

Wenchao Zhang

List of Publications by Year in descending order

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55
papers

5,596
citations

147786
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155644
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docs citations

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times ranked

5575
citing authors

#	ARTICLE	IF	CITATIONS
1	Constructing ultrastable electrode/electrolyte interface for rapid potassium ion storage capability via salt chemistry and interfacial engineering. <i>Nano Research</i> , 2022, 15, 2083-2091.	10.4	13
2	Recent Progress and Future Advances on Aqueous Monovalent-Ion Batteries towards Safe and High-Power Energy Storage. <i>Advanced Materials</i> , 2022, 34, e2107965.	21.0	48
3	Minimizing Fe-Bearing Waste Guided by Modulating the Precipitation Pathway: A Novel Magnetite Precipitation Approach for Zinc Hydrometallurgy. <i>ACS ES&T Engineering</i> , 2022, 2, 1611-1618.	7.6	6
4	Accelerated Degradation of Microplastics at the Liquid Interface of Ice Crystals in Frozen Aqueous Solutions. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	31
5	S-Doped Carbon-Coated FeS ₂ /C@C Nanorods for Potassium Storage. <i>Acta Metallurgica Sinica (English) Tj ETQq1</i> , 2021, 16, 10784314.	2.9	16
6	Melamine-assisted synthesis of ultrafine Mo ₂ C/Mo ₂ N@N-doped carbon nanofibers for enhanced alkaline hydrogen evolution reaction activity. <i>Science China Materials</i> , 2021, 64, 1150-1158.	6.3	25
7	A CoSe@C@C core-shell structure with stable potassium storage performance realized by an effective solid electrolyte interphase layer. <i>Journal of Materials Chemistry A</i> , 2021, 9, 11397-11404.	10.3	28
8	Promoting sulphur conversion chemistry with tri-modal porous N, O-codoped carbon for stable Li-S batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 5497-5506.	10.3	40
9	Long-cycling and dendrite-free lithium metal anodes via salt chemistry. <i>Green Energy and Environment</i> , 2021, 6, 791-793.	8.7	7
10	Learning from biology: biomimetic carbon cells promote high-power potassium ion batteries. <i>National Science Review</i> , 2021, 8, nwab043.	9.5	4
11	Bi-Atom Electrocatalyst for Electrochemical Nitrogen Reduction Reactions. <i>Nano-Micro Letters</i> , 2021, 13, 106.	27.0	10
12	Challenges and future perspectives on sodium and potassium ion batteries for grid-scale energy storage. <i>Materials Today</i> , 2021, 50, 400-417.	14.2	161
13	An Overlooked Natural Hydrogen Evolution Pathway: Ni ²⁺ Boosting H ₂ O Reduction by Fe(OH) ₂ Oxidation during Low-Temperature Serpentinization. <i>Angewandte Chemie</i> , 2021, 133, 24256-24260.	2.0	5
14	An Overlooked Natural Hydrogen Evolution Pathway: Ni ²⁺ Boosting H ₂ O Reduction by Fe(OH) ₂ Oxidation during Low-Temperature Serpentinization. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 24054-24058.	13.8	25
15	Fundamental understanding and practical challenges of lithium-rich oxide cathode materials: Layered and disordered-rocksalt structure. <i>Energy Storage Materials</i> , 2021, 40, 51-71.	18.0	61
16	Immobilization of cadmium in contaminated soils using sulfidated nanoscale zero-valent iron: Effectiveness and remediation mechanism. <i>Journal of Hazardous Materials</i> , 2021, 420, 126605.	12.4	44
17	Achieving Ultrahigh Anodic Efficiency via Single-Phase Design of Mg-Zn Alloy Anode for Mg-Air Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 58737-58745.	8.0	11
18	Necklace-like carbon nanofibers encapsulating V ₃ S ₄ microspheres for ultrafast and stable potassium-ion storage. <i>Journal of Materials Chemistry A</i> , 2020, 8, 2618-2626.	10.3	87

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19	High-Performance CO_2 Batteries Based on Metal-Free Carbon Electrocatalysts. <i>Angewandte Chemie</i> , 2020, 132, 3498-3502.	2.0	8
20	High-Performance CO_2 Batteries Based on Metal-Free Carbon Electrocatalysts. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 3470-3474.	13.8	66
21	An Intrinsically Non-flammable Electrolyte for High-Performance Potassium Batteries. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 3638-3644.	13.8	211
22	Coupling Topological Insulator SnSb_2Te_4 Nanodots with Highly Doped Graphene for High-Rate Energy Storage. <i>Advanced Materials</i> , 2020, 32, e1905632.	21.0	78
23	Synergy of binders and electrolytes in enabling micro-sized alloy anodes for high performance potassium-ion batteries. <i>Nano Energy</i> , 2020, 77, 105118.	16.0	82
24	Tuning Interface Bridging Between MoSe_2 and Three-Dimensional Carbon Framework by Incorporation of MoC Intermediate to Boost Lithium Storage Capability. <i>Nano-Micro Letters</i> , 2020, 12, 171.	27.0	53
25	A Long Cycle-Life High-Voltage Spinel Lithium-Ion Battery Electrode Achieved by Site-Selective Doping. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 10594-10602.	13.8	144
26	A Long Cycle-Life High-Voltage Spinel Lithium-Ion Battery Electrode Achieved by Site-Selective Doping. <i>Angewandte Chemie</i> , 2020, 132, 10681-10689.	2.0	20
27	Sealed pre-carbonization to regulate the porosity and heteroatom sites of biomass derived carbons for lithium-sulfur batteries. <i>Journal of Colloid and Interface Science</i> , 2020, 579, 667-679.	9.4	24
28	Polyaniline/Pure Carbon Assemblies as Efficient Self-standing Metal-free Oxygen Electrodes in Alkaline Media for Zn-Air Batteries. <i>Chemistry - an Asian Journal</i> , 2020, 15, 1544-1548.	3.3	26
29	2020 Roadmap on Carbon Materials for Energy Storage and Conversion. <i>Chemistry - an Asian Journal</i> , 2020, 15, 995-1013.	3.3	154
30	Approaching High-Performance Supercapacitors via Enhancing Pseudocapacitive Nickel Oxide-Based Materials. <i>Advanced Sustainable Systems</i> , 2020, 4, 1900137.	5.3	49
31	Rational Design of Unique ZnO/ZnS@N-C Heterostructures for High-Performance Lithium-Ion Batteries. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 905-912.	4.6	41
32	An Intrinsically Non-flammable Electrolyte for High-Performance Potassium Batteries. <i>Angewandte Chemie</i> , 2020, 132, 3667-3673.	2.0	16
33	Br doped porous bismuth oxychloride micro-sheets with rich oxygen vacancies and dominating $\{001\}$ facets for enhanced nitrogen photo-fixation performances. <i>Journal of Colloid and Interface Science</i> , 2019, 556, 111-119.	9.4	66
34	One-Step In Situ Preparation of Polymeric Selenium Sulfide Composite as a Cathode Material for Enhanced Sodium/Potassium Storage. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 29807-29813.	8.0	36
35	Hollow-Carbon-Templated Few-Layered V_5S_8 Nanosheets Enabling Ultrafast Potassium Storage and Long-Term Cycling. <i>ACS Nano</i> , 2019, 13, 7939-7948.	14.6	136
36	Constructing $\text{CoO/Co}_3\text{S}_4$ Heterostructures Embedded in N-doped Carbon Frameworks for High-Performance Sodium-Ion Batteries. <i>Advanced Functional Materials</i> , 2019, 29, 1901925.	14.9	169

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37	Approaching high-performance potassium-ion batteries via advanced design strategies and engineering. <i>Science Advances</i> , 2019, 5, eaav7412.	10.3	790
38	<i>In situ</i> incorporation of nanostructured antimony in an N-doped carbon matrix for advanced sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 12842-12850.	10.3	25
39	Single-crystal-like ZnO mesoporous spheres derived from metal organic framework delivering high electron mobility for enhanced energy conversion and storage performances. <i>Electrochimica Acta</i> , 2019, 305, 474-483.	5.2	30
40	Bi-functional nitrogen-doped carbon protective layer on three-dimensional RGO/SnO ₂ composites with enhanced electron transport and structural stability for high-performance lithium-ion batteries. <i>Journal of Colloid and Interface Science</i> , 2019, 542, 81-90.	9.4	17
41	Hierarchical mesoporous MoSe ₂ @CoSe/N-doped carbon nanocomposite for sodium ion batteries and hydrogen evolution reaction applications. <i>Energy Storage Materials</i> , 2019, 21, 97-106.	18.0	128
42	Research progress on vanadium-based cathode materials for sodium ion batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 8815-8838.	10.3	161
43	Heterostructure Manipulation <i>via in Situ</i> Localized Phase Transformation for High-Rate and Highly Durable Lithium Ion Storage. <i>ACS Nano</i> , 2018, 12, 10430-10438.	14.6	138
44	Unraveling the effect of salt chemistry on long-durability high-phosphorus-concentration anode for potassium ion batteries. <i>Nano Energy</i> , 2018, 53, 967-974.	16.0	151
45	Advances in Polar Materials for Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , 2018, 28, 1707520.	14.9	268
46	Understanding High-Energy-Density Sn ₄ P ₃ Anodes for Potassium-Ion Batteries. <i>Joule</i> , 2018, 2, 1534-1547.	24.0	468
47	Creating fast ion conducting composites via in-situ introduction of titanium as oxygen getter. <i>Nano Energy</i> , 2018, 49, 549-554.	16.0	18
48	Phosphorus-Based Alloy Materials for Advanced Potassium-Ion Battery Anode. <i>Journal of the American Chemical Society</i> , 2017, 139, 3316-3319.	13.7	755
49	Unique Structural Design and Strategies for Germanium-Based Anode Materials Toward Enhanced Lithium Storage. <i>Advanced Energy Materials</i> , 2017, 7, 1700488.	19.5	103
50	Large-scale synthesis of ternary Sn ₅ SbP ₃ /C composite by ball milling for superior stable sodium-ion battery anode. <i>Electrochimica Acta</i> , 2017, 235, 107-113.	5.2	45
51	Single ion conducting sodium ion batteries enabled by a sodium ion exchanged poly(bis(4-carbonyl) Tj ETQq1 1 0.784314 rgBT /Overl... 300, 60-66.	2.7	29
52	In Situ Construction of 3D Interconnected FeS@Fe ₃ C@Graphitic Carbon Networks for High-Performance Sodium-Ion Batteries. <i>Advanced Functional Materials</i> , 2017, 27, 1703390.	14.9	219
53	A Strategy for Configuration of an Integrated Flexible Sulfur Cathode for High-Performance Lithium-Sulfur Batteries. <i>Angewandte Chemie</i> , 2016, 128, 4060-4064.	2.0	19
54	A Strategy for Configuration of an Integrated Flexible Sulfur Cathode for High-Performance Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 3992-3996.	13.8	200

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55	Construction of a lithium ion transport network in cathode with lithiated bis(benzene sulfonyl)imide based single ion polymer ionomers. Journal of Power Sources, 2015, 283, 279-288.	7.8	31