Xiao Huang

List of Publications by Year
in descending order

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32 papers	1,815 citations	331670 21 h-index	434195 31 g-index
32 all docs	32 docs citations	32 times ranked	1617 citing authors

#	Article	IF	Citations
1	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
2	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
3	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
4	Pre-modified Li3PS4 based interphase for lithium anode towards high-performance Li-S battery. Energy Storage Materials, 2018, 11, 16-23.	18.0	119
5	Manipulating Li2O atmosphere for sintering dense Li7La3Zr2O12 solid electrolyte. Energy Storage Materials, 2019, 22, 207-217.	18.0	114
6	A gel-ceramic multi-layer electrolyte for long-life lithium sulfur batteries. Chemical Communications, 2016, 52, 1637-1640.	4.1	113
7	A Li-Garnet composite ceramic electrolyte and its solid-state Li-S battery. Journal of Power Sources, 2018, 382, 190-197.	7.8	111
8	Two-step sintering strategy to prepare dense Li-Garnet electrolyte ceramics with high Li+ conductivity. Ceramics International, 2018, 44, 5660-5667.	4.8	82
9	Overcoming the abnormal grain growth in Ga-doped Li7La3Zr2O12 to enhance the electrochemical stability against Li metal. Ceramics International, 2019, 45, 14991-14996.	4.8	82
10	Preparation of dense Ta-LLZO/MgO composite Li-ion solid electrolyte: Sintering, microstructure, performance and the role of MgO. Journal of Energy Chemistry, 2019, 39, 8-16.	12.9	74
11	Electronic and ionic co-conductive coating on the separator towards high-performance lithiumâ€“sulfur batteries. Journal of Power Sources, 2016, 306, 347-353.	7.8	72
12	Method Using Water-Based Solvent to Prepare Li₇La₃Zr₂O₁₂ Solid Electrolytes. ACS Applied Materials & Interfaces, 2018, 10, 17147-17155.	8.0	58
13	A hybrid electrolyte for long-life semi-solid-state lithium sulfur batteries. Journal of Materials Chemistry A, 2017, 5, 13971-13975.	10.3	52
14	Phase transformation and grain-boundary segregation in Al-Doped Li7La3Zr2O12 ceramics. Ceramics International, 2021, 47, 22768-22775.	4.8	50
15	Sintering, micro-structure and Li+ conductivity of Li7â^'La3Zr2â^'Nb O12/MgO (xâ€¯=â€¯0.2â€“0.7) Li-Garnet composite ceramics. Ceramics International, 2019, 45, 56-63.	4.8	48
16	An ion-conductive Li1.5Al0.5Ge1.5(PO4)3-based composite protective layer for lithium metal anode in lithium-sulfur batteries. Journal of Power Sources, 2018, 377, 36-43.	7.8	47
17	Influence of La2Zr2O7 Additive on Densification and Li+ Conductivity for Ta-Doped Li7La3Zr2O12 Garnet. Jom, 2016, 68, 2593-2600.	1.9	46
18	Niâ€CeO₂ Heterostructures in Liâ€S Batteries: A Balancing Act between Adsorption and Catalytic Conversion of Polysulfide. Advanced Science, 2022, 9, e2105538.	11.2	45

#	Article	IF	Citations
19	Synthesis of Ga-doped Li7La3Zr2O12 solid electrolyte with high Li+ ion conductivity. Ceramics International, 2021, 47, 2123-2130.	4.8	33
20	Constructing stable Li-solid electrolyte interphase to achieve dendrites-free solid-state battery: A nano-interlayer/Li pre-reduction strategy. Nano Research, 2022, 15, 7180-7189.	10.4	28
21	None-Mother-Powder Method to Prepare Dense Li-Garnet Solid Electrolytes with High Critical Current Density. ACS Applied Energy Materials, 0, , .	5.1	27
22	Rapid preparation and performances of garnet electrolyte with sintering aids for solid-state Liâ€“S battery. Ceramics International, 2021, 47, 18196-18204.	4.8	25
23	Chiral Ligand-Induced Structural Transformation of Low-Dimensional Hybrid Perovskite for Circularly Polarized Photodetection. Chemistry of Materials, 2022, 34, 2955-2962.	6.7	24
24	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
25	A rational design of garnet-type Li7La3Zr2O12 with ultrahigh moisture stability. Energy Storage Materials, 2022, 49, 278-290.	18.0	21
26	Searching for low-cost Li MO compounds for compensating Li-loss in sintering of Li-Garnet solid electrolyte. Journal of Materiomics, 2019, 5, 221-228.	5.7	20
27	Developing Preparation Craft Platform for Solid Electrolytes Containing Volatile Components: Experimental Study of Competition between Lithium Loss and Densification in Li₇La₃Zr₂O₁₂. ACS Applied Materials & Interfaces, 2022, 14, 33340-33354.	8.0	20
28	Efficient Mutual-Compensating Li-Loss Strategy toward Highly Conductive Garnet Ceramics for Li-Metal Solid-State Batteries. ACS Applied Materials & Interfaces, 2021, 13, 56054-56063.	8.0	19
29	Reduced free-standing Co₃O₄@Ni cathode for lithiumâ€“oxygen batteries with enhanced electrochemical performance. RSC Advances, 2016, 6, 16263-16267.	3.6	16
30	High-performance lithium storage in an ultrafine manganese fluoride nanorod anode with enhanced electrochemical activation based on conversion reaction. Physical Chemistry Chemical Physics, 2016, 18, 3780-3787.	2.8	15
31	Controlled construction of 3D hierarchical manganese fluoride nanostructures via an oleylamine-assisted solvothermal route with high performance for rechargeable lithium ion batteries. RSC Advances, 2016, 6, 27170-27176.	3.6	10
32	Protected Sulfur Cathode with Mixed Conductive Coating Layer for Lithium Sulfur Battery. Jom, 2016, 68, 2601-2606.	1.9	4