

Guojin Liang

List of Publications by Year in descending order

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papers

10,154
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30070

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64796

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all docs

80
docs citations

80
times ranked

5737
citing authors

#	ARTICLE	IF	CITATIONS
1	A Superior Zn-MnO_2 Cathode and a Self-Healing Zn-MnO_2 Battery. ACS Nano, 2019, 13, 10643-10652.	14.6	535
2	A flexible rechargeable aqueous zinc manganese-dioxide battery working at $\sim 20^\circ\text{C}$. Energy and Environmental Science, 2019, 12, 706-715.	30.8	511
3	Do Zinc Dendrites Exist in Neutral Zinc Batteries: A Developed Electrohealing Strategy to In Situ Rescue In-service Batteries. Advanced Materials, 2019, 31, e1903778.	21.0	494
4	Waterproof and Tailorable Elastic Rechargeable Yarn Zinc Ion Batteries by a Cross-Linked Polyacrylamide Electrolyte. ACS Nano, 2018, 12, 3140-3148.	14.6	439
5	MXene chemistry, electrochemistry and energy storage applications. Nature Reviews Chemistry, 2022, 6, 389-404.	30.2	429
6	Single-Site Active Iron-Based Bifunctional Oxygen Catalyst for a Compressible and Rechargeable Zinc-Air Battery. ACS Nano, 2018, 12, 1949-1958.	14.6	336
7	Superstretchable Zinc-Air Batteries Based on an Alkaline-Tolerant Dual-Network Hydrogel Electrolyte. Advanced Energy Materials, 2019, 9, 1803046.	19.5	287
8	Zwitterionic Sulfobetaine Hydrogel Electrolyte Building Separated Positive/Negative Ion Migration Channels for Aqueous Zn-MnO_2 Batteries with Superior Rate Capabilities. Advanced Energy Materials, 2020, 10, 2000035.	19.5	287
9	Non-metallic charge carriers for aqueous batteries. Nature Reviews Materials, 2021, 6, 109-123.	48.7	250
10	A Wholly Degradable, Rechargeable $\text{Zn-Ti}_3\text{C}_2$ MXene Capacitor with Superior Anti-Self-Discharge Function. ACS Nano, 2019, 13, 8275-8283.	14.6	224
11	Insight on Organic Molecules in Aqueous Zn-Ion Batteries with an Emphasis on the Zn Anode Regulation. Advanced Energy Materials, 2022, 12, .	19.5	208
12	An Overview of Fiber-Shaped Batteries with a Focus on Multifunctionality, Scalability, and Technical Difficulties. Advanced Materials, 2020, 32, e1902151.	21.0	207
13	A Nanofibrillated Cellulose/Polyacrylamide Electrolyte-Based Flexible and Sewable High-Performance Zn-MnO_2 Battery with Superior Shear Resistance. Small, 2018, 14, e1803978.	10.0	191
14	A soft yet device-level dynamically super-tough supercapacitor enabled by an energy-dissipative dual-crosslinked hydrogel electrolyte. Nano Energy, 2019, 58, 732-742.	16.0	187
15	Initiating Hexagonal MoO_3 for Superstable and Fast NH_4^+ Storage Based on Hydrogen Bond Chemistry. Advanced Materials, 2020, 32, e1907802.	21.0	186
16	Halogenated Ti_3C_2 MXenes with Electrochemically Active Terminals for High-Performance Zinc Ion Batteries. ACS Nano, 2021, 15, 1077-1085.	14.6	183
17	An Intrinsically Self-Healing NiCo Zn Rechargeable Battery with a Self-Healable Ferric-Ion-Crosslinking Sodium Polyacrylate Hydrogel Electrolyte. Angewandte Chemie - International Edition, 2018, 57, 9810-9813.	13.8	171
18	A mechanically durable and device-level tough Zn-MnO ₂ battery with high flexibility. Energy Storage Materials, 2019, 23, 636-645.	18.0	159

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19	A Universal Principle to Design Reversible Aqueous Batteries Based on Deposition–Dissolution Mechanism. <i>Advanced Energy Materials</i> , 2019, 9, 1901838.	19.5	151
20	Phosphorene as Cathode Material for High-Voltage, Anti-Self-Discharge Zinc Ion Hybrid Capacitors. <i>Advanced Energy Materials</i> , 2020, 10, 2001024.	19.5	149
21	Gradient fluorinated alloy to enable highly reversible Zn-metal anode chemistry. <i>Energy and Environmental Science</i> , 2022, 15, 1086-1096.	30.8	141
22	Toward a Practical Zn Powder Anode: $\text{Ti}_3\text{C}_2\text{Tx}$ MXene as a Lattice-Match Electrons/Ions Redistributor. <i>ACS Nano</i> , 2021, 15, 14631-14642.	14.6	137
23	A Flexible Solid-State Aqueous Zinc Hybrid Battery with Flat and High-Voltage Discharge Plateau. <i>Advanced Energy Materials</i> , 2019, 9, 1902473.	19.5	136
24	Dendrites issues and advances in Zn anode for aqueous rechargeable Zn-based batteries. <i>EcoMat</i> , 2020, 2, e12035.	11.9	135
25	A smart safe rechargeable zinc ion battery based on sol-gel transition electrolytes. <i>Science Bulletin</i> , 2018, 63, 1077-1086.	9.0	134
26	Building durable aqueous K-ion capacitors based on MXene family. , 2022, 1, e9120002.		131
27	Activating the I^0/I^+ redox couple in an aqueous I_2/I^- Zn battery to achieve a high voltage plateau. <i>Energy and Environmental Science</i> , 2021, 14, 407-413.	30.8	129
28	In Situ Electrochemical Synthesis of MXenes without Acid/Alkali Usage in/for an Aqueous Zinc Ion Battery. <i>Advanced Energy Materials</i> , 2020, 10, 2001791.	19.5	128
29	Vertically Aligned Sn^{4+} Preintercalated Ti_2CT_x MXene Sphere with Enhanced Zn Ion Transportation and Superior Cycle Lifespan. <i>Advanced Energy Materials</i> , 2020, 10, 2001394.	19.5	127
30	Stabilizing Interface pH by Na-Modified Graphdiyne for Dendrite-Free and High-Rate Aqueous Zn-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	124
31	Advances in Flexible and Wearable Energy-Storage Textiles. <i>Small Methods</i> , 2018, 2, 1800124.	8.6	123
32	Effects of Anion Carriers on Capacitance and Self-Discharge Behaviors of Zinc Ion Capacitors. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 1011-1021.	13.8	122
33	Calendar Life of Zn Batteries Based on Zn Anode with Zn Powder/Current Collector Structure. <i>Advanced Energy Materials</i> , 2021, 11, 2003931.	19.5	122
34	Enhanced Redox Kinetics and Duration of Aqueous I_2/I^- Conversion Chemistry by MXene Confinement. <i>Advanced Materials</i> , 2021, 33, e2006897.	21.0	121
35	Efficient Ammonia Electrosynthesis and Energy Conversion through a Zn-Nitrate Battery by Iron Doping Engineered Nickel Phosphide Catalyst. <i>Advanced Energy Materials</i> , 2022, 12, .	19.5	108
36	Energy density issues of flexible energy storage devices. <i>Energy Storage Materials</i> , 2020, 28, 264-292.	18.0	106

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37	Highly Compressible Cross-Linked Polyacrylamide Hydrogel-Enabled Compressible Zn ²⁺ /MnO ₂ Battery and a Flexible Battery ² Sensor System. ACS Applied Materials & Interfaces, 2018, 10, 44527-44534.	8.0	105
38	Manipulating anion intercalation enables a high-voltage aqueous dual ion battery. Nature Communications, 2021, 12, 3106.	12.8	104
39	Biomimetic organohydrogel electrolytes for high ² environmental adaptive energy storage devices. EcoMat, 2019, 1, e12008.	11.9	95
40	Lattice Matching and Halogen Regulation for Synergistically Induced Uniform Zinc Electrodeposition by Halogenated Ti ₃ C ₂ MXenes. ACS Nano, 2022, 16, 813-822.	14.6	90
41	Aqueous Rechargeable Metal ² on Batteries Working at Subzero Temperatures. Advanced Science, 2021, 8, 2002590.	11.2	89
42	Recent advances in flexible aqueous zinc-based rechargeable batteries. Nanoscale, 2019, 11, 17992-18008.	5.6	83
43	Inhibiting Grain Pulverization and Sulfur Dissolution of Bismuth Sulfide by Ionic Liquid Enhanced Poly(3,4-ethylenedioxythiophene):Poly(styrenesulfonate) for High-Performance Zinc-Ion Batteries. ACS Nano, 2019, 13, 7270-7280.	14.6	81
44	Confining Aqueous Zn ²⁺ /Br Halide Redox Chemistry by Ti ₃ C ₂ T _X MXene. ACS Nano, 2021, 15, 1718-1726.	14.6	78
45	Commencing an Acidic Battery Based on a Copper Anode with Ultrafast Proton ² Regulated Kinetics and Superior Dendrite ² Free Property. Advanced Materials, 2019, 31, e1905873.	21.0	77
46	A zinc battery with ultra-flat discharge plateau through phase transition mechanism. Nano Energy, 2020, 71, 104583.	16.0	75
47	Intrinsic voltage plateau of a Nb ₂ CT _x MXene cathode in an aqueous electrolyte induced by high-voltage scanning. Joule, 2021, 5, 2993-3005.	24.0	74
48	Self-healable electroluminescent devices. Light: Science and Applications, 2018, 7, 102.	16.6	71
49	A Self ² Healing Crease ² Free Supramolecular All ² Polymer Supercapacitor. Advanced Science, 2021, 8, 2100072.	11.2	70
50	Commencing mild Ag ²⁺ /Zn batteries with long-term stability and ultra-flat voltage platform. Energy Storage Materials, 2020, 25, 86-92.	18.0	68
51	Hydrated hybrid vanadium oxide nanowires as the superior cathode for aqueous Zn battery. Materials Today Energy, 2019, 14, 100361.	4.7	67
52	3D printing of reduced graphene oxide aerogels for energy storage devices: A paradigm from materials and technologies to applications. Energy Storage Materials, 2021, 39, 146-165.	18.0	66
53	Coaxial ² Structured Weavable and Wearable Electroluminescent Fibers. Advanced Electronic Materials, 2017, 3, 1700401.	5.1	63
54	<i>in situ</i> formation of NaTi ₂ (PO ₄) ₃ cubes on Ti ₃ C ₂ MXene for dual-mode sodium storage. Journal of Materials Chemistry A, 2018, 6, 18525-18532.	10.3	60

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55	High-Voltage Organic Cathodes for Zinc-Ion Batteries through Electron Cloud and Solvation Structure Regulation. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	60
56	Small-Dipole-Molecule-Containing Electrolytes for High-Voltage Aqueous Rechargeable Batteries. <i>Advanced Materials</i> , 2022, 34, e2106180.	21.0	58
57	Ni ₃ S ₂ /Ni nanosheet arrays for high-performance flexible zinc hybrid batteries with evident two-stage charge and discharge processes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 18915-18924.	10.3	55
58	Highly Flexible and Bright Electroluminescent Devices Based on Ag Nanowire Electrodes and Top-Emission Structure. <i>Advanced Electronic Materials</i> , 2017, 3, 1600535.	5.1	54
59	A manganese hexacyanoferrate framework with enlarged ion tunnels and two-species redox reaction for aqueous Al-ion batteries. <i>Nano Energy</i> , 2021, 84, 105945.	16.0	54
60	Carbon-Based Flexible and All-Solid-State Micro-supercapacitors Fabricated by Inkjet Printing with Enhanced Performance. <i>Nano-Micro Letters</i> , 2017, 9, 19.	27.0	50
61	Conversion-Type Nonmetal Elemental Tellurium Anode with High Utilization for Mild/Alkaline Zinc Batteries. <i>Advanced Materials</i> , 2021, 33, e2105426.	21.0	48
62	Toward Multifunctional and Wearable Smart Skins with Energy Harvesting, Touch Sensing, and Exteroception-Visualizing Capabilities by an All-Polymer Design. <i>Advanced Electronic Materials</i> , 2019, 5, 1900553.	5.1	41
63	A reversible Zn-metal battery. <i>Nature Nanotechnology</i> , 2021, 16, 854-855.	31.5	41
64	Two-Electron Redox Chemistry Enabled High-Performance Iodide-Ion Conversion Battery. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	34
65	A universal method towards conductive textile for flexible batteries with superior softness. <i>Energy Storage Materials</i> , 2021, 36, 272-278.	18.0	31
66	Reconstructing Vanadium Oxide with Anisotropic Pathways for a Durable and Fast Aqueous K-Ion Battery. <i>ACS Nano</i> , 2021, 15, 17717-17728.	14.6	30
67	In situ/operando analysis of surface reconstruction of transition metal-based oxygen evolution electrocatalysts. <i>Cell Reports Physical Science</i> , 2022, 3, 100729.	5.6	29
68	Tellurium: A High-Performance Cathode for Magnesium Ion Batteries Based on a Conversion Mechanism. <i>ACS Nano</i> , 2022, 16, 5349-5357.	14.6	28
69	Stabilizing Interface pH by N-Modified Graphdiyne for Dendrite-Free and High-Rate Aqueous Zn-Ion Batteries. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	24
70	Effects of Anion Carriers on Capacitance and Self-Discharge Behaviors of Zinc Ion Capacitors. <i>Angewandte Chemie</i> , 2021, 133, 1024-1034.	2.0	21
71	High-Voltage Organic Cathodes for Zinc-Ion Batteries through Electron Cloud and Solvation Structure Regulation. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	20
72	The energy storage mechanisms of MnO ₂ in batteries. <i>Current Opinion in Electrochemistry</i> , 2021, 30, 100769.	4.8	19

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73	Bis-ammonium salts with strong chemisorption to halide ions for fast and durable aqueous redox Zn ion batteries. <i>Nano Energy</i> , 2022, 98, 107278.	16.0	17
74	An Intrinsically Self-Healing NiCo Zn Rechargeable Battery with a Self-Healable Ferric-Ion-Crosslinking Sodium Polyacrylate Hydrogel Electrolyte. <i>Angewandte Chemie</i> , 2018, 130, 9958-9961.	2.0	13
75	Structural properties and enhanced bandgap tunability of quaternary CdZnOS epitaxial films grown by pulsed laser deposition. <i>Journal of Alloys and Compounds</i> , 2015, 650, 748-752.	5.5	11
76	Recent Progress and Challenges of Flexible Zn-Based Batteries with Polymer Electrolyte. <i>Batteries</i> , 2022, 8, 59.	4.5	11
77	Two-Electron Redox Chemistry Enabled High-Performance Iodide-Ion Conversion Battery. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	4