

What is Next in Anion-Exchange Membrane Water Electrolysis? Future

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Citation Report

#	ARTICLE	IF	CITATIONS
1	What is Next in Anion Exchange Membrane Water Electrolyzers? Bottlenecks, Benefits, and Future. <i>ChemSusChem</i> , 2022, 15, .	6.8	77
2	Electrochemical Water Splitting: Bridging the Gaps Between Fundamental Research and Industrial Applications. <i>Energy and Environmental Materials</i> , 2023, 6, .	12.8	89
3	Review Recent Developments in the Applications of 2D Transition Metal Dichalcogenides as Electrocatalysts in the Generation of Hydrogen for Renewable Energy Conversion. <i>Journal of the Electrochemical Society</i> , 2022, 169, 064504.	2.9	19
4	Improving poly(arylene piperidinium) anion exchange membranes by monomer design. <i>Journal of Materials Chemistry A</i> , 2022, 10, 16478-16489.	10.3	36
5	Valorization of the inedible pistachio shells into nanoscale transition metal and nitrogen codoped carbon-based electrocatalysts for hydrogen evolution reaction and oxygen reduction reaction. <i>Materials for Renewable and Sustainable Energy</i> , 2022, 11, 131-141.	3.6	20
6	Anode Catalysts in Anion Exchange Membrane Electrolysis without Supporting Electrolyte: Conductivity, Dynamics, and Ionomer Degradation. <i>Advanced Materials</i> , 2022, 34, .	21.0	42
7	A Step Forward: Hydrogen Production on Cobalt Molybdenum Sulfide Electrocatalyst in Anion Exchange Membrane Water Electrolyzer. <i>ACS Applied Energy Materials</i> , 2022, 5, 10396-10401.	5.1	3
8	On the Radical-Induced Degradation of Quaternary Ammonium Cations for Anion Exchange Membrane Fuel Cells and Electrolyzers. <i>ChemSusChem</i> , 2022, 15, .	6.8	7
9	In situ Electrochemical Transformed Cu Oxide from Cu Sulfide for Efficient Upgrading of Biomass Derived 5-Hydroxymethylfurfural in Anion Exchange Membrane Electrolyzer. <i>ChemSusChem</i> , 2022, 15, .	6.8	8
10	Application of Thermal Spray Coatings in Electrolysers for Hydrogen Production: Advances, Challenges, and Opportunities. <i>ChemNanoMat</i> , 2022, 8, .	2.8	7
11	Structural-enhanced bacterial cellulose based alkaline exchange membranes for highly selective CO ₂ electrochemical reduction and excellent conductive performance in flexible zinc-air batteries. <i>Chemical Engineering Journal</i> , 2023, 454, 139807.	12.7	7
12	Coupling Value-Added Anodic Reactions with Electrocatalytic CO ₂ Reduction. <i>Chemistry - A European Journal</i> , 2023, 29, .	3.3	4
13	NiFe ₂ O ₄ hierarchical nanoparticles as electrocatalyst for anion exchange membrane water electrolysis. <i>Journal of Power Sources</i> , 2023, 556, 232417.	7.8	18
14	Highly Efficient and Durable Anion Exchange Membrane Water Electrolyzer Enabled by a Fe ₃ S ₂ Anode Catalyst. <i>Advanced Energy and Sustainability Research</i> , 2023, 4, .	5.8	6
15	Impact of Catalyst Reconstruction on the Durability of Anion Exchange Membrane Water Electrolysis. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 16725-16733.	6.7	12
16	Anion Exchange Membrane Water Electrolysis Based on Nickel Ferrite Catalysts. <i>ChemElectroChem</i> , 2023, 10, .	3.4	12
17	Development of Anion Exchange Membrane Water Electrolysis and the Associated Challenges: A Review. <i>ChemElectroChem</i> , 2023, 10, .	3.4	15
18	Alkali-Stable Anion Exchange Membranes Based on Poly(xanthene). <i>ACS Macro Letters</i> , 2023, 12, 20-25.	4.8	14

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19	Aquivion-based anion exchange membranes: Synthesis optimization via dispersant agents and reaction time. <i>Chemical Engineering Journal</i> , 2023, 455, 140765.	12.7	3
20	Green Hydrogen Production by Anion Exchange Membrane Water Electrolysis: Status and Future Perspectives. <i>Energies</i> , 2023, 16, 943.	3.1	12
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23	Bubble evolution and transport in PEM water electrolysis: Mechanism, impact, and management. <i>Progress in Energy and Combustion Science</i> , 2023, 96, 101075.	31.2	54
24	Tailoring Ni-Fe-Se film on Ni foam via electrodeposition optimization for efficient oxygen evolution reaction. <i>Electrochimica Acta</i> , 2023, 451, 142294.	5.2	4
25	State-of-the-art hydrogen generation techniques and storage methods: A critical review. <i>Journal of Energy Storage</i> , 2023, 64, 107196.	8.1	61
26	Morpholinium-Modified, Polyketone-Based Anion Exchange Membranes for Water Electrolysis. <i>ChemElectroChem</i> , 2023, 10, .	3.4	6
27	Key components and design strategy of the membrane electrode assembly for alkaline water electrolysis. <i>Energy and Environmental Science</i> , 2023, 16, 1384-1430.	30.8	49
28	Tuning Alkaline Anion Exchange Membranes through Crosslinking: A Review of Synthetic Strategies and Property Relationships. <i>Polymers</i> , 2023, 15, 1534.	4.5	9
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32	In-situ spectroelectrochemical study of highly active Ni-based foam electrocatalysts for hydrogen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2023, 336, 122930.	20.2	9
33	Dynamic operation of water electrolyzers: A review for applications in photovoltaic systems integration. <i>Renewable and Sustainable Energy Reviews</i> , 2023, 182, 113407.	16.4	5
34	Start-Stop Cyclic Durability Analysis of Membrane Electrode Assemblies Using Polyfluorene-Based Electrolytes for an Anion-Exchange Membrane Water Electrolyzer. <i>ACS Sustainable Chemistry and Engineering</i> , 2023, 11, 9295-9302.	6.7	2
35	Durable and highly-efficient anion exchange membrane water electrolysis using poly(biphenyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 102	12.7	8
36	Stainless Steel Felt as a Combined OER Electrocatalyst/Porous Transport Layer for Investigating Anion-Exchange Membranes in Water Electrolysis. <i>ACS Energy Letters</i> , 2023, 8, 2661-2667.	17.4	7

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38	Anion Exchange Membrane Water Electrolyzers: An Overview. <i>Journal of Chemical Engineering of Japan</i> , 2023, 56, .	0.6	2
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40	Three-dimensionally ordered macroporous trimetallic spinel for anion exchange membrane water electrolysis. <i>Electrochimica Acta</i> , 2023, 463, 142851.	5.2	1
41	Microwave-assisted synthesis of carbon-supported Pt nanoparticles for their use as electrocatalysts in the oxygen reduction reaction and hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2023, 464, 142871.	5.2	9
42	Effects of the Hydrophobic Block Length Ratio of Poly(vinylbenzyl <i>N</i> -methylpiperidinium) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Block Copolymers for Anion Exchange Membrane Electrolysis. <i>ACS Applied Polymer Materials</i> , 2023, 5, 5834-5845.	4.4	2
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46	Molybdenum disulfide as hydrogen evolution catalyst: From atomistic to materials structure and electrocatalytic performance. <i>Journal of Energy Chemistry</i> , 2023, 87, 256-285.	12.9	5
47	Molecular Assembly of Alkylated Fused Expanded Pyridinium for a Highly Conductive Anion-Exchange Membrane. <i>Chemistry of Materials</i> , 2023, 35, 8030-8038.	6.7	0
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49	Why today's seawater in water splitting is not natural water? Critical up-to-date perspective and future challenges for direct seawater splitting. <i>Nano Energy</i> , 2023, 117, 108884.	16.0	0
50	Scaling up BiVO ₄ Photoanodes on Porous Ti Transport Layers for Solar Hydrogen Production. <i>ChemSusChem</i> , 2024, 17, .	6.8	0
51	Screening potential anodic chemistry in lieu of the oxygen evolution reaction in electrolysis systems: the road to practical application. <i>Energy and Environmental Science</i> , 0, , .	30.8	0
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56	Recent progress in understanding the catalyst layer in anion exchange membrane electrolyzers â€“ durability, utilization, and integration. , 0, , .		1
57	Dye-sensitized solar cells based on critical raw material-free Feâ€“Nâ€“C counter electrodes. <i>Materials for Renewable and Sustainable Energy</i> , 0, , .	3.6	0
58	Anion Exchange Ionomers: Design Considerations and Recent Advances â€“An Electrochemical Perspective. <i>Advanced Materials</i> , 2024, 36, .	21.0	0
59	Environmental and material criticality assessment of hydrogen production via anion exchange membrane electrolysis. <i>Applied Energy</i> , 2024, 356, 122247.	10.1	1
60	Anode Reinforcement by Polydopamine Glue in Anion Exchange Membrane Water Electrolysis. <i>ACS Energy Letters</i> , 2023, 8, 5240-5247.	17.4	0
61	NiGraf: A new nickel-based molecularly doped metal for enhanced water electrolysis. <i>Materials Advances</i> , 0, , .	5.4	0
62	Computational Modeling of Hydrated Polyamine-Based Anion Exchange Membranes via Molecular Dynamics Simulation. <i>Journal of Physical Chemistry C</i> , 0, , .	3.1	0
63	Hydroxide Conducting Membranes with Quaternary Ammonium Cations Tethered to Poly(arylene) Tj ETQq0 0 0 rgBT/Overlock 10 Tf 50	6.7	0
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72	Recent advancement in water electrolysis for hydrogen production: A comprehensive bibliometric analysis and technology updates. <i>International Journal of Hydrogen Energy</i> , 2024, 60, 780-801.	7.1	0

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