Yaxiang Lu

List of Publications by Year in descending order

63 papers	8,344 citations	70961 41 h-index	123241 61 g-index
63 all docs	63 docs citations	63 times ranked	6196 citing authors

#	Article	IF	Citations
1	Building aqueous K-ion batteries for energy storage. Nature Energy, 2019, 4, 495-503.	19.8	630
2	Rational design of layered oxide materials for sodium-ion batteries. Science, 2020, 370, 708-711.	6.0	616
3	Intercalation chemistry of graphite: alkali metal ions and beyond. Chemical Society Reviews, 2019, 48, 4655-4687.	18.7	534
4	Fundamentals, status and promise of sodium-based batteries. Nature Reviews Materials, 2021, 6, 1020-1035.	23.3	496
5	Solidâ€State Sodium Batteries. Advanced Energy Materials, 2018, 8, 1703012.	10.2	478
6	Recent advances of electrode materials for low-cost sodium-ion batteries towards practical application for grid energy storage. Energy Storage Materials, 2017, 7, 130-151.	9.5	469
7	Highâ€Entropy Layered Oxide Cathodes for Sodiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2020, 59, 264-269.	7.2	335
8	Drawing a Soft Interface: An Effective Interfacial Modification Strategy for Garnet-Type Solid-State Li Batteries. ACS Energy Letters, 2018, 3, 1212-1218.	8.8	321
9	Anionic Redox Reaction-Induced High-Capacity and Low-Strain Cathode with Suppressed Phase Transition. Joule, 2019, 3, 503-517.	11.7	262
10	Regulating Pore Structure of Hierarchical Porous Waste Corkâ€Derived Hard Carbon Anode for Enhanced Na Storage Performance. Advanced Energy Materials, 2019, 9, 1902852.	10.2	212
11	Advanced Nanostructured Anode Materials for Sodiumâ€Ion Batteries. Small, 2017, 13, 1701835.	5.2	206
12	Revealing High Na-Content P2-Type Layered Oxides as Advanced Sodium-Ion Cathodes. Journal of the American Chemical Society, 2020, 142, 5742-5750.	6.6	206
13	Tuning the Closed Pore Structure of Hard Carbons with the Highest Na Storage Capacity. ACS Energy Letters, 2019, 4, 2608-2612.	8.8	205
14	Hardâ€“Soft Carbon Composite Anodes with Synergistic Sodium Storage Performance. Advanced Functional Materials, 2019, 29, 1901072.	7.8	191
15	Preâ€Oxidationâ€Tuned Microstructures of Carbon Anodes Derived from Pitch for Enhancing Na Storage Performance. Advanced Energy Materials, 2018, 8, 1800108.	10.2	179
16	A high-performance sodium-ion battery enhanced by macadamia shell derived hard carbon anode. Nano Energy, 2017, 39, 489-498.	8.2	172
17	Slopeâ€Dominated Carbon Anode with High Specific Capacity and Superior Rate Capability for High Safety Naâ€Ion Batteries. Angewandte Chemie - International Edition, 2019, 58, 4361-4365.	7.2	171
18	Research and development of advanced battery materials in China. Energy Storage Materials, 2019, 23, 144-153.	9.5	168

#	Article	IF	Citations
19	Interfacial engineering to achieve an energy density of over 200â€‰Whâ€‰kgâ^'1 in sodium batteries. Nature Energy, 2022, 7, 511-519.	19.8	130
20	Structural Engineering of Multishelled Hollow Carbon Nanostructures for Highâ€Performance Naâ€Ion Battery Anode. Advanced Energy Materials, 2018, 8, 1800855.	10.2	121
21	Ultralow-Concentration Electrolyte for Na-Ion Batteries. ACS Energy Letters, 2020, 5, 1156-1158.	8.8	120
22	Using High-Entropy Configuration Strategy to Design Na-Ion Layered Oxide Cathodes with Superior Electrochemical Performance and Thermal Stability. Journal of the American Chemical Society, 2022, 144, 8286-8295.	6.6	112
23	2019 Nobel Prize for the Li-Ion Batteries and New Opportunities and Challenges in Na-Ion Batteries. ACS Energy Letters, 2019, 4, 2689-2690.	8.8	109
24	Flexible Na batteries. InformaÄ‌Ã-MateriÃ¡ly, 2020, 2, 126-138.	8.5	108
25	High-temperature treatment induced carbon anode with ultrahigh Na storage capacity at low-voltage plateau. Science Bulletin, 2018, 63, 1125-1129.	4.3	107
26	Multi-electron reaction materials for sodium-based batteries. Materials Today, 2018, 21, 960-973.	8.3	103
27	A Novel Ni-rich O3-Na[Ni0.60Fe0.25Mn0.15]O2 Cathode for Na-ion Batteries. Energy Storage Materials, 2020, 30, 420-430.	9.5	102
28	Advanced Na metal anodes. Journal of Energy Chemistry, 2018, 27, 1584-1596.	7.1	99
29	A novel NASICON-based glass-ceramic composite electrolyte with enhanced Na-ion conductivity. Energy Storage Materials, 2019, 23, 514-521.	9.5	97
30	The Mystery of Electrolyte Concentration: From Superhigh to Ultralow. ACS Energy Letters, 2020, 5, 3633-3636.	8.8	96
31	Superior electrochemical performance of sodium-ion full-cell using poplar wood derived hard carbon anode. Energy Storage Materials, 2019, 18, 269-279.	9.5	94
32	Novel Methods for Sodiumâ€Ion Battery Materials. Small Methods, 2017, 1, 1600063.	4.6	84
33	Ti Substitution Facilitating Oxygen Oxidation in Na2/3Mg1/3Ti1/6Mn1/2O2 Cathode. CheM, 2019, 5, 2913-2925.	5.8	75
34	Unveiling the role of hydrothermal carbon dots as anodes in sodium-ion batteries with ultrahigh initial coulombic efficiency. Journal of Materials Chemistry A, 2019, 7, 27567-27575.	5.2	69
35	Ni-based cathode materials for Na-ion batteries. Nano Research, 2019, 12, 2018-2030.	5.8	67
36	Decreasing transition metal triggered oxygen redox activity in Na-deficient oxides. Energy Storage Materials, 2019, 20, 395-400.	9.5	58

#	Article	IF	Citations
37	Screening Heteroatom Configurations for Reversible Sloping Capacity Promises Highâ€Power Naâ€Ion Batteries. Angewandte Chemie - International Edition, 2022, 61, .	7.2	58
38	Hunting Sodium Dendrites in NASICON-Based Solid-State Electrolytes. Energy Material Advances, 2021, 2021, .	4.7	57
39	Retarding graphitization of soft carbon precursor: From fusion-state to solid-state carbonization. Energy Storage Materials, 2020, 26, 577-584.	9.5	56
40	Review on anionic redox for high-capacity lithium- and sodium-ion batteries. Journal Physics D: Applied Physics, 2017, 50, 183001.	1.3	53
41	Revealing an Interconnected Interfacial Layer in Solidâ€State Polymer Sodium Batteries. Angewandte Chemie - International Edition, 2019, 58, 17026-17032.	7.2	48
42	Stabilizing a sodium-metal battery with the synergy effects of a sodiophilic matrix and fluorine-rich interface. Journal of Materials Chemistry A, 2019, 7, 24857-24867.	5.2	48
43	Disordered carbon anodes for Na-ion batteriesâ€"quo vadis?. Science China Chemistry, 2021, 64, 1679-1692.	4.2	44
44	A new Tin-based O3-Na0.9[Ni0.45â^'/2Mn Sn0.55â^'/2]O2 as sodium-ion battery cathode. Journal of Energy Chemistry, 2019, 31, 132-137.	7.1	39
45	PEO-NaPF₆ Blended Polymer Electrolyte for Solid State Sodium Battery. Journal of the Electrochemical Society, 2020, 167, 070523.	1.3	37
46	Slopeâ€Dominated Carbon Anode with High Specific Capacity and Superior Rate Capability for High Safety Naâ€Ion Batteries. Angewandte Chemie, 2019, 131, 4405-4409.	1.6	36
47	Additiveâ€Free Selfâ€Presodiation Strategy for Highâ€Performance Naâ€Ion Batteries. Advanced Functional Materials, 2021, 31, 2101475.	7.8	36
48	Constructing Naâ€Ion Cathodes via Alkaliâ€Site Substitution. Advanced Functional Materials, 2020, 30, 1910840.	7.8	28
49	Failure analysis with a focus on thermal aspect towards developing safer Na-ion batteries*. Chinese Physics B, 2020, 29, 048201.	0.7	26
50	Screening Heteroatom Configurations for Reversible Sloping Capacity Promises Highâ€Power Naâ€Ion Batteries. Angewandte Chemie, 0, , .	1.6	23
51	Anthraquinone derivative as high-performance anode material for sodium-ion batteries using ether-based electrolytes. Green Energy and Environment, 2018, 3, 63-70.	4.7	20
52	Triple effects of Sn-substitution on Na0.67Ni0.33Mn0.67O2. Journal of Materials Science and Technology, 2019, 35, 1250-1254.	5.6	20
53	Large Scale One-Pot Synthesis of Monodispersed Na ₃ (VOPO ₄) ₂ F Cathode for Na-Ion Batteries. Energy Material Advances, 2022, 2022, .	4.7	16
54	Highâ€Entropy Layered Oxide Cathodes for Sodiumâ€Ion Batteries. Angewandte Chemie, 2020, 132, 270-275.	1.6	15

#	Article	IF	Citations
55	Thermal Stability of High Power 26650-Type Cylindrical Na-Ion Batteries. Chinese Physics Letters, 2021, 38, 076501.	1.3	13
56	Achieving high initial Coulombic efficiency for competent Na storage by microstructure tailoring from chiral nematic nanocrystalline cellulose. , 2022, 4, 914-923.		13
57	Modification of NASICON Electrolyte and Its Application in Real Na-Ion Cells. Engineering, 2022, 8, 170-180.	3.2	12
58	Hard carbons derived from pine nut shells as anode materials for Na-ion batteries*. Chinese Physics B, 2019, 28, 068203.	0.7	10
59	Recent Progress in Presodiation Technique for High-Performance Na-Ion Batteries. Chinese Physics Letters, 2021, 38, 118401.	1.3	9
60	P2-type Na0.6[Mg(II)0.3Mn(IV)0.7]O2 as a new model material for anionic redox reaction. Chinese Chemical Letters, 2018, 29, 1791-1794.	4.8	8
61	Revealing an Interconnected Interfacial Layer in Solidâ€State Polymer Sodium Batteries. Angewandte Chemie, 2019, 131, 17182-17188.	1.6	7
62	Mg-doped layered oxide cathode for Na-ion batteries. Chinese Physics B, 2022, 31, 068201.	0.7	6
63	Sodiumâ€Ion Batteries: Hardâ€“Soft Carbon Composite Anodes with Synergistic Sodium Storage Performance (Adv. Funct. Mater. 24/2019). Advanced Functional Materials, 2019, 29, 1970164.	7.8	4