

Chao Xu

List of Publications by Year in descending order

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29
papers

2,466
citations

361045

20
h-index

500791

28
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31
all docs

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docs citations

31
times ranked

3458
citing authors

#	ARTICLE	IF	CITATIONS
1	Improved Performance of the Silicon Anode for Li-Ion Batteries: Understanding the Surface Modification Mechanism of Fluoroethylene Carbonate as an Effective Electrolyte Additive. <i>Chemistry of Materials</i> , 2015, 27, 2591-2599.	3.2	494
2	Bulk fatigue induced by surface reconstruction in layered Ni-rich cathodes for Li-ion batteries. <i>Nature Materials</i> , 2021, 20, 84-92.	13.3	349
3	Interface layer formation in solid polymer electrolyte lithium batteries: an XPS study. <i>Journal of Materials Chemistry A</i> , 2014, 2, 7256-7264.	5.2	296
4	Evolution of Structure and Lithium Dynamics in $\text{LiNi}_{0.8}\text{Mn}_{0.1}\text{Co}_{0.1}\text{O}_2$ (NMC811) Cathodes during Electrochemical Cycling. <i>Chemistry of Materials</i> , 2019, 31, 2545-2554.	3.2	228
5	Phase Behavior during Electrochemical Cycling of Ni-Rich Cathode Materials for Li-Ion Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2003404.	10.2	153
6	SEI Formation and Interfacial Stability of a Si Electrode in a LiTDI-Salt Based Electrolyte with FEC and VC Additives for Li-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 15758-15766.	4.0	105
7	At the polymer electrolyte interfaces: the role of the polymer host in interphase layer formation in Li-batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 13994-14000.	5.2	101
8	Flexible freestanding Cladophora nanocellulose paper based Si anodes for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 14109-14115.	5.2	91
9	Operando NMR of NMC811/Graphite Lithium-Ion Batteries: Structure, Dynamics, and Lithium Metal Deposition. <i>Journal of the American Chemical Society</i> , 2020, 142, 17447-17456.	6.6	79
10	LiTDI: A Highly Efficient Additive for Electrolyte Stabilization in Lithium-Ion Batteries. <i>Chemistry of Materials</i> , 2017, 29, 2254-2263.	3.2	69
11	Conducting polymer paper-derived separators for lithium metal batteries. <i>Energy Storage Materials</i> , 2018, 13, 283-292.	9.5	64
12	Unraveling and Mitigating the Storage Instability of Fluoroethylene Carbonate-Containing LiPF_6 Electrolytes To Stabilize Lithium Metal Anodes for High-Temperature Rechargeable Batteries. <i>ACS Applied Energy Materials</i> , 2019, 2, 4925-4935.	2.5	49
13	Effect of Anode Slippage on Cathode Cutoff Potential and Degradation Mechanisms in Ni-Rich Li-Ion Batteries. <i>Cell Reports Physical Science</i> , 2020, 1, 100253.	2.8	42
14	Transition Metal Dissolution and Degradation in NMC811-Graphite Electrochemical Cells. <i>Journal of the Electrochemical Society</i> , 2021, 168, 060518.	1.3	42
15	Co_3O_4 -Catalyzed LiOH Chemistry in Li^+O_2 Batteries. <i>ACS Energy Letters</i> , 2020, 5, 3681-3691.	8.8	37
16	A high pressure x-ray photoelectron spectroscopy experimental method for characterization of solid-liquid interfaces demonstrated with a Li-ion battery system. <i>Review of Scientific Instruments</i> , 2015, 86, 044101.	0.6	34
17	A hard X-ray photoelectron spectroscopy study on the solid electrolyte interphase of a lithium 4,5-dicyano-2-(trifluoromethyl)imidazolid based electrolyte for Si-electrodes. <i>Journal of Power Sources</i> , 2016, 301, 105-112.	4.0	33
18	On the Capacity Losses Seen for Optimized Nano-Si Composite Electrodes in Li-Metal Half-Cells. <i>Advanced Energy Materials</i> , 2019, 9, 1901608.	10.2	32

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19	Cycle-Induced Interfacial Degradation and Transition-Metal Cross-Over in $\text{LiNi}_{0.8}\text{Mn}_{0.1}\text{Co}_{0.1}\text{O}_2$ Graphite Cells. Chemistry of Materials, 2022, 34, 2034-2048.	3.2	28
20	Conducting Polymer Paper-Derived Mesoporous 3D N-doped Carbon Current Collectors for Na and Li Metal Anodes: A Combined Experimental and Theoretical Study. Journal of Physical Chemistry C, 2018, 122, 23352-23363.	1.5	27
21	Conducting Polymer Paper-Based Cathodes for High-Areal-Capacity Lithium-Organic Batteries. Energy Technology, 2015, 3, 563-569.	1.8	21
22	Modelling the morphological background to capacity fade in Si-based lithium-ion batteries. Electrochimica Acta, 2017, 258, 755-763.	2.6	19
23	Excess Lithium in Transition Metal Layers of Epitaxially Grown Thin Film Cathodes of Li_2MnO_3 Leads to Rapid Loss of Covalency during First Battery Cycle. Journal of Physical Chemistry C, 2019, 123, 28519-28526.	1.5	19
24	The Role of LiTDI Additive in $\text{LiNi}_{1/3}\text{Mn}_{1/3}\text{Co}_{1/3}\text{O}_2$ /Graphite Lithium-Ion Batteries at Elevated Temperatures. Journal of the Electrochemical Society, 2018, 165, A40-A46.	1.3	16
25	Towards Li-Ion Batteries Operating at 80 °C: Ionic Liquid versus Conventional Liquid Electrolytes. Batteries, 2018, 4, 2.	2.1	14
26	Spatially Resolved Operando Synchrotron-Based X-Ray Diffraction Measurements of Ni-Rich Cathodes for Li-Ion Batteries. Frontiers in Chemical Engineering, 2022, 3, .	1.3	9
27	An Effective Way to Stabilize Ni-Rich Layered Cathodes. Chem, 2020, 6, 3165-3167.	5.8	8
28	The Complex Role of Aluminium Contamination in Nickel-Rich Layered Oxide Cathodes for Lithium-Ion Batteries. Batteries and Supercaps, 2021, 4, 1813-1820.	2.4	7
29	The Complex Role of Aluminium Contamination in Nickel-Rich Layered Oxide Cathodes for Lithium-Ion Batteries. Batteries and Supercaps, 2021, 4, 1783-1784.	2.4	0