Jiantao Fan

List of Publications by Year
in descending order

32 papers	1,644 citations	430874 18 h-index	395702 33 g-index
33 all docs	33 docs citations	33 times ranked	1537 citing authors

#	Article	IF	Citations
1	Bridging the gap between highly active oxygen reduction reaction catalysts and effective catalyst layers for proton exchange membrane fuel cells. Nature Energy, 2021, 6, 475-486.	39.5	252
2	Poly(bis-arylimidazoliums) possessing high hydroxide ion exchange capacity and high alkaline stability. Nature Communications, 2019, 10, 2306.	12.8	239
3	Hexamethyl-p-terphenyl poly(benzimidazolium): a universal hydroxide-conducting polymer for energy conversion devices. Energy and Environmental Science, 2016, 9, 2130-2142.	30.8	213
4	Cationic Polyelectrolytes, Stable in 10 M KOH_{aq} at 100 Â°C. ACS Macro Letters, 2017, 6, 1089-1093.	4.8	140
5	Research progress of catalyst layer and interlayer interface structures in membrane electrode assembly (MEA) for proton exchange membrane fuel cell (PEMFC) system. ETransportation, 2020, 5, 100075.	14.8	95
6	Insight into the Alkaline Stability of Nâ€Heterocyclic Ammonium Groups for Anionâ€Exchange Polyelectrolytes. Angewandte Chemie - International Edition, 2021, 60, 19272-19280.	13.8	85
7	Preparation of a new inorganicâ€“organic composite flocculant used in solidâ€“liquid separation for waste drilling fluid. Chemical Engineering Journal, 2011, 171, 350-356.	12.7	72
8	Electrochemical Compression Technologies for High-Pressure Hydrogen: Current Status, Challenges and Perspective. Electrochemical Energy Reviews, 2020, 3, 690-729.	25.5	56
9	Mo modulation effect on the hydrogen binding energy of hexagonal-close-packed Ru for hydrogen evolution. Journal of Materials Chemistry A, 2019, 7, 2780-2786.	10.3	53
10	Layered double hydroxideâ€“polyphosphazene-based ionomer hybrid membranes with electric field-aligned domains for hydroxide transport. Journal of Materials Chemistry A, 2014, 2, 8376.	10.3	44
11	Tungsten Carbide Encapsulated in Grape-Like N-Doped Carbon Nanospheres: One-Step Facile Synthesis for Low-Cost and Highly Active Electrocatalysts in Proton Exchange Membrane Water Electrolyzers. ACS Applied Materials & Interfaces, 2019, 11, 25123-25132.	8.0	37
12	A Novel Approach to Fabricate Membrane Electrode Assembly by Directly Coating the Nafion Ionomer on Catalyst Layers for Proton-Exchange Membrane Fuel Cells. ACS Sustainable Chemistry and Engineering, 2020, 8, 9803-9812.	6.7	37
13	Benchmarking Phases of Ruthenium Dichalcogenides for Electrocatalysis of Hydrogen Evolution: Theoretical and Experimental Insights. Small, 2021, 17, e2007333.	10.0	35
14	Scalable Synthesis of a Ruthenium-Based Electrocatalyst as a Promising Alternative to Pt for Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2018, 10, 32171-32179.	8.0	33
15	Montmorillonite Modified by Cationic and Nonionic Surfactants as High-Performance Fluid-Loss-Control Additive in Oil-Based Drilling Fluids. Journal of Dispersion Science and Technology, 2015, 36, 569-576.	2.4	30
16	Study of relative humidity on durability of the reversal tolerant proton exchange membrane fuel cell anode using a segmented cell. Journal of Power Sources, 2020, 449, 227542.	7.8	24
17	An effective strategy to tune the oxygen vacancy of pyrochlore oxides for electrochemical energy storage and conversion systems. Chemical Engineering Journal, 2020, 395, 124428.	12.7	23
18	Sterically-encumbered ionenes as hydroxide ion-conducting polymer membranes. Current Opinion in Electrochemistry, 2019, 18, 99-105.	4.8	21

#	Article	IF	Citations
19	Study of failure mechanisms of the reversal tolerant fuel cell anode via novel in-situ measurements. International Journal of Hydrogen Energy, 2020, 45, 996-1007.	7.1	19
20	Insights into electrochemical hydrogen compressor operating parameters and membrane electrode assembly degradation mechanisms. Journal of Power Sources, 2021, 484, 229249.	7.8	18
21	Novel Proton Exchange Membrane with Long-Range Acidâ€“Base-Pair Proton Transfer Pathways Based on Functionalized Polyethyleneimine. ACS Sustainable Chemistry and Engineering, 2021, 9, 3963-3974.	6.7	16
22	Insight into the Alkaline Stability of Nâ€Heterocyclic Ammonium Groups for Anionâ€Exchange Polyelectrolytes. Angewandte Chemie, 2021, 133, 19421-19429.	2.0	15
23	Preparation of chitosanâ€based flocculant for high density waste drilling mud solidâ€“liquid separation. Journal of Applied Polymer Science, 2012, 125, 2646-2651.	2.6	14
24	A self-humidifying proton exchange membrane embedded with phosphonic acid-functionalized mesoporous silica nanoparticles that has excellent dispersion and water retention. Sustainable Energy and Fuels, 2021, 5, 230-245.	4.9	14
25	Pt atoms on doped carbon nanosheets with ultrahigh N content as a superior bifunctional catalyst for hydrogen evolution/oxidation. Sustainable Energy and Fuels, 2021, 5, 532-539.	4.9	12
26	Mitigation of chemical degradation in perfluorosulfonic acid proton exchange membrane using regenerable hindered amine functionalized carbon quantum dots. Journal of Membrane Science, 2021, 636, 119614.	8.2	10
27	Poly-hydroxyethylidene-1,1-diphosphonic acid (PHEDP) as a highly effective water-retentive and proton-conductive material for low-humidity proton exchange membranes. Journal of Membrane Science, 2020, 606, 118144.	8.2	8
28	Preparation of High Effective Flocculant for High Density Waste Drilling Mud. Journal of Environmental Protection, 2010, 01, 179-182.	0.7	8
29	IrO_X Supported onto Niobium-Doped Titanium Dioxide as an Anode Reversal Tolerant Electrocatalyst for Proton Exchange Membrane Fuel Cells. ACS Applied Energy Materials, 2022, 5, 3259-3268.	5.1	7
30	An in situ cross-linked vinylphosphonic acid-modified aminosilicon oxide gel electrolyte for proton exchange membrane fuel cells. Sustainable Energy and Fuels, 2020, 4, 2859-2868.	4.9	6
31	Expanded polytetrafluoroethylene functionalized with free radical scavengers and hydrophilic groups for superior chemical stability of proton exchange membranes. International Journal of Hydrogen Energy, 2022, 47, 18109-18121.	7.1	6
32	Investigation of three system shut-down strategies alongside optimization suggestion for proton exchange membrane fuel cells via in-situ measurements. International Journal of Green Energy, 2020, 17, 157-170.	3.8	1