Gaoqiang Yang

List of Publications by Year
in descending order

41 papers	1,873 citations	257450 24 h-index	330143 37 g-index
42 all docs	42 docs citations	42 times ranked	998 citing authors

#	Article	IF	Citations
1	Durability of anion exchange membrane water electrolyzers. Energy and Environmental Science, 2021, 14, 3393-3419.	30.8	213
2	Investigation of thin/well-tunable liquid/gas diffusion layers exhibiting superior multifunctional performance in low-temperature electrolytic water splitting. Energy and Environmental Science, 2017, 10, 166-175.	30.8	154
3	Novel thin/tunable gas diffusion electrodes with ultra-low catalyst loading for hydrogen evolution reactions in proton exchange membrane electrolyzer cells. Nano Energy, 2018, 47, 434-441.	16.0	118
4	Thin liquid/gas diffusion layers for high-efficiency hydrogen production from water splitting. Applied Energy, 2016, 177, 817-822.	10.1	101
5	In situ investigation on ultrafast oxygen evolution reactions of water splitting in proton exchange membrane electrolyzer cells. Journal of Materials Chemistry A, 2017, 5, 18469-18475.	10.3	87
6	Modeling of two-phase transport in proton exchange membrane electrolyzer cells for hydrogen energy. International Journal of Hydrogen Energy, 2017, 42, 4478-4489.	7.1	81
7	Bipolar plate development with additive manufacturing and protective coating for durable and high-efficiency hydrogen production. Journal of Power Sources, 2018, 396, 590-598.	7.8	74
8	Fully printed and integrated electrolyzer cells with additive manufacturing for high-efficiency water splitting. Applied Energy, 2018, 215, 202-210.	10.1	69
9	Additive manufactured bipolar plate for high-efficiency hydrogen production in proton exchange membrane electrolyzer cells. International Journal of Hydrogen Energy, 2017, 42, 14734-14740.	7.1	67
10	A novel PEMEC with 3D printed non-conductive bipolar plate for low-cost hydrogen production from water electrolysis. Energy Conversion and Management, 2019, 182, 108-116.	9.2	65
11	In-situ investigation of bubble dynamics and two-phase flow in proton exchange membrane electrolyzer cells. International Journal of Hydrogen Energy, 2018, 43, 11223-11233.	7.1	62
12	In-situ investigation and modeling of electrochemical reactions with simultaneous oxygen and hydrogen microbubble evolutions in water electrolysis. International Journal of Hydrogen Energy, 2019, 44, 28283-28293.	7.1	59
13	Thin film surface modifications of thin/tunable liquid/gas diffusion layers for high-efficiency proton exchange membrane electrolyzer cells. Applied Energy, 2017, 206, 983-990.	10.1	58
14	Performance Modeling and Current Mapping of Proton Exchange Membrane Electrolyzer Cells with Novel Thin/Tunable Liquid/Gas Diffusion Layers. Electrochimica Acta, 2017, 255, 405-416.	5.2	56
15	Performance improvement of proton exchange membrane electrolyzer cells by introducing in-plane transport enhancement layers. Electrochimica Acta, 2019, 316, 43-51.	5.2	56
16	Constructing Ultrathin W-Doped NiFe Nanosheets via Facile Electrosynthesis as Bifunctional Electrocatalysts for Efficient Water Splitting. ACS Applied Materials & Interfaces, 2021, 13, 20070-20080.	8.0	54
17	Developing titanium micro/nano porous layers on planar thin/tunable LGDLs for high-efficiency hydrogen production. International Journal of Hydrogen Energy, 2018, 43, 14618-14628.	7.1	52
18	Investigation of titanium liquid/gas diffusion layers in proton exchange membrane electrolyzer cells. International Journal of Green Energy, 2017, 14, 162-170.	3.8	45

#	Article	IF	Citations
19	Ultrathin platinum nanowire based electrodes for high-efficiency hydrogen generation in practical electrolyzer cells. Chemical Engineering Journal, 2021, 410, 128333.	12.7	40
20	Insights into the rapid two-phase transport dynamics in different structured porous transport layers of water electrolyzers through high-speed visualization. Journal of Power Sources, 2021, 516, 230641.	7.8	39
21	Building Electron/Proton Nanohighways for Full Utilization of Water Splitting Catalysts. Advanced Energy Materials, 2020, 10, 1903871.	19.5	38
22	Wettability effects of thin titanium liquid/gas diffusion layers in proton exchange membrane electrolyzer cells. Electrochimica Acta, 2019, 298, 704-708.	5.2	34
23	W-induced morphological modification of NiFe layered double hydroxides as efficient electrocatalysts for overall water splitting. Electrochimica Acta, 2021, 395, 139199.	5.2	32
24	High-speed characterization of two-phase flow and bubble dynamics in titanium felt porous media for hydrogen production. Electrochimica Acta, 2021, 370, 137751.	5.2	31
25	Study on corrosion migrations within catalyst-coated membranes of proton exchangeÂmembrane electrolyzer cells. International Journal of Hydrogen Energy, 2017, 42, 27343-27349.	7.1	24
26	An inkjet-printed capacitive sensor for water level or quality monitoring: investigated theoretically and experimentally. Journal of Materials Chemistry A, 2017, 5, 17841-17847.	10.3	24
27	Optimization of catalyst-coated membranes for enhancing performance in proton exchange membrane electrolyzer cells. International Journal of Hydrogen Energy, 2021, 46, 1155-1162.	7.1	22
28	All-in-one bipolar electrode: A new concept for compact and efficient water electrolyzers. Nano Energy, 2021, 90, 106551.	16.0	17
29	Direct thermal visualization of micro-scale hydrogen evolution reactions in proton exchange membrane electrolyzer cells. Energy Conversion and Management, 2019, 199, 111935.	9.2	15
30	A simple convertible electrolyzer in membraneless and membrane-based modes for understanding water splitting mechanism. Journal of Power Sources, 2021, 487, 229353.	7.8	15
31	Experimental studies on the effects of sheet resistance and wettability of catalyst layer on electro-catalytic activities for oxygen evolution reaction in proton exchange membrane electrolysis cells. International Journal of Hydrogen Energy, 2020, 45, 26595-26603.	7.1	14
32	Role of electron pathway in dimensionally increasing water splitting reaction sites in liquid electrolytes. Electrochimica Acta, 2020, 362, 137113.	5.2	13
33	Direct Synthesis of Conformal Layered Protonated Titanate Nanoarray Coatings on Various Substrate Surfaces Boosted by Low-Temperature Microwave-Assisted Hydrothermal Synthesis. ACS Applied Materials & Interfaces, 2018, 10, 35164-35174.	8.0	10
34	Morphology engineering of iridium electrodes via modifying titanium substrates with controllable pillar structures for highly efficient oxygen evolution reaction. Electrochimica Acta, 2022, 405, 139797.	5.2	9
35	Impacts of catalyst nanolayers on water permeation and swelling of polymer electrolyte membranes. Journal of Power Sources, 2020, 448, 227582.	7.8	8
36	Favorable morphology and electronic conductivity of functional sublayers for highly efficient water splitting electrodes. Journal of Energy Storage, 2021, 36, 102342.	8.1	7

#	Article	IF	Citations
37	Electrocatalysts: Building Electron/Proton Nanohighways for Full Utilization of Water Splitting Catalysts (Adv. Energy Mater. 16/2020). Advanced Energy Materials, 2020, 10, 2070075.	19.5	3
38	Investigation of Pore Shape Effects of Novel Thin LGDLs for High-Efficiency Hydrogen/Oxygen Generation and Energy Storage. , 2017, , .		2
39	Visualization on rapid and micro-scale dynamics of oxygen bubble evolution in PEMECs. , 2017, , .		2
40	Micro/nano manufacturing of novel multifunctional layers for hydrogen production from water splitting. , 2017, , .		2
41	Additive manufactured micro-sensor from silver nanoparticles for measuring shear stress and pressure. , 2017, , .		1