Zihan Shen

List of Publications by Year
in descending order

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41 papers	3,427 citations	304743 22 h-index	276875 41 g-index
41 all docs	41 docs citations	41 times ranked	5713 citing authors

#	Article	IF	Citations
1	Carbon and Graphene Quantum Dots for Optoelectronic and Energy Devices: A Review. Advanced Functional Materials, 2015, 25, 4929-4947.	14.9	1,072
2	Nitrogenâ€Doped CoP Electrocatalysts for Coupled Hydrogen Evolution and Sulfur Generation with Low Energy Consumption. Advanced Materials, 2018, 30, e1800140.	21.0	336
3	Multifunctional Co 3 S 4 @sulfur nanotubes for enhanced lithium-sulfur battery performance. Nano Energy, 2017, 37, 7-14.	16.0	335
4	Rational Design of a Ni₃N_{0.85} Electrocatalyst to Accelerate Polysulfide Conversion in Lithiumâ€“Sulfur Batteries. ACS Nano, 2020, 14, 6673-6682.	14.6	212
5	Cation-doped ZnS catalysts for polysulfide conversion in lithiumâ€“sulfur batteries. Nature Catalysis, 2022, 5, 555-563.	34.4	198
6	Interlayer Lithium Plating in Au Nanoparticles Pillared Reduced Graphene Oxide for Lithium Metal Anodes. Advanced Functional Materials, 2018, 28, 1804133.	14.9	142
7	Efficient Ni₂Co₄P₃ Nanowires Catalysts Enhance Ultrahighâ€Loading Lithiumâ€“Sulfur Conversion in a Microreactorâ€Like Battery. Advanced Functional Materials, 2020, 30, 1906661.	14.9	134
8	Amorphous ZnO based resistive random access memory. RSC Advances, 2016, 6, 17867-17872.	3.6	109
9	Biomimetic Bipolar Microcapsules Derived from Staphylococcus aureus for Enhanced Properties of Lithiumâ€“Sulfur Battery Cathodes. Advanced Energy Materials, 2018, 8, 1702373.	19.5	106
10	Electrodeposition Technologies for Liâ€Based Batteries: New Frontiers of Energy Storage. Advanced Materials, 2020, 32, e1903808.	21.0	70
11	Electroplating lithium transition metal oxides. Science Advances, 2017, 3, e1602427.	10.3	62
12	Enhanced synergistic catalysis by a novel triple-phase interface design of NiO/Ru@Ni for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2019, 7, 2344-2350.	10.3	61
13	Structure design of NiCo₂O₄ electrodes for high performance pseudocapacitors and lithium-ion batteries. Journal of Materials Chemistry A, 2016, 4, 17394-17402.	10.3	53
14	Oxygenâ€Deficient Ferric Oxide as an Electrochemical Cathode Catalyst for Highâ€Energy Lithiumâ€“Sulfur Batteries. Small, 2020, 16, e2000870.	10.0	49
15	Carbonâ€Free O₂ Cathode with Threeâ€Dimensional Ultralight Nickel Foamâ€Supported Ruthenium Electrocatalysts for Liâ€“O₂ Batteries. ChemSusChem, 2017, 10, 2714-2719.	6.8	39
16	(Co/Fe)₄O₄ Cubane-Containing Nanorings Fabricated by Phosphorylating Cobalt Ferrite for Highly Efficient Oxygen Evolution Reaction. ACS Catalysis, 2019, 9, 3878-3887.	11.2	38
17	Sulfophobic and Vacancy Design Enables Selfâ€Cleaning Electrodes for Efficient Desulfurization and Concurrent Hydrogen Evolution with Low Energy Consumption. Advanced Functional Materials, 2021, 31, 2101922.	14.9	34
18	Aliovalent fluorine doping and anodization-induced amorphization enable bifunctional catalysts for efficient water splitting. Journal of Materials Chemistry A, 2020, 8, 10831-10838.	10.3	31

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19	Engineering Two-Dimensional Metalâ€“Organic Framework on Molecular Basis for Fast Li⁺ Conduction. Nano Letters, 2021, 21, 5805-5812.	9.1	31
20	In Situ Formation of Polycyclic Aromatic Hydrocarbons as an Artificial Hybrid Layer for Lithium Metal Anodes. Nano Letters, 2022, 22, 263-270.	9.1	31
21	In Situ Tuning of Defects and Phase Transition in Titanium Dioxide by Lithiothermic Reduction. ACS Applied Materials & Interfaces, 2020, 12, 5750-5758.	8.0	30
22	Unipolar resistive switching of ZnO-single-wire memristors. Nanoscale Research Letters, 2014, 9, 381.	5.7	22
23	<scp>CoSe₂</scp>/<scp>MoS₂</scp> Heterostructures to Couple Polysulfide Adsorption and Catalysis in <scp>Lithiumâ€Sulfur</scp> Batteries^{â€}. Chinese Journal of Chemistry, 2021, 39, 1138-1144.	4.9	21
24	A Polysulfidesâ€Confined Allâ€inâ€One Porous Microcapsule Lithiumâ€“Sulfur Battery Cathode. Small, 2021, 17, e2103051.	10.0	21
25	A Lamellar Yolkâ€“Shell Lithiumâ€Sulfur Battery Cathode Displaying Ultralong Cycling Life, High Rate Performance, and Temperature Tolerance. Advanced Science, 2022, 9, e2103517.	11.2	20
26	Low Interface Energies Tune the Electrochemical Reversibility of Tin Oxide Composite Nanoframes as Lithium-Ion Battery Anodes. ACS Applied Materials & Interfaces, 2018, 10, 36892-36901.	8.0	19
27	High-performance Li-ion Sn anodes with enhanced electrochemical properties using highly conductive TiN nanotubes array as a 3D multifunctional support. Journal of Power Sources, 2017, 360, 189-195.	7.8	17
28	A novel ternary sulfur/carbon@tin dioxide composite with polysulfides-adsorptive shell and conductive core as high-performance lithiumâ€‘sulfur battery cathodes. Applied Surface Science, 2019, 489, 462-469.	6.1	16
29	Electronic modulation of nickel phosphide by iron doping and its assembly on a graphene framework for efficient electrocatalytic water oxidation. Journal of Alloys and Compounds, 2020, 824, 153913.	5.5	15
30	CuO/ZnO memristors via oxygen or metal migration controlled by electrodes. AIP Advances, 2016, 6, .	1.3	14
31	ZIF-derived ZnO/Sb composite scaffolded on carbon framework for Ni-Zn batteries. Journal of Colloid and Interface Science, 2020, 579, 823-831.	9.4	13
32	A novel wheel-confined composite as cathode in Li-S batteries with high capacity retention. Journal of Alloys and Compounds, 2019, 776, 504-510.	5.5	11
33	Renewable Polysulfide Regulation by Versatile Films toward High-Loading Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2020, 12, 47590-47598.	8.0	11
34	Efficient transport system of cultivated mushroom mycelium enables its derived carbon with high performance electrochemical desalination capability. Carbon, 2022, 196, 699-707.	10.3	11
35	Hydrogel assisted synthesis of Li3V2(PO4)3 composite as high energy density and low-temperature stable secondary battery cathode. Journal of Alloys and Compounds, 2018, 739, 837-847.	5.5	10
36	Silicon Quantum Dots Induce Uniform Lithium Plating in a Sandwiched Metal Anode. ChemElectroChem, 2020, 7, 2026-2032.	3.4	8

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37	A novel tin hybrid nano-composite with double nets of carbon matrixes as a stable anode in lithium ion batteries. Chemical Communications, 2017, 53, 13125-13128.	4.1	7
38	Novel Doughnutlike Graphene Quantum Dot-Decorated Composites for High-Performance Liâ€“S Batteries Displaying Dual Immobilization Toward Polysulfides. ACS Applied Energy Materials, 2021, 4, 10998-11003.	5.1	7
39	A bee pupa-infilled honeycomb structure-inspired Li₂MnSiO₄ cathode for high volumetric energy density secondary batteries. Chemical Communications, 2019, 55, 3582-3585.	4.1	4
40	Three-dimensional Co₉S₈nanotube network/sulfur composite cathode with enhanced lithium-sulfur battery performance. Nanotechnology, 2020, 31, 295404.	2.6	4
41	Threeâ€Dimensionally Scaffolded Hydrogel@Sulfur Composite as a Binderâ€Free Polysulfidesâ€Adsorptive Cathode for Highâ€Performance Lithiumâ€Sulfur Batteries. Energy Technology, 2019, 7, 1801158.	3.8	3