Guojin Liang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1889926/publications.pdf

Version: 2024-02-01

77 papers	10,154 citations	29994 54 h-index	64668 79 g-index
80 all docs	80 docs citations	80 times ranked	5737 citing authors

#	Article	IF	Citations
1	A Superior Î´-MnO₂ Cathode and a Self-Healing Zn-Î´-MnO₂ Battery. ACS Nano, 2019, 13, 10643-10652.	7.3	535
2	A flexible rechargeable aqueous zinc manganese-dioxide battery working at â^'20 Â°C. Energy and Environmental Science, 2019, 12, 706-715.	15.6	511
3	Do Zinc Dendrites Exist in Neutral Zinc Batteries: A Developed Electrohealing Strategy to In Situ Rescue Inâ€Service Batteries. Advanced Materials, 2019, 31, e1903778.	11.1	494
4	Waterproof and Tailorable Elastic Rechargeable Yarn Zinc Ion Batteries by a Cross-Linked Polyacrylamide Electrolyte. ACS Nano, 2018, 12, 3140-3148.	7.3	439
5	MXene chemistry, electrochemistry and energy storage applications. Nature Reviews Chemistry, 2022, 6, 389-404.	13.8	429
6	Single-Site Active Iron-Based Bifunctional Oxygen Catalyst for a Compressible and Rechargeable Zincâ€“Air Battery. ACS Nano, 2018, 12, 1949-1958.	7.3	336
7	Superâ€Stretchable Zincâ€“Air Batteries Based on an Alkalineâ€Tolerant Dualâ€Network Hydrogel Electrolyte. Advanced Energy Materials, 2019, 9, 1803046.	10.2	287
8	Zwitterionic Sulfobetaine Hydrogel Electrolyte Building Separated Positive/Negative Ion Migration Channels for Aqueous Znâ€MnO₂ Batteries with Superior Rate Capabilities. Advanced Energy Materials, 2020, 10, 2000035.	10.2	287
9	Non-metallic charge carriers for aqueous batteries. Nature Reviews Materials, 2021, 6, 109-123.	23.3	250
10	A Wholly Degradable, Rechargeable Znâ€“Ti₃C₂ MXene Capacitor with Superior Anti-Self-Discharge Function. ACS Nano, 2019, 13, 8275-8283.	7.3	224
11	Insight on Organic Molecules in Aqueous Znâ€Ion Batteries with an Emphasis on the Zn Anode Regulation. Advanced Energy Materials, 2022, 12, .	10.2	208
12	An Overview of Fiberâ€Shaped Batteries with a Focus on Multifunctionality, Scalability, and Technical Difficulties. Advanced Materials, 2020, 32, e1902151.	11.1	207
13	A Nanofibrillated Cellulose/Polyacrylamide Electrolyteâ€Based Flexible and Sewable Highâ€Performance Znâ€“MnO₂ Battery with Superior Shear Resistance. Small, 2018, 14, e1803978.	5.2	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.	8.2	187
15	Initiating Hexagonal MoO₃ for Superbâ€Stable and Fast NH₄⁺ Storage Based on Hydrogen Bond Chemistry. Advanced Materials, 2020, 32, e1907802.	11.1	186
16	Halogenated Ti₃C₂ MXenes with Electrochemically Active Terminals for High-Performance Zinc Ion Batteries. ACS Nano, 2021, 15, 1077-1085.	7.3	183
17	An Intrinsically Selfâ€Healing NiCo||Zn Rechargeable Battery with a Selfâ€Healable Ferricâ€Ionâ€Crosslinking Sodium Polyacrylate Hydrogel Electrolyte. Angewandte Chemie - International Edition, 2018, 57, 9810-9813.	7.2	171
18	A mechanically durable and device-level tough Zn-MnO2 battery with high flexibility. Energy Storage Materials, 2019, 23, 636-645.	9.5	159

#	Article	IF	Citations
19	A Universal Principle to Design Reversible Aqueous Batteries Based on Depositionâ€“Dissolution Mechanism. Advanced Energy Materials, 2019, 9, 1901838.	10.2	151
20	Phosphorene as Cathode Material for Highâ€Voltage, Antiâ€Selfâ€Discharge Zinc Ion Hybrid Capacitors. Advanced Energy Materials, 2020, 10, 2001024.	10.2	149
21	Gradient fluorinated alloy to enable highly reversible Zn-metal anode chemistry. Energy and Environmental Science, 2022, 15, 1086-1096.	15.6	141
22	Toward a Practical Zn Powder Anode: Ti₃C₂Tx MXene as a Lattice-Match Electrons/Ions Redistributor. ACS Nano, 2021, 15, 14631-14642.	7.3	137
23	A Flexible Solidâ€State Aqueous Zinc Hybrid Battery with Flat and Highâ€Voltage Discharge Plateau. Advanced Energy Materials, 2019, 9, 1902473.	10.2	136
24	Dendrites issues and advances in Zn anode for aqueous rechargeable Znâ€based batteries. EcoMat, 2020, 2, e12035.	6.8	135
25	A smart safe rechargeable zinc ion battery based on sol-gel transition electrolytes. Science Bulletin, 2018, 63, 1077-1086.	4.3	134
26	Building durable aqueous K-ion capacitors based on MXene family. , 2022, 1, e9120002.		131
27	Activating the I⁰/I⁺ redox couple in an aqueous I₂â€“Zn battery to achieve a high voltage plateau. Energy and Environmental Science, 2021, 14, 407-413.	15.6	129
28	In Situ Electrochemical Synthesis of MXenes without Acid/Alkali Usage in/for an Aqueous Zinc Ion Battery. Advanced Energy Materials, 2020, 10, 2001791.	10.2	128
29	Vertically Aligned Sn⁴⁺ Preintercalated Ti₂CT_X MXene Sphere with Enhanced Zn Ion Transportation and Superior Cycle Lifespan. Advanced Energy Materials, 2020, 10, 2001394.	10.2	127
30	Stabilizing Interface pH by Nâ€Modified Graphdiyne for Dendriteâ€Free and Highâ€Rate Aqueous Znâ€Ion Batteries. Angewandte Chemie - International Edition, 2022, 61, .	7.2	124
31	Advances in Flexible and Wearable Energyâ€Storage Textiles. Small Methods, 2018, 2, 1800124.	4.6	123
32	Effects of Anion Carriers on Capacitance and Selfâ€Discharge Behaviors of Zinc Ion Capacitors. Angewandte Chemie - International Edition, 2021, 60, 1011-1021.	7.2	122
33	Calendar Life of Zn Batteries Based on Zn Anode with Zn Powder/Current Collector Structure. Advanced Energy Materials, 2021, 11, 2003931.	10.2	122
34	Enhanced Redox Kinetics and Duration of Aqueous I₂/I^{â^'} Conversion Chemistry by MXene Confinement. Advanced Materials, 2021, 33, e2006897.	11.1	121
35	Efficient Ammonia Electrosynthesis and Energy Conversion through a Znâ€Nitrate Battery by Iron Doping Engineered Nickel Phosphide Catalyst. Advanced Energy Materials, 2022, 12, .	10.2	108
36	Energy density issues of flexible energy storage devices. Energy Storage Materials, 2020, 28, 264-292.	9.5	106

#	Article	IF	Citations
37	Highly Compressible Cross-Linked Polyacrylamide Hydrogel-Enabled Compressible Znâ€“MnO₂ Battery and a Flexible Batteryâ€“Sensor System. ACS Applied Materials & Interfaces, 2018, 10, 44527-44534.	4.0	105
38	Manipulating anion intercalation enables a high-voltage aqueous dual ion battery. Nature Communications, 2021, 12, 3106.	5.8	104
39	Biomimetic organohydrogel electrolytes for highâ€environmental adaptive energy storage devices. EcoMat, 2019, 1, e12008.	6.8	95
40	Lattice Matching and Halogen Regulation for Synergistically Induced Uniform Zinc Electrodeposition by Halogenated Ti₃C₂ MXenes. ACS Nano, 2022, 16, 813-822.	7.3	90
41	Aqueous Rechargeable Metalâ€Ion Batteries Working at Subzero Temperatures. Advanced Science, 2021, 8, 2002590.	5.6	89
42	Recent advances in flexible aqueous zinc-based rechargeable batteries. Nanoscale, 2019, 11, 17992-18008.	2.8	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.	7.3	81
44	Confining Aqueous Znâ€“Br Halide Redox Chemistry by Ti₃C₂T_X MXene. ACS Nano, 2021, 15, 1718-1726.	7.3	78
45	Commencing an Acidic Battery Based on a Copper Anode with Ultrafast Protonâ€Regulated Kinetics and Superior Dendriteâ€Free Property. Advanced Materials, 2019, 31, e1905873.	11.1	77
46	A zinc battery with ultra-flat discharge plateau through phase transition mechanism. Nano Energy, 2020, 71, 104583.	8.2	75
47	Intrinsic voltage plateau of a Nb2CTx MXene cathode in an aqueous electrolyte induced by high-voltage scanning. Joule, 2021, 5, 2993-3005.	11.7	74
48	Self-healable electroluminescent devices. Light: Science and Applications, 2018, 7, 102.	7.7	71
49	A Selfâ€Healing Creaseâ€Free Supramolecular Allâ€Polymer Supercapacitor. Advanced Science, 2021, 8, 2100072.	5.6	70
50	Commencing mild Agâ€“Zn batteries with long-term stability and ultra-flat voltage platform. Energy Storage Materials, 2020, 25, 86-92.	9.5	68
51	Hydrated hybrid vanadium oxide nanowires as the superior cathode for aqueous Zn battery. Materials Today Energy, 2019, 14, 100361.	2.5	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.	9.5	66
53	Coaxialâ€Structured Weavable and Wearable Electroluminescent Fibers. Advanced Electronic Materials, 2017, 3, 1700401.	2.6	63
54	In situ formation of NaTi₂(PO₄)₃ cubes on Ti₃C₂ MXene for dual-mode sodium storage. Journal of Materials Chemistry A, 2018, 6, 18525-18532.	5.2	60

#	Article	IF	Citations
55	Highâ€Voltage Organic Cathodes for Zincâ€Ion Batteries through Electron Cloud and Solvation Structure Regulation. Angewandte Chemie - International Edition, 2022, 61, .	7.2	60
56	Smallâ€Dipoleâ€Moleculeâ€Containing Electrolytes for Highâ€Voltage Aqueous Rechargeable Batteries. Advanced Materials, 2022, 34, e2106180.	11.1	58
57	Ni₃S₂/Ni nanosheet arrays for high-performance flexible zinc hybrid batteries with evident two-stage charge and discharge processes. Journal of Materials Chemistry A, 2019, 7, 18915-18924.	5.2	55
58	Highly Flexible and Bright Electroluminescent Devices Based on Ag Nanowire Electrodes and Topâ€Emission Structure. Advanced Electronic Materials, 2017, 3, 1600535.	2.6	54
59	A manganese hexacyanoferrate framework with enlarged ion tunnels and twoâ€species redox reaction for aqueous Al-ion batteries. Nano Energy, 2021, 84, 105945.	8.2	54
60	Carbon-Based Flexible and All-Solid-State Micro-supercapacitors Fabricated by Inkjet Printing with Enhanced Performance. Nano-Micro Letters, 2017, 9, 19.	14.4	50
61	Conversionâ€Type Nonmetal Elemental Tellurium Anode with High Utilization for Mild/Alkaline Zinc Batteries. Advanced Materials, 2021, 33, e2105426.	11.1	48
62	Toward Multifunctional and Wearable Smart Skins with Energyâ€Harvesting, Touchâ€Sensing, and Exteroceptionâ€Visualizing Capabilities by an Allâ€Polymer Design. Advanced Electronic Materials, 2019, 5, 1900553.	2.6	41
63	A reversible Zn-metal battery. Nature Nanotechnology, 2021, 16, 854-855.	15.6	41
64	Twoâ€Electron Redox Chemistry Enabled Highâ€Performance Iodideâ€Ion Conversion Battery. Angewandte Chemie - International Edition, 2022, 61, .	7.2	34
65	A universal method towards conductive textile for flexible batteries with superior softness. Energy Storage Materials, 2021, 36, 272-278.	9.5	31
66	Reconstructing Vanadium Oxide with Anisotropic Pathways for a Durable and Fast Aqueous K-Ion Battery. ACS Nano, 2021, 15, 17717-17728.	7.3	30
67	In situ/operando analysis of surface reconstruction of transition metal-based oxygen evolution electrocatalysts. Cell Reports Physical Science, 2022, 3, 100729.	2.8	29
68	Tellurium: A High-Performance Cathode for Magnesium Ion Batteries Based on a Conversion Mechanism. ACS Nano, 2022, 16, 5349-5357.	7.3	28
69	Stabilizing Interface pH by Nâ€Modified Graphdiyne for Dendriteâ€Free and Highâ€Rate Aqueous Znâ€Ion Batteries. Angewandte Chemie, 2022, 134, .	1.6	24
70	Effects of Anion Carriers on Capacitance and Selfâ€Discharge Behaviors of Zinc Ion Capacitors. Angewandte Chemie, 2021, 133, 1024-1034.	1.6	21
71	Highâ€Voltage Organic Cathodes for Zincâ€Ion Batteries through Electron Cloud and Solvation Structure Regulation. Angewandte Chemie, 2022, 134, .	1.6	20
72	The energy storage mechanisms of MnO2 in batteries. Current Opinion in Electrochemistry, 2021, 30, 100769.	2.5	19

#	Article	IF	Citations
73	Bis-ammonium salts with strong chemisorption to halide ions for fast and durable aqueous redox Zn ion batteries. Nano Energy, 2022, 98, 107278.	8.2	17
74	An Intrinsically Selfâ€Healing NiCo||Zn Rechargeable Battery with a Selfâ€Healable Ferricâ€Ionâ€Crosslinking Sodium Polyacrylate Hydrogel Electrolyte. Angewandte Chemie, 2018, 130, 9958-9961.	1.6	13
75	Structural properties and enhanced bandgap tunability of quaternary CdZnOS epitaxial films grown by pulsed laser deposition. Journal of Alloys and Compounds, 2015, 650, 748-752.	2.8	11
76	Recent Progress and Challenges of Flexible Zn-Based Batteries with Polymer Electrolyte. Batteries, 2022, 8, 59.	2.1	11
77	Twoâ€Electron Redox Chemistry Enabled Highâ€Performance Iodideâ€Ion Conversion Battery. Angewandte Chemie, 2022, 134, .	1.6	4