

Houzhao Wan

List of Publications by Year in descending order

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53
papers

5,445
citations

117625

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168389

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docs citations

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times ranked

6180
citing authors

#	ARTICLE	IF	CITATIONS
1	Highly conductive NiCo ₂ S ₄ urchin-like nanostructures for high-rate pseudocapacitors. <i>Nanoscale</i> , 2013, 5, 8879.	5.6	848
2	In situ growth of NiCo ₂ S ₄ nanotube arrays on Ni foam for supercapacitors: Maximizing utilization efficiency at high mass loading to achieve ultrahigh areal pseudocapacitance. <i>Journal of Power Sources</i> , 2014, 254, 249-257.	7.8	518
3	Interface engineering: The Ni(OH) ₂ /MoS ₂ heterostructure for highly efficient alkaline hydrogen evolution. <i>Nano Energy</i> , 2017, 37, 74-80.	16.0	436
4	NiCo ₂ S ₄ porous nanotubes synthesis via sacrificial templates: high-performance electrode materials of supercapacitors. <i>CrystEngComm</i> , 2013, 15, 7649.	2.6	285
5	Facile synthesized porous NiCo ₂ O ₄ flowerlike nanostructure for high-rate supercapacitors. <i>Journal of Power Sources</i> , 2014, 248, 28-36.	7.8	248
6	Hierarchical Configuration of NiCo ₂ S ₄ Nanotube@Ni-Mn Layered Double Hydroxide Arrays/Three-Dimensional Graphene Sponge as Electrode Materials for High-Capacitance Supercapacitors. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 15840-15847.	8.0	214
7	Valence Engineering via In Situ Carbon Reduction on Octahedron Sites Mn ₃ O ₄ for Ultra-Long Cycle Life Aqueous Zn-Mn Battery. <i>Advanced Energy Materials</i> , 2020, 10, 2001050.	19.5	196
8	Hydrothermal synthesis of cobalt sulfide nanotubes: The size control and its application in supercapacitors. <i>Journal of Power Sources</i> , 2013, 243, 396-402.	7.8	193
9	Mutually beneficial Co ₃ O ₄ @MoS ₂ heterostructures as a highly efficient bifunctional catalyst for electrochemical overall water splitting. <i>Journal of Materials Chemistry A</i> , 2018, 6, 2067-2072.	10.3	178
10	Co ^{2+/3+/4+} -Regulated Electron State of Mn ⁰ for Superb Aqueous Zinc-Manganese Oxide Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2003203.	19.5	144
11	Synergistic effect of Fe ₃ O ₄ /reduced graphene oxide nanocomposites for supercapacitors with good cycling life. <i>Electrochimica Acta</i> , 2013, 114, 674-680.	5.2	139
12	Rapid self-assembly of porous square rod-like nickel persulfide via a facile solution method for high-performance supercapacitors. <i>Journal of Power Sources</i> , 2016, 301, 122-130.	7.8	123
13	Tailoring the electrocatalytic activity of bimetallic nickel-iron diselenide hollow nanochains for water oxidation. <i>Nano Energy</i> , 2018, 47, 275-284.	16.0	116
14	Dual-Descriptor Tailoring: The Hydroxyl Adsorption Energy-Dependent Hydrogen Evolution Kinetics of High-Valence State Doped Ni ₃ N in Alkaline Media. <i>ACS Catalysis</i> , 2019, 9, 9332-9338.	11.2	102
15	Synergistic effect of two active sites on cobalt oxides towards electrochemical water-oxidation. <i>Nano Energy</i> , 2017, 42, 98-105.	16.0	101
16	Nickel Sulfide Nanoparticles Synthesized by Microwave-assisted Method as Promising Supercapacitor Electrodes: An Experimental and Computational Study. <i>Electrochimica Acta</i> , 2015, 182, 361-367.	5.2	99
17	Intercalation of Glucose in NiMn-Layered Double Hydroxide Nanosheets: an Effective Path Way towards Battery-type Electrodes with Enhanced Performance. <i>Electrochimica Acta</i> , 2016, 216, 35-43.	5.2	98
18	Ni-Co selenide nanowires supported on conductive wearable textile as cathode for flexible battery-supercapacitor hybrid devices. <i>Chemical Engineering Journal</i> , 2020, 400, 125955.	12.7	96

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19	A durable VO ₂ (M)/Zn battery with ultrahigh rate capability enabled by pseudocapacitive proton insertion. <i>Journal of Materials Chemistry A</i> , 2020, 8, 1731-1740.	10.3	90
20	Welding Perovskite Nanowires for Stable, Sensitive, Flexible Photodetectors. <i>ACS Nano</i> , 2020, 14, 2777-2787.	14.6	90
21	Rapid microwave-assisted synthesis NiMoO ₄ ·H ₂ O nanoclusters for supercapacitors. <i>Materials Letters</i> , 2013, 108, 164-167.	2.6	89
22	Simultaneous interfacial chemistry and inner Helmholtz plane regulation for superior alkaline hydrogen evolution. <i>Energy and Environmental Science</i> , 2020, 13, 3007-3013.	30.8	83
23	High conductivity Ni ₁₂ P ₅ nanowires as high-rate electrode material for battery-supercapacitor hybrid devices. <i>Chemical Engineering Journal</i> , 2020, 392, 123661.	12.7	78
24	Different charge-storage mechanisms in disulfide vanadium and vanadium carbide monolayer. <i>Journal of Materials Chemistry A</i> , 2015, 3, 9909-9914.	10.3	76
25	One pot synthesis of Ni ₁₂ P ₅ hollow nanocapsules as efficient electrode materials for oxygen evolution reactions and supercapacitor applications. <i>Electrochimica Acta</i> , 2017, 229, 380-386.	5.2	64
26	Metal-organic framework-derived high conductivity Fe ₃ C with porous carbon on graphene as advanced anode materials for aqueous battery-supercapacitor hybrid devices. <i>Journal of Power Sources</i> , 2020, 448, 227403.	7.8	60
27	Activation Mechanism Study of Dandelion-Like Co ₉ S ₈ Nanotubes in Supercapacitors. <i>Journal of the Electrochemical Society</i> , 2014, 161, A996-A1000.	2.9	53
28	Favorable anion adsorption/desorption of high rate NiSe ₂ nanosheets/hollow mesoporous carbon for battery-supercapacitor hybrid devices. <i>Nano Research</i> , 2021, 14, 2574-2583.	10.4	52
29	Oxygen-Defect Enhanced Anion Adsorption Energy Toward Super-Rate and Durable Cathode for Ni-Zn Batteries. <i>Nano-Micro Letters</i> , 2021, 13, 167.	27.0	52
30	Electrochemical double layer near polar reduced graphene oxide electrode: Insights from molecular dynamic study. <i>Electrochimica Acta</i> , 2015, 166, 142-149.	5.2	51
31	Direct Formation of Hedgehog-Like Hollow Ni-Mn Oxides and Sulfides for Supercapacitor Electrodes. <i>Particle and Particle Systems Characterization</i> , 2014, 31, 857-862.	2.3	50
32	Suppressing cathode dissolution via guest engineering for durable aqueous zinc-ion batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 7631-7639.	10.3	47
33	First-principles explorations of Li ₂ S@V ₂ CT hybrid structure as cathode material for lithium-sulfur battery. <i>Applied Surface Science</i> , 2019, 489, 677-683.	6.1	39
34	Ultra-long life nickel nanowires@nickel-cobalt hydroxide nanoarrays composite pseudocapacitive electrode: Construction and activation mechanism. <i>Electrochimica Acta</i> , 2018, 259, 303-312.	5.2	37
35	2D-VN ₂ MXene as a novel anode material for Li, Na and K ion batteries: Insights from the first-principles calculations. <i>Journal of Colloid and Interface Science</i> , 2021, 593, 51-58.	9.4	35
36	Achieving low-energy consumption water-to-hydrogen conversion via urea electrolysis over a bifunctional electrode of hierarchical cuprous sulfide@nickel selenide nanoarrays. <i>Journal of Colloid and Interface Science</i> , 2021, 592, 13-21.	9.4	33

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37	Interface Synergistic Effect from Layered Metal Sulfides of MoS ₂ /SnS ₂ van der Waals Heterojunction with Enhanced Li-Ion Storage Performance. <i>Journal of Physical Chemistry C</i> , 2018, 122, 24600-24608.	3.1	32
38	Hollow spiny shell of porous Ni-Mn oxides: A facile synthesis route and their application as electrode in supercapacitors. <i>Journal of Power Sources</i> , 2015, 286, 66-72.	7.8	28
39	Understanding the electrochemical activation behavior of Co(OH) ₂ nanotubes during the ion-exchange process. <i>Materials Today Energy</i> , 2017, 4, 122-131.	4.7	25
40	Core/shell Cu/FePtCu nanoparticles with face-centered tetragonal texture: An active and stable low-Pt catalyst for enhanced oxygen reduction. <i>Nano Energy</i> , 2018, 54, 280-287.	16.0	22
41	Three-dimensional cotton-like nickel nanowire@Ni-Co hydroxide nanosheet arrays as binder-free electrode for high-performance asymmetric supercapacitor. <i>Nanotechnology</i> , 2018, 29, 194003.	2.6	20
42	Contribution of Cation Addition to MnO ₂ Nanosheets on Stable Co ₃ O ₄ Nanowires for Aqueous Zinc-Ion Battery. <i>Frontiers in Chemistry</i> , 2020, 8, 793.	3.6	18
43	High-rate transition metal-based cathode materials for battery-supercapacitor hybrid devices. <i>Nanoscale Advances</i> , 2021, 3, 5222-5239.	4.6	18
44	Colloidal Cd _x Zn _{1-x} S nanocrystals as efficient photocatalysts for H ₂ production under visible-light irradiation. <i>RSC Advances</i> , 2019, 9, 4001-4007.	3.6	14
45	Nickel Nanowire@Porous NiCo ₂ O ₄ Nanorods Arrays Grown on Nickel Foam as Efficient Pseudocapacitor Electrode. <i>Frontiers in Energy Research</i> , 2017, 5, .	2.3	12
46	Electronic coupling regulation in yolk-shell nanostructured nickel-cobalt diselenides with octahedral coordination for boosted oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 28387-28396.	7.1	10
47	Mn-dopant induced Octahedral Configuration Strongly Stabilizes Ni ₁₂ P ₅ Nanowires for Battery-Supercapacitor Hybrid Devices. <i>Journal of Alloys and Compounds</i> , 2022, 903, 163897.	5.5	10
48	The Co-Improvement of Selectivity and Uniformity on NbO _x -Based Selector by Al-Doping. <i>IEEE Electron Device Letters</i> , 2022, 43, 870-873.	3.9	8
49	Stability Optimization Strategies of Cathode Materials for Aqueous Zinc Ion Batteries: A Mini Review. <i>Frontiers in Chemistry</i> , 2021, 9, 828119.	3.6	6
50	Synergistic regulation of hydrogen adsorption/desorption via dual interfaces of Cu/Ni/Ni(OH) ₂ toward efficient hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 14053-14062.	7.1	4
51	Improved uniformity and threshold voltage in NbO _x -ZrO ₂ selectors. <i>Applied Physics Letters</i> , 2021, 119, .	3.3	3
52	Zinc-Ion Batteries: Valence Engineering via In Situ Carbon Reduction on Octahedron Sites Mn ₃ O ₄ for Ultra-Long Cycle Life Aqueous Zn-Ion Battery (Adv. Energy Mater.) Tj ETQ 0.0 0 rgBT /Overlock	4.0	1
53	Structure and size control of FePtCu nanocatalysts for high performance hydrogen evolution reaction. <i>Sustainable Energy and Fuels</i> , 2020, 4, 2727-2733.	4.9	1