Hongmei Yu

List of Publications by Year
in descending order

54 papers	1,917 citations	185998 28 h-index	253896 43 g-index
55 all docs	55 docs citations	55 times ranked	2439 citing authors

#	Article	IF	Citations
1	Vertically Aligned FeOOH/NiFe Layered Double Hydroxides Electrode for Highly Efficient Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2017, 9, 464-471.	4.0	174
2	Nanostructured ultrathin catalyst layer based on open-walled PtCo bimetallic nanotube arrays for proton exchange membrane fuel cells. Nano Energy, 2017, 34, 344-355.	8.2	107
3	Supported Noble Metals on Hydrogenâ€Treated TiO₂ Nanotube Arrays as Highly Ordered Electrodes for Fuel Cells. ChemSusChem, 2013, 6, 659-666.	3.6	94
4	High-performance alkaline fuel cells using crosslinked composite anion exchange membrane. Journal of Power Sources, 2013, 221, 247-251.	4.0	81
5	Highly effective IrxSn1âˆ’xO2 electrocatalysts for oxygen evolution reaction in the solid polymer electrolyte water electrolyser. Physical Chemistry Chemical Physics, 2013, 15, 2858.	1.3	73
6	Construction of orderly hierarchical FeOOH/NiFe layered double hydroxides supported on cobaltous carbonate hydroxide nanowire arrays for a highly efficient oxygen evolution reaction. Journal of Materials Chemistry A, 2018, 6, 3397-3401.	5.2	67
7	High performance anion exchange ionomer for anion exchange membrane fuel cells. RSC Advances, 2017, 7, 19153-19161.	1.7	61
8	High durability and hydroxide ion conducting pore-filled anion exchange membranes for alkaline fuel cell applications. Journal of Power Sources, 2014, 269, 1-6.	4.0	60
9	Nano-engineering of a 3D-ordered membrane electrode assembly with ultrathin Pt skin on open-walled PdCo nanotube arrays for fuel cells. Journal of Materials Chemistry A, 2018, 6, 6521-6533.	5.2	56
10	Behaviors of a proton exchange membrane electrolyzer under water starvation. RSC Advances, 2015, 5, 14506-14513.	1.7	55
11	Effect of water and annealing temperature of anodized TiO2 nanotubes on hydrogen production in photoelectrochemical cell. Electrochimica Acta, 2013, 107, 313-319.	2.6	53
12	Fine microstructure of high performance electrode in alkaline anion exchange membrane fuel cells. Journal of Power Sources, 2014, 267, 39-47.	4.0	53
13	Low-Loading and Highly Stable Membrane Electrode Based on an Ir@WO_{<i>x</i>}NR Ordered Array for PEM Water Electrolysis. ACS Applied Materials & Interfaces, 2021, 13, 15073-15082.	4.0	53
14	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
15	Uniform Pd_{0.33}Ir_{0.67} nanoparticles supported on nitrogen-doped carbon with remarkable activity toward the alkaline hydrogen oxidation reaction. Journal of Materials Chemistry A, 2019, 7, 3161-3169.	5.2	50
16	Transient Behavior of a Proton Exchange Membrane Fuel Cell under Dry Operation. Journal of the Electrochemical Society, 2006, 153, A570.	1.3	49
17	Ultrathin IrRu nanowire networks with high performance and durability for the hydrogen oxidation reaction in alkaline anion exchange membrane fuel cells. Journal of Materials Chemistry A, 2018, 6, 20374-20382.	5.2	49
18	Vertically aligned carbon-coated titanium dioxide nanorod arrays on carbon paper with low platinum for proton exchange membrane fuel cells. Journal of Power Sources, 2015, 276, 80-88.	4.0	46

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19	A novel Ir/CeO₂â€“C nanoparticle electrocatalyst for the hydrogen oxidation reaction of alkaline anion exchange membrane fuel cells. RSC Advances, 2017, 7, 31574-31581.	1.7	46
20	Highly stable ternary tinâ€“palladiumâ€“platinum catalysts supported on hydrogenated TiO2 nanotube arrays for fuel cells. Nanoscale, 2013, 5, 6834.	2.8	45
21	Influence of platinum dispersity on oxygen transport resistance and performance in PEMFC. Electrochimica Acta, 2020, 332, 135474.	2.6	41
22	A novel IrNi@PdIr/C coreâ€“shell electrocatalyst with enhanced activity and durability for the hydrogen oxidation reaction in alkaline anion exchange membrane fuel cells. Nanoscale, 2018, 10, 4872-4881.	2.8	40
23	Preparation of Pt catalysts decorated TiO2 nanotube arrays by redox replacement of Ni precursors for proton exchange membrane fuel cells. Electrochimica Acta, 2012, 80, 1-6.	2.6	38
24	Preparation and characterization of PTFE based composite anion exchange membranes for alkaline fuel cells. Journal of Membrane Science, 2012, 421-422, 311-317.	4.1	37
25	Vertically Aligned Titanium Nitride Nanorod Arrays as Supports of Platinumâ€“Palladiumâ€“Cobalt Catalysts for Thinâ€Film Proton Exchange Membrane Fuel Cell Electrodes. ChemElectroChem, 2016, 3, 734-740.	1.7	37
26	Recent progresses in H2-PEMFC at DICP. Journal of Energy Chemistry, 2019, 36, 129-140.	7.1	37
27	Triblock polymer mediated synthesis of Irâ€“Sn oxide electrocatalysts for oxygen evolution reaction. Journal of Power Sources, 2014, 249, 175-184.	4.0	34
28	Development of advanced catalytic layer based on vertically aligned conductive polymer arrays for thin-film fuel cell electrodes. Journal of Power Sources, 2016, 329, 347-354.	4.0	28
29	An effective oxygen electrode based on Ir0.6Sn0.4O2 for PEM water electrolyzers. Journal of Energy Chemistry, 2019, 39, 23-28.	7.1	28
30	Nickel/cobalt oxide as a highly efficient OER electrocatalyst in an alkaline polymer electrolyte water electrolyzer. RSC Advances, 2016, 6, 90397-90400.	1.7	26
31	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
32	Effect of gas diffusion electrode parameters on anion exchange membrane fuel cell performance. Chinese Journal of Catalysis, 2014, 35, 1091-1097.	6.9	22
33	Transient behavior of water generation in a proton exchange membrane fuel cell. Journal of Power Sources, 2008, 177, 404-411.	4.0	21
34	Photo-driven growth of a monolayer of platinum spherical-nanocrowns uniformly coated on a membrane toward fuel cell applications. Journal of Materials Chemistry A, 2020, 8, 23284-23292.	5.2	18
35	Palladiumâ€"nickel catalysts based on ordered titanium dioxide nanorod arrays with high catalytic peformance for formic acid electro-oxidation. RSC Advances, 2017, 7, 11719-11723.	1.7	17
36	The non-precious metal ORR catalysts for the anion exchange membrane fuel cells application: A numerical simulation and experimental study. International Journal of Hydrogen Energy, 2020, 45, 23353-23367.	3.8	17

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37	Highly stable nanostructured membrane electrode assembly based on Pt/Nb₂O₅nanobelts with reduced platinum loading for proton exchange membrane fuel cells. Nanoscale, 2017, 9, 6910-6919.	2.8	16
38	Boosting the oxygen evolution stability and activity of a heterogeneous IrRu bimetallic coating on a WO₃ nano-array electrode for PEM water electrolysis. Journal of Materials Chemistry A, 2022, 10, 11893-11903.	5.2	16
39	A PtPdCu thin-film catalyst based on titanium nitride nanorod arrays with high catalytic performance for methanol electro-oxidation. RSC Advances, 2016, 6, 82370-82375.	1.7	15
40	Experimental Study on Critical Membrane Water Content of Proton Exchange Membrane Fuel Cells for Cold Storage at âˆ’50 Â°C. Energies, 2021, 14, 4520.	1.6	11
41	A novel ultra-thin catalyst layer based on wheat ear-like catalysts for polymer electrolyte membrane fuel cells. RSC Advances, 2014, 4, 58591-58595.	1.7	9
42	Sub-freezing endurance of PEM fuel cells with different catalyst-coated membranes. Journal of Applied Electrochemistry, 2009, 39, 609-615.	1.5	8
43	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
44	Preparation and properties of amorphous TiO2 modified anion exchange membrane by impregnation-hydrolysis method. Reactive and Functional Polymers, 2019, 144, 104348.	2.0	7
45	Nanowheat-Like Î±-Fe2O3@Co-Based/Ti Foil Photoanode with Surface Defects for Enhanced Charge Carrier Separation and Photoelectrochemical Water Splitting. Energy & Fuels, 0, , .	2.5	7
46	Porous Pt-Ni Nanobelt Arrays with Superior Performance in H₂/Air Atmosphere for Proton Exchange Membrane Fuel Cells. ACS Applied Energy Materials, 2021, 4, 10703-10712.	2.5	6
47	Self-Supporting NiFe Layered Double Hydroxide â€œNanoflowerâ€•Cluster Anode Electrode for an Efficient Alkaline Anion Exchange Membrane Water Electrolyzer. Energies, 2022, 15, 4645.	1.6	6
48	A Novel Cathode Architecture Using Ordered Pt Nanostructure Thin Film for AAEMFC Application. Electrochimica Acta, 2016, 220, 67-74.	2.6	5
49	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
50	Ti4O7 supported IrOx for anode reversal tolerance in proton exchange membrane fuel cell. Frontiers in Energy, 2022, 16, 852-861.	1.2	5
51	Boosting cell performance with self-supported PtCu nanotube arrays serving as the cathode in a proton exchange membrane fuel cell. Sustainable Energy and Fuels, 2020, 4, 3640-3646.	2.5	1
52	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
53	The threshold method in the analysis of catalyst layer porosity towards oxygen transport resistance in PEMFCs. Catalysis Science and Technology, 2021, 11, 6804-6810.	2.1	1
54	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