Hao Zhang

List of Publications by Year
in descending order

28 papers	916 citations	567281 15 h-index	526287 27 g-index
28 all docs	28 docs citations	28 times ranked	1347 citing authors

#	Article	IF	Citations
1	CdS Quantum Dots-Sensitized TiO₂ Nanorod Array on Transparent Conductive Glass Photoelectrodes. Journal of Physical Chemistry C, 2010, 114, 16451-16455.	3.1	288
2	Solar photocatalytic fuel cell using CdSâ€“TiO2 photoanode and air-breathing cathode for wastewater treatment and simultaneous electricity production. Chemical Engineering Journal, 2014, 253, 174-182.	12.7	88
3	A review of non-precious metal single atom confined nanomaterials in different structural dimensions (1Dâ€“3D) as highly active oxygen redox reaction electrocatalysts. Journal of Materials Chemistry A, 2020, 8, 2222-2245.	10.3	59
4	Counter-flow formic acid microfluidic fuel cell with high fuel utilization exceeding 90%. Applied Energy, 2015, 160, 930-936.	10.1	49
5	Numerical and experimental comparative study of microfluidic fuel cells with different flow configurations: Co-flow vs. counter-flow cell. Applied Energy, 2017, 203, 535-548.	10.1	46
6	Accelerating Fuel Cell Development with Additive Manufacturing Technologies: State of the Art, Opportunities and Challenges. Fuel Cells, 2019, 19, 636-650.	2.4	40
7	Enabling high-concentrated fuel operation of fuel cells with microfluidic principles: A feasibility study. Applied Energy, 2013, 112, 1131-1137.	10.1	39
8	Seeing is Believing: In Situ/Operando Optical Microscopy for Probing Electrochemical Energy Systems. Advanced Materials Technologies, 2020, 5, 2000555.	5.8	33
9	Energy and exergy analysis of microfluidic fuel cell. International Journal of Hydrogen Energy, 2013, 38, 6526-6536.	7.1	31
10	Numerical investigation and optimization of vapor-feed microfluidic fuel cells with high fuel utilization. Electrochimica Acta, 2018, 261, 127-136.	5.2	27
11	Structured Zeolite Monoliths with Ultrathin Framework for Fast CO₂ Adsorption Enabled by 3D Printing. Industrial & Engineering Chemistry Research, 2020, 59, 8223-8229.	3.7	27
12	Toward a mechanistic understanding of microfluidic droplet-based extraction and separation of lanthanides. Chemical Engineering Journal, 2019, 356, 673-679.	12.7	26
13	Hybrid Manufacturing of 3D Hierarchical Porous Carbons for Electrochemical Storage. Advanced Materials Technologies, 2020, 5, 1901030.	5.8	19
14	How to go beyond C₁ products with electrochemical reduction of CO₂. Sustainable Energy and Fuels, 2021, 5, 5893-5914.	4.9	19
15	Understanding the performance of optofluidic fuel cells: Experimental and theoretical analyses. Chemical Engineering Journal, 2016, 283, 1455-1464.	12.7	17
16	pH-differential design and operation of electrochemical and photoelectrochemical systems with bipolar membrane. Applied Energy, 2020, 268, 115053.	10.1	16
17	Rational design of photoelectrochemical cells towards bias-free water splitting: Thermodynamic and kinetic insights. Journal of Power Sources, 2020, 462, 228113.	7.8	15
18	A Theoretical Study on Photocatalytic Fuel Cell. Energy Procedia, 2014, 61, 246-249.	1.8	13

#	Article	IF	Citations
19	Advanced gas-emission anode design for microfluidic fuel cell eliminating bubble accumulation. Journal of Micromechanics and Microengineering, 2017, 27, 105016.	2.6	12
20	The future of sustainable chemistry and process: Convergence of artificial intelligence, data and hardware. Energy and AI, 2020, 2, 100036.	10.6	12
21	A Numerical Study on Microfluidic Fuel Cell: Improving Fuel Utilization and Fuel Operation Concentration. Energy Procedia, 2014, 61, 250-253.	1.8	8
22	Electrolytic cell engineering and device optimization for electrosynthesis of e-biofuels via co-valorisation of bio-feedstocks and captured CO2. Frontiers of Chemical Science and Engineering, 2021, 15, 208-219.	4.4	8
23	A Counter-flow Microfluidic Fuel Cell Achieving Concentrated Fuel Operation. Energy Procedia, 2015, 75, 1990-1995.	1.8	7
24	Rapid Synthesis of Porous Graphene Microspheres through a Three-Dimensionally Printed Inkjet Nozzle for Selective Pollutant Removal from Water. ACS Omega, 2019, 4, 20509-20518.	3.5	6
25	Hierarchically Structured Components: Design, Additive Manufacture, and Their Energy Applications. Advanced Materials Technologies, 0, , 2100672.	5.8	4
26	Enabling separation intensification of a lanthanide pair with closely similar kinetics based on droplet microfluidics: hydrodynamic and kinetic approaches. Reaction Chemistry and Engineering, 2019, 4, 1410-1420.	3.7	3
27	Energy Storage: Hybrid Manufacturing of 3D Hierarchical Porous Carbons for Electrochemical Storage (Adv. Mater. Technol. 6/2020). Advanced Materials Technologies, 2020, 5, 2070034.	5.8	3
28	Structured Electrodes with Accurately Controllable Channels Enabled by Hybrid 3D Printing. Energy & Fuels, 2021, 35, 19791-19800.	5.1	1