

Lai Chen

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6332070/publications.pdf>

Version: 2024-02-01

58
papers

3,765
citations

126907
33
h-index

144013
57
g-index

59
all docs

59
docs citations

59
times ranked

3351
citing authors

#	ARTICLE	IF	CITATIONS
1	Urea-assisted mixed gas treatment on Li-Rich layered oxide with enhanced electrochemical performance. Journal of Energy Chemistry, 2022, 66, 123-132.	12.9	45
2	Stress accumulation in Ni-rich layered oxide cathodes: Origin, impact, and resolution. Journal of Energy Chemistry, 2022, 65, 236-253.	12.9	65
3	Enhanced Electrochemical Performance of Ni-Rich Cathode Materials with an In Situ-Formed $\text{LiBO}_2/\text{B}_2\text{O}_3$ Hybrid Coating Layer. ACS Applied Energy Materials, 2022, 5, 2231-2241.	5.1	19
4	Dual-Decoration and Mechanism Analysis of Ni-rich $\text{LiNi}_{0.83}\text{Co}_{0.11}\text{Mn}_{0.06}\text{O}_2$ Cathodes by $\text{Na}_2\text{PO}_3\text{F}$. Acta Chimica Sinica, 2022, 80, 150.	1.4	0
5	The mechanism of side reaction induced capacity fading of Ni-rich cathode materials for lithium ion batteries. Journal of Energy Chemistry, 2021, 58, 1-8.	12.9	73
6	Research Progress of Lithium Plating on Graphite Anode in Li-ion Batteries. Chinese Journal of Chemistry, 2021, 39, 165-173.	4.9	45
7	Interfacial Degradation and Optimization of Li-rich Cathode Materials ^{â€} . Chinese Journal of Chemistry, 2021, 39, 402-420.	4.9	11
8	Ultrathin 3 V Spinel Clothed Layered Li-rich Oxides as Heterostructured Cathode for High-Energy and High-Power Li-ion Batteries ^{â€} . Chinese Journal of Chemistry, 2021, 39, 345-352.	4.9	12
9	Strategies of Removing Residual Lithium Compounds on the Surface of Ni-rich Cathode Materials ^{â€} . Chinese Journal of Chemistry, 2021, 39, 189-198.	4.9	52
10	High-Temperature Storage Deterioration Mechanism of Cylindrical 21700-Type Batteries Using Ni-Rich Cathodes under Different SOC. ACS Applied Materials & Interfaces, 2021, 13, 6286-6297.	8.0	17
11	Roles of Fast-Ion Conductor LiTaO_3 Modifying Ni-rich Cathode Material for Li-ion Batteries. ChemSusChem, 2021, 14, 1955-1961.	6.8	26
12	A Universal Method for Enhancing the Structural Stability of Ni-Rich Cathodes Via the Synergistic Effect of Dual-Element Cosubstitution. ACS Applied Materials & Interfaces, 2021, 13, 24925-24936.	8.0	43
13	Sublimated Se-Induced Formation of Dual-Conductive Surface Layers for High-Performance Ni-rich Layered Cathodes. ChemElectroChem, 2021, 8, 4207-4217.	3.4	7
14	Unrevealing the effects of low temperature on cycling life of 21700-type cylindrical Li-ion batteries. Journal of Energy Chemistry, 2021, 60, 104-110.	12.9	31
15	High-voltage and high-safety nickel-rich layered cathode enabled by a self-reconstructive cathode/electrolyte interphase layer. Energy Storage Materials, 2021, 41, 495-504.	18.0	87
16	The nature of irreversible phase transformation propagation in nickel-rich layered cathode for lithium-ion batteries. Journal of Energy Chemistry, 2021, 62, 351-358.	12.9	74
17	Improved Stability of Layered and Porous Nickel-rich Cathode Materials by Relieving the Accumulation of Inner Stress. ChemSusChem, 2020, 13, 426-433.	6.8	31
18	Renovating the electrode-electrolyte interphase for layered lithium- & manganese-rich oxides. Energy Storage Materials, 2020, 28, 383-392.	18.0	40

#	ARTICLE	IF	CITATIONS
19	Riveting Dislocation Motion: The Inspiring Role of Oxygen Vacancies in the Structural Stability of Ni-Rich Cathode Materials. ACS Applied Materials & Interfaces, 2020, 12, 37208-37217.	8.0	49
20	Clean the Ni-Rich Cathode Material Surface With Boric Acid to Improve Its Storage Performance. Frontiers in Chemistry, 2020, 8, 573.	3.6	18
21	Advances and Prospects of Surface Modification on ^{scp>Nickelâ€Rich} Materials for ^{scp>Lithiumâ€Ion} Batteries^{â€}. Chinese Journal of Chemistry, 2020, 38, 1817-1831.	4.9	24
22	Densely Packed 3D Corrugated Papery Electrodes as Polysulfide Reservoirs for Lithiumâ€Sulfur Battery with Ultrahigh Volumetric Capacity. ACS Sustainable Chemistry and Engineering, 2020, 8, 5648-5661.	6.7	15
23	Effectively stabilizing electrode/electrolyte interface of high-energy LiNi _{0.9} Co _{0.1} O ₂ //Siâ€C system by simple cathode surface-coating. Nano Energy, 2020, 76, 105065.	16.0	23
24	UiO-66 type metal-organic framework as a multifunctional additive to enhance the interfacial stability of Ni-rich layered cathode material. Journal of Energy Chemistry, 2020, 50, 378-386.	12.9	19
25	Enhanced high-temperature performance of Li-rich layered oxide via surface heterophase coating. Journal of Energy Chemistry, 2020, 51, 39-47.	12.9	48
26	The effects of alkali metal ions with different ionic radii substituting in Li sites on the electrochemical properties of Ni-Rich cathode materials. Journal of Power Sources, 2019, 441, 227195.	7.8	71
27	High-Rate Structure-Gradient Ni-Rich Cathode Material for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 36697-36704.	8.0	77
28	Improving the Structure Stability of LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ by Surface Perovskite-like La ₂ Ni _{0.5} Li _{0.5} O ₄ Self-Assembling and Subsurface La ³⁺ Doping. ACS Applied Materials & Interfaces, 2019, 11, 36751-36762.	8.0	59
29	CF@rGO/PPy-S Hybrid Foam with Paper Window-like Microstructure as Freestanding and Flexible Cathode for the Lithiumâ€Sulfur Battery. ACS Applied Energy Materials, 2019, 2, 4151-4158.	5.1	20
30	Micromixerâ€Assisted Coâ€Precipitation Method for Fast Synthesis of Layered Niâ€Rich Materials for Lithiumâ€Ion Batteries. ChemElectroChem, 2019, 6, 3057-3064.	3.4	12
31	Hand-in-Hand Reinforced rGO Film Used as an Auxiliary Functional Layer for High-Performance Liâ€S Batteries. ACS Applied Materials & Interfaces, 2019, 11, 12544-12553.	8.0	36
32	Synthesizing LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ with novel shell-pore structure for enhanced rate performance. Journal of Alloys and Compounds, 2019, 789, 736-743.	5.5	13
33	The Effects of Trace Yb Doping on the Electrochemical Performance of Liâ€Rich Layered Oxides. ChemSusChem, 2019, 12, 2294-2301.	6.8	35
34	Improving the reversibility of the H2-H3 phase transitions for layered Ni-rich oxide cathode towards retarded structural transition and enhanced cycle stability. Nano Energy, 2019, 59, 50-57.	16.0	334
35	Use of Ce to Reinforce the Interface of Niâ€Rich LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ Cathode Materials for Lithiumâ€Ion Batteries under High Operating Voltage. ChemSusChem, 2019, 12, 935-943.	6.8	113
36	Sufficient Utilization of Zirconium Ions to Improve the Structure and Surface properties of Nickelâ€Rich Cathode Materials for Lithiumâ€Ion Batteries. ChemSusChem, 2018, 11, 1639-1648.	6.8	117

#	ARTICLE	IF	CITATIONS
37	Exposing the {010} Planes by Oriented Self-Assembly with Nanosheets To Improve the Electrochemical Performances of Ni-Rich $\text{Li}[\text{Ni}_{0.8}\text{Co}_{0.1}\text{Mn}_{0.1}]\text{O}_2$ Microspheres. ACS Applied Materials & Interfaces, 2018, 10, 6407-6414.	8.0	98
38	Ethoxy (pentafluoro) cyclotriphosphazene (PFPN) as a multi-functional flame retardant electrolyte additive for lithium-ion batteries. Journal of Power Sources, 2018, 378, 707-716.	7.8	77
39	Simultaneously fabricating homogeneous nanostructured ionic and electronic pathways for layered lithium-rich oxides. Journal of Power Sources, 2018, 402, 499-505.	7.8	18
40	Electron bridging structure glued yolk-shell hierarchical porous carbon/sulfur composite for high performance Li-S batteries. Electrochimica Acta, 2018, 292, 199-207.	5.2	27
41	Improving the cycling stability of Ni-rich cathode materials by fabricating surface rock salt phase. Electrochimica Acta, 2018, 292, 217-226.	5.2	90
42	Pre-oxidizing the precursors of Nickel-rich cathode materials to regulate their $\text{Li}^+/\text{Ni}^{2+}$ cation ordering towards cyclability improvements. Journal of Power Sources, 2018, 396, 734-741.	7.8	82
43	Metal-organic frameworks composites threaded on the CNT knitted separator for suppressing the shuttle effect of lithium sulfur batteries. Energy Storage Materials, 2018, 14, 383-391.	18.0	135
44	Synergistic Effects of Stabilizing the Surface Structure and Lowering the Interface Resistance in Improving the Low-Temperature Performances of Layered Lithium-Rich Materials. ACS Applied Materials & Interfaces, 2017, 9, 8641-8648.	8.0	38
45	Polyacrylonitrile-polyvinylidene fluoride as high-performance composite binder for layered Li-rich oxides. Journal of Power Sources, 2017, 359, 226-233.	7.8	32
46	An interfacial framework for breaking through the Li-ion transport barrier of Li-rich layered cathode materials. Journal of Materials Chemistry A, 2017, 5, 24292-24298.	10.3	64
47	Ni-Rich $\text{LiNi}_{0.8}\text{Co}_{0.1}\text{Mn}_{0.1}\text{O}_2$ Oxide Coated by Dual-Conductive Layers as High Performance Cathode Material for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 29732-29743.	8.0	309
48	Layer-by-Layer Assembled Architecture of Polyelectrolyte Multilayers and Graphene Sheets on Hollow Carbon Spheres/Sulfur Composite for High-Performance Lithium-Sulfur Batteries. Nano Letters, 2016, 16, 5488-5494.	9.1	104
49	Layered Lithium-Rich Cathode Materials Synthesized by an Ethanol-Based One-Step Oxalate Coprecipitation Method. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2016, 32, 717-722.	4.9	5
50	Role of Cobalt Content in Improving the Low-Temperature Performance of Layered Lithium-Rich Cathode Materials for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2015, 7, 17910-17918.	8.0	47
51	High-performance LiFePO_4/C electrode with polytetrafluoroethylene as an aqueous-based binder. Journal of Power Sources, 2015, 298, 292-298.	7.8	46
52	Hierarchical $\text{Li}_{1.2}\text{Ni}_{0.2}\text{Mn}_{0.6}\text{O}_2$ Nanoplates with Exposed {010} Planes as High-Performance Cathode Material for Lithium-Ion Batteries. Advanced Materials, 2014, 26, 6756-6760.	21.0	220
53	Ultrathin Spinel Membrane-Encapsulated Layered Lithium-Rich Cathode Material for Advanced Li-Ion Batteries. Nano Letters, 2014, 14, 3550-3555.	9.1	227
54	Crystal Structure and Electrochemical Performance of Lithium-Rich Cathode Materials $\text{Li}_2\text{MnO}_3 \cdot (1-x)\text{LiNi}_{0.5}\text{Mn}_{0.5}\text{O}_2$ ($x=0.1-0.8$). Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2014, 30, 467-475.	9.9	49

#	ARTICLE	IF	CITATIONS
55	The role of yttrium content in improving electrochemical performance of layered lithium-rich cathode materials for Li-ion batteries. Journal of Materials Chemistry A, 2013, 1, 9760.	10.3	116
56	Preparation and Characterization of $\text{Li}_{2/3}\text{MnO}_3 \cdot (1-x)\text{Li}[\text{Ni}_{1/3}\text{Mn}_{1/3}\text{Co}_{1/3}]$ Cathode Materials for Lithium-Ion Batteries. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2012, 28, 823-830.	4.9	5
57	Effect of CeO ₂ -coating on the electrochemical performances of LiFePO ₄ /C cathode material. Electrochimica Acta, 2011, 56, 5587-5592.	5.2	127
58	Competitive effect of KOH activation on the electrochemical performances of carbon nanotubes for EDLC: Balance between porosity and conductivity. Electrochimica Acta, 2008, 53, 7730-7735.	5.2	132