Xiaolin Li

List of Publications by Year
in descending order

66 papers	17,181 citations	53660 45 h-index	110170 64 g-index
66 all docs	66 docs citations	66 times ranked	21506 citing authors

#	Article	IF	Citations
1	Chemically Derived, Ultrasmooth Graphene Nanoribbon Semiconductors. Science, 2008, 319, 1229-1232.	6.0	4,504
2	Reversible aqueous zinc/manganese oxide energy storage from conversion reactions. Nature Energy, 2016, 1, .	19.8	2,186
3	Simultaneous Nitrogen Doping and Reduction of Graphene Oxide. Journal of the American Chemical Society, 2009, 131, 15939-15944.	6.6	1,673
4	Mesoporous silicon sponge as an anti-pulverization structure for high-performance lithium-ion battery anodes. Nature Communications, 2014, 5, 4105.	5.8	1,160
5	Materials Science and Materials Chemistry for Large Scale Electrochemical Energy Storage: From Transportation to Electrical Grid. Advanced Functional Materials, 2013, 23, 929-946.	7.8	590
6	Controlling SEI Formation on SnSbâ€Porous Carbon Nanofibers for Improved Na Ion Storage. Advanced Materials, 2014, 26, 2901-2908.	11.1	441
7	From Charge Storage Mechanism to Performance: A Roadmap toward High Specific Energy Sodiumâ€Ion Batteries through Carbon Anode Optimization. Advanced Energy Materials, 2018, 8, 1703268.	10.2	396
8	Langmuirâˆ’Blodgett Assembly of Densely Aligned Single-Walled Carbon Nanotubes from Bulk Materials. Journal of the American Chemical Society, 2007, 129, 4890-4891.	6.6	373
9	Hierarchical porous silicon structures with extraordinary mechanical strength as high-performance lithium-ion battery anodes. Nature Communications, 2020, 11, 1474.	5.8	298
10	Selective Synthesis Combined with Chemical Separation of Single-Walled Carbon Nanotubes for Chirality Selection. Journal of the American Chemical Society, 2007, 129, 15770-15771.	6.6	282
11	Hollow coreâ€"shell structured porous Siâ€"C nanocomposites for Li-ion battery anodes. Journal of Materials Chemistry, 2012, 22, 11014.	6.7	280
12	Ultraâ€Thick, Lowâ€Tortuosity, and Mesoporous Wood Carbon Anode for Highâ€Performance Sodiumâ€Ion Batteries. Advanced Energy Materials, 2016, 6, 1600377.	10.2	257
13	Hard Carbon as Sodiumâ€Ion Battery Anodes: Progress and Challenges. ChemSusChem, 2019, 12, 133-144.	3.6	257
14	Advanced Sodium Ion Battery Anode Constructed <i>via</i> Chemical Bonding between Phosphorus, Carbon Nanotube, and Cross-Linked Polymer Binder. ACS Nano, 2015, 9, 11933-11941.	7.3	255
15	Selfâ€Assembled Feâ€"Nâ€Doped Carbon Nanotube Aerogels with Singleâ€Atom Catalyst Feature as Highâ€Efficiency Oxygen Reduction Electrocatalysts. Small, 2017, 13, 1603407.	5.2	254
16	Enabling room temperature sodium metal batteries. Nano Energy, 2016, 30, 825-830.	8.2	248
17	Interphases in Sodiumâ€Ion Batteries. Advanced Energy Materials, 2018, 8, 1703082.	10.2	236
18	Origin of lithium whisker formation and growth under stress. Nature Nanotechnology, 2019, 14, 1042-1047.	15.6	211

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19	A novel approach to synthesize micrometer-sized porous silicon as a high performance anode for lithium-ion batteries. Nano Energy, 2018, 50, 589-597.	8.2	191
20	Highâ€Performance Silicon Anodes Enabled By Nonflammable Localized Highâ€Concentration Electrolytes. Advanced Energy Materials, 2019, 9, 1900784.	10.2	175
21	Crossroads in the renaissance of rechargeable aqueous zinc batteries. Materials Today, 2021, 45, 191-212.	8.3	171
22	Exceptionally High Ionic Conductivity in Na₃P_{0.62}As_{0.38}S₄ with Improved Moisture Stability for Solidâ€State Sodiumâ€Ion Batteries. Advanced Materials, 2017, 29, 1605561.	11.1	164
23	Tuning the Solid Electrolyte Interphase for Selective Liâ€•and Naâ€Ion Storage in Hard Carbon. Advanced Materials, 2017, 29, 1606860.	11.1	157
24	Progressive growth of the solidâ€“electrolyte interphase towards the Si anode interior causes capacity fading. Nature Nanotechnology, 2021, 16, 1113-1120.	15.6	147
25	Design of porous Si/Câ€“graphite electrodes with long cycle stability and controlled swelling. Energy and Environmental Science, 2017, 10, 1427-1434.	15.6	140
26	Low-solvation electrolytes for high-voltage sodium-ion batteries. Nature Energy, 2022, 7, 718-725.	19.8	137
27	Yolk-shell structured Sb@C anodes for high energy Na-ion batteries. Nano Energy, 2017, 40, 504-511.	8.2	123
28	Enhanced Stability of Li Metal Anodes by Synergetic Control of Nucleation and the Solid Electrolyte Interphase. Advanced Energy Materials, 2019, 9, 1901764.	10.2	108
29	Lithiumâ€Pretreated Hard Carbon as Highâ€Performance Sodiumâ€Ion Battery Anodes. Advanced Energy Materials, 2018, 8, 1801441.	10.2	105
30	Polyvinyl alcohol coating induced preferred crystallographic orientation in aqueous zinc battery anodes. Nano Energy, 2022, 98, 107269.	8.2	102
31	A Micrometerâ€Sized Silicon/Carbon Composite Anode Synthesized by Impregnation of Petroleum Pitch in Nanoporous Silicon. Advanced Materials, 2021, 33, e2103095.	11.1	99
32	Functionalized Graphene Sheets as Molecular Templates for Controlled Nucleation and Selfâ€Assembly of Metal Oxideâ€Graphene Nanocomposites. Advanced Materials, 2012, 24, 5136-5141.	11.1	92
33	Chemical self-assembly of graphene sheets. Nano Research, 2009, 2, 336-342.	5.8	80
34	Engineering stable Zn-MnO2 batteries by synergistic stabilization between the carbon nanofiber core and birnessite-MnO2 nanosheets shell. Chemical Engineering Journal, 2021, 405, 126969.	6.6	74
35	Stable Sodium Metal Batteries via Manipulation of Electrolyte Solvation Structure. Small Methods, 2020, 4, 1900856.	4.6	73
36	Interfacial-engineering-enabled practical low-temperature sodium metal battery. Nature Nanotechnology, 2022, 17, 269-277.	15.6	69

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37	Charging activation and desulfurization of MnS unlock the active sites and electrochemical reactivity for Zn-ion batteries. Nano Energy, 2020, 75, 104869.	8.2	66
38	Sugar Blowingâ€Induced Porous Cobalt Phosphide/Nitrogenâ€Doped Carbon Nanostructures with Enhanced Electrochemical Oxidation Performance toward Water and Other Small Molecules. Small, 2017, 13, 1700796.	5.2	65
39	Controlling Surface Phase Transition and Chemical Reactivity of O3-Layered Metal Oxide Cathodes for High-Performance Na-Ion Batteries. ACS Energy Letters, 2020, 5, 1718-1725.	8.8	64
40	Edge magnetotransport fingerprints in disordered graphene nanoribbons. Physical Review B, 2010, 82, .	1.1	63
41	Multifunctional SnO2/3D graphene hybrid materials for sodium-ion and lithium-ion batteries with excellent rate capability and long cycle life. Nano Research, 2017, 10, 4398-4414.	5.8	63
42	Vacancyâ€Enabled O3 Phase Stabilization for Manganeseâ€Rich Layered Sodium Cathodes. Angewandte Chemie - International Edition, 2021, 60, 8258-8267.	7.2	59
43	Rational Design of Electrolytes for Long-Term Cycling of Si Anodes over a Wide Temperature Range. ACS Energy Letters, 2021, 6, 387-394.	8.8	58
44	Unlocking the passivation nature of the cathodeâ€“air interfacial reactions in lithium ion batteries. Nature Communications, 2020, 11, 3204.	5.8	55
45	Electrolyte Effect on the Electrochemical Performance of Mild Aqueous Zinc-Electrolytic Manganese Dioxide Batteries. ACS Applied Materials & Interfaces, 2019, 11, 37524-37530.	4.0	47
46	A comparative study of pomegranate Sb@C yolkâ€“shell microspheres as Li and Na-ion battery anodes. Nanoscale, 2019, 11, 348-355.	2.8	45
47	Effects of waterâ€based binders on electrochemical performance of manganese dioxide cathode in mild aqueous zinc batteries. , 2021, 3, 473-481.		44
48	Enabling Natural Graphite in Highâ€Voltage Aqueous Graphite || Zn Metal Dualâ€Ion Batteries. Advanced Energy Materials, 2020, 10, 2001256.	10.2	43
49	Electrodeposited Zinc-Based Films as Anodes for Aqueous Zinc Batteries. ACS Applied Materials & Interfaces, 2020, 12, 42763-42772.	4.0	43
50	The importance of solid electrolyte interphase formation for long cycle stability full-cell Na-ion batteries. Nano Energy, 2016, 27, 664-672.	8.2	41
51	Template-directed synthesis of nitrogen- and sulfur-codoped carbon nanowire aerogels with enhanced electrocatalytic performance for oxygen reduction. Nano Research, 2017, 10, 1888-1895.	5.8	34
52	Uncommon Behavior of Li Doping Suppresses Oxygen Redox in P2â€Type Manganeseâ€Rich Sodium Cathodes. Advanced Materials, 2021, 33, e2107141.	11.1	34
53	Sandwich-structured nanocomposites of N-doped graphene and nearly monodisperse Fe3O4 nanoparticles as high-performance Li-ion battery anodes. Nano Research, 2017, 10, 2923-2933.	5.8	30
54	Edge Dislocations Induce Improved Photocatalytic Efficiency of Colored TiO₂. Advanced Materials Interfaces, 2019, 6, 1901121.	1.9	30

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55	Revealing the Atomic Origin of Heterogeneous Liâ€‘Ion Diffusion by Probing Na. Advanced Materials, 2019, 31, e1805889.	11.1	30
56	High-Performance InZn Alloy Anodes toward Practical Aqueous Zinc Batteries. ACS Energy Letters, 2022, 7, 1888-1895.	8.8	26
57	Controlling Ion Coordination Structure and Diffusion Kinetics for Optimized Electrode-Electrolyte Interphases and High-Performance Si Anodes. Chemistry of Materials, 2020, 32, 8956-8964.	3.2	24
58	A general strategy for batch development of high-performance and cost-effective sodium layered cathodes. Nano Energy, 2021, 89, 106371.	8.2	22
59	Mechanistic investigation of redox processes in Znâ€“MnO₂ battery in mild aqueous electrolytes. Journal of Materials Chemistry A, 2021, 9, 20766-20775.	5.2	18
60	Carbon Nanotubes: From Growth, Placement and Assembly Control to 60mV/decade and Sub-60 mV/decade Tunnel Transistors. , 2006, , .		14
61	Vacancyâ€Enabled O3 Phase Stabilization for Manganeseâ€Rich Layered Sodium Cathodes. Angewandte Chemie, 2021, 133, 8339-8348.	1.6	14
62	Enhancing Chemical Interaction of Polysulfide and Carbon through Synergetic Nitrogen and Phosphorus Doping. ACS Sustainable Chemistry and Engineering, 2020, 8, 806-813.	3.2	11
63	A glance of the layered transition metal oxide cathodes in sodium and lithium-ion batteries: difference and similarities. Nanotechnology, 2021, 32, 422501.	1.3	11
64	LiCoPO4 cathode from a CoHPO4Â·xH2O nanoplate precursor for high voltage Li-ion batteries. Heliyon, 2016, 2, e00081.	1.4	10
65	Nonsacrificial Additive for Tuning the Cathodeâ€“Electrolyte Interphase of Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 4111-4118.	4.0	8
66	Aqueous Dualâ€Ion Batteries: Enabling Natural Graphite in Highâ€Voltage Aqueous Graphite || Zn Metal Dualâ€Ion Batteries (Adv. Energy Mater. 41/2020). Advanced Energy Materials, 2020, 10, 2070169.	10.2	1