Kangning Zhao

List of Publications by Year
in descending order

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109 papers	11,126 citations	31902 53 h-index	29081 104 g-index
110 all docs	110 docs citations	110 times ranked	11240 citing authors

#	Article	IF	Citations
1	An integrated flexible film as cathode for High-Performance Lithiumâ€“Sulfur battery. Journal of Colloid and Interface Science, 2022, 606, 1627-1635.	5.0	7
2	Nickel Niobate Anodes for High Rate Lithiumâ€Ion Batteries. Advanced Energy Materials, 2022, 12, .	10.2	49
3	Dual-function engineering to construct ultra-stable anodes for potassium-ion hybrid capacitors: N, O-doped porous carbon spheres. Nano Energy, 2022, 93, 106903.	8.2	30
4	A facile surface alloy-engineering route to enable robust lithium metal anodes. Physical Chemistry Chemical Physics, 2022, 24, 4751-4758.	1.3	8
5	A programmable and skin temperatureâ€“activated electromechanical synergistic dressing for effective wound healing. Science Advances, 2022, 8, eabl8379.	4.7	45
6	Electronic synergy to boost the performance of NiCoP-NWs@FeCoP-NSs anodes for flexible lithium-ion batteries. Nanoscale, 2022, 14, 8398-8408.	2.8	5
7	Multifunctional flexible contact lens for eye health monitoring using inorganic magnetic oxide nanosheets. Journal of Nanobiotechnology, 2022, 20, 202.	4.2	8
8	FeP Coated in Nitrogen/Phosphorus Co-doped Carbon Shell Nanorods Arrays as High-Rate Capable Flexible Anode for K-ion Half/Full Batteries. Journal of Colloid and Interface Science, 2022, 624, 670-679.	5.0	13
9	Quadrupling the stored charge by extending the accessible density of states. CheM, 2022, 8, 2410-2418.	5.8	4
10	Challenges and Perspectives for Doping Strategy for Manganese-Based Zinc-ion Battery Cathode. Energies, 2022, 15, 4698.	1.6	11
11	Enhanced lithiation dynamics in nanostructured Nb18W16O93 anodes. Journal of Power Sources, 2021, 482, 228898.	4.0	15
12	Reconstruction of pH-universal atomic Fe N C catalysts towards oxygen reduction reaction. Journal of Colloid and Interface Science, 2021, 582, 1033-1040.	5.0	29
13	Electrochemically Exfoliating MoS₂ into Atomically Thin Planarâ€Stacking Through a Selective Lateral Reaction Pathway. Advanced Functional Materials, 2021, 31, 2007840.	7.8	23
14	Sn stabilized pyrovanadate structure rearrangement for zinc ion battery. Nano Energy, 2021, 81, 105584.	8.2	41
15	Atomically targeting NiFe LDH to create multivacancies for OER catalysis with a small organic anchor. Nano Energy, 2021, 81, 105606.	8.2	204
16	Carbon-coated ultrathin metallic V5Se8 nanosheet for high-energy-density and robust potassium storage. Energy Storage Materials, 2021, 35, 1-11.	9.5	35
17	Biomineralization-inspired synthesis of Na3V2(PO4)3 nanoparticles wrapped with 3D porous carbon as high-performance cathode for sodium-ion batteries. Ionics, 2021, 27, 1165-1175.	1.2	16
18	Potassiumâ€Ion Activating Formation of Feâˆ’Nâˆ’C Moiety as Efficient Oxygen Electrocatalyst for Znâ€Air Batteries. ChemElectroChem, 2021, 8, 1298-1306.	1.7	10

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19	Interface cation migration kinetics induced oxygen release heterogeneity in layered lithium cathodes. Energy Storage Materials, 2021, 36, 115-122.	9.5	23
20	In situ visualizing the interplay between the separator and potassium dendrite growth by synchrotron X-ray tomography. Nano Energy, 2021, 83, 105841.	8.2	13
21	Quicker and More Zn²⁺ Storage Predominantly from the Interface. Advanced Materials, 2021, 33, e2100359.	11.1	111
22	Carbon-Decorated Na₃V₂(PO₄)₃ as Ultralong Lifespan Cathodes for High-Energy-Density Symmetric Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 25036-25043.	4.0	55
23	A self-powered implantable and bioresorbable electrostimulation device for biofeedback bone fracture healing. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	71
24	Enhanced performance of atomically dispersed dual-site Fe-Mn electrocatalysts through cascade reaction mechanism. Applied Catalysis B: Environmental, 2021, 288, 120021.	10.8	104
25	Direct Visualization of Atomic-Scale Heterogeneous Structure Dynamics in MnO₂ Nanowires. ACS Applied Materials & Interfaces, 2021, 13, 33644-33651.	4.0	9
26	Tremella-like Hydrated Vanadium Oxide Cathode with an Architectural Design Strategy toward Ultralong Lifespan Aqueous Zinc-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 41688-41697.	4.0	25
27	Bottom-up synthesis of graphene films hosting atom-thick molecular-sieving apertures. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	14
28	Sodium Superionic Conductors (NASICONs) as Cathode Materials for Sodium-Ion Batteries. Electrochemical Energy Reviews, 2021, 4, 793-823.	13.1	59
29	Gradient SEI layer induced by liquid alloy electrolyte additive for high rate lithium metal battery. Nano Energy, 2021, 88, 106237.	8.2	48
30	2D titanoniobate-titaniumcarbide nanohybrid anodes for ultrafast lithium-ion batteries. Journal of Power Sources, 2021, 512, 230523.	4.0	5
31	Architecting a Hydrated Ca_{0.24}V₂O₅ Cathode with a Facile Desolvation Interface for Superior-Performance Aqueous Zinc Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 60035-60045.	4.0	26
32	Compact Sn/SnO2 microspheres with gradient composition for high volumetric lithium storage. Energy Storage Materials, 2020, 25, 376-381.	9.5	27
33	Flexible bioelectronics for physiological signals sensing and disease treatment. Journal of Materiomics, 2020, 6, 397-413.	2.8	28
34	Interfacial Electronic Modulation of Multishelled CoP Hollow Spheres via Surface Reconstruction for High-Efficient Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2020, 3, 309-318.	2.5	26
35	Reversible (De)Intercalation of Hydrated Zn²⁺ in Mg²⁺â€Stabilized V₂O₅ Nanobelts with High Areal Capacity. Advanced Energy Materials, 2020, 10, 2002293.	10.2	84
36	Layered ferric vanadate nanosheets as a high-rate NH4+ storage electrode. Electrochimica Acta, 2020, 360, 137008.	2.6	46

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37	3D branched rutile TiO2 @ rutile SnO2 nanorods array heteroarchitectures/carbon cloth with an adjustable band gap to enhance lithium storage reaction kinetics for flexible lithium-ion batteries. Electrochimica Acta, 2020, 354, 136727.	2.6	26
38	Crystalline state transformation strategy for improving the catalytic performance of oxygen evolution reaction at high current density. Materials Today Energy, 2020, 18, 100564.	2.5	5
39	Confinement of Ionic Liquids at Single-Ni-Sites Boost Electroreduction of CO₂ in Aqueous Electrolytes. ACS Catalysis, 2020, 10, 13171-13178.	5.5	54
40	In situ structural evolution of the multi-site alloy electrocatalyst to manipulate the intermediate for enhanced water oxidation reaction. Energy and Environmental Science, 2020, 13, 2200-2208.	15.6	101
41	Sulfur-Deficient Porous SnS2â^'x Microflowers as Superior Anode for Alkaline Ion Batteries. Materials, 2020, 13, 443.	1.3	3
42	Mg 2+ Doped LiNi 1/3 Co 1/3 Mn 1/3 O 2 Hollow Flakeâ€"Like Structures with Enhanced Performances Cathodes for Lithiumâ€"Ion Batteries. ChemistrySelect, 2020, 5, 1275-1281.	0.7	8
43	FeP Quantum Dots Confined in Carbonâ€Nanotubeâ€Grafted Pâ€Doped Carbon Octahedra for Highâ€Rate Sodium Storage and Fullâ€Cell Applications. Advanced Functional Materials, 2020, 30, 1909283.	7.8	143
44	Surface reconstruction of NiCoP pre-catalysts for bifunctional water splitting in alkaline electrolyte. Electrochimica Acta, 2020, 345, 136114.	2.6	71
45	High-Voltage Cycling Induced Thermal Vulnerability in LiCoO₂ Cathode: Cation Loss and Oxygen Release Driven by Oxygen Vacancy Migration. ACS Nano, 2020, 14, 6181-6190.	7.3	144
46	Boosting Polysulfide Redox Kinetics by Grapheneâ€Supported Ni Nanoparticles with Carbon Coating. Advanced Energy Materials, 2020, 10, 2000907.	10.2	89
47	Atomically dispersed metal catalysts for the oxygen reduction reaction: synthesis, characterization, reaction mechanisms and electrochemical energy applications. Energy and Environmental Science, 2019, 12, 2890-2923.	15.6	317
48	Interconnected Vertically Stacked 2D-MoS₂ for Ultrastable Cycling of Rechargeable Li-Ion Battery. ACS Applied Materials & Interfaces, 2019, 11, 20762-20769.	4.0	37
49	Diethyl ether as self-healing electrolyte additive enabled long-life rechargeable aqueous zinc ion batteries. Nano Energy, 2019, 62, 275-281.	8.2	455
50	Built-in oriented electric field facilitating durable Zn MnO2 battery. Nano Energy, 2019, 62, 79-84.	8.2	150
51	Illumining phase transformation dynamics of vanadium oxide cathode by multimodal techniques under operando conditions. Nano Research, 2019, 12, 905-910.	5.8	12
52	Sisyphus effects in hydrogen electrochemistry on metal silicides enabled by silicene subunit edge. Science Bulletin, 2019, 64, 617-624.	4.3	65
53	Copperâ€"Nickel Nitride Nanosheets as Efficient Bifunctional Catalysts for Hydrazineâ€Assisted Electrolytic Hydrogen Production. Advanced Energy Materials, 2019, 9, 1900390.	10.2	243
54	Defect engineering activating (Boosting) zinc storage capacity of MoS2. Energy Storage Materials, 2019, 16, 527-534.	9.5	199

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55	Low-Crystalline Bimetallic Metalâ€"Organic Framework Electrocatalysts with Rich Active Sites for Oxygen Evolution. ACS Energy Letters, 2019, 4, 285-292.	8.8	255
56	Superior Stability and Dynamic Performance of Single Crystal LiNi_{1/3}Co_{1/3}Mn_{1/3}O₂ Nanorods from Î²-MnO₂ Template for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2019, 166, A59-A67.	1.3	23
57	Hierarchical Bimetallic Selenide Nanosheetâ€Constructed Nanotubes for Efficient Electrocatalytic Water Oxidation. ChemElectroChem, 2019, 6, 331-335.	1.7	15
58	H₂V₃O₈ Nanowire/Graphene Electrodes for Aqueous Rechargeable Zinc Ion Batteries with High Rate Capability and Large Capacity. Advanced Energy Materials, 2018, 8, 1800144.	10.2	427
59	MoB/gâ€C₃N₄ Interface Materials as a Schottky Catalyst to Boost Hydrogen Evolution. Angewandte Chemie, 2018, 130, 505-509.	1.6	71
60	MoB/gâ€C₃N₄ Interface Materials as a Schottky Catalyst to Boost Hydrogen Evolution. Angewandte Chemie - International Edition, 2018, 57, 496-500.	7.2	308
61	Waterâ€Lubricated Intercalation in V₂O₅Â·nH₂O for Highâ€Capacity and Highâ€Rate Aqueous Rechargeable Zinc Batteries. Advanced Materials, 2018, 30, 1703725.	11.1	1,084
62	Surface Gradient Ti-Doped MnO₂ Nanowires for High-Rate and Long-Life Lithium Battery. ACS Applied Materials & Interfaces, 2018, 10, 44376-44384.	4.0	41
63	Nonhierarchical Heterostructured Fe₂O₃/Mn₂O₃ Porous Hollow Spheres for Enhanced Lithium Storage. Small, 2018, 14, e1800659.	5.2	83
64	Electrochemical activated MoO2/Mo2N heterostructured nanobelts as superior zinc rechargeable battery cathode. Energy Storage Materials, 2018, 15, 374-379.	9.5	87
65	Sodium Ion Capacitor Using Pseudocapacitive Layered Ferric Vanadate Nanosheets Cathode. IScience, 2018, 6, 212-221.	1.9	63
66	Ultrathin Surface Coating Enables Stabilized Zinc Metal Anode. Advanced Materials Interfaces, 2018, 5, 1800848.	1.9	476
67	Electrochemical in situ X-ray probing in lithium-ion and sodium-ion batteries. Journal of Materials Science, 2017, 52, 3697-3718.	1.7	36
68	Copper silicate nanotubes anchored on reduced graphene oxide for long-life lithium-ion battery. Energy Storage Materials, 2017, 7, 152-156.	9.5	67
69	Low-crystalline iron oxide hydroxide nanoparticle anode for high-performance supercapacitors. Nature Communications, 2017, 8, 14264.	5.8	588
70	Thermal Induced Strain Relaxation of 1D Iron Oxide for Solid Electrolyte Interphase Control and Lithium Storage Improvement. Advanced Energy Materials, 2017, 7, 1601582.	10.2	73
71	Phosphorus Enhanced Intermolecular Interactions of SnO₂ and Graphene as an Ultrastable Lithium Battery Anode. Small, 2017, 13, 1603973.	5.2	87
72	Interconnected LiCuVO₄networks with in situ Cu generation as high-performance lithium-ion battery anode. Physical Chemistry Chemical Physics, 2017, 19, 13341-13347.	1.3	15

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73	Field Effect Enhanced Hydrogen Evolution Reaction of MoS₂ Nanosheets. Advanced Materials, 2017, 29, 1604464.	11.1	148
74	Air-Stable Porous Fe₂N Encapsulated in Carbon Microboxes with High Volumetric Lithium Storage Capacity and a Long Cycle Life. Nano Letters, 2017, 17, 5740-5746.	4.5	132
75	Oxalate-assisted formation of uniform carbon-confined SnO₂ nanotubes with enhanced lithium storage. Chemical Communications, 2017, 53, 9542-9545.	2.2	22
76	Nanoribbons and nanoscrolls intertwined three-dimensional vanadium oxide hydrogels for high-rate lithium storage at high mass loading level. Nano Energy, 2017, 40, 73-81.	8.2	44
77	A Crystalline/Amorphous Cobalt(II,III) Oxide Hybrid Electrocatalyst for Lithiumâ€“Air Batteries. Energy Technology, 2017, 5, 568-579.	1.8	12
78	In operando observation of temperature-dependent phase evolution in lithium-incorporation olivine cathode. Nano Energy, 2016, 22, 406-413.	8.2	31
79	Hollow spherical LiNi0.5Mn1.5O4 built from polyhedra with high-rate performance via carbon nanotube modification. Science China Materials, 2016, 59, 95-103.	3.5	31
80	Self-sacrificed synthesis of three-dimensional Na3V2(PO4)3 nanofiber network for high-rate sodiumâ€“ion full batteries. Nano Energy, 2016, 25, 145-153.	8.2	230
81	Pyrolyzed carbon with embedded NiO/Ni nanospheres for applications in microelectrodes. RSC Advances, 2016, 6, 43436-43441.	1.7	37
82	Cycling-Stable Cathodes: The Capturing of Ionized Oxygen in Sodium Vanadium Oxide Nanorods Cathodes under Operando Conditions (Adv. Funct. Mater. 36/2016). Advanced Functional Materials, 2016, 26, 6498-6498.	7.8	0
83	The Capturing of Ionized Oxygen in Sodium Vanadium Oxide Nanorods Cathodes under Operando Conditions. Advanced Functional Materials, 2016, 26, 6555-6562.	7.8	18
84	Cathodic polarization suppressed sodium-ion full cell with a 3.3 V high-voltage. Nano Energy, 2016, 28, 216-223.	8.2	97
85	SnO₂ Quantum Dots@Graphene Oxide as a Highâ€Rate and Longâ€Life Anode Material for Lithiumâ€Ion Batteries. Small, 2016, 12, 588-594.	5.2	338
86	Zinc Pyrovanadate Nanoplates Embedded in Graphene Networks with Enhanced Electrochemical Performance. Industrial & Engineering Chemistry Research, 2016, 55, 2992-2999.	1.8	47
87	Single-Nanowire Electrochemical Probe Detection for Internally Optimized Mechanism of Porous Graphene in Electrochemical Devices. Nano Letters, 2016, 16, 1523-1529.	4.5	72
88	Direct growth of an economic green energy storage material: a monocrystalline jarosite-KFe₃(SO₄)₂(OH)₆-nanoplates@rGO hybrid as a superior lithium-ion battery cathode. Journal of Materials Chemistry A, 2016, 4, 3735-3742.	5.2	28
89	Acetylene Black Induced Heterogeneous Growth of Macroporous CoV₂O₆ Nanosheet for High-Rate Pseudocapacitive Lithium-Ion Battery Anode. ACS Applied Materials & Interfaces, 2016, 8, 7139-7146.	4.0	81
90	Facile synthesis of a Co₃V₂O₈interconnected hollow microsphere anode with superior high-rate capability for Li-ion batteries. Journal of Materials Chemistry A, 2016, 4, 5075-5080.	5.2	66

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91	Carbon-supported and nanosheet-assembled vanadium oxide microspheres for stable lithium-ion battery anodes. Nano Research, 2016, 9, 128-138.	5.8	64
92	SnS2@Graphene nanosheet arrays grown on carbon cloth as freestanding binder-free flexible anodes for advanced sodium batteries. Journal of Alloys and Compounds, 2016, 654, 357-362.	2.8	81
93	Energy Storage: Novel Polygonal Vanadium Oxide Nanoscrolls as Stable Cathode for Lithium Storage (Adv. Funct. Mater. 12/2015). Advanced Functional Materials, 2015, 25, 1766-1766.	7.8	0
94	Graphene Oxide Wrapped Amorphous Copper Vanadium Oxide with Enhanced Capacitive Behavior for Highâ€Rate and Longâ€Life Lithiumâ€Ion Battery Anodes. Advanced Science, 2015, 2, 1500154.	5.6	114
95	Novel K₃V₂(PO₄)₃/C Bundled Nanowires as Superior Sodiumâ€Ion Battery Electrode with Ultrahigh Cycling Stability. Advanced Energy Materials, 2015, 5, 1500716.	10.2	150
96	General synthesis of complex nanotubes by gradient electrospinning and controlled pyrolysis. Nature Communications, 2015, 6, 7402.	5.8	370
97	Novel Polygonal Vanadium Oxide Nanoscrolls as Stable Cathode for Lithium Storage. Advanced Functional Materials, 2015, 25, 1773-1779.	7.8	54
98	Hierarchical zigzag Na_{1.25}V₃O₈ nanowires with topotactically encoded superior performance for sodium-ion battery cathodes. Energy and Environmental Science, 2015, 8, 1267-1275.	15.6	158
99	Interwoven Three-Dimensional Architecture of Cobalt Oxide Nanobrush-Graphene@Ni_xCo_{2x}(OH)_{6x} for High-Performance Supercapacitors. Nano Letters, 2015, 15, 2037-2044.	4.5	134
100	Inhibiting effect of Na+ pre-intercalation in MoO3 nanobelts with enhanced electrochemical performance. Nano Energy, 2015, 15, 145-152.	8.2	72
101	Integrated SnO₂nanorod array with polypyrrole coverage for high-rate and long-life lithium batteries. Physical Chemistry Chemical Physics, 2015, 17, 7619-7623.	1.3	74
102	Hierarchical Graphene-Encapsulated Hollow SnO₂@SnS₂ Nanostructures with Enhanced Lithium Storage Capability. ACS Applied Materials & Interfaces, 2015, 7, 22533-22541.	4.0	78
103	An electrospun hierarchical LiV3O8 nanowire-in-network for high-rate and long-life lithium batteries. Journal of Materials Chemistry A, 2015, 3, 19850-19856.	5.2	61
104	Manganese Oxide/Carbon Yolkâ€"Shell Nanorod Anodes for High Capacity Lithium Batteries. Nano Letters, 2015, 15, 738-744.	4.5	345
105	Amorphous Vanadium Oxide Matrixes Supporting Hierarchical Porous Fe₃O₄/Graphene Nanowires as a High-Rate Lithium Storage Anode. Nano Letters, 2014, 14, 6250-6256.	4.5	257
106	Mesoporous VO₂ nanowires with excellent cycling stability and enhanced rate capability for lithium batteries. RSC Advances, 2014, 4, 33332-33337.	1.7	47
107	VO₂ Nanowires Assembled into Hollow Microspheres for High-Rate and Long-Life Lithium Batteries. Nano Letters, 2014, 14, 2873-2878.	4.5	244
108	Heterogeneous branched coreâ€"shell SnO2â€"PANI nanorod arrays with mechanical integrity and three dimentional electron transport for lithium batteries. Nano Energy, 2014, 8, 196-204.	8.2	140

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109	Nanowire device for electrochemical energy storage. Chinese Science Bulletin, 2013, 58, 3312-3327.	0.4	1