Jian-Wen Liu

List of Publications by Year
in descending order

32 papers	2,248 citations	361045 20 h-index	454577 30 g-index
32 all docs	32 docs citations	32 times ranked	2019 citing authors

#	Article	IF	Citations
1	Electrolyte Design for In Situ Construction of Highly Zn²⁺â€Conductive Solid Electrolyte Interphase to Enable Highâ€Performance Aqueous Znâ€Ion Batteries under Practical Conditions. Advanced Materials, 2021, 33, e2007416.	11.1	484
2	Bio-inspired design of anin situmultifunctional polymeric solidâ€“electrolyte interphase for Zn metal anode cycling at 30 mA cm^{â^'2}and 30 mA h cm^{â^'2}. Energy and Environmental Science, 2021, 14, 5947-5957.	15.6	289
3	Tuning the Electrolyte Solvation Structure to Suppress Cathode Dissolution, Water Reactivity, and Zn Dendrite Growth in Zincâ€Ion Batteries. Advanced Functional Materials, 2021, 31, 2104281.	7.8	225
4	Direct regeneration of cathode materials from spent lithium iron phosphate batteries using a solid phase sintering method. RSC Advances, 2017, 7, 4783-4790.	1.7	199
5	Ni₃N/NF as Bifunctional Catalysts for Both Hydrogen Generation and Urea Decomposition. ACS Applied Materials & Interfaces, 2019, 11, 13168-13175.	4.0	147
6	Fluorinated phosphazene derivative â€“ A promising electrolyte additive for high voltage lithium ion batteries: From electrochemical performance to corrosion mechanism. Nano Energy, 2018, 46, 404-414.	8.2	137
7	Phase Compatible NiFe₂O₄ Coating Tunes Oxygen Redox in Li-Rich Layered Oxide. ACS Nano, 2021, 15, 11607-11618.	7.3	95
8	Re-synthesis of nano-structured LiFePO4/graphene composite derived from spent lithium-ion battery for booming electric vehicle application. Journal of Power Sources, 2019, 419, 192-202.	4.0	87
9	Lithium fluoride recovery from cathode material of spent lithium-ion battery. RSC Advances, 2018, 8, 8990-8998.	1.7	66
10	A General Strategy for Antimonyâ€Based Alloy Nanocomposite Embedded in Swissâ€Cheeseâ€Like Nitrogenâ€Doped Porous Carbon for Energy Storage. Advanced Functional Materials, 2021, 31, 2009433.	7.8	62
11	Bi₂Se₃@C Rod-like Architecture with Outstanding Electrochemical Properties in Lithium/Potassium-Ion Batteries. ACS Applied Energy Materials, 2020, 3, 11073-11081.	2.5	61
12	Integrated Polypyrrole@Sulfur@Graphene Aerogel 3D Architecture via Advanced Vapor Polymerization for High-Performance Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2019, 11, 18448-18455.	4.0	53
13	N,N-Dimethylformamide Electrolyte Additive Via a Blocking Strategy Enables High-Performance Lithium-Ion Battery under High Temperature. Journal of Physical Chemistry C, 2019, 123, 5942-5950.	1.5	44
14	Encapsulating MnSe Nanoparticles Inside 3D Hierarchical Carbon Frameworks with Lithium Storage Boosted by in Situ Electrochemical Phase Transformation. ACS Applied Materials & Interfaces, 2019, 11, 33022-33032.	4.0	40
15	In situ growth of ZnO nanodots on carbon hierarchical hollow spheres as high-performance electrodes for lithium-ion batteries. Journal of Alloys and Compounds, 2018, 735, 1079-1087.	2.8	34
16	Lithium Nickel Cobalt Manganese Oxide Recovery via Spray Pyrolysis Directly from the Leachate of Spent Cathode Scraps. ACS Applied Energy Materials, 2019, 2, 6952-6959.	2.5	30
17	Hierarchical Structural Evolution of Zn₂GeO₄ in Binary Solvent and Its Effect on Li-ion Storage Performance. ACS Applied Materials & Interfaces, 2017, 9, 9778-9784.	4.0	26
18	Preparation and characterization of lithium hexafluorophosphate for lithium-ion battery electrolyte. Transactions of Nonferrous Metals Society of China, 2010, 20, 344-348.	1.7	25

#	Article	IF	Citations
19	Synergistic Inorganicâ€“Organic Dual-Additive Electrolytes Enable Practical High-Voltage Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 10447-10456.	4.0	23
20	Graphene-Like Matrix Composites with Fe2O3 and Co3O4 as Cathode Materials for Lithiumâ€“Sulfur Batteries. ACS Applied Nano Materials, 2020, 3, 1382-1390.	2.4	21
21	A closed-loop regeneration of LiNi_{0.6}Co_{0.2}Mn_{0.2}O₂ and graphite from spent batteries via efficient lithium supplementation and structural remodelling. Sustainable Energy and Fuels, 2021, 5, 4981-4991.	2.5	21
22	Encapsulation of BiOCl nanoparticles in N-doped carbon nanotubes as a highly efficient anode for potassium ion batteries. Nanoscale, 2022, 14, 5814-5823.	2.8	18
23	Hierarchical Porous NiO/Î²â€NiMoO₄ Heterostructure as Superior Anode Material for Lithium Storage. ChemPlusChem, 2018, 83, 915-923.	1.3	15
24	Hierarchical structure constructed by manganese oxalate framework with accurate iron doping for ultra-efficient lithium storage. Electrochimica Acta, 2021, 380, 138217.	2.6	10
25	Graphene aerogel supported crystalline ZnO@amorphous Zn₂GeO₄ coreâ€“shell hierarchical structure for lithium storage. RSC Advances, 2017, 7, 17769-17772.	1.7	8
26	Metal multiple-sulfides with nitrogen doped carbon layer for high performance lithium-sulfur batteries. Journal of Alloys and Compounds, 2019, 798, 531-539.	2.8	7
27	1-(2-Cyanoethyl)pyrrole enables excellent battery performance at high temperature via the synergistic effect of Lewis base and Cî€,N functional groups. Chemical Communications, 2020, 56, 8420-8423.	2.2	6
28	Facile synthesis of bimetallic zeolite imidazolate framework with enhanced lithium storage performance. Ionics, 2020, 26, 2107-2115.	1.2	5
29	Nano-Fe2O3-coated NiMoO4 composites for high lithium storage performance. Ionics, 2022, 28, 1501-1510.	1.2	4
30	Synthesis of ZnMoO4 with different polymorphas anode materials for lithiumâ€“ion batteries application. Journal of Materials Science: Materials in Electronics, 2019, 30, 20213-20220.	1.1	3
31	Building a House for Stabilizing Lithiumâ€Metal Anodes. Batteries and Supercaps, 0, , .	2.4	2
32	Novel Nitride-Based Electrodes for Solid-State Batteries. ACS Symposium Series, 0, , 15-38.	0.5	1