

Durability challenges of anion exchange membrane fuel

Energy and Environmental Science

13, 2805-2838

DOI: 10.1039/d0ee01133a

Citation Report

#	ARTICLE	IF	CITATIONS
1	Ionomers for electrochemical energy conversion & storage technologies. <i>Polymer</i> , 2020, 211, 123080.	1.8	53
2	Tuning Ion Exchange Capacity in Hydroxide-Stable Poly(arylimidazolium) Ionenes: Increasing the Ionic Content Decreases the Dependence of Conductivity and Hydration on Temperature and Humidity. <i>Macromolecules</i> , 2020, 53, 10548-10560.	2.2	23
3	Crosslinked Pore-Filling Anion Exchange Membrane Using the Cylindrical Centrifugal Force for Anion Exchange Membrane Fuel Cell System. <i>Polymers</i> , 2020, 12, 2758.	2.0	16
4	High-Performance Anion Exchange Membranes with Para-Type Cations on Electron-Withdrawing Câ•O Links Free Backbone. <i>Macromolecules</i> , 2020, 53, 10988-10997.	2.2	36
5	Recent Advances in Bipolar Membrane Design and Applications. <i>Chemistry of Materials</i> , 2020, 32, 8060-8090.	3.2	96
6	Are Radicals Formed During Anion-Exchange Membrane Fuel Cell Operation?. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 7630-7636.	2.1	57
7	Asymmetric electrode ionomer for low relative humidity operation of anion exchange membrane fuel cells. <i>Journal of Materials Chemistry A</i> , 2020, 8, 14135-14144.	5.2	60
8	Alkaline fuel cells consisting of imidazolium-based graft-type anion exchange membranes: Optimization of fuel cell conditions to achieve high performance and durability. <i>Journal of Membrane Science</i> , 2021, 620, 118844.	4.1	21
9	Self-aggregating cationic-chains enable alkaline stable ion-conducting channels for anion-exchange membrane fuel cells. <i>Journal of Materials Chemistry A</i> , 2021, 9, 327-337.	5.2	116
10	Recent Advancement on Anion Exchange Membranes for Fuel Cell and Water Electrolysis. <i>ChemElectroChem</i> , 2021, 8, 36-45.	1.7	68
11	Poly(Alkylâ€Terphenyl Piperidinium) Ionomers and Membranes with an Outstanding Alkalineâ€Membrane Fuelâ€Cell Performance of 2.58â€Wâ€%cm². <i>Angewandte Chemie - International Edition</i> , 2021, 60, 7710-7718.	7.0	185
12	Oxide-based precious metal-free electrocatalysts for anion exchange membrane fuel cells: from material design to cell applications. <i>Journal of Materials Chemistry A</i> , 2021, 9, 3151-3179.	5.2	12
13	Using Ultrasound to Effectively Homogenise Catalyst Inks: Is this Approach Still Acceptable?. <i>Johnson Matthey Technology Review</i> , 2022, 66, 61-76.	0.5	15
14	Anion exchange membranes containing no Î²-hydrogen atoms on ammonium groups: synthesis, properties, and alkaline stability. <i>RSC Advances</i> , 2021, 11, 1030-1038.	1.7	5
15	Effect of Membrane Properties on the Carbonation of Anion Exchange Membrane Fuel Cells. <i>Membranes</i> , 2021, 11, 102.	1.4	13
16	Silver nanomaterials: synthesis and (electro/photo) catalytic applications. <i>Chemical Society Reviews</i> , 2021, 50, 11293-11380.	18.7	79
17	Durability of anion exchange membrane water electrolyzers. <i>Energy and Environmental Science</i> , 2021, 14, 3393-3419.	15.6	213
18	Facile Preparation of Highly Alkaline Stable Poly(aryleneâ€imidazolium) Anion Exchange Membranes through an Ionized Monomer Strategy. <i>Macromolecules</i> , 2021, 54, 2202-2212.	2.2	38

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19	Poly(Alkylâ€Terphenyl Piperidinium) Ionomers and Membranes with an Outstanding Alkalineâ€Membrane Fuelâ€Cell Performance of 2.58â€...Wâ€%cm^{âˆ²}. <i>Angewandte Chemie</i> , 2021, 133, 7789-7797.	1.6	29
20	Atomistic Insights into the Hydrogen Oxidation Reaction of Palladium-Ceria Bifunctional Catalysts for Anion-Exchange Membrane Fuel Cells. <i>ACS Catalysis</i> , 2021, 11, 2561-2571.	5.5	30
21	Polymer Electrolytes with High Ionic Concentration for Fuel Cells and Electrolyzers. <i>ACS Applied Polymer Materials</i> , 2021, 3, 1250-1270.	2.0	74
22	Highly conductive anion exchange membranes based on polymer networks containing imidazolium functionalised side chains. <i>Scientific Reports</i> , 2021, 11, 3764.	1.6	22
23	Regenerative fuel cells: Recent progress, challenges, perspectives and their applications for space energy system. <i>Applied Energy</i> , 2021, 283, 116376.	5.1	50
24	Editorsâ€™ Choiceâ€™Power-Generating Electrochemical CO₂ Scrubbing from Air Enabling Practical AEMFC Application. <i>Journal of the Electrochemical Society</i> , 2021, 168, 024504.	1.3	9
25	Sustainable catalysts for water electrolysis: Selected strategies for reduction and replacement of platinum-group metals. <i>Materials Today Sustainability</i> , 2021, 11-12, 100060.	1.9	17
26	Performance hysteresis phenomena of anion exchange membrane fuel cells using an Feâ€Nâ€C cathode catalyst and an in-house-developed polymer electrolyte. <i>Journal of Power Sources</i> , 2021, 487, 229407.	4.0	13
27	Anion Exchange Ionomers: Impact of Chemistry on Thinâ€Film Properties. <i>Advanced Functional Materials</i> , 2021, 31, 2008778.	7.8	36
28	Separation of CO₂ from Dilute Gas Streams Using a Membrane Electrochemical Cell. <i>ACS ES&T Engineering</i> , 2021, 1, 905-916.	3.7	13
29	Designing Highly Conductive Block Copolymer-Based Anion Exchange Membranes by Mesoscale Simulations. <i>Journal of Physical Chemistry B</i> , 2021, 125, 2729-2740.	1.2	11
30	Progress in Highâ€Performance Anion Exchange Membranes Based on the Design of Stable Cations for Alkaline Fuel Cells. <i>Advanced Materials Technologies</i> , 2021, 6, 2001220.	3.0	69
31	Recent Advances in Electrocatalysts for Proton Exchange Membrane Fuel Cells and Alkaline Membrane Fuel Cells. <i>Advanced Materials</i> , 2021, 33, e2006292.	11.1	300
32	Piperidinium functionalized aryl ether-free polyaromatics as anion exchange membrane for water electrolyzers: Performance and durability. <i>Journal of Membrane Science</i> , 2021, 621, 118964.	4.1	68
33	Critical Review of Platinum Group Metal-Free Materials for Water Electrolysis: Transition from the Laboratory to the Market. <i>Johnson Matthey Technology Review</i> , 2021, 65, 207-226.	0.5	17
34	Editorsâ€™ Choiceâ€™Examining Performance and Durability of Anion Exchange Membrane Fuel Cells with Novel Spirocyclic Anion Exchange Membranes. <i>Journal of the Electrochemical Society</i> , 2021, 168, 044525.	1.3	14
35	Nanocomposite Anion Exchange Membranes with a Conductive Semi-Interpenetrating Silica Network. <i>Membranes</i> , 2021, 11, 260.	1.4	3
36	Towards the Hydrogen Economyâ€™A Review of the Parameters That Influence the Efficiency of Alkaline Water Electrolyzers. <i>Energies</i> , 2021, 14, 3193.	1.6	40

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37	The effect of "NH" on quaternized polybenzimidazole anion exchange membranes for alkaline fuel cells. <i>Journal of Membrane Science</i> , 2021, 626, 119178.	4.1	58
38	Alkaline fuel cell technology - A review. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 18489-18510.	3.8	166
39	Recent Insights on Catalyst Layers for Anion Exchange Membrane Fuel Cells. <i>Advanced Science</i> , 2021, 8, e2100284.	5.6	76
40	Progress in neutron techniques: towards improved polymer electrolyte membranes for energy devices. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 264005.	0.7	3
41	Catalytic activity of Pt-CoTiO ₃ nanocatalysts supported on reduced graphene oxide functionalized with Cr organometallic compounds for the oxygen reduction reaction. <i>Journal of Materials Research</i> , 0, 1.	1.2	5
42	Pore Modification and Phosphorus Doping Effect on Phosphoric Acid-Activated Fe-N-C for Alkaline Oxygen Reduction Reaction. <i>Nanomaterials</i> , 2021, 11, 1519.	1.9	3
43	Ultrafine Nickel Nanoparticles Encapsulated in N-Doped Carbon Promoting Hydrogen Oxidation Reaction in Alkaline Media. <i>ACS Catalysis</i> , 2021, 11, 7422-7428.	5.5	57
44	Toward alkaline-stable anion exchange membranes in fuel cells: cycloaliphatic quaternary ammonium-based anion conductors. <i>Electrochemical Energy Reviews</i> , 2022, 5, 348-400.	13.1	62
45	Synthesis and properties of anion conductive polymers containing dual quaternary ammonium groups without beta-hydrogen via CuAAC click chemistry. <i>Polymer</i> , 2021, 228, 123920.	1.8	12
46	Insight into the Alkaline Stability of N-Heterocyclic Ammonium Groups for Anion-Exchange Polyelectrolytes. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 19272-19280.	7.2	85
47	Insight into the Alkaline Stability of N-Heterocyclic Ammonium Groups for Anion-Exchange Polyelectrolytes. <i>Angewandte Chemie</i> , 2021, 133, 19421-19429.	1.6	15
48	High performance carbon-supported IrRu alloy catalyst for the in an alkaline anion-exchange membrane fuel cell. <i>Journal of Alloys and Compounds</i> , 2021, 868, 159205.	2.8	10
49	Analytical transmission electron microscopy for emerging advanced materials. <i>Matter</i> , 2021, 4, 2309-2339.	5.0	71
50	Molecular Control of Carbon-Based Oxygen Reduction Electrocatalysts through Metal Macrocyclic Complexes Functionalization. <i>Advanced Energy Materials</i> , 2021, 11, 2100866.	10.2	60
51	Proton conductors for heavy-duty vehicle fuel cells. <i>Joule</i> , 2021, 5, 1660-1677.	11.7	65
52	A novel anion exchange membrane based on poly (2,6-dimethyl-1,4-phenylene oxide) with excellent alkaline stability for AEMFC. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 24328-24338.	3.8	22
53	Hierarchically mesoporous carbon spheres coated with a single atomic Fe-N-C layer for balancing activity and mass transfer in fuel cells. , 2022, 4, 1-11.		45
54	Interaction Regulation Between Ionomer Binder and Catalyst: Active Triple-Phase Boundary and High Performance Catalyst Layer for Anion Exchange Membrane Fuel Cells. <i>Advanced Science</i> , 2021, 8, e2101744.	5.6	34

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55	High-performing commercial Fe-N-C cathode electrocatalyst for anion-exchange membrane fuel cells. <i>Nature Energy</i> , 2021, 6, 834-843.	19.8	238
56	Promotion Effect of Modified Ni/C by La-Ce Oxide for Durable Hydrogen Evolution Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 12508-12513.	3.2	23
57	Ion conductive membranes for flow batteries: Design and ions transport mechanism. <i>Journal of Membrane Science</i> , 2021, 632, 119355.	4.1	23
58	Recent Developments of Microenvironment Engineering of Single-Atom Catalysts for Oxygen Reduction toward Desired Activity and Selectivity. <i>Advanced Functional Materials</i> , 2021, 31, 2103857.	7.8	77
59	Proton Exchange Membrane Fuel Cell (PEMFC) Durability Factors, Challenges, and Future Perspectives: A Detailed Review. <i>Material Science Research India</i> , 2021, 18, 217-234.	0.9	15
60	Nanoarchitecturing Carbon Nanodot Arrays on Zeolitic Imidazolate Framework-Derived Cobalt-Nitrogen-Doped Carbon Nanoflakes toward Oxygen Reduction Electrocatalysts. <i>ACS Nano</i> , 2021, 15, 13240-13248.	7.3	38
61	Anion exchange membranes with fast ion transport channels driven by cation-dipole interactions for alkaline fuel cells. <i>Journal of Membrane Science</i> , 2021, 634, 119404.	4.1	51
62	Electrochemical performance of poly(arylene piperidinium) membranes and ionomers in anion exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2021, 507, 230287.	4.0	22
63	Design Strategies for Alkaline Exchange Membrane-Electrode Assemblies: Optimization for Fuel Cells and Electrolyzers. <i>Membranes</i> , 2021, 11, 686.	1.4	8
64	Chemo-stable poly(quinquephenylene-co-diphenylene piperidinium) ionomers for anion exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2021, 506, 230184.	4.0	32
65	Commercial anion exchange membrane water electrolyzer stack through non-precious metal electrocatalysts. <i>Applied Catalysis B: Environmental</i> , 2021, 292, 120170.	10.8	59
66	Fe, Co, N-doped carbon nanotubes as bifunctional oxygen electrocatalysts. <i>Applied Surface Science</i> , 2022, 572, 151459.	3.1	3
67	Long side-chain quaternary ammonium group functionalized polybenzimidazole based anion exchange membranes and their applications. <i>Electrochimica Acta</i> , 2021, 391, 138919.	2.6	31
68	Tailoring active sites of iron-nitrogen-carbon catalysts for oxygen reduction in alkaline environment: Effect of nitrogen-based organic precursor and pyrolysis atmosphere. <i>Electrochimica Acta</i> , 2021, 391, 138899.	2.6	14
69	Metallo-Polyelectrolyte-Based Robust Anion Exchange Membranes via Acetalation of a Commodity Polymer. <i>Macromolecules</i> , 2021, 54, 9145-9154.	2.2	20
70	Limitations of aqueous model systems in the stability assessment of electrocatalysts for oxygen reactions in fuel cell and electrolyzers. <i>Current Opinion in Electrochemistry</i> , 2021, 29, 100832.	2.5	45
71	Polynorbornene-based anion exchange membranes with hydrophobic large steric hindrance arylene substituent. <i>Journal of Membrane Science</i> , 2022, 641, 119938.	4.1	21
72	A comprehensive review on the synthesis and applications of ion exchange membranes. <i>Chemosphere</i> , 2021, 282, 130817.	4.2	103

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73	Unveiling the influence of radiation-induced grafting methods on the properties of polyethylene-based anion-exchange membranes for alkaline fuel cells. <i>Journal of Power Sources</i> , 2021, 512, 230484.	4.0	14
74	High-performance poly(fluorenyl aryl piperidinium)-based anion exchange membrane fuel cells with realistic hydrogen supply. <i>Journal of Power Sources</i> , 2021, 512, 230474.	4.0	12
75	Chemically & physically stable crosslinked poly(aryl-co-aryl piperidinium)s for anion exchange membrane fuel cells. <i>Journal of Membrane Science</i> , 2021, 638, 119685.	4.1	57
76	Multi-layered thin film nanocomposite MoS ₂ @MoO ₂ /MWCNP/ITO-PET: Electrochemical approaches for synthesis and structural characterizations. <i>Applied Surface Science</i> , 2021, 565, 150508.	3.1	4
77	Performance of five commercial bipolar membranes under forward and reverse bias conditions for acid-base flow battery applications. <i>Journal of Membrane Science</i> , 2021, 640, 119748.	4.1	21
78	Carbon dots regulate the interface electron transfer and catalytic kinetics of Pt-based alloys catalyst for highly efficient hydrogen oxidation. <i>Journal of Energy Chemistry</i> , 2022, 66, 61-67.	7.1	45
79	High-performance radiation grafted anion-exchange membranes for fuel cell applications: Effects of irradiation conditions on ETFE-based membranes properties. <i>Journal of Membrane Science</i> , 2022, 641, 119879.	4.1	25
80	Preparation of crosslinker-free anion exchange membranes with excellent physicochemical and electrochemical properties based on crosslinked PPO-SEBS. <i>Journal of Materials Chemistry A</i> , 2021, 9, 1062-1079.	5.2	41
81	Machine learning analysis and prediction models of alkaline anion exchange membranes for fuel cells. <i>Energy and Environmental Science</i> , 2021, 14, 3965-3975.	15.6	29
82	Degradation study for the membrane electrode assembly of anion exchange membrane fuel cells at a single-cell level. <i>Journal of Materials Chemistry A</i> , 2021, 9, 18546-18556.	5.2	13
83	Pyrolyzed M ^x N _x catalysts for oxygen reduction reaction: progress and prospects. <i>Energy and Environmental Science</i> , 2021, 14, 2158-2185.	15.6	170
84	Improved Borohydride Oxidation Reaction Activity and Stability for Carbon-Supported Platinum Nanoparticles with Tantalum Oxyphosphate Interlayers. <i>Journal of the Electrochemical Society</i> , 2020, 167, 164508.	1.3	3
85	Electrocatalytic reduction of CO ₂ and CO to multi-carbon compounds over Cu-based catalysts. <i>Chemical Society Reviews</i> , 2021, 50, 12897-12914.	18.7	266
86	Design, synthesis and characterization of anion exchange membranes containing guanidinium salts with ultrahigh dimensional stability. <i>Journal of Membrane Science</i> , 2022, 643, 120008.	4.1	32
87	3D Zipped Interface: In Situ Covalent Locking for High Performance of Anion Exchange Membrane Fuel Cells. <i>Advanced Science</i> , 2021, 8, e2102637.	5.6	21
88	Highly Selective Anion Exchange Membrane Based on Quaternized Poly(triphenyl piperidine) for the Vanadium Redox Flow Battery. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 14297-14306.	3.2	17
89	A review of the application of polyvinyl alcohol membranes for fuel cells. <i>Ionics</i> , 2022, 28, 1-13.	1.2	13
90	Silver Oxygen Reduction Electrocatalyst in Alkaline Medium: Aging and Protective Coating. <i>Energy Technology</i> , 2021, 9, 2100546.	1.8	1

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91	Enhanced mass transport and water management of polymer electrolyte fuel cells via 3-D printed architectures. <i>Journal of Power Sources</i> , 2021, 515, 230636.	4.0	17
92	Review“Challenges and Opportunities for Increased Current Density in Alkaline Electrolysis by Increasing the Operating Temperature. <i>Journal of the Electrochemical Society</i> , 2021, 168, 114501.	1.3	34
93	Alkaline Fuel Cells, Theory and Applications. , 2022, , 166-231.		0
94	Functionalized graphene oxide cross-linked poly(2,6-dimethyl-1,4-phenylene oxide)-based anion exchange membranes with superior ionic conductivity. <i>Journal of Power Sources</i> , 2022, 517, 230720.	4.0	39
95	A deep learning protocol for analyzing and predicting ionic conductivity of anion exchange membranes. <i>Journal of Membrane Science</i> , 2022, 642, 119983.	4.1	16
96	Bimetallic Pt or Pd-based carbon supported nanoparticles are more stable than their monometallic counterparts for application in membraneless alkaline fuel cell anodes. <i>Applied Catalysis B: Environmental</i> , 2022, 301, 120811.	10.8	16
97	Soluble poly(aryl piperidinium) with extended aromatic segments as anion exchange membranes for alkaline fuel cells and water electrolysis. <i>Journal of Membrane Science</i> , 2022, 642, 119966.	4.1	101
98	Fabrication of an Ionomer-Free Electrode Containing Vertically Aligned One-Dimensional Nanostructures for Alkaline Membrane Fuel Cells. <i>Journal of the Electrochemical Society</i> , 0, , .	1.3	2
99	A stable ion-solvating PBI electrolyte enabled by sterically bulky naphthalene for alkaline water electrolysis. <i>Journal of Membrane Science</i> , 2022, 643, 120042.	4.1	28
100	Direct borohydride fuel cells: A selected review of their reaction mechanisms, electrocatalysts, and influence of operating parameters on their performance. <i>Current Opinion in Electrochemistry</i> , 2022, 32, 100883.	2.5	12
101	Impact of side-chains in poly(dibenzyl-co-terphenyl piperidinium) copolymers for anion exchange membrane fuel cells. <i>Journal of Membrane Science</i> , 2022, 644, 120109.	4.1	44
102	Anion Exchange Membranes with 1D, 2D and 3D Fillers: A Review. <i>Polymers</i> , 2021, 13, 3887.	2.0	12
103	Efficiency and Oxidation Performance of Densely Flexible Side-Chain Piperidinium-Functionalized Anion Exchange Membranes for Vanadium Redox Flow Batteries. <i>ACS Applied Energy Materials</i> , 2021, 4, 14488-14496.	2.5	13
104	Eco-friendly synthesis of alkaline anion exchange membrane for fuel cells application. <i>Brazilian Journal of Chemical Engineering</i> , 2022, 39, 183-195.	0.7	1
105	Highly stable N-containing polymer-based Fe/Nx/C electrocatalyst for alkaline anion exchange membrane fuel cell applications. <i>Progress in Natural Science: Materials International</i> , 2022, 32, 27-33.	1.8	11
106	Understanding how single-atom site density drives the performance and durability of PGM-free Fe“N“C cathodes in anion exchange membrane fuel cells. <i>Materials Today Advances</i> , 2021, 12, 100179.	2.5	18
107	Recent Progress and Viability of PGM-Free Catalysts for Hydrogen Evolution Reaction and Hydrogen Oxidation Reaction. <i>ACS Catalysis</i> , 2022, 12, 1082-1089.	5.5	49
108	Recent Progress on Polyvinyl Alcohol-Based Materials for Energy Conversion. <i>New Journal of Chemistry</i> , 0, , .	1.4	2

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109	Aquivion®-based anionic membranes for water electrolysis. <i>Electrochimica Acta</i> , 2022, 405, 139834.	2.6	5
110	Spatially resolved performance and degradation in a perfluorinated anion exchange membrane fuel cell. <i>Electrochimica Acta</i> , 2022, 406, 139812.	2.6	7
111	2, 6-Diaminopyridine decorated reduced graphene oxide as integrated electrode with excellent electrochemical properties for aqueous supercapacitors. <i>Electrochimica Acta</i> , 2022, 404, 139725.	2.6	10
112	Crosslinked of poly(biphenyl pyridine) and poly(styrene- <i>co</i> -(ethylene- <i>co</i> -butylene)- <i>co</i> -styrene) grafted with double cations for anion exchange membrane. <i>Electrochimica Acta</i> , 2022, 405, 139770.	2.6	15
113	Reinforced poly(fluorenyl- <i>co</i> -terphenyl piperidinium) anion exchange membranes for fuel cells. <i>Journal of Membrane Science</i> , 2022, 644, 120160.	4.1	23
114	Decoupling polymer, water and ion transport dynamics in ion-selective membranes for fuel cell applications. <i>Journal of Non-Crystalline Solids: X</i> , 2022, 13, 100073.	0.5	3
115	Anion-conducting polyelectrolytes for energy devices. <i>Trends in Chemistry</i> , 2022, 4, 236-249.	4.4	34
116	Effect of LDH platelets on the transport properties and carbonation of anion exchange membranes. <i>Electrochimica Acta</i> , 2022, 403, 139713.	2.6	16
117	Bis-pyridinium crosslinked poly(ether ether ketone) anion exchange membranes with enhancement of hydroxide conductivity and alkaline stability. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 6097-6110.	3.8	18
118	Di-piperidinium-crosslinked poly(fluorenyl- <i>co</i> -terphenyl piperidinium)s for high-performance alkaline exchange membrane fuel cells. <i>Journal of Materials Chemistry A</i> , 2022, 10, 3678-3687.	5.2	45
119	Strategies for Improving Anion Exchange Membrane Fuel Cell Performance by Optimizing Electrode Conditions. <i>Journal of the Electrochemical Society</i> , 2022, 169, 014515.	1.3	7
120	Carbon Dots Derived from Waste Psidium Guajava Leaves for Electrocatalytic Sensing of Chlorpyrifos. <i>Electroanalysis</i> , 2022, 34, 1141-1149.	1.5	7
121	Highly stable poly(<i>p</i> -quaterphenylene alkylene)-based anion exchange membranes. <i>Journal of Membrane Science</i> , 2022, 647, 120342.	4.1	35
122	Effect of water management in membrane and cathode catalyst layers on suppressing the performance hysteresis phenomenon in anion-exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2022, 522, 230997.	4.0	13
123	La-Based Perovskite Oxide Catalysts for Alkaline Oxygen Reduction: The Importance of Electrochemical Stability. <i>Journal of Physical Chemistry C</i> , 2022, 126, 3098-3108.	1.5	7
124	Branched Anion-Conducting Poly(arylene alkylene)s for Alkaline Membrane Fuel Cells. <i>ACS Applied Energy Materials</i> , 2022, 5, 2462-2473.	2.5	27
125	Strategies to optimize water management in anion exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2022, 525, 231141.	4.0	18
126	A hierarchical monolithic cobalt-single-atom electrode for efficient hydrogen peroxide production in acid. <i>Catalysis Science and Technology</i> , 2022, 12, 2416-2419.	2.1	14

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127	Oligomeric chain extender-derived anion conducting membrane materials with poly(<i>p</i> -phenylene)-based architecture for fuel cells and water electrolyzers. <i>Journal of Materials Chemistry A</i> , 2022, 10, 9693-9706.	5.2	22
128	Crosslinked Poly(M-Terphenyl N-Methyl Piperidinium)-Sebs Membranes with Aryl-Ether Free and Kinked Backbones as Highly Stable and Conductive Anion Exchange Membranes. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
129	Tuning hydrophobic composition in terpolymer-based anion exchange membranes to balance conductivity and stability. <i>Molecular Systems Design and Engineering</i> , 2022, 7, 798-808.	1.7	5
130	Dimensionally stable multication-crosslinked poly(arylene piperidinium) membranes for water electrolysis. <i>Journal of Materials Chemistry A</i> , 2022, 10, 8401-8412.	5.2	41
131	<i>In situ</i> construction of self-supporting Ni-Fe sulfide for high-efficiency oxygen evolution. <i>New Journal of Chemistry</i> , 2022, 46, 8250-8255.	1.4	8
132	The Influence of Various Cationic Group on Polynorbornene Based Anion Exchange Membranes with Hydrophobic Large Steric Hindrance Arylene Substituent. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
133	Highly Stable Nanocarbon Supported Pt Catalyst for Fuel Cell Via a Molten Salt Graphitization Strategy. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
134	Highly Stable Nanocarbon Supported Pt Catalyst for Fuel Cell Via a Molten Salt Graphitization Strategy. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
135	Magnetic-field-oriented mixed-valence-stabilized ferrocenium anion-exchange membranes for fuel cells. <i>Nature Energy</i> , 2022, 7, 329-339.	19.8	60
136	Hydrophobic Quaternized Poly(fluorene) Ionomers for Emerging Fuel Cells. <i>ACS Applied Energy Materials</i> , 2022, 5, 2663-2668.	2.5	7
137	Disentangling water, ion and polymer dynamics in an anion exchange membrane. <i>Nature Materials</i> , 2022, 21, 555-563.	13.3	32
138	Anion Exchange Membranes for Fuel Cell Application: A Review. <i>Polymers</i> , 2022, 14, 1197.	2.0	55
139	Robust, dimensional stable, and self-healable anion exchange membranes via quadruple hydrogen bonds. <i>Polymer</i> , 2022, 245, 124698.	1.8	7
140	Crosslinked poly(m-terphenyl N-methyl piperidinium)-SEBS membranes with aryl-ether free and kinked backbones as highly stable and conductive anion exchange membranes. <i>Journal of Membrane Science</i> , 2022, 653, 120487.	4.1	28
141	Structural modification of electrode for anion exchange membrane fuel cell by controlling ionomer dispersion. <i>International Journal of Energy Research</i> , 2022, 46, 6471-6479.	2.2	7
142	A Critical Assessment on Functional Attributes and Degradation Mechanism of Membrane Electrode Assembly Components in Direct Methanol Fuel Cells. <i>Sustainability</i> , 2021, 13, 13938.	1.6	10
143	Branched Poly(Aryl Piperidinium) Membranes for Anion-Exchange Membrane Fuel Cells. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	3
144	Branched Poly(Aryl Piperidinium) Membranes for Anion-Exchange Membrane Fuel Cells. <i>Angewandte Chemie - International Edition</i> , 2022, 61, e202114892.	7.2	77

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145	Enhancing side chain swing ability by novel all-carbon twisted backbone for high performance anion exchange membrane at relatively low IEC level. , 2021, 1, 100007.		7
146	Three-Electrode Study of Electrochemical Ionomer Degradation Relevant to Anion-Exchange-Membrane Water Electrolyzers. ACS Applied Materials & Interfaces, 2022, 14, 18261-18274.	4.0	28
147	Native Ligand Carbonization Renders Common Platinum Nanoparticles Highly Durable for Electrocatalytic Oxygen Reduction: Annealing Temperature Matters. Advanced Materials, 2022, 34, e2202743.	11.1	34
148	Anion-Exchange Membrane Water Electrolyzers. Chemical Reviews, 2022, 122, 11830-11895.	23.0	177
149	A high-performance hydroxide exchange membrane enabled by Cu ²⁺ -crosslinked chitosan. Nature Nanotechnology, 2022, 17, 629-636.	15.6	50
150	A Short Overview of Biological Fuel Cells. Membranes, 2022, 12, 427.	1.4	8
151	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
152	Crosslinked Anion Exchange Membranes Prepared from Highly Reactive Polyethylene and Polypropylene Intermediates. SSRN Electronic Journal, 0, , .	0.4	0
153	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
154	Highly stable nanocarbon supported Pt catalyst for fuel cell via a molten salt graphitization strategy. International Journal of Hydrogen Energy, 2022, 47, 20494-20506.	3.8	12
155	Emerging Electrochemical Processes to Decarbonize the Chemical Industry. Jacs Au, 2022, 2, 1054-1070.	3.6	59
156	High-performance tetracyclic aromatic anion exchange membranes containing twisted binaphthyl for fuel cells. Journal of Membrane Science, 2022, 655, 120578.	4.1	45
157	Dual-Cation Interpenetrating Polymer Network Anion Exchange Membrane for Fuel Cells and Water Electrolyzers. Macromolecules, 2022, 55, 4647-4655.	2.2	16
158	In Situ Crosslinked Side Chain Polybenzimidazole Based Anion Exchange Membranes for High Performance Alkaline Direct Methanol Fuel Cells. SSRN Electronic Journal, 0, , .	0.4	0
159	Oxygen Reduction Reaction in Alkaline Media Causes Iron Leaching from Fe ²⁺ -N ³⁻ C Electrocatalysts. Journal of the American Chemical Society, 2022, 144, 9753-9763.	6.6	59
160	Communicationâ€”Electropolymerization of Anion-Conducting Polymer Films. Journal of the Electrochemical Society, 0, , .	1.3	1
161	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
162	CeO ₂ Modulates the Electronic States of a Palladium Onion-Like Carbon Interface into a Highly Active and Durable Electrocatalyst for Hydrogen Oxidation in Anion-Exchange-Membrane Fuel Cells. ACS Catalysis, 2022, 12, 7014-7029.	5.5	33

#	ARTICLE	IF	CITATIONS
163	Molecular Modeling in Anion Exchange Membrane Research: A Brief Review of Recent Applications. <i>Molecules</i> , 2022, 27, 3574.	1.7	6
164	Quaternary Ammonium-Biphosphate Ion-Pair Based Copolymers with Continuous H ⁺ Transport Channels for High-Temperature Proton Exchange Membrane. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
165	Electrochemical Reactors for Continuous Decentralized H ₂ O ₂ Production. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	31
166	Electrochemical Reactors for Continuous Decentralized H ₂ O ₂ Production. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	12
167	Understanding Recoverable vs Unrecoverable Voltage Losses and Long-Term Degradation Mechanisms in Anion Exchange Membrane Fuel Cells. <i>ACS Catalysis</i> , 2022, 12, 8116-8126.	5.5	10
168	Stable, high-performing bifunctional electrodes for anion exchange membrane-based unitized regenerative fuel cells. <i>Journal of Power Sources</i> , 2022, 541, 231599.	4.0	5
169	Alkaline stable piperidinium-based biphenyl polymer for anion exchange membranes. <i>Solid State Ionics</i> , 2022, 383, 115969.	1.3	5
170	On the stability of anion exchange membrane fuel cells incorporating polyimidazolium ionene (Aemion+ [®]) membranes and ionomers. <i>Sustainable Energy and Fuels</i> , 2022, 6, 3551-3564.	2.5	18
171	Efficient Transport of Active Species in Triple-Phase Boundary Through "Paddle-Effect" of Ionomer for Alkaline Fuel Cells. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
172	New block poly(ether sulfone) based anion exchange membranes with rigid side-chains and high-density quaternary ammonium groups for fuel cell application. <i>Polymer Chemistry</i> , 2022, 13, 4395-4405.	1.9	7
173	Implementation of heteroatom-doped nanomaterial/core-shell nanostructure based electrocatalysts for fuel cells and metal-ion/air/sulfur batteries. <i>Materials Advances</i> , 2022, 3, 6096-6124.	2.6	8
174	Crosslinked Anion Exchange Membranes Prepared from Highly Reactive Polyethylene and Polypropylene Intermediates. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
175	Support Effect in Bimetallic Particles PtNi for Hydrogen Oxidation Reaction in Alkaline Media. <i>Topics in Catalysis</i> , 2022, 65, 1251-1261.	1.3	2
176	A Study on the Characteristics of Anion Exchange Membrane According to Aliphatic Alkyl Chain Spacer Length Introduced into Branched Poly (Arylene Ether Sulfone). <i>Transactions of the Korean Hydrogen and New Energy Society</i> , 2022, 33, 209-218.	0.1	0
177	Anion Exchange Membranes for Fuel Cells Based on Quaternized Polystyrene-b-poly(ethylene-co-butylene)-b-polystyrene Triblock Copolymers with Spacer-Sidechain Design. <i>Polymers</i> , 2022, 14, 2860.	2.0	4
178	Recent advances in the electrochemical CO reduction reaction towards highly selective formation of C _x products (X= 1-3). <i>Chem Catalysis</i> , 2022, 2, 1961-1988.	2.9	7
179	A review on anion exchange membranes for fuel cells: Anion-exchange polyelectrolytes and synthesis strategies. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 27800-27820.	3.8	42
180	Imidazole-Functionalized Multiquaternary Side-Chain Polyethersulfone Anion-Exchange Membrane for Fuel Cell Applications. <i>ACS Applied Energy Materials</i> , 2022, 5, 10023-10033.	2.5	9

#	ARTICLE	IF	CITATIONS
181	Stability Tests on Anion Exchange Membrane Water Electrolyzer under On-Off Cycling with Continuous Solution Feeding. <i>Journal of Electrochemical Science and Technology</i> , 2022, 13, 369-376.	0.9	3
182	Design, synthesis and characterization of SEBS anion exchange membranes with ultrahigh dimensional stability. <i>Journal of Polymer Research</i> , 2022, 29, .	1.2	1
183	Heterogenization of Molecular Electrocatalytic Active Sites through Reticular Chemistry. <i>Advanced Materials</i> , 2023, 35, .	11.1	11
184	State-of-the-art and developmental trends in platinum group metal-free cathode catalyst for anion exchange membrane fuel cell (AEMFC). <i>Applied Catalysis B: Environmental</i> , 2023, 325, 121733.	10.8	54
185	Co-, Ni-Catalyzed Borylation of Carbon Nanofibers for Oxygen Reduction Reaction in an Anion Exchange Membrane Fuel Cell. <i>ACS Applied Energy Materials</i> , 2022, 5, 10240-10253.	2.5	8
186	Cross-Linked Anion-Exchange Membranes with Dipole-Containing Cross-Linkers Based on Poly(terphenyl isatin piperidinium) Copolymers. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 39343-39353.	4.0	24
187	Recent Advances in Heterogeneous Electroreduction of CO ₂ on Copper-Based Catalysts. <i>Catalysts</i> , 2022, 12, 860.	1.6	11
188	Molecular dynamics insight into phase separation and transport in anion-exchange membranes: Effect of hydrophobicity of backbones. <i>Journal of Membrane Science</i> , 2022, 661, 120922.	4.1	28
189	Strong and Flexible High-Performance Anion Exchange Membranes with Long-Distance Interconnected Ion Transport Channels for Alkaline Fuel Cells. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 38132-38143.	4.0	11
190	Performance optimization of PGM and PGM-free catalysts in anion-exchange membrane fuel cells. <i>Journal of Solid State Electrochemistry</i> , 2022, 26, 2049-2057.	1.2	4
191	Novel poly(carbazole-butanedione) anion exchange membranes constructed by obvious microphase separation for fuel cells. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 32262-32272.	3.8	17
192	Quaternary ammonium-biphosphate ion-pair based copolymers with continuous H ⁺ transport channels for high-temperature proton exchange membrane. <i>Journal of Membrane Science</i> , 2022, 660, 120878.	4.1	18
193	Alkaline direct liquid fuel cells: Advances, challenges and perspectives. <i>Journal of Electroanalytical Chemistry</i> , 2022, 922, 116712.	1.9	10
194	Crosslinked anion exchange membranes prepared from highly reactive polyethylene and polypropylene intermediates. <i>Journal of Membrane Science</i> , 2022, 661, 120921.	4.1	12
195	Highly conductive branched poly(aryl piperidinium) anion exchange membranes with robust chemical stability. <i>Journal of Colloid and Interface Science</i> , 2023, 629, 377-387.	5.0	38
196	Crosslinked Anion Exchange Membranes Prepared from Highly Reactive Polyethylene and Polypropylene Intermediates. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
197	Construction of symbiotic one-dimensional ionic channels in a cobalt-based covalent organic framework for high-performance oxygen reduction electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2022, 10, 22781-22790.	5.2	2
198	Light olefin synthesis from a diversity of renewable and fossil feedstocks: state-of the-art and outlook. <i>Chemical Society Reviews</i> , 2022, 51, 7994-8044.	18.7	40

#	ARTICLE	IF	CITATIONS
199	Chemically stable piperidinium cations for anion exchange membranes. RSC Advances, 2022, 12, 26542-26549.	1.7	7
200	Field Grand Challenge for Membrane Science and Technology. , 0, 1, .		4
201	Efficient transport of active species in triple-phase boundary through "Paddle-Effect" of ionomer for alkaline fuel cells. Chemical Engineering Journal, 2023, 452, 139498.	6.6	7
202	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 0z84314 gBT /Over		
203	Pt Atomic Layers with Tensile Strain and Rich Defects Boost Ethanol Electrooxidation. Nano Letters, 2022, 22, 7563-7571.	4.5	37
204	Biochar sacrificial anode assisted water electrolysis for hydrogen production. International Journal of Hydrogen Energy, 2022, 47, 36482-36492.	3.8	13
205	Membrane Strategies for Water Electrolysis. ACS Energy Letters, 2022, 7, 3447-3457.	8.8	61
206	High-Entropy Alloy Nanosheets for Fine-Tuning Hydrogen Evolution. ACS Catalysis, 2022, 12, 11955-11959.	5.5	67
207	Pyrrolidinium-Based Hyperbranched Anion Exchange Membranes with Controllable Microphase Separated Morphology for Alkaline Fuel Cells. Macromolecular Rapid Communications, 0, , 2200669.	2.0	3
208	PdNi Nanoframework and Nanochain Catalysts with Enhanced Oxygen Reduction Reaction Performance. ChemCatChem, 2022, 14, .	1.8	7
209	Performance and Stability of Membrane Electrode Assemblies Using a Carbon-free Connected Pt-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
210	High-current density alkaline electrolyzers: The role of Nafion binder content in the catalyst coatings and techno-economic analysis. Frontiers in Chemistry, 0, 10, .	1.8	8
211	Grand challenges in membrane applications "Energy. , 0, 1, .		1
212	Progress and Understanding of CO ₂ /CO Electroreduction in Flow Electrolyzers. ACS Catalysis, 2022, 12, 12993-13020.	5.5	25
213	Templated Nitrogen-, Iron-, and Cobalt-Doped Mesoporous Nanocarbon Derived from an Alkylresorcinol Mixture for Anion-Exchange Membrane Fuel Cell Application. ACS Catalysis, 2022, 12, 14050-14061.	5.5	22
214	High-performance anion exchange membranes achieved by crosslinking two aryl ether-free polymers: poly(bibenzyl N-methyl piperidine) and SEBS. Journal of Membrane Science, 2022, 664, 121071.	4.1	20
215	Dual-atom catalysts for oxygen electrocatalysis. Nano Energy, 2022, 104, 107927.	8.2	57
216	Alkaline anion exchange membrane containing pyrene-based "π-π" stacking interactions. Journal of Power Sources, 2023, 553, 232247.	4.0	29

#	ARTICLE	IF	CITATIONS
217	Side-chain structural engineering on poly(terphenyl piperidinium) anion exchange membrane for water electrolyzers. <i>Journal of Membrane Science</i> , 2023, 665, 121135.	4.1	41
218	In-situ crosslinked, side chain polybenzimidazole-based anion exchange membranes for alkaline direct methanol fuel cells. <i>Chemical Engineering Journal</i> , 2023, 454, 140046.	6.6	8
219	Fuel Cell Types, Properties of Membrane, and Operating Conditions: A Review. <i>Sustainability</i> , 2022, 14, 14653.	1.6	15
220	Anion exchange membrane fuel cell: New insights and advancements. <i>Wiley Interdisciplinary Reviews: Energy and Environment</i> , 0, , .	1.9	2
221	Recent progress in heteroatom doped carbon based electrocatalysts for oxygen reduction reaction in anion exchange membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 3593-3631.	3.8	33
222	Physically and Chemically Stable Anion Exchange Membranes with Hydrogen-Bond Induced Ion Conducting Channels. <i>Polymers</i> , 2022, 14, 4920.	2.0	8
223	Chain Architecture Dependence of Morphology and Water Transport in Poly(fluorene alkylene)-Based Anion-Exchange Membranes. <i>Macromolecules</i> , 2022, 55, 10607-10617.	2.2	18
224	Preparation of phosphotungstic acid hybrid proton exchange membranes by constructing proton transport channels for direct methanol fuel cells. <i>Polymer</i> , 2023, 265, 125589.	1.8	4
225	Poly(arylene alkylene)s with pendent benzyl-tethered ammonium cations for anion exchange membranes. <i>Journal of Membrane Science</i> , 2023, 668, 121229.	4.1	12
226	Recent developments of membranes and electrocatalysts for the hydrogen production by anion exchange membrane water electrolyzers: A review. <i>Arabian Journal of Chemistry</i> , 2023, 16, 104451.	2.3	18
227	Tailoring the Durability of Carbon-Coated Pd Catalysts Towards Hydrogen Oxidation Reaction (HOR) in Alkaline Media. <i>Electrocatalysis</i> , 2023, 14, 267-278.	1.5	2
228	Impact of Catalyst Reconstruction on the Durability of Anion Exchange Membrane Water Electrolysis. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 16725-16733.	3.2	12
229	Transition Metal-Doped Nanocarbon Electrocatalysts for Oxygen Reduction Reaction. <i>ACS Symposium Series</i> , 0, , 133-150.	0.5	0
230	Design of ammonia oxidation electrocatalysts for efficient direct ammonia fuel cells. <i>EnergyChem</i> , 2023, 5, 100093.	10.1	6
231	High Conductive Anion Exchange Membranes from All-Carbon Twisted Intrinsic Microporous Polymers. <i>Macromolecules</i> , 2022, 55, 10713-10722.	2.2	12
232	Plasma-Assisted Synthesis of Metal Nitrides for an Efficient Platinum-Group-Metal-Free Anion-Exchange-Membrane Fuel Cell. <i>Nano Letters</i> , 2023, 23, 107-115.	4.5	6
233	Development of Anion Exchange Membrane Water Electrolysis and the Associated Challenges: A Review. <i>ChemElectroChem</i> , 2023, 10, .	1.7	15
234	Terpolymer-Based Anion Exchange Membranes: Effect of Pendent Hexyl Groups on Membranes Properties. <i>Bulletin of the Chemical Society of Japan</i> , 2023, 96, 16-23.	2.0	1

#	ARTICLE	IF	CITATIONS
235	Crown-ether block copolymer based poly(isatin terphenyl) anion exchange membranes for electrochemical energy conversion devices. <i>Chemical Engineering Journal</i> , 2023, 455, 140776.	6.6	17
236	Alkali-Stable Anion Exchange Membranes Based on Poly(xanthene). <i>ACS Macro Letters</i> , 2023, 12, 20-25.	2.3	14
237	Secondary reduction strategy synthesis of Pt-Co nanoparticle catalysts towards boosting the activity of proton exchange membrane fuel cells. <i>Particuology</i> , 2023, 79, 18-26.	2.0	4
238	Dense 1,2,4,5-tetramethylimidazolium-functionized anion exchange membranes based on poly(aryl) Tj ETQq1 1 0.784314 rgBT /Over Energy, 2023, 48, 8165-8178.	3.8	16
239	Elucidating Electrocatalytic Oxygen Reduction Kinetics via Intermediates by Time-Dependent Electrochemiluminescence. <i>Angewandte Chemie</i> , 0, , .	1.6	1
240	Efficient Synthesis of High-Performance Anion Exchange Membranes by Applying Clickable Tetrakis(dialkylamino)phosphonium Cations. <i>Polymers</i> , 2023, 15, 352.	2.0	2
241	Elucidating Electrocatalytic Oxygen Reduction Kinetics via Intermediates by Time-Dependent Electrochemiluminescence. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	16
242	Effects of hydrophobic side chains in poly(fluorenyl-co-aryl piperidinium) ionomers for durable anion exchange membrane fuel cells. <i>Journal of Materials Chemistry A</i> , 2023, 11, 2031-2041.	5.2	17
243	Fluorinated Poly(aryl piperidinium) Membranes for Anion Exchange Membrane Fuel Cells. <i>Advanced Materials</i> , 2023, 35, .	11.1	40
244	Progress in constructing high-performance anion exchange Membrane: Molecular design, microphase controllability and In-device property. <i>Chemical Engineering Journal</i> , 2023, 457, 141094.	6.6	18
245	Towards high alkaline stability and fuel cell performance in anion exchange membranes via backbone ³ cation alkylene spacer tuning for quaternized poly(biphenylene alkylene)s. <i>Journal of Power Sources</i> , 2023, 557, 232590.	4.0	18
246	Micro-block poly(arylene ether sulfone)s with densely quaternized units for anion exchange membranes: Effects of benzyl N-methylpiperidinium and benzyl trimethyl ammonium cations. <i>Journal of Membrane Science</i> , 2023, 669, 121333.	4.1	9
247	Imidazolium-based AEMs with high dimensional and alkaline-resistance stabilities for extended temperature range of alkaline fuel cells. <i>Journal of Membrane Science</i> , 2023, 670, 121352.	4.1	10
248	Molecular-Level Control over Oxygen Transport and Catalyst-Ionomer Interaction by Designing Cis-Trans Isomeric Ionomers. <i>ACS Energy Letters</i> , 2023, 8, 790-799.	8.8	6
249	Quaternized Polyethersulfone (QPES) Membrane with Imidazole Functionalized Graphene Oxide (ImGO) for Alkaline Anion Exchange Fuel Cell Application. <i>Sustainability</i> , 2023, 15, 2209.	1.6	2
250	High-performing anion exchange membranes enabled by diversifying the polymer backbone of quaternized poly(arylene alkylene)s. <i>Journal of Membrane Science</i> , 2023, 678, 121667.	4.1	17
251	Highly alkali-stable polyolefin-based anion exchange membrane enabled by N-cyclic quaternary ammoniums for alkaline fuel cells. <i>Journal of Membrane Science</i> , 2023, 672, 121441.	4.1	17
252	Unsupervised Learning-Guided Accelerated Discovery of Alkaline Anion Exchange Membranes for Fuel Cells. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	0

#	ARTICLE	IF	CITATIONS
253	A review of anion exchange membranes prepared via Friedel-Crafts reaction for fuel cell and water electrolysis. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 25830-25858.	3.8	7
254	Host-guest coordination self-assembly gives anion exchange membranes better stability. <i>Chemical Engineering Journal</i> , 2023, 464, 142563.	6.6	11
255	Spray pyrolysis facilitated construction of carbon nanotube-embedded hollow CoFe electrocatalysts demonstrating excellent durability and activity for the oxygen reduction reaction. <i>Journal of Alloys and Compounds</i> , 2023, 944, 169232.	2.8	3
256	Optimization of cobalt on CNT towards the oxygen evolution reaction and its synergy with iron (II) phthalocyanine as bifunctional oxygen electrocatalyst. <i>Catalysis Today</i> , 2023, 418, 114057.	2.2	5
257	Switching the locus of oxygen reduction and evolution reactions between spinel active phase and carbon carrier upon heteroatoms doping. <i>Catalysis Today</i> , 2023, 418, 114043.	2.2	1
258	Understanding of hydroxide transport in poly(arylene indole piperidinium) anion exchange membranes: Effect of side-chain position. <i>Separation and Purification Technology</i> , 2023, 314, 123577.	3.9	4
259	Poly (ionic liquid) filled and cross-linked bacterial cellulose-based organic-inorganic composite anion exchange membrane with significantly improved ionic conductivity and mechanical strength. <i>Journal of Membrane Science</i> , 2023, 675, 121558.	4.1	5
260	Effects of the crown ether cavity on the performance of anion exchange membranes. <i>Journal of Colloid and Interface Science</i> , 2023, 643, 62-72.	5.0	15
261	CoOx-Fe3O4/N-rGO Oxygen Reduction Catalyst for Anion-Exchange Membrane Fuel Cells. <i>Energies</i> , 2023, 16, 3425.	1.6	3
262	Nanoscopic Roughness Characterization of Chitosan with Buried Graphene Oxide for Fuel Cell Application. , 0, , .		2
263	Operando EPR Study of Radical Formation in Anion-Exchange Membrane Fuel Cells. <i>ACS Catalysis</i> , 2023, 13, 2744-2750.	5.5	9
264	Microwave Assisted Grafting of Polyethylene Membrane through Imidazolium and Pyridinium Moieties as Alkaline Anion Exchanger for Fuel Cell Applications. <i>Chemical Data Collections</i> , 2023, 44, 101002.	1.1	0
265	Crosslinked Polynorbornene-Based Anion Exchange Membranes with Perfluorinated Branch Chains. <i>Polymers</i> , 2023, 15, 1073.	2.0	3
266	Key components and design strategy of the membrane electrode assembly for alkaline water electrolysis. <i>Energy and Environmental Science</i> , 2023, 16, 1384-1430.	15.6	49
267	Influence of Operating and Electrochemical Parameters on PEMFC Performance: A Simulation Study. <i>Membranes</i> , 2023, 13, 259.	1.4	5
268	A Review of Water Electrolysis, Fuel Cells and Its Use in Energy Storage. <i>Studies in Infrastructure and Control</i> , 2023, , 275-288.	0.4	0
269	Fluorination and its Effects on Electrocatalysts for Low-temperature Fuel Cells. <i>Advanced Energy Materials</i> , 2023, 13, .	10.2	11
270	Unsupervised Learning-Guided Accelerated Discovery of Alkaline Anion Exchange Membranes for Fuel Cells. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	9

#	ARTICLE	IF	CITATIONS
271	Adsorbed Enolate as the Precursor for the C=C Bond Splitting during Ethanol Electrooxidation on Pt. <i>Journal of the American Chemical Society</i> , 2023, 145, 6330-6338.	6.6	7
272	High-strength, ultra-thin anion exchange membranes with a branched structure toward alkaline membrane fuel cells. <i>Journal of Materials Chemistry A</i> , 2023, 11, 10738-10747.	5.2	20
273	Determining the change in performance from replacing a separator with an anion exchange membrane for alkaline water electrolysis. <i>Journal of Physics: Conference Series</i> , 2023, 2454, 012003.	0.3	0
274	Tuning Alkaline Anion Exchange Membranes through Crosslinking: A Review of Synthetic Strategies and Property Relationships. <i>Polymers</i> , 2023, 15, 1534.	2.0	9
275	Understanding the Effect of Triazole on Crosslinked PPO-SEBS-Based Anion Exchange Membranes for Water Electrolysis. <i>Polymers</i> , 2023, 15, 1736.	2.0	5
276	Performance and Stability of Aemion and Aemion+ Membranes in Zero-Gap CO ₂ Electrolyzers with Mild Anolyte Solutions. <i>ChemSusChem</i> , 2023, 16, .	3.6	5
277	Nafion-like structured perfluoropoly(diphenylene) graft polymers microphase separated anion exchange membranes. <i>Desalination</i> , 2023, 557, 116600.	4.0	4
278	The design and synthesis of a long-side-chain-type anion exchange membrane with a hydrophilic spacer for alkaline fuel cells. <i>Journal of Membrane Science</i> , 2023, 678, 121663.	4.1	12
279	Tailoring MOF structure via iron decoration to enhance ORR in alkaline polymer electrolyte membrane fuel cells. <i>Chemical Engineering Journal</i> , 2023, 465, 142987.	6.6	8
280	DFT insight of hydroxide degradation pathways for heterocyclic quaternary ammonium cations in anion exchange membranes. <i>Journal of Membrane Science</i> , 2023, 678, 121672.	4.1	6
281	Metal-nitrogen-carbon catalysts loaded on fluorinated carbon nanotubes for efficient oxygen reduction reaction. <i>Advanced Composites and Hybrid Materials</i> , 2023, 6, .	9.9	1
311	Ion Exchange Membranes in Electrochemical CO ₂ Reduction Processes. <i>Electrochemical Energy Reviews</i> , 2023, 6, .	13.1	6
362	An Investigative Study for the Commercialization of Anion Exchange Membrane-based Unitized Regenerative Fuel Cell. , 2023, , .		0
372	Smart electrolytes: materials, durability, and degradation issues. , 2024, , 91-141.		0