Yang Lu

List of Publications by Year
in descending order

23 papers	2,063 citations	331670 21 h-index	642732 23 g-index
24 all docs	24 docs citations	24 times ranked	1508 citing authors

#	Article	IF	Citations
1	Critical Current Density in Solidâ€State Lithium Metal Batteries: Mechanism, Influences, and Strategies. Advanced Functional Materials, 2021, 31, 2009925.	14.9	239
2	The timescale identification decoupling complicated kinetic processes in lithium batteries. Joule, 2022, 6, 1172-1198.	24.0	207
3	An in situ element permeation constructed high endurance Liâ€“LLZO interface at high current densities. Journal of Materials Chemistry A, 2018, 6, 18853-18858.	10.3	157
4	Acid induced conversion towards a robust and lithiophilic interface for Liâ€“Li₇La₃Zr₂O₁₂ solid-state batteries. Journal of Materials Chemistry A, 2019, 7, 14565-14574.	10.3	138
5	Sulfonic Groups Originated Dual-Functional Interlayer for High Performance Lithiumâ€“Sulfur Battery. ACS Applied Materials & Interfaces, 2017, 9, 14878-14888.	8.0	126
6	Highly stable garnet solid electrolyte based Li-S battery with modified anodic and cathodic interfaces. Energy Storage Materials, 2018, 15, 282-290.	18.0	121
7	Engineering a passivating electric double layer for high performance lithium metal batteries. Nature Communications, 2022, 13, 2029.	12.8	113
8	The carrier transition from Li atoms to Li vacancies in solid-state lithium alloy anodes. Science Advances, 2021, 7, eabi5520.	10.3	110
9	Dry electrode technology, the rising star in solid-state battery industrialization. Matter, 2022, 5, 876-898.	10.0	108
10	A 3D Crossâ€Linking Lithiophilic and Electronically Insulating Interfacial Engineering for Garnetâ€Type Solidâ€State Lithium Batteries. Advanced Functional Materials, 2021, 31, 2007815.	14.9	82
11	Anodeâ€Free Solidâ€State Lithium Batteries: A Review. Advanced Energy Materials, 2022, 12, .	19.5	81
12	A Selfâ€Limited Freeâ€Standing Sulfide Electrolyte Thin Film for Allâ€Solidâ€State Lithium Metal Batteries. Advanced Functional Materials, 2021, 31, 2101985.	14.9	77
13	A rGOâ€“CNT aerogel covalently bonded with a nitrogen-rich polymer as a polysulfide adsorptive cathode for high sulfur loading lithium sulfur batteries. Journal of Materials Chemistry A, 2017, 5, 14775-14782.	10.3	71
14	In Situ Lithiophilic Layer from H⁺/Li⁺ Exchange on Garnet Surface for the Stable Lithium-Solid Electrolyte Interface. ACS Applied Materials & Interfaces, 2019, 11, 35030-35038.	8.0	70
15	Method Using Water-Based Solvent to Prepare Li₇La₃Zr₂O₁₂ Solid Electrolytes. ACS Applied Materials & Interfaces, 2018, 10, 17147-17155.	8.0	58
16	Recent Progress in Liquid Electrolyte-Based Liâ€“S Batteries: Shuttle Problem and Solutions. Electrochemical Energy Reviews, 2018, 1, 599-624.	25.5	56
17	Understanding the Impedance Response of Lithium Polysulfide Symmetric Cells. Small Science, 2021, 1, 2100042.	9.9	54
18	Dry electrode technology for scalable and flexible high-energy sulfur cathodes in all-solid-state lithium-sulfur batteries. Journal of Energy Chemistry, 2022, 71, 612-618.	12.9	54

#	Article	IF	Citations
19	Slryâ€Coated Sulfur/Sulfide Cathode with Li Metal Anode for Allâ€Solidâ€State Lithiumâ€Sulfur Pouch Cells. Batteries and Supercaps, 2020, 3, 596-603.	4.7	50
20	Rationally Designed Fluorinated Amide Additive Enables the Stable Operation of Lithium Metal Batteries by Regulating the Interfacial Chemistry. Nano Letters, 2022, 22, 5936-5943.	9.1	36
21	From protonation & Li-rich contamination to grain-boundary segregation: Evaluations of solvent-free vs. wet routes on preparing Li7La3Zr2O12 solid electrolyte. Journal of Energy Chemistry, 2022, 73, 223-239.	12.9	24
22	Highly active mixed-valent MnO_xspheres constructed by nanocrystals as efficient catalysts for long-cycle Liâ€“O₂batteries. Journal of Materials Chemistry A, 2016, 4, 17129-17137.	10.3	22
23	Li 1.5 Al 0.5 Ge 1.5 (PO 4) 3 Ceramic Based Lithiumâ€Sulfur Batteries with High Cycling Stability Enabled by a Dual Confinement Effect for Polysulfides. ChemElectroChem, 2020, 7, 4093-4100.	3.4	9