Wangda Li

List of Publications by Year
in descending order

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29	5,912	236833	501076
papers	citations	25 h-index	28 g-index

29	29	29	5328
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High-voltage positive electrode materials for lithium-ion batteries. Chemical Society Reviews, 2017, 46, 3006-3059.	18.7	986
2	High-nickel layered oxide cathodes for lithium-based automotive batteries. Nature Energy, 2020, 5, 26-34.	19.8	940
3	A perspective on nickel-rich layered oxide cathodes for lithium-ion batteries. Energy Storage Materials, 2017, 6, 125-139.	9.5	478
4	Black phosphorus composites with engineered interfaces for high-rate high-capacity lithium storage. Science, 2020, 370, 192-197.	6.0	336
5	Dynamic behaviour of interphases and its implication on high-energy-density cathode materials in lithium-ion batteries. Nature Communications, 2017, 8, 14589.	5.8	306
6	Collapse of LiNi_{1â€“xâ€“y}Co_xMn_yO₂ Lattice at Deep Charge Irrespective of Nickel Content in Lithium-Ion Batteries. Journal of the American Chemical Society, 2019, 141, 5097-5101.	6.6	299
7	A Mg-Doped High-Nickel Layered Oxide Cathode Enabling Safer, High-Energy-Density Li-Ion Batteries. Chemistry of Materials, 2019, 31, 938-946.	3.2	288
8	Mn versus Al in Layered Oxide Cathodes in Lithiumâ€Ion Batteries: A Comprehensive Evaluation on Longâ€Term Cyclability. Advanced Energy Materials, 2018, 8, 1703154.	10.2	260
9	Interfacial Chemistry in Solid-State Batteries: Formation of Interphase and Its Consequences. Journal of the American Chemical Society, 2018, 140, 250-257.	6.6	239
10	Long-Life Nickel-Rich Layered Oxide Cathodes with a Uniform Li₂ZrO₃ Surface Coating for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 9718-9725.	4.0	219
11	Highâ€Nickel NMA: A Cobaltâ€Free Alternative to NMC and NCA Cathodes for Lithiumâ€Ion Batteries. Advanced Materials, 2020, 32, e2002718.	11.1	205
12	Extending the Service Life of Highâ€Ni Layered Oxides by Tuning the Electrodeâ€“Electrolyte Interphase. Advanced Energy Materials, 2018, 8, 1801957.	10.2	171
13	Formation and Inhibition of Metallic Lithium Microstructures in Lithium Batteries Driven by Chemical Crossover. ACS Nano, 2017, 11, 5853-5863.	7.3	155
14	Long-Term Cyclability of NCM-811 at High Voltages in Lithium-Ion Batteries: an In-Depth Diagnostic Study. Chemistry of Materials, 2020, 32, 7796-7804.	3.2	152
15	Understanding the Air-Exposure Degradation Chemistry at a Nanoscale of Layered Oxide Cathodes for Sodium-Ion Batteries. Nano Letters, 2019, 19, 182-188.	4.5	122
16	Overcoming the chemical instability on exposure to air of Ni-rich layered oxide cathodes by coating with spinel LiMn_{1.9}Al_{0.1}O₄. Journal of Materials Chemistry A, 2016, 4, 5839-5841.	5.2	119
17	Facilitating the Operation of Lithium-Ion Cells with High-Nickel Layered Oxide Cathodes with a Small Dose of Aluminum. Chemistry of Materials, 2018, 30, 3101-3109.	3.2	119
18	Inâ€Depth Analysis of the Degradation Mechanisms of Highâ€Nickel, Low/Noâ€Cobalt Layered Oxide Cathodes for Lithiumâ€Ion Batteries. Advanced Energy Materials, 2021, 11, 2100858.	10.2	79

#	Article	IF	Citations
19	Highâ€Performance Heterostructured Cathodes for Lithiumâ€Ion Batteries with a Niâ€Rich Layered Oxide Core and a Liâ€Rich Layered Oxide Shell. Advanced Science, 2016, 3, 1600184.	5.6	78
20	Ethylene Carbonateâ€Free Electrolytes for Highâ€Nickel Layered Oxide Cathodes in Lithiumâ€Ion Batteries. Advanced Energy Materials, 2019, 9, 1901152.	10.2	78
21	Insights into Boron-Based Polyanion-Tuned High-Nickel Cathodes for High-Energy-Density Lithium-Ion Batteries. Chemistry of Materials, 2019, 31, 8886-8897.	3.2	71
22	Insights into the Cathodeâ€“Electrolyte Interphases of High-Energy-Density Cathodes in Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 16451-16461.	4.0	60
23	Thermodynamics of Antisite Defects in Layered NMC Cathodes: Systematic Insights from High-Precision Powder Diffraction Analyses. Chemistry of Materials, 2020, 32, 1002-1010.	3.2	44
24	Delineating the Roles of Mn, Al, and Co by Comparing Three Layered Oxide Cathodes with the Same Nickel Content of 70% for Lithium-Ion Batteries. Chemistry of Materials, 2022, 34, 629-642.	3.2	38
25	Influence of Calendering on the Electrochemical Performance of LiNi_{0.9}Mn_{0.05}Al_{0.05}O₂ Cathodes in Lithium-Ion Cells. ACS Applied Materials & Interfaces, 2021, 13, 42898-42908.	4.0	37
26	Extending the limits of powder diffraction analysis: Diffraction parameter space, occupancy defects, and atomic form factors. Review of Scientific Instruments, 2018, 89, 093002.	0.6	18
27	Essential effect of the electrolyte on the mechanical and chemical degradation of LiNi_{0.8}Co_{0.15}Al_{0.05}O₂ cathodes upon long-term cycling. Journal of Materials Chemistry A, 2021, 9, 2111-2119.	5.2	14
28	Ethylene Carbonate-Free Electrolytes for High-Nickel Layered Oxide Cathodes. ECS Meeting Abstracts, 2019, , .	0.0	1
29	A Comparison of Electrode Surface Films Formed with Different Oxide Cathodes for Lithium-Ion Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0