Yawen Dai

List of Publications by Year
in descending order

38 papers	1,157 citations	361413 20 h-index	395702 33 g-index
39 all docs	39 docs citations	39 times ranked	1104 citing authors

#	Article	IF	Citations
1	Rechargeable alkaline zinc batteries: Progress and challenges. Energy Storage Materials, 2020, 31, 44-57.	18.0	139
2	Mini-review of perovskite oxides as oxygen electrocatalysts for rechargeable zincâ€“air batteries. Chemical Engineering Journal, 2020, 397, 125516.	12.7	121
3	Multiâ€Functional Hydrogels for Flexible Zincâ€Based Batteries Working under Extreme Conditions. Advanced Energy Materials, 2021, 11, 2101749.	19.5	116
4	Sacrificial Interlayer for Promoting Charge Transport in Hematite Photoanode. ACS Applied Materials & Interfaces, 2017, 9, 42723-42733.	8.0	61
5	Polarization-induced saw-tooth-like potential distribution in zincblende-wurtzite superlattice for efficient charge separation. Nano Energy, 2017, 41, 101-108.	16.0	53
6	Bridging the Charge Accumulation and High Reaction Order for Highâ€Rate Oxygen Evolution and Long Stable Znâ€Air Batteries. Advanced Functional Materials, 2022, 32, .	14.9	49
7	Engineering the interfaces in water-splitting photoelectrodes â€“ an overview of the technique development. Journal of Materials Chemistry A, 2020, 8, 6984-7002.	10.3	44
8	Insights into the Thermopower of Thermally Regenerative Electrochemical Cycle for Low Grade Heat Harvesting. ACS Energy Letters, 2021, 6, 329-336.	17.4	43
9	Interfacial La Diffusion in the CeO₂/LaFeO₃ Hybrid for Enhanced Oxygen Evolution Activity. ACS Applied Materials & Interfaces, 2021, 13, 2799-2806.	8.0	38
10	Review of Liquid-Based Systems to Recover Low-Grade Waste Heat for Electrical Energy Generation. Energy & Fuels, 2021, 35, 161-175.	5.1	32
11	Materials development and prospective for protonic ceramic fuel cells. International Journal of Energy Research, 2022, 46, 2212-2240.	4.5	29
12	Robust non-Pt noble metal-based nanomaterials for electrocatalytic hydrogen generation. Applied Physics Reviews, 2020, 7, .	11.3	28
13	Rational design of spinel oxides as bifunctional oxygen electrocatalysts for rechargeable Zn-air batteries. Chemical Physics Reviews, 2020, 1, .	5.7	28
14	Microstructure-tuned cobalt oxide electrodes for high-performance Znâ€“Co batteries. Electrochimica Acta, 2020, 353, 136535.	5.2	28
15	Ultrafine ruthenium-iridium alloy nanoparticles well-dispersed on N-rich carbon frameworks as efficient hydrogen-generation electrocatalysts. Chemical Engineering Journal, 2021, 417, 128105.	12.7	28
16	A mini-review of noble-metal-free electrocatalysts for overall water splitting in non-alkaline electrolytes. Materials Reports Energy, 2021, 1, 100024.	3.2	27
17	Tailoring structural properties of carbon via implanting optimal co nanoparticles in nâ€rich carbon cages toward highâ€efficiency oxygen electrocatalysis for rechargeable znâ€air batteries. , 2022, 4, 576-585.		27
18	Investigation on the Discharge and Charge Behaviors of Li-CO₂ Batteries with Carbon Nanotube Electrodes. ACS Sustainable Chemistry and Engineering, 2020, 8, 9742-9750.	6.7	25

#	Article	IF	Citations
19	Performance evaluation and optimization of a perovskite solar cell-thermoelectric generator hybrid system. Energy, 2020, 201, 117665.	8.8	24
20	All-in-one and bipolar-membrane-free acid-alkaline hydrogel electrolytes for flexible high-voltage Zn-air batteries. Chemical Engineering Journal, 2022, 430, 132718.	12.7	24
21	Photo-assisted non-aqueous lithium-oxygen batteries: Progress and prospects. Renewable and Sustainable Energy Reviews, 2020, 127, 109877.	16.4	22
22	In Situ Anchoring Coâ€“Nâ€“C Nanoparticles on Co₄N Nanosheets toward Ultrastable Flexible Selfâ€Supported Bifunctional Oxygen Electrocatalyst Enables Recyclable Znâ€“Air Batteries Over 10 000 Cycles and Fast Charging. Small, 2022, 18, e2105887.	10.0	22
23	Coupling properties and parametric optimization of a photovoltaic panel driven thermoelectric refrigerators system. Energy, 2021, 220, 119798.	8.8	15
24	Modulating Photoelectrochemical Water-Splitting Activity by Charge-Storage Capacity of Electrocatalysts. Journal of Physical Chemistry C, 2019, 123, 28753-28762.	3.1	14
25	Radiative cooling-assisted thermoelectric refrigeration and power systems: Coupling properties and parametric optimization. Energy, 2022, 242, 122546.	8.8	13
26	Parametric optimization of a coupled system integrating solid oxide fuel cell and graphene thermionic energy converter. Journal of Power Sources, 2020, 478, 228797.	7.8	12
27	Harvesting waste heat produced in solid oxide fuel cell using near-field thermophotovoltaic cell. Journal of Power Sources, 2020, 452, 227831.	7.8	12
28	GaP/GaPN core/shell nanowire array on silicon for enhanced photoelectrochemical hydrogen production. Chinese Journal of Catalysis, 2020, 41, 2-8.	14.0	10
29	A hybrid system integrating solid oxide fuel cell and thermo-radiative-photovoltaic cells for energy cascade utilization. Journal of Power Sources, 2021, 512, 230538.	7.8	10
30	Regulating the Interfacial Electron Density of La_{0.8}Sr_{0.2}Mn_{0.5}Co_{0.5}O₃/RuO_x for Efficient and Low-Cost Bifunctional Oxygen Electrocatalysts and Rechargeable Zn-Air Batteries. ACS Applied Materials & Interfaces, 2021, 13, 61098-61106.	8.0	10
31	Investigation on the Strategies for Discharge Capacity Improvement of Aprotic Li-CO₂ Batteries. Energy & Fuels, 2020, 34, 16870-16878.	5.1	9
32	Coupled and optimized properties of a hybrid system integrating electrochemical cycles with perovskite solar cell. International Journal of Energy Research, 2021, 45, 18846-18856.	4.5	8
33	Synergetic Effects of Dual Electrocatalysts for High-Performance Solar-Driven Water Oxidation. ACS Applied Energy Materials, 2019, 2, 7256-7262.	5.1	7
34	Thermally Regenerative CO₂-Induced pH-Gradient Cell for Waste-to-Energy Conversion. ACS Energy Letters, 2021, 6, 3221-3227.	17.4	7
35	Investigation on the electrochemical performance of hybrid zinc batteries through numerical analysis. Electrochimica Acta, 2021, 375, 137967.	5.2	6
36	Numerical study of tripleâ€phase boundary length in highâ€temperature proton exchange membrane fuel cell. International Journal of Energy Research, 2022, 46, 1998-2010.	4.5	6

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37	Microscale-decoupled charge-discharge reaction sites for an air electrode with abundant triple-phase boundary and enhanced cycle stability of Zn-Air batteries. Journal of Power Sources, 2022, 525, 231108.	7.8	6
38	Multiâ€Functional Hydrogels for Flexible Zincâ€Based Batteries Working under Extreme Conditions (Adv.) Tj ETQq0 0 0 rgBT /Overlock 1	19.5	4