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List of Publications by Year in descending order

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236833

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68
all docs

68
docs citations

68
times ranked

2081
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	Rational design of polyaromatic ionomers for alkaline membrane fuel cells with $>1 \text{ W cm}^{-2}$ power density. Energy and Environmental Science, 2018, 11, 3283-3291.	15.6	209
3	Synthesis of Aromatic Anion Exchange Membranes by Friedel-Crafts Bromoalkylation and Cross-Linking of Polystyrene Block Copolymers. Macromolecules, 2019, 52, 2139-2147.	2.2	152
4	Synergistically integrated phosphonated poly(pentafluorostyrene) for fuel cells. Nature Materials, 2021, 20, 370-377.	13.3	112
5	Stabilizing Single-Atom Iron Electrocatalysts for Oxygen Reduction via Ceria Confining and Trapping. ACS Catalysis, 2020, 10, 2452-2458.	5.5	103
6	Adsorption of Polyaromatic Backbone Impacts the Performance of Anion Exchange Membrane Fuel Cells. Chemistry of Materials, 2019, 31, 4195-4204.	3.2	91
7	Stability of composite anion exchange membranes with various functional groups and their performance for energy conversion. Journal of Membrane Science, 2013, 443, 28-35.	4.1	87
8	Alkaline Stability of Quaternized Diels-Alder Polyphenylenes. Macromolecules, 2019, 52, 5419-5428.	2.2	82
9	Effect of flow field geometry on operating current density, capacity and performance of vanadium redox flow battery. Journal of Power Sources, 2018, 404, 20-27.	4.0	81
10	Toward Improved Alkaline Membrane Fuel Cell Performance Using Quaternized Aryl-Ether Free Polyaromatics. Chemistry of Materials, 2018, 30, 2188-2192.	3.2	77
11	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
12	Amphoteric nanoporous polybenzimidazole membrane with extremely low crossover for a vanadium redox flow battery. RSC Advances, 2016, 6, 5198-5204.	1.7	68
13	Intermediate temperature fuel cells via an ion-pair coordinated polymer electrolyte. Energy and Environmental Science, 2018, 11, 979-987.	15.6	67
14	Anion exchange membrane prepared from simultaneous polymerization and quaternization of 4-vinyl pyridine for non-aqueous vanadium redox flow battery applications. Journal of Power Sources, 2014, 255, 325-334.	4.0	66
15	Protonated phosphonic acid electrodes for high power heavy-duty vehicle fuel cells. Nature Energy, 2022, 7, 248-259.	19.8	65
16	Asymmetric electrode ionomer for low relative humidity operation of anion exchange membrane fuel cells. Journal of Materials Chemistry A, 2020, 8, 14135-14144.	5.2	60
17	Preparation of polysulfone-polyamide thin film composite hollow fiber nanofiltration membranes and their performance in the treatment of aqueous dye solutions. Desalination, 2012, 304, 11-19.	4.0	59
18	Impact of ionomer adsorption on alkaline hydrogen oxidation activity and fuel cell performance. Current Opinion in Electrochemistry, 2018, 12, 189-195.	2.5	55

#	ARTICLE	IF	CITATIONS
19	Surface Adsorption Affects the Performance of Alkaline Anion-Exchange Membrane Fuel Cells. ACS Catalysis, 2018, 8, 9429-9439.	5.5	55
20	How does a small structural change of anode ionomer make a big difference in alkaline membrane fuel cell performance?. Journal of Materials Chemistry A, 2019, 7, 25040-25046.	5.2	55
21	Nitrogen-Deficient ORR Active Sites Formation by Iron-Assisted Water Vapor Activation of Electrospun Carbon Nanofibers. Journal of Physical Chemistry C, 2016, 120, 7705-7714.	1.5	48
22	Tailoring the molecular weight cut off values of polyacrylonitrile based hollow fibre ultrafiltration membranes with improved fouling resistance by chemical modification. Journal of Membrane Science, 2013, 425-426, 251-261.	4.1	38
23	Ultrafine Pt cluster and RuO ₂ heterojunction anode catalysts designed for ultra-low Pt-loading anion exchange membrane fuel cells. Nanoscale Horizons, 2020, 5, 316-324.	4.1	34
24	Performance and durability of anion exchange membrane water electrolyzers using down-selected polymer electrolytes. Journal of Materials Chemistry A, 2021, 9, 22670-22683.	5.2	34
25	Proof-of-concept experiments of an acid-base junction flow battery by reverse bipolar electro dialysis for an energy conversion system. Electrochemistry Communications, 2016, 72, 157-161.	2.3	29
26	Influence of membrane structure on the operating current densities of non-aqueous redox flow batteries: Organic-inorganic composite membranes based on a semi-interpenetrating polymer network. Journal of Power Sources, 2015, 296, 245-254.	4.0	25
27	Quaternized poly(arylene ether benzonitrile) membranes for vanadium redox flow batteries. Journal of Membrane Science, 2021, 617, 118565.	4.1	23
28	Fabrication of a composite anion exchange membrane with aligned ion channels for a high-performance non-aqueous vanadium redox flow battery. RSC Advances, 2020, 10, 5010-5025.	1.7	21
29	SPPO pore-filled composite membranes with electrically aligned ion channels via a lab-scale continuous caster for fuel cells: An optimal DC electric field strength-IEC relationship. Journal of Membrane Science, 2016, 501, 15-23.	4.1	18
30	A rejuvenation process to enhance the durability of low Pt loaded polymer electrolyte membrane fuel cells. Journal of Power Sources, 2018, 396, 345-354.	4.0	18
31	Iron-iminopyridine complexes as charge carriers for non-aqueous redox flow battery applications. Energy Storage Materials, 2021, 37, 576-586.	9.5	18
32	Unusually High Concentration of Alkyl Ammonium Hydroxide in the Cation-Hydroxide-Water Coadsorbed Layer on Pt. ACS Applied Materials & Interfaces, 2020, 12, 1825-1831.	4.0	15
33	Role of phosphate source in improving the proton conductivity of tin pyrophosphate and its composite electrolytes. Journal of Materials Chemistry A, 2020, 8, 16345-16354.	5.2	15
34	Structure and performance of nanofiltration membrane prepared in a large-scale at CSIR-CSMCRI using indigenous coating unit. Desalination, 2012, 288, 8-15.	4.0	11
35	Linked Picolinamide Nickel Complexes as Redox Carriers for Nonaqueous Flow Batteries. ChemSusChem, 2019, 12, 1304-1309.	3.6	11
36	Dispersing Agents Impact Performance of Protonated Phosphonic Acid High-Temperature Polymer Electrolyte Membrane Fuel Cells. ACS Energy Letters, 2022, 7, 1642-1647.	8.8	11

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37	Effect of Cerium, Cobalt and Nickel Contaminants on the Oxygen Reduction Reaction at Platinum Electrodes. ECS Transactions, 2017, 80, 861-867.	0.3	10
38	Structure-performance-fouling studies of polysulfone microfiltration hollow fibre membranes. Bulletin of Materials Science, 2012, 35, 817-822.	0.8	9
39	Durable and highly selective ion transport of a sulfonated Diels Alder Poly(phenylene) for vanadium redox flow batteries. Journal of Power Sources, 2022, 520, 230805.	4.0	9
40	Acid-catalyzed benzoylation reactions of Diels-Alder polyphenylenes. Polymer, 2018, 158, 190-197.	1.8	3
41	Preparation and surface modification of hollow fibre membranes for drinking water disinfection and water reclamation. International Journal of Nuclear Desalination, 2010, 4, 149.	0.2	2
42	Importance of Resonance Structure on Alkaline Stability. ECS Meeting Abstracts, 2017, , .	0.0	1
43	Dimethyl Substituted Polyaromatic Alkaline Ionomers for Better Alkaline Hydrogen Oxidation. ECS Meeting Abstracts, 2018, , .	0.0	1
44	Effect of Flow Field Geometry on Operating Current Density, Capacity and Performance of Vanadium Redox Flow Battery. ECS Meeting Abstracts, 2017, , .	0.0	0
45	Effect of Cerium, Cobalt and Nickel Contaminants on the Oxygen Reduction Reaction at Platinum Electrodes. ECS Meeting Abstracts, 2017, , .	0.0	0
46	Organic Molecular Catalyst for Hydrogen Evolution Reaction. ECS Meeting Abstracts, 2017, , .	0.0	0
47	SnP2O7 Based Membranes for Intermediate Temperature Electrochemical-Synthesis of Ammonia. ECS Meeting Abstracts, 2017, , .	0.0	0
48	Evaluation of Varying Electrocatalysts for the Intermediate Temperature Electrochemical Synthesis of Ammonia. ECS Meeting Abstracts, 2018, , .	0.0	0
49	Progress Toward High Voltage, High Cycle Life Non-Aqueous Flow Cells for Grid Scale Energy Storage. ECS Meeting Abstracts, 2018, , .	0.0	0
50	Development of High Capacity Metal-Ligand Electrolytes for Grid-Scale Non-Aqueous Redox Flow Battery. ECS Meeting Abstracts, 2018, , .	0.0	0
51	Why Pt-Ru Catalyst Works Better for Alkaline Hydrogen Oxidation Reaction?. ECS Meeting Abstracts, 2018, , .	0.0	0
52	(Invited) Electrochemical Synthesis of Ammonia Using Ion Conducting Membranes. ECS Meeting Abstracts, 2018, , .	0.0	0
53	Strategies to Enhance the Performance of Polybenzimidazole Membrane Based Vanadium Redox Flow Batteries. ECS Meeting Abstracts, 2018, , .	0.0	0
54	(Invited) Electrochemical Ammonia Synthesis Using Intermediate Temperature Proton Conducting Membranes. ECS Meeting Abstracts, 2018, , .	0.0	0

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55	Polyaromatic Ionomers for High Performance Alkaline Membrane Fuel Cells. ECS Meeting Abstracts, 2018, , .	0.0	0
56	Caveat of High Temperature Accelerated Stability Test for Anion Exchange Membranes. ECS Meeting Abstracts, 2019, , .	0.0	0
57	Crosslinked Quaternized Poly(arylene ether benzonitrile) Membranes for Vanadium Redox Flow Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
58	Iron(tris pyridyl-imine) Complexes As Redox Couples for Non-Aqueous Redox Flow Battery Applications. ECS Meeting Abstracts, 2019, , .	0.0	0
59	Electrochemical Synthesis of Ammonia Using Origami-like Molybdenum Carbide Nanoflakes As Nitrogen Reduction Reaction Catalyst. ECS Meeting Abstracts, 2019, , .	0.0	0
60	Durability-Limiting Factor of Anion Exchange Membrane Fuel Cells. ECS Meeting Abstracts, 2019, , .	0.0	0
61	Exploring Redox Active and Electrochemically Stable Organic Molecules for > 3 V Non-Aqueous Redox Flow Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 206-206.	0.0	0
62	The Effect of Backbone Structure on Functional Properties in Anion Exchange Membranes; Comparison of Poly(fluorene) with Poly(biphenylene) and Poly(terphenylene)s. ECS Meeting Abstracts, 2020, MA2020-02, 2268-2268.	0.0	0
63	Fundamental Aspects of the Electron Transfer Processes in Non-Aqueous Redox Flow Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 2029-2029.	0.0	0