Yingchun Lyu

List of Publications by Year
in descending order

44 papers	2,658 citations	257450 24 h-index	254184 43 g-index
44 all docs	44 docs citations	44 times ranked	3589 citing authors

#	ARTICLE	IF	CITATIONS
1	Fabricating a thin gradient surface layer to enhance the cycle stability of Ni-rich cathode materials. Journal of Alloys and Compounds, 2022, 893, 162162.	5.5	2
2	Adjusting Oxygen Redox Reaction and Structural Stability of Li- and Mn-Rich Cathodes by Zr-Ti Dual-Doping. ACS Applied Materials & Interfaces, 2022, 14, 5308-5317.	8.0	21
3	Improved electrochemical kinetics and interfacial stability of cobalt-free lithium-rich layered oxides via thiourea treatment. Chemical Engineering Journal, 2022, 450, 138114.	12.7	12
4	Achieving Stable Cycling of LiCoO₂ at 4.6 V by Multilayer Surface Modification. Advanced Functional Materials, 2021, 31, 2001974.	14.9	77
5	An Overview on the Advances of LiCoO₂ Cathodes for Lithiumâ€Ion Batteries. Advanced Energy Materials, 2021, 11, 2000982.	19.5	418
6	Deciphering the Oxygen Absorption Preâ€edge: A Caveat on its Application for Probing Oxygen Redox Reactions in Batteries. Energy and Environmental Materials, 2021, 4, 246-254.	12.8	56
7	Understanding the Structural Evolution and Storage Mechanism of NASICON-Structure Mg_{0.5}Ti₂(PO₄)₃ for Li-Ion and Na-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2021, 9, 13414-13423.	6.7	5
8	A Hybrid Ionic and Electronic Conductive Coating Layer for Enhanced Electrochemical Performance of 4.6 V LiCoO₂. ACS Applied Materials & Interfaces, 2021, 13, 42917-42926.	8.0	10
9	A vacancy-free sodium manganese hexacyanoferrate as cathode for sodium-ion battery by high-salt-concentration preparation. Journal of Alloys and Compounds, 2021, 887, 161388.	5.5	10
10	Effect of Fluorine Substitution on the Electrochemical Property and Structural Stability of a Lithium-Excess Cation Disordered Rock-Salt Cathode. Chinese Physics Letters, 2021, 38, 088201.	3.3	1
11	All roads lead to Rome: Sodiation of different-stacked SnS2. Nano Energy, 2020, 67, 104276.	16.0	14
12	Hard carbon micro-nano tubes derived from kapok fiber as anode materials for sodium-ion batteries and the sodium-ion storage mechanism. Chemical Communications, 2020, 56, 778-781.	4.1	59
13	Study on the effect of Ni and Mn doping on the structural evolution of LiCoO2 under 4.6ÂV high-voltage cycling. Journal of Alloys and Compounds, 2020, 842, 155827.	5.5	32
14	One-Step Integrated Comodification to Improve the Electrochemical Performances of High-Voltage LiCoO₂ for Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2020, 8, 9346-9355.	6.7	27
15	Narrowing Working Voltage Window to Improve Layered GeP Anode Cycling Performance for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 17466-17473.	8.0	33
16	Enhanced Surface Chemical and Structural Stability of Ni-Rich Cathode Materials by Synchronous Lithium-Ion Conductor Coating for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 13813-13823.	8.0	107
17	The synergistic effect of carbon coating and CNTs compositing on the hard carbon anode for sodium ion batteries. RSC Advances, 2019, 9, 21667-21670.	3.6	8
18	Enhanced cycling stability of high voltage LiCoO2 by surface phosphorylation. Journal of Alloys and Compounds, 2019, 803, 348-353.	5.5	21

#	Article	IF	Citations
19	Sodium storage mechanism and electrochemical performance of layered GeP as anode for sodium ion batteries. Journal of Power Sources, 2019, 433, 126682.	7.8	46
20	<i>In situ</i> TEM and half cell investigation of sodium storage in hexagonal FeSe nanoparticles. Chemical Communications, 2019, 55, 5611-5614.	4.1	27
21	Recent advances in high energy-density cathode materials for sodium-ion batteries. Sustainable Materials and Technologies, 2019, 21, e00098.	3.3	43
22	Porous scaffold of TiO2 for dendrite-free lithium metal anode. Journal of Alloys and Compounds, 2019, 791, 364-370.	5.5	20
23	Real-Time TEM Study of Nanopore Evolution in Battery Materials and Their Suppression for Enhanced Cycling Performance. Nano Letters, 2019, 19, 3074-3082.	9.1	29
24	Enhanced proton conductivity and dimensional stability of proton exchange membrane based on sulfonated poly(arylene ether sulfone) and graphene oxide. Materials Research Bulletin, 2018, 103, 142-149.	5.2	21
25	Al2O3 coated Li1.2Ni0.2Mn0.2Ru0.4O2 as cathode material for Li-ion batteries. Journal of Alloys and Compounds, 2018, 741, 398-403.	5.5	23
26	Electrochemical and in-situ X-ray diffraction studies of Na1.2Ni0.2Mn0.2Ru0.4O2 as a cathode material for sodium-ion batteries. Electrochemistry Communications, 2018, 87, 71-75.	4.7	27
27	Cracks Formation in Lithium-Rich Cathode Materials for Lithium-Ion Batteries during the Electrochemical Process. Energies, 2018, 11, 2712.	3.1	7
28	Systematic investigation of the Binder's role in the electrochemical performance of tin sulfide electrodes in SIBs. Journal of Power Sources, 2018, 401, 195-203.	7.8	23
29	Forming a Stable CEI Layer on LiNi_{0.5}Mn_{1.5}O₄Cathode by the Synergy Effect of FEC and HDI. Journal of the Electrochemical Society, 2018, 165, A2032-A2036.	2.9	22
30	Improved Electrochemical Performances of LiCoO₂ at Elevated Voltage and Temperature with an In Situ Formed Spinel Coating Layer. ACS Applied Materials & Interfaces, 2018, 10, 31271-31279.	8.0	81
31	Correlations between Transition-Metal Chemistry, Local Structure, and Global Structure in Li₂Ru_{0.5}Mn_{0.5}O₃ Investigated in a Wide Voltage Window. Chemistry of Materials, 2017, 29, 9053-9065.	6.7	40
32	High-throughput characterization methods for lithium batteries. Journal of Materiomics, 2017, 3, 221-229.	5.7	17
33	Explore the Effects of Microstructural Defects on Voltage Fade of Li- and Mn-Rich Cathodes. Nano Letters, 2016, 16, 5999-6007.	9.1	64
34	Structural integrityâ€"Searching the key factor to suppress the voltage fade of Li-rich layered cathode materials through 3D X-ray imaging and spectroscopy techniques. Nano Energy, 2016, 28, 164-171.	16.0	44
35	Surface structure evolution of cathode materials for Li-ion batteries. Chinese Physics B, 2016, 25, 018209.	1.4	19
36	Feâ€Based Tunnelâ€Type Na_{0.61}[Mn_{0.27}Fe_{0.34}Ti_{0.39}]O₂ Designed by a New Strategy as a Cathode Material for Sodiumâ€Ion Batteries. Advanced Energy Materials, 2015, 5, 1501156.	19.5	122

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37	A New Oxyfluorinated Titanium Phosphate Anode for A High-Energy Lithium-Ion Battery. ACS Applied Materials & Interfaces, 2015, 7, 1270-1274.	8.0	12
38	Atomic insight into electrochemical inactivity of lithium chromate (LiCrO2): Irreversible migration of chromium into lithium layers in surface regions. Journal of Power Sources, 2015, 273, 1218-1225.	7.8	45
39	Layered and Spinel Structural Cathodes. Green Energy and Technology, 2015, , 67-92.	0.6	1
40	Probing Reversible Multielectron Transfer and Structure Evolution of Li_{1.2}Cr_{0.4}Mn_{0.4}O₂ Cathode Material for Li-Ion Batteries in a Voltage Range of 1.0â€“4.8 V. Chemistry of Materials, 2015, 27, 5238-5252.	6.7	57
41	A highly reversible, low-strain Mg-ion insertion anode material for rechargeable Mg-ion batteries. NPG Asia Materials, 2014, 6, e120-e120.	7.9	130
42	Understanding the Rate Capability of Highâ€Energyâ€Density Liâ€Rich Layered Li_{1.2}Ni_{0.15}Co_{0.1}Mn_{0.55}O₂ Cathode Materials. Advanced Energy Materials, 2014, 4, 1300950.	19.5	480
43	Nanotube Li₂MoO₄: a novel and high-capacity material as a lithium-ion battery anode. Nanoscale, 2014, 6, 13660-13667.	5.6	64
44	Rechargeable Li/CO2â€“O2 (2â€‰:â€‰1) battery and Li/CO2 battery. Energy and Environmental Science, 2014, 7, 677.	30.8	281