Anion-exchange membranes in electrochemical energy

Energy and Environmental Science
7, 3135-3191
DOI: 10.1039/c4ee01303d

Citation Report

#	Article	IF	Citations
1	International experts meet in Germany to discuss trends in anion exchange membranes. Fuel Cells Bulletin, 2014, 2014, 12-15.	0.7	1
2	Anion-exchange membranes in electrochemical energy systems. Energy and Environmental Science, 2014, 7, 3135-3191.	15.6	1,617
3	Water uptake profile in a model ion-exchange membrane: Conditions for water-rich channels. Journal of Chemical Physics, 2015, 142, 114906.	1.2	15
4	Highly Water Resistant Anion Exchange Membrane for Fuel Cells. Macromolecular Rapid Communications, 2015, 36, 1362-1367.	2.0	12
5	Toward an Active and Stable Catalyst for Oxygen Evolution in Acidic Media: Tiâ€Stabilized MnO₂. Advanced Energy Materials, 2015, 5, 1500991.	10.2	177
6	Nanostructured Ionâ€Exchange Membranes for Fuel Cells: Recent Advances and Perspectives. Advanced Materials, 2015, 27, 5280-5295.	11.1	335
7	Structureâ€“Property Relationships in Hydroxideâ€Exchange Membranes with Cation Strings and High Ionâ€Exchange Capacity. ChemSusChem, 2015, 8, 4229-4234.	3.6	85
8	Anionâ€Exchange Membranes for Fuel Cells: Synthesis Strategies, Properties and Perspectives. Fuel Cells, 2015, 15, 761-780.	1.5	83
9	Synthesis and characterization of benzimidazolium-functionalized polysulfones as anion-exchange membranes. Journal of Polymer Science Part A, 2015, 53, 2363-2373.	2.5	13
10	Recent Progress on Fe/N/C Electrocatalysts for the Oxygen Reduction Reaction in Fuel Cells. Catalysts, 2015, 5, 1167-1192.	1.6	68
11	Breath Figure Method for Construction of Honeycomb Films. Membranes, 2015, 5, 399-424.	1.4	62
12	Ruthenium-Alloy Electrocatalysts with Tunable Hydrogen Oxidation Kinetics in Alkaline Electrolyte. Journal of Physical Chemistry C, 2015, 119, 13481-13487.	1.5	104
13	A mini-review on anion exchange membranes forÂfuel cell applications: Stability issue and addressing strategies. International Journal of Hydrogen Energy, 2015, 40, 7348-7360.	3.8	260
14	Mechanical Performance of Polyisoprene Copolymer Anion Exchange Membranes by Varying Crosslinking Methods. Journal of the Electrochemical Society, 2015, 162, H206-H212.	1.3	9
15	Ceramic anion-exchange membranes based on microporous supports infiltrated with hydrated zirconium dioxide. RSC Advances, 2015, 5, 46348-46358.	1.7	29
16	The Effect of Carbonate and pH on Hydrogen Oxidation and Oxygen Reduction on Pt-Based Electrocatalysts in Alkaline Media. ECS Transactions, 2015, 69, 995-1005.	0.3	0
17	Alkaline Stability of Quaternary Ammonium Cations for Alkaline Fuel Cell Membranes and Ionic Liquids. ChemSusChem, 2015, 8, 513-523.	3.6	547
18	Stability and Activity of Pt/ITO Electrocatalyst for Oxygen Reduction Reaction in Alkaline Media. Electrochimica Acta, 2015, 157, 175-182.	2.6	38

#	Article	IF	Citations
19	Polysulfones with highly localized imidazolium groups for anion exchange membranes. Journal of Membrane Science, 2015, 481, 164-171.	4.1	84
20	Hydroxide based Benzyltrimethylammonium Degradation: Quantification of Rates and Degradation Technique Development. Journal of the Electrochemical Society, 2015, 162, F366-F372.	1.3	62
21	Surface charge enhanced carbon electrodes for stable and efficient capacitive deionization using inverted adsorptionâ€“desorption behavior. Energy and Environmental Science, 2015, 8, 897-909.	15.6	335
22	Graphene Oxideâ€“Polymer Nanocomposite Anion-Exchange Membranes. Journal of the Electrochemical Society, 2015, 162, F419-F426.	1.3	40
23	Poly(phenylene oxide) functionalized with quaternary ammonium groups via flexible alkyl spacers for high-performance anion exchange membranes. Journal of Materials Chemistry A, 2015, 3, 5280-5284.	5.2	247
24	Fabrication of spinel ferrite based alkaline anion exchange membrane water electrolysers for hydrogen production. RSC Advances, 2015, 5, 34100-34108.	1.7	53
25	Enhancement of hydroxide conductivity by grafting flexible pendant imidazolium groups into poly(arylene ether sulfone) as anion exchange membranes. Journal of Materials Chemistry A, 2015, 3, 18105-18114.	5.2	116
26	Polybenzimidazole-crosslinked poly(vinylbenzyl chloride) with quaternary 1,4-diazabicyclo (2.2.2) octane groups as high-performance anion exchange membrane for fuel cells. Journal of Power Sources, 2015, 296, 204-214.	4.0	97
27	An integrally thin skinned asymmetric architecture design for advanced anion exchange membranes for vanadium flow batteries. Journal of Materials Chemistry A, 2015, 3, 16948-16952.	5.2	59
28	Robust Hydroxide Ion Conducting Poly(biphenyl alkylene)s for Alkaline Fuel Cell Membranes. ACS Macro Letters, 2015, 4, 814-818.	2.3	267
29	Separators used in microbial electrochemical technologies: Current status and future prospects. Bioresource Technology, 2015, 195, 170-179.	4.8	124
30	Imidazolium Cations with Exceptional Alkaline Stability: A Systematic Study of Structureâ€“Stability Relationships. Journal of the American Chemical Society, 2015, 137, 8730-8737.	6.6	363
31	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
32	A review of radiation-grafted polymer electrolyte membranes for alkaline polymer electrolyte membrane fuel cells. Journal of Power Sources, 2015, 293, 946-975.	4.0	80
33	Sustainable synthesis of a high performance inter-polymer anion exchange membrane employing concentrated solar radiation in a crucial functionalization step. Journal of Membrane Science, 2015, 493, 373-381.	4.1	11
34	Mechanically Stable Poly(arylene ether) Anion Exchange Membranes Prepared from Commercially Available Polymers for Alkaline Electrochemical Devices. Journal of the Electrochemical Society, 2015, 162, F686-F693.	1.3	51
35	Optimizing Oxygen Reduction Catalyst Morphologies from First Principles. Journal of Physical Chemistry C, 2015, 119, 16804-16810.	1.5	16
36	Permethyl Cobaltocenium (Cp*2Co+) as an Ultra-Stable Cation for Polymer Hydroxide-Exchange Membranes. Scientific Reports, 2015, 5, 11668.	1.6	111

#	Article	IF	Citations
37	Correlating Hydrogen Oxidation/Evolution Reaction Activity with the Minority Weak Hydrogen-Binding Sites on Ir/C Catalysts. ACS Catalysis, 2015, 5, 4449-4455.	5.5	114
38	Anion exchange membranes (AEMs) based on poly(2,6-dimethyl-1,4-phenylene oxide) (PPO) and its derivatives. Polymer Chemistry, 2015, 6, 5809-5826.	1.9	119
39	Effect of cationic molecules on the oxygen reduction reaction on fuel cell grade Pt/C (20 wt%) catalyst in potassium hydroxide (aq, 1 mol dm^{â^'3}). Physical Chemistry Chemical Physics, 2015, 17, 12135-12145.	1.3	20
40	Highly stable anion exchange membranes based on quaternized polypropylene. Journal of Materials Chemistry A, 2015, 3, 12284-12296.	5.2	144
41	Thermal crosslinking of an alkaline anion exchange membrane bearing unsaturated side chains. Journal of Membrane Science, 2015, 490, 1-8.	4.1	87
42	Highly Stable Anion Exchange Membranes with Internal Crossâ€Linking Networks. Advanced Functional Materials, 2015, 25, 2583-2589.	7.8	114
43	A Semiâ€Interpenetrating Network Approach for Dimensionally Stabilizing Highlyâ€Charged Anion Exchange Membranes for Alkaline Fuel Cells. ChemSusChem, 2015, 8, 1472-1483.	3.6	40
44	Electrifying microbes for the production of chemicals. Frontiers in Microbiology, 2015, 6, 201.	1.5	157
45	Comb-shaped alkyl imidazolium-functionalized poly(arylene ether sulfone)s as high performance anion-exchange membranes. Journal of Materials Chemistry A, 2015, 3, 8571-8580.	5.2	88
46	Direct Methanol Anion Exchange Membrane Fuel Cell with a Non-Platinum Group Metal Cathode based on Iron-Aminoantipyrine Catalyst. Electrochimica Acta, 2015, 175, 202-208.	2.6	34
47	A review on recent developments of anion exchange membranes for fuel cells and redox flow batteries. RSC Advances, 2015, 5, 37206-37230.	1.7	209
48	Anisotropic radio-chemically pore-filled anion exchange membranes for solid alkaline fuel cell (SAFC). Journal of Membrane Science, 2015, 495, 206-215.	4.1	26
49	Pd/Ni Synergestic Activity for Hydrogen Oxidation Reaction in Alkaline Conditions. Electrochimica Acta, 2015, 176, 1074-1082.	2.6	56
50	Segregated Pt on Pd nanotubes for enhanced oxygen reduction activity in alkaline electrolyte. Chemical Communications, 2015, 51, 16633-16636.	2.2	17
51	Mechanically Tough and Chemically Stable Anion Exchange Membranes from Rigid-Flexible Semi-Interpenetrating Networks. Chemistry of Materials, 2015, 27, 6689-6698.	3.2	149
52	Integrated Production, Extraction, and Concentration of Acetic Acid from CO₂ through Microbial Electrosynthesis. Environmental Science and Technology Letters, 2015, 2, 325-328.	3.9	161
53	Stable Elastomeric Anion Exchange Membranes Based on Quaternary Ammonium-Tethered Polystyrene-b-poly(ethylene-co-butylene)-b-polystyrene Triblock Copolymers. Macromolecules, 2015, 48, 7085-7095.	2.2	198
54	A durable anion conducting membrane with packed anion-exchange sites and an aromatic backbone for solid-state alkaline fuel cells. Polymer Chemistry, 2015, 6, 7964-7973.	1.9	25

#	Article	IF	Citations
55	On the Effect of Cu on the Activity of Carbon Supported Ni Nanoparticles for Hydrogen Electrode Reactions in Alkaline Medium. Topics in Catalysis, 2015, 58, 1181-1192.	1.3	48
56	Synthesis and Alkaline Stability of Solubilized Anion Exchange Membrane Binders Based on Poly(phenylene oxide) Functionalized with Quaternary Ammonium Groups via a Hexyl Spacer. Journal of the Electrochemical Society, 2015, 162, F1236-F1242.	1.3	47
57	Interplay between solid state transitions, conductivity mechanisms, and electrical relaxations in a [PVBTMA] [Br]-b-PMB diblock copolymer membrane for electrochemical applications. Physical Chemistry Chemical Physics, 2015, 17, 31125-31139.	1.3	29
58	Reviewâ€"Recent Progress in Electrocatalysts for Oxygen Reduction Suitable for Alkaline Anion Exchange Membrane Fuel Cells. Journal of the Electrochemical Society, 2015, 162, F1504-F1539.	1.3	129
59	Modification of poly(aryl ether ketone) using imidazolium groups as both pendants and bridging joints for anion exchange membranes. European Polymer Journal, 2015, 73, 116-126.	2.6	58
60	Guanidinium based blend anion exchange membranes for direct methanol alkaline fuel cells (DMAFCs). Journal of Power Sources, 2015, 300, 95-103.	4.0	37
61	Electrospun nanofiber enhanced imidazolium-functionalized polysulfone composite anion exchange membranes. RSC Advances, 2015, 5, 95118-95125.	1.7	30
62	Interplay between water uptake, ion interactions, and conductivity in an e-beam grafted poly(ethylene-co-tetrafluoroethylene) anion exchange membrane. Physical Chemistry Chemical Physics, 2015, 17, 4367-4378.	1.3	83
63	Highly active carbon supported palladium-rhodium PdXRh/C catalysts for methanol electrooxidation in alkaline media and their performance in anion exchange direct methanol fuel cells (AEM-DMFCs). Electrochimica Acta, 2015, 176, 1191-1201.	2.6	68
64	Characterization and Chemical Stability of Anion Exchange Membranes Cross-Linked with Polar Electron-Donating Linkers. Journal of the Electrochemical Society, 2015, 162, F1047-F1055.	1.3	50
65	Platinum and Palladium Overlayers Dramatically Enhance the Activity of Ruthenium Nanotubes for Alkaline Hydrogen Oxidation. ACS Catalysis, 2015, 5, 7015-7023.	5.5	44
66	Influence of phenolphthalein groups on the structure and properties of poly(arylene ether sulfone) Tj ETQq1 1 0.784314 rgBT /Overlo	1.7	4
67	Gas Permeation through Nafion. Part 1: Measurements. Journal of Physical Chemistry C, 2015, 119, 25145-25155.	1.5	144
68	Nanohybrid membranes with hydroxide ion transport highways constructed from imidazolium-functionalized graphene oxide. RSC Advances, 2015, 5, 88736-88747.	1.7	19
69	In-situ crosslinking of anion exchange membrane bearing unsaturated moieties for electrodialysis. Separation and Purification Technology, 2015, 156, 226-233.	3.9	27
70	Oxygen Evolution Reaction Electrocatalysis on Transition Metal Oxides and (Oxy)hydroxides: Activity Trends and Design Principles. Chemistry of Materials, 2015, 27, 7549-7558.	3.2	944
71	Numerical and Experimental Analyses on Deviated Concentration Loss with Alkaline Anion-Exchange Membrane Fuel Cells. Journal of Physical Chemistry C, 2015, 119, 24276-24281.	1.5	22
72	Mechanism of Polysulfone-Based Anion Exchange Membranes Degradation in Vanadium Flow Battery. ACS Applied Materials & Interfaces, 2015, 7, 19446-19454.	4.0	123

#	Article	IF	Citations
73	UV irradiation-induced cross-linked bicarbonate anion exchange membranes based on vinylimidazolium-functionalized poly(arylene ether ketone). RSC Advances, 2015, 5, 57067-57075.	1.7	11
74	Exploring Different Cationic Alkyl Side Chain Designs for Enhanced Alkaline Stability and Hydroxide Ion Conductivity of Anion-Exchange Membranes. Macromolecules, 2015, 48, 5742-5751.	2.2	244
75	Anion exchange membranes composed of perfluoroalkylene chains and ammonium-functionalized oligophenylenes. Journal of Materials Chemistry A, 2015, 3, 21779-21788.	5.2	67
76	Blend membranes of quaternized poly(vinylbenzyl chloride-co-styrene) and quaternized polysulfone for anion-exchange membrane fuel cells. RSC Advances, 2015, 5, 99347-99355.	1.7	17
77	Aromatic Polymers Incorporating Bis-N-spirocyclic Quaternary Ammonium Moieties for Anion-Exchange Membranes. ACS Macro Letters, 2015, 4, 1370-1375.	2.3	80
78	Electrochemical/Mechanical Coupling in Ion-Conducting Soft Matter. Journal of Physical Chemistry Letters, 2015, 6, 4547-4552.	2.1	32
79	Hydrogen Oxidation and Evolution Reaction Kinetics on Carbon Supported Pt, Ir, Rh, and Pd Electrocatalysts in Acidic Media. Journal of the Electrochemical Society, 2015, 162, F190-F203.	1.3	412
80	Novel morpholinium-functionalized anion-exchange PBIâ€“polymer blends. Journal of Materials Chemistry A, 2015, 3, 1110-1120.	5.2	53
81	Ptâ€“Ru catalyzed hydrogen oxidation in alkaline media: oxophilic effect or electronic effect?. Energy and Environmental Science, 2015, 8, 177-181.	15.6	418
82	Reorientation of Magnetic Graphene Oxide Nanosheets in Crosslinked Quaternized Polyvinyl Alcohol as Effective Solid Electrolyte. Energies, 2016, 9, 1003.	1.6	15
83	Direct Alcohol Fuel Cells: Nanostructured Materials for the Electrooxidation of Alcohols in Alkaline Media. Nanostructure Science and Technology, 2016, , 477-516.	0.1	5
84	Covalently functionalized graphene oxide and quaternized polysulfone nanocomposite membranes for fuel cells. RSC Advances, 2016, 6, 71305-71310.	1.7	26
85	Mechanical properties of anion exchange membranes by combination of tensile stress-strain tests and dynamic mechanical analysis. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 1180-1187.	2.4	51
86	Configuring Anionâ€Exchange Membranes for High Conductivity and Alkaline Stability by Using Cationic Polymers with Tailored Side Chains. Macromolecular Chemistry and Physics, 2016, 217, 1108-1118.	1.1	82
87	The Control and Effect of Pore Size Distribution in AEMFC Catalyst Layers. Journal of the Electrochemical Society, 2016, 163, F353-F358.	1.3	60
88	Poly(phenylen) und mâ€Terphenyl als starke Schutzgruppen zur Herstellung von stabilen organischen Hydroxiden. Angewandte Chemie, 2016, 128, 4898-4902.	1.6	1
89	Anion conductive aromatic polymers containing fluorenyl groups: Effect of the position and number of ammonium groups. Journal of Polymer Science Part A, 2016, 54, 935-944.	2.5	23
90	Alkaline Anionâ€Exchange Membranes Containing Mobile Ion Shuttles. Advanced Materials, 2016, 28, 3467-3472.	11.1	98

#	Article	IF	Citations
91	Fe-carbon nitride â€œCore-shellâ€•electrocatalysts for the oxygen reduction reaction. Electrochimica Acta, 2016, 222, 1778-1791.	2.6	60
92	Self-cross-linked quaternary phosphonium based anion exchange membranes: assessing the influence of quaternary phosphonium groups on alkaline stability. RSC Advances, 2016, 6, 114329-114343.	1.7	16
93	Novel Processing of a Poly(phenyleneoxide) â˜’bâ€“Poly(vinylbenzyltrimethylammonium) Copolymer Anion Exchange Membrane; The Effect On Mechanical And Transport Properties. Electrochimica Acta, 2016, 222, 1545-1554.	2.6	2
94	High production of CH4 and H2 by reducing PET waste water using a non-diaphragm-based electrochemical method. Scientific Reports, 2016, 6, 20512.	1.6	3
95	Enhancement of ammonia oxidation activity over Y2O3-modified platinum surface: Promotion of NH2,ad dimerization process. Journal of Catalysis, 2016, 344, 496-506.	3.1	25
96	Understanding Transport at the Acid-Alkaline Interface of Bipolar Membranes. Journal of the Electrochemical Society, 2016, 163, F1572-F1587.	1.3	46
97	Activity targets for nanostructured platinum-group-metal-free catalysts in hydroxide exchange membrane fuel cells. Nature Nanotechnology, 2016, 11, 1020-1025.	15.6	282
98	Effect of alkaline exchange polymerized ionic liquid block copolymer ionomers on the kinetics of fuel cell half reactions. Journal of Electroanalytical Chemistry, 2016, 783, 182-187.	1.9	9
99	On the complex structural diffusion of proton holes in nanoconfined alkaline solutions within slit pores. Nature Communications, 2016, 7, 12625.	5.8	39
100	Ether cleavage-triggered degradation of benzyl alkylammonium cations for polyethersulfone anion exchange membranes. Physical Chemistry Chemical Physics, 2016, 18, 12009-12023.	1.3	98
101	Hexamethyl-p-terphenyl poly(benzimidazolium): a universal hydroxide-conducting polymer for energy conversion devices. Energy and Environmental Science, 2016, 9, 2130-2142.	15.6	213
102	General Models for the Electrochemical Hydrogen Oxidation and Hydrogen Evolution Reactions: Theoretical Derivation and Experimental Results under Near Mass-Transport Free Conditions. Journal of Physical Chemistry C, 2016, 120, 10721-10745.	1.5	136
103	Research advances in deriving renewable energy from biomass in wastewater treatment plants. RSC Advances, 2016, 6, 55903-55918.	1.7	11
104	Communicationâ€”Anion-Conductive Perfluoroheteroaromatic Composite Membranes: High Chemical Stability under Strong Alkaline Conditions. Journal of the Electrochemical Society, 2016, 163, F688-F690.	1.3	12
105	Membrane aeration as an energy-efficient method for supplying oxygen to microbial fuel cells. RSC Advances, 2016, 6, 49787-49791.	1.7	9
106	Constructing a rigid crosslinked structure for enhanced conductivity of imidazolium functionalized polysulfone hydroxide exchange membrane. International Journal of Hydrogen Energy, 2016, 41, 10923-10934.	3.8	36
107	Tri-quaternized poly (ether sulfone) anion exchange membranes with improved hydroxide conductivity. Journal of Membrane Science, 2016, 514, 613-621.	4.1	56
108	A surface-enhanced infrared absorption spectroscopic study of pH dependent water adsorption on Au. Surface Science, 2016, 650, 51-56.	0.8	38

#	Article	IF	Citations
109	Energy efficiency of platinum-free alkaline direct formate fuel cells. Applied Energy, 2016, 175, 479-487.	5.1	44
110	Development of a cross-linked quaternized poly(styrene-b-isobutylene-b-styrene)/graphene oxide composite anion exchange membrane for direct alkaline methanol fuel cell application. RSC Advances, 2016, 6, 52122-52130.	1.7	28
111	Trends in Catalysis and Catalyst Cost Effectiveness for N₂H₄ Fuel Cells and Sensors: a Rotating Disk Electrode (RDE) Study. Journal of Physical Chemistry C, 2016, 120, 4717-4738.	1.5	51
112	Mass transport aspects of electrochemical solar-hydrogen generation. Energy and Environmental Science, 2016, 9, 1533-1551.	15.6	81
113	Multi-block copolymers with fluorene-containing hydrophilic segments densely functionalized by side-chain quaternary ammonium groups as anion exchange membranes. RSC Advances, 2016, 6, 41453-41464.	1.7	13
114	Side-chain-type anion exchange membranes bearing pendent imidazolium-functionalized poly(phenylene) Tj ETQq1 1 0.784314 rgBT /O	4.1	73
115	Insights into the Impact of the Nafion Membrane Pretreatment Process on Vanadium Flow Battery Performance. ACS Applied Materials & Interfaces, 2016, 8, 12228-12238.	4.0	166
116	Photoelectrochemical Cell Design, Efficiency, Definitions, Standards, and Protocols. , 2016, , 163-197.		10
117	Systematic Alkaline Stability Study of Polymer Backbones for Anion Exchange Membrane Applications. Macromolecules, 2016, 49, 3361-3372.	2.2	287
118	Base tolerant polybenzimidazolium hydroxide membranes for solid alkaline-exchange membrane fuel cells. Journal of Membrane Science, 2016, 514, 398-406.	4.1	11
119	Electrocatalysts for hydrogen oxidation and evolution reactions. Science China Materials, 2016, 59, 217-238.	3.5	142
120	Alcohol electro-oxidation on platinumâ€“ceria/graphene nanosheet in alkaline solutions. International Journal of Hydrogen Energy, 2016, 41, 20709-20719.	3.8	46
121	Enhanced hydroxide conductivity of imidazolium functionalized polysulfone anion exchange membrane by doping imidazolium surface-functionalized nanocomposites. RSC Advances, 2016, 6, 58380-58386.	1.7	23
122	Recent progress in alkaline direct ethylene glycol fuel cells for sustainable energy production. Journal of Power Sources, 2016, 329, 484-501.	4.0	154
123	Imidazolium-Functionalized Poly(arylene ether sulfone) Anion-Exchange Membranes Densely Grafted with Flexible Side Chains for Fuel Cells. ACS Applied Materials & Interfaces, 2016, 8, 25279-25288.	4.0	140
124	Improved hydrogen oxidation reaction under alkaline conditions by rutheniumâ€“iridium alloyed nanoparticles. Journal of Materials Chemistry A, 2016, 4, 15980-15985.	5.2	86
125	Alkaline stable anion exchange membranes based on poly(phenylene-co-arylene ether ketone) backbones. Polymer Chemistry, 2016, 7, 5988-5995.	1.9	25
126	The evolution of hierarchical porosity in self-templated nitrogen-doped carbons and its effect on oxygen reduction electrocatalysis. RSC Advances, 2016, 6, 80398-80407.	1.7	46

#	Article	IF	Citations
127	Acidic or Alkaline? Towards a New Perspective on the Efficiency of Water Electrolysis. Journal of the Electrochemical Society, 2016, 163, F3197-F3208.	1.3	232
128	Side Chain Influence on the Mechanical Properties and Water Uptake of Confined Comb-Shaped Cationic Polymer Thin Films. Macromolecular Chemistry and Physics, 2016, 217, 2442-2451.	1.1	13
129	Recent progress in electrocatalysts with mesoporous structures for application in polymer electrolyte membrane fuel cells. Journal of Materials Chemistry A, 2016, 4, 16272-16287.	5.2	55
130	Combâ€Like Poly(Etherâ€Sulfone) Membranes Derived from Planar 6,12â€Diarylâ€5,11â€Dihydroindolo[3,2â€b]Carbazole Monomer for Alkaline Fuel Cells. Macromolecular Rapid Communications, 2016, 37, 1748-1753.	2.0	16
131	Anion conducting multiblock copolymer membranes with partial fluorination and long head-group tethers. Journal of Materials Chemistry A, 2016, 4, 16233-16244.	5.2	69
132	Anion exchange polymer coated graphite granule electrodes for improving the performance of anodes in unbuffered microbial fuel cells. Journal of Power Sources, 2016, 330, 211-218.	4.0	10
133	Alkaline Stability of Poly(Phenylene Oxide) Based Anion Exchange Membranes Containing Imidazolium Cations. Journal of the Electrochemical Society, 2016, 163, F824-F831.	1.3	25
134	Spirocyclic quaternary ammonium cations for alkaline anion exchange membrane applications: an experimental and theoretical study. RSC Advances, 2016, 6, 94387-94398.	1.7	43
135	Rapid prototyping of electrolyzer flow field plates. Energy and Environmental Science, 2016, 9, 3417-3423.	15.6	49
136	High performance aliphatic-heterocyclic benzyl-quaternary ammonium radiation-grafted anion-exchange membranes. Energy and Environmental Science, 2016, 9, 3724-3735.	15.6	215
137	A dual-electrolyte based air-breathing regenerative microfluidic fuel cell with 1.76 V open-circuit-voltage and 0.74 V water-splitting voltage. Nano Energy, 2016, 27, 619-626.	8.2	52
138	Highly Conductive Anionâ€Exchange Membranes from Microporous TrÃ¶ger's Base Polymers. Angewandte Chemie - International Edition, 2016, 55, 11499-11502.	7.2	206
139	Anion-conducting polysulfone membranes containing hexa-imidazolium functionalized biphenyl units. Journal of Membrane Science, 2016, 520, 425-433.	4.1	25
140	Composite Anion Exchange Membrane from Quaternized Polymer Spheres with Tunable and Enhanced Hydroxide Conduction Property. Industrial & Engineering Chemistry Research, 2016, 55, 9064-9076.	1.8	35
141	Highly charged hierarchically structured porous anion exchange membranes with excellent performance. Journal of Membrane Science, 2016, 515, 154-162.	4.1	28
142	Recent developments of carbon-based electrocatalysts for hydrogen evolution reaction. Nano Energy, 2016, 28, 29-43.	8.2	603
143	Side-chain-type anion exchange membranes bearing pendant quaternary ammonium groups via flexible spacers for fuel cells. Journal of Materials Chemistry A, 2016, 4, 13938-13948.	5.2	177
144	Anion exchange membranes with well-defined ion transporting nanochannels via self-assembly of polymerizable ionic liquids. Journal of Materials Chemistry A, 2016, 4, 13316-13323.	5.2	21

#	Article	IF	Citations
145	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
146	Facilitating Anion Transport in Polyolefin-Based Anion Exchange Membranes via Bulky Side Chains. ACS Applied Materials & Interfaces, 2016, 8, 23321-23330.	4.0	91
147	Effect of Surface Ion Conductivity of Anion Exchange Membranes on Fuel Cell Performance. Langmuir, 2016, 32, 9557-9565.	1.6	15
148	Performance Evaluation of a Platinumâ€Free Microscale Alkaline Direct Ethanol Fuel Cell Operating for Long Periods. Energy Technology, 2016, 4, 1119-1124.	1.8	5
149	Highly Conductive Anionâ€Exchange Membranes from Microporous TrÃ¶ger's Base Polymers. Angewandte Chemie, 2016, 128, 11671-11674.	1.6	47
150	Enhanced performance of anion exchange membranes via crosslinking of ion cluster regions for fuel cells. Journal of Power Sources, 2016, 327, 56-66.	4.0	50
151	A New Alkaliâ€Stable Phosphonium Cation Based on Fundamental Understanding of Degradation Mechanisms. ChemSusChem, 2016, 9, 2374-2379.	3.6	45
152	Reactive oxygen species accelerate degradation of anion exchange membranes based on polyphenylene oxide in alkaline environments. Physical Chemistry Chemical Physics, 2016, 18, 19705-19712.	1.3	59
153	The use of different types of reduced graphene oxide in the preparation of Fe-N-C electrocatalysts: capacitive behavior and oxygen reduction reaction activity in alkaline medium. Journal of Solid State Electrochemistry, 2016, 20, 3507-3523.	1.2	34
154	Hyper-branched anion exchange membranes with high conductivity and chemical stability. Chemical Communications, 2016, 52, 10141-10143.	2.2	55
155	Membrane Separators for Electrochemical Energy Storage Technologies. Nanostructure Science and Technology, 2016, , 417-462.	0.1	1
156	Exploring the Influence of the Nickel Oxide Species on the Kinetics of Hydrogen Electrode Reactions in Alkaline Media. Topics in Catalysis, 2016, 59, 1319-1331.	1.3	79
157	Methanol oxidation on PdRh/C electrocatalyst in alkaline media: Temperature and methanol concentration dependencies. Journal of Electroanalytical Chemistry, 2016, 776, 49-52.	1.9	13
158	A polybenzimidazole/graphite oxide based three layer membrane for intermediate temperature polymer electrolyte membrane fuel cells. RSC Advances, 2016, 6, 72224-72229.	1.7	13
159	Poly(2,6-dimethyl-1,4-phenylene oxide) containing imidazolium-terminated long side chains as hydroxide exchange membranes with improved conductivity. Journal of Membrane Science, 2016, 518, 159-167.	4.1	48
160	Improving the performances of Nafionâ„¢-based membranes for microbial fuel cells with silica-based, organically-functionalized mesostructured fillers. Journal of Power Sources, 2016, 334, 120-127.	4.0	45
161	An anion-conductive microporous membrane composed of a rigid ladder polymer with a spirobiindane backbone. Journal of Materials Chemistry A, 2016, 4, 17655-17659.	5.2	40
162	Heat treated carbon supported iron(<scp>ii</scp>)phthalocyanine oxygen reduction catalysts: elucidation of the structureâ€“activity relationship using X-ray absorption spectroscopy. Physical Chemistry Chemical Physics, 2016, 18, 33142-33151.	1.3	39

#	Article	IF	Citations
163	A Novel Cathode Architecture Using Ordered Pt Nanostructure Thin Film for AAEMFC Application. Electrochimica Acta, 2016, 220, 67-74.	2.6	5
164	Enhancing Cycling Stability of Aqueous Polyaniline Electrochemical Capacitors. ACS Applied Materials & Interfaces, 2016, 8, 29452-29460.	4.0	29
165	On the Design of a Comb-Shaped, Poly(phenylene oxide)-Based Anodic Binder for Anion-Exchange Membrane Direct Methanol Fuel Cell (AEM-DMFC). ECS Transactions, 2016, 75, 1041-1054.	0.3	0
166	Pore-filled anion-exchange membranes for electrochemical energy conversion applications. Electrochimica Acta, 2016, 222, 212-220.	2.6	24
167	Micro-total envelope system with silicon nanowire separator for safe carcinogenic chemistry. Nature Communications, 2016, 7, 10741.	5.8	26
168	Fabrication and electrolyte characterization of uniaxially-aligned anion conductive polymer nanofibers. Nanoscale, 2016, 8, 19614-19619.	2.8	12
169	Ion transport in microbial fuel cells: Key roles, theory and critical review. Applied Energy, 2016, 183, 1682-1704.	5.1	139
170	Zero gap alkaline electrolysis cell design for renewable energy storage as hydrogen gas. RSC Advances, 2016, 6, 100643-100651.	1.7	161
171	Anion-exchange membranes with polycationic alkyl side chains attached via spacer units. Journal of Materials Chemistry A, 2016, 4, 17138-17153.	5.2	81
172	Earth-Abundant Heterogeneous Water Oxidation Catalysts. Chemical Reviews, 2016, 116, 14120-14136.	23.0	1,259
173	A Pd/Câ€CeO₂ Anode Catalyst for Highâ€Performance Platinumâ€Free Anion Exchange Membrane Fuel Cells. Angewandte Chemie - International Edition, 2016, 55, 6004-6007.	7.2	199
174	Poly(phenylene) and mâ€Terphenyl as Powerful Protecting Groups for the Preparation of Stable Organic Hydroxides. Angewandte Chemie - International Edition, 2016, 55, 4818-4821.	7.2	95
175	Highly Selective Oxidation of Carbohydrates in an Efficient Electrochemical Energy Converter: Cogenerating Organic Electrosynthesis. ChemSusChem, 2016, 9, 252-263.	3.6	40
176	High hydroxide conductivity in a chemically stable crystalline metalâ€“organic framework containing a water-hydroxide supramolecular chain. Chemical Communications, 2016, 52, 8459-8462.	2.2	32
177	A Highly Hydroxide Conductive, Chemically Stable Anion Exchange Membrane, Poly(2,6 dimethyl 1,4) Tj ETQq0 0 0 rgBT /Overlock 10 Tf Journal of the Electrochemical Society, 2016, 163, H513-H520.	1.3	55
178	Bicarbonate and chloride anion transport in anion exchange membranes. Journal of Membrane Science, 2016, 514, 125-134.	4.1	60
179	Novel hydrophilic-hydrophobic block copolymer based on cardo poly(arylene ether sulfone)s with bis-quaternary ammonium moieties for anion exchange membranes. Journal of Membrane Science, 2016, 518, 31-39.	4.1	62
180	Electrospun nanofibre composite polymer electrolyte fuel cell and electrolysis membranes. Nano Energy, 2016, 26, 729-745.	8.2	128

#	Article	IF	Citations
181	Achieving Continuous Anion Transport Domains Using Block Copolymers Containing Phosphonium Cations. Macromolecules, 2016, 49, 4714-4722.	2.2	60
182	PERFORMANCE ASSESSMENT OF A POLYMER ELECTROLYTE MEMBRANE ELECTROCHEMICAL REACTOR UNDER ALKALINE CONDITIONS â" A CASE STUDY WITH THE ELECTROOXIDATION OF ALCOHOLS. Electrochimica Acta, 2016, 206, 165-175.	2.6	4
183	Preparation and investigation of various imidazolium-functionalized poly(2,6-dimethyl-1,4-phenylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.6	65
184	Preparation and characterization of hydroxyl ion-conducting interpenetrating polymer network based on PVA and PEI. Journal of Polymer Research, 2016, 23, 1.	1.2	7
185	Synthesis of perfluorinated ionomers and their anion exchange membranes. Journal of Membrane Science, 2016, 515, 268-276.	4.1	24
186	Reverse-Current Decay in Hydroxide Exchange Membrane Fuel Cells. Journal of the Electrochemical Society, 2016, 163, F377-F383.	1.3	20
187	Ethanol Electro-oxidation on Palladium Revisited Using Polarization Modulation Infrared Reflection Absorption Spectroscopy (PM-IRRAS) and Density Functional Theory (DFT): Why Is It Difficult To Break the Câ€"C Bond?. ACS Catalysis, 2016, 6, 4894-4906.	5.5	109
188	Alkali-stable and highly anion conducting poly(phenylene oxide)s carrying quaternary piperidinium cations. Journal of Materials Chemistry A, 2016, 4, 11924-11938.	5.2	126
189	A Pd/Câ€CeO₂ Anode Catalyst for Highâ€Performance Platinumâ€Free Anion Exchange Membrane Fuel Cells. Angewandte Chemie, 2016, 128, 6108-6111.	1.6	47
190	Metalâ€"Organic Frameworks Containing Missingâ€Linker Defects Leading to High Hydroxideâ€Ion Conductivity. Chemistry - A European Journal, 2016, 22, 1646-1651.	1.7	48
191	Hydroxide Solvation and Transport in Anion Exchange Membranes. Journal of the American Chemical Society, 2016, 138, 991-1000.	6.6	208
192	Fine-tuning the activity of oxygen evolution catalysts: The effect of oxidation pre-treatment on size-selected Ru nanoparticles. Catalysis Today, 2016, 262, 57-64.	2.2	27
193	A facile functionalized routine for the synthesis of imidazolium-based anion-exchange membrane with excellent alkaline stability. Journal of Membrane Science, 2016, 505, 138-147.	4.1	63
194	Charge transport in the electrospun nanofiber composite membrane's three-dimensional fibrous structure. Journal of Power Sources, 2016, 307, 538-551.	4.0	6
195	Model-based analysis of water management at anode of alkaline direct methanol fuel cells. Chemical Engineering Science, 2016, 143, 181-193.	1.9	14
196	Microbial electrolysis cells: An emerging technology for wastewater treatment and energy recovery. From laboratory to pilot plant and beyond. Renewable and Sustainable Energy Reviews, 2016, 55, 942-956.	8.2	234
197	Palladium/nickel bifunctional electrocatalyst for hydrogen oxidation reaction in alkaline membrane fuel cell. Journal of Power Sources, 2016, 304, 332-339.	4.0	137
198	Investigation of Size Effect of Ag Nanoparticles on Oxygen Reduction Reaction Using Ag/Co/C Catalysts Prepared by Galvanic Deposition Method. Catalysis Letters, 2016, 146, 22-27.	1.4	2

#	Article	IF	Citations
199	Imidazolium-based anion exchange membranes for alkaline anion fuel cells: elucidation of the morphology and the interplay between the morphology and properties. Soft Matter, 2016, 12, 1567-1578.	1.2	26
200	Phenolate anion-based branched/cross-linked poly (arylene ether sulfone) hydroxide exchange membranes. International Journal of Hydrogen Energy, 2016, 41, 5765-5775.	3.8	19
201	Imidazolium functionalized poly(vinyl chloride-co-vinyl acetate)-based anion exchange membrane. International Journal of Hydrogen Energy, 2016, 41, 5776-5782.	3.8	17
202	Novel anion-conducting interpenetrating polymer network of quaternized polysulfone and poly(vinylÂalcohol) for alkaline fuel cells. International Journal of Hydrogen Energy, 2016, 41, 5816-5823.	3.8	37
203	A comparative study of Nafion series membranes for vanadium redox flow batteries. Journal of Membrane Science, 2016, 510, 18-26.	4.1	384
204	Quaternary ammonium bearing hyper-crosslinked polymer encapsulation on Fe₃O₄ nanoparticles. RSC Advances, 2016, 6, 21317-21325.	1.7	21
205	The Effect of Carbonate and pH on Hydrogen Oxidation and Oxygen Reduction on Pt-Based Electrocatalysts in Alkaline Media. Journal of the Electrochemical Society, 2016, 163, F291-F295.	1.3	11
206	Interfacial effects on the catalysis of the hydrogen evolution, oxygen evolution and CO2-reduction reactions for (co-)electrolyzer development. Nano Energy, 2016, 29, 4-28.	8.2	104
207	Crosslinking of comb-shaped polymer anion exchange membranes via thiolâ€“ene click chemistry. Polymer Chemistry, 2016, 7, 2464-2475.	1.9	131
208	Stability challenge in anion exchange membrane for fuel cells. Current Opinion in Chemical Engineering, 2016, 12, 22-30.	3.8	63
209	Selective CoSe 2 /C cathode catalyst for passive air-breathing alkaline anion exchange membrane Î¼-direct methanol fuel cell (AEM-Î¼DMFC). International Journal of Hydrogen Energy, 2016, 41, 19595-19600.	3.8	17
210	Varying the microphase separation patterns of alkaline polymer electrolytes. Journal of Materials Chemistry A, 2016, 4, 4071-4081.	5.2	61
211	N-Arylation of Tertiary Amines under Mild Conditions. Organic Letters, 2016, 18, 980-983.	2.4	42
212	Alkyl bisimidazolium-mediated crosslinked comb-shaped polymers as highly conductive and stable anion exchange membranes. RSC Advances, 2016, 6, 16168-16176.	1.7	18
213	Highly stable poly(ethylene glycol)-grafted alkaline anion exchange membranes. Journal of Materials Chemistry A, 2016, 4, 3886-3892.	5.2	60
214	Tetrakis(dialkylamino)phosphonium Polyelectrolytes Prepared by Reversible Additionâ€“Fragmentation Chain Transfer Polymerization. ACS Macro Letters, 2016, 5, 253-257.	2.3	44
215	Anion exchange membranes composed of a poly(2,6-dimethyl-1,4-phenylene oxide) random copolymer functionalized with a bulky phosphonium cation. Journal of Membrane Science, 2016, 506, 50-59.	4.1	67
216	Multication Side Chain Anion Exchange Membranes. Macromolecules, 2016, 49, 815-824.	2.2	303

#	Article	IF	Citations
217	Comb-shaped phenolphthalein-based poly(ether sulfone)s as anion exchange membranes for alkaline fuel cells. RSC Advances, 2016, 6, 17269-17279.	1.7	24
218	Nanocomposite membranes modified by graphene-based materials for anion exchange membrane fuel cells. RSC Advances, 2016, 6, 13618-13625.	1.7	49
219	Alkaline anion exchange membranes based on KOH-treated multilayer graphene oxide. Journal of Membrane Science, 2016, 508, 51-61.	4.1	69
220	Azide-assisted self-crosslinking of highly ion conductive anion exchange membranes. Journal of Membrane Science, 2016, 509, 48-56.	4.1	68
221	1,2,3-Triazolium-Based Poly(2,6-Dimethyl Phenylene Oxide) Copolymers as Anion Exchange Membranes. ACS Applied Materials & Interfaces, 2016, 8, 4651-4660.	4.0	111
222	Photo-Cross-Linked Anion Exchange Membranes with Improved Water Management and Conductivity. Macromolecules, 2016, 49, 153-161.	2.2	68
223	Perpendicularly Aligned, Anion Conducting Nanochannels in Block Copolymer Electrolyte Films. Chemistry of Materials, 2016, 28, 1377-1389.	3.2	45
224	Side-chain-type phenolphthalein-based poly(arylene ether sulfone nitrile)s anion exchange membrane for fuel cells. Journal of Membrane Science, 2016, 502, 94-105.	4.1	38
225	A recast Nafion/graphene oxide composite membrane for advanced vanadium redox flow batteries. RSC Advances, 2016, 6, 3756-3763.	1.7	90
226	Crosslinked poly(phenylene oxide)-based nanofiber composite membranes for alkaline fuel cells. Journal of Materials Chemistry A, 2016, 4, 132-141.	5.2	81
227	Charge-Transfer Effects in Niâ€“Fe and Niâ€“Feâ€“Co Mixed-Metal Oxides for the Alkaline Oxygen Evolution Reaction. ACS Catalysis, 2016, 6, 155-161.	5.5	413
228	Measurement of water uptake in thin-film Nafion and anion alkaline exchange membranes using the quartz crystal microbalance. Journal of Membrane Science, 2016, 497, 229-238.	4.1	32
229	Anion exchange membranes based on tetra-quaternized poly(arylene ether ketone). Journal of Membrane Science, 2016, 497, 318-327.	4.1	55
230	Effect of hydration on the mechanical properties and ion conduction in a polyethylene-b-poly(vinylbenzyl trimethylammonium) anion exchange membrane. Journal of Membrane Science, 2016, 497, 67-76.	4.1	51
231	N- and S-doped mesoporous carbon as metal-free cathode catalysts for direct biorenewable alcohol fuel cells. Journal of Materials Chemistry A, 2016, 4, 83-95.	5.2	101
232	Tuning the performance of anion exchange membranes by embedding multifunctional nanotubes into a polymer matrix. Journal of Membrane Science, 2016, 498, 242-253.	4.1	68
233	Anion exchange membrane water electrolyzer with an ultra-low loading of Pt-decorated Ni electrocatalyst. Applied Catalysis B: Environmental, 2016, 180, 674-679.	10.8	47
234	Understanding Anion, Water, and Methanol Transport in a Polyethylene-b-poly(vinylbenzyl) Tj ETQq1 1 0.784314 rgBT /Overlo of Physical Chemistry C, 2017, 121, 2035-2045.	1.5	22

#	Article	IF	Citations
235	Improved electrical power production of thermally regenerative batteries using a poly(phenylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 7	4.0	60
236	Highly active nanostructured palladium-ceria electrocatalysts for the hydrogen oxidation reaction in alkaline medium. Nano Energy, 2017, 33, 293-305.	8.2	147
237	In situ construction of interconnected ion transfer channels in anion-exchange membranes for fuel cell application. Journal of Materials Chemistry A, 2017, 5, 4003-4010.	5.2	36
238	Comb-shaped guanidinium functionalized poly(ether sulfone)s for anion exchange membranes: Effects of the spacer types and lengths. Journal of Polymer Science Part A, 2017, 55, 1313-1321.	2.5	48
239	Fe-N/C catalysts for oxygen reduction reaction supported on different carbonaceous materials. Performance in acidic and alkaline direct alcohol fuel cells. Applied Catalysis B: Environmental, 2017, 205, 637-653.	10.8	115
240	Direct glycerol fuel cell with polytetrafluoroethylene (PTFE) thin film separator. Renewable Energy, 2017, 105, 647-655.	4.3	65
241	South African hydrogen infrastructure (HySA infrastructure) for fuel cells and energy storage: Overview of a projects portfolio. International Journal of Hydrogen Energy, 2017, 42, 13568-13588.	3.8	46
242	Towards a stable ion-solvating polymer electrolyte for advanced alkaline water electrolysis. Journal of Materials Chemistry A, 2017, 5, 5055-5066.	5.2	63
243	Carbonate Dynamics and Opportunities With Low Temperature, Anion Exchange Membrane-Based Electrochemical Carbon Dioxide Separators. Journal of Electrochemical Energy Conversion and Storage, 2017, 14, .	1.1	25
244	Unlocking the capacity of iodide for high-energy-density zinc/polyiodide and lithium/polyiodide redox flow batteries. Energy and Environmental Science, 2017, 10, 735-741.	15.6	225
245	Adamantammonium as a novel functional group for anion exchange membranes with excellent comprehensive performances. Polymer, 2017, 112, 288-296.	1.8	15
246	Improvement in the solid-state alkaline fuel cell performance through efficient water management strategies. Journal of Power Sources, 2017, 345, 221-226.	4.0	45
247	Ionic crosslinking of imidazolium functionalized poly(aryl ether ketone) by sulfonated poly(ether) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2 333-342.	5.0	51
248	Alkaline anion exchange membrane degradation as a function of humidity measured using the quartz crystal microbalance. International Journal of Hydrogen Energy, 2017, 42, 6243-6249.	3.8	13
249	Oneâ€Pot Synthesis of Chloromethylated Mesoporous Silica Nanoparticles as Multifunctional Fillers in Hybrid Anion Exchange Membranes. Chinese Journal of Chemistry, 2017, 35, 673-680.	2.6	4
250	A novel strategy for constructing a highly conductive and swelling-resistant semi-flexible aromatic polymer based anion exchange membranes. International Journal of Hydrogen Energy, 2017, 42, 10228-10237.	3.8	15
251	Optimization of synthesis of the nickel-cobalt oxide based anode electrocatalyst and of the related membrane-electrode assembly for alkaline water electrolysis. Journal of Power Sources, 2017, 347, 247-258.	4.0	48
252	Polystyrene-Block-Poly(ethylene-ran-butylene)-Block-Polystyrene Triblock Copolymer Separators for a Vanadium-Cerium Redox Flow Battery. Journal of the Electrochemical Society, 2017, 164, F372-F378.	1.3	27

#	Article	IF	Citations
253	Hydrocarbon-Based Polymer Electrolyte Membranes: Importance of Morphology on Ion Transport and Membrane Stability. Chemical Reviews, 2017, 117, 4759-4805.	23.0	732
254	A general strategy to enhance the alkaline stability of anion exchange membranes. Journal of Materials Chemistry A, 2017, 5, 6318-6327.	5.2	55
255	Unusually Flexible Indium(III) Metalâ€“Organic Polyhedra Materials for Detecting Trace Amounts of Water in Organic Solvents and High Proton Conductivity. Inorganic Chemistry, 2017, 56, 3429-3439.	1.9	31
256	Evaluation of reduced-graphene-oxide-supported gold nanoparticles as catalytic system for electroreduction of oxygen in alkaline electrolyte. Electrochimica Acta, 2017, 233, 113-122.	2.6	35
257	Hybrid triazolium and ammonium ions-contained hyperbranched polymer with enhanced ionic conductivity. Polymer, 2017, 112, 297-305.	1.8	9
258	N-Spirocyclic Quaternary Ammonium Ionenes for Anion-Exchange Membranes. Journal of the American Chemical Society, 2017, 139, 2888-2891.	6.6	231
259	Research Progress in Frontiers of Poly(Ionic Liquid)s: A Review. Polymer-Plastics Technology and Engineering, 2017, 56, 1823-1838.	1.9	43
260	Adsorption of polyelectrolyte multilayers imparts high monovalent/divalent cation selectivity to aliphatic polyamide cation-exchange membranes. Journal of Membrane Science, 2017, 537, 177-185.	4.1	45
261	Synthesis of novel guanidinium-based anion-exchange membranes with controlled microblock structures. Journal of Membrane Science, 2017, 537, 151-159.	4.1	80
262	Prospects of fuel cell technologies. National Science Review, 2017, 4, 163-166.	4.6	238
263	Cross-linked poly(arylene ether sulfone)s with side-chain aromatic benzyltrimethyl ammonium for anion-exchange membranes. Polymer Bulletin, 2017, 74, 4329-4348.	1.7	3
264	Effect of Water on the Stability of Quaternary Ammonium Groups for Anion Exchange Membrane Fuel Cell Applications. Chemistry of Materials, 2017, 29, 4425-4431.	3.2	282
265	UV-crosslinking of polystyrene anion exchange membranes by azidated macromolecular crosslinker for alkaline fuel cells. Journal of Membrane Science, 2017, 535, 322-330.	4.1	60
266	Self-crosslinking of comb-shaped polystyrene anion exchange membranes for alkaline fuel cell application. Journal of Membrane Science, 2017, 536, 133-140.	4.1	67
267	Hydroxide-ion transport and stability of diblock copolymers with a polydiallyldimethyl ammonium hydroxide block. Journal of Polymer Science Part A, 2017, 55, 2243-2248.	2.5	8
268	Enhancing Hydroxide Conductivity and Stability of Anion Exchange Membrane by Blending Quaternary Ammonium Functionalized Polymers. Electrochimica Acta, 2017, 240, 486-494.	2.6	44
269	Highly conductive and durable poly(arylene ether sulfone) anion exchange membrane with end-group cross-linking. Energy and Environmental Science, 2017, 10, 275-285.	15.6	255
270	Click mediated high-performance anion exchange membranes with improved water uptake. Journal of Materials Chemistry A, 2017, 5, 1022-1027.	5.2	39

#	Article	IF	Citations
271	A novel cathode architecture using Cu nanoneedle arrays as the cathode support for AAEMFC application. Journal of Materials Chemistry A, 2017, 5, 14794-14800.	5.2	5
272	Development of acid block anion exchange membrane by structure design and its possible application in waste acid recovery. Separation and Purification Technology, 2017, 186, 188-196.	3.9	32
273	Facile synthesis and the properties of novel cardo poly(arylene ether sulfone)s with pendent cycloaminium side chains as anion exchange membranes. Polymer Chemistry, 2017, 8, 4207-4219.	1.9	45
274	Cationic Side-Chain Attachment to Poly(Phenylene Oxide) Backbones for Chemically Stable and Conductive Anion Exchange Membranes. Chemistry of Materials, 2017, 29, 5321-5330.	3.2	133
276	Synthesis and properties of poly(arylene ether sulfone) anion exchange membranes with pendant benzyl-quaternary ammonium groups. Polymer, 2017, 121, 137-148.	1.8	21
277	Parameterization of a coarse-grained model with short-ranged interactions for modeling fuel cell membranes with controlled water uptake. Physical Chemistry Chemical Physics, 2017, 19, 17698-17707.	1.3	20
278	Synthesis and properties of quaternized polyolefins with bulky poly(4-phenyl-1-butene) moieties as anion exchange membranes. Journal of Membrane Science, 2017, 541, 244-252.	4.1	43
279	Preparation and characterization of click-driven N-vinylcarbazole-based anion exchange membranes with improved water uptake for fuel cells. RSC Advances, 2017, 7, 29794-29805.	1.7	18
280	Synthesis and characterization of anion exchange multi-block copolymer membranes with a fluorine moiety as alkaline membrane fuel cells. Journal of Power Sources, 2017, 359, 568-576.	4.0	48
281	Communicationâ€"Acid-Treated Nickel-Rich Platinumâ€"Nickel Alloys for Oxygen Reduction and Methanol Oxidation Reactions in Alkaline Media. Journal of the Electrochemical Society, 2017, 164, F858-F860.	1.3	8
282	Crosslinked side-chain-type anion exchange membranes with enhanced conductivity and dimensional stability. Journal of Membrane Science, 2017, 539, 24-33.	4.1	85
283	Imidazolium-functionalized anion exchange membranes using poly(ether sulfone)s as macrocrosslinkers for fuel cells. RSC Advances, 2017, 7, 27342-27353.	1.7	24
284	High Hydroxide Ion Conductivity with Enhanced Alkaline Stability of Partially Fluorinated and Quaternized Aromatic Copolymers as Anion Exchange Membranes. Macromolecules, 2017, 50, 4256-4266.	2.2	110
285	Dimensionally stable hexamethylenetetramine functionalized polysulfone anion exchange membranes. Journal of Materials Chemistry A, 2017, 5, 15038-15047.	5.2	47
286	Poly(arylene ether sulfone) bearing multiple benzyl-type quaternary ammonium pendants: preparation, stability and conductivity. RSC Advances, 2017, 7, 30770-30783.	1.7	8
287	Improvement of alkaline stability for hydroxide exchange membranes by the interactions between strongly polar nitrile groups and functional cations. Journal of Membrane Science, 2017, 533, 121-129.	4.1	23
288	Elastic Long-Chain Multication Cross-Linked Anion Exchange Membranes. Macromolecules, 2017, 50, 3323-3332.	2.2	159
289	Niâ˜Zn Alloy Nanosheets Arrayed on Nickel Foamas a Promising Catalyst for Electrooxidation of Hydrazine. ChemElectroChem, 2017, 4, 1944-1949.	1.7	38

#	Article	IF	Citations
290	A comb-like ionomer based on poly(2,6-dimethyl-1,4-phenylene oxide) for the use as anodic binder in anion-exchange membrane direct methanol fuel cells. Solid State Ionics, 2017, 303, 1-11.	1.3	7
291	Stability of carbon-supported palladium nanoparticles in alkaline media: A case study of graphitized and more amorphous supports. Electrochemistry Communications, 2017, 78, 33-37.	2.3	24
292	Development of efficient membrane electrode assembly for low cost hydrogen production by anion exchange membrane electrolysis. International Journal of Hydrogen Energy, 2017, 42, 10752-10761.	3.8	148
293	High performance anion exchange ionomer for anion exchange membrane fuel cells. RSC Advances, 2017, 7, 19153-19161.	1.7	61
294	Poly(N,N-diallylazacycloalkane)s for Anion-Exchange Membranes Functionalized with N-Spirocyclic Quaternary Ammonium Cations. Macromolecules, 2017, 50, 2784-2793.	2.2	119
295	Mechanism Exploration of Ion Transport in Nanocomposite Cation Exchange Membranes. ACS Applied Materials & Interfaces, 2017, 9, 13491-13499.	4.0	31
296	Low-Temperature and Gram-Scale Synthesis of Two-Dimensional Feâ€“Nâ€“C Carbon Sheets for Robust Electrochemical Oxygen Reduction Reaction. Chemistry of Materials, 2017, 29, 2890-2898.	3.2	55
297	Synthesis of midblock-quaternized triblock copolystyrenes as highly conductive and alkaline-stable anion-exchange membranes. Polymer Chemistry, 2017, 8, 2074-2086.	1.9	51
298	Ion transport properties of mechanically stable symmetric ABCBA pentablock copolymers with quaternary ammonium functionalized midblock. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 612-622.	2.4	21
299	Alternative preparative route for efficient and stable anion-exchange membrane for water desalination by electrodialysis. Desalination, 2017, 413, 101-108.	4.0	34
300	Investigating the Influences of the Adsorbed Species on Catalytic Activity for Hydrogen Oxidation Reaction in Alkaline Electrolyte. Journal of the American Chemical Society, 2017, 139, 5156-5163.	6.6	243
301	Cobaltocenium-containing polybenzimidazole polymers for alkaline anion exchange membrane applications. Polymer Chemistry, 2017, 8, 1381-1392.	1.9	95
302	Hybrid RED/ED system: Simultaneous osmotic energy recovery and desalination of high-salinity wastewater. Desalination, 2017, 405, 59-67.	4.0	52
303	Transport phenomena in alkaline direct ethanol fuel cells for sustainable energy production. Journal of Power Sources, 2017, 341, 199-211.	4.0	103
304	Novel quaternary ammonium microblock poly (p-phenylene-co-aryl ether ketone)s as anion exchange membranes for alkaline fuel cells. Journal of Power Sources, 2017, 342, 605-615.	4.0	70
305	Degradation of radiation grafted hydroxide anion exchange membrane immersed in neutral pH: removal of vinylbenzyl trimethylammonium hydroxide due to oxidation. Journal of Materials Chemistry A, 2017, 5, 1248-1267.	5.2	60
306	An Aza-Fused Ï€-Conjugated Microporous Framework Catalyzes the Production of Hydrogen Peroxide. ACS Catalysis, 2017, 7, 1015-1024.	5.5	83
307	Energy and fuels from electrochemical interfaces. Nature Materials, 2017, 16, 57-69.	13.3	1,484

#	Article	IF	Citations
308	The facile construction of an anion exchange membrane with 3D interconnected ionic nano-channels. Chemical Communications, 2017, 53, 767-770.	2.2	14
309	A mechanically strong and tough anion exchange membrane engineered with non-covalent modalities. Chemical Communications, 2017, 53, 12369-12372.	2.2	28
310	Thermoplastic interpenetrating polymer networks based on polybenzimidazole and poly (1,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 662 T	2.6	33
311	A novel bioelectrochemical system for chemical-free permanent treatment of acid mine drainage. Water Research, 2017, 126, 411-420.	5.3	60
312	A comparative study of anion-exchange membranes tethered with different hetero-cycloaliphatic quaternary ammonium hydroxides. Journal of Materials Chemistry A, 2017, 5, 21965-21978.	5.2	129
313	Coffee Waste-Derived Hierarchical Porous Carbon as a Highly Active and Durable Electrocatalyst for Electrochemical Energy Applications. ACS Applied Materials & Interfaces, 2017, 9, 41303-41313.	4.0	74
314	The first anion-exchange membrane fuel cell to exceed 1 W cm^{â˜'2} at 70 Â°C with a non-Pt-group (O₂) cathode. Chemical Communications, 2017, 53, 11771-11773.	2.2	70
315	Rapid Analysis of Tetrakis(dialkylamino)phosphonium Stability in Alkaline Media. Organometallics, 2017, 36, 4038-4046.	1.1	30
316	Ionic Processes in Water Electrolysis: The Role of Ion-Selective Membranes. ACS Energy Letters, 2017, 2, 2625-2634.	8.8	68
317	Benzene Adsorption: A Significant Inhibitor for the Hydrogen Oxidation Reaction in Alkaline Conditions. Journal of Physical Chemistry Letters, 2017, 8, 4918-4924.	2.1	55
318	Anion Exchange Membranes Based on Polystyrene-Block-Poly(ethylene-ran-butylene)-Block-Polystyrene Triblock Copolymers: Cation Stability and Fuel Cell Performance. Journal of the Electrochemical Society, 2017, 164, F1216-F1225.	1.3	29
319	Vapor-fed solar hydrogen production exceeding 15% efficiency using earth abundant catalysts and anion exchange membrane. Sustainable Energy and Fuels, 2017, 1, 2061-2065.	2.5	37
320	Vanadium trioxide@carbon nanosheet array-based ultrathin flexible symmetric hydrogel supercapacitors with 2ÂV voltage and high volumetric energy density. Journal of Materials Chemistry A, 2017, 5, 22216-22223.	5.2	30
321	Highly active and durable Pd-Cu catalysts for oxygen reduction in alkaline exchange membrane fuel cells. Frontiers in Energy, 2017, 11, 299-309.	1.2	37
322	A Raman spectro-microscopic investigation of ETFE-based radiation-grafted anion-exchange membranes. RSC Advances, 2017, 7, 47726-47737.	1.7	18
323	Imidazolium-based anion exchange membranes for alkaline anion fuel cells: (2) elucidation of the ionic structure and its impact on conducting properties. Soft Matter, 2017, 13, 8463-8473.	1.2	16
324	Non-fluorinated pre-irradiation-grafted (peroxidated) LDPE-based anion-exchange membranes with high performance and stability. Energy and Environmental Science, 2017, 10, 2154-2167.	15.6	159
325	Synthesis and characterization of anion-exchange membranes based on hydrogenated poly(norbornene). Polymer Chemistry, 2017, 8, 5708-5717.	1.9	33

#	Article	IF	Citations
326	Poly(ether sulfone) copolymers containing densely quaternized oligo(2, 6-dimethyl-1, 4-phenylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.8	4
327	Copolymers Composed of Perfluoroalkyl and Ammonium-Functionalized Fluorenyl Groups as Chemically Stable Anion Exchange Membranes. Bulletin of the Chemical Society of Japan, 2017, 90, 1088-1094.	2.0	8
328	Alkaline anion exchange membrane fuel cells for cogeneration of electricity and valuable chemicals. Journal of Power Sources, 2017, 365, 430-445.	4.0	94
329	Understanding the structure and reactivity of NiCu nanoparticles: an atomistic model. Physical Chemistry Chemical Physics, 2017, 19, 26812-26820.	1.3	14
330	Cationic Polyelectrolytes, Stable in 10 M KOH_{aq} at 100 Â°C. ACS Macro Letters, 2017, 6, 1089-1093.	2.3	140
331	Electrocatalytic Water Oxidation by MnO_x/C: In Situ Catalyst Formation, Carbon Substrate Variations, and Direct O₂/CO₂ Monitoring by Membraneâ€Inlet Mass Spectrometry. ChemSusChem, 2017, 10, 4491-4502.	3.6	26
332	Triblock copolymer anion exchange membranes bearing alkyl-tethered cycloaliphatic quaternary ammonium-head-groups for fuel cells. Journal of Power Sources, 2017, 365, 282-292.	4.0	64
333	Chemical modification and structural rearrangements of polyketoneâ€based polymer membrane. Journal of Applied Polymer Science, 2017, 134, 45485.	1.3	17
334	DABCO-functionalized polysulfones as anion-exchange membranes for fuel cell applications: Effect of crosslinking. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 1326-1336.	2.4	37
335	Quaternized triblock polymer anion exchange membranes with enhanced alkaline stability. Journal of Membrane Science, 2017, 541, 358-366.	4.1	98
336	Advances in Electrocatalysis for Energy Conversion and Synthesis of Organic Molecules. ChemPhysChem, 2017, 18, 2573-2605.	1.0	51
337	Fuel Cell Power Systems and Applications. Proceedings of the IEEE, 2017, 105, 2166-2190.	16.4	79
338	Elucidating Performance Limitations in Alkaline-Exchange- Membrane Fuel Cells. Journal of the Electrochemical Society, 2017, 164, E3583-E3591.	1.3	40
339	Microbial electrolysis cell platform for simultaneous waste biorefinery and clean electrofuels generation: Current situation, challenges and future perspectives. Progress in Energy and Combustion Science, 2017, 63, 119-145.	15.8	137
340	Extracellular electron transfer in acetogenic bacteria and its application for conversion of carbon dioxide into organic compounds. Applied Microbiology and Biotechnology, 2017, 101, 6301-6307.	1.7	34
341	Crosslinked anion exchange membranes with primary diamine-based crosslinkers for vanadium redox flow battery application. Journal of Power Sources, 2017, 363, 78-86.	4.0	76
342	Evaluation of Water in Perfluorinated Anion Exchange Membranes with Different IEC Values. Journal of Physical Chemistry C, 2017, 121, 17546-17551.	1.5	5
343	Anion-selective materials with 1,4-diazabicyclo[2.2.2]octane functional groups for advanced alkaline water electrolysis. Electrochimica Acta, 2017, 248, 547-555.	2.6	56

#	Article	IF	Citations
344	Highly Hydroxide-Conductive Nanostructured Solid Electrolyte via Predesigned Ionic Nanoaggregates. ACS Applied Materials & Interfaces, 2017, 9, 28346-28354.	4.0	19
345	Nitrogen-Doped Three-Dimensional Graphene-Supported Palladium Nanocomposites: High-Performance Cathode Catalysts for Oxygen Reduction Reactions. ACS Catalysis, 2017, 7, 6609-6618.	5.5	43
346	Electrooxidation of hydrogen at Pt/carbon nanotube catalysts for hydrogenâ€“air fuel cell. Russian Journal of Electrochemistry, 2017, 53, 615-621.	0.3	5
347	Internal cross-linked anion exchange membranes with improved dimensional stability for electrodialysis. Journal of Membrane Science, 2017, 542, 280-288.	4.1	49
348	Novel synthetic route to prepare doubly quaternized anion exchange membranes for diffusion dialysis application. Separation and Purification Technology, 2017, 189, 204-212.	3.9	27
349	Anion Exchange Membranes: Enhancement by Addition of Unfunctionalized Triptycene Poly(Ether) Tj ETQq1 1 0.784314 rgBT /Overlo	4.0	60
350	Pt/C/Ni(OH)₂Bi-Functional Electrocatalyst for Enhanced Hydrogen Evolution Reaction Activity under Alkaline Conditions. Journal of the Electrochemical Society, 2017, 164, F1307-F1315.	1.3	41
351	Hydrophobic comb-shaped polymers based on PPO with long alkyl side chains as novel anion exchange membranes. Macromolecular Research, 2017, 25, 1220-1229.	1.0	29
352	Platinum group metal-free NiMo hydrogen oxidation catalysts: high performance and durability in alkaline exchange membrane fuel cells. Journal of Materials Chemistry A, 2017, 5, 24433-24443.	5.2	161
353	Robust anion conductive polymers containing perfluoroalkylene and pendant ammonium groups for high performance fuel cells. Journal of Materials Chemistry A, 2017, 5, 24804-24812.	5.2	90
354	Fabricating hydroxyl anion conducting membranes based on poly(vinyl alcohol) and bis(2-chloroethyl) ether-1,3-bis[3-(dimethylamino)propyl] urea copolymer with linear anion-exchange sites for polymer electrolyte membrane fuel cell. Solid State Ionics, 2017, 308, 112-120.	1.3	15
355	High surface area Pd nanocatalyst on core-shell tungsten based support as a beneficial catalyst for low temperature fuel cells application. Electrochimica Acta, 2017, 247, 674-684.	2.6	16
356	Advances in electrode materials for Li-based rechargeable batteries. RSC Advances, 2017, 7, 33789-33811.	1.7	30
357	Clustered multi-imidazolium side chains functionalized alkaline anion exchange membranes for fuel cells. Journal of Membrane Science, 2017, 541, 214-223.	4.1	63
358	Co 3 O 4 nanoparticles assembled on polypyrrole/graphene oxide for electrochemical reduction of oxygen in alkaline media. Chinese Journal of Catalysis, 2017, 38, 1281-1290.	6.9	16
359	Phase separated nanofibrous anion exchange membranes with polycationic side chains. Journal of Materials Chemistry A, 2017, 5, 15326-15341.	5.2	39
360	Composite anion exchange membranes with functionalized hydrophilic or hydrophobic titanium dioxide. International Journal of Hydrogen Energy, 2017, 42, 19178-19189.	3.8	29
361	High-Resolution Coarse-Grained Model of Hydrated Anion-Exchange Membranes that Accounts for Hydrophobic and Ionic Interactions through Short-Ranged Potentials. Journal of Chemical Theory and Computation, 2017, 13, 245-264.	2.3	31

#	Article	IF	Citations
362	Ion exchange membranes: New developments and applications. Journal of Membrane Science, 2017, 522, 267-291.	4.1	650
363	Electrocatalysts for the generation of hydrogen, oxygen and synthesis gas. Progress in Energy and Combustion Science, 2017, 58, 1-35.	15.8	506
364	Anion conductive polymer nanofiber composite membrane: effects of nanofibers on polymer electrolyte characteristics. Polymer International, 2017, 66, 382-387.	1.6	12
365	Membrane evaluation for vanadium flow batteries in a temperature range of â˜'20â€“50 Â°C. Journal of Membrane Science, 2017, 522, 45-55.	4.1	90
366	Preparation and characterization of anion-exchange membranes derived from poly(vinylbenzyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 58 728-735.	1.6	8
367	Highly durable and active Co3O4 nanocrystals supported on carbon nanotubes as bifunctional electrocatalysts in alkaline media. Applied Catalysis B: Environmental, 2017, 203, 138-145.	10.8	75
368	Design of pendent imidazolium side chain with flexible ether-containing spacer for alkaline anion exchange membrane. Journal of Membrane Science, 2017, 523, 216-224.	4.1	88
369	Temperature dependent performance and catalyst layer properties of PtRu supported on modified few-walled carbon nanotubes for the alkaline direct ethanol fuel cell. Journal of Electroanalytical Chemistry, 2017, 793, 48-57.	1.9	19
370	An optimised synthesis of high performance radiation-grafted anion-exchange membranes. Green Chemistry, 2017, 19, 831-843.	4.6	141
371	Self-assembly prepared anion exchange membranes with high alkaline stability and organic solvent resistance. Journal of Membrane Science, 2017, 522, 159-167.	4.1	41
372	The Importance of Using Alkaline Ionomer Binders for Screening Electrocatalysts in Alkaline Electrolyte. Journal of the Electrochemical Society, 2017, 164, F1551-F1555.	1.3	21
374	Anion Conducting Ionomers for Fuel Cells and Electrolyzers. Journal of the Electrochemical Society, 2017, 164, F1648-F1653.	1.3	20
375	Polymer Electrolyte Membranes for Water Photo-Electrolysis. Membranes, 2017, 7, 25.	1.4	16
376	Poly(vinylbenzylchloride) Based Anion-Exchange Blend Membranes (AEBMs): Influence of PEG Additive on Conductivity and Stability. Membranes, 2017, 7, 32.	1.4	8
377	3.8 Membrane-Based Processes for Sustainable Power Generation Using Water: Pressure-Retarded Osmosis (PRO), Reverse Electrodialysis (RED), and Capacitive Mixing (CAPMIX). , 2017, , 206-248.		17
378	Studies on a novel anionâ€exchange membrane based on chitosan and ionized organic compounds with multiwalled carbon nanotubes for alkaline fuel cells. Journal of Applied Polymer Science, 2018, 135, 46323.	1.3	18
379	Homogeneous Coating with an Anion-Exchange Ionomer Improves the Cycling Stability of Secondary Batteries with Zinc Anodes. ACS Applied Materials & Interfaces, 2018, 10, 8640-8648.	4.0	61
380	Poly(arylene ether ketone) Copolymer Grafted with Amine Groups Containing a Long Alkyl Chain by Chloroacetylation for Improved Alkaline Stability and Conductivity of Anion Exchange Membrane. ACS Applied Energy Materials, 2018, 1, 1175-1182.	2.5	59

#	Article	IF	Citations
381	Novel anion exchange membranes based on quaternized diblock copolystyrene containing a fluorinated hydrophobic block. Journal of Membrane Science, 2018, 554, 264-273.	4.1	67
382	Highly conductive anion exchange membranes with long flexible multication spacer. Journal of Membrane Science, 2018, 553, 209-217.	4.1	73
383	Tetrazole tethered polymers for alkaline anion exchange membranes. Frontiers of Chemical Science and Engineering, 2018, 12, 306-310.	2.3	11
384	Anion exchange membranes with branched ionic clusters for fuel cells. Journal of Materials Chemistry A, 2018, 6, 5993-5998.	5.2	70
385	Bifunctional Electrocatalysis on Pdâ€Ni Coreâ€“Shell Nanoparticles for Hydrogen Oxidation Reaction in Alkaline Medium. Advanced Materials Interfaces, 2018, 5, 1701666.	1.9	41
386	Ni₂P Entwined by Graphite Layers as a Low-Pt Electrocatalyst in Acidic Media for Oxygen Reduction. ACS Applied Materials & Interfaces, 2018, 10, 9999-10010.	4.0	34
387	Dual hydrophobic grafted chains facilitating quaternary ammonium aggregations of hydroxide conducting polymers: a theoretical and experimental investigation. Journal of Materials Chemistry A, 2018, 6, 5714-5723.	5.2	29
388	Design of Heterogeneities and Interfaces with Nanofibers in Fuel Cell Membranes. , 2018, , 1-37.		0
389	Soluble Polystyreneâ€bâ€poly (ethylene/butylene)â€bâ€polystyrene Based Ionomer for Anion Exchange Membrane Fuel Cells Operating at 70â€‰Â°C. Fuel Cells, 2018, 18, 137-147.	1.5	26
390	High-Performing Hydroxide Exchange Membranes with Flexible Tetra-Piperidinium Side Chains Linked by Alkyl Spacers. ACS Applied Energy Materials, 2018, 1, 2222-2231.	2.5	80
391	Anion conducting multiblock copolymers with different tethered cations. Journal of Polymer Science Part A, 2018, 56, 1395-1403.	2.5	19
392	Structurally Well-Defined Anion Conductive Aromatic Copolymers: Effect of the Side-Chain Length. Macromolecules, 2018, 51, 3394-3404.	2.2	40
393	Commercial Monomer Availability Leading to Missed Opportunities? Anion-Exchange Membranes Made from meta-Vinylbenzyl Chloride Exhibit an Alkali Stability Enhancement. ACS Applied Energy Materials, 2018, 1, 1883-1887.	2.5	17
394	Water Uptake Study of Anion Exchange Membranes. Macromolecules, 2018, 51, 3264-3278.	2.2	141
395	Ultrastable and High Ion-Conducting Polyelectrolyte Based on Six-Membered N-Spirocyclic Ammonium for Hydroxide Exchange Membrane Fuel Cell Applications. ACS Applied Materials & Interfaces, 2018, 10, 15720-15732.	4.0	115
396	Stable Water Oxidation in Acid Using Manganese-Modified TiO₂ Protective Coatings. ACS Applied Materials & Interfaces, 2018, 10, 18805-18815.	4.0	24
397	Low-Temperature Electrochemical Upgrading of Bio-oils Using Polymer Electrolyte Membranes. Energy & Fuels, 2018, 32, 5944-5950.	2.5	42
398	Polypyrroleâ€Derived Feâ€“Coâ€“Nâ€“C Catalyst for the Oxygen Reduction Reaction: Performance in Alkaline Hydrogen and Ethanol Fuel Cells. ChemElectroChem, 2018, 5, 1954-1965.	1.7	49

#	Article	IF	Citations
399	Alkali Resistant Anion Exchange Membranes Based on Saturated Heterocyclic Quaternary Ammonium Cations Functionalized Poly(2,6-dimethyl-1,4-phenylene oxide)s. Journal of the Electrochemical Society, 2018, 165, F350-F356.	1.3	38
400	Carbon catalysts for electrochemical hydrogen peroxide production in acidic media. Electrochimica Acta, 2018, 272, 192-202.	2.6	63
401	High alkaline resistance of benzyl-triethylammonium functionalized anion exchange membranes with different pendants. European Polymer Journal, 2018, 101, 83-89.	2.6	27
402	Lab-Scale Alkaline Water Electrolyzer for Bridging Material Fundamentals with Realistic Operation. ACS Sustainable Chemistry and Engineering, 2018, 6, 4829-4837.	3.2	59
403	Quaternary Ammonium Cation Specific Adsorption on Platinum Electrodes: A Combined Experimental and Density Functional Theory Study. Journal of the Electrochemical Society, 2018, 165, F114-F121.	1.3	26
404	Electrochemical synthesis of thin, dense, and conformal anion exchange membranes with quaternary ammonium groups. Electrochimica Acta, 2018, 265, 78-88.	2.6	15
405	Crosslinked high-performance anion exchange membranes based on poly(styrene-b-(ethylene-co-butylene)-b-styrene). Journal of Membrane Science, 2018, 551, 66-75.	4.1	106
406	Advances and challenges in alkaline anion exchange membrane fuel cells. Progress in Energy and Combustion Science, 2018, 66, 141-175.	15.8	388
407	A practical method for measuring the true hydroxide conductivity of anion exchange membranes. Electrochemistry Communications, 2018, 88, 109-113.	2.3	131
408	Effect of CO2 absorption on ion and water mobility in an anion exchange membrane. Journal of Power Sources, 2018, 380, 64-75.	4.0	53
409	Recent progress and perspectives of bifunctional oxygen reduction/evolution catalyst development for regenerative anion exchange membrane fuel cells. Nano Energy, 2018, 47, 172-198.	8.2	134
410	Small angle neutron scattering study on the morphology of imidazolium-based grafted anion-conducting fuel cell membranes. Physica B: Condensed Matter, 2018, 551, 203-207.	1.3	6
411	The Effect of Ambient Carbon Dioxide on Anionâ€Exchange Membrane Fuel Cells. ChemSusChem, 2018, 11, 1136-1150.	3.6	137
412	A Membraneless Direct Isopropanol Fuel Cell (DIPAFC) Operated with a Catalyst-Selective Principle. Journal of Physical Chemistry C, 2018, 122, 13558-13563.	1.5	13
413	Preparation and Characterization of A Semi-interpenetrating Network Alkaline Anion Exchange Membrane. Fibers and Polymers, 2018, 19, 11-21.	1.1	16
414	Elucidation of the Oxygen Reduction Volcano in Alkaline Media using a Copperâ€“Platinum(111) Alloy. Angewandte Chemie - International Edition, 2018, 57, 2800-2805.	7.2	72
415	Elucidation of the Oxygen Reduction Volcano in Alkaline Media using a Copperâ€“Platinum(111) Alloy. Angewandte Chemie, 2018, 130, 2850-2855.	1.6	10
416	Controllable Crossâ€Linking Anion Exchange Membranes with Excellent Mechanical and Thermal Properties. Macromolecular Materials and Engineering, 2018, 303, 1700462.	1.7	85

#	Article	IF	Citations
417	Hydrothermal-microwave synthesis of cobalt oxide incorporated nitrogen-doped graphene composite as an efficient catalyst for oxygen reduction reaction in alkaline medium. Journal of Materials Science: Materials in Electronics, 2018, 29, 6750-6762.	1.1	12
418	Beyond catalysis and membranes: visualizing and solving the challenge of electrode water accumulation and flooding in AEMFCs. Energy and Environmental Science, 2018, 11, 551-558.	15.6	229
419	High-performance layered double hydroxide/poly(2,6-dimethyl-1,4-phenylene oxide) membrane with porous sandwich structure for anion exchange membrane fuel cell applications. Journal of Membrane Science, 2018, 552, 51-60.	4.1	79
420	Hydrophilic side chain assisting continuous ion-conducting channels for anion exchange membranes. Journal of Membrane Science, 2018, 552, 286-294.	4.1	71
421	Microbial desalination cell with sulfonated sodium poly(ether ether ketone) as cation exchange membranes for enhancing power generation and salt reduction. Bioelectrochemistry, 2018, 121, 176-184.	2.4	31
422	Morphology of Anion-Conducting Ionenes Investigated by X-ray Scattering and Simulation. Journal of Physical Chemistry B, 2018, 122, 1730-1737.	1.2	13
423	Synthesis and Properties of Symmetric Sideâ€Chain Quaternized Poly(Arylene Ether Sulfone)s for Anion Exchange Membrane Fuel Cells. Macromolecular Chemistry and Physics, 2018, 219, 1700416.	1.1	4
424	Bent-twisted block copolymer anion exchange membrane with improved conductivity. Journal of Membrane Science, 2018, 550, 59-71.	4.1	64
425	Impact of carbonation processes in anion exchange membrane fuel cells. Electrochimica Acta, 2018, 263, 433-446.	2.6	77
426	Emerging electrochemical and membrane-based systems to convert low-grade heat to electricity. Energy and Environmental Science, 2018, 11, 276-285.	15.6	172
427	A hamburger-structure imidazolium-modified silica/polyphenyl ether composite membrane with enhancing comprehensive performance for anion exchange membrane applications. Electrochimica Acta, 2018, 268, 295-303.	2.6	33
428	Quantum Chemical Prediction of pK_a Values of Cationic Ion-Exchange Groups in Polymer Electrolyte Membranes. Journal of Physical Chemistry C, 2018, 122, 2490-2501.	1.5	14
429	Interplay Between Hydroxyl Density and Relaxations in Poly(vinylbenzyltrimethylammonium)-b-poly(methylbutylene) Membranes for Electrochemical Applications. Journal of the American Chemical Society, 2018, 140, 1372-1384.	6.6	21
430	Tuning the properties of poly(2,6-dimethyl-1,4-phenylene oxide) anion exchange membranes and their performance in H₂/O₂ fuel cells. Energy and Environmental Science, 2018, 11, 435-446.	15.6	225
431	Accelerated Stress Test of Pt/C Nanoparticles in an Interface with an Anion-Exchange Membraneâ€"An Identical-Location Transmission Electron Microscopy Study. ACS Catalysis, 2018, 8, 1278-1286.	5.5	69
432	Poly(arylene ether nitrile) anion exchange membranes with dense flexible ionic side chain for fuel cells. Journal of Membrane Science, 2018, 550, 254-265.	4.1	55
433	Enhanced Catalysis of Electrochemical Overall Water Splitting in Alkaline Media by Fe Doping in Ni₃S₂ Nanosheet Arrays. ACS Catalysis, 2018, 8, 5431-5441.	5.5	499
434	Achieving high anion conductivity by densely grafting of ionic strings. Journal of Membrane Science, 2018, 559, 35-41.	4.1	38

#	Article	IF	Citations
435	System Design and Performance in Alkaline Direct Ethanol Fuel Cells. Lecture Notes in Energy, 2018, , 217-247.	0.2	1
436	Three-Decker Strategy Based on Multifunctional Layered Double Hydroxide to Realize High-Performance Hydroxide Exchange Membranes for Fuel Cell Applications. ACS Applied Materials & Interfaces, 2018, 10, 18246-18256.	4.0	29
437	Anion conductive poly(2,6-dimethyl phenylene oxide)s with clicked bulky quaternary phosphonium groups. Journal of Membrane Science, 2018, 558, 9-16.	4.1	61
438	Well-designed mono- and di-functionalized comb-shaped poly(2,6-dimethylphenylene oxide) based alkaline stable anion exchange membrane for fuel cells. International Journal of Hydrogen Energy, 2018, 43, 21742-21749.	3.8	22
439	Anion conducting multiblock copolymers with multiple head-groups. Journal of Materials Chemistry A, 2018, 6, 9000-9008.	5.2	49
440	3D Pd/Co coreâ€“shell nanoneedle arrays as a high-performance cathode catalyst layer for AAEMFCs. RSC Advances, 2018, 8, 12887-12893.	1.7	0
441	Water and Ion Transport in Anion Exchange Membrane Fuel Cells. Lecture Notes in Energy, 2018, , 1-31.	0.2	4
442	Water â€“ A key parameter in the stability of anion exchange membrane fuel cells. Current Opinion in Electrochemistry, 2018, 9, 173-178.	2.5	146
443	Toward the Decentralized Electrochemical Production of H₂O₂: A Focus on the Catalysis. ACS Catalysis, 2018, 8, 4064-4081.	5.5	663
444	Thin, robust, and chemically stable photo-cross-linked anion exchange membranes based on a polychlorostyrene-b-polycyclooctene-b-polychlorostyrene ABA triblock polymer. Solid State Ionics, 2018, 316, 135-142.	1.3	14
445	Electrocatalysts and Mechanisms of Hydrogen Oxidation in Alkaline Media for Anion Exchange Membrane Fuel Cells. Lecture Notes in Energy, 2018, , 79-103.	0.2	5
446	Selectivity of ion exchange membranes: A review. Journal of Membrane Science, 2018, 555, 429-454.	4.1	722
447	Anion Exchange Membrane Fuel Cells. Lecture Notes in Energy, 2018, , .	0.2	7
448	Recent advances in alkali-doped polybenzimidazole membranes for fuel cell applications. Renewable and Sustainable Energy Reviews, 2018, 89, 168-183.	8.2	71
449	Toward Pt-Free Anion-Exchange Membrane Fuel Cells: Feâ€“Sn Carbon Nitrideâ€“Graphene Coreâ€“Shell Electrocatalysts for the Oxygen Reduction Reaction. Chemistry of Materials, 2018, 30, 2651-2659.	3.2	44
450	Analysis and characterization of an atropisomeric ionomer containing quaternary ammonium groups. Polymer, 2018, 141, 143-153.	1.8	5
451	Hybrid anion exchange membranes with selfâ€assembled ionic channels. Advances in Polymer Technology, 2018, 37, 1732-1736.	0.8	6
452	Importance of balancing membrane and electrode water in anion exchange membrane fuel cells. Journal of Power Sources, 2018, 375, 205-213.	4.0	236

#	Article	IF	Citations
453	Exploring backbone-cation alkyl spacers for multi-cation side chain anion exchange membranes. Journal of Power Sources, 2018, 375, 433-441.	4.0	83
454	Anion exchange membranes based on terminally crosslinked methyl morpholinium-functionalized poly(arylene ether sulfone)s. Journal of Power Sources, 2018, 375, 421-432.	4.0	63
455	Water permeation through anion exchange membranes. Journal of Power Sources, 2018, 375, 442-451.	4.0	60
456	Low cost hydrogen production by anion exchange membrane electrolysis: A review. Renewable and Sustainable Energy Reviews, 2018, 81, 1690-1704.	8.2	507
457	Phase separation and ion conductivity in the bulk and at the surface of anion exchange membranes with different ion exchange capacities at different humidities. Journal of Power Sources, 2018, 375, 397-403.	4.0	24
458	Durability of template-free Fe-N-C foams for electrochemical oxygen reduction in alkaline solution. Journal of Power Sources, 2018, 375, 244-254.	4.0	24
459	Steady state and transient simulation of anion exchange membrane fuel cells. Journal of Power Sources, 2018, 375, 191-204.	4.0	101
460	A novel strategy to construct highly conductive and stabilized anionic channels by fluorocarbon grafted polymers. Journal of Membrane Science, 2018, 549, 631-637.	4.1	33
461	New insights into evaluating catalyst activity and stability for oxygen evolution reactions in alkaline media. Sustainable Energy and Fuels, 2018, 2, 237-251.	2.5	183
462	Chitosan-Modified Poly(2,6-dimethyl-1,4-phenylene Oxide) for Anion-Exchange Membrane in Fuel Cell Technology. Polymer-Plastics Technology and Engineering, 2018, 57, 1121-1130.	1.9	4
463	N3-adamantyl imidazolium cations: Alkaline stability assessment and the corresponding comb-shaped anion exchange membranes. Journal of Membrane Science, 2018, 545, 116-125.	4.1	37
464	Anion exchange membrane fuel cells: Current status and remaining challenges. Journal of Power Sources, 2018, 375, 170-184.	4.0	706
466	Anion exchange membrane from polyvinyl alcohol functionalized with quaternary ammonium groups via alkyl spacers. Ionics, 2018, 24, 1097-1109.	1.2	25
467	3D-Graphene supports for palladium nanoparticles: Effect of micro/macropores on oxygen electroreduction in Anion Exchange Membrane Fuel Cells. Journal of Power Sources, 2018, 375, 255-264.	4.0	30
468	The critical relation between chemical stability of cations and water in anion exchange membrane fuel cells environment. Journal of Power Sources, 2018, 375, 351-360.	4.0	179
469	Anionâ€Exchange Membranes for Alkaline Fuelâ€Cell Applications: The Effects of Cations. ChemSusChem, 2018, 11, 58-70.	3.6	194
470	Functionalization of polybenzimidazole-crosslinked poly(vinylbenzyl chloride) with two cyclic quaternary ammonium cations for anion exchange membranes. Journal of Membrane Science, 2018, 548, 1-10.	4.1	83
471	Poly(arylene piperidinium) Hydroxide Ion Exchange Membranes: Synthesis, Alkaline Stability, and Conductivity. Advanced Functional Materials, 2018, 28, 1702758.	7.8	385

#	Article	IF	Citations
472	Synthesis and properties of poly(phenylene-co-arylene ether ketone)s with five quaternary ammonium groups on a phenyl unit for anion-exchange membranes. Solid State Ionics, 2018, 314, 187-194.	1.3	6
473	Synthesis and characterization of poly(ether sulfone) block copolymers containing pendent quaternary ammonium- and imidazolium groups as anion exchange membranes. Solid State Ionics, 2018, 314, 46-56.	1.3	24
474	A benzyltetramethylimidazolium-based membrane with exceptional alkaline stability in fuel cells: role of its structure in alkaline stability. Journal of Materials Chemistry A, 2018, 6, 527-534.	5.2	101
475	Novel imidazoleâ€grafted hybrid anion exchange membranes based on poly(2,6â€dimethylâ€1,4â€phenylene) Tj ETQq1 1 0.784314 rgB	1.3	7
476	Simple Synthesis of Auâ€“Pd Alloy Nanowire Networks as Macroscopic, Flexible Electrocatalysts with Excellent Performance. ACS Applied Materials & Interfaces, 2018, 10, 602-613.	4.0	36
477	Advanced Biomassâ€Derived Electrocatalysts for the Oxygen Reduction Reaction. Advanced Materials, 2018, 30, e1703691.	11.1	274
478	Electrocatalysis of oxygen reduction on heteroatom-doped nanocarbons and transition metalâ€“nitrogenâ€“carbon catalysts for alkaline membrane fuel cells. Journal of Materials Chemistry A, 2018, 6, 776-804.	5.2	357
479	Gas phase electrochemical conversion of humidified CO2 to CO and H2 on proton-exchange and alkaline anion-exchange membrane fuel cell reactors. Journal of CO2 Utilization, 2018, 23, 152-158.	3.3	64
480	Introducing catalyst in alkaline membrane for improved performance direct borohydride fuel cells. Journal of Power Sources, 2018, 374, 113-120.	4.0	17
481	Quaternized poly(2.6 dimethylâ€1.4 phenylene oxide)/polysulfone blend composite membrane doped with <scp>Z</scp>n<scp>O</scp>â€nanoparticles for alkaline fuel cells. Journal of Applied Polymer Science, 2018, 135, 45959.	1.3	22
482	Benzimidazolium functionalized polysulfone-based anion exchange membranes with improved alkaline stability. Chinese Journal of Polymer Science (English Edition), 2018, 36, 129-138.	2.0	15
483	Degradation of radiation grafted anion exchange membranes tethered with different amine functional groups via removal of vinylbenzyl trimethylammonium hydroxide. Journal of Power Sources, 2018, 375, 373-386.	4.0	39
484	Chemically durable polymer electrolytes for solid-state alkaline water electrolysis. Journal of Power Sources, 2018, 375, 367-372.	4.0	94
485	Review of cell performance in anion exchange membrane fuel cells. Journal of Power Sources, 2018, 375, 158-169.	4.0	820
486	Methanol oxidation reaction on core-shell structured Ruthenium-Palladium nanoparticles: Relationship between structure and electrochemical behavior. Journal of Power Sources, 2018, 375, 320-334.	4.0	43
487	Improved Physicochemical Stability and High Ion Transportation of Poly(Arylene Ether Sulfone) Blocks Containing a Fluorinated Hydrophobic Part for Anion Exchange Membrane Applications. Polymers, 2018, 10, 1400.	2.0	24
488	ETFE-based anion-exchange membrane ionomer powders for alkaline membrane fuel cells: a first performance comparison of head-group chemistry. Journal of Materials Chemistry A, 2018, 6, 24330-24341.	5.2	67
489	Facile construction of crosslinked all-carbon-backbone anion-exchange membranes with robust durability. Journal of Materials Chemistry A, 2018, 6, 24831-24840.	5.2	28

#	Article	IF	Citations
490	Development of nickel-cobalt bimetallic/conducting polymer composite used as a catalyst in the oxygen evolution reaction (OER). IOP Conference Series: Earth and Environmental Science, 2018, 161, 012027.	0.2	5
491	Beneficial use of rotatable-spacer side-chains in alkaline anion exchange membranes for fuel cells. Energy and Environmental Science, 2018, 11, 3472-3479.	15.6	196
492	High Selectivities among Monovalent Cations in Dialysis through Cation-Exchange Membranes Coated with Polyelectrolyte Multilayers. ACS Applied Materials & Interfaces, 2018, 10, 44134-44143.	4.0	37
493	Unraveling mysteries of hydrogen electrooxidation in anion exchange membrane fuel cells. Current Opinion in Electrochemistry, 2018, 12, 182-188.	2.5	52
494	Hydroxide Conduction Enhancement of Chitosan Membranes by Functionalized MXene. Materials, 2018, 11, 2335.	1.3	24
495	Hydration and Ionic Conductivity of Model Cation and Anion-Conducting Ionomers in Buffer Solutions (Phosphate, Acetate, Citrate). Journal of Physical Chemistry B, 2018, 122, 12009-12016.	1.2	9
496	Hydroxide Transport in Anion-Exchange Membranes for Alkaline Fuel Cells. , 0, , .		4
497	Highly Active Nickel-Based Catalyst for Hydrogen Evolution in Anion Exchange Membrane Electrolysis. Catalysts, 2018, 8, 614.	1.6	58
498	The Comparability of Pt to Ptâ€Ru in Catalyzing the Hydrogen Oxidation Reaction for Alkaline Polymer Electrolyte Fuel Cells Operated at 80â€‰Â°C. Angewandte Chemie, 2019, 131, 1456-1460.	1.6	22
499	Understanding how high-performance anion exchange membrane fuel cells were achieved: Component, interfacial, and cell-level factors. Current Opinion in Electrochemistry, 2018, 12, 233-239.	2.5	91
500	Activation of Reduced-Graphene-Oxide Supported Pt Nanoparticles by Aligning with WO₃-Nanowires toward Oxygen Reduction in Acid Medium: Diagnosis with Rotating-Ring-Disk Voltammetry and Double-Potential-Step Chronocoulometry. Journal of the Electrochemical Society, 2018, 165, J3384-J3391.	1.3	13
501	Preparation of highly purity Tetrabutyl Ammonium Hydroxide using a novel method of Electro-Electrodialysis: The study on mass transfer process and influencing factors. Journal of Membrane Science, 2018, 567, 281-289.	4.1	7
502	Alkaline anion exchange membrane from poly(arylene ether ketone)-g-polyimidazolium copolymer for enhanced hydroxide ion conductivity and thermal, mechanical, and hydrolytic stability. Electrochimica Acta, 2018, 290, 544-555.	2.6	20
503	Design Strategy for Zinc Anodes with Enhanced Utilization and Retention: Electrodeposited Zinc Oxide on Carbon Mesh Protected by Ionomeric Layers. ACS Applied Energy Materials, 0, , .	2.5	15
504	In Situ Raman Study of Amorphous and Crystalline Ni-Co Alloys for the Alkaline Oxygen Evolution Reaction. Journal of the Electrochemical Society, 2018, 165, J3122-J3129.	1.3	40
505	Nanostructured nickel nanoparticles supported on vulcan carbon as a highly active catalyst for the hydrogen oxidation reaction in alkaline media. Journal of Power Sources, 2018, 402, 447-452.	4.0	70
506	Overview of Direct Liquid Oxidation Fuel Cells and its Application as Micro-Fuel Cells. , 2018, , 129-174.		2
507	Microstructure Determines Water and Salt Permeation in Commercial Ion-Exchange Membranes. ACS Applied Materials & Interfaces, 2018, 10, 39745-39756.	4.0	72

#	Article	IF	Citations
508	Poly(2,6-dimethyl-1,4-phenylene oxide)s with Various Head Groups: Effect of Head Groups on the Properties of Anion Exchange Membranes. ACS Applied Materials & Interfaces, 2018, 10, 41279-41292.	4.0	59
509	Chemical and Thermal Stability of Poly(phenylene oxide)-Based Anion Exchange Membranes Containing Alkyl Side Chains. Journal of the Electrochemical Society, 2018, 165, F1133-F1138.	1.3	11
510	Introduction: Low-Temperature Fuel Cells. , 2018, , 1-49.		3
511	Hydrogen Oxidation on Ni-Based Electrocatalysts: The Effect of Metal Doping. Catalysts, 2018, 8, 454.	1.6	80
512	Interfacing nickel nitride and nickel boosts both electrocatalytic hydrogen evolution and oxidation reactions. Nature Communications, 2018, 9, 4531.	5.8	410
513	Metallo-polyelectrolytes as a class of ionic macromolecules for functional materials. Nature Communications, 2018, 9, 4329.	5.8	83
514	Rational design of polyaromatic ionomers for alkaline membrane fuel cells with >1 W cm^{â^'2} power density. Energy and Environmental Science, 2018, 11, 3283-3291.	15.6	209
515	Chemical stability of poly(phenylene oxide)-based ionomers in an anion exchange-membrane fuel cell environment. Journal of Materials Chemistry A, 2018, 6, 22234-22239.	5.2	105
516	Understanding of imidazolium group hydration and polymer structure for hydroxide anion conduction in hydrated imidazolium-g-PPO membrane by molecular dynamics simulations. Chemical Engineering Science, 2018, 192, 1167-1176.	1.9	40
517	A Highly Conductive and Mechanically Robust OH^{â€“} Conducting Membrane for Alkaline Water Electrolysis. Chemistry of Materials, 2018, 30, 6420-6430.	3.2	43
518	Chloromethylbenzoylation as a simple way to poly(aryl ether)s with side-chain-type benzylic cationic groups for anion-exchange membranes. Polymer, 2018, 154, 272-280.	1.8	2
519	Magnetic field-oriented ferroferric oxide/poly(2,6-dimethyl-1,4-phenylene oxide) hybrid membranes for anion exchange membrane applications. Nanoscale, 2018, 10, 18680-18689.	2.8	29
520	Reverse relationships of water uptake and alkaline durability with hydrophilicity of imidazolium-based grafted anion-exchange membranes. Soft Matter, 2018, 14, 9118-9131.	1.2	12
521	Beyond 1.0ÂW cm^{â^'2}Performance without Platinum: The Beginning of a New Era in Anion Exchange Membrane Fuel Cells. Journal of the Electrochemical Society, 2018, 165, J3039-J3044.	1.3	91
522	Sulfonated Nanobamboo Fiber-Reinforced Quaternary Ammonia Poly(ether ether ketone) Membranes for Alkaline Polymer Electrolyte Fuel Cells. ACS Applied Materials & Interfaces, 2018, 10, 33581-33588.	4.0	24
523	Synthesis and characterization of anilineâ€containing anionâ€conducting polymer electrolyte membranes by radiationâ€induced graft polymerization. Journal of Applied Polymer Science, 2018, 135, 46886.	1.3	7
524	Hydrogen production from industrial wastewaters: An integrated reverse electrodialysis - Water electrolysis energy system. Journal of Cleaner Production, 2018, 203, 418-426.	4.6	43
525	Laminar GO Membrane with Imdazolium Polymer Brush for High Hydroxide Conduction. Chemistry Letters, 2018, 47, 1324-1326.	0.7	2

#	Article	IF	Citations
526	Alkali-stable partially fluorinated poly(arylene ether) anion exchange membranes with a claw-type head for fuel cells. Journal of Materials Chemistry A, 2018, 6, 12455-12465.	5.2	74
527	Tuning the electrocatalytic activity of Pt by structurally ordered PdFe/C for the hydrogen oxidation reaction in alkaline media. Journal of Materials Chemistry A, 2018, 6, 11346-11352.	5.2	41
528	Semi-interpenetrating polymer networks by azideâ€“alkyne cycloaddition as novel anion exchange membranes. Journal of Materials Chemistry A, 2018, 6, 11317-11326.	5.2	67
529	Opening Doors to Future Electrochemical Energy Devices: The Anionâ€Conducting Polyketone Polyelectrolytes. Advanced Functional Materials, 2018, 28, 1706522.	7.8	19
530	Recent trends on the application of PGM-free catalysts at the cathode of anion exchange membrane fuel cells. Current Opinion in Electrochemistry, 2018, 9, 240-256.	2.5	75
531	Molecular engineering of organic-inorganic interface towards high-performance polyelectrolyte membrane via amphiphilic block copolymer. Journal of Membrane Science, 2018, 563, 1-9.	4.1	10
532	Hierarchical oxygen reduction reaction electrocatalysts based on FeSn0.5 species embedded in carbon nitride-graphene based supports. Electrochimica Acta, 2018, 280, 149-162.	2.6	22
533	Electrocatalysts for Hydrogen Oxidation Reaction in Alkaline Electrolytes. ACS Catalysis, 2018, 8, 6665-6690.	5.5	289
534	Imidazolium functionalized poly(aryl ether ketone) anion exchange membranes having star main chains or side chains. Renewable Energy, 2018, 127, 910-919.	4.3	43
535	Progress and prospects in reverse electrodialysis for salinity gradient energy conversion and storage. Applied Energy, 2018, 225, 290-331.	5.1	214
536	Inhibition mechanism of the radical inhibitors to alkaline degradation of anion exchange membranes. Polymer Degradation and Stability, 2018, 153, 298-306.	2.7	19
537	Towards zinc-oxygen batteries with enhanced cycling stability: The benefit of anion-exchange ionomer for zinc sponge anodes. Journal of Power Sources, 2018, 395, 195-204.	4.0	65
538	Specific co-ion sorption and diffusion properties influence membrane permselectivity. Journal of Membrane Science, 2018, 563, 492-504.	4.1	49
539	Enhanced Conductivity of Anion-Exchange Membrane by Incorporation of Quaternized Cellulose Nanocrystal. ACS Applied Materials & Interfaces, 2018, 10, 23774-23782.	4.0	54
540	Quaternary Ti3C2Tx enhanced ionic conduction in quaternized polysulfone membrane for alkaline anion exchange membrane fuel cells. Journal of Membrane Science, 2018, 563, 882-887.	4.1	42
541	Cross-Linked Poly(vinylbenzyl chloride) Anion Exchange Membranes with Long Flexible Multihead for Fuel Cells. ACS Applied Energy Materials, 2018, 1, 3479-3487.	2.5	54
542	Optimization of the pendant chain length in partially fluorinated aromatic anion exchange membranes for alkaline fuel cells. Journal of Materials Chemistry A, 2018, 6, 14400-14409.	5.2	77
543	Blend membranes of polybenzimidazole and an anion exchange ionomer (FAA3) for alkaline water electrolysis: Improved alkaline stability and conductivity. Journal of Membrane Science, 2018, 564, 653-662.	4.1	60

#	Article	IF	Citations
544	Brief Historical Background of Water Electrolysis. , 2018, , 17-42.		3
545	Strategies for Reducing the PGM Loading in High Power AEMFC Anodes. Journal of the Electrochemical Society, 2018, 165, F710-F717.	1.3	48
546	Highly conductive and stabilized side-chain-type anion exchange membranes: ideal alternatives for alkaline fuel cell applications. Journal of Materials Chemistry A, 2018, 6, 17101-17110.	5.2	58
547	Formylated polystyrene for the fabrication of pore selective aldehyde group functionalized honeycomb patterned porous polystyrene films. Journal of Polymer Science, Part B: Polymer Physics, 2018, 56, 1181-1192.	2.4	13
548	Mid-block quaternized polystyrene-b-polybutadiene-b-polystyrene triblock copolymers as anion exchange membranes. Journal of Membrane Science, 2018, 564, 428-435.	4.1	42
549	PtNi Alloy Nanoparticles Prepared by Nanocapsule Method for ORR Catalysts in Alkaline Media. Bulletin of the Chemical Society of Japan, 2018, 91, 1495-1497.	2.0	4
550	Architectural engineering of bioelectrochemical systems from the perspective of polymeric membrane separators: A comprehensive update on recent progress and future prospects. Journal of Membrane Science, 2018, 564, 508-522.	4.1	63
551	Relating alkaline stability to the structure of quaternary phosphonium cations. RSC Advances, 2018, 8, 26640-26645.	1.7	12
552	Tailoring the nanophase-separated morphology of anion exchange membrane by embedding aliphatic chains of different lengths into aromatic main chains. Journal of Membrane Science, 2018, 564, 436-443.	4.1	28
553	Nickelâ€“copper supported on a carbon black hydrogen oxidation catalyst integrated into an anion-exchange membrane fuel cell. Sustainable Energy and Fuels, 2018, 2, 2268-2275.	2.5	102
554	Controlling the degree of sulfonation and its impact on hybrid cross-linked network based polyphosphazene grafted butylphenoxy as proton exchange membrane. International Journal of Hydrogen Energy, 2018, 43, 15466-15480.	3.8	16
555	Poly(arylene alkylene)s with pendant N-spirocyclic quaternary ammonium cations for anion exchange membranes. Journal of Materials Chemistry A, 2018, 6, 16537-16547.	5.2	147
556	Strategies for Reducing the PGM Loading in High Power AEMFC Anodes. ECS Transactions, 2018, 85, 873-887.	0.3	2
557	Bimetallic Nano Electrocatalyst for HER in Alkaline Polymer Electrolysis. ECS Transactions, 2018, 85, 961-979.	0.3	2
558	Improving the Energy Efficiency of Direct Formate Fuel Cells with a Pd/C-CeO2 Anode Catalyst and Anion Exchange Ionomer in the Catalyst Layer. Energies, 2018, 11, 369.	1.6	36
560	Comprehensive Analysis of Trends and Emerging Technologies in All Types of Fuel Cells Based on a Computational Method. Sustainability, 2018, 10, 458.	1.6	32
561	A high conductivity ultrathin anion-exchange membrane with 500+ h alkali stability for use in alkaline membrane fuel cells that can achieve 2 W cm^{â¯2} at 80 Â°C. Journal of Materials Chemistry A, 2018, 6, 15404-15412.	5.2	177
562	Role of cationic groups on structural and dynamical correlations in hydrated quaternary ammonium-functionalized poly(p-phenylene oxide)-based anion exchange membranes. Physical Chemistry Chemical Physics, 2018, 20, 19350-19362.	1.3	27

#	Article	IF	Citations
563	The morphology-dependent electrocatalytic activities of spinel-cobalt oxide nanomaterials for direct hydrazine fuel cell application. New Journal of Chemistry, 2018, 42, 13087-13095.	1.4	9
564	Crosslinked poly (2,6-dimethyl-1,4-phenylene oxide) polyelectrolyte enhanced with poly (styrene-b-(ethylene-co-butylene)-b-styrene) for anion exchange membrane applications. Journal of Membrane Science, 2018, 564, 492-500.	4.1	56
565	Poly (vinyl alcohol) and poly (benzimidazole) blend membranes for high performance alkaline direct ethanol fuel cells. Renewable Energy, 2018, 127, 883-895.	4.3	47
566	Anion Conductive Triblock Copolymer Membranes with Flexible Multication Side Chain. ACS Applied Materials & Interfaces, 2018, 10, 18327-18337.	4.0	80
567	Electrode parameters and operating conditions influencing the performance of anion exchange membrane fuel cells. Electrochimica Acta, 2018, 277, 151-160.	2.6	30
568	Alkaline polymer electrolyte fuel cells stably working at 80â€Â°C. Journal of Power Sources, 2018, 390, 165-167.	4.0	256
569	Molecular Simulation of Quaternary Ammonium Solutions at Low Hydration Levels. Journal of Physical Chemistry C, 2018, 122, 11204-11213.	1.5	43
570	Copper Silver Thin Films with Metastable Miscibility for Oxygen Reduction Electrocatalysis in Alkaline Electrolytes. ACS Applied Energy Materials, 2018, 1, 1990-1999.	2.5	40
571	Identifying the forefront of electrocatalytic oxygen evolution reaction: Electronic double layer. Applied Catalysis B: Environmental, 2018, 239, 425-432.	10.8	49
572	Alkaline Exchange Polymer Membrane Electrolyte for High Performance of All-Solid-State Electrochemical Devices. ACS Applied Materials & Interfaces, 2018, 10, 29593-29598.	4.0	52
573	Experimental investigation of electrolytic solution for anion exchange membrane water electrolysis. International Journal of Hydrogen Energy, 2018, 43, 17030-17039.	3.8	67
574	Preparation and Identification of Optimal Synthesis Conditions for a Novel Alkaline Anion-Exchange Membrane. Polymers, 2018, 10, 913.	2.0	13
575	Fabrication of an Anion-Exchange Membrane by Pore-Filling Using Catecholâ€“1,4-Diazabicyclo-[2,2,2]octane Coating and Its Application to Reverse Electrodialysis. Langmuir, 2018, 34, 10837-10846.	1.6	31
576	Boosting the Performance of Iron-Phthalocyanine as Cathode Electrocatalyst for Alkaline Polymer Fuel Cells Through Edge-Closed Conjugation. ACS Applied Materials & Interfaces, 2018, 10, 28664-28671.	4.0	34
577	Mussel-inspired strategy towards functionalized reduced graphene oxide-crosslinked polysulfone-based anion exchange membranes with enhanced properties. International Journal of Hydrogen Energy, 2018, 43, 17461-17474.	3.8	23
578	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
579	Preparation of polyvinylidene fluoride blend anion exchange membranes via non-solvent induced phase inversion for desalination and fluoride removal. Desalination, 2018, 445, 85-94.	4.0	39
580	The Alkaline Stability of Anion Exchange Membrane for Fuel Cell Applications: The Effects of Alkaline Media. Advanced Science, 2018, 5, 1800065.	5.6	107

#	Article	IF	Citations
581	A review of the synthesis and characterization of anion exchange membranes. Journal of Materials Science, 2018, 53, 11131-11150.	1.7	224
582	Anion exchange membrane with well-ordered arrays of ionic channels based on a porous anodic aluminium oxide template. Journal of Applied Electrochemistry, 2018, 48, 1151-1161.	1.5	7
583	Synthesis, Self-assembly and Electrode Application of Mussel-inspired Alternating Copolymers. Chinese Journal of Polymer Science (English Edition), 2018, 36, 897-904.	2.0	20
584	Polystyreneâ€based anion exchange membranes via click chemistry: improved properties and AEM performance. Polymer International, 2018, 67, 1302-1312.	1.6	19
585	Direct synthesis of nitrogen-rich carbon sheets via polybenzoxazine as highly active electrocatalyst for water splitting. International Journal of Hydrogen Energy, 2018, 43, 13266-13275.	3.8	30
586	Graphitic Nitrogen Is Responsible for Oxygen Electroreduction on Nitrogen-Doped Carbons in Alkaline Electrolytes: Insights from Activity Attenuation Studies and Theoretical Calculations. ACS Catalysis, 2018, 8, 6827-6836.	5.5	188
587	Polymer Electrolyte Membranes for Microbial Fuel Cells: Part A. Nafion-Based Membranes. , 2018, , 47-72.		7
588	Recent advances in bimetallic electrocatalysts for oxygen reduction: design principles, structure-function relations and active phase elucidation. Current Opinion in Electrochemistry, 2018, 8, 135-146.	2.5	60
589	Pathways to electrochemical solar-hydrogen technologies. Energy and Environmental Science, 2018, 11, 2768-2783.	15.6	238
590	Anion Exchange Membranesâ€™ Evolution toward High Hydroxide Ion Conductivity and Alkaline Resiliency. ACS Applied Energy Materials, 2018, 1, 2991-3012.	2.5	211
591	Polymer Fuel Cell Based on Polybenzimidazole Membrane: A Review. Polymer-Plastics Technology and Materials, 2019, 58, 465-497.	0.6	22
592	Visualization of Hydroxide Ion Formation upon Electrolytic Water Splitting in an Anion Exchange Membrane. , 2019, 1, 362-366.		42
593	Novel crosslinked aliphatic anion exchange membranes with pendant pentafluorophenyl groups. Electrochimica Acta, 2019, 321, 134634.	2.6	29
594	Interfacial Kinetics of HOR/MOR at the AEM/Pt Microelectrode Interface: Investigation of the Influence of CO32â^' on the Reaction Kinetics and the Mass Transport through Membrane. Journal of the Electrochemical Society, 2019, 166, F889-F896.	1.3	3
595	Photocatalytic Water Splitting Cycle in a Dye-Catalyst Supramolecular Complex: Ab Initio Molecular Dynamics Simulations. Journal of Physical Chemistry C, 2019, 123, 21403-21414.	1.5	17
596	Fluorene-containing poly(arylene ether sulfone nitrile)s multiblock copolymers as anion exchange membranes. International Journal of Hydrogen Energy, 2019, 44, 24256-24266.	3.8	20
597	Highly stable polysulfone anion exchange membranes incorporated with bulky alkyl substituted guanidinium cations. Molecular Systems Design and Engineering, 2019, 4, 1039-1047.	1.7	21
598	Nanocellulose-based materials as components of polymer electrolyte fuel cells. Journal of Materials Chemistry A, 2019, 7, 20045-20074.	5.2	85

#	Article	IF	Citations
599	Non-covalently crosslinked anion exchange membranes: Effect of urea hydrogen-bonding group position. Polymer, 2019, 179, 121654.	1.8	8
600	Electrochemical impedance spectroscopy as a performance indicator of water dissociation in bipolar membranes. Journal of Materials Chemistry A, 2019, 7, 19060-19069.	5.2	45
601	A high-performance anion exchange membrane based on poly(arylene ether sulfone) with a high concentration of quaternization units. Journal of Membrane Science, 2019, 589, 117266.	4.1	27
602	Efficient Preparation of Styrene Block Copolymer Anion Exchange Membranes via One-Step Friedelâ€“Crafts Bromoalkylation with Alkenes. Organic Process Research and Development, 2019, 23, 1580-1586.	1.3	13
603	On the origin of permanent performance loss of anion exchange membrane fuel cells: Electrochemical oxidation of phenyl group. Journal of Power Sources, 2019, 436, 226866.	4.0	69
604	Alkaline Stability of Quaternized Dielsâ€“Alder Polyphenylenes. Macromolecules, 2019, 52, 5419-5428.	2.2	82
605	Methanesulfonic acid-based electrode-decoupled vanadiumâ€“cerium redox flow battery exhibits significantly improved capacity and cycle life. Sustainable Energy and Fuels, 2019, 3, 2417-2425.	2.5	19
606	DPD simulations of anion exchange membrane: The effect of an alkyl spacer on the hydrated morphology. Solid State Ionics, 2019, 339, 115012.	1.3	18
607	Poly(vinyl benzyl methylpyrrolidinium) hydroxide derived anion exchange membranes for water electrolysis. Journal of Materials Chemistry A, 2019, 7, 17914-17922.	5.2	56
608	Quaternized cellulose and graphene oxide crosslinked polyphenylene oxide based anion exchange membrane. Scientific Reports, 2019, 9, 9572.	1.6	23
609	Superionic conduction along ordered hydroxyl networks in molecular-thin nanosheets. Materials Horizons, 2019, 6, 2087-2093.	6.4	22
610	PtCuNi Tetrahedra Catalysts with Tailored Surfaces for Efficient Alcohol Oxidation. Nano Letters, 2019, 19, 5431-5436.	4.5	93
611	Ion-solvating membranes as a new approach towards high rate alkaline electrolyzers. Energy and Environmental Science, 2019, 12, 3313-3318.	15.6	150
612	Quantifying and elucidating the effect of CO₂ on the thermodynamics, kinetics and charge transport of AEMFCs. Energy and Environmental Science, 2019, 12, 2806-2819.	15.6	74
613	Anion exchange membranes of bis-imidazolium cation crosslinked poly(2,6-dimethyl-1,4- phenylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	5.8	38
614	Construction of crosslinked polybenz imidazole-based anion exchange membranes with ether-bond-free backbone. Journal of Membrane Science, 2019, 590, 117303.	4.1	38
615	Influence of the position of ionic groups in amphoteric polyelectrolytes on hydration and ionic conduction: Side chain vs main chain. European Polymer Journal, 2019, 119, 45-51.	2.6	5
616	Poly(2,6-Dimethyl-1,4-Phenylene Oxide)-Based Hydroxide Exchange Separator Membranes for Zincâ€“Air Battery. International Journal of Molecular Sciences, 2019, 20, 3678.	1.8	46

#	Article	IF	Citations
617	Branched poly(ether ether ketone) based anion exchange membrane for H2/O2 fuel cell. International Journal of Hydrogen Energy, 2019, 44, 23750-23761.	3.8	31
618	Flame-retardant AEMs based on organic-inorganic composite polybenzimidazole membranes with enhanced hydroxide conductivity. Journal of Membrane Science, 2019, 591, 117306.	4.1	21
619	Relaxation phenomena and conductivity mechanisms in anion-exchange membranes derived from polyketone. Electrochimica Acta, 2019, 319, 253-263.	2.6	10
620	Hydroxide Ion Diffusion in Anion-Exchange Membranes at Low Hydration: Insights from Ab Initio Molecular Dynamics. Chemistry of Materials, 2019, 31, 5778-5787.	3.2	64
622	A SO2F2 mediated mild, practical, and gram-scale dehydroxylative transforming primary alcohols to quaternary ammonium salts. Tetrahedron, 2019, 75, 4648-4656.	1.0	6
623	Benzimidazole as Solid Electrolyte Material for Fuel Cells. , 0, , .		0
624	Preparation and properties of amorphous TiO2 modified anion exchange membrane by impregnation-hydrolysis method. Reactive and Functional Polymers, 2019, 144, 104348.	2.0	7
625	Hydrogen oxidation reaction on modified platinum model electrodes in alkaline media. Electrochimica Acta, 2019, 327, 135016.	2.6	17
626	Highly durable and conductive poly(arylene piperidine) with a long heterocyclic ammonium side-chain for hydroxide exchange membranes. International Journal of Hydrogen Energy, 2019, 44, 24954-24964.	3.8	32
627	Humidity-Dependent Surface Structure and Hydroxide Conductance of a Model Quaternary Ammonium Anion Exchange Membrane. Langmuir, 2019, 35, 14188-14193.	1.6	22
629	Click Chemistry-Induced Terminally Crosslinked Poly(ether sulfone) as a Highly Conductive Anion Exchange Membrane Under Humidity Condition. Macromolecular Research, 2019, 27, 1050-1059.	1.0	11
630	Anion Exchange Membranes Based on Sulfonated Poly(ether ether ketone) Crosslinked Methylpyrrolidinium Functionalized Poly (vinyl benzyl chloride) with High Chemical Stability. Journal of the Electrochemical Society, 2019, 166, F1134-F1141.	1.3	17
631	Effect of Ammonium Cations on the Diffusivity and Structure of Hydroxide Ions in Low Hydration Media. Journal of Physical Chemistry C, 2019, 123, 27355-27362.	1.5	17
632	Custom-Made Ion Exchange Membranes at Laboratory Scale for Reverse Electrodialysis. Membranes, 2019, 9, 145.	1.4	18
633	Alkaline Anion-Exchange Membrane Fuel Cells: Challenges in Electrocatalysis and Interfacial Charge Transfer. Chemical Reviews, 2019, 119, 11945-11979.	23.0	273
634	High Performance Anion Exchange Membrane Electrolysis Using Plasma-Sprayed, Non-Precious-Metal Electrodes. ACS Applied Energy Materials, 2019, 2, 7903-7912.	2.5	80
635	Numerical Simulations of Seasonal Variations of Rainfall over the Island of Hawaii. Journal of Applied Meteorology and Climatology, 2019, 58, 1219-1232.	0.6	3
636	Molecular Engineering of Hydroxide Conducting Polymers for Anion Exchange Membranes in Electrochemical Energy Conversion Technology. Accounts of Chemical Research, 2019, 52, 2745-2755.	7.6	134

#	Article	IF	Citations
637	A Highly Conductive Cationic Wood Membrane. Advanced Functional Materials, 2019, 29, 1902772.	7.8	79
638	Rh nanoroses for isopropanol oxidation reaction. Applied Catalysis B: Environmental, 2019, 259, 118082.	10.8	44
639	Analysis and Optimization of Thermally-Regenerative Ammonia-Based Flow Battery Based on a 3-D Model. Journal of the Electrochemical Society, 2019, 166, A2814-A2825.	1.3	14
640	Highly stable membraneâ€“electrode assembly using ether-linkage-free spirobifluorene-based aromatic polyelectrolytes for direct formate solid alkaline fuel cells. Journal of Power Sources, 2019, 438, 226997.	4.0	16
641	Anion exchange membranes with "rigid-side-chain" symmetric piperazinium structures for fuel cell exceeding 1.2â€Wâ€cmâ^'2 at 60 Â°C. Journal of Power Sources, 2019, 438, 227021.	4.0	29
642	Peptide-Modified Electrode Surfaces for Promoting Anion Exchange Ionomer Microphase Separation and Ionic Conductivity. , 2019, 1, 467-475.		14
643	Advantageous of Hybrid Fuel Cell Operation under Self-Humidification for Energy Efficient Bipolar Membrane. ACS Sustainable Chemistry and Engineering, 2019, 7, 16493-16500.	3.2	30
644	Characterization of Amorphous Ni-Nb-Y Nanoparticles for the Hydrogen Evolution Reaction Produced Through Surfactant-Assisted Ball Milling. Electrocatalysis, 2019, 10, 680-689.	1.5	9
645	The Performance of Nickel and Nickel-Iron Catalysts Evaluated As Anodes in Anion Exchange Membrane Water Electrolysis. Catalysts, 2019, 9, 814.	1.6	57
646	Direct modification of polyketone resin for anion exchange membrane of alkaline fuel cells. Journal of Colloid and Interface Science, 2019, 556, 420-431.	5.0	20
647	Mechanisms of Manganese Oxide Electrocatalysts Degradation during Oxygen Reduction and Oxygen Evolution Reactions. Journal of Physical Chemistry C, 2019, 123, 25267-25277.	1.5	76
648	Recent progress and developments in membrane materials for microbial electrochemistry technologies: A review. Bioresource Technology Reports, 2019, 8, 100308.	1.5	10
649	CO₂ reduction on gas-diffusion electrodes and why catalytic performance must be assessed at commercially-relevant conditions. Energy and Environmental Science, 2019, 12, 1442-1453.	15.6	692
650	Quantifying water transport in anion exchange membrane fuel cells. International Journal of Hydrogen Energy, 2019, 44, 4930-4939.	3.8	38
651	One-pot synthesis of IrNi@Ir core-shell nanoparticles as highly active hydrogen oxidation reaction electrocatalyst in alkaline electrolyte. Nano Energy, 2019, 59, 26-32.	8.2	72
652	Tuning poly(arylene piperidinium) anion-exchange membranes by copolymerization, partial quaternization and crosslinking. Journal of Membrane Science, 2019, 578, 183-195.	4.1	135
653	Selectivity enhancement of quaternized poly(arylene ether ketone) membranes by ion segregation for vanadium redox flow batteries. Science China Chemistry, 2019, 62, 479-490.	4.2	20
654	Ion exchange membranes in ion chromatography and related applications. Talanta, 2019, 204, 89-137.	2.9	24

#	Article	IF	Citations
655	Poly(bis-arylimidazoliums) possessing high hydroxide ion exchange capacity and high alkaline stability. Nature Communications, 2019, 10, 2306.	5.8	239
656	Effect of CO2 on the properties of anion exchange membranes for fuel cell applications. Journal of Membrane Science, 2019, 586, 140-150.	4.1	61
657	Facile preparation of porefilled membranes based on poly(ionic liquid) with quaternary ammonium and tertiary amine head groups for AEMFCs. Solid State Ionics, 2019, 338, 58-65.	1.3	8
658	Synthesis of anion conducting polymer electrolyte membranes by Pd-Catalyzed Buchwald-Hartwig Amination coupling reaction. Tetrahedron, 2019, 75, 4150-4155.	1.0	3
659	Effect of Carbonate Anions on Quaternary Ammonium-Hydroxide Interaction. Journal of Physical Chemistry C, 2019, 123, 15956-15962.	1.5	17
660	Stability Limits of Ni-Based Hydrogen Oxidation Electrocatalysts for Anion Exchange Membrane Fuel Cells. ACS Catalysis, 2019, 9, 6837-6845.	5.5	102
661	Designing Underwater Superaerophobic Surface of 3D Porous Nanocrystalline Ni-Zn Alloy: An Efficient Electrocatalyst for Hydrazine Electrooxidation. Journal of the Electrochemical Society, 2019, 166, F604-F609.	1.3	8
662	Composite Poly(norbornene) Anion Conducting Membranes for Achieving Durability, Water Management and High Power (3.4ÂW/cm²) in Hydrogen/Oxygen Alkaline Fuel Cells. Journal of the Electrochemical Society, 2019, 166, F637-F644.	1.3	172
663	Protocol for the Quantitative Assessment of Organic Cation Stability for Polymer Electrolytes. ACS Energy Letters, 2019, 4, 1681-1686.	8.8	58
664	Effects of the N-alicyclic cation and backbone structures on the performance of poly(terphenyl)-based hydroxide exchange membranes. Journal of Materials Chemistry A, 2019, 7, 15895-15906.	5.2	68
665	Electrochemical characterization of manganese oxides as a water oxidation catalyst in proton exchange membrane electrolysers. Royal Society Open Science, 2019, 6, 190122.	1.1	23
666	Enhancement of Hydroxide Conduction by Incorporation of Metalâ€“Organic Frameworks into a Semi-Interpenetrating Network. Energy & Fuels, 2019, 33, 5749-5760.	2.5	21
667	Development and testing of a novel catalyst-coated membrane with platinum-free catalysts for alkaline water electrolysis. International Journal of Hydrogen Energy, 2019, 44, 17493-17504.	3.8	45
668	Research trends in proton exchange membrane fuel cells during 2008â€“2018: A bibliometric analysis. Heliyon, 2019, 5, e01724.	1.4	46
669	Mainâ€chain poly(1,2,3â€triazolium hydroxide)s obtained through AA+BB click polyaddition as anion exchange membranes. Polymer International, 2019, 68, 1591-1598.	1.6	11
670	N-cyclic quaternary ammonium-functionalized anion exchange membrane with improved alkaline stability enabled by aryl-ether free polymer backbones for alkaline fuel cells. Journal of Membrane Science, 2019, 587, 117135.	4.1	53
671	Simultaneously enhanced hydroxide conductivity and mechanical properties of quaternized chitosan/functionalized carbon nanotubes composite anion exchange membranes. International Journal of Hydrogen Energy, 2019, 44, 18134-18144.	3.8	24
672	High-Concentration Single Atomic Pt Sites on Hollow CuSx for Selective O2 Reduction to H2O2 in Acid Solution. CheM, 2019, 5, 2099-2110.	5.8	279

#	Article	IF	Citations
673	Membrane resistance of different separator materials in a vanadium redox flow battery. Journal of Membrane Science, 2019, 586, 106-114.	4.1	18
674	High-Loading Composition-Tolerant Coâ€“Mn Spinel Oxides with Performance beyond 1 W/cm² in Alkaline Polymer Electrolyte Fuel Cells. ACS Energy Letters, 2019, 4, 1251-1257.	8.8	77
675	Hydrophobic side chains to enhance hydroxide conductivity and physicochemical stabilities of side-chain-type polymer AEMs. Journal of Membrane Science, 2019, 585, 90-98.	4.1	53
676	Degradation of Carbon-Supported Platinum-Group-Metal Electrocatalysts in Alkaline Media Studied by in Situ Fourier Transform Infrared Spectroscopy and Identical-Location Transmission Electron Microscopy. ACS Catalysis, 2019, 9, 5613-5622.	5.5	80
677	Enhancement of Palladium HOR Activity in Alkaline Conditions through Ceria Surface Doping. Journal of the Electrochemical Society, 2019, 166, F3234-F3239.	1.3	15
678	High Performance Anion Exchange Membrane Fuel Cells Enabled by Fluoropoly(olefin) Membranes. Advanced Functional Materials, 2019, 29, 1902059.	7.8	128
679	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
680	Optimized Nickel-Cobalt and Nickel-Iron Oxide Catalysts for the Hydrogen Evolution Reaction in Alkaline Water Electrolysis. Journal of the Electrochemical Society, 2019, 166, F519-F533.	1.3	43
681	Quaternized poly(arylene perfluoroalkylene)s (QPAFs) for alkaline fuel cells â€“ a perspective. Sustainable Energy and Fuels, 2019, 3, 1916-1928.	2.5	20
682	Quaternized chitosan/functionalized carbon nanotubes composite anion exchange membranes. Journal of Applied Polymer Science, 2019, 136, 47778.	1.3	20
683	Pendent piperidinium-functionalized blend anion exchange membrane for fuel cell application. International Journal of Hydrogen Energy, 2019, 44, 15482-15493.	3.8	58
684	Radiation-grafted cation-exchange membranes: an initial ex situ feasibility study into their potential use in reverse electrodialysis. Sustainable Energy and Fuels, 2019, 3, 1682-1692.	2.5	14
685	Rh and Rh Alloy Nanoparticles as Highly Active H₂ Oxidation Catalysts for Alkaline Fuel Cells. ACS Catalysis, 2019, 9, 5057-5062.	5.5	45
686	Along-the-Channel Impacts of Water Management and Carbon-Dioxide Contamination in Hydroxide-Exchange-Membrane Fuel Cells: A Modeling Study. Journal of the Electrochemical Society, 2019, 166, F3180-F3192.	1.3	50
687	Long-Life Polysulfideâ€“Polyhalide Batteries with a Mediator-Ion Solid Electrolyte. ACS Applied Energy Materials, 2019, 2, 3445-3451.	2.5	26
688	Nanostructured Pd-Based Electrocatalyst and Membrane Electrode Assembly Behavior in a Passive Direct Glycerol Fuel Cell. Nanoscale Research Letters, 2019, 14, 52.	3.1	26
689	Boosting the performance of an anion exchange membrane by the formation of well-connected ion conducting channels. Polymer Chemistry, 2019, 10, 2822-2831.	1.9	34
690	Highly conductive and chemically stable alkaline anion exchange membranes via ROMP of trans -cyclooctene derivatives. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9729-9734.	3.3	118

#	Article	IF	Citations
691	The rise of bio-inspired energy devices. Energy Storage Materials, 2019, 23, 390-408.	9.5	18
692	Microscopic phase-segregated quaternary ammonia polysulfone membrane for vanadium redox flow batteries. Journal of Power Sources, 2019, 428, 88-92.	4.0	31
693	Impacts of anions on the electrochemical oxygen reduction reaction activity and stability of Pt/C in alkaline electrolyte. International Journal of Hydrogen Energy, 2019, 44, 13373-13382.	3.8	17
694	A Quasielastic Neutron Scattering Study of Water Diffusion in Model Anion Exchange Membranes over Localized and Extended Volume Increments. Journal of Physical Chemistry C, 2019, 123, 14195-14206.	1.5	18
695	Design of a Zeroâ€Gap Laboratoryâ€Scale Polymer Electrolyte Membrane Alkaline Water Electrolysis Stack. Chemie-Ingenieur-Technik, 2019, 91, 821-832.	0.4	15
696	Electric-field-aligned functionalized-layered double hydroxide/polyphenyl ether composite membrane for ion transport. International Journal of Hydrogen Energy, 2019, 44, 13852-13863.	3.8	17
697	3-Glycidoxy-propylthrimethoxysilane improved anion exchange membranes based on quaternized poly(2,6-dimethyl-1,4-phenyleneoxide). Polymer, 2019, 174, 38-44.	1.8	14
698	Imidazolium-Based Anion Exchange Membranes for Alkaline Anion Fuel Cells: Interplay between Morphology and Anion Transport Behavior. Journal of the Electrochemical Society, 2019, 166, F472-F478.	1.3	9
699	Effect of Polymer Architecture on the Nanophase Segregation, Ionic Conductivity, and Electro-Osmotic Drag of Anion Exchange Membranes. Journal of Physical Chemistry C, 2019, 123, 8717-8726.	1.5	35
700	Highly Conductive Anion-Exchange Membranes Based on Cross-Linked Poly(norbornene): Vinyl Addition Polymerization. ACS Applied Energy Materials, 2019, 2, 2447-2457.	2.5	117
701	Anion exchange membrane with a novel quaternized ammonium containing long ether substituent. Journal of Membrane Science, 2019, 581, 293-302.	4.1	45
702	Quaternized Polysulfone Cross-Linked N,N-Dimethyl Chitosan-Based Anion-Conducting Membranes. Polymers, 2019, 11, 512.	2.0	11
703	Constructing an internally cross-linked structure for polysulfone to improve dimensional stability and alkaline stability of high performance anion exchange membranes. International Journal of Hydrogen Energy, 2019, 44, 8279-8289.	3.8	31
704	Comb-shaped 2-Methylimidazolium Poly(arylene ether sulfone) Anion Exchange Membranes with High Alkaline Stability. Chemical Research in Chinese Universities, 2019, 35, 150-156.	1.3	2
705	Enhanced water transport in AEMs based on poly(styreneâ€“ethyleneâ€“butyleneâ€“styrene) triblock copolymer for high fuel cell performance. Polymer Chemistry, 2019, 10, 1894-1903.	1.9	52
706	A versatile and membrane-less electrochemical reactor for the electrolysis of water and brine. Energy and Environmental Science, 2019, 12, 1592-1604.	15.6	80
707	Development of polyvinyl alcohol/chitosan blend anion exchange membrane with mono and di quaternizing agents for application in alkaline polymer electrolyte fuel cells. Materials Science for Energy Technologies, 2019, 2, 194-202.	1.0	31
708	In situ grown nanosheet Ni Zn alloy on Ni foam for high performance hydrazine electrooxidation. Electrochimica Acta, 2019, 304, 275-281.	2.6	55

#	Article	IF	Citations
709	Predicting performance stability of anion exchange membrane fuel cells. Journal of Power Sources, 2019, 420, 118-123.	4.0	81
710	A 3D porous Ni-Zn/RGO catalyst with superaerophobic surface for high-performance hydrazine electrooxidation. Journal of Alloys and Compounds, 2019, 788, 1240-1245.	2.8	28
711	Highly alkaline stable anion exchange membranes from nonplanar polybenzimidazole with steric hindrance backbone. Journal of Polymer Science Part A, 2019, 57, 1087-1096.	2.5	14
712	Long-branched and densely functionalized anion exchange membranes for fuel cells. Journal of Membrane Science, 2019, 581, 82-92.	4.1	61
713	Facile synthesis of anion conductive poly(2,6-dimethyl-1,4-phenylene oxide)s from a clickable di-quaternized side-chain precursor. Polymer, 2019, 172, 75-82.	1.8	8
714	Preparation and characterization of crosslinked poly(vinylimidazolium) anion exchange membranes for artificial photosynthesis. Journal of Materials Chemistry A, 2019, 7, 23818-23829.	5.2	21
715	Synthesis of Functionalized Imidazolium Salts via Iodine-Mediated Annulations of Enamines. Organic Letters, 2019, 21, 2583-2587.	2.4	22
716	Versatile Strategy for Tuning ORR Activity of a Single Fe-N₄ Site by Controlling Electron-Withdrawing/Donating Properties of a Carbon Plane. Journal of the American Chemical Society, 2019, 141, 6254-6262.	6.6	509
717	Poly (aryl ether ketone)/polymeric ionic liquid with anisotropic swelling behavior for anion exchange membranes. Journal of Membrane Science, 2019, 581, 303-311.	4.1	36
718	Novel piperidinium functionalized anionic membrane for alkaline polymer electrolysis with excellent electrochemical properties. Journal of Membrane Science, 2019, 581, 283-292.	4.1	55
719	A comparative study of side-chain-type poly(ether ether ketone) anion exchange membrane functionalized with different hetero-cycloaliphatic quaternary ammonium groups. RSC Advances, 2019, 9, 7975-7983.	1.7	27
720	Microbial electrosynthesis system with dual biocathode arrangement for simultaneous acetogenesis, solventogenesis and carbon chain elongation. Chemical Communications, 2019, 55, 4351-4354.	2.2	60
721	A Breakthrough Application of a Cross-Linked Polystyrene Anion-Exchange Membrane for a Hydrogencarbonate Ion-Selective Electrode. Sensors, 2019, 19, 1268.	2.1	14
722	Effect of crosslinking on the properties of partially fluorinated anion exchange membranes. Journal of Polymer Science Part A, 2019, 57, 1059-1069.	2.5	13
723	Amorphous Fe Co Ni oxide for oxygen evolution reaction. Materials Today Energy, 2019, 12, 311-317.	2.5	38
724	The impact of alkyl triâ€methyl ammonium side chains on perfluorinated ionic membranes for electrochemical applications. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 700-712.	2.4	9
725	Poly(aryl piperidinium) membranes and ionomers for hydroxide exchange membrane fuel cells. Nature Energy, 2019, 4, 392-398.	19.8	570
726	A Roadmap to Lowâ€Cost Hydrogen with Hydroxide Exchange Membrane Electrolyzers. Advanced Materials, 2019, 31, e1805876.	11.1	184

#	Article	IF	Citations
727	On the feasibility of bifunctional hydrogen oxidation on Ni and NiCu surfaces. Electrochimica Acta, 2019, 305, 452-458.	2.6	28
728	Exploring Side-Chain Designs for Enhanced Ion Conductivity of Anion-Exchange Membranes by Mesoscale Simulations. Journal of Physical Chemistry C, 2019, 123, 10802-10815.	1.5	36
729	Highly hydroxide conducting membranes with long-chain flexible pendant quaternary ammonium groups of PPEK for HEMFC. Solid State Ionics, 2019, 335, 121-128.	1.3	4
730	Facile preparation of poly (2,6-dimethyl-1,4-phenylene oxide)-based anion exchange membranes with improved alkaline stability. International Journal of Hydrogen Energy, 2019, 44, 11877-11886.	3.8	15
731	Polybenzimidazole as alkaline anion exchange membrane with twin hydroxide ion conducting sites. Polymer, 2019, 172, 213-220.	1.8	29
732	Synergistic Mn-Co catalyst outperforms Pt on high-rate oxygen reduction for alkaline polymer electrolyte fuel cells. Nature Communications, 2019, 10, 1506.	5.8	212
733	Ni₃N as an Active Hydrogen Oxidation Reaction Catalyst in Alkaline Medium. Angewandte Chemie - International Edition, 2019, 58, 7445-7449.	7.2	217
734	Ni₃N as an Active Hydrogen Oxidation Reaction Catalyst in Alkaline Medium. Angewandte Chemie, 2019, 131, 7523-7527.	1.6	36
735	Microbial electro-Fenton: An emerging and energy-efficient platform for environmental remediation. Journal of Power Sources, 2019, 424, 220-244.	4.0	56
736	Exploring the Compositionâ€“Activity Relation of Niâ€“Cu Binary Alloy Electrocatalysts for Hydrogen Oxidation Reaction in Alkaline Media. ACS Applied Energy Materials, 2019, 2, 3160-3165.	2.5	47
737	Unusual enhancement of degradation rate induced by polymer chain elongation in quaternized polyethyleneimine derivatives. Reactive and Functional Polymers, 2019, 137, 96-103.	2.0	6
738	Enhanced desalination performance of poly (vinyl alcohol)/carbon nanotube composite pervaporation membranes via interfacial engineering. Journal of Membrane Science, 2019, 579, 40-51.	4.1	85
739	Side-chain-type imidazolium-functionalized anion exchange membranes: The effects of additional hydrophobic side chains and their hydrophobicity. Journal of Membrane Science, 2019, 579, 219-229.	4.1	73
740	Poly(vinyl alcohol)/Poly(diallyldimethylammonium chloride) anion-exchange membrane modified with multiwalled carbon nanotubes for alkaline fuel cells. Journal of Materiomics, 2019, 5, 286-295.	2.8	30
741	Ab Initio Molecular Dynamics Study of Hydroxide Diffusion Mechanisms in Nanoconfined Structural Mimics of Anion Exchange Membranes. Journal of Physical Chemistry C, 2019, 123, 4638-4653.	1.5	43
742	Effect of styrene addition on chemically induced grafting of 4â€vinylbenzyl chloride onto lowâ€density polyethylene for anion exchange membrane preparation. Polymer International, 2019, 68, 972-978.	1.6	10
743	Preparation and performance of novel tetraphenylphosphonium-functionalized polyphosphazene membranes for alkaline fuel cells. European Polymer Journal, 2019, 114, 109-117.	2.6	21
744	A facile fabrication of functionalized rGO crosslinked chemically stable polysulfone-based anion exchange membranes with enhanced performance. International Journal of Hydrogen Energy, 2019, 44, 6618-6630.	3.8	22

#	Article	IF	Citations
745	Highly Conducting Anion-Exchange Membranes Based on Cross-Linked Poly(norbornene): Ring Opening Metathesis Polymerization. ACS Applied Energy Materials, 2019, 2, 2458-2468.	2.5	109
746	Hydroxide transport and chemical degradation in anion exchange membranes: a combined reactive and non-reactive molecular simulation study. Journal of Materials Chemistry A, 2019, 7, 5442-5452.	5.2	39
747	Pyridinium-functionalized crosslinked anion exchange membrane based on multication side chain tethered elastomeric triblock poly(styrene-b-(ethylene-co-butylene)-b-styrene). Reactive and Functional Polymers, 2019, 138, 62-69.	2.0	29
748	Piperidinium-functionalized anion exchange membranes and their application in alkaline fuel cells and water electrolysis. Journal of Materials Chemistry A, 2019, 7, 7717-7727.	5.2	143
749	Practical implementation of bis-six-membered N-cyclic quaternary ammonium cations in advanced anion exchange membranes for fuel cells: Synthesis and durability. Journal of Membrane Science, 2019, 578, 239-250.	4.1	113
750	Chemically Stable, Highly Anion Conductive Polymers Composed of Quinquephenylene and Pendant Ammonium Groups. Macromolecules, 2019, 52, 2131-2138.	2.2	41
751	Synthesis of Aromatic Anion Exchange Membranes by Friedelâ€“Crafts Bromoalkylation and Cross-Linking of Polystyrene Block Copolymers. Macromolecules, 2019, 52, 2139-2147.	2.2	152
752	Temperature Effects on the HOPG Intercalation Process. Condensed Matter, 2019, 4, 23.	0.8	4
753	Effect of Surface Alignment on Connectivity in Phosphonium-Containing Diblock Copolymer Anion-Exchange Membranes. Journal of Physical Chemistry C, 2019, 123, 30819-30826.	1.5	11
754	Sterically-encumbered ionenes as hydroxide ion-conducting polymer membranes. Current Opinion in Electrochemistry, 2019, 18, 99-105.	2.5	21
755	Facile construction of poly(arylene ether)s-based anion exchange membranes bearing pendent N-spirocyclic quaternary ammonium for fuel cells. International Journal of Hydrogen Energy, 2019, 44, 26565-26576.	3.8	30
756	Effects of Alkaline Cleaning on the Conversion and Transformation of Functional Groups on Ion-Exchange Membranes in Polymer-Flooding Wastewater Treatment: Desalination Performance, Fouling Behavior, and Mechanism. Environmental Science & Technology, 2019, 53, 14430-14440.	4.6	20
757	Study on the Chemical Stabilities of Poly(arylene ether) Random Copolymers for Alkaline Fuel Cells: Effect of Main Chain Structures with Different Monomer Units. ACS Sustainable Chemistry and Engineering, 2019, 7, 20077-20087.	3.2	47
758	Vapor-fed electrolysis of water using earth-abundant catalysts in Nafion or in bipolar Nafion/poly(benzimidazolium) membranes. Sustainable Energy and Fuels, 2019, 3, 3611-3626.	2.5	14
759	Stable Reference Electrode in Polymer Electrolyte Membrane Electrolyser for Three-Electrode Measurements. Journal of the Electrochemical Society, 2019, 166, F1326-F1336.	1.3	17
760	Correlations of Ion Composition and Power Efficiency in a Reverse Electrodialysis Heat Engine. International Journal of Molecular Sciences, 2019, 20, 5860.	1.8	5
761	Electrowinning of Iron from Spent Leaching Solutions Using Novel Anion Exchange Membranes. Membranes, 2019, 9, 137.	1.4	8
762	A facile approach to prepare crosslinked polysulfone-based anion exchange membranes with enhanced alkali resistance and dimensional stability. RSC Advances, 2019, 9, 36374-36385.	1.7	6

#	Article	IF	Citations
763	Partially fluorinated copolymers containing pendant piperidinium head groups as anion exchange membranes for alkaline fuel cells. RSC Advances, 2019, 9, 37391-37402.	1.7	28
764	Ether-free polyfluorenes tethered with quinuclidinium cations as hydroxide exchange membranes. Journal of Materials Chemistry A, 2019, 7, 27164-27174.	5.2	62
765	In situ grown Ni phosphide nanowire array on Ni foam as a high-performance catalyst for hydrazine electrooxidation. Applied Catalysis B: Environmental, 2019, 241, 292-298.	10.8	89
766	Electrodialytic separation of volatile fatty acids from hydrogen fermented food wastes. International Journal of Hydrogen Energy, 2019, 44, 3356-3362.	3.8	23
767	Combâ€shaped diblock copolystyrene for anion exchange membranes. Journal of Applied Polymer Science, 2019, 136, 47370.	1.3	12
768	Physically-crosslinked anion exchange membranes by blending ionic additive into alkyl-substituted quaternized PPO. Journal of Membrane Science, 2019, 574, 33-43.	4.1	42
769	Towards best practices for improving paper-based microfluidic fuel cells. Electrochimica Acta, 2019, 298, 389-399.	2.6	69
770	Basicityâ€dependent properties of anion conducting membranes consisting of iminium cations for alkaline fuel cells. Journal of Polymer Science Part A, 2019, 57, 503-510.	2.5	6
771	Molecularly designed, solvent processable tetraalkylammonium-functionalized fluoropolyolefin for durable anion exchange membrane fuel cells. Journal of Membrane Science, 2019, 574, 212-221.	4.1	59
772	Preparation of anion exchange membrane with enhanced conductivity and alkaline stability by incorporating ionic liquid modified carbon nanotubes. Journal of Membrane Science, 2019, 573, 1-10.	4.1	58
773	Palladium decorated porous nickel having enhanced electrocatalytic performance for hydrazine oxidation. Journal of Power Sources, 2019, 412, 71-77.	4.0	36
774	Mechanically robust poly[vinyl-(4-benzyl-N,N,N-trimethylammonium bromide) ketone]/polybenzimidazole blend membranes for anion conductive solid electrolytes. Journal of Membrane Science, 2019, 572, 262-270.	4.1	11
775	Earth-Abundant Oxygen Electrocatalysts for Alkaline Anion-Exchange-Membrane Water Electrolysis: Effects of Catalyst Conductivity and Comparison with Performance in Three-Electrode Cells. ACS Catalysis, 2019, 9, 7-15.	5.5	189
776	Co/CoOx nanoparticles inlaid onto nitrogen-doped carbon-graphene as a trifunctional electrocatalyst. Electrochimica Acta, 2019, 296, 830-841.	2.6	93
777	Graphene-mediated organic-inorganic composites with improved hydroxide conductivity and outstanding alkaline stability for anion exchange membranes. Composites Part B: Engineering, 2019, 164, 324-332.	5.9	60
778	Graphene oxide crosslinked poly(phenylene oxide) nanocomposite as high-performance anion-conducting membrane. Journal of Industrial and Engineering Chemistry, 2019, 72, 380-389.	2.9	15
779	Highly conductive anion exchange membranes based on one-step benzylation modification of poly(ether ether ketone). Journal of Membrane Science, 2019, 574, 205-211.	4.1	43
780	Bâ€Doped Fe/N/C Porous Catalyst for Highâ€Performance Oxygen Reduction in Anionâ€Exchange Membrane Fuel Cells. ChemElectroChem, 2019, 6, 1754-1760.	1.7	18

#	Article	IF	Citations
781	Palladium-ceria nanocatalyst for hydrogen oxidation in alkaline media: Optimization of the Pdâ€“CeO2 interface. Nano Energy, 2019, 57, 820-826.	8.2	70
782	4-formyl dibenzo-18-crown-6 grafted polyvinyl alcohol as anion exchange membranes for fuel cell. European Polymer Journal, 2019, 112, 581-590.	2.6	32
783	Anionic multiblock copolymer membrane based on vinyl addition polymerization of norbornenes: Applications in anion-exchange membrane fuel cells. Journal of Membrane Science, 2019, 570-571, 394-402.	4.1	119
784	Supported ionic liquid membrane based on [bmim][PF6] can be a promising separator to replace Nafion in microbial fuel cells and improve energy recovery: A comparative process evaluation. Journal of Membrane Science, 2019, 570-571, 215-225.	4.1	39
785	Anion exchange membranes for aqueous acid-based redox flow batteries: Current status and challenges. Applied Energy, 2019, 233-234, 622-643.	5.1	101
786	Functionalized rGO as covalent crosslinkers for constructing chemically stable polysulfone-based anion exchange membranes with enhanced ion conductivity. Journal of Membrane Science, 2019, 570-571, 481-493.	4.1	22
787	Robust poly(aryl piperidinium)/N-spirocyclic poly(2,6-dimethyl-1,4-phenyl) for hydroxide-exchange membranes. Journal of Membrane Science, 2019, 572, 246-254.	4.1	41
788	Controlling conduction environments of anion exchange membrane by functionalized SiO2 for enhanced hydroxide conductivity. Journal of Membrane Science, 2019, 569, 166-176.	4.1	27
789	The Comparability of Pt to Ptâ€Ru in Catalyzing the Hydrogen Oxidation Reaction for Alkaline Polymer Electrolyte Fuel Cells Operated at 80â€‰Â°C. Angewandte Chemie - International Edition, 2019, 58, 1442-1446.	7.2	99
790	Effect of Micromorphology on Alkaline Polymer Electrolyte Stability. ACS Applied Materials & Interfaces, 2019, 11, 469-477.	4.0	36
791	High Performance Ion Exchange Membranes Prepared via Direct Polyacylation of Racemic and (S)â€1,1â€²â€Binaphthylâ€Based Cationic/Anionic Monomers. Macromolecular Materials and Engineering, 2019, 304, 1800547.	1.7	2
792	Hyperbranched Polystyrene Copolymer Makes Superior Anion Exchange Membrane. ACS Applied Polymer Materials, 2019, 1, 76-82.	2.0	28
793	Gas-Diffusion Electrodes for Carbon Dioxide Reduction: A New Paradigm. ACS Energy Letters, 2019, 4, 317-324.	8.8	416
794	Ionic Conduction in Metalâ€“Organic Frameworks with Incorporated Ionic Liquids. ACS Sustainable Chemistry and Engineering, 2019, 7, 70-81.	3.2	104
795	Friedel-Crafts alkylation route for preparation of pendent side chain imidazolium-functionalized polysulfone anion exchange membranes for fuel cells. Journal of Membrane Science, 2019, 573, 157-166.	4.1	29
796	Densely quaternized anion exchange membranes synthesized from Ullmann coupling extension of ionic segments for vanadium redox flow batteries. Science China Materials, 2019, 62, 211-224.	3.5	21
797	Ni(OH)2-Ni/C for hydrogen oxidation reaction in alkaline media. Journal of Energy Chemistry, 2019, 29, 111-115.	7.1	51
798	Improved hydrogen oxidation reaction under alkaline conditions by Auâ€“Pt alloy nanoparticles. Journal of Energy Chemistry, 2020, 40, 52-56.	7.1	25

#	Article	IF	Citations
799	Preparation of click-driven cross-linked anion exchange membranes with low water uptake. Particuology, 2020, 48, 65-73.	2.0	13
800	Electrospun Ionomeric Fibers with Anion Conducting Properties. Advanced Functional Materials, 2020, 30, 1901733.	7.8	24
801	Effect of increasing hydrophilicâ€“hydrophobic block length in quaternary ammonium-functionalized poly(ether sulfone) block copolymer for anion exchange membrane fuel cells. Journal of Industrial and Engineering Chemistry, 2020, 81, 124-134.	2.9	40
802	Improving fuel cell performance of an anion exchange membrane by terminal pending bis-cations on a flexible side chain. Journal of Membrane Science, 2020, 595, 117483.	4.1	48
803	High performance cross-linked dehydro-halogenated poly (vinylidene fluoride-co-hexafluoro) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 587 T Purification Technology, 2020, 234, 116078.	3.9	27
804	Poly(phenylene oxide)s incorporating N-spirocyclic quaternary ammonium cation/cation strings for anion exchange membranes. Journal of Membrane Science, 2020, 595, 117507.	4.1	66
805	Dielectric Permittivity Properties of Hydrated Polymers: Measurement and Connection to Ion Transport Properties. Industrial & Engineering Chemistry Research, 2020, 59, 5205-5217.	1.8	24
806	The Importance of Water Transport in High Conductivity and High-Power Alkaline Fuel Cells. Journal of the Electrochemical Society, 2020, 167, 054501.	1.3	132
807	Describing ion exchange membrane-electrolyte interactions for high electrolyte concentrations used in electrochemical reactors. Journal of Membrane Science, 2020, 593, 117340.	4.1	19
808	Hydroxide ion conducting polymer electrolytes and their applications in solid supercapacitors: A review. Energy Storage Materials, 2020, 24, 6-21.	9.5	108
809	Efficient oxygen reduction activity on layered palladium phosphosulphide and its application in alkaline fuel cells. Journal of Power Sources, 2020, 445, 227280.	4.0	15
810	Oxygen Evolution Reaction on Singleâ€Walled Carbon Nanotubes Noncovalently Functionalized with Metal Phthalocyanines. ChemElectroChem, 2020, 7, 428-436.	1.7	28
811	Tailoring the Electrochemical Production of H₂O₂: Strategies for the Rational Design of Highâ€Performance Electrocatalysts. Small, 2020, 16, e1902845.	5.2	114
812	Paperâ€Based Microfluidics for Electrochemical Applications. ChemElectroChem, 2020, 7, 10-30.	1.7	40
813	Alkaline-stable anion exchange membranes: A review of synthetic approaches. Progress in Polymer Science, 2020, 100, 101177.	11.8	250
814	Chloromethylation and Quaternization of Poly(aryl ether ketone sulfone)s with Clustered Electron-rich Phenyl Groups for Anion Exchange Membranes. Chinese Journal of Polymer Science (English Edition), 2020, 38, 278-287.	2.0	10
815	Improved performance of quaternized poly(arylene ether ketone)s/graphitic carbon nitride nanosheets composite anion exchange membrane for fuel cell applications. Applied Surface Science, 2020, 503, 144071.	3.1	37
816	Effect of anion exchange membrane capacity loss on pH and electric conductivity of saline solution during neutralization dialysis. Journal of Membrane Science, 2020, 595, 117573.	4.1	7

#	Article	IF	Citations
817	Phosphate stabilized PdCoP@Nifoam catalyst for self-pressurized H2 production from the electrochemical reforming of ethanol at 150ÂÂ°C. Journal of Catalysis, 2020, 382, 237-246.	3.1	5
818	Practical ex-Situ Technique To Measure the Chemical Stability of Anion-Exchange Membranes under Conditions Simulating the Fuel Cell Environment. , 2020, 2, 168-173.		48
819	Insights into membrane-separated organic electrosynthesis: the case of adiponitrile electrochemical production. Reaction Chemistry and Engineering, 2020, 5, 136-144.	1.9	19
820	Single-atom catalysts for electrochemical clean energy conversion: recent progress and perspectives. Sustainable Energy and Fuels, 2020, 4, 996-1011.	2.5	36
821	Single Nanometer-Sized NiFe-Layered Double Hydroxides as Anode Catalyst in Anion Exchange Membrane Water Electrolysis Cell with Energy Conversion Efficiency of 74.7% at 1.0 A cm^{â€“2}. ACS Catalysis, 2020, 10, 1886-1893.	5.5	91
822	Water-Oxidation Electrocatalysis by Manganese Oxides: Syntheses, Electrode Preparations, Electrolytes and Two Fundamental Questions. Zeitschrift Fur Physikalische Chemie, 2020, 234, 925-978.	1.4	41
823	Poly(arylene ether sulfone) crosslinked networks with pillar[5]arene units grafted by multiple long-chain quaternary ammonium salts for anion exchange membranes. Chemical Communications, 2020, 56, 928-931.	2.2	24
824	Pdâ€Decorated Tungsten as Ptâ€Free Bimetallic Catalysts for Hydrogen Oxidation Reaction in Alkaline Electrolyte. Israel Journal of Chemistry, 2020, 60, 563-569.	1.0	8
825	Self-crosslinked blend alkaline anion exchange membranes with bi-continuous phase separated morphology to enhance ion conductivity. Journal of Membrane Science, 2020, 597, 117769.	4.1	63
826	Olefin metathesis-crosslinked, bulky imidazolium-based anion exchange membranes with excellent base stability and mechanical properties. Journal of Membrane Science, 2020, 598, 117793.	4.1	45
827	Hydrophilic Flexible Ether Containing, Cross-Linked Anion-Exchange Membrane Quaternized with DABCO. ACS Applied Materials & Interfaces, 2020, 12, 3510-3521.	4.0	53
828	Tunable Anion-Selective Transport through Monolayer Graphene and Hexagonal Boron Nitride. ACS Nano, 2020, 14, 2729-2738.	7.3	36
829	Ether spaced N-spirocyclic quaternary ammonium functionalized crosslinked polysulfone for high alkaline stable anion exchange membranes. Journal of Membrane Science, 2020, 598, 117650.	4.1	55
830	Highly dispersed nickel nitride nanoparticles on nickel nanosheets as an active catalyst for hydrazine electrooxidation. Journal of Materials Chemistry A, 2020, 8, 632-638.	5.2	44
831	Advances and challenges in electrochemical CO₂reduction processes: an engineering and design perspective looking beyond new catalyst materials. Journal of Materials Chemistry A, 2020, 8, 1511-1544.	5.2	305
832	Rational Synthesis of Metallo-Cations Toward Redox- and Alkaline-Stable Metallo-Polyelectrolytes. Journal of the American Chemical Society, 2020, 142, 1083-1089.	6.6	91
833	Enhanced ionic conductivity of anion exchange membranes by grafting flexible ionic strings on multiblock copolymers. International Journal of Hydrogen Energy, 2020, 45, 1998-2008.	3.8	15
834	Highly Anion Conductive Polymers: How Do Hexafluoroisopropylidene Groups Affect Membrane Properties and Alkaline Fuel Cell Performance?. ACS Applied Energy Materials, 2020, 3, 469-477.	2.5	36

#	Article	IF	Citations
835	Polysulfone-polyvinylpyrrolidone blend membranes as electrolytes in alkaline water electrolysis. Journal of Membrane Science, 2020, 598, 117674.	4.1	44
836	Catalytic Advantages, Challenges, and Priorities in Alkaline Membrane Fuel Cells. ACS Catalysis, 2020, 10, 225-234.	5.5	190
837	Hydrogen from solar energy, a clean energy carrier from a sustainable source of energy. International Journal of Energy Research, 2020, 44, 4110-4131.	2.2	272
838	Influences of non-ionic branches on the properties of the anion exchange membranes based on imidazolium functionalized poly (2, 6-dimethyl-1, 4-phenylene oxide). European Polymer Journal, 2020, 124, 109463.	2.6	17
839	In-depth understanding of the CO₂ limitation of air fed anion exchange membrane fuel cells. Sustainable Energy and Fuels, 2020, 4, 1801-1811.	2.5	8
840	Amorphous Ni-Based Nanoparticles for Alkaline Oxygen Evolution. ACS Applied Nano Materials, 2020, 3, 10522-10530.	2.4	10
841	Exploring the Effects of Bulky Cations Tethered to Semicrystalline Polymers: The Case of Tetraaminophosphoniums with Ring-Opened Polynorbornenes. Macromolecules, 2020, 53, 8509-8518.	2.2	20
842	Ni/NiO nanosheets for alkaline hydrogen evolution reaction: In situ electrochemical-Raman study. Electrochimica Acta, 2020, 361, 137040.	2.6	148
843	3D-printing for electrolytic processes and electrochemical flow systems. Journal of Materials Chemistry A, 2020, 8, 21902-21929.	5.2	37
844	Rational molecular design of anion exchange membranes functionalized with alicyclic quaternary ammonium cations. Polymer Chemistry, 2020, 11, 6953-6963.	1.9	44
845	Achieving High Conductivity at Low Ion Exchange Capacity for Anion Exchange Membranes with Electrospun Polyelectrolyte Nanofibers. ACS Applied Energy Materials, 2020, 3, 10660-10668.	2.5	15
846	How hydrophobic side chain design affects water cluster connectivity in model polymer electrolyte membranes: Linear versus Y-shaped side chains. International Journal of Hydrogen Energy, 2020, 45, 33906-33924.	3.8	5
847	Ionomers for electrochemical energy conversion & storage technologies. Polymer, 2020, 211, 123080.	1.8	53
848	Decoupled Electrochemical Water Splitting: From Fundamentals to Applications. Advanced Energy Materials, 2020, 10, 2002453.	10.2	167
849	In situ electrochemical grazing incidence small angle X-ray scattering: From the design of an electrochemical cell to an exemplary study of fuel cell catalyst degradation. Journal of Power Sources, 2020, 477, 229030.	4.0	10
850	Integration of a Pd-CeO₂/C Anode with Pt and Pt-Free Cathode Catalysts in High Power Density Anion Exchange Membrane Fuel Cells. ACS Applied Energy Materials, 2020, 3, 10209-10214.	2.5	29
851	Inter-regulated d-band centers of the Ni₃B/Ni heterostructure for boosting hydrogen electrooxidation in alkaline media. Chemical Science, 2020, 11, 12118-12123.	3.7	74
852	Effect of anion exchange ionomer content on electrode performance in AEM water electrolysis. International Journal of Hydrogen Energy, 2020, 45, 28272-28284.	3.8	70

#	Article	IF	Citations
853	A high-temperature anion-exchange membrane fuel cell. Journal of Power Sources Advances, 2020, 5, 100023.	2.6	76
854	Water electrolysers with closed and open electrochemical systems. Nature Materials, 2020, 19, 1140-1150.	13.3	326
855	Alkaline stability of ether bond free fluorene-based anion exchange polymer containing cycloaliphatic quaternary ammonium groups. Polymer Degradation and Stability, 2020, 179, 109299.	2.7	16
856	Quaternized TrÃ¶gerâ€™s base polymer with crown ether unit for alkaline stable anion exchange membranes. Electrochimica Acta, 2020, 354, 136693.	2.6	29
857	Alkaline polymer electrolyte fuel cells without anode humidification and H2 emission. Journal of Power Sources, 2020, 472, 228471.	4.0	23
858	Measuring the true hydroxide conductivity of anion exchange membranes. Journal of Membrane Science, 2020, 612, 118461.	4.1	78
859	Using operando techniques to understand and design high performance and stable alkaline membrane fuel cells. Nature Communications, 2020, 11, 3561.	5.8	113
860	Application of Crosslinked Polybenzimidazole-Poly(Vinyl Benzyl Chloride) Anion Exchange Membranes in Direct Ethanol Fuel Cells. Membranes, 2020, 10, 349.	1.4	12
861	Piperidinium-Functionalized Poly(Vinylbenzyl Chloride) Cross-linked by Polybenzimidazole as an Anion Exchange Membrane with a Continuous Ionic Transport Pathway. Industrial & Engineering Chemistry Research, 2020, 59, 21077-21087.	1.8	18
862	A Composite Anion Conducting Membrane Based on Quaternized Cellulose and Poly(Phenylene Oxide) for Alkaline Fuel Cell Applications. Polymers, 2020, 12, 2676.	2.0	11
863	Fuel and oxygen harvesting from Martian regolithic brine. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 31685-31689.	3.3	17
864	Optimization of the Catalytic Layer for Alkaline Fuel Cells Based on Fumatech Membranes and Ionomer. Catalysts, 2020, 10, 1353.	1.6	14
865	Comparison of Carbon Supports in Anion Exchange Membrane Fuel Cells. Materials, 2020, 13, 5370.	1.3	12
866	Ni₁₇W₃â€“W Interconnected Hybrid Prepared by Atmosphereâ€•and Thermalâ€induced Phase Separation for Efficient Electrocatalysis of Alkaline Hydrogen Evolution. Small, 2020, 16, e2005184.	5.2	31
867	Poly(meta/para-Terphenylene-Methyl Piperidinium)-Based Anion Exchange Membranes: The Effect of Backbone Structure in AEMFC Application. Membranes, 2020, 10, 329.	1.4	24
868	Hydrophilic Microporous Polymer Membranes: Synthesis and Applications. ChemPlusChem, 2020, 85, 1893-1904.	1.3	18
869	Partially fluorinated, multication cross-linked poly(arylene piperidinium) membranes with improved conductivity and reduced swelling for fuel cell application. Ionics, 2020, 26, 5617-5627.	1.2	15
870	Synthetic Approaches for Poly(Phenylene) Block Copolymers via Nickel Coupling Reaction for Fuel Cell Applications. Polymers, 2020, 12, 1614.	2.0	3

#	Article	IF	Citations
871	Synthesis of CeO_xâ€Decorated Pd/C Catalysts by Controlled Surface Reactions for Hydrogen Oxidation in Anion Exchange Membrane Fuel Cells. Advanced Functional Materials, 2020, 30, 2002087.	7.8	58
872	Elastic and durable multiâ€cationâ€crosslinked anion exchange membrane based on poly(styreneâ€bâ€(ethyleneâ€coâ€butylene)â€bâ€styrene). Journal of Polymer Science, 2020, 58, 2181-2196.	3.8	34
873	Bipolar Membrane Electrode Assemblies for Water Electrolysis. ACS Applied Energy Materials, 2020, 3, 9635-9644.	2.5	91
874	A long side chain imidazolium-based graft-type anion-exchange membrane: novel electrolyte and alkaline-durable properties and structural elucidation using SANS contrast variation. Soft Matter, 2020, 16, 8128-8143.	1.2	13
875	De Novo Design of Covalent Organic Framework Membranes toward Ultrafast Anion Transport. Advanced Materials, 2020, 32, e2001284.	11.1	130
876	Towards highly efficient electrochemical CO2 reduction: Cell designs, membranes and electrocatalysts. Applied Energy, 2020, 277, 115557.	5.1	104
877	Poly(norbornene) anion conductive membranes: homopolymer, block copolymer and random copolymer properties and performance. Journal of Materials Chemistry A, 2020, 8, 17568-17578.	5.2	105
878	Twisted ether-free polymer based alkaline membrane for high-performance water electrolysis. Journal of Power Sources, 2020, 480, 228805.	4.0	46
879	Synthesis and characterization of anion-exchange multi-block-copolymer membranes containing highly densified cationic functional groups. Polymer, 2020, 210, 122996.	1.8	9
880	Facile synthesis of poly(arylene ether ketone)s with pendent oxyhexyltrimethylammonium groups for Robust anion exchange membranes. Polymer, 2020, 210, 123035.	1.8	6
881	Development of advanced materials for cleaner energy generation through fuel cells. New Journal of Chemistry, 2020, 44, 19977-19995.	1.4	9
882	Hierarchically Nanostructured Nickelâ€“Cobalt Alloy Supported on Nickel Foam as a Highly Efficient Electrocatalyst for Hydrazine Oxidation. ACS Sustainable Chemistry and Engineering, 2020, 8, 16583-16590.	3.2	29
883	Increasing the Alkaline Stability of N,N-Diaryl Carbazolium Salts Using Substituent Electronic Effects. ACS Applied Materials & Interfaces, 2020, 12, 49617-49625.	4.0	35
884	Achieving Highâ€Performance and 2000 h Stability in Anion Exchange Membrane Fuel Cells by Manipulating Ionomer Properties and Electrode Optimization. Advanced Energy Materials, 2020, 10, 2001986.	10.2	188
885	Highâ€Efficiency Anion Exchange Membrane Water Electrolysis Employing Nonâ€Noble Metal Catalysts. Advanced Energy Materials, 2020, 10, 2002285.	10.2	134
886	Synthesis and Characterization of Anion-Exchange Membranes Using Semicrystalline Triblock Copolymers in Ordered and Disordered States. Macromolecules, 2020, 53, 8548-8561.	2.2	9
887	Electrolysis using Pt/SS electrodes for aluminum recovery from drinking water treatment sludge. Journal of Material Cycles and Waste Management, 2020, 22, 2130-2139.	1.6	5
888	Water Content and Ionic Conductivity of Thin Films of Different Anionic Forms of Anion Conducting Ionomers. Journal of Physical Chemistry C, 2020, 124, 23469-23478.	1.5	15

#	Article	IF	Citations
889	Recent Advances in Bipolar Membrane Design and Applications. Chemistry of Materials, 2020, 32, 8060-8090.	3.2	96
890	Improved Hydrogen Oxidation Reaction Activity and Stability of Buried Metal-Oxide Electrocatalyst Interfaces. Chemistry of Materials, 2020, 32, 7716-7724.	3.2	38
891	Are Radicals Formed During Anion-Exchange Membrane Fuel Cell Operation?. Journal of Physical Chemistry Letters, 2020, 11, 7630-7636.	2.1	57
892	Cationic ether-free poly(bis-alkylimidazolium) ionene blend polybenzimidazole as anion exchange membranes. Polymer Chemistry, 2020, 11, 6037-6046.	1.9	20
893	Anionic Exchange Membrane for Photo-Electrolysis Application. Polymers, 2020, 12, 2991.	2.0	12
894	Self-Optimized Ligand Effect in L1₂-PtPdFe Intermetallic for Efficient and Stable Alkaline Hydrogen Oxidation Reaction. ACS Catalysis, 2020, 10, 15207-15216.	5.5	64
895	Modelling the Proton-Conductive Membrane in Practical Polymer Electrolyte Membrane Fuel Cell (PEMFC) Simulation: A Review. Membranes, 2020, 10, 310.	1.4	46
896	Chemically Durable Poly(phenylene-co-arylene ether) Multiblock Copolymer-Based Anion Exchange Membranes with Different Hydrophobic Moieties for Application in Fuel Cells. Macromolecules, 2020, 53, 10538-10547.	2.2	17
897	An Analysis of Research on Membrane-Coated Electrodes in the 2001â€“2019 Period: Potential Application to CO2 Capture and Utilization. Catalysts, 2020, 10, 1226.	1.6	2
898	Poly (2, 6-dimethyl-1, 4-phenylene)/polysulfone anion exchange membrane blended with TiO2 with improved water uptake for alkaline fuel cell application. International Journal of Hydrogen Energy, 2020, 45, 29465-29476.	3.8	36
899	Directions of membrane separator development for microbial fuel cells: A retrospective analysis using frequent itemset mining and descriptive statistical approach. Journal of Power Sources, 2020, 478, 229014.	4.0	12
900	A highly-active, stable and low-cost platinum-free anode catalyst based on RuNi for hydroxide exchange membrane fuel cells. Nature Communications, 2020, 11, 5651.	5.8	142
901	Optimization of anionic conductivity through the coexistence of ionomer cluster and backboneâ€backbone morphologies in anion exchange membranes. Journal of Polymer Science, 2020, 58, 3446-3455.	2.0	3
902	Toward Overcoming the Challenges in the Comparison of Different Pd Nanocatalysts: Case Study of the Ethanol Oxidation Reaction. Inorganics, 2020, 8, 59.	1.2	8
903	A Phosphorusâ€Doped Ag@Pd Catalyst for Enhanced Cï£¿C Bond Cleavage during Ethanol Electrooxidation. Small, 2020, 16, e2004727.	5.2	59
904	Through-Plane Conductivity of Anion Exchange Membranes at Sub-Freezing Temperaturesâ€”Hydroxide vs (Bi-)Carbonate Ions. Journal of the Electrochemical Society, 2020, 167, 084513.	1.3	8
905	Electrochemical Behavior of Screen-Printed Carbon Electrodes as Transducers in Biosensors. Corrosion, 2020, 76, 553-561.	0.5	2
906	Effect of N-cyclic cationic groups in poly(phenylene oxide)-based catalyst ionomer membranes for anion exchange membrane fuel cells. Journal of Membrane Science, 2020, 608, 118183.	4.1	32

#	Article	IF	Citations
907	Controlling Fuel Crossover in Open Electrochemical Cells by Tuning the Water Nanochannel for Power Generation. ACS Sustainable Chemistry and Engineering, 2020, 8, 8613-8623.	3.2	6
908	The Reaction Mechanism Between Tetraarylammonium Salts and Hydroxide. European Journal of Organic Chemistry, 2020, 2020, 3161-3168.	1.2	14
909	Alkaline water-splitting reactions over Pd/Co-MOF-derived carbon obtained via microwave-assisted synthesis. RSC Advances, 2020, 10, 17359-17368.	1.7	30
910	Cathode Catalysts Based on Cobalt- and Nitrogen-Doped Nanocarbon Composites for Anion Exchange Membrane Fuel Cells. ACS Applied Energy Materials, 2020, 3, 5375-5384.	2.5	61
911	Hydroxypolybenzimidazole Electrolyte with Excellent Stability for High Power Density All-Solid-State Supercapacitors. ACS Applied Energy Materials, 2020, 3, 5163-5172.	2.5	3
912	Functionalizing Polystyrene with N-Alicyclic Piperidine-Based Cations via Friedelâ€“Crafts Alkylation for Highly Alkali-Stable Anion-Exchange Membranes. Macromolecules, 2020, 53, 4722-4732.	2.2	65
913	Ultrafine phosphorus-doped rhodium for enhanced hydrogen electrocatalysis in alkaline electrolytes. Journal of Materials Chemistry A, 2020, 8, 11923-11927.	5.2	34
914	Tailoring the Proton Conductivity and Microstructure of Block Copolymers by Countercation-Selective Membrane Fabrication. Journal of Physical Chemistry C, 2020, 124, 13071-13081.	1.5	5
915	Novel self-cross-linked multi-imidazolium cations long flexible side chains triblock copolymer anion exchange membrane based on ROMP-type polybenzonorbornadiene. International Journal of Hydrogen Energy, 2020, 45, 19676-19690.	3.8	31
916	Properties and Alkaline Stability of Composite Anion Conducting Ionomers Based on Poly(phenylene) Tj ETQq1 1 0.784314 rgBT /Ove 2917-2924.	1.7	7
917	Membrane applications for microbial energy conversion: a review. Environmental Chemistry Letters, 2020, 18, 1581-1592.	8.3	38
918	Improved electrochemical performance of composite anion exchange membranes for fuel cells through cross linking of the polymer chain with functionalized graphene oxide. Journal of Membrane Science, 2020, 611, 118385.	4.1	70
919	High Ion Conductivity and Diffusivity in the Anion Exchange Membrane Enabled by Tethering with Multication Strings on the Poly(biphenyl alkylene) Backbone. ACS Applied Energy Materials, 2020, 3, 6268-6279.	2.5	46
920	IrMo Nanocatalysts for Efficient Alkaline Hydrogen Electrocatalysis. ACS Catalysis, 2020, 10, 7322-7327.	5.5	87
921	Discrepant roles of adsorbed OH* species on IrWO for boosting alkaline hydrogen electrocatalysis. Science Bulletin, 2020, 65, 1735-1742.	4.3	37
922	N3-butyl imidazolium-based anion exchange membranes blended with Poly(vinyl alcohol) for alkaline water electrolysis. Journal of Membrane Science, 2020, 611, 118355.	4.1	54
923	Electrochemical synthesis of ion exchange polymers: Comparison between hydroxide and proton conductors. Solid State Ionics, 2020, 352, 115370.	1.3	4
924	Water Layering Affects Hydroxide Diffusion in Functionalized Nanoconfined Environments. Journal of Physical Chemistry Letters, 2020, 11, 5087-5091.	2.1	25

#	Article	IF	Citations
925	Novel Quaternary Ammonium-Functionalized Covalent Organic Frameworks/Poly(2,6-dimethyl-1,4-phenylene oxide) Hybrid Anion Exchange Membranes with Enhanced Ion Conductivity and Stability. ACS Applied Materials & Interfaces, 2020, 12, 15138-15144.	4.0	42
926	Simulation study of the effects of phase separation on hydroxide solvation and transport in anion exchange membranes. Journal of Chemical Physics, 2020, 152, 094903.	1.2	9
927	Green hydrogen from anion exchange membrane water electrolysis: a review of recent developments in critical materials and operating conditions. Sustainable Energy and Fuels, 2020, 4, 2114-2133.	2.5	367
928	The effect of polymer backbones and cation functional groups on properties of anion exchange membranes for fuel cells. Journal of Membrane Science, 2020, 603, 118025.	4.1	49
929	Highly quaternized polystyrene ionomers for high performance anion exchange membrane water electrolysers. Nature Energy, 2020, 5, 378-385.	19.8	372
930	Multifunctional Electrocatalysts: Ruâ€“M (M = Co, Ni, Fe) for Alkaline Fuel Cells and Electrolyzers. ACS Catalysis, 2020, 10, 4608-4616.	5.5	102
931	Ironâ€•and Nitrogenâ€Doped Grapheneâ€Based Catalysts for Fuel Cell Applications. ChemElectroChem, 2020, 7, 1739-1747.	1.7	53
932	Crosslinked metallo-polyelectrolytes with enhanced flexibility and dimensional stability for anion-exchange membranes. Polymer Chemistry, 2020, 11, 4542-4546.	1.9	15
933	N-spirocyclic ammonium-functionalized graphene oxide-based anion exchange membrane for fuel cells. International Journal of Hydrogen Energy, 2020, 45, 19778-19790.	3.8	31
934	Unitized Regenerative Alkaline Microfluidic Cell Based on Platinum Group Metal-Free Electrode Materials. ACS Applied Energy Materials, 2020, 3, 7397-7403.	2.5	11
935	Mesoscale Simulations of Quaternary Ammonium-Tethered Triblock Copolymers: Effects of the Degree of Functionalization and Styrene Content. Journal of Physical Chemistry C, 2020, 124, 16315-16323.	1.5	11
936	Development of surface-sulfonated graft anion-exchange membranes with monovalent ion selectivity and antifouling properties for electromembrane processes. Journal of Membrane Science, 2020, 612, 118408.	4.1	31
937	Polysulfone functionalized membranes: Properties and challenges. Materials Today Chemistry, 2020, 17, 100302.	1.7	62
938	Preparation and electrochemical performances of silver (alloy) nanoparticles decorated on reduced graphene oxide, using self-polymerization of dopamine in an acidic environment. Materials Today Chemistry, 2020, 17, 100312.	1.7	6
939	pH Effect on the H₂O₂-Induced Deactivation of Fe-N-C Catalysts. ACS Catalysis, 2020, 10, 8485-8495.	5.5	92
940	A Polyethylene-Based Triblock Copolymer Anion Exchange Membrane with High Conductivity and Practical Mechanical Properties. ACS Applied Polymer Materials, 2020, 2, 1294-1303.	2.0	48
941	Membrane-based power generation from seawater treatment and desalination processes. , 2020, , 239-261.		0
942	Improved hydroxide conductivity and performance of nanocomposite membrane derived on quaternized polymers incorporated by titanium dioxide modified graphitic carbon nitride for fuel cells. Renewable Energy, 2020, 152, 590-600.	4.3	14

#	Article	IF	Citations
943	Intrinsic Effect of Carbon Supports on the Activity and Stability of Precious Metal Based Catalysts for Electrocatalytic Alcohol Oxidation in Fuel Cells: A Review. ChemSusChem, 2020, 13, 2484-2502.	3.6	52
944	Electrolyte Lifetime in Aqueous Organic Redox Flow Batteries: A Critical Review. Chemical Reviews, 2020, 120, 6467-6489.	23.0	340
945	Recent trends in hydrogen and oxygen electrocatalysis for anion exchange membrane technologies. Current Opinion in Electrochemistry, 2020, 21, 146-159.	2.5	9
946	Assessment of the FAA3-50 polymer electrolyte in combination with a NiMn2O4 anode catalyst for anion exchange membrane water electrolysis. International Journal of Hydrogen Energy, 2020, 45, 9285-9292.	3.8	77
947	Recent advances in the electrooxidation of biomass-based organic molecules for energy, chemicals and hydrogen production. Catalysis Science and Technology, 2020, 10, 3071-3112.	2.1	52
948	Fuel cell evaluation of anion exchange membranes based on poly(phenylene oxide) with different cationic group placement. Sustainable Energy and Fuels, 2020, 4, 2274-2283.	2.5	16
949	Application of Viscose Nonwoven Fabrics as a Fibrous Frame of Polykon Mosaic Membranes. Membranes and Membrane Technologies, 2020, 2, 63-69.	0.6	5
950	Density functional theory study on the degradation of fuel cell anion exchange membranes via removal of vinylbenzyl quaternary ammonium head group. Journal of Physical Organic Chemistry, 2020, 33, e4049.	0.9	16
951	Effect of ion exchange capacity and water uptake on hydroxide transport in PSU-TMA membranes: A DFT and molecular dynamics study. Journal of Membrane Science, 2020, 599, 117837.	4.1	31
952	Nanofiber Based Organic Solvent Anion Exchange Membranes for Selective Separation of Monovalent anions. ACS Applied Materials & Interfaces, 2020, 12, 7539-7547.	4.0	32
953	Changes of Anion Exchange Membrane Properties During Chemical Degradation. ACS Applied Polymer Materials, 2020, 2, 360-367.	2.0	35
954	Quaternized poly(2,6-dimethyl-1,4-phenylene oxide) anion exchange membranes with pendant sterically-protected imidazoliums for alkaline fuel cells. Journal of Membrane Science, 2020, 601, 117881.	4.1	48
955	Perfluorinated comb-shaped cationic polymer containing long-range ordered main chain for anion exchange membrane. Electrochimica Acta, 2020, 336, 135757.	2.6	16
956	Highly conductive and stable anionâ€exchange membranes based on crosslinked poly(arylene ether) Tj ETQq1 1 0.784314 rgBT /Over	2.0	9
957	Designing Anion Exchange Membranes with Enhanced Hydroxide Ion Conductivity by Mesoscale Simulations. Journal of Physical Chemistry C, 2020, 124, 4470-4482.	1.5	34
958	Reactive microporous copolymers with excellent film-forming ability for ion exchange membranes. Journal of Power Sources, 2020, 452, 227827.	4.0	12
959	Co8FeS8 wrapped in Auricularia-derived N-doped carbon with a micron-size spherical structure as an efficient cathode catalyst for strengthening charge transfer and bioelectricity generation. Journal of Colloid and Interface Science, 2020, 567, 65-74.	5.0	13
960	Development of Polymeric Membranes Based on Quaternized Polysulfones for AMFC Applications. Polymers, 2020, 12, 283.	2.0	25

#	Article	IF	Citations
961	Nitrogen-doped carbide-derived carbon/carbon nanotube composites as cathode catalysts for anion exchange membrane fuel cell application. Applied Catalysis B: Environmental, 2020, 272, 119012.	10.8	72
962	An Electrochemical Valorization Fuel Cell for Simultaneous Electroorganic and Hydrogen Fuel Syntheses. Journal of Physical Chemistry C, 2020, 124, 11284-11292.	1.5	4
963	Promoting H2O2 production via 2-electron oxygen reduction by coordinating partially oxidized Pd with defect carbon. Nature Communications, 2020, 11, 2178.	5.8	209
964	Aggregated and ionic cross-linked anion exchange membrane with enhanced hydroxide conductivity and stability. Journal of Power Sources, 2020, 459, 227838.	4.0	32
965	Anion exchange membrane electrolyte preserving inverse Ia<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mrow><mml:mover accent="true"><mml:mn>3</mml:mn><mml:mo>â€¾</mml:mo></mml:mover></mml:mrow></mml:math>d bicontinuous cubic phase: Effect of microdomain morphology on selective ion transport. Journal of Membrane Science, 2020, 605, 118113.	4.1	15
966	Anion-exchange membranes for direct methanol alkaline fuel cells. , 2020, , 71-106.		1
967	Effect of side chain on the electrochemical performance of poly (ether ether ketone) based anion-exchange membrane: A molecular dynamics study. Journal of Membrane Science, 2020, 605, 118105.	4.1	42
968	Quaternized poly (2, 6-dimethyl-1, 4-phenylene oxide) anion exchange membranes based on isomeric benzyltrimethylammonium cations for alkaline fuel cells. Journal of Membrane Science, 2020, 606, 118133.	4.1	31
969	Sublayered Thin Films of Hydrated Anion Exchange Ionomer for Fuel Cells Formed on SiO₂ and Pt Substrates Analyzed by Neutron Reflectometry under Controlled Temperature and Humidity Conditions. Langmuir, 2020, 36, 4955-4963.	1.6	9
970	Low-temperature direct ammonia fuel cells: Recent developments and remaining challenges. Current Opinion in Electrochemistry, 2020, 21, 335-344.	2.5	47
971	Comb-shaped fluorene-based poly(arylene ether sulfone nitrile) as anion exchange membrane. International Journal of Hydrogen Energy, 2020, 45, 11148-11157.	3.8	25
972	Influence of Water Transport Across Microscale Bipolar Interfaces on the Performance of Direct Borohydride Fuel Cells. ACS Applied Energy Materials, 2020, 3, 4449-4456.	2.5	32
973	Comb-shaped cardo poly(arylene ether nitrile sulfone) anion exchange membranes: significant impact of nitrile group content on morphology and properties. RSC Advances, 2020, 10, 15375-15382.	1.7	9
974	Electroreduction of oxygen on cobalt phthalocyanine-modified carbide-derived carbon/carbon nanotube composite catalysts. Journal of Solid State Electrochemistry, 2021, 25, 57-71.	1.2	37
975	Defect engineering of single-walled carbon nanohorns for stable electrochemical synthesis of hydrogen peroxide with high selectivity in neutral electrolytes. Journal of Energy Chemistry, 2021, 54, 118-123.	7.1	5
976	Understanding the oxophilic effect on the hydrogen electrode reaction through PtM nanostructures. Journal of Solid State Electrochemistry, 2021, 25, 187-194.	1.2	15
977	Electrodeposited <scp>NiRh</scp> alloy as an efficient lowâ€precious metal catalyst for alkaline hydrogen oxidation reaction. International Journal of Energy Research, 2021, 45, 5325-5336.	2.2	8
978	Alkaline fuel cells consisting of imidazolium-based graft-type anion exchange membranes: Optimization of fuel cell conditions to achieve high performance and durability. Journal of Membrane Science, 2021, 620, 118844.	4.1	21

#	Article	IF	Citations
979	Facile Fabrication of Poly(vinyl alcohol)/Polyquaterniumâ€10 (PVA/PQâ€10) Anion Exchange Membrane with Semiâ€Interpenetrating Network. Macromolecular Materials and Engineering, 2021, 306, .	1.7	14
980	Recent Progress on Flexible Zn-Air Batteries. Energy Storage Materials, 2021, 35, 538-549.	9.5	143
981	Chemically stable anion exchange membranes based on C2-Protected imidazolium cations for vanadium flow battery. Journal of Membrane Science, 2021, 618, 118696.	4.1	48
982	Rigid crosslinkers towards constructing highly-efficient ion transport channels in anion exchange membranes. Journal of Membrane Science, 2021, 619, 118806.	4.1	48
983	Effective ion mobility in anion exchange ionomers: Relations with hydration, porosity, tortuosity, and percolation. Journal of Membrane Science, 2021, 617, 118622.	4.1	33
984	Alkaline stable pyrrolidinium-type main-chain polymer: The synergetic effect between adjacent cations. Journal of Membrane Science, 2021, 618, 118689.	4.1	20
985	Degradation of Organic Cations under Alkaline Conditions. Journal of Organic Chemistry, 2021, 86, 254-263.	1.7	70
986	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
987	Highly hydroxide-conductive anion exchange membrane with PIL@MOF-assisted ion nanochannels. Journal of Industrial and Engineering Chemistry, 2021, 94, 465-471.	2.9	22
988	The lab-to-fab journey of copper-based electrocatalysts for multi-carbon production: Advances, challenges, and opportunities. Nano Today, 2021, 36, 101028.	6.2	25
989	Recent Advancement on Anion Exchange Membranes for Fuel Cell and Water Electrolysis. ChemElectroChem, 2021, 8, 36-45.	1.7	68
990	Redox flow desalination based on the temperature difference as a driving force. Chemical Engineering Journal, 2021, 416, 127716.	6.6	17
991	Facile fabrication of amorphous NiMo catalysts for alkaline hydrogen oxidation reaction. Journal of Industrial and Engineering Chemistry, 2021, 94, 309-316.	2.9	19
992	A Divergent Paired Electrochemical Process for the Conversion of Furfural Using a Dividedâ€Cell Flow Microreactor. ChemSusChem, 2021, 14, 590-594.	3.6	24
993	Construction of ion conducting channels by embedding hydrophilic oligomers in piperidine functionalized poly(2, 6-dimethyl-1, 4-phenylene oxide) membranes. European Polymer Journal, 2021, 142, 110150.	2.6	4
994	Pure Water Solid Alkaline Water Electrolyzer Using Fully Aromatic and High-Molecular-Weight Poly(fluorene-alt-tetrafluorophenylene)-trimethyl Ammonium Anion Exchange Membranes and Ionomers. ACS Applied Energy Materials, 2021, 4, 1053-1058.	2.5	45
995	Oxide-based precious metal-free electrocatalysts for anion exchange membrane fuel cells: from material design to cell applications. Journal of Materials Chemistry A, 2021, 9, 3151-3179.	5.2	12
996	Quaternized poly (2,6â€dimethylâ€1,4â€phenylene oxide) crosslinked by tertiary amine and siloxane for anion exchange membranes. Journal of Applied Polymer Science, 2021, 138, 50201.	1.3	5

#	Article	IF	Citations
997	Ion/Molecule-selective transport nanochannels of membranes for redox flow batteries. Energy Storage Materials, 2021, 34, 648-668.	9.5	37
998	Flexible cationic side chains for enhancing the hydroxide ion conductivity of olefinic-type copolymer-based anion exchange membranes: An experimental and theoretical study. Journal of Membrane Science, 2021, 620, 118794.	4.1	26
999	Diamine crosslinked anion exchange membranes based on poly(vinyl benzyl methylpyrrolidinium). Polymer, 2021, 212, 123156.	1.8	20
1000	Crosslinked PPO-based anion exchange membranes: The effect of crystallinity versus hydrophilicity by oxygen-containing crosslinker chain length. Journal of Membrane Science, 2021, 619, 118774.	4.1	49
1001	Tuning the Protonâ€Coupled Electronâ€Transfer Rate by Ligand Modification in Catalystâ€“Dye Supramolecular Complexes for Photocatalytic Water Splitting. ChemSusChem, 2021, 14, 479-486.	3.6	7
1002	Altering membrane structure to enhance water permeability and performance of anion exchange membrane fuel cell. Science China Technological Sciences, 2021, 64, 414-422.	2.0	1
1003	Fluorinated poly(fluorenyl ether)s with linear multi-cationic side chains for vanadium redox flow batteries. Science China Materials, 2021, 64, 349-361.	3.5	13
1004	Conductive Porous Coordination Polymers: Electron, Ion, and Proton Conduction. , 2021, , 393-409.		1
1005	Aqueous Mn-Zn and Ni-Zn Batteries for Sustainable Energy Storage. , 2021, , 1-26.		1
1006	Direct hydrazine fuel cells (DHFCs). , 2021, , 233-248.		2
1007	Expeditious synthesis of aromatic-free piperidinium-functionalized polyethylene as alkaline anion exchange membranes. Chemical Science, 2021, 12, 3898-3910.	3.7	47
1008	On the effect of anion exchange ionomer binders in bipolar electrode membrane interface water electrolysis. Journal of Materials Chemistry A, 2021, 9, 14285-14295.	5.2	27
1009	Microbial Fuel Cells: Design and Evaluation of Catalysts and Device. , 2021, , 681-764.		1
1010	Alkaline Anion Exchange Membrane (AEM) Water Electrolysersâ€"Current/Future Perspectives in Electrolysers for Hydrogen. , 2022, , 473-504.		2
1011	Single-atom oxygen reduction reaction electrocatalysts of Fe, Si, and N co-doped carbon with 3D interconnected mesoporosity. Journal of Materials Chemistry A, 2021, 9, 4297-4309.	5.2	43
1012	Microbial fuel <scp>cellsâ€"A</scp> preferred technology to prevail energy crisis. International Journal of Energy Research, 2021, 45, 8370-8388.	2.2	26
1013	Gas diffusion electrodes (GDEs) for electrochemical reduction of carbon dioxide, carbon monoxide, and dinitrogen to value-added products: a review. Energy and Environmental Science, 2021, 14, 1959-2008.	15.6	243
1014	Imidazole-functionalized polyketone-based polyelectrolytes with efficient ionic channels and superwettability for alkaline polyelectrolyte fuel cells and multiple liquid purification. Journal of Materials Chemistry A, 2021, 9, 14827-14840.	5.2	11

#	Article	IF	Citations
1015	Ultra-thin quaternized polybenzimidazole anion exchange membranes with throughout OH^{â”} conducive highway networks for high-performance fuel cells. Journal of Materials Chemistry A, 2021, 9, 7522-7530.	5.2	47
1016	Evaluation of Diaphragms and Membranes as Separators for Alkaline Water Electrolysis. Journal of the Electrochemical Society, 2021, 168, 014510.	1.3	54
1017	Controllable size and crystallinity of Ru nanoparticles on a carbon support synthesized by fluidized bed reactor-atomic layer deposition for enhanced hydrogen oxidation activity. Journal of Materials Chemistry A, 2021, 9, 17223-17230.	5.2	14
1018	Design and application of covalent organic frameworks for ionic conduction. Polymer Chemistry, 2021, 12, 4874-4894.	1.9	27
1019	The influence of the anion exchange membrane on mass-transport limiting phenomena in bipolar interface fuel cells with Feâ€“N/C based cathode catalyst layers. RSC Advances, 2021, 11, 31477-31486.	1.7	4
1020	Cationâ€“dipole interaction that creates ordered ion channels in an anion exchange membrane for fast<scp>OH</scp>^{â”}conduction. AICHE Journal, 2021, 67, e17133.	1.8	53
1021	Carbide-Supported PtRu Catalysts for Hydrogen Oxidation Reaction in Alkaline Electrolyte. ACS Catalysis, 2021, 11, 932-947.	5.5	56
1022	Recent advances in transition-metal-sulfide-based bifunctional electrocatalysts for overall water splitting. Journal of Materials Chemistry A, 2021, 9, 5320-5363.	5.2	322
1023	Imidazoles. , 2022, , 113-307.		1
1024	Effect of same chloromethylation and sulfonation process on the ion exchange membranes in terms of polymer types and ionic properties. Ionics, 2021, 27, 1243-1254.	1.2	4
1025	Dimensionally and oxidatively stable anion exchange membranes based on bication cross-linked poly(meta-terphenylene alkylene)s. Polymer, 2021, 216, 123433.	1.8	20
1026	Toward predictive permeabilities: Experimental measurements and multiscale simulation of methanol transport in Nafion. Journal of Polymer Science, 2021, 59, 594-613.	2.0	6
1027	Overview of Anion Exchange Membranes Based on Ring Opening Metathesis Polymerization (ROMP). Polymer Reviews, 2021, 61, 689-713.	5.3	16
1029	A stable zinc-based secondary battery realized by anion-exchange membrane as the separator. Journal of Power Sources, 2021, 486, 229376.	4.0	20
1030	Construction of highly efficient ion channel within anion exchange membrane based on interpenetrating polymer network for H2/Air (CO2-free) alkaline fuel cell. Journal of Power Sources, 2021, 486, 229377.	4.0	19
1031	Atomistic Insights into the Hydrogen Oxidation Reaction of Palladium-Ceria Bifunctional Catalysts for Anion-Exchange Membrane Fuel Cells. ACS Catalysis, 2021, 11, 2561-2571.	5.5	30
1032	An Anionâ€Exchange Membrane Fuel Cell Containing Only Abundant and Affordable Materials. Energy Technology, 2021, 9, 2000909.	1.8	46
1033	Ionic and molecular transport in aqueous solution through 2D and layered nanoporous membranes. Journal Physics D: Applied Physics, 2021, 54, 183002.	1.3	4

#	Article	IF	Citations
1034	Ionomer Optimization for Water Uptake and Swelling in Anion Exchange Membrane Electrolyzer: Hydrogen Evolution Electrode. Journal of the Electrochemical Society, 2021, 168, 024503.	1.3	31
1035	Higher Acid Recovery Efficiency of Novel Functionalized Inorganic/Organic Composite Anion Exchange Membranes from Acidic Wastewater. Membranes, 2021, 11, 133.	1.4	14
1036	Polymer Electrolytes with High Ionic Concentration for Fuel Cells and Electrolyzers. ACS Applied Polymer Materials, 2021, 3, 1250-1270.	2.0	74
1037	Blend membranes based on N1-alkyl-substituted imidazolium functionalized polymers and aromatic polyethers: influence of N1-alkyl substituent on properties and alkaline stability. Polymer Bulletin, 2022, 79, 1647-1668.	1.7	3
1038	A Review of Inorganic Photoelectrode Developments and Reactor Scaleâ€Up Challenges for Solar Hydrogen Production. Advanced Energy Materials, 2021, 11, 2003286.	10.2	51
1039	Highly conductive anion exchange membranes based on polymer networks containing imidazolium functionalised side chains. Scientific Reports, 2021, 11, 3764.	1.6	22
1040	Designing anion exchange membranes for CO2 electrolysers. Nature Energy, 2021, 6, 339-348.	19.8	209
1041	Performance hysteresis phenomena of anion exchange membrane fuel cells using an Feâ€“Nâ€“C cathode catalyst and an in-house-developed polymer electrolyte. Journal of Power Sources, 2021, 487, 229407.	4.0	13
1042	Direct Formation of Metal Layer on Anion Exchange Membrane Using Electroless Deposition Process. Electrochemistry, 2021, 89, 192-196.	0.6	3
1043	Enhancing Proton Conductivity of Sulfonated Poly(ether ether ketone)-Based Membranes by Incorporating Phosphotungstic-Acid-Coupled Graphene Oxide. Industrial & Engineering Chemistry Research, 2021, 60, 4460-4470.	1.8	22
1044	Anion Exchange Ionomers: Impact of Chemistry on Thinâ€Film Properties. Advanced Functional Materials, 2021, 31, 2008778.	7.8	36
1045	Designing Synergistic Electrocatalysts for H₂ Oxidation and Evolution Reactions in Alkaline Media. Journal of Physical Chemistry C, 2021, 125, 7188-7203.	1.5	9
1046	Separation of CO₂ from Dilute Gas Streams Using a Membrane Electrochemical Cell. ACS ES&T Engineering, 2021, 1, 905-916.	3.7	13
1047	Multiâ€cation sideâ€chainâ€type containing piperidinium group poly(2,6â€dimethylâ€1,4â€phenylene oxide) alkaline anion exchange membranes. Journal of Applied Polymer Science, 2021, 138, 50736.	1.3	5
1048	Effect of Different Quaternary Ammonium Groups on the Hydroxide Conductivity and Stability of Anion Exchange Membranes. ACS Omega, 2021, 6, 7994-8001.	1.6	19
1049	Designing Highly Conductive Block Copolymer-Based Anion Exchange Membranes by Mesoscale Simulations. Journal of Physical Chemistry B, 2021, 125, 2729-2740.	1.2	11
1050	Poly(ether sulfone)-Based Anion Exchange Membranes Containing Dense Quaternary Ammonium Cations and Their Application for Fuel Cells. ACS Applied Energy Materials, 2021, 4, 2201-2217.	2.5	14
1051	Polymer Membranes for All-Vanadium Redox Flow Batteries: A Review. Membranes, 2021, 11, 214.	1.4	32

#	Article	IF	Citations
1052	NiCu mixed metal oxide catalyst for alkaline hydrogen evolution in anion exchange membrane water electrolysis. Electrochimica Acta, 2021, 371, 137837.	2.6	60
1053	Bipolarâ€Interface Hydrogen Fuel Cells: A Review and Perspective on Future Highâ€Performance, Low Platinumâ€Group Metal Content Designs. ChemElectroChem, 2021, 8, 1430-1447.	1.7	6
1054	Supported Ni@Ni₂P Coreâ€“Shell Nanotube Arrays on Ni Foam for Hydrazine Electrooxidation. ACS Sustainable Chemistry and Engineering, 2021, 9, 4564-4570.	3.2	14
1055	Piperidinium functionalized aryl ether-free polyaromatics as anion exchange membrane for water electrolysers: Performance and durability. Journal of Membrane Science, 2021, 621, 118964.	4.1	68
1056	Tuning Niâ€“MoO₂ Catalystâ€“Ionomer and Electrolyte Interaction for Water Electrolyzers with Anion Exchange Membranes. ACS Applied Energy Materials, 2021, 4, 3327-3340.	2.5	27
1057	Ionomer Thinâ€Films by Electrochemical Synthesis: Bipolar and Ampholytic Membranes. ChemElectroChem, 2021, 8, 1493-1499.	1.7	3
1058	Electrochemical CO2 reduction at room temperature: Status and perspectives. Journal of Energy Storage, 2021, 36, 102373.	3.9	23
1059	Critical Review of Platinum Group Metal-Free Materials for Water Electrolysis: Transition from the Laboratory to the Market. Johnson Matthey Technology Review, 2021, 65, 207-226.	0.5	17
1060	A rod-coil grafts strategy for N-spirocyclic functionalized anion exchange membranes with high fuel cell power density. Journal of Power Sources, 2021, 490, 229544.	4.0	27
1061	Nanofluidics for osmotic energy conversion. Nature Reviews Materials, 2021, 6, 622-639.	23.3	288
1062	Bismuth Nanoparticle-Embedded Porous Carbon Frameworks as a High-Rate Chloride Storage Electrode for Water Desalination. ACS Applied Materials & Interfaces, 2021, 13, 21149-21156.	4.0	38
1063	Radical inhibitors assisted alkali-resisting anion exchange membranes based on poly(4-vinylbenzyl) Tj ETQq1 1 0.784314 rgBT /Overlo	1.3	3
1064	Highly stable electron-withdrawing C O link-free backbone with branched cationic side chain as anion exchange membrane. Journal of Membrane Science, 2021, 624, 119052.	4.1	25
1065	Crucial role of side-chain functionality in anion exchange membranes: Properties and alkaline fuel cell performance. Journal of Membrane Science, 2021, 625, 119172.	4.1	48
1066	High chemical stability anion exchange membrane based on poly(aryl piperidinium): Effect of monomer configuration on membrane properties. International Journal of Hydrogen Energy, 2021, 46, 18524-18533.	3.8	61
1067	Electrospun Modified Polyketone-Based Anion Exchange Membranes with High Ionic Conductivity and Robust Mechanical Properties. ACS Applied Energy Materials, 2021, 4, 5187-5200.	2.5	18
1068	Study of Anion Exchange Membrane Properties Incorporating N-spirocyclic Quaternary Ammonium Cations and Aqueous Organic Redox Flow Battery Performance. Membranes, 2021, 11, 367.	1.4	12
1069	OHâ^' and H3O+ Diffusion in Model AEMs and PEMs at Low Hydration: Insights from Ab Initio Molecular Dynamics. Membranes, 2021, 11, 355.	1.4	11

#	Article	IF	Citations
1070	Crosslinked quaternary phosphonium-functionalized poly(ether ether ketone) polymer-based anion-exchange membranes. Journal of Membrane Science, 2021, 626, 119167.	4.1	59
1071	The effect of â€“NHâ€˜ on quaternized polybenzimidazole anion exchange membranes for alkaline fuel cells. Journal of Membrane Science, 2021, 626, 119178.	4.1	58
1072	Metallopolymer as a Solid Electrolyte for Rechargeable Zn-Metal Alkaline Batteries. , 2021, 3, 799-806.		9
1073	Alkaline fuel cell technology - A review. International Journal of Hydrogen Energy, 2021, 46, 18489-18510.	3.8	166
1074	Recent Insights on Catalyst Layers for Anion Exchange Membrane Fuel Cells. Advanced Science, 2021, 8, e2100284.	5.6	76
1075	Enhanced catalytic activity of Ru through N modification toward alkaline hydrogen electrocatalysis. Chinese Chemical Letters, 2022, 33, 1065-1069.	4.8	31
1076	Comb-shaped anion exchange membranes: Hydrophobic side chains grafted onto backbones or linked to cations?. Journal of Membrane Science, 2021, 626, 119096.	4.1	26
1077	Progress in neutron techniques: towards improved polymer electrolyte membranes for energy devices. Journal of Physics Condensed Matter, 2021, 33, 264005.	0.7	3
1078	Towards performance improved anion exchange membrane: Cross-linking with multi-cations oligomer modified graphene oxide. International Journal of Hydrogen Energy, 2021, 46, 23855-23867.	3.8	16
1079	Elucidating the Role of Hydroxide Electrolyte on Anion-Exchange-Membrane Water Electrolyzer Performance. Journal of the Electrochemical Society, 2021, 168, 054522.	1.3	54
1080	Dual-Side-Chain-Grafted Poly(phenylene oxide) Anion Exchange Membranes for Fuel-Cell and Electrodialysis Applications. ACS Sustainable Chemistry and Engineering, 2021, 9, 8611-8622.	3.2	23
1081	Imparting Antimicrobial and Antifouling Properties to Anion Exchange Membrane through the Modification with Gentamicinâ€Based Polymer. Advanced Materials Interfaces, 2021, 8, 2100457.	1.9	5
1082	New amphiphilic semi-interpenetrating networks based on polysulfone for anion-exchange membrane fuel cells with improved alkaline and mechanical stabilities. Polymer, 2021, 226, 123824.	1.8	16
1083	Acidâ€durable, highâ€performance cobalt phosphide catalysts for hydrogen evolution in proton exchange membrane water electrolysis. International Journal of Energy Research, 2021, 45, 16842-16855.	2.2	12
1084	A review of alkaline solid polymer membrane in the application of <scp>AEM</scp> electrolyzer: Materials and characterization. International Journal of Energy Research, 2021, 45, 18337-18354.	2.2	44
1085	Geometrical Model for the Growth Mechanism of Si Nanopores. Silicon, 0, , 1.	1.8	1
1086	Ultrafine Nickel Nanoparticles Encapsulated in N-Doped Carbon Promoting Hydrogen Oxidation Reaction in Alkaline Media. ACS Catalysis, 2021, 11, 7422-7428.	5.5	57
1087	Hydrogen energy: development prospects and materials. Russian Chemical Reviews, 2021, 90, 627-643.	2.5	115

#	Article	IF	Citations
1088	Fabrication of High-Alkaline Stable Quaternized Poly(arylene ether ketone)/Graphene Oxide Derivative Including Zwitterion for Alkaline Fuel Cells. ACS Sustainable Chemistry and Engineering, 2021, 9, 8824-8834.	3.2	30
1089	Ligand Valency Effects on the Alkaline Stability of Metallopolymer Anionâ€Exchange Membranes. Macromolecular Rapid Communications, 2021, 42, e2100238.	2.0	12
1090	In Silico High-Throughput Screening of Ag-Based Electrocatalysts for Anion-Exchange Membrane Fuel Cells. Journal of Physical Chemistry Letters, 2021, 12, 5660-5667.	2.1	6
1091	Facile Chemical Modification of AquivionÂ® Membranes for Anionic Fuel Cells. ChemElectroChem, 2021, 8, 2231-2237.	1.7	12
1092	Highly Stable and Conductive Multicationic Poly(biphenyl indole) with Extender Side Chains for Anion Exchange Membrane Fuel Cells. ACS Applied Energy Materials, 2021, 4, 6154-6165.	2.5	47
1093	Series-Connected Tetracation Partially Cross-Linked Anion Exchange Membranes: Insight towards Consequences of Alkyl Spacer Length. ACS Applied Polymer Materials, 2021, 3, 3307-3320.	2.0	9
1094	Biselective microporous TrÓ§ger's base membrane for effective ion separation. Journal of Membrane Science, 2021, 627, 119246.	4.1	19
1095	An Investigation of a (Vinylbenzyl) Trimethylammonium and N-Vinylimidazole-Substituted Poly (Vinylidene Fluoride-Co-Hexafluoropropylene) Copolymer as an Anion-Exchange Membrane in a Lignin-Oxidising Electrolyser. Membranes, 2021, 11, 425.	1.4	9
1096	Silica Containing Composite Anion Exchange Membranes by Solâ€“Gel Synthesis: A Short Review. Polymers, 2021, 13, 1874.	2.0	10
1097	Highly Conductive and Dimensionally Stable Anion Exchange Membranes Based on Poly(dimethoxybenzene-co-methyl 4-formylbenzoate) Ionomers. Macromolecules, 2021, 54, 5557-5566.	2.2	24
1098	Toward alkaline-stable anion exchange membranes in fuel cells: cycloaliphatic quaternary ammonium-based anion conductors. Electrochemical Energy Reviews, 2022, 5, 348-400.	13.1	62
1099	The alkaline stability and fuel cell performance of poly(N-spirocyclic quaternary ammonium) ionenes as anion exchange membrane. Journal of Membrane Science, 2021, 630, 119325.	4.1	25
1100	Hot-pressed polyelectrolyte complexes as novel alkaline stable monovalent-ion selective anion exchange membranes. Journal of Colloid and Interface Science, 2021, 593, 11-20.	5.0	17
1101	Single Pass CO₂ Conversion Exceeding 85% in the Electrosynthesis of Multicarbon Products via Local CO₂ Regeneration. ACS Energy Letters, 2021, 6, 2952-2959.	8.8	155
1102	Bipolar Membrane and Interface Materials for Electrochemical Energy Systems. ACS Applied Energy Materials, 2021, 4, 7419-7439.	2.5	21
1103	Effect of current-induced ion transfer on the electrical resistance of reverse electrodialysis stack by chronopotentiometry. Electrochimica Acta, 2021, 385, 138446.	2.6	2
1104	Electrospun and cross-linked nanofiber composite poly(aryl ether sulfone) for anion exchange membranesÂ. Journal of Polymer Research, 2021, 28, 1.	1.2	7
1105	A novel anion exchange membrane based on poly (2,6-dimethyl-1,4-phenylene oxide) with excellent alkaline stability for AEMFC. International Journal of Hydrogen Energy, 2021, 46, 24328-24338.	3.8	22

#	Article	IF	Citations
1107	Interaction Regulation Between Ionomer Binder and Catalyst: Active Tripleâ€Phase Boundary and High Performance Catalyst Layer for Anion Exchange Membrane Fuel Cells. Advanced Science, 2021, 8, e2101744.	5.6	34
1108	Dimethylimidazolium-Functionalized Polybenzimidazole and Its Organicâ€“Inorganic Hybrid Membranes for Anion Exchange Membrane Fuel Cells. Polymers, 2021, 13, 2864.	2.0	10
1109	Hierarchically nanostructured (Ni,Co)phosphides for hydrazine electrooxidation. Electrochimica Acta, 2021, 387, 138492.	2.6	16
1110	Architecture dependent water uptake in model polyelectrolyte membranes. International Journal of Hydrogen Energy, 2021, 46, 28232-28245.	3.8	2
1111	Alkaline Fuel Cells. , 2022, , 623-648.		0
1112	Mechanically robust microporous anion exchange membranes with efficient anion conduction for fuel cells. Chemical Engineering Journal, 2021, 418, 129311.	6.6	44
1113	Fuels for Fuel Cells. , 2022, , 123-170.		0
1114	Highly conductive hydroxide exchange membranes containing fluorene-units tethered with dual pairs of quaternary piperidinium cations. Journal of Membrane Science, 2021, 632, 119376.	4.1	45
1115	Poly(vinyl alcohol)-Based Hydrogel Anion Exchange Membranes for Alkaline Fuel Cell. Macromolecules, 2021, 54, 7900-7909.	2.2	25
1116	Fast Bulky Anion Conduction Enabled by Free Shuttling Phosphonium Cations. Research, 2021, 2021, 9762709.	2.8	11
1117	Designing Anion-Exchange Ionomers with Oriented Nanoscale Phase Separation at a Silver Interface. Journal of Physical Chemistry C, 2021, 125, 20592-20605.	1.5	3
1118	Multiblock Copolymer Anion-Exchange Membranes Derived from Vinyl Addition Polynorbornenes. ACS Applied Energy Materials, 2021, 4, 10273-10279.	2.5	15
1119	The promise of hydrogen production from alkaline anion exchange membrane electrolyzers. Nano Energy, 2021, 87, 106162.	8.2	149
1120	Alkaline Anion Exchange Membrane from Alkylated Polybenzimidazole. ACS Applied Energy Materials, 2021, 4, 9792-9805.	2.5	26
1121	Anion exchange membranes with fast ion transport channels driven by cation-dipole interactions for alkaline fuel cells. Journal of Membrane Science, 2021, 634, 119404.	4.1	51
1122	Diamine crosslinked anion exchange membranes based on poly(vinyl benzyl methylpyrrolidinium) for alkaline water electrolysis. Journal of Membrane Science, 2021, 633, 119418.	4.1	44
1123	The Implications of Membranes Used as Separators in Microbial Fuel Cells. Membranes, 2021, 11, 738.	1.4	37
1124	Gas diffusion electrodes and membranes for CO2 reduction electrolysers. Nature Reviews Materials, 2022, 7, 55-64.	23.3	265

#	Article	IF	Citations
1125	A liquid e-fuel cell operating at â˜’20ÂÂ°C. Journal of Power Sources, 2021, 506, 230198.	4.0	7
1126	Novel Method of Rebound Tailing Pulse (RTP) for Water Dissociation. IEEE Transactions on Plasma Science, 2021, 49, 2893-2900.	0.6	1
1127	Design Strategies for Alkaline Exchange Membraneâ€“Electrode Assemblies: Optimization for Fuel Cells and Electrolyzers. Membranes, 2021, 11, 686.	1.4	8
1128	Operational parameters correlated with the long-term stability of anion exchange membrane water electrolyzers. International Journal of Hydrogen Energy, 2021, 46, 31550-31562.	3.8	10
1129	Chemo-stable poly(quinquephenylene-co-diphenylene piperidinium) ionomers for anion exchange membrane fuel cells. Journal of Power Sources, 2021, 506, 230184.	4.0	32
1130	Hydrophobic Effect on Alkaline Stability of Graft Chains in Ammoniumâ€type Anion Exchange Membranes Prepared by Radiationâ€Induced Graft Polymerization. ChemistrySelect, 2021, 6, 8879-8888.	0.7	2
1131	Electrocatalysts for the oxygen evolution reaction in alkaline and neutral media. A comparative review. Journal of Power Sources, 2021, 507, 230072.	4.0	93
1132	Functionalized TiO2 mediated organic-inorganic composite membranes based on quaternized poly(arylene ether ketone) with enhanced ionic conductivity and alkaline stability for alkaline fuel cells. Journal of Membrane Science, 2021, 634, 119435.	4.1	31
1133	Conductivity and Stability Properties of Anion Exchange Membranes: Cation Effect and Backbone Effect. ChemSusChem, 2021, 14, 5021-5031.	3.6	14
1134	Mixed matrix anion exchange membrane containing covalent organic frameworks: Ultra-low IEC but medium conductivity. Applied Surface Science, 2021, 560, 149909.	3.1	14
1135	Atomically Isolated Rh Sites within Highly Branched Rh₂Sb Nanostructures Enhance Bifunctional Hydrogen Electrocatalysis. Advanced Materials, 2021, 33, e2105049.	11.1	48
1136	Anion Exchange Membrane Water Electrolysis. Denki Kagaku, 2021, 89, 247-251.	0.0	1
1137	A surprising relation between operating temperature and stability of anion exchange membrane fuel cells. Journal of Power Sources Advances, 2021, 11, 100066.	2.6	17
1138	MgAl-CO3 layered double hydroxide as potential filler in substrate layer of composite membrane for enhanced carbon dioxide separation. Journal of Environmental Chemical Engineering, 2021, 9, 106164.	3.3	16
1139	Anion exchange membranes with twisted poly(terphenylene) backbone: Effect of the N-cyclic cations. Journal of Membrane Science, 2021, 635, 119525.	4.1	26
1140	Microbial Fuel Cells, Concept, and Applications. , 2022, , 875-909.		0
1141	Molecular dynamics study on water and hydroxide transfer mechanisms in PSU-g-alkyl-TMA membranes at low hydration: Effect of side chain length. International Journal of Hydrogen Energy, 2021, 46, 33915-33933.	3.8	4
1142	Unveiling the influence of radiation-induced grafting methods on the properties of polyethylene-based anion-exchange membranes for alkaline fuel cells. Journal of Power Sources, 2021, 512, 230484.	4.0	14

#	Article	IF	Citations
1143	Alkaline enrichment via electrodialysis with alkaline stable side-chain-type polysulfone-based anion exchange membranes. Separation and Purification Technology, 2021, 275, 119075.	3.9	7
1144	Dependable polysulfone based anion exchange membranes incorporating triazatriangulenium cations. Solid State Ionics, 2021, 370, 115731.	1.3	14
1145	Ion selective redox active anion exchange membrane: Improved performance of vanadium redox flow battery. Journal of Membrane Science, 2021, 637, 119626.	4.1	11
1146	Novel phosphonated polymer without anhydride formation for proton exchange membrane fuel cells. Journal of Energy Chemistry, 2022, 65, 469-471.	7.1	4
1147	Steam activation of Fe-N-C catalyst for advanced power performance of alkaline hydrazine fuel cells. Journal of Energy Chemistry, 2022, 64, 276-285.	7.1	15
1148	Tailoring catalyst layer structures for anion exchange membrane fuel cells by controlling the size of ionomer aggreates in dispersion. Chemical Engineering Journal, 2022, 427, 131737.	6.6	21
1149	High-performance radiation grafted anion-exchange membranes for fuel cell applications: Effects of irradiation conditions on ETFE-based membranes properties. Journal of Membrane Science, 2022, 641, 119879.	4.1	25
1150	Radiation-grafted anion-exchange membranes for reverse electrodialysis: a comparison ofN,N,Nâ€²,Nâ€²-tetramethylhexane-1,6-diamine crosslinking (amination stage) and divinylbenzene crosslinking (grafting stage). Journal of Materials Chemistry A, 2021, 9, 22025-22038.	5.2	9
1151	Anisotropic anion exchange membranes with extremely high water uptake for water electrolysis and fuel cells. Journal of Materials Chemistry A, 2021, 9, 23485-23496.	5.2	33
1152	A highly stable aliphatic backbone from visible light-induced RAFT polymerization for anion exchange membranes. Polymer Chemistry, 2021, 12, 5574-5582.	1.9	4
1153	Nanoscale electrocatalyst design for alkaline hydrogen evolution reaction through activity descriptor identification. Materials Chemistry Frontiers, 2021, 5, 4042-4058.	3.2	17
1154	Operando X-ray absorption spectroscopy of a Pd/Î³-NiOOH 2 nm cubes hydrogen oxidation catalyst in an alkaline membrane fuel cell. Catalysis Science and Technology, 2021, 11, 1337-1344.	2.1	4
1155	Synergy of light and acidâ€“base reaction in energy conversion based on cellulose nanofiber intercalated titanium carbide composite nanofluidics. Energy and Environmental Science, 2021, 14, 4400-4409.	15.6	53
1156	Preparation of crosslinker-free anion exchange membranes with excellent physicochemical and electrochemical properties based on crosslinked PPO-SEBS. Journal of Materials Chemistry A, 2021, 9, 1062-1079.	5.2	41
1157	Machine learning analysis and prediction models of alkaline anion exchange membranes for fuel cells. Energy and Environmental Science, 2021, 14, 3965-3975.	15.6	29
1158	Degradation study for the membrane electrode assembly of anion exchange membrane fuel cells at a single-cell level. Journal of Materials Chemistry A, 2021, 9, 18546-18556.	5.2	13
1159	Membrane Technologies for Sustainable and Eco-Friendly Microbial Energy Production. Environmental Chemistry for A Sustainable World, 2020, , 353-381.	0.3	1
1160	Towards the gemini cation anion exchange membranes by nucleophilic substitution reaction. Science China Materials, 2019, 62, 973-981.	3.5	18

#	Article	IF	Citations
1161	Single-phase Ru1â^'â^'Mn Co O2 nanoparticles as highly effective oxygen reduction electrocatalysts in alkaline media with enhanced stability and fuel-tolerance. Applied Catalysis B: Environmental, 2020, 277, 119149.	10.8	13
1162	Graphene inclusion effect on anion-exchange membranes properties for alkaline water electrolyzers. International Journal of Hydrogen Energy, 2020, 45, 17057-17066.	3.8	35
1163	Synthesis and characterization of main-chain type polyimidazolium-based alkaline anion exchange membranes. Journal of Membrane Science, 2020, 610, 118283.	4.1	33
1164	Mesoscale Simulations of Anion Exchange Membranes Based on Quaternary Ammonium Tethered Triblock Copolymers. Macromolecules, 2017, 50, 4397-4405.	2.2	62
1165	Optimized electrode structure for performance and mechanical stability in a direct formate fuel cell using cation ionomer. Sustainable Energy and Fuels, 2020, 4, 1899-1907.	2.5	13
1166	Insights into the carbon balance for CO₂ electroreduction on Cu using gas diffusion electrode reactor designs. Energy and Environmental Science, 2020, 13, 977-985.	15.6	313
1167	The alkali degradation of LDPE-based radiation-grafted anion-exchange membranes studied using different ex situ methods. RSC Advances, 2020, 10, 36467-36477.	1.7	20
1168	High performance cross-linked anion exchange membrane based on aryl-ether free polymer backbones for anion exchange membrane fuel cell application. Sustainable Energy and Fuels, 2020, 4, 4057-4066.	2.5	25
1169	Overview: State-of-the Art Commercial Membranes for Anion Exchange Membrane Water Electrolysis. Journal of Electrochemical Energy Conversion and Storage, 2021, 18, .	1.1	160
1170	High Performance FeNC and Mn-oxide/FeNC Layers for AEMFC Cathodes. Journal of the Electrochemical Society, 2020, 167, 134505.	1.3	49
1171	Reviewâ€"CO₂ Separation and Transport via Electrochemical Methods. Journal of the Electrochemical Society, 2020, 167, 133504.	1.3	43
1172	Effect of Ammonia on the Electrocatalysis of Oxygen Reduction Reaction in Base. Journal of the Electrochemical Society, 2020, 167, 164510.	1.3	4
1173	Ionomer Optimization for Water Uptake and Swelling in Anion Exchange Membrane Electrolyzer: Oxygen Evolution Electrode. Journal of the Electrochemical Society, 2020, 167, 164514.	1.3	40
1175	Development of Anion Exchange Membrane based on Crosslinked Poly(2,6-dimethyl-1,4-phenylene oxide) for Alkaline Fuel Cell Application. Membrane Journal, 2019, 29, 173-182.	0.2	2
1176	Promoting the OH- Ion Conductivity of Chitosan Membrane Using Quaternary Phosphonium Polymer Brush Functionalized Graphene Oxide. International Journal of Electrochemical Science, 2017, 12, 9262-9278.	0.5	6
1177	Platinum and Platinum Group Metal-Free Catalysts for Anion Exchange Membrane Fuel Cells. Energies, 2020, 13, 582.	1.6	50
1178	A Review on Membranes and Catalysts for Anion Exchange Membrane Water Electrolysis Single Cells. Journal of Electrochemical Science and Technology, 2017, 8, 183-196.	0.9	45
1179	Anion Exchange Membrane Based on Interpenetrating Polymer Network with Ultrahigh Ion Conductivity and Excellent Stability for Alkaline Fuel Cell. Research, 2020, 2020, 4794706.	2.8	24

#	Article	IF	Citations
1180	Poly(arylene piperidine) Anion Exchange Membranes with Tunable <i>N</i>-Alicyclic Quaternary Ammonium Side Chains. ACS Applied Energy Materials, 2021, 4, 11652-11665.	2.5	27
1181	Studies on Anion Exchange Membrane and Interface Properties by Electrochemical Impedance Spectroscopy: The Role of pH. Membranes, 2021, 11, 771.	1.4	2
1182	Scaling-up Studies on Electrolysis Using Cation Exchange Membrane for Alum Recovery. International Journal of Environmental Research, 2021, 15, 1097-1108.	1.1	1
1183	Electrospun Composite Proton-Exchange and Anion-Exchange Membranes for Fuel Cells. Energies, 2021, 14, 6709.	1.6	18
1184	Highly Cationized and Porous Hyper-cross-linked Polymer Nanospheres for Composite Anion Exchange Membranes. ACS Applied Polymer Materials, 2021, 3, 5612-5621.	2.0	9
1185	Ionomer content optimization in nickel-iron-based anodes with and without ceria for anion exchange membrane water electrolysis. Journal of Power Sources, 2021, 514, 230563.	4.0	28
1186	Cells and Stacks â˜†. , 2015, , .		0
1187	2ï¼Žç„¡æ©Ÿæ°´é…¸åŒ–ç‰©ã‚ã‚ªãƒ³ä¼å°Žä½“ã®å‰µè£½ã¨å¿œç”¨. Electrochemistry, 2016, 84, 31-34.	0.6	0
1188	Development of Ionomer Binder Solutions Using Polymer Grinding for Solid Alkaline Fuel Cells. Journal of the Korean Electrochemical Society, 2016, 19, 107-113.	0.1	0
1189	Design of Heterogeneities and Interfaces with Nanofibers in Fuel Cell Membranes. , 2019, , 979-1015.		0
1190	Microbial Fuel Cells, Concept, and Applications. , 2020, , 1-35.		0
1191	N and S Co-doped Ordered Mesoporous Carbon: An Efficient Electrocatalyst for Oxygen Reduction Reaction in Microbial Fuel Cells. Current Nanoscience, 2020, 16, 625-638.	0.7	2
1192	Clustered piperidinium-functionalized poly(terphenylene) anion exchange membranes with well-developed conductive nanochannels. Journal of Colloid and Interface Science, 2022, 608, 1247-1256.	5.0	38
1193	Alkaline Fuel Cells, Theory and Applications. , 2022, , 166-231.		0
1194	Permselectivity of ionene-based, AemionÂ® anion exchange membranes. Journal of Membrane Science, 2022, 641, 119917.	4.1	13
1195	Soluble poly(aryl piperidinium) with extended aromatic segments as anion exchange membranes for alkaline fuel cells and water electrolysis. Journal of Membrane Science, 2022, 642, 119966.	4.1	101
1196	Electro-Fermentation Technology: Emerging Platform. , 2020, , 71-79.		0
1197	Radiation-Grafted Polymer Electrolyte Membranes for Fuel Cells. Hacettepe Journal of Biology and Chemistry, 0, , .	0.3	2

#	Article	IF	Citations
1198	Sulfonated Fluorocarbon Polymers as Proton Exchange Membranes for Fuel Cells. Journal of Chemical Engineering of Japan, 2020, 53, 713-721.	0.3	0
1199	Highly conductive and alkaline stable partially fluorinated anion exchange membranes for alkaline fuel cells: Effect of ammonium head groups. Journal of Membrane Science, 2022, 643, 120072.	4.1	33
1200	Hexyl quaternary ammonium- and fluorobenzoyl-grafted SEBS as hydrophilicâ€“hydrophobic comb-type anion exchange membranes. Journal of Membrane Science, 2022, 643, 120029.	4.1	30
1201	Anion Exchange Membranes Based on Imidazoline Quaternized Polystyrene Copolymers for Fuel Cell Applications. Membranes, 2021, 11, 901.	1.4	7
1202	Alkaline Stability Evaluation of Polymerizable Hexylâ€Tethered Ammonium Cations. Macromolecular Rapid Communications, 2022, 43, e2100610.	2.0	7
1203	In situ grown Co9S8 nanocrystals in sulfur-doped carbon matrix for electrocatalytic oxidation of hydrazine. Electrochimica Acta, 2022, 403, 139567.	2.6	7
1204	Impact of side-chains in poly(dibenzyl-co-terphenyl piperidinium) copolymers for anion exchange membrane fuel cells. Journal of Membrane Science, 2022, 644, 120109.	4.1	44
1205	Water Splitting with Enhanced Efficiency Using a Nickel-Based Co-Catalyst at a Cupric Oxide Photocathode. Catalysts, 2021, 11, 1363.	1.6	7
1206	Anion Exchange Membranes with 1D, 2D and 3D Fillers: A Review. Polymers, 2021, 13, 3887.	2.0	12
1207	A critical review and commentary on recent progress of additive manufacturing and its impact on membrane technology. Journal of Membrane Science, 2022, 645, 120041.	4.1	38
1208	Simultaneous Improvement of Anion Conductivity and Alkaline Stability of Quaternized Poly(Phenylene Oxide) Nanocomposite Membranes Including F-Doped Porous Graphitic Carbon Nitride as a Filler. SSRN Electronic Journal, 0, , .	0.4	0
1209	Low-Cost Hydrocarbon Membrane Enables Commercial-Scale Alkaline-Based Flow Batteries for Long-Duration Energy Storage. SSRN Electronic Journal, 0, , .	0.4	0
1210	Understanding the alkaline stability of imidazolium and benzimidazolium functionalized poly(phenylene oxide) based hydroxide exchange membranes. Materials Today: Proceedings, 2022, 51, 2550-2555.	0.9	1
1211	AquivionÂ®-based anionic membranes for water electrolysis. Electrochimica Acta, 2022, 405, 139834.	2.6	5
1212	Spatially resolved performance and degradation in a perfluorinated anion exchange membrane fuel cell. Electrochimica Acta, 2022, 406, 139812.	2.6	7
1213	Reinforced poly(fluorenyl-co-terphenyl piperidinium) anion exchange membranes for fuel cells. Journal of Membrane Science, 2022, 644, 120160.	4.1	23
1214	Hierarchically nanostructured Ni2Fe2N as an efficient electrocatalyst for hydrazine oxidation reaction. Chemical Engineering Journal, 2022, 431, 134123.	6.6	20
1215	Organophosphorus and Related Group 15 Polymers. , 2021, , .		1

#	Article	IF	Citations
1217	Vanadium Redox Flow Battery Using Aemionâ„¢ Anion Exchange Membranes. Processes, 2022, 10, 270.	1.3	9
1218	Cross-Linked Alkaline Anion Exchange Membrane from N-Spirocyclic Quaternary Ammonium and Polybenzimidazole. ACS Applied Polymer Materials, 2022, 4, 1523-1534.	2.0	34
1219	Advance of click chemistry in anion exchange membranes for energy application. Journal of Polymer Science, 2022, 60, 627-649.	2.0	19
1220	Alkaline Stability of Low Oxophilicity Metallopolymer Anionâ€Exchange Membranes. Chemistry - A European Journal, 2022, 28, .	1.7	10
1221	Boosting Electrocatalytic Hydrazine Oxidation Reaction on High-Index Faceted Au Concave Trioctahedral Nanocrystals. ACS Sustainable Chemistry and Engineering, 2022, 10, 696-702.	3.2	11
1222	Transport phenomena in polymer electrolyte membrane fuel cells. , 2022, , 341-368.		0
1223	Transport phenomena in electrodialysis/reverse electrodialysis processes. , 2022, , 91-109.		0
1224	Strategies for Improving Anion Exchange Membrane Fuel Cell Performance by Optimizing Electrode Conditions. Journal of the Electrochemical Society, 2022, 169, 014515.	1.3	7
1225	Ion Sensitivity of Hygroscopic Insulator Field Effect Transistors. ACS Applied Electronic Materials, 2022, 4, 842-849.	2.0	2
1226	Probing Anion Exchange Membrane Fuel Cell Cathodes by Varying Electrocatalysts and Electrode Processing. Journal of the Electrochemical Society, 2022, 169, 024507.	1.3	7
1227	Effect of water management in membrane and cathode catalyst layers on suppressing the performance hysteresis phenomenon in anion-exchange membrane fuel cells. Journal of Power Sources, 2022, 522, 230997.	4.0	13
1228	Recent developments in Pd-CeO2 nano-composite electrocatalysts for anodic reactions in anion exchange membrane fuel cells. Electrochemistry Communications, 2022, 135, 107219.	2.3	15
1229	A novel electrocatalyst based on Fe-ZIF-PPY nanocomposite for oxygen reduction reaction in air-breathing direct-ethanol fuel cell. Applied Surface Science, 2022, 584, 152529.	3.1	17
1230	Metal-organic frameworks-derived Ni2P@C Nanocomposite as a high-performance catalyst for hydrazine electrooxidation. Journal of Alloys and Compounds, 2022, 902, 163746.	2.8	4
1231	Robust and durable poly(aryl-co-aryl piperidinium) reinforced membranes for alkaline membrane fuel cells. Journal of Materials Chemistry A, 2022, 10, 6587-6595.	5.2	27
1232	Electrocatalysis in Alkaline Media and Alkaline Membrane-Based Energy Technologies. Chemical Reviews, 2022, 122, 6117-6321.	23.0	195
1233	A three-chamber electrochemical cell facilitated biogas upgrading and high-purity oxygen production. Journal of Applied Electrochemistry, 0, , 1.	1.5	0
1234	Polymer-based membranes for promoting osmotic energy conversion. Giant, 2022, 10, 100094.	2.5	21

#	Article	IF	Citations
1235	Measuring the alkaline stability of anion-exchange membranes. Journal of Electroanalytical Chemistry, 2022, 908, 116112.	1.9	13
1236	Strategies to optimize water management in anion exchange membrane fuel cells. Journal of Power Sources, 2022, 525, 231141.	4.0	18
1237	Elucidating the role of alkyl chain in poly(aryl piperidinium) copolymers for anion exchange membrane fuel cells. Journal of Membrane Science, 2022, 647, 120341.	4.1	45
1238	Highly Efficient Lithium-Ion Exchange Membrane Water Electrolysis. SSRN Electronic Journal, 0, , .	0.4	0
1239	Prospects on utilization of biopolymer materials for ion exchange membranes in fuel cells. Green Chemistry Letters and Reviews, 2022, 15, 253-275.	2.1	9
1240	Elucidating the Role of Alkyl Chain in Poly(Aryl Piperidinium) Copolymers for Anion Exchange Membrane Fuel Cells. SSRN Electronic Journal, 0, , .	0.4	0
1241	Dimensionally stable multication-crosslinked poly(arylene piperidinium) membranes for water electrolysis. Journal of Materials Chemistry A, 2022, 10, 8401-8412.	5.2	41
1242	Mesoporous PdBi nanocages for enhanced electrocatalytic performances by all-direction accessibility and steric site activation. Chemical Science, 2022, 13, 3819-3825.	3.7	26
1243	The Influence of Various Cationic Group on Polynorbornene Based Anion Exchange Membranes with Hydrophobic Large Steric Hindrance Arylene Substituent. SSRN Electronic Journal, 0, , .	0.4	0
1244	In situ analysis of hydration and ionic conductivity of sulfonated poly(ether ether ketone) thin films using an interdigitated electrode array and a nanobalance. Journal of Sensors and Sensor Systems, 2022, 11, 51-59.	0.6	1
1245	Isoindolinium Groups as Stable Anion Conductors for Anion-Exchange Membrane Fuel Cells and Electrolyzers. ACS Materials Au, 2022, 2, 367-373.	2.6	14
1246	Magnetic-field-oriented mixed-valence-stabilized ferrocenium anion-exchange membranes for fuel cells. Nature Energy, 2022, 7, 329-339.	19.8	60
1247	Boosting Hydrogen Oxidation Performance of Phase-Engineered Ni Electrocatalyst under Alkaline Media. ACS Sustainable Chemistry and Engineering, 2022, 10, 3682-3689.	3.2	16
1248	Cross-Linked Polybenzimidazoles as Alkaline Stable Anion Exchange Membranes. ACS Applied Energy Materials, 2022, 5, 3626-3637.	2.5	22
1249	Assessing the Oxidative Stability of Anion Exchange Membranes in Oxygen Saturated Aqueous Alkaline Solutions. Frontiers in Energy Research, 2022, 10, .	1.2	2
1250	Disentangling water, ion and polymer dynamics in an anion exchange membrane. Nature Materials, 2022, 21, 555-563.	13.3	32
1251	Electrosynthesis of H2O2 through a two-electron oxygen reduction reaction by carbon based catalysts: From mechanism, catalyst design to electrode fabrication. Environmental Science and Ecotechnology, 2022, 11, 100170.	6.7	29
1252	Low-cost hydrocarbon membrane enables commercial-scale flow batteries for long-duration energy storage. Joule, 2022, 6, 884-905.	11.7	53

#	Article	IF	Citations
1253	Anion-Conducting Polymer Electrolyte without Ether Linkages and with Ionic Groups Grafted on Long Side Chains: Poly(Alkylene Biphenyl Butyltrimethyl Ammonium) (ABBA). Membranes, 2022, 12, 337.	1.4	2
1254	Anion Exchange Membranes for Fuel Cell Application: A Review. Polymers, 2022, 14, 1197.	2.0	55
1255	Oxygen Evolution Reaction in Alkaline Environment: Material Challenges and Solutions. Advanced Functional Materials, 2022, 32, .	7.8	209
1256	Robust, dimensional stable, and self-healable anion exchange membranes via quadruple hydrogen bonds. Polymer, 2022, 245, 124698.	1.8	7
1257	Anion-exchange membranes derived from main group and metal-based cations. Polymer, 2022, 249, 124811.	1.8	11
1258	Poly(aryl piperidinium) anion exchange membranes with cationic extender sidechain for fuel cells. Journal of Membrane Science, 2022, 653, 120448.	4.1	20
1259	Electrochemical transformation of Fe-N-C catalysts into iron oxides in alkaline medium and its impact on the oxygen reduction reaction activity. Applied Catalysis B: Environmental, 2022, 311, 121366.	10.8	22
1260	Designing the feasible membrane systems for CO2 removal from Air-fed Anion-Exchange membrane fuel cells. Separation and Purification Technology, 2022, 289, 120713.	3.9	4
1261	Simultaneous improvement of anion conductivity and cell durability through the formation of dense ion clusters of F-doped graphitic carbon nitride/quaternized poly(phenylene oxide) composite membrane. Journal of Membrane Science, 2022, 650, 120384.	4.1	22
1262	Highly efficient lithium-ion exchange membrane water electrolysis. Journal of Power Sources, 2022, 529, 231188.	4.0	6
1263	Performance and stability of a critical raw materials-free anion exchange membrane electrolysis cell. Electrochimica Acta, 2022, 413, 140078.	2.6	19
1264	The inhibiting water uptake mechanism of main-chain type N-spirocyclic quaternary ammonium ionene blended with polybenzimidazole as anion exchange membrane. Separation and Purification Technology, 2022, 291, 120950.	3.9	12
1265	Bicontinuous nanoporous Ni-Fe alloy as a highly active catalyst for hydrazine electrooxidation. Journal of Alloys and Compounds, 2022, 906, 164370.	2.8	8
1266	Branched Poly(Aryl Piperidinium) Membranes for Anionâ€Exchange Membrane Fuel Cells. Angewandte Chemie, 2022, 134, .	1.6	3
1267	Poly(fluorene alkylene) Anion Exchange Membranes with Pendant Spirocyclic and Bis-Spirocyclic Quaternary Ammonium Cations. ACS Applied Energy Materials, 2022, 5, 981-991.	2.5	16
1268	Branched Poly(Aryl Piperidinium) Membranes for Anionâ€Exchange Membrane Fuel Cells. Angewandte Chemie - International Edition, 2022, 61, e202114892.	7.2	77
1269	Mechanism of Facilitation of Ion Mobility in Low-Water-Content Fuel Cell Membranes. Journal of Physical Chemistry C, 2021, 125, 27703-27713.	1.5	12
1270	Investigation of Hydrogen Oxidation and Evolution Reactions at Porous Pt/C Electrodes in Nafion-Based Membrane Electrode Assemblies Using Impedance Spectroscopy and Distribution of Relaxation Times Analysis. Journal of Physical Chemistry C, 2022, 126, 132-150.	1.5	12

#	Article	IF	Citations
1271	Width and Clustering of Ion-Conducting Channels in Fuel Cell Membranes Are Insensitive to the Length of Ion Tethers. Journal of Physical Chemistry C, 2021, 125, 27693-27702.	1.5	11
1272	Homologous flexible multi-cationic cross-linkers modified poly(aryl ether sulfone) anion exchange membranes for fuel cell applications. International Journal of Hydrogen Energy, 2022, 47, 17329-17340.	3.8	8
1273	Nickelâ€based anodes in anion exchange membrane water electrolysis: a review. Journal of Chemical Technology and Biotechnology, 2022, 97, 1611-1624.	1.6	9
1274	Efficient lamellar twoâ€dimensional proton channels derived from dipole interactions in a polyelectrolyte membrane. AICHE Journal, 2022, 68, .	1.8	8
1275	Anion-Exchange Membrane Water Electrolyzers. Chemical Reviews, 2022, 122, 11830-11895.	23.0	177
1276	A high-performance hydroxide exchange membrane enabled by Cu2+-crosslinked chitosan. Nature Nanotechnology, 2022, 17, 629-636.	15.6	50
1277	Improving the conductivity and dimensional stability of anion exchange membranes by grafting of quaternized dendrons. Journal of Polymer Science, 2022, 60, 2055-2068.	2.0	4
1278	Insight into the relationship between molecular morphology and water/ion diffusion in cation exchange membranes: Case of partially sulfonated polyether sulfone. Journal of Membrane Science, 2022, 654, 120561.	4.1	7
1279	Properties and Morphologies of Anion-Exchange Membranes with Different Lengths of Fluorinated Hydrophobic Chains. ACS Omega, 2022, 7, 13577-13587.	1.6	6
1280	IrO2 modified Crystalline-PdO nanowires based bi-functional electro-catalyst for HOR/HER in acid and base. Renewable Energy, 2022, 191, 151-160.	4.3	8
1281	Carbonate formation on carbon electrode in rechargeable zinc-air battery revealed by in-situ Raman measurements. Journal of Power Sources, 2022, 533, 231237.	4.0	14
1282	Poly(terphenyl piperidinium) containing hydrophilic crown ether units in main chains as anion exchange membranes for alkaline fuel cells and water electrolysers. Journal of Membrane Science, 2022, 653, 120558.	4.1	40
1283	Manipulating the electronic structure of Ni electrocatalyst through d-p orbital hybridization induced by B-doping for efficient alkaline hydrogen oxidation reaction. Chinese Journal of Catalysis, 2022, 43, 1527-1534.	6.9	10
1284	Binding and Degradation Reaction of Hydroxide Ions with Several Quaternary Ammonium Head Groups of Anion Exchange Membranes Investigated by the DFT Method. Molecules, 2022, 27, 2686.	1.7	12
1285	Hydrogen as a carrier of renewable energies toward carbon neutrality: State-of-the-art and challenging issues. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 1073-1089.	2.4	27
1286	Impact of the Relative Humidity on the Performance Stability of Anion Exchange Membrane Fuel Cells Studied by Ion Chromatography. ACS Applied Polymer Materials, 2022, 4, 3962-3970.	2.0	7
1287	Current Challenges and Perspectives of Polymer Electrolyte Membranes. Macromolecules, 2022, 55, 3773-3787.	2.2	45
1288	Molecular-Level Control over Ionic Conduction and Ionic Current Direction by Designing Macrocycle-Based Ionomers. Jacs Au, 2022, 2, 1144-1159.	3.6	4

#	Article	IF	Citations
1289	Optimal operating conditions evaluation of an anion-exchange-membrane electrolyzer based on FUMASEPÂ® FAA3-50 membrane. International Journal of Hydrogen Energy, 2023, 48, 11914-11921.	3.8	19
1290	High-performance tetracyclic aromatic anion exchange membranes containing twisted binaphthyl for fuel cells. Journal of Membrane Science, 2022, 655, 120578.	4.1	45
1291	Crosslinked PAEK-based nanofiber reinforced Nafion membrane with ion-paired interfaces towards high-concentration DMFC. Journal of Membrane Science, 2022, 655, 120589.	4.1	17
1292	Water electrolysis: from textbook knowledge to the latest scientific strategies and industrial developments. Chemical Society Reviews, 2022, 51, 4583-4762.	18.7	453
1293	Water limiting current measurements in anion exchange membrane fuel cells (AEMFCs); part 1: Water limiting current method development. Journal of Power Sources, 2022, 539, 231534.	4.0	5
1294	Multiscale Polymeric Materials for Advanced Lithium Battery Applications. Advanced Materials, 2023, 35, .	11.1	18
1295	Oxygen Reduction Reaction in Alkaline Media Causes Iron Leaching from Feâ€“Nâ€“C Electrocatalysts. Journal of the American Chemical Society, 2022, 144, 9753-9763.	6.6	59
1296	Importance of Hydroxide Ion Conductivity Measurement for Alkaline Water Electrolysis Membranes. Membranes, 2022, 12, 556.	1.4	1
1297	Communicationâ€”Electropolymerization of Anion-Conducting Polymer Films. Journal of the Electrochemical Society, 0, , .	1.3	1
1298	Passive Small Direct Alcohol Fuel Cells for Low-Power Portable Applications: Assessment Based on Innovative Increments since 2018. Energies, 2022, 15, 3787.	1.6	7
1299	Development of highly alkaline stable anion conductive polymers with fluorene backbone for water electrolysis. Polymers for Advanced Technologies, 2022, 33, 2863-2871.	1.6	2
1300	Superaerophobic Polyethyleneimine Hydrogels for Improving Electrochemical Hydrogen Production by Promoting Bubble Detachment. Advanced Energy Materials, 2022, 12, .	10.2	41
1301	Molecular Modeling in Anion Exchange Membrane Research: A Brief Review of Recent Applications. Molecules, 2022, 27, 3574.	1.7	6
1302	Dynamic anion regulation to construct S-doped FeOOH realizing 1000ÂmAÂcmâ^'2â€'levelâ€'currentâ€'density oxygen evolution over 1000Âh. Applied Catalysis B: Environmental, 2022, 315, 121571.	10.8	24
1303	Anion Exchange Membranes Incorporating Multi N-Spirocyclic Quaternary Ammonium Cations via Ultraviolet-Initiated Polymerization for Zinc Slurry-Air Flow Batteries. ACS Applied Energy Materials, 2022, 5, 7069-7080.	2.5	10
1304	Anion Exchange Membranes for Fuel Cells: Stateâ€ofâ€theâ€Art and Perspectives. Advanced Energy Materials, 2022, 12, .	10.2	59
1305	UV-crosslinkable anthracene-based ionomer derived gas â€œExpresswayâ€• for anion exchange membrane fuel cells. Journal of Materials Chemistry A, 2022, 10, 13355-13367.	5.2	15
1306	Solar Fuels Devices: Multi-Scale Modeling and Device Design Guidelines. Springer Handbooks, 2022, , 965-983.	0.3	1

#	Article	IF	Citations
1307	Ternary NiCoFe nanosheets for oxygen evolution in anion exchange membrane water electrolysis. International Journal of Hydrogen Energy, 2022, 47, 23483-23497.	3.8	13
1308	Understanding Recoverable vs Unrecoverable Voltage Losses and Long-Term Degradation Mechanisms in Anion Exchange Membrane Fuel Cells. ACS Catalysis, 2022, 12, 8116-8126.	5.5	10
1309	Composition of Oxygen Functional Groups on Graphite Surfaces. Journal of Physical Chemistry C, 2022, 126, 10653-10667.	1.5	6
1310	2022 roadmap on low temperature electrochemical CO₂ reduction. JPhys Energy, 2022, 4, 042003.	2.3	76
1311	Alkaline stable piperidinium-based biphenyl polymer for anion exchange membranes. Solid State Ionics, 2022, 383, 115969.	1.3	5
1312	Improving poly(arylene piperidinium) anion exchange membranes by monomer design. Journal of Materials Chemistry A, 2022, 10, 16478-16489.	5.2	36
1313	Electrocatalytic Oxidation of Hydrazine by Flexible Self-Supported Cobalt Phosphide Nanocrystals. SSRN Electronic Journal, 0, , .	0.4	0
1314	New block poly(ether sulfone) based anion exchange membranes with rigid side-chains and high-density quaternary ammonium groups for fuel cell application. Polymer Chemistry, 2022, 13, 4395-4405.	1.9	7
1315	Microstructural description of ion exchange membranes: The effect of PPy-based modification. Journal of Membrane Science, 2022, 659, 120771.	4.1	6
1316	Electronic Modulation of Ru Nanosheet by dâ€“d Orbital Coupling for Enhanced Hydrogen Oxidation Reaction in Alkaline Electrolytes. Small, 2022, 18, .	5.2	18
1317	Anion Exchange Membranes for Fuel Cells Based on Quaternized Polystyrene-b-poly(ethylene-co-butylene)-b-polystyrene Triblock Copolymers with Spacer-Sidechain Design. Polymers, 2022, 14, 2860.	2.0	4
1318	Anion Exchange Membrane Water Electrolysis from Catalyst Design to the Membrane Electrode Assembly. Energy Technology, 2022, 10, .	1.8	11
1319	Scientific Challenges and Improvement Strategies of Znâ€Based Anodes for Aqueous Znâ€Ion Batteries. Chemical Record, 2022, 22, .	2.9	9
1320	Imidazolium structural isomer pyrazolium: A better alkali-stable anion conductor for anion exchange membranes. Journal of Membrane Science, 2022, 660, 120843.	4.1	18
1321	Parametric Sensitivity Analysis and Performance Evaluation of High-Temperature Anion-Exchange Membrane Fuel Cell. Processes, 2022, 10, 1315.	1.3	0
1322	Compositionâ€Dependent Morphology, Structure, and Catalytical Performance of Nickelâ€“Iron Layered Double Hydroxide as Highlyâ€Efficient and Stable Anode Catalyst in Anion Exchange Membrane Water Electrolysis. Advanced Functional Materials, 2022, 32, .	7.8	34
1323	Imidazole-Functionalized Multiquaternary Side-Chain Polyethersulfone Anion-Exchange Membrane for Fuel Cell Applications. ACS Applied Energy Materials, 2022, 5, 10023-10033.	2.5	9
1324	Adamantane-based block poly(arylene ether sulfone)s as anion exchange membranes. Polymer, 2022, 255, 125155.	1.8	8

#	Article	IF	Citations
1325	Quinuclidinium-piperidinium based dual hydroxide anion exchange membranes as highly conductive and stable electrolyte materials for alkaline fuel cell applications. Electrochimica Acta, 2022, 426, 140826.	2.6	9
1326	Exponential Water Uptake in Ionomer Membranes Results from Polymer Plasticization. Macromolecules, 2022, 55, 6762-6774.	2.2	10
1327	Hydration and OH^{â€“}/Br^{â€“} Conduction Properties of Fluoreneâ€“Thiophene-Based Anion Exchange Thin Films Tethered with Different Cations. ACS Applied Polymer Materials, 0, , .	2.0	0
1328	Carbothermal Shock Synthesis of High Entropy Oxide Catalysts: Dynamic Structural and Chemical Reconstruction Boosting the Catalytic Activity and Stability toward Oxygen Evolution Reaction. Advanced Energy Materials, 2022, 12, .	10.2	56
1329	Enhancing anion conduction stability of quaternized poly(phenylene) oxideâ€based anion exchange membranes with ionic liquids modified carbon nanomaterials. International Journal of Energy Research, 2022, 46, 17332-17345.	2.2	4
1330	Facile fabrication of high performance zwitterionic P(<scp> NVP â€co â€SPE </scp>)/polyvinyl alcohol hydrogel polyelectrolyte for capacitor. Journal of Applied Polymer Science, 0, , .	1.3	0
1331	State-of-the-art and developmental trends in platinum group metal-free cathode catalyst for anion exchange membrane fuel cell (AEMFC). Applied Catalysis B: Environmental, 2023, 325, 121733.	10.8	54
1332	The Role of Hydroxide Binding Energy in Alkaline Hydrogen Oxidation Reaction Kinetics on <scp>RuCr</scp> Nanosheet^{â€}. Chinese Journal of Chemistry, 2022, 40, 2495-2501.	2.6	7
1333	Anion exchange composite membrane based on ionic liquid-grafted covalent organic framework for fuel cells. International Journal of Hydrogen Energy, 2022, 47, 29481-29494.	3.8	7
1334	Sessile Drop Method: Critical Analysis and Optimization for Measuring the Contact Angle of an Ion-Exchange Membrane Surface. Membranes, 2022, 12, 765.	1.4	18
1335	Strong and Flexible High-Performance Anion Exchange Membranes with Long-Distance Interconnected Ion Transport Channels for Alkaline Fuel Cells. ACS Applied Materials & Interfaces, 2022, 14, 38132-38143.	4.0	11
1336	Engineering membrane electrode assembly for advanced polymer electrolyte water electrolyzer. Science China Materials, 2022, 65, 3243-3272.	3.5	10
1337	Performance optimization of PGM and PGM-free catalysts in anion-exchange membrane fuel cells. Journal of Solid State Electrochemistry, 2022, 26, 2049-2057.	1.2	4
1338	Tailor-Made Functional Polyolefins of Complex Architectures: Recent Advances, Applications, and Prospects. Macromolecules, 2022, 55, 6938-6972.	2.2	14
1339	Role of Ionomers in Anion Exchange Membrane Water Electrolysis: Is Aemion the Answer for Nickel-Based Anodes?. ACS Applied Energy Materials, 2022, 5, 9938-9951.	2.5	9
1340	Investigation on various types of ion-exchange membranes in vanadium redox flow batteries: Experiment and modeling. Journal of Energy Storage, 2022, 54, 105347.	3.9	4
1341	Multiply quaternized poly(phenylene oxide)s bearing Î²-cyclodextrin pendants as â€œassisting moietyâ€•for high-performance anion exchange membranes. Journal of Membrane Science, 2022, 660, 120881.	4.1	10
1342	3D helical membranes for process intensification of membrane separation via generation of Dean vortices. Journal of Membrane Science, 2022, 662, 120969.	4.1	3

#	Article	IF	Citations
1343	Mechanically robust and highly conductive semi-interpenetrating network anion exchange membranes for fuel cell applications. Journal of Power Sources, 2022, 548, 232097.	4.0	11
1344	Highly conductive branched poly(aryl piperidinium) anion exchange membranes with robust chemical stability. Journal of Colloid and Interface Science, 2023, 629, 377-387.	5.0	38
1345	How membrane characteristics influence the performance of CO₂ and CO electrolysis. Energy and Environmental Science, 2022, 15, 4440-4469.	15.6	40
1346	Engineering of Unique Ni-Ru Nano-Twins for Highly Active and Robust Bifunctional Hydrogen Oxidation and Hydrogen Evolution Electrocatalysis. SSRN Electronic Journal, 0, , .	0.4	0
1347	Nife2o4 Hierarchical Nanospheres as Electrocatalyst for Anion Exchange Membrane Water Electrolysis. SSRN Electronic Journal, 0, , .	0.4	0
1348	Ultra-low voltage bipolar hydrogen production from biomass-derived aldehydes and water in membrane-less electrolyzers. Energy and Environmental Science, 2022, 15, 4175-4189.	15.6	28
1349	Two Novel Threeâ€Dimensional Tetraphenylethyleneâ€Based Rare Earth MOFs with Ultraâ€High Proton Conductivity and Performance Stability. Chemistry - A European Journal, 0, , .	1.7	4
1350	The Influence of Various Cationic Group on Polynorbornene Based Anion Exchange Membranes with Hydrophobic Large Steric Hindrance Arylene Substituent. Chinese Journal of Polymer Science (English) Tj ETQq1 1 0.784314 rgBT /Ov	2.8	
1351	Designing oxygen-doped Fe-N-C oxygen reduction catalysts for proton- and anion-exchange-membrane fuel cells. Chem Catalysis, 2022, 2, 2750-2763.	2.9	18
1352	Poly(phenylene oxide)-Based Anion Exchange Membranes Having Linear Cross-Linkers or Star Cross-Linkers. ACS Applied Energy Materials, 2022, 5, 11613-11623.	2.5	12
1353	The Effect of Ion Exchange Poisoning on the Ion Transport and Conduction in Polymer Electrolyte Membranes (PEMs) for Water Electrolysis. Journal of the Electrochemical Society, 2022, 169, 094510.	1.3	4
1354	OH spectator at IrMo intermetallic narrowing activity gap between alkaline and acidic hydrogen evolution reaction. Nature Communications, 2022, 13, .	5.8	48
1355	Engineering 3dâ€“2pâ€“4f Gradient Orbital Coupling to Enhance Electrocatalytic Oxygen Reduction. Advanced Materials, 2022, 34, .	11.1	92
1356	Atomically dispersed chromium coordinated with hydroxyl clusters enabling efficient hydrogen oxidation on ruthenium. Nature Communications, 2022, 13, .	5.8	35
1357	Platinum-free electrocatalysts for hydrogen oxidation reaction in alkaline media. Nano Energy, 2022, 104, 107877.	8.2	20
1358	Novel low-carbon energy solutions for powering emerging wearables, smart textiles, and medical devices. Energy and Environmental Science, 2022, 15, 4928-4981.	15.6	30
1359	Properties of Anion Exchange Membranes with a Focus on Water Electrolysis. Membranes, 2022, 12, 989.	1.4	17
1360	Well-Defined Nanostructures by Block Copolymers and Mass Transport Applications in Energy Conversion. Polymers, 2022, 14, 4568.	2.0	4

#	Article	IF	Citations
1361	Aqueous titanium redox flow batteriesâ€"State-of-the-art and future potential. Frontiers in Energy Research, 0, 10, .	1.2	0
1362	Application of Thermal Spray Coatings in Electrolysers for Hydrogen Production: Advances, Challenges, and Opportunities. ChemNanoMat, 2022, 8, .	1.5	7
1363	Performance and Stability of Membraneâ€"Electrode Assemblies Using a Carbon-free Connected Ptâ€"Fe Catalyst and Polyphenylene-Based Electrolytes for Direct Formate Anion-Exchange Membrane Fuel Cells. ACS Applied Energy Materials, 2022, 5, 13176-13188.	2.5	4
1364	Ion Exchange Membranes: Constructing and Tuning Ion Transport Channels. Advanced Functional Materials, 2022, 32, .	7.8	31
1365	Proton antagonist membrane towards exclusive CO2 reduction. Nano Research, 2023, 16, 4589-4595.	5.8	1
1366	Suppressing Water Uptake and Increasing Hydroxide Conductivity in Ring-Opened Polynorbornene Ion-Exchange Materials via Backbone Design. ACS Applied Polymer Materials, 2022, 4, 8032-8042.	2.0	3
1367	High-Capacity Retention Thermally Reinforced Pore-Filled Anion Exchange Membrane for All-Vanadium Flow Batteries. ACS Applied Energy Materials, 2022, 5, 13661-13671.	2.5	7
1368	Progress and Understanding of CO₂/CO Electroreduction in Flow Electrolyzers. ACS Catalysis, 2022, 12, 12993-13020.	5.5	25
1369	Theoretical and Experimental Study of Neutralization Dialysis of Phenylalanineâ€"Mineral Salt Equimolar Mixture of Different Concentrations. Membranes and Membrane Technologies, 2022, 4, 306-318.	0.6	4
1370	In-situ electrochemical surface-enhanced Raman spectroscopy in metal/polyelectrolyte interfaces. Chinese Journal of Catalysis, 2022, 43, 2820-2825.	6.9	2
1371	Transition-metal-free preparation of polyethylene-based anion exchange membranes from commercial EVA. Polymer, 2022, 262, 125439.	1.8	3
1372	Three birds with one stone: Microphase separation induced by densely grafted short chains in ion conducting membranes. Journal of Membrane Science, 2022, 664, 121119.	4.1	3
1373	Muscovite as an inert filler for highly conductive and durable gel polymer electrolyte in sodium-ion batteries. Journal of Power Sources, 2022, 552, 232259.	4.0	5
1374	Alkaline anion exchange membrane containing pyrene-based Ï€-Ï€ stacking interactions. Journal of Power Sources, 2023, 553, 232247.	4.0	29
1375	Engineering of unique Ni-Ru nano-twins for highly active and robust bifunctional hydrogen oxidation and hydrogen evolution electrocatalysis. Chemical Engineering Journal, 2023, 454, 139959.	6.6	10
1376	Anion-exchange membrane water electrolyzers and fuel cells. Chemical Society Reviews, 2022, 51, 9620-9693.	18.7	93
1377	Effect of membrane mechanics on AEM fuel cell performance. Energy Advances, 2023, 2, 113-122.	1.4	2
1378	Anion exchange membranes and ionomer properties of a polyfluorene-based polymer with alkyl spacers for water electrolysis. Applied Surface Science, 2023, 610, 155601.	3.1	19

#	Article	IF	Citations
1379	Examining the Alkaline Stability of Tris(dialkylamino)sulfoniums and Sulfoxoniums. Journal of Organic Chemistry, 2022, 87, 15732-15743.	1.7	0
1380	Anion exchange membrane fuel cell: New insights and advancements. Wiley Interdisciplinary Reviews: Energy and Environment, 0, , .	1.9	2
1381	Polyoxometalate-polymer nanocomposites with multiplex proton transport channels for high-performance proton exchange membranes. Composites Science and Technology, 2023, 232, 109842.	3.8	9
1382	Hydroxide ion-conducting viologenâ€“bakelite organic frameworks for flexible solid-state zincâ€“air battery applications. Nanoscale Horizons, 2023, 8, 224-234.	4.1	3
1383	Helical configuration channels boost performance in anion exchange membranes. Chemical Engineering Journal, 2023, 455, 140938.	6.6	15
1384	Catalyst-free synthesis of diverse fluorescent polyoxadiazoles for the facile formation and morphology visualization of microporous films and cell imaging. Chemical Science, 2023, 14, 903-915.	3.7	4
1385	Enhancing hydroxide conductivity at subzero temperature of anion exchange membranes based on imidazolium modified metal organic frameworks. Journal of Molecular Liquids, 2023, 370, 120943.	2.3	6
1386	Modelling single atom catalysts for water splitting and fuel cells: A tutorial review. Journal of Power Sources, 2023, 556, 232492.	4.0	19
1387	Poly(arylene alkylene)s with pendent benzyl-tethered ammonium cations for anion exchange membranes. Journal of Membrane Science, 2023, 668, 121229.	4.1	12
1388	Recent developments of membranes and electrocatalysts for the hydrogen production by anion exchange membrane water electrolysers: A review. Arabian Journal of Chemistry, 2023, 16, 104451.	2.3	18
1389	Monopolar membrane-assisted acid-alkaline amphoteric water electrolysis towards efficient hydrogen generation. Journal of Power Sources, 2023, 557, 232561.	4.0	3
1390	NiFe2O4 hierarchical nanoparticles as electrocatalyst for anion exchange membrane water electrolysis. Journal of Power Sources, 2023, 556, 232417.	4.0	18
1391	Highly efficient and durable H2-etched Ni@C for alkaline polymer electrolyte fuel cells application. Journal of Power Sources, 2023, 556, 232439.	4.0	6
1392	Chemically Folded Polyelectrolytes with Superior Alkaline Stability. ACS Applied Polymer Materials, 2022, 4, 9250-9256.	2.0	0
1393	Development of Quaternized Chitosan Integrated with Nanofibrous Polyacrylonitrile Mat as an Anion-Exchange Membrane. ACS Omega, 2022, 7, 45371-45380.	1.6	2
1394	The influence of anion-exchange membrane nanostructure onto ion transport: Adjusting membrane performance through fabrication conditions. Journal of Membrane Science, 2023, 669, 121306.	4.1	3
1395	A Ï€â€Conjugated Anionâ€Exchange Membrane with an Ordered Ionâ€Conducting Channel via the McMurray Coupling Reaction. Angewandte Chemie, 0, , .	1.6	1
1396	Atomically Dispersed Znâ€Pyrrolicâ€N₄ Cathode Catalysts for Hydrogen Fuel Cells. Angewandte Chemie, 2023, 135, .	1.6	3

#	Article	IF	Citations
1397	High-performance anion exchange membrane water electrolysis by polysulfone grafted with tetramethyl ammonium functionalities. Materials Today Sustainability, 2023, 21, 100297.	1.9	8
1398	Atomically Dispersed Znâ€Pyrrolicâ€N₄ Cathode Catalysts for Hydrogen Fuel Cells. Angewandte Chemie - International Edition, 2023, 62, .	7.2	23
1399	Assessment of the FAA3â€50 Polymer Electrolyte for Anion Exchange Membrane Fuel Cells. ChemElectroChem, 2023, 10, .	1.7	2
1400	Phenylâ€Free Polynorbornenes for Potential Anion Exchange Ionomers for Fuel Cells and Electrolyzers. Advanced Energy Materials, 2023, 13, .	10.2	16
1401	Lattice and Surface Engineering of Ruthenium Nanostructures for Enhanced Hydrogen Oxidation Catalysis. Advanced Functional Materials, 2023, 33, .	7.8	22
1402	Anion Exchange Membrane Water Electrolysis Based on Nickel Ferrite Catalysts. ChemElectroChem, 2023, 10, .	1.7	12
1403	Crown-ether block copolymer based poly(isatin terphenyl) anion exchange membranes for electrochemical energy conversion devices. Chemical Engineering Journal, 2023, 455, 140776.	6.6	17
1404	Alkali-Stable Anion Exchange Membranes Based on Poly(xanthene). ACS Macro Letters, 2023, 12, 20-25.	2.3	14
1405	Ion Transport Behavior in Bipolar Membrane Electrodialysis: Role of Anions. Industrial & Engineering Chemistry Research, 2023, 62, 698-707.	1.8	4
1406	Aquivion-based anion exchange membranes: Synthesis optimization via dispersant agents and reaction time. Chemical Engineering Journal, 2023, 455, 140765.	6.6	3
1407	A Ï€â€Conjugated Anionâ€Exchange Membrane with an Ordered Ionâ€Conducting Channel via the McMurray Coupling Reaction. Angewandte Chemie - International Edition, 2023, 62, .	7.2	14
1408	Self-Assembly of Porphyrin to Realize the High Ionic Conductivity of Anion-Exchange Membranes. ACS Applied Energy Materials, 2022, 5, 15809-15818.	2.5	3
1409	Covalently bridged pillararene-based polymers: structures, synthesis, and applications. Chemical Communications, 2023, 59, 989-1005.	2.2	4
1410	Interface Engineering of Zinc Electrode for Rechargeable Alkaline Zincâ€Based Batteries. Small Methods, 2023, 7, .	4.6	13
1411	Effects of hydrophobic side chains in poly(fluorenyl-co-aryl piperidinium) ionomers for durable anion exchange membrane fuel cells. Journal of Materials Chemistry A, 2023, 11, 2031-2041.	5.2	17
1412	Polyfluorenes Bearing N,N-Dimethylpiperidinium Cations on Short Spacers for Durable Anion Exchange Membranes. Macromolecules, 2023, 56, 1165-1176.	2.2	11
1413	Operandocharacterization of continuous flow CO₂electrolyzers: current status and future prospects. Chemical Communications, 2023, 59, 1395-1414.	2.2	7
1414	Neutralization Short-Circuiting with Weak Electrolytes Erodes the Efficiency of Bipolar Membranes. ACS Applied Materials & Interfaces, 2023, 15, 4001-4010.	4.0	5

#	Article	IF	Citations
1415	Synthesis and Characterization of a Composite Anion Exchange Membrane for Water Electrolyzers (AEMWE). Membranes, 2023, 13, 109.	1.4	7
1416	Quaternized Polynorbornene Random Copolymers for Fuel Cell Devices. ACS Applied Energy Materials, 2023, 6, 1822-1833.	2.5	10
1417	Influence of Ion-Exchange Capacity on the Solubility, Mechanical Properties, and Mass Transport of Anion-Exchange Ionomers for Alkaline Fuel Cells. ACS Applied Energy Materials, 2023, 6, 876-884.	2.5	5
1418	Tuned Low-Salinity Waterflooding in Carbonate Reservoirs: Impact of Cr2O72-, C6H5COO-, and SO42-. SPE Journal, 2023, 28, 1250-1263.	1.7	1
1419	Fluorinated Poly(aryl piperidinium) Membranes for Anion Exchange Membrane Fuel Cells. Advanced Materials, 2023, 35, .	11.1	40
1420	Long-term durability test of highly efficient membrane electrode assemblies for anion exchange membrane seawater electrolyzers. Journal of Power Sources, 2023, 558, 232564.	4.0	12
1421	Modeling direct ammonia anion-exchange membrane fuel cells. Journal of Power Sources, 2023, 558, 232616.	4.0	2
1422	Progress in constructing high-performance anion exchange Membrane: Molecular design, microphase controllability and In-device property. Chemical Engineering Journal, 2023, 457, 141094.	6.6	18
1423	Towards high alkaline stability and fuel cell performance in anion exchange membranes via backboneâ~cation alkylene spacer tuning for quaternized poly(biphenylene alkylene)s. Journal of Power Sources, 2023, 557, 232590.	4.0	18
1424	Polyisatin derived ion-solvating blend membranes for alkaline water electrolysis. Journal of Membrane Science, 2023, 669, 121331.	4.1	7
1425	Alkaline hydrogen oxidation reaction on Ni-based electrocatalysts: From mechanistic study to material development. Coordination Chemistry Reviews, 2023, 478, 214980.	9.5	10
1426	Novel piperidinium-functionalized crosslinked anion exchange membrane with flexible spacers for water electrolysis. Journal of Membrane Science, 2023, 670, 121302.	4.1	15
1427	A mini-review on alkaline stability of imidazolium cations and imidazolium-based anion exchange membranes. Results in Materials, 2023, 17, 100366.	0.9	8
1428	Effect of the Amine Hydrochloride Salt on the Antifogging Properties of Amino-Functionalized Polysilsesquioxane. ACS Applied Polymer Materials, 2023, 5, 1596-1605.	2.0	2
1429	Quaternized Polyethersulfone (QPES) Membrane with Imidazole Functionalized Graphene Oxide (ImGO) for Alkaline Anion Exchange Fuel Cell Application. Sustainability, 2023, 15, 2209.	1.6	2
1430	Polymorphismâ€Interfaceâ€Induced Work Function Regulating on Ru Nanocatalyst for Enhanced Alkaline Hydrogen Oxidation Reaction. Advanced Functional Materials, 2023, 33, .	7.8	12
1431	Alkalineâ€Stable Anionâ€Exchange Membranes with Barium [2.2.2]Cryptate Cations: The Importance of High Binding Constants. Angewandte Chemie, 2023, 135, .	1.6	1
1432	Self-supported electrodes to enhance mass transfer for high-performance anion exchange membrane water electrolyzer. Chemical Engineering Journal, 2023, 460, 141727.	6.6	7

#	Article	IF	Citations
1433	High-performing anion exchange membranes enabled by diversifying the polymer backbone of quaternized poly(arylene alkylene)s. Journal of Membrane Science, 2023, 678, 121667.	4.1	17
1434	Highly alkali-stable polyolefin-based anion exchange membrane enabled by N-cyclic quaternary ammoniums for alkaline fuel cells. Journal of Membrane Science, 2023, 672, 121441.	4.1	17
1435	Nitrogen-doped carbon as selectively permeable layer to enhance the anti-poisoning ability of hydrogen oxidation reaction catalysts for hydroxide exchange membrane fuel cells. Applied Catalysis B: Environmental, 2023, 327, 122442.	10.8	12
1436	A Ni-MoOx composite catalyst for the hydrogen oxidation reaction in anion exchange membrane fuel cell. Applied Catalysis B: Environmental, 2023, 332, 122740.	10.8	5
1437	Performance investigation of alkaline direct methanol fuel cell with commercial PGM-free cathodic materials. Journal of Power Sources, 2023, 561, 232732.	4.0	15
1438	Morpholiniumâ€Modified, Polyketoneâ€Based Anion Exchange Membranes for Water Electrolysis. ChemElectroChem, 2023, 10, .	1.7	6
1439	Ruthenium-loaded titania nanotube arrays as catalysts for the hydrogen evolution reaction in alkaline membrane electrolysis. Journal of Power Sources, 2023, 562, 232747.	4.0	7
1440	Investigation of Wet-Preparation Methods of Nickel Foam For Alkaline Water Electrolysis. Journal of Physics: Conference Series, 2023, 2430, 012002.	0.3	1
1441	Highly Conductive and Ultra Alkaline Stable Anion Exchange Membranes by Superacid-Promoted Polycondensation for Fuel Cells. ACS Applied Polymer Materials, 2023, 5, 2243-2253.	2.0	9
1442	Alkalineâ€Stable Anionâ€Exchange Membranes with Barium [2.2.2]Cryptate Cations: The Importance of High Binding Constants. Angewandte Chemie - International Edition, 2023, 62, .	7.2	5
1443	How Acid Washing Nickel Foam Substrates Improves the Efficiency of the Alkaline Hydrogen Evolution Reaction. Energies, 2023, 16, 2083.	1.6	1
1444	How alkali cations affect salt precipitation and CO₂electrolysis performance in membrane electrode assembly electrolyzers. Energy and Environmental Science, 2023, 16, 1631-1643.	15.6	27
1445	Highly Efficient Alkaline Water Electrolysis Using Alkanolamine-Functionalized Zirconia-Blended Separators. ACS Sustainable Chemistry and Engineering, 2023, 11, 4269-4278.	3.2	8
1446	MOF-Based Co and Mn Embedded in Nitrogen-Doped Microporous Carbon as an Efficient Catalyst for Oxygen Reduction Reaction in Anion Exchange Membrane Fuel Cell. International Journal of Energy Research, 2023, 2023, 1-14.	2.2	0
1447	Boosting Hydrogen Oxidation Kinetics by Promoting Interfacial Water Adsorption on d-p Hybridized Ru Catalysts. ACS Catalysis, 2023, 13, 4127-4133.	5.5	19
1448	Novel Pyrrolidinium-Functionalized Styrene-b-ethylene-b-butylene-b-styrene Copolymer Based Anion Exchange Membrane with Flexible Spacers for Water Electrolysis. Membranes, 2023, 13, 328.	1.4	6
1449	Impact of impurities on water electrolysis: a review. Sustainable Energy and Fuels, 2023, 7, 1565-1603.	2.5	21
1450	High-strength, ultra-thin anion exchange membranes with a branched structure toward alkaline membrane fuel cells. Journal of Materials Chemistry A, 2023, 11, 10738-10747.	5.2	20

#	Article	IF	Citations
1451	Determining the change in performance from replacing a separator with an anion exchange membrane for alkaline water electrolysis. Journal of Physics: Conference Series, 2023, 2454, 012003.	0.3	0
1452	Investigation of FumasepÂ® FAA3-50 Membranes in Alkaline Direct Methanol Fuel Cells. Polymers, 2023, 15, 1555.	2.0	1
1453	Electrochemically induced dilute gold-in-nickel nanoalloy as a highly robust electrocatalyst for alkaline hydrogen oxidation reaction. Chemical Engineering Journal, 2023, 464, 142692.	6.6	2
1454	Controlling the Size of Ag@Pd Catalysts to Boost Ethanol Oxidation. Journal of Electronic Materials, 0, , .	1.0	0
1455	Electroreduction of CO₂: Advances in the Continuous Production of Formic Acid and Formate. ACS Energy Letters, 2023, 8, 1992-2024.	8.8	48
1456	Development of crosslinked SEBS-based anion exchange membranes for water electrolysis: Investigation of the crosslinker effect. International Journal of Hydrogen Energy, 2023, 48, 24180-24195.	3.8	8
1457	Environmentally-safe anion exchange membranes of PVA/PDDA/SiO2composite for reverse electrodialysis. International Journal of Thermofluids, 2023, 18, 100350.	4.0	1
1458	Recent Advances in Water-Splitting Electrocatalysts Based on Electrodeposition. Materials, 2023, 16, 3044.	1.3	8
1459	Construction of reliable ion-conducting channels based on the perfluorinated anion-exchange membrane for high-performance pure-water-fed electrolysis. Advanced Composites and Hybrid Materials, 2023, 6, .	9.9	9
1506	Ion Exchange Membranes in Electrochemical CO2 Reduction Processes. Electrochemical Energy Reviews, 2023, 6, .	13.1	6
1519	Recent progress in anion exchange membranes (AEMs) in water electrolysis: synthesis, physio-chemical analysis, properties, and applications. Journal of Materials Chemistry A, 2023, 11, 20886-21008.	5.2	3
1520	Anion Exchange Membrane Water Electrolysis. , 2023, , 99-146.		0
1531	Membrane CO2 separation. , 2023, , 163-190.		0
1547	Preparation, modification and antifouling properties of polyaniline conductive membranes for water treatment: a comprehensive review. Environmental Science: Water Research and Technology, 0, , .	1.2	0
1551	Exploring the degradation mechanism of nickelâ€“copperâ€“molybdenum hydrogen evolution catalysts during intermittent operation. Chemical Communications, 0, , .	2.2	0
1571	Fundamental of ion-exchange membranes. , 2024, , 1-19.		0
1577	New nonporous fillers-based hybrid membranes for gas separations and water treatment process. , 2024, , 53-105.		0
1578	Ion-exchange membranes in non-microbial fuel cell systems. , 2024, , 191-227.		0

#	Article	IF	Citations
1579	Smart electrolytes: materials, durability, and degradation issues. , 2024, , 91-141.		0
1580	Electronic processes in membranes. , 2024, , 81-97.		0
1581	Ion exchange membranes in electrodialysis process for desalination. , 2024, , 93-121.		0