Chao Xu

List of Publications by Year
in descending order

29 papers	2,466 citations	361045 20 h-index	500791 28 g-index
31 all docs	31 docs citations	31 times ranked	3458 citing authors

#	Article	IF	Citations
1	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
2	Cycle-Induced Interfacial Degradation and Transition-Metal Cross-Over in LiNi_{0.8}Mn_{0.1}Co_{0.1}O₂â€“Graphite Cells. Chemistry of Materials, 2022, 34, 2034-2048.	3.2	28
3	Phase Behavior during Electrochemical Cycling of Niâ€Rich Cathode Materials for Liâ€Ion Batteries. Advanced Energy Materials, 2021, 11, 2003404.	10.2	153
4	Bulk fatigue induced by surface reconstruction in layered Ni-rich cathodes for Li-ion batteries. Nature Materials, 2021, 20, 84-92.	13.3	349
5	Transition Metal Dissolution and Degradation in NMC811-Graphite Electrochemical Cells. Journal of the Electrochemical Society, 2021, 168, 060518.	1.3	42
6	The Complex Role of Aluminium Contamination in Nickelâ€Rich Layered Oxide Cathodes for Lithiumâ€Ion Batteries. Batteries and Supercaps, 2021, 4, 1813-1820.	2.4	7
7	The Complex Role of Aluminium Contamination in Nickelâ€Rich Layered Oxide Cathodes for Lithiumâ€Ion Batteries. Batteries and Supercaps, 2021, 4, 1783-1784.	2.4	0
8	An Effective Way to Stabilize Ni-Rich Layered Cathodes. CheM, 2020, 6, 3165-3167.	5.8	8
9	Co₃O₄-Catalyzed LiOH Chemistry in Liâ€“O₂ Batteries. ACS Energy Letters, 2020, 5, 3681-3691.	8.8	37
10	Effect of Anode Slippage on Cathode Cutoff Potential and Degradation Mechanisms in Ni-Rich Li-Ion Batteries. Cell Reports Physical Science, 2020, 1, 100253.	2.8	42
11	Operando NMR of NMC811/Graphite Lithium-Ion Batteries: Structure, Dynamics, and Lithium Metal Deposition. Journal of the American Chemical Society, 2020, 142, 17447-17456.	6.6	79
12	On the Capacity Losses Seen for Optimized Nanoâ€Si Composite Electrodes in Liâ€Metal Halfâ€Cells. Advanced Energy Materials, 2019, 9, 1901608.	10.2	32
13	Unraveling and Mitigating the Storage Instability of Fluoroethylene Carbonate-Containing LiPF₆ Electrolytes To Stabilize Lithium Metal Anodes for High-Temperature Rechargeable Batteries. ACS Applied Energy Materials, 2019, 2, 4925-4935.	2.5	49
14	Excess Lithium in Transition Metal Layers of Epitaxially Grown Thin Film Cathodes of Li₂MnO₃ Leads to Rapid Loss of Covalency during First Battery Cycle. Journal of Physical Chemistry C, 2019, 123, 28519-28526.	1.5	19
15	Evolution of Structure and Lithium Dynamics in LiNi_{0.8}Mn_{0.1}Co_{0.1}O₂ (NMC811) Cathodes during Electrochemical Cycling. Chemistry of Materials, 2019, 31, 2545-2554.	3.2	228
16	Conducting polymer paper-derived separators for lithium metal batteries. Energy Storage Materials, 2018, 13, 283-292.	9.5	64
17	The Role of LiTDI Additive in LiNi_{1/3}Mn_{1/3}Co_{1/3}O₂/Graphite Lithium-Ion Batteries at Elevated Temperatures. Journal of the Electrochemical Society, 2018, 165, A40-A46.	1.3	16
18	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

#	Article	IF	Citations
19	Towards Li-Ion Batteries Operating at 80 Â°C: Ionic Liquid versus Conventional Liquid Electrolytes. Batteries, 2018, 4, 2.	2.1	14
20	LiTDI: A Highly Efficient Additive for Electrolyte Stabilization in Lithium-Ion Batteries. Chemistry of Materials, 2017, 29, 2254-2263.	3.2	69
21	Modelling the morphological background to capacity fade in Si-based lithium-ion batteries. Electrochimica Acta, 2017, 258, 755-763.	2.6	19
22	SEI Formation and Interfacial Stability of a Si Electrode in a LiTDI-Salt Based Electrolyte with FEC and VC Additives for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 15758-15766.	4.0	105
23	A hard X-ray photoelectron spectroscopy study on the solid electrolyte interphase of a lithium 4,5-dicyano-2-(trifluoromethyl)imidazolide based electrolyte for Si-electrodes. Journal of Power Sources, 2016, 301, 105-112.	4.0	33
24	Conducting Polymer Paperâ€Based Cathodes for Highâ€Arealâ€Capacity Lithiumâ€"Organic Batteries. Energy Technology, 2015, 3, 563-569.	1.8	21
25	At the polymer electrolyte interfaces: the role of the polymer host in interphase layer formation in Li-batteries. Journal of Materials Chemistry A, 2015, 3, 13994-14000.	5.2	101
26	Flexible freestanding Cladophora nanocellulose paper based Si anodes for lithium-ion batteries. Journal of Materials Chemistry A, 2015, 3, 14109-14115.	5.2	91
27	A high pressure x-ray photoelectron spectroscopy experimental method for characterization of solid-liquid interfaces demonstrated with a Li-ion battery system. Review of Scientific Instruments, 2015, 86, 044101.	0.6	34
28	Improved Performance of the Silicon Anode for Li-Ion Batteries: Understanding the Surface Modification Mechanism of Fluoroethylene Carbonate as an Effective Electrolyte Additive. Chemistry of Materials, 2015, 27, 2591-2599.	3.2	494
29	Interface layer formation in solid polymer electrolyte lithium batteries: an XPS study. Journal of Materials Chemistry A, 2014, 2, 7256-7264.	5.2	296