranes with branched ionic clusters for fuel cells. <i>Journal of Materials Chemistry A</i> , 2018, 6, 5993-5998.	5.2	70
43	Achieving high anion conductivity by densely grafting of ionic strings. <i>Journal of Membrane Science</i> , 2018, 559, 35-41.	4.1	38
44	Anion exchange membrane crosslinked in the easiest way stands out for fuel cells. <i>Journal of Power Sources</i> , 2018, 390, 234-241.	4.0	74
45	Flow Batteries: Alkaline Benzoquinone Aqueous Flow Battery for Large-Scale Storage of Electrical Energy ( <i>Adv. Energy Mater.</i> 8/2018). <i>Advanced Energy Materials</i> , 2018, 8, 1870034.	10.2	30
46	Recyclable cross-linked anion exchange membrane for alkaline fuel cell application. <i>Journal of Power Sources</i> , 2018, 375, 404-411.	4.0	53
47	Alkaline Benzoquinone Aqueous Flow Battery for Large-Scale Storage of Electrical Energy. <i>Advanced Energy Materials</i> , 2018, 8, 1702056.	10.2	161
48	Ion exchange membranes from poly(2,6-dimethyl-1,4-phenylene oxide) and related applications. <i>Science China Chemistry</i> , 2018, 61, 1062-1087.	4.2	19
49	Monovalent cations permselective membranes with zwitterionic side chains. <i>Journal of Membrane Science</i> , 2018, 563, 320-325.	4.1	48
50	Thermally triggered polyrotaxane translational motion helps proton transfer. <i>Nature Communications</i> , 2018, 9, 2297.	5.8	24
51	Anion Exchange Membrane Crosslinked In The Easiest Way Exhibits High Alkaline Stability. , 2018, , .		0
52	Development of novel PVA-QUDAP based anion exchange membranes for diffusion dialysis and theoretical analysis therein. <i>Separation and Purification Technology</i> , 2017, 178, 269-278.	3.9	47
53	Ion exchange membranes: New developments and applications. <i>Journal of Membrane Science</i> , 2017, 522, 267-291.	4.1	650
54	Alkaline Anion-Exchange Membranes Containing Mobile Ion Shuttles. <i>Advanced Materials</i> , 2016, 28, 3467-3472.	11.1	98

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55	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
56	Reclamation of Aniline Wastewater and CO <sub>2</sub> Capture Using Bipolar Membrane Electrodialysis. ACS Sustainable Chemistry and Engineering, 2016, 4, 5743-5751.	3.2	42
57	Enhancing acid recovery efficiency by implementing oligomer ionic bridge in the membrane matrix. Journal of Membrane Science, 2016, 518, 263-272.	4.1	12
58	Highly Conductive Anion Exchange Membranes from Microporous Träger's Base Polymers. Angewandte Chemie - International Edition, 2016, 55, 11499-11502.	7.2	206
59	Cationic metal-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
60	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
61	Highly Conductive Anion Exchange Membranes from Microporous Träger's Base Polymers. Angewandte Chemie, 2016, 128, 11671-11674.	1.6	47
62	Hyper-branched anion exchange membranes with high conductivity and chemical stability. Chemical Communications, 2016, 52, 10141-10143.	2.2	55
63	Wittig reaction constructed an alkaline stable anion exchange membrane. Journal of Membrane Science, 2016, 518, 282-288.	4.1	40
64	One-pot solvent-free synthesis of cross-linked anion exchange membranes for electrodialysis. Journal of Membrane Science, 2016, 515, 115-124.	4.1	43
65	Dual-cation comb-shaped anion exchange membranes: Structure, morphology and properties. Journal of Membrane Science, 2016, 515, 189-195.	4.1	72
66	Highly hydroxide conductive ionomers with fullerene functionalities. Chemical Communications, 2016, 52, 2788-2791.	2.2	25
67	Stability challenge in anion exchange membrane for fuel cells. Current Opinion in Chemical Engineering, 2016, 12, 22-30.	3.8	63
68	A mechanically robust anion exchange membrane with high hydroxide conductivity. Journal of Membrane Science, 2016, 504, 47-54.	4.1	92
69	Development of BPPPO-based anion exchange membranes for electrodialysis desalination applications. Desalination, 2016, 391, 61-68.	4.0	83
70	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
71	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
72	A Novel Methodology to Synthesize Highly Conductive Anion Exchange Membranes. Scientific Reports, 2015, 5, 13417.	1.6	74

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73	Highly Water Resistant Anion Exchange Membrane for Fuel Cells. <i>Macromolecular Rapid Communications</i> , 2015, 36, 1362-1367.	2.0	12
74	Click Chemistry Finds Its Way in Constructing an Ionic Highway in Anion-Exchange Membrane. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 28545-28553.	4.0	84
75	Sulfonated poly(2,6-dimethyl-1,4-phenyleneoxide)/nano silica hybrid membranes for alkali recovery via diffusion dialysis. <i>Separation and Purification Technology</i> , 2015, 141, 307-313.	3.9	31
76	Pilot-scale integrated membrane system for the treatment of acrylonitrile wastewater. <i>Desalination</i> , 2015, 357, 215-224.	4.0	17
77	Diffusion dialysis membranes with semi-interpenetrating network for acid recovery. <i>Journal of Membrane Science</i> , 2015, 493, 645-653.	4.1	57
78	The preparation and application of a low-cost multi-channel tubular inorganic-organic composite microfiltration membrane. <i>Separation and Purification Technology</i> , 2015, 151, 131-138.	3.9	13
79	A strategy to construct alkali-stable anion exchange membranes bearing ammonium groups via flexible spacers. <i>Journal of Materials Chemistry A</i> , 2015, 3, 15015-15019.	5.2	95
80	Novel quaternized aromatic amine based hybrid PVA membranes for acid recovery. <i>Journal of Membrane Science</i> , 2015, 490, 29-37.	4.1	68
81	Thermal crosslinking of an alkaline anion exchange membrane bearing unsaturated side chains. <i>Journal of Membrane Science</i> , 2015, 490, 1-8.	4.1	87
82	One-pot preparation of anion exchange membranes from bromomethylated poly(2,6-dimethyl-1,4-phenylene oxide) for electro dialysis. <i>Chemical Engineering Science</i> , 2015, 135, 526-531.	1.9	16
83	ZIF-8/PDMS mixed matrix membranes for propane/nitrogen mixture separation: Experimental result and permeation model validation. <i>Journal of Membrane Science</i> , 2015, 474, 103-113.	4.1	140
84	Improved thiophene solution selectivity by Cu <sup>2+</sup> , Pb <sup>2+</sup> and Mn <sup>2+</sup> ions in pervaporative poly[bis(p-methyl phenyl) phosphazene] desulfurization membrane. <i>Journal of Membrane Science</i> , 2014, 454, 463-469.	4.1	36
85	Facile and cost effective PVA based hybrid membrane fabrication for acid recovery. <i>Separation and Purification Technology</i> , 2014, 136, 250-257.	3.9	80
86	Enhancing FCC gasoline desulfurization performance in a polyphosphazene pervaporative membrane. <i>Separation and Purification Technology</i> , 2013, 109, 48-54.	3.9	22
87	Poly[bis(p-methyl phenyl) phosphazene] Pervaporative Membranes for Separating Organosulfur Compounds from n-Heptane and Its Surface Functionalization. <i>Industrial &amp; Engineering Chemistry Research</i> , 2013, 52, 13801-13809.	1.8	22
88	Preparation and characterization of PEG/PVDF composite membranes and effects of solvents on its pervaporation performance in heptane desulfurization. <i>Desalination and Water Treatment</i> , 2012, 46, 321-331.	1.0	8
89	Polyphosphazene membranes with phenoxyls for enhanced desulfurization. <i>RSC Advances</i> , 2012, 2, 11432.	1.7	17
90	Polyphosphazene membrane for desulfurization: Selecting poly[bis(trifluoroethoxy) phosphazene] for pervaporative removal of thiophene. <i>Separation and Purification Technology</i> , 2012, 93, 15-24.	3.9	34

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91	Waterborne polyurethane/poly(vinyl alcohol) membranes: Preparation, characterization, and potential application for pervaporation. Journal of Applied Polymer Science, 2012, 124, E216.	1.3	16
92	Ion Exchange Membranes for Pervaporation A Patents Review. Recent Patents on Chemical Engineering, 2011, 4, 161-169.	0.5	0