Wanhai Zhou

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8711750/publications.pdf

Version: 2024-02-01

27 papers	3,750 citations	394286 19 h-index	526166 27 g-index
27 all docs	27 docs citations	27 times ranked	2300 citing authors

#	Article	IF	Citations
1	Roadmap for advanced aqueous batteries: From design of materials to applications. Science Advances, 2020, 6, eaba4098.	4.7	1,069
2	An Electrolytic Znâ€“MnO₂ Battery for Highâ€Voltage and Scalable Energy Storage. Angewandte Chemie - International Edition, 2019, 58, 7823-7828.	7.2	787
3	Simultaneous Regulation on Solvation Shell and Electrode Interface for Dendriteâ€Free Zn Ion Batteries Achieved by a Lowâ€Cost Glucose Additive. Angewandte Chemie - International Edition, 2021, 60, 18247-18255.	7.2	529
4	Atomic Engineering Catalyzed MnO₂ Electrolysis Kinetics for a Hybrid Aqueous Battery with High Power and Energy Density. Advanced Materials, 2020, 32, e2001894.	11.1	221
5	Sulfur-Based Aqueous Batteries: Electrochemistry and Strategies. Journal of the American Chemical Society, 2021, 143, 15475-15489.	6.6	148
6	A scalable top-down strategy toward practical metrics of Niâ€“Zn aqueous batteries with total energy densities of 165 W h kg^{â^'1} and 506 W h L^{â^'1}. Energy and Environmental Science, 2020, 13, 4157-4167.	15.6	142
7	The origin of capacity fluctuation and rescue of dead Mn-based Znâ€“ion batteries: a Mn-based competitive capacity evolution protocol. Energy and Environmental Science, 2022, 15, 1106-1118.	15.6	124
8	An Electrolytic Znâ€“MnO₂ Battery for Highâ€Voltage and Scalable Energy Storage. Angewandte Chemie, 2019, 131, 7905-7910.	1.6	114
9	Hierarchical Confinement Effect with Zincophilic and Spatial Traps Stabilized Zn-Based Aqueous Battery. Nano Letters, 2022, 22, 4223-4231.	4.5	99
10	Simultaneous Regulation on Solvation Shell and Electrode Interface for Dendriteâ€Free Zn Ion Batteries Achieved by a Lowâ€Cost Glucose Additive. Angewandte Chemie, 2021, 133, 18395-18403.	1.6	97
11	Aqueous zinc-ion batteries at extreme temperature: Mechanisms, challenges, and strategies. Energy Storage Materials, 2022, 51, 683-718.	9.5	54
12	Porous cube-like Mn3O4@C as an advanced cathode for low-cost neutral zinc-ion battery. Journal of Alloys and Compounds, 2020, 813, 151812.	2.8	53
13	Improvement in low-temperature and instantaneous high-rate output performance of Al-free AB5-type hydrogen storage alloy for negative electrode in Ni/MH battery: Effect of thermodynamic and kinetic regulation via partial Mn substituting. Journal of Power Sources, 2017, 343, 11-21.	4.0	50
14	Hierarchical NiSe₂ Nanosheet Arrays as a Robust Cathode toward Superdurable and Ultrafast Niâ€“Zn Aqueous Batteries. ACS Applied Materials & Interfaces, 2020, 12, 34931-34940.	4.0	47
15	Effects of size of nickel powder additive on the low-temperature electrochemical performances and kinetics parameters of AB5-type hydrogen storage alloy for negative electrode in Ni/MH battery. Journal of Alloys and Compounds, 2016, 660, 289-296.	2.8	35
16	Long-life Ni-MH batteries with high-power delivery at lower temperatures: Coordination of low-temperature and high-power delivery with cycling life of low-Al AB5-type hydrogen storage alloys. International Journal of Hydrogen Energy, 2018, 43, 21464-21477.	3.8	34
17	Low-temperature and instantaneous high-rate output performance of AB5-type hydrogen storage alloy with duplex surface hot-alkali treatment. Journal of Alloys and Compounds, 2017, 692, 364-374.	2.8	31
18	Ni3S2-coated metal hydride anode with high-power and long-life performance for low-temperature Ni-MH power batteries. Chemical Engineering Journal, 2020, 379, 122204.	6.6	26

#	Article	IF	Citations
19	Effects of Al content on the electrochemical properties of La0.78Ce0.22Ni3.95-xCo0.65Mn0.3Si0.1Alx alloys at 20â€“80ÂÂ°C. International Journal of Hydrogen Energy, 2015, 40, 10200-10210.	3.8	23
20	The mechanism of suppressing capacity degradation of high-Al AB5-type hydrogen storage alloys at 60ÂÂ°C. International Journal of Hydrogen Energy, 2016, 41, 1801-1810.	3.8	16
21	Ultrafast Co_{0.8}Al_{0.2}-Layered Double-Hydroxide Nanosheets Cathode for High-Performance Coâ€“Zn Battery. ACS Sustainable Chemistry and Engineering, 2020, 8, 14877-14885.	3.2	13
22	The high-temperature performance of low-cost La Ni Fe based hydrogen storage alloys with Si substituting. International Journal of Hydrogen Energy, 2016, 41, 14852-14863.	3.8	11
23	Nanoscale tungsten nitride/nitrogen-doped carbon as an efficient non-noble metal catalyst for hydrogen and oxygen recombination at room temperature in nickelâ€“iron batteries. RSC Advances, 2018, 8, 35343-35347.	1.7	10
24	SOC-dependent high-rate dischargeability of AB5-type metal hydride anode: Mechanism linking phase transition to electrochemical H-desorption kinetics. International Journal of Hydrogen Energy, 2019, 44, 15278-15286.	3.8	6
25	High-temperature electrochemical performance of low-cost Laâ€“Niâ€“Fe based hydrogen storage alloys with different preparation methods. Materials Research Bulletin, 2016, 76, 28-36.	2.7	5
26	Influence factors of capacity loss after short-time standing of metal-hydride electrode and its EIS model. Journal of Rare Earths, 2013, 31, 772-777.	2.5	3
27	Hybrid Aqueous Batteries: Atomic Engineering Catalyzed MnO₂ Electrolysis Kinetics for a Hybrid Aqueous Battery with High Power and Energy Density (Adv. Mater. 25/2020). Advanced Materials, 2020, 32, 2070191.	11.1	3