Yuzhang Li

List of Publications by Year
in descending order

53 papers	14,944 citations	57758 44 h-index	161849 54 g-index
57 all docs	57 docs citations	57 times ranked	14567 citing authors

#	Article	IF	Citations
1	Capturing the swelling of solid-electrolyte interphase in lithium metal batteries. Science, 2022, 375, 66-70.	12.6	183
2	Spheres of Graphene and Carbon Nanotubes Embedding Silicon as Mechanically Resilient Anodes for Lithium-Ion Batteries. Nano Letters, 2022, 22, 3054-3061.	9.1	42
3	Cathode-Electrolyte Interphase in Lithium Batteries Revealed by Cryogenic Electron Microscopy. Matter, 2021, 4, 302-312.	10.0	127
4	Corrosion of lithium metal anodes during calendar ageing and its microscopic origins. Nature Energy, 2021, 6, 487-494.	39.5	124
5	In situ formation of ionically conductive nanointerphase on Si particles for stable battery anode. Science China Chemistry, 2021, 64, 1417-1425.	8.2	28
6	Resolve cathode electrolyte interphase in lithium batteries with cryo-EM. Microscopy and Microanalysis, 2021, 27, 2188-2190.	0.4	0
7	Atomically Thin Bilayer Janus Membranes for Cryo-electron Microscopy. ACS Nano, 2021, 15, 16562-16571.	14.6	5
8	Synergistic enhancement of electrocatalytic CO2 reduction to C2 oxygenates at nitrogen-doped nanodiamonds/Cu interface. Nature Nanotechnology, 2020, 15, 131-137.	31.5	169
9	Designing a Nanoscale Three-phase Electrochemical Pathway to Promote Pt-catalyzed Formaldehyde Oxidation. Nano Letters, 2020, 20, 8719-8724.	9.1	15
10	Opportunities for Cryogenic Electron Microscopy in Materials Science and Nanoscience. ACS Nano, 2020, 14, 9263-9276.	14.6	55
11	Cryogenic-electron Microscopy for Battery Materials. Microscopy and Microanalysis, 2020, 26, 1824-1825.	0.4	0
12	Resolving Nanoscale Heterogeneity in Battery Interphases with Cryo-EM. Microscopy and Microanalysis, 2020, 26, 2786-2788.	0.4	0
13	Resolving Nanoscopic and Mesoscopic Heterogeneity of Fluorinated Species in Battery Solid-Electrolyte Interphases by Cryogenic Electron Microscopy. ACS Energy Letters, 2020, 5, 1128-1135.	17.4	199
14	Tortuosity Effects in Lithium-Metal Host Anodes. Joule, 2020, 4, 938-952.	24.0	150
15	Evolution of the Solidâ€"Electrolyte Interphase on Carbonaceous Anodes Visualized by Atomic-Resolution Cryogenic Electron Microscopy. Nano Letters, 2019, 19, 5140-5148.	9.1	132
16	Improving cyclability of Li metal batteries at elevated temperatures and its origin revealed by cryo-electron microscopy. Nature Energy, 2019, 4, 664-670.	39.5	336
17	Lithium Metal Anode Materials Design: Interphase and Host. Electrochemical Energy Reviews, 2019, 2, 509-517.	25.5	156
18	Dynamic Structure and Chemistry of the Silicon Solid-Electrolyte Interphase Visualized by Cryogenic Electron Microscopy. Matter, 2019, 1, 1232-1245.	10.0	107

#	ARTICLE	IF	CITATIONS
19	Unravelling Degradation Mechanisms and Atomic Structure of Organic-Inorganic Halide Perovskites by Cryo-EM. Joule, 2019, 3, 2854-2866.	24.0	99
20	Fast galvanic lithium corrosion involving a Kirkendall-type mechanism. Nature Chemistry, 2019, 11, 382-389.	13.6	180
21	Wrinkled Graphene Cages as Hosts for High-Capacity Li Metal Anodes Shown by Cryogenic Electron Microscopy. Nano Letters, 2019, 19, 1326-1335.	9.1	193
22	Cryo-EM Structures of Atomic Surfaces and Host-Guest Chemistry in Metal-Organic Frameworks. Matter, 2019, 1, 428-438.	10.0	102
23	Design of Red Phosphorus Nanostructured Electrode for Fast-Charging Lithium-Ion Batteries with High Energy Density. Joule, 2019, 3, 1080-1093.	24.0	168
24	Nanostructural and Electrochemical Evolution of the Solid-Electrolyte Interphase on CuO Nanowires Revealed by Cryogenic-Electron Microscopy and Impedance Spectroscopy. ACS Nano, 2019, 13, 737-744.	14.6	78
25	A manganeseâ€"hydrogen battery with potential for grid-scale energy storage. Nature Energy, 2018, 3, 428-435.	39.5	325
26	Robust Pinhole-free Li₃N Solid Electrolyte Grown from Molten Lithium. ACS Central Science, 2018, 4, 97-104.	11.3	197
27	Looking cool. Nature Energy, 2018, 3, 1023-1024.	39.5	4
28	Correlating Structure and Function of Battery Interphases at Atomic Resolution Using Cryoelectron Microscopy. Joule, 2018, 2, 2167-2177.	24.0	284
29	Catalyst: How Cryo-EM Shapes the Development of Next-Generation Batteries. CheM, 2018, 4, 2250-2252.	11.7	24
30	Shell-Protective Secondary Silicon Nanostructures as Pressure-Resistant High-Volumetric-Capacity Anodes for Lithium-Ion Batteries. Nano Letters, 2018, 18, 7060-7065.	9.1	121
31	Solubility-mediated sustained release enabling nitrate additive in carbonate electrolytes for stable lithium metal anode. Nature Communications, 2018, 9, 3656.	12.8	371
32	Engineering stable interfaces for three-dimensional lithium metal anodes. Science Advances, 2018, 4, eaat5168.	10.3	153
33	Nanoscale Nucleation and Growth of Electrodeposited Lithium Metal. Nano Letters, 2017, 17, 1132-1139.	9.1	1,081
34	Identifying the Active Surfaces of Electrochemically Tuned LiCoO₂for Oxygen Evolution Reaction. Journal of the American Chemical Society, 2017, 139, 6270-6276.	13.7	143
35	Atomic structure of sensitive battery materials and interfaces revealed by cryoâ€"electron microscopy. Science, 2017, 358, 506-510.	12.6	1,039
36	Sulfur-Modulated Tin Sites Enable Highly Selective Electrochemical Reduction of CO2 to Formate. Joule, 2017, 1, 794-805.	24.0	390

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37	Surface Fluorination of Reactive Battery Anode Materials for Enhanced Stability. Journal of the American Chemical Society, 2017, 139, 11550-11558.	13.7	398
38	Ultrahighâ€“current density anodes with interconnected Li metal reservoir through overlithiation of mesoporous AlF ₃ framework. Science Advances, 2017, 3, e1701301.	10.3	199
39	Revealing Nanoscale Passivation and Corrosion Mechanisms of Reactive Battery Materials in Gas Environments. Nano Letters, 2017, 17, 5171-5178.	9.1	88
40	Air-stable and freestanding lithium alloy/graphene foil as an alternative to lithium metal anodes. Nature Nanotechnology, 2017, 12, 993-999.	31.5	376
41	Stabilized Li3N for efficient battery cathode prelithiation. Energy Storage Materials, 2017, 6, 119-124.	18.0	143
42	In Situ Electrochemically Derived Nanoporous Oxides from Transition Metal Dichalcogenides for Active Oxygen Evolution Catalysts. Nano Letters, 2016, 16, 7588-7596.	9.1	186
43	Direct and continuous strain control of catalysts with tunable battery electrode materials. Science, 2016, 354, 1031-1036.	12.6	512
44	Entrapment of Polysulfides by a Blackâ€Phosphorusâ€Modified Separator for Lithiumâ€“Sulfur Batteries. Advanced Materials, 2016, 28, 9797-9803.	21.0	453
45	Growth of conformal graphene cages on micrometre-sized silicon particles as stable battery anodes. Nature Energy, 2016, 1, .	39.5	609
46	Fast and reversible thermoresponsive polymer switching materials for safer batteries. Nature Energy, 2016, 1, .	39.5	253
47	High-capacity battery cathode prelithiation to offset initial lithium loss. Nature Energy, 2016, 1, .	39.5	265
48	Selective deposition and stable encapsulation of lithium through heterogeneous seeded growth. Nature Energy, 2016, 1, .	39.5	1,516
49	Perspectives in in situ transmission electron microscopy studies on lithium battery electrodes. Current Opinion in Chemical Engineering, 2016, 12, 37-43.	7.8	26
50	Ionic Conductivity Enhancement of Polymer Electrolytes with Ceramic Nanowire Fillers. Nano Letters, 2015, 15, 2740-2745.	9.1	782
51	Nonfilling Carbon Coating of Porous Silicon Micrometer-Sized Particles for High-Performance Lithium Battery Anodes. ACS Nano, 2015, 9, 2540-2547.	14.6	433
52	In Situ Electrochemical Oxidation Tuning of Transition Metal Disulfides to Oxides for Enhanced Water Oxidation. ACS Central Science, 2015, 1, 244-251.	11.3	373
53	A phosphoreneâ€“graphene hybrid material as a high-capacity anode for sodium-ion batteries. Nature Nanotechnology, 2015, 10, 980-985.	31.5	1,287