## Unlocking the Potential of Cation-Disordered Oxides fo

Science 343, 519-522 DOI: 10.1126/science.1246432

Citation Report

#	Article	IF	Citations
3	Electrode Nanostructures in Lithiumâ€Based Batteries. Advanced Science, 2014, 1, 1400012.	11.2	148
4	Direct observation of the structural and electronic changes of Li2MnO3 during electron irradiation. Applied Physics Letters, 2014, 105, .	3.3	24
5	Metastable amorphous chromium-vanadium oxide nanoparticles with superior performance as a new lithium battery cathode. Nano Research, 2014, 7, 1604-1612.	10.4	21
6	Facet-Dependent Disorder in Pristine High-Voltage Lithium–Manganese-Rich Cathode Material. ACS Nano, 2014, 8, 12710-12716.	14.6	71
7	An intuitive and efficient method for cell voltage prediction of lithium and sodium-ion batteries. Nature Communications, 2014, 5, 5559.	12.8	39
8	Structural and Electrochemical Study of the Li–Mn–Ni Oxide System within the Layered Single Phase Region. Chemistry of Materials, 2014, 26, 7059-7066.	6.7	53
9	The Configurational Space of Rocksaltâ€Type Oxides for High apacity Lithium Battery Electrodes. Advanced Energy Materials, 2014, 4, 1400478.	19.5	256
10	Tuning charge–discharge induced unit cell breathing in layer-structured cathode materials for lithium-ion batteries. Nature Communications, 2014, 5, 5381.	12.8	180
11	A Novel Surface Treatment Method and New Insight into Discharge Voltage Deterioration for Highâ€Performance 0.4Li <sub>2</sub> MnO <sub>3–</sub> 0.6LiNi <sub>1/3</sub> Co <sub>1/3</sub> Mn <sub>1/3</sub> O <sub>2 Cathode Materials. Advanced Energy Materials, 2014, 4, 1400631.</sub>	2	196
12	Two-dimensional layered transition metal disulphides for effective encapsulation of high-capacity lithium sulphide cathodes. Nature Communications, 2014, 5, 5017.	12.8	530
13	The Reaction Mechanism and Capacity Degradation Model in Lithium Insertion Organic Cathodes, Li <sub>2</sub> C <sub>6</sub> O <sub>6</sub> , Using Combined Experimental and First Principle Studies. Journal of Physical Chemistry Letters, 2014, 5, 3086-3092.	4.6	81
14	Unraveling the Voltage-Fade Mechanism in High-Energy-Density Lithium-Ion Batteries: Origin of the Tetrahedral Cations for Spinel Conversion. Chemistry of Materials, 2014, 26, 6272-6280.	6.7	236
15	Electron–Water Interactions and Implications for Liquid Cell Electron Microscopy. Journal of Physical Chemistry C, 2014, 118, 22373-22382.	3.1	519
16	Mesoporous VO <sub>2</sub> nanowires with excellent cycling stability and enhanced rate capability for lithium batteries. RSC Advances, 2014, 4, 33332-33337.	3.6	47
17	Highly enhanced lithium storage capability of LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> by coating with Li <sub>2</sub> TiO <sub>3</sub> for Li-ion batteries. Journal of Materials Chemistry A, 2014, 2, 18256-18262.	10.3	93
18	Superior Long-Term Energy Retention and Volumetric Energy Density for Li-Rich Cathode Materials. Nano Letters, 2014, 14, 5965-5972.	9.1	145
19	Better than crystalline: amorphous vanadium oxide for sodium-ion batteries. Journal of Materials Chemistry A, 2014, 2, 18208-18214.	10.3	260
20	Enhanced Li Storage Performance of LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> –Coated 0.4Li <sub>2</sub> MnO <sub>3</sub> ·0.6LiNi <sub>1/3</sub> Co <sub>1/3</sub> Mn <sub>1/3</sub> O <sub>2&lt; Cathode Materials for Li-Ion Batteries. ACS Applied Materials &amp; amp; Interfaces, 2014, 6, 16888-16894.</sub>	/ສາp>	65

ITATION REDOD

#	Article	IF	CITATIONS
21	Resolving and Quantifying Nanoscaled Phases in Amorphous FeF3 by Pair Distribution Function and Mössbauer Spectroscopy. Journal of Physical Chemistry C, 2014, 118, 14039-14043.	3.1	10
22	K <sup>+</sup> -Doped Li <sub>1.2</sub> Mn <sub>0.54</sub> Co <sub>0.13</sub> Ni <sub>0.13</sub> O <sub>2</sub> : A Novel Cathode Material with an Enhanced Cycling Stability for Lithium-Ion Batteries. ACS Applied Materials &: Interfaces. 2014. 6. 10330-10341.	8.0	332
23	Nanoscale Morphological and Chemical Changes of High Voltage Lithium–Manganese Rich NMC Composite Cathodes with Cycling. Nano Letters, 2014, 14, 4334-4341.	9.1	163
24	Magnesium Anode for Chloride Ion Batteries. ACS Applied Materials & Interfaces, 2014, 6, 10997-11000.	8.0	69
25	Surface Engineering and Design Strategy for Surfaceâ€Amorphized TiO <sub>2</sub> @Graphene Hybrids for High Power Liâ€Ion Battery Electrodes. Advanced Science, 2015, 2, 1500027.	11.2	182
26	Considering Critical Factors of Liâ€rich Cathode and Si Anode Materials for Practical Liâ€ion Cell Applications. Small, 2015, 11, 4058-4073.	10.0	67
28	AlF <sub>3</sub> Surfaceâ€Coated Li[Li <sub>0.2</sub> Ni <sub>0.17</sub> Co <sub>0.07</sub> Mn <sub>0.56</sub> ]O <sub>2</sub> Nanoparticles with Superior Electrochemical Performance for Lithiumâ€Ion Batteries. ChemSusChem, 2015, 8, 2544-2550.	6.8	51
29	The Role of Intentionally Introduced Defects on Electrode Materials for Alkaliâ€Ion Batteries. Chemistry - an Asian Journal, 2015, 10, 1608-1617.	3.3	69
30	Lithium-Excess Research of Cathode Material Li2MnTiO4 for Lithium-Ion Batteries. Nanomaterials, 2015, 5, 1985-1994.	4.1	27
31	Fast and Large Lithium Storage in 3D Porous VN Nanowires–Graphene Composite as a Superior Anode Toward Highâ€Performance Hybrid Supercapacitors. Advanced Functional Materials, 2015, 25, 2270-2278.	14.9	379
32	Recent Advances on the Understanding of Structural and Composition Evolution of LMR Cathodes for Li-ion Batteries. Frontiers in Energy Research, 2015, 3, .	2.3	19
33	Aerosol-spray diverse mesoporous metal oxides from metal nitrates. Scientific Reports, 2015, 5, 9923.	3.3	42
34	The role of nanoscale-range vanadium treatment in LiNi <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> cathode materials for Li-ion batteries at elevated temperatures. Journal of Materials Chemistry A, 2015, 3, 13453-13460.	10.3	131
35	Enhanced electrochemical performance by facile oxygen vacancies from lower valence-state doping for ramsdellite-MnO <sub>2</sub> . Journal of Materials Chemistry A, 2015, 3, 12461-12467.	10.3	54
36	High-capacity electrode materials for rechargeable lithium batteries: Li <sub>3</sub> NbO <sub>4</sub> -based system with cation-disordered rocksalt structure. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 7650-7655.	7.1	400
37	Li <sup>+</sup> intercalation in isostructural Li <sub>2</sub> VO <sub>3</sub> and Li <sub>2</sub> VO <sub>2</sub> F with O <sup>2â^</sup> and mixed O <sup>2â^</sup> /F <sup>â^</sup> anions. Physical Chemistry Chemical Physics, 2015, 17, 17288-17295.	2.8	67
38	Post-lithium-ion battery chemistries for hybrid electric vehicles and battery electric vehicles. , 2015, , 127-172.		2
39	Improved Voltage and Cycling for Li <sup>+</sup> Intercalation in Highâ€Capacity Disordered Oxyfluoride Cathodes. Advanced Science, 2015, 2, 1500128.	11.2	56

#	Article	IF	CITATIONS
40	A universal self-charging system driven by random biomechanical energy for sustainable operation of mobile electronics. Nature Communications, 2015, 6, 8975.	12.8	526
41	Visualization of O-O peroxo-like dimers in high-capacity layered oxides for Li-ion batteries. Science, 2015, 350, 1516-1521.	12.6	659
42	Rice perception of symbiotic arbuscular mycorrhizal fungi requires the karrikin receptor complex. Science, 2015, 350, 1521-1524.	12.6	191
43	First-principles study of lithium adsorption and diffusion on graphene: the effects of strain. Materials Research Express, 2015, 2, 105016.	1.6	20
44	Activation Mechanism of LiNi <sub>0.80</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> : Surface and Bulk Operando Electrochemical, Differential Electrochemical Mass Spectrometry, and X-ray Diffraction Analyses. Chemistry of Materials, 2015, 27, 526-536.	6.7	198
45	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
46	A New Coating Method for Alleviating Surface Degradation of LiNi <sub>0.6</sub> Co <sub>0.2</sub> Mn <sub>0.2</sub> O <sub>2</sub> Cathode Material: Nanoscale Surface Treatment of Primary Particles. Nano Letters, 2015, 15, 2111-2119.	9.1	452
47	Stable Alkali Metal Ion Intercalation Compounds as Optimized Metal Oxide Nanowire Cathodes for Lithium Batteries. Nano Letters, 2015, 15, 2180-2185.	9.1	160
48	Recent Achievements on Inorganic Electrode Materials for Lithium-Ion Batteries. Journal of the American Chemical Society, 2015, 137, 3140-3156.	13.7	461
49	An Ionâ€Exchange Promoted Phase Transition in a Liâ€Excess Layered Cathode Material for Highâ€Performance Lithium Ion Batteries. Advanced Energy Materials, 2015, 5, 1401937.	19.5	82
50	Nanostructured Mo-based electrode materials for electrochemical energy storage. Chemical Society Reviews, 2015, 44, 2376-2404.	38.1	599
51	Mo-doped LiV <sub>3</sub> O <sub>8</sub> nanorod-assembled nanosheets as a high performance cathode material for lithium ion batteries. Journal of Materials Chemistry A, 2015, 3, 3547-3558.	10.3	102
52	Structural and Chemical Evolution of Li- and Mn-Rich Layered Cathode Material. Chemistry of Materials, 2015, 27, 1381-1390.	6.7	311
53	Disordered Lithiumâ€Rich Oxyfluoride as a Stable Host for Enhanced Li <sup>+</sup> Intercalation Storage. Advanced Energy Materials, 2015, 5, 1401814.	19.5	162
54	Recent progress in theoretical and computational investigations of Li-ion battery materials and electrolytes. Physical Chemistry Chemical Physics, 2015, 17, 4799-4844.	2.8	237
55	Probing the Degradation Mechanism of Li <sub>2</sub> MnO <sub>3</sub> Cathode for Li-Ion Batteries. Chemistry of Materials, 2015, 27, 975-982.	6.7	130
56	Pure Singleâ€Crystalline Na <sub>1.1</sub> V <sub>3</sub> O <sub>7.9</sub> Nanobelts as Superior Cathode Materials for Rechargeable Sodiumâ€lon Batteries. Advanced Science, 2015, 2, 1400018.	11.2	110
57	Enhanced electrochemical performance of LiMn <sub>2</sub> O <sub>4</sub> cathode with a Li <sub>0.34</sub> La <sub>0.51</sub> TiO <sub>3</sub> -coated layer. RSC Advances, 2015, 5, 17592-17600.	3.6	14

#	Article	IF	CITATIONS
58	Synthesis of high-capacity LiNi 0.8 Co 0.1 Mn 0.1 O 2 cathode by transition metal acetates. Transactions of Nonferrous Metals Society of China, 2015, 25, 1568-1574.	4.2	29
59	Surface-modified Li[Li0.2Ni0.17Co0.07Mn0.56]O2 nanoparticles with MgF2 as cathode for Li-ion battery. Solid State Ionics, 2015, 278, 85-90.	2.7	40
60	Rational Composition Optimization of the Lithium-Rich Li <sub>3</sub> OCl <sub>1–<i>x</i></sub> Br <sub><i>x</i></sub> Anti-Perovskite Superionic Conductors. Chemistry of Materials, 2015, 27, 3749-3755.	6.7	130
61	Improved electrochemical performance of spinel LiMn <sub>1.5</sub> Ni <sub>0.5</sub> O <sub>4</sub> through MgF <sub>2</sub> nano-coating. Nanoscale, 2015, 7, 15609-15617.	5.6	65
62	Promotional recyclable Li-ion batteries by a magnetic binder with anti-vibration and non-fatigue performance. Journal of Materials Chemistry A, 2015, 3, 15403-15407.	10.3	11
63	Probing Reversible Multielectron Transfer and Structure Evolution of Li <sub>1.2</sub> Cr <sub>0.4</sub> Mn <sub>0.4</sub> O <sub>2</sub> Cathode Material for Li-Ion Batteries in a Voltage Range of 1.0–4.8 V. Chemistry of Materials, 2015, 27, 5238-5252.	6.7	57
64	Three dimensional architecture of carbon wrapped multilayer Na <sub>3</sub> V <sub>2</sub> O <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F nanocubes embedded in graphene for improved sodium ion batteries. Journal of Materials Chemistry A, 2015, 3, 17563-17568.	10.3	91
65	How to synthesize pure Li <sub>2â<sup>°</sup>x</sub> FeSi <sub>1â<sup>°°</sup>x</sub> P <sub>x</sub> O <sub>4</sub> /C (x =) Tj ETQq2 Transactions, 2015, 44, 14805-14812.	1 1 0.7843 3.3	314 rgBT /O 7
66	Facile synthesis of mesoporous V2O5 nanosheets with superior rate capability and excellent cycling stability for lithium ion batteries. Journal of Power Sources, 2015, 294, 1-7.	7.8	91
67	Balancing stability and specific energy in Li-rich cathodes for lithium ion batteries: a case study of a novel Li–Mn–Ni–Co oxide. Journal of Materials Chemistry A, 2015, 3, 10592-10602.	10.3	62
68	Roles of transition metals interchanging with lithium in electrode materials. Physical Chemistry Chemical Physics, 2015, 17, 14064-14070.	2.8	27
69	Theoretical capacity achieved in a LiMn <sub>0.5</sub> Fe <sub>0.4</sub> Mg <sub>0.1</sub> BO <sub>3</sub> cathode by using topological disorder. Energy and Environmental Science, 2015, 8, 1790-1798.	30.8	27
70	Nickelâ€Rich Layered Lithium Transitionâ€Metal Oxide for Highâ€Energy Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2015, 54, 4440-4457.	13.8	1,512
71	Rational material design for ultrafast rechargeable lithium-ion batteries. Chemical Society Reviews, 2015, 44, 5926-5940.	38.1	857
72	Characterization of Disordered Li <sub>(1+<i>x</i>)</sub> Ti <sub>2<i>x</i></sub> Fe <sub>(1–3<i>x</i>)</sub> O <sub>2</sub> as Positive Electrode Materials in Li-lon Batteries Using Percolation Theory. Chemistry of Materials, 2015, 27, 7751-7756.	6.7	83
73	Lattice Breathing Inhibited Layered Vanadium Oxide Ultrathin Nanobelts for Enhanced Sodium Storage. ACS Applied Materials & Interfaces, 2015, 7, 18211-18217.	8.0	94
74	Phosphorus Enrichment as a New Composition in the Solid Electrolyte Interphase of High-Voltage Cathodes and Its Effects on Battery Cycling. Chemistry of Materials, 2015, 27, 7447-7451.	6.7	37
75	Elucidating the Role of Defects for Electrochemical Intercalation in Sodium Vanadium Oxide. Chemistry of Materials, 2015, 27, 7082-7090.	6.7	28

#	Article	IF	CITATIONS
76	Review—Lithium-Excess Layered Cathodes for Lithium Rechargeable Batteries. Journal of the Electrochemical Society, 2015, 162, A2447-A2467.	2.9	141
77	Three-dimensional ZnMn2O4/porous carbon framework from petroleum asphalt for high performance lithium-ion battery. Electrochimica Acta, 2015, 180, 164-172.	5.2	73
78	A disordered rock-salt Li-excess cathode material with high capacity and substantial oxygen redox activity: Li 1.25 Nb 0.25 Mn 0.5 O 2. Electrochemistry Communications, 2015, 60, 70-73.	4.7	145
79	Facile synthesis of manganese carbonate quantum dots/Ni(HCO <sub>3</sub> ) <sub>2</sub> –MnCO <sub>3</sub> composites as advanced cathode materials for high energy density asymmetric supercapacitors. Journal of Materials Chemistry A, 2015, 3. 22102-22117.	10.3	127
80	Anomalous Jahn–Teller behavior in a manganese-based mixed-phosphate cathode for sodium ion batteries. Energy and Environmental Science, 2015, 8, 3325-3335.	30.8	175
81	Synthesis and Electrochemical Properties of Spherical Nano-Structured and Nano-Agglomerated Li1.2Mn0.6Ni0.2O2Cathode Materials for Lithium-Ion Batteries. Integrated Ferroelectrics, 2015, 164, 52-59.	0.7	3
82	A new class of high capacity cation-disordered oxides for rechargeable lithium batteries: Li–Ni–Ti–Mo oxides. Energy and Environmental Science, 2015, 8, 3255-3265.	30.8	224
83	A Study on Storage Characteristics of Pristine Li-rich Layered Oxide Li 1.20 Mn 0.54 Co 0.13 Ni 0.13 O 2 : Effect of Storage Temperature and Duration. Electrochimica Acta, 2015, 154, 249-258.	5.2	30
84	Oxygen-participated electrochemistry of new lithium-rich layered oxides Li <sub>3</sub> MRuO <sub>5</sub> (M = Mn, Fe). Physical Chemistry Chemical Physics, 2015, 17, 3749-3760.	2.8	22
85	Spinel compounds as multivalent battery cathodes: a systematic evaluation based on ab initio calculations. Energy and Environmental Science, 2015, 8, 964-974.	30.8	430
86	Designing New Lithium-Excess Cathode Materials from Percolation Theory: Nanohighways in Li <sub><i>x</i></sub> Ni <sub>2–4<i>x</i>/3</sub> Sb <sub><i>x</i>/3</sub> O <sub>2</sub> . Nano Letters, 2015, 15, 596-602.	9.1	54
87	Evolution of Lattice Structure and Chemical Composition of the Surface Reconstruction Layer in Li <sub>1.2</sub> Ni <sub>0.2</sub> Mn <sub>0.6</sub> O <sub>2</sub> Cathode Material for Lithium Ion Batteries. Nano Letters, 2015, 15, 514-522.	9.1	261
88	Insight into the Atomic Structure of Cycled Lithium-Rich Layered Oxide Li <sub>1.20</sub> Mn <sub>0.54</sub> Co <sub>0.13</sub> Ni <sub>0.13</sub> O <sub>2</sub> Using HAADF STEM and Electron Nanodiffraction. Journal of Physical Chemistry C, 2015, 119, 75-83.	3.1	117
89	Origin of voltage decay in high-capacity layered oxide electrodes. Nature Materials, 2015, 14, 230-238.	27.5	757
90	Origin of electrochemical activity in nano-Li <sub>2</sub> MnO <sub>3</sub> ; stabilization via a â€~point defect scaffold'. Nanoscale, 2015, 7, 1167-1180.	5.6	20
91	Ni-induced stepwise capacity increase in Ni-poor Li-rich cathode materials for high performance lithium ion batteries. Nano Research, 2015, 8, 808-820.	10.4	25
92	Polypyrrole-coated Graphite Fluorides with High Energy and High Power Densities for Li/CF battery. International Journal of Electrochemical Science, 2016, 11, 6413-6422.	1.3	20
93	Computational Design and Preparation of Cationâ€Disordered Oxides for Highâ€Energyâ€Density Liâ€lon Batteries. Advanced Energy Materials, 2016, 6, 1600488	19.5	93

#	Article	IF	CITATIONS
94	Lowâ€Temperature Cationic Rearrangement in a Bulk Metal Oxide. Angewandte Chemie, 2016, 128, 10016-10021.	2.0	3
95	Lowâ€Temperature Cationic Rearrangement in a Bulk Metal Oxide. Angewandte Chemie - International Edition, 2016, 55, 9862-9867.	13.8	20
96	Lithiation-driven structural transition of VO2F into disordered rock-salt LixVO2F. RSC Advances, 2016, 6, 65112-65118.	3.6	19
97	Synthesis of new Azoâ€based liquid crystalline polymers and their selective sensing behaviors to alkali metal ions. Journal of Polymer Science Part A, 2016, 54, 1713-1723.	2.3	6
98	Colorâ€Coded Batteries – Electroâ€Photonic Inverse Opal Materials for Enhanced Electrochemical Energy Storage and Optically Encoded Diagnostics. Advanced Materials, 2016, 28, 5681-5688.	21.0	44
99	Understanding Voltage Decay in Lithium-Rich Manganese-Based Layered Cathode Materials by Limiting Cutoff Voltage. ACS Applied Materials & Interfaces, 2016, 8, 18867-18877.	8.0	43
100	Ni and Co Segregations on Selective Surface Facets and Rational Design of Layered Lithium Transitionâ€Metal Oxide Cathodes. Advanced Energy Materials, 2016, 6, 1502455.	19.5	100
101	Transition metal oxides for sodium-ion batteries. Energy Storage Materials, 2016, 5, 116-131.	18.0	256
102	Search of high-capacity cathode materials based on lithium–iron silicate compounds. Glass Physics and Chemistry, 2016, 42, 576-581.	0.7	1
103	Improvement of Cathode Properties by Lithium Excess in Disordered Rocksalt		
	Electrochemistry, 2016, 84, 597-600.	i> <b>1∴s</b> ub>x	
104	Electrochemistry, 2016, 84, 597-600. Synthesis and Electrode Performance of Li <sub>4</sub> MoO <sub>5</sub> -LiFeO <sub>2</sub> Binary System as Positive Electrode Materials for Rechargeable Lithium Batteries. Electrochemistry, 2016, 84, 797-801.	i>1.4	30
104 105	Electrochemistry, 2016, 84, 597-600. Synthesis and Electrode Performance of Li <sub>4</sub> MoO <sub>5</sub> -LiFeO <sub>2</sub> Binary System as Positive Electrode Materials for Rechargeable Lithium Batteries. Electrochemistry, 2016, 84, 797-801. Prediction of new battery materials based on ab initio computations. AIP Conference Proceedings, 2016, , .	i> <b>t.s</b> ub>x 1.4 0.4	30 7
104 105 106	Electrochemistry, 2016, 84, 597-600. Synthesis and Electrode Performance of Li <sub>4</sub> MoO <sub>5</sub> -LiFeO <sub>2</sub> Binary System as Positive Electrode Materials for Rechargeable Lithium Batteries. Electrochemistry, 2016, 84, 797-801. Prediction of new battery materials based on ab initio computations. AIP Conference Proceedings, 2016, , . Facile Synthesis of Non-Graphitizable Polypyrrole-Derived Carbon/Carbon Nanotubes for Lithium-ion Batteries. Scientific Reports, 2016, 6, 19317.	i> <b>1.</b> sub>x 1.4 0.4 3.3	30 7 52
104 105 106	<ul> <li>Electrochemistry, 2016, 84, 597-600.</li> <li>Synthesis and Electrode Performance of Li<sub>4</sub>MoO<sub>5</sub>-LiFeO<sub>2</sub> Binary System as Positive Electrode Materials for Rechargeable Lithium Batteries. Electrochemistry, 2016, 84, 797-801.</li> <li>Prediction of new battery materials based on ab initio computations. AIP Conference Proceedings, 2016, , .</li> <li>Facile Synthesis of Non-Graphitizable Polypyrrole-Derived Carbon/Carbon Nanotubes for Lithium-ion Batteries. Scientific Reports, 2016, 6, 19317.</li> <li>Origin of stabilization and destabilization in solid-state redox reaction of oxide ions for lithium-ion batteries. Nature Communications, 2016, 7, 13814.</li> </ul>	i> <b>1</b> .sub>x 1.4 0.4 3.3 12.8	<pre>(sub&gt;)() 30 7 52 330</pre>
104 105 106 107	Electrochemistry, 2016, 84, 597-600. Synthesis and Electrode Performance of Li <sub>4</sub> MoO <sub>5</sub> -LiFeO <sub>2</sub> Binary System as Positive Electrode Materials for Rechargeable Lithium Batteries. Electrochemistry, 2016, 84, 797-801. Prediction of new battery materials based on ab initio computations. AIP Conference Proceedings, 2016, Facile Synthesis of Non-Graphitizable Polypyrrole-Derived Carbon/Carbon Nanotubes for Lithium-ion Batteries. Scientific Reports, 2016, 6, 19317. Origin of stabilization and destabilization in solid-state redox reaction of oxide ions for lithium-ion batteries. Nature Communications, 2016, 7, 13814. Penta-graphene: A Promising Anode Material as the Li/Na-Ion Battery with Both Extremely High Theoretical Capacity and Fast Charge/Discharge Rate. ACS Applied Materials & amp; Interfaces, 2016, 8, 35342-35352.	i>1.4 0.4 3.3 12.8 8.0	<pre>&gt; 30 7 52 330 174</pre>
104 105 106 107 108	Electrochemistry, 2016, 84, 597-600. Synthesis and Electrode Performance of Li&Itsub>4&It/sub>MoO&Itsub>5&It/sub>-LiFeO&Itsub>2&It/sub> Binary System as Positive Electrode Materials for Rechargeable Lithium Batteries. Electrochemistry, 2016, 84, 797-801. Prediction of new battery materials based on ab initio computations. AIP Conference Proceedings, 2016, , . Facile Synthesis of Non-Graphitizable Polypyrrole-Derived Carbon/Carbon Nanotubes for Lithium-ion Batteries. Scientific Reports, 2016, 6, 19317. Origin of stabilization and destabilization in solid-state redox reaction of oxide ions for lithium-ion batteries. Nature Communications, 2016, 7, 13814. Penta-graphene: A Promising Anode Material as the Li/Na-Ion Battery with Both Extremely High Theoretical Capacity and Fast Charge/Discharge Rate. ACS Applied Materials & amp; Interfaces, 2016, 8, 35342-35352. Performance and design considerations for lithium excess layered oxide positive electrode materials for lithium ion batteries. Energy and Environmental Science, 2016, 9, 1931-1954.	i>t.sub>x 1.4 0.4 3.3 12.8 8.0 30.8	<pre>  30   7   52   330   174   295</pre>
104 105 106 107 108 109	<ul> <li>Electrochemistry, 2016, 84, 597-600.</li> <li>Synthesis and Electrode Performance of Li&lt;_sub&gt;4MoO<sub>5</sub>-LiFeO<sub>2</sub> Binary System as Positive Electrode Materials for Rechargeable Lithium Batteries. Electrochemistry, 2016, 84, 797-801.</li> <li>Prediction of new battery materials based on ab initio computations. AIP Conference Proceedings, 2016,</li> <li>Facile Synthesis of Non-Graphitizable Polypyrrole-Derived Carbon/Carbon Nanotubes for Lithium-ion Batteries. Scientific Reports, 2016, 6, 19317.</li> <li>Origin of stabilization and destabilization in solid-state redox reaction of oxide ions for lithium-ion batteries. Nature Communications, 2016, 7, 13814.</li> <li>Penta-graphene: A Promising Anode Material as the Li/Na-Ion Battery with Both Extremely High Theoretical Capacity and Fast Charge/Discharge Rate. ACS Applied Materials &amp; amp; Interfaces, 2016, 8, 35342-35352.</li> <li>Performance and design considerations for lithium excess layered oxide positive electrode materials for lithium ion batteries. Energy and Environmental Science, 2016, 9, 1931-1954.</li> <li>Porous niobium nitride as a capacitive anode material for advanced Li-ion hybrid capacitors with superior cycling stability. Journal of Materials Chemistry A, 2016, 4, 9760-9766.</li> </ul>	<ol> <li>i&gt;t.sub&gt;x</li> <li>1.4</li> <li>0.4</li> <li>3.3</li> <li>12.8</li> <li>8.0</li> <li>30.8</li> <li>10.3</li> </ol>	(SRD) < /i> (i)  30 7 52 330 174 295 84

#	Article	IF	CITATIONS
112	Structural Understanding of Superior Battery Properties of Partially Ni-Doped Li2MnO3 as Cathode Material. Journal of Physical Chemistry Letters, 2016, 7, 2063-2067.	4.6	29
113	A synergistic effect between layer surface configurations and K ions of potassium vanadate nanowires for enhanced energy storage performance. Journal of Materials Chemistry A, 2016, 4, 4893-4899.	10.3	65
114	Enhanced electrochemical performance of Ti-doped Li1.2Mn0.54Co0.13Ni0.13O2 for lithium-ion batteries. Journal of Power Sources, 2016, 317, 74-80.	7.8	134
115	The Effect of Cation Disorder on the Average Li Intercalation Voltage of Transition-Metal Oxides. Chemistry of Materials, 2016, 28, 3659-3665.	6.7	62
116	In Situ STEM-EELS Observation of Nanoscale Interfacial Phenomena in All-Solid-State Batteries. Nano Letters, 2016, 16, 3760-3767.	9.1	278
117	High rate capabilities of HF-etched SiOC anode materials derived from polymer for lithium-ion batteries. RSC Advances, 2016, 6, 43316-43321.	3.6	32
118	Crystalline Grain Interior Configuration Affects Lithium Migration Kinetics in Li-Rich Layered Oxide. Nano Letters, 2016, 16, 2907-2915.	9.1	115
119	Electrode Reaction Mechanism of Ag <sub>2</sub> VO <sub>2</sub> PO <sub>4</sub> Cathode. Chemistry of Materials, 2016, 28, 3428-3434.	6.7	6
120	A Study of Stacking Faults and Superlattice Ordering in Some Li-Rich Layered Transition Metal Oxide Positive Electrode Materials. Journal of the Electrochemical Society, 2016, 163, A1394-A1400.	2.9	49
121	Elastic Properties, Defect Thermodynamics, Electrochemical Window, Phase Stability, and Li <sup>+</sup> Mobility of Li <sub>3</sub> PS <sub>4</sub> : Insights from First-Principles Calculations. ACS Applied Materials & Interfaces, 2016, 8, 25229-25242.	8.0	114
122	Electrospun Li2MnO3-modified Li1.2NixCo0.1Mn0.9-xO2 nanofibers: Synthesis and enhanced electrochemical performance for lithium-ion batteries. Electronic Materials Letters, 2016, 12, 804-811.	2.2	10
123	Two dimensional and layered transition metal oxides. Applied Materials Today, 2016, 5, 73-89.	4.3	400
124	Prospects for spinel-stabilized, high-capacity lithium-ion battery cathodes. Journal of Power Sources, 2016, 334, 213-220.	7.8	18
125	Preparation and electrochemical properties of Li <sub>2</sub> MoO <sub>3</sub> /C composites for rechargeable Li-ion batteries. Physical Chemistry Chemical Physics, 2016, 18, 28556-28563.	2.8	19
126	Explore the Effects of Microstructural Defects on Voltage Fade of Li- and Mn-Rich Cathodes. Nano Letters, 2016, 16, 5999-6007.	9.1	64
127	Highly Stable Three Lithium Insertion in Thin V <sub>2</sub> O <sub>5</sub> Shells on Vertically Aligned Carbon Nanofiber Arrays for Ultrahigh apacity Lithium Ion Battery Cathodes. Advanced Materials Interfaces, 2016, 3, 1600824.	3.7	28
128	Nanocrystallisation in vanadate phosphate and lithium iron vanadate phosphate glasses. Journal of Commonwealth Law and Legal Education, 2016, 57, 113-124.	0.5	9
129	Nanostructured cation disordered Li <sub>2</sub> FeTiO <sub>4</sub> /graphene composite as high capacity cathode for lithium-ion batteries. Materials Technology, 2016, 31, 537-543.	3.0	22

#	Article	IF	CITATIONS
130	Lithium-excess olivine electrode for lithium rechargeable batteries. Energy and Environmental Science, 2016, 9, 2902-2915.	30.8	49
131	Mg ion dynamics in anode materials of Sn and Bi for Mg-ion batteries. Materials Chemistry and Physics, 2016, 182, 167-172.	4.0	37
132	Evolution of crystal structure and electrochemical performance of layered Li1.20Ti0.44Cr0.36O2/C cathode materials with cycling. Ionics, 2016, 22, 2291-2298.	2.4	1
133	Linear topology in amorphous metal oxide electrochromic networks obtained via low-temperature solution processing. Nature Materials, 2016, 15, 1267-1273.	27.5	155
134	A novel electroactive λ-MnO <sub>2</sub> /PPy/PSS core–shell nanorod coated electrode for selective recovery of lithium ions at low concentration. Journal of Materials Chemistry A, 2016, 4, 13989-13996.	10.3	109
135	Structural integrity—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
136	The phase structure and electrochemical performance of xLi2MnO3·(1Ââ^'Âx)LiNi1/3Co1/3Mn1/3O2 during the synthesis and charge–discharge process. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	6
137	Recent advances in titanium-based electrode materials for stationary sodium-ion batteries. Energy and Environmental Science, 2016, 9, 2978-3006.	30.8	368
138	Analytical ABF-STEM imaging of Li ions in rechargeable batteries. Microscopy (Oxford, England), 2016, 66, 25-38.	1.5	11
139	Quantitative Analysis of Transition-Metal Migration Induced Electrochemically in Lithium-Rich Layered Oxide Cathode and Its Contribution to Properties at High and Low Temperatures. Journal of Physical Chemistry C, 2016, 120, 27109-27116.	3.1	15
140	A stable lithium-rich surface structure for lithium-rich layered cathode materials. Nature Communications, 2016, 7, 13598.	12.8	153
141	In Situ Environmental TEM in Imaging Gas and Liquid Phase Chemical Reactions for Materials Research. Advanced Materials, 2016, 28, 9686-9712.	21.0	124
142	Monoclinic β-Li2TiO3: Neutron diffraction study and estimation of Li diffusion pathways. Solid State Sciences, 2016, 61, 161-166.	3.2	8
143	Redesign of Li <sub>2</sub> MP <sub>2</sub> O <sub>7</sub> (M = Fe or Mn) by Tuning the Li Diffusion in Rechargeable Battery Electrodes. Chemistry of Materials, 2016, 28, 6894-6899.	6.7	17
144	Understanding the Effect of Cation Disorder on the Voltage Profile of Lithium Transition-Metal Oxides. Chemistry of Materials, 2016, 28, 5373-5383.	6.7	79
145	Structural model, size effect and nano-energy system design for more sustainable energy of solid state automotive battery. Renewable and Sustainable Energy Reviews, 2016, 65, 685-697.	16.4	11
146	Countering the Segregation of Transitionâ€Metal lons in LiMn <sub>1/3</sub> Co <sub>1/3</sub> Ni <sub>1/3</sub> O <sub>2</sub> Cathode for Ultralong Life and Highâ€Energy Liâ€Ion Batteries. Small, 2016, 12, 4421-4430.	10.0	30
147	Bivalence Mn5O8 with hydroxylated interphase for high-voltage aqueous sodium-ion storage. Nature Communications, 2016, 7, 13370.	12.8	109

#	Article	IF	CITATIONS
148	Antisite Disorder and Bond Valence Compensation in Li <sub>2</sub> FePO <sub>4</sub> F Cathode for Li-Ion Batteries. Chemistry of Materials, 2016, 28, 7578-7581.	6.7	20
149	Computational understanding of Li-ion batteries. Npj Computational Materials, 2016, 2, .	8.7	411
150	Roles of surface structure and chemistry on electrochemical processes in lithium-rich layered oxide cathodes. Nano Energy, 2016, 30, 580-602.	16.0	61
151	Guided Evolution of Bulk Metallic Glass Nanostructures: A Platform for Designing 3D Electrocatalytic Surfaces. Advanced Materials, 2016, 28, 1940-1949.	21.0	71
152	A Layerâ€Structured Electrode Material Reformed by a PO <sub>4</sub> â€O <sub>2</sub> Hybrid Framework toward Enhanced Lithium Storage and Stability. Advanced Energy Materials, 2016, 6, 1501717.	19.5	43
153	Computational studies of solid-state alkali conduction in rechargeable alkali-ion batteries. NPG Asia Materials, 2016, 8, e254-e254.	7.9	73
154	Highly conductive cathode materials for Li-ion batteries prepared by thermal nanocrystallization of selected oxide glasses. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2016, 213, 140-147.	3.5	26
155	The Effect of Boron Doping on Structure and Electrochemical Performance of Lithium-Rich Layered Oxide Materials. ACS Applied Materials & Interfaces, 2016, 8, 18008-18017.	8.0	68
156	The structural and chemical origin of the oxygen redox activity in layered and cation-disordered Li-excess cathode materials. Nature Chemistry, 2016, 8, 692-697.	13.6	1,022
157	Zero-Strain Na <sub>2</sub> FeSiO <sub>4</sub> as Novel Cathode Material for Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 17233-17238.	8.0	101
158	Dependence of Structural Defects in Li <sub>2</sub> MnO <sub>3</sub> on Synthesis Temperature. Chemistry of Materials, 2016, 28, 4143-4150.	6.7	54
159	Nitrogen-doped carbon-coated Ti–Fe–O nanocomposites with enhanced reversible capacity and rate capability for high-performance lithium-ion batteries. RSC Advances, 2016, 6, 65266-65274.	3.6	12
160	Insights into Ionic Transport and Structural Changes in Magnetite during Multipleâ€Electron Transfer Reactions. Advanced Energy Materials, 2016, 6, 1502471.	19.5	72
161	Highâ€Performance Lowâ€Temperature Li <sup>+</sup> Intercalation in Disordered Rockâ€Salt Li–Cr–V Oxyfluorides. ChemElectroChem, 2016, 3, 892-895.	3.4	32
162	Capacity improvement by deficit of transition metals in inverse spinel LiNi1/3Co1/3Mn1/3VO4 cathodes. Journal of Power Sources, 2016, 302, 240-246.	7.8	3
163	Understanding electrochemical potentials of cathode materials in rechargeable batteries. Materials Today, 2016, 19, 109-123.	14.2	811
164	Synthesis and electrochemical properties of Li <sub>1.3</sub> Nb <sub>0.3</sub> V <sub>0.4</sub> O <sub>2</sub> as a positive electrode material for rechargeable lithium batteries. Chemical Communications, 2016, 52, 2051-2054.	4.1	76
165	A novel polytype – the stacking fault based γ-MoO <sub>3</sub> nanobelts. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2016, 72, 201-208.	1.1	5

#	Article	IF	Citations
166	Identifying the redox activity of cation-disordered Li–Fe–V–Ti oxide cathodes for Li-ion batteries. Physical Chemistry Chemical Physics, 2016, 18, 7695-7701.	2.8	25
167	Self-doped V 4+ –V 2 O 5 nanoflake for 2 Li-ion intercalation with enhanced rate and cycling performance. Nano Energy, 2016, 22, 1-10.	16.0	143

Layered-to-Rock-Salt Transformation in Desodiated Na<sub><i>x</i></sub>CrO<sub>2</sub> (<i>x</i>) Tj ETQq0 0.0 rgBT /Overlock 10

169	Comparative Electrochemical Charge Storage Properties of Bulk and Nanoscale Vanadium Oxide Electrodes. Journal of Solid State Electrochemistry, 2016, 20, 1445-1458.	2.5	27
170	Porous cubes constructed by cobalt oxide nanocrystals with graphene sheet coatings for enhanced lithium storage properties. Nanoscale, 2016, 8, 7688-7694.	5.6	48
171	Synthesis and Electrochemical Properties of Li <sub>4</sub> MoO <sub>5</sub> –NiO Binary System as Positive Electrode Materials for Rechargeable Lithium Batteries. Chemistry of Materials, 2016, 28, 416-419.	6.7	55
172	Synthesis of nanostructured Li3Me2(PO4)2F3 glass-ceramics (Me = V, Fe, Ti). Solid State Ionics, 2016, 288, 193-198.	2.7	14
173	Preparation of Fe 3 O 4 /rebar graphene composite via solvothermal route as binder free anode for lithium ion batteries. Journal of Alloys and Compounds, 2016, 661, 448-454.	5.5	25
174	Storage and Effective Migration of Li-Ion for Defected β-LiFePO <sub>4</sub> Phase Nanocrystals. Nano Letters, 2016, 16, 601-608.	9.1	31
175	Lithium Batteries. , 2016, , .		114
176	Lithium-free transition metal monoxides for positive electrodes in lithium-ion batteries. Nature Energy, 2017, 2, .	39.5	94
177	Enhanced Lithium Storage Capability in Li-Ion Batteries Using Porous 3D Co <sub>3</sub> O <sub>4</sub> Nanofiber Anodes. Industrial & Engineering Chemistry Research, 2017, 56, 2046-2053.	3.7	42
178	Regulating Li deposition at artificial solid electrolyte interphases. Journal of Materials Chemistry A, 2017, 5, 3483-3492.	10.3	258
179	Atomic-Scale Tracking of a Phase Transition from Spinel to Rocksalt in Lithium Manganese Oxide. Chemistry of Materials, 2017, 29, 1006-1013.	6.7	32
180	Polyanion‶ype Electrode Materials for Sodiumâ€ion Batteries. Advanced Science, 2017, 4, 1600275.	11.2	367
181	Selfâ€Induced Concentration Gradient in Nickelâ€Rich Cathodes by Sacrificial Polymeric Bead Clusters for Highâ€Energy Lithiumâ€Ion Batteries. Advanced Energy Materials, 2017, 7, 1602559.	19.5	80
182	Advanced electron microscopy characterization of nanomaterials for catalysis. Green Energy and Environment, 2017, 2, 70-83.	8.7	97
183	The Impact of Electrolyte Additives and Upper Cut-off Voltage on the Formation of a Rocksalt Surface Layer in LiNi <sub>0.8</sub> Mn <sub>0.1</sub> Co <sub>0.1</sub> O <sub>2</sub> Electrodes. Journal of the Electrochemical Society. 2017. 164. A655-A665.	2.9	161

#	Article	IF	CITATIONS
184	Design structure model and renewable energy technology for rechargeable battery towards greener and more sustainable electric vehicle. Renewable and Sustainable Energy Reviews, 2017, 74, 19-25.	16.4	43
185	Highly Efficient Catalytic Hydrogen Evolution from Ammonia Borane Using the Synergistic Effect of Crystallinity and Size of Noble-Metal-Free Nanoparticles Supported by Porous Metal–Organic Frameworks. ACS Applied Materials & Interfaces, 2017, 9, 10759-10767.	8.0	77
186	Amorphous LiCoO 2 Li 2 SO 4 active materials: Potential positive electrodes for bulk-type all-oxide solid-state lithium batteries with high energy density. Journal of Power Sources, 2017, 348, 1-8.	7.8	29
187	Investigating the Kinetic Effect on Structural Evolution of Li <sub><i>x</i></sub> Ni <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> Cathode Materials during the Initial Charge/Discharge. Chemistry of Materials, 2017, 29, 2708-2716.	6.7	39
188	Tuning the Reversibility of Oxygen Redox in Lithium-Rich Layered Oxides. Chemistry of Materials, 2017, 29, 2811-2818.	6.7	56
189	Reversible Three-Electron Redox Reaction of Mo <sup>3+</sup> /Mo <sup>6+</sup> for Rechargeable Lithium Batteries. ACS Energy Letters, 2017, 2, 733-738.	17.4	61
190	Template-free formation of various V <sub>2</sub> O <sub>5</sub> hierarchical structures as cathode materials for lithium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 6522-6531.	10.3	50
191	Depolarization effect to enhance the performance of lithium ions batteries. Nano Energy, 2017, 33, 497-507.	16.0	79
192	Understanding the Origins of Higher Capacities at Faster Rates in Lithium-Excess Li <sub><i>x</i></sub> Ni <sub>2–4<i>x</i>/3</sub> Sb <sub><i>x</i>/3</sub> O <sub>2</sub> . Chemistry of Materials, 2017, 29, 2584-2593.	6.7	18
193	Review on anionic redox for high-capacity lithium- and sodium-ion batteries. Journal Physics D: Applied Physics, 2017, 50, 183001.	2.8	53
194	Molecular layer deposition of "vanadiconeâ€; a vanadium-based hybrid material, as an electrode for lithium-ion batteries. Dalton Transactions, 2017, 46, 4542-4553.	3.3	42
195	Magnesium ion mobility in post-spinels accessible at ambient pressure. Chemical Communications, 2017, 53, 5171-5174.	4.1	21
196	Re-entrant spin-glass freezing and magneto-dielectric behaviour of Li <sub>3</sub> NiRuO <sub>5</sub> , a layered rock-salt related oxide. Journal of Materials Chemistry C, 2017, 5, 5163-5169.	5.5	5
197	Electron Beam Effects in Liquid Cell TEM and STEM. , 0, , 140-163.		12
198	In situ Visualization of State-of-Charge Heterogeneity within a LiCoO <sub>2</sub> Particle that Evolves upon Cycling at Different Rates. ACS Energy Letters, 2017, 2, 1240-1245.	17.4	159
199	Nanofibrous membrane constructed wearable triboelectric nanogenerator for high performance biomechanical energy harvesting. Nano Energy, 2017, 36, 341-348.	16.0	162
200	Unraveling the Nature of Anomalously Fast Energy Storage in T-Nb <sub>2</sub> O <sub>5</sub> . Journal of the American Chemical Society, 2017, 139, 7071-7081.	13.7	171
201	A review of Ni-based layered oxides for rechargeable Li-ion batteries. Journal of Materials Chemistry A, 2017, 5, 874-901.	10.3	394

#	Article	IF	CITATIONS
202	Amorphous <scp>MnO<sub>2</sub></scp> as Cathode Material for Sodiumâ€ion Batteries. Chinese Journal of Chemistry, 2017, 35, 1294-1298.	4.9	29
203	Toward Low-Cost, High-Energy Density, and High-Power Density Lithium-Ion Batteries. Jom, 2017, 69, 1484-1496.	1.9	186
204	Nanoporous carbon leading to the high performance of a Na <sub>3</sub> V <sub>2</sub> O <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F@carbon/graphene cathode in a sodium ion battery. CrystEngComm, 2017, 19, 4287-4293.	2.6	31
205	Oxygen vacancies: Effective strategy to boost sodium storage of amorphous electrode materials. Nano Energy, 2017, 38, 304-312.	16.0	92
206	Structure Evolution and Thermal Stability of High-Energy- Density Li-Ion Battery Cathode Li <sub>2</sub> VO <sub>2</sub> F. Journal of the Electrochemical Society, 2017, 164, A1552-A1558.	2.9	27
207	Structural water engaged disordered vanadium oxide nanosheets for high capacity aqueous potassium-ion storage. Nature Communications, 2017, 8, 15520.	12.8	121
208	Attainable high capacity in Li-excess Li-Ni-Ru-O rock-salt cathode for lithium ion battery. Journal of Power Sources, 2017, 359, 270-276.	7.8	24
209	Understanding the Enhanced Kinetics of Gradient-Chemical-Doped Lithium-Rich Cathode Material. ACS Applied Materials & Interfaces, 2017, 9, 20519-20526.	8.0	41
210	Amorphous and Crystalline Vanadium Oxides as High-Energy and High-Power Cathodes for Three-Dimensional Thin-Film Lithium Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 13121-13131.	8.0	73
211	Effects of proton irradiation on structural and electrochemical charge storage properties of TiO <sub>2</sub> nanotube electrodes for lithium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 11815-11824.	10.3	45
212	Phase structure and electrochemical performance control of 0.5Li2MnO3â‹0.5LiNi1/3Co1/3Mn1/3O2 based on the concentration adjustment in a molten salt synthesis system. Journal of Applied Electrochemistry, 2017, 47, 691-698.	2.9	5
213	Microstructure dynamics of rechargeable battery materials studied by advanced transmission electron microscopy. NPG Asia Materials, 2017, 9, e360-e360.	7.9	20
214	High Rate and Stable Li-Ion Insertion in Oxygen-Deficient LiV <sub>3</sub> O <sub>8</sub> Nanosheets as a Cathode Material for Lithium-Ion Battery. ACS Applied Materials & Interfaces, 2017, 9, 2875-2882.	8.0	64
215	Solid-state Redox Reaction of Oxide Ions for Rechargeable Batteries. Chemistry Letters, 2017, 46, 412-422.	1.3	59
216	Li―and Mnâ€Rich Cathode Materials: Challenges to Commercialization. Advanced Energy Materials, 2017, 7, 1601284.	19.5	383
217	Modelling solid solutions with cluster expansion, special quasirandom structures, and thermodynamic approaches. Applied Physics Reviews, 2017, 4, 041301.	11.3	20
218	High-capacity lithium-rich cathode oxides with multivalent cationic and anionic redox reactions for lithium ion batteries. Science China Chemistry, 2017, 60, 1483-1493.	8.2	26
219	Reversible Li storage for nanosize cation/anion-disordered rocksalt-type oxyfluorides: LiMoO 2 – x LiF (0 ≤ â‰⊉) binary system. Journal of Power Sources, 2017, 367, 122-129.	7.8	59

#	Article	IF	CITATIONS
220	Electronic-Structure Origin of Cation Disorder in Transition-Metal Oxides. Physical Review Letters, 2017, 119, 176402.	7.8	135
221	NbS <sub>2</sub> Nanosheets with M/Se (M = Fe, Co, Ni) Codopants for Li <sup>+</sup> and Na <sup>+</sup> Storage. ACS Nano, 2017, 11, 10599-10607.	14.6	95
222	Improving the Structural Stability of Liâ€Rich Layered Cathode Materials by Constructing an Antisite Defect Nanolayer through Polyanion Doping. ChemElectroChem, 2017, 4, 3068-3074.	3.4	22
223	Porous carbon-wrapped cerium oxide hollow spheres synthesized via microwave hydrothermal for long-cycle and high-rate lithium-ion batteries. Electrochimica Acta, 2017, 256, 110-118.	5.2	24
224	Molecular Orbital Principles of Oxygen-Redox Battery Electrodes. ACS Applied Materials & Interfaces, 2017, 9, 36463-36472.	8.0	146
225	Advances in Structure and Property Optimizations of Battery Electrode Materials. Joule, 2017, 1, 522-547.	24.0	219
226	Lithium-Ion Battery Supply Chain Considerations: Analysis of Potential Bottlenecks in Critical Metals. Joule, 2017, 1, 229-243.	24.0	937
227	Mitigating oxygen loss to improve the cycling performance of high capacity cation-disordered cathode materials. Nature Communications, 2017, 8, 981.	12.8	197
228	The effect of cation mixing controlled by thermal treatment duration on the electrochemical stability of lithium transition-metal oxides. Physical Chemistry Chemical Physics, 2017, 19, 29886-29894.	2.8	91
229	Formation of an Anti-Core–Shell Structure in Layered Oxide Cathodes for Li-Ion Batteries. ACS Energy Letters, 2017, 2, 2598-2606.	17.4	42
230	Correlations between Transition-Metal Chemistry, Local Structure, and Global Structure in Li <sub>2</sub> Ru <sub>0.5</sub> Mn <sub>0.5</sub> O <sub>3</sub> Investigated in a Wide Voltage Window. Chemistry of Materials, 2017, 29, 9053-9065.	6.7	40
231	Synthetic Control of Kinetic Reaction Pathway and Cationic Ordering in Highâ€Ni Layered Oxide Cathodes. Advanced Materials, 2017, 29, 1606715.	21.0	127
232	Influence of Inversion on Mg Mobility and Electrochemistry in Spinels. Chemistry of Materials, 2017, 29, 7918-7930.	6.7	75
233	Unlocking the structure of mixed amorphous-crystalline ceramic oxide films synthesized under low temperature electromagnetic excitation. Journal of Materials Chemistry A, 2017, 5, 18434-18441.	10.3	20
234	Humidity-resisting triboelectric nanogenerator for high performance biomechanical energy harvesting. Nano Energy, 2017, 40, 282-288.	16.0	145
235	Material design of high-capacity Li-rich layered-oxide electrodes: Li <sub>2</sub> MnO <sub>3</sub> and beyond. Energy and Environmental Science, 2017, 10, 2201-2211.	30.8	80
236	Reversible magnesium and aluminium ions insertion in cation-deficient anatase TiO2. Nature Materials, 2017, 16, 1142-1148.	27.5	366
237	Diffusion in energy materials: Governing dynamics from atomistic modelling. Applied Physics Reviews, 2017, 4, .	11.3	22

#	Article	IF	CITATIONS
238	Evidence for percolation diffusion of cations and reordering in disordered pyrochlore from accelerated molecular dynamics. Nature Communications, 2017, 8, 618.	12.8	28
239	Suppressed oxygen extraction and degradation of LiNi x Mn y Co z O2 cathodes at high charge cut-off voltages. Nano Research, 2017, 10, 4221-4231.	10.4	77
240	Synthesis and electrochemical properties of cation-disordered Li-Ni-Ti-O compounds as cathode material for lithium ion batteries. Journal of Alloys and Compounds, 2017, 728, 659-668.	5.5	22
241	An Outlook on Lithium Ion Battery Technology. ACS Central Science, 2017, 3, 1063-1069.	11.3	997
242	Efficient and accurate machine-learning interpolation of atomic energies in compositions with many species. Physical Review B, 2017, 96, .	3.2	228
243	Lithium-Excess Cation-Disordered Rocksalt-Type Oxide with Nanoscale Phase Segregation: Li <sub>1.25</sub> Nb <sub>0.25</sub> V <sub>0.5</sub> O <sub>2</sub> . Chemistry of Materials, 2017, 29, 6927-6935.	6.7	87
244	New allotropes of Li <sub>2</sub> MnO <sub>3</sub> as cathode materials with better cycling performance predicted in high pressure synthesis. Journal of Materials Chemistry A, 2017, 5, 16936-16943.	10.3	17
245	Preparation of Layeredâ€Spinel Microsphere/Reduced Graphene Oxide Cathode Materials for Ultrafast Charge–Discharge Lithiumâ€Ion Batteries. ChemSusChem, 2017, 10, 4845-4850.	6.8	18
246	Narrowing the Gap between Theoretical and Practical Capacities in Liâ€Ion Layered Oxide Cathode Materials. Advanced Energy Materials, 2017, 7, 1602888.	19.5	455
247	Enhanced Electrochemical Performance of Tiâ€Doping Li <sub>1.</sub> <scp><sub>15</sub>Ni<sub>0</sub><sub>.</sub>.<scp><sub>47</sub>Sb<sub>0as Lithiumâ€excess Cathode for Lithiumâ€ion Batteries. Chinese Journal of Chemistry, 2017, 35, 1853-1860.</sub></scp></scp>	> <b>4/9</b> cp > < s	su <b>b</b> >.
248	Role of Ordered Ni Atoms in Li Layers for Liâ€Rich Layered Cathode Materials. Advanced Functional Materials, 2017, 27, 1700982.	14.9	36
249	K-Doped Li-Rich Molybdenum-Based Oxide with Improved Electrochemical Properties for Lithium-Ion Batteries. Arabian Journal for Science and Engineering, 2017, 42, 4291-4298.	3.0	13
250	A Mild Surface Washing Method Using Protonated Polyaniline for Ni-rich LiNi0.8Co0.1Mn0.1O2 Material of Lithium Ion Batteries. Electrochimica Acta, 2017, 248, 534-540.	5.2	89
251	Using Firstâ€Principles Calculations for the Advancement of Materials for Rechargeable Batteries. Advanced Functional Materials, 2017, 27, 1702887.	14.9	40
252	Construction of ground-state preserving sparse lattice models for predictive materials simulations. Npj Computational Materials, 2017, 3, .	8.7	15
253	Study of Li atom diffusion in amorphous Li3PO4 with neural network potential. Journal of Chemical Physics, 2017, 147, 214106.	3.0	108
254	Nanoscale Zirconium-Abundant Surface Layers on Lithium- and Manganese-Rich Layered Oxides for High-Rate Lithium-Ion Batteries. Nano Letters, 2017, 17, 7869-7877.	9.1	40
255	Anionic Redox in Rechargeable Lithium Batteries. Advanced Materials, 2017, 29, 1701054.	21.0	220

#	Article	IF	CITATIONS
256	Composition and temperature dependence of self-diffusion in Si1â^'x Ge x alloys. Scientific Reports, 2017, 7, 1374.	3.3	26
257	Latticeâ€Cell Orientation Disorder in Complex Spinel Oxides. Advanced Energy Materials, 2017, 7, 1601950.	19.5	21
258	Fabrication of amorphous SnO2@C nanofibers as anode for lithium-ion batteries. Materials Letters, 2017, 186, 231-234.	2.6	22
259	Obstacles toward unity efficiency of LiNi 1-2x Co x Mn x O 2 (xÂ=Â0Ââ^¼Â1/3) (NCM) cathode materials: Insights from ab initio calculations. Journal of Power Sources, 2017, 340, 217-228.	7.8	57
260	Understanding Mn-Based Intercalation Cathodes from Thermodynamics and Kinetics. Crystals, 2017, 7, 221.	2.2	13
261	Lithium manganese oxyfluoride as a new cathode material exhibiting oxygen redox. Energy and Environmental Science, 2018, 11, 926-932.	30.8	156
262	Self-powered versatile shoes based on hybrid nanogenerators. Nano Research, 2018, 11, 3972-3978.	10.4	45
263	Photodeposited Amorphous Oxide Films for Electrochromic Windows. CheM, 2018, 4, 821-832.	11.7	95
264	Reversible Multi-Electron Transfer of Cr <sup>2.8+</sup> /Cr <sup>4.4+</sup> in O3-Type Layered Na <sub>0.66</sub> Fe <sub>1/3</sub> Cr <sub>1/3</sub> Ti <sub>1/3</sub> O <sub>2</sub> for Sodium-Ion Batteries. Journal of the Electrochemical Society, 2018, 165, A565-A574.	2.9	19
265	Facilitating high-capacity V2O5 cathodes with stable two and three Li+ insertion using a hybrid membrane structure consisting of amorphous V2O5 shells coaxially deposited on electrospun carbon nanofibers. Electrochimica Acta, 2018, 269, 144-154.	5.2	16
266	Fundamental Challenges for Modeling Electrochemical Energy Storage Systems at the Atomic Scale. Topics in Current Chemistry, 2018, 376, 17.	5.8	16
267	Dissolution of Complex Metal Oxides from First-Principles and Thermodynamics: Cation Removal from the (001) Surface of Li(Ni <sub>1/3</sub> Mn <sub>1/3</sub> Co <sub>1/3</sub> )O <sub>2</sub> . Environmental Science & amp; Technology, 2018, 52, 5792-5802.	10.0	57
268	Reversible Delithiation of Disordered Rock Salt LiVO <sub>2</sub> . ChemElectroChem, 2018, 5, 1484-1490.	3.4	24
269	Highly bonded T-Nb2O5/rGO nanohybrids for 4 V quasi-solid state asymmetric supercapacitors with improved electrochemical performance. Nano Research, 2018, 11, 4673-4685.	10.4	50
270	Fundamental understanding and practical challenges of anionic redox activity in Li-ion batteries. Nature Energy, 2018, 3, 373-386.	39.5	962
271	Reversible Mn2+/Mn4+ double redox in lithium-excess cathode materials. Nature, 2018, 556, 185-190.	27.8	525
272	Stretchable and Tailorable Triboelectric Nanogenerator Constructed by Nanofibrous Membrane for Energy Harvesting and Selfâ€Powered Biomechanical Monitoring. Advanced Materials Technologies, 2018, 3, 1700370.	5.8	47
273	All boron-based 2D material as anode material in Li-ion batteries. Journal of Energy Chemistry, 2018, 27, 1651-1654.	12.9	35

#	Article	IF	CITATIONS
274	Cation-mixing stabilized layered oxide cathodes for sodium-ion batteries. Science Bulletin, 2018, 63, 376-384.	9.0	75
275	Unravelling Solid-State Redox Chemistry in Li <sub>1.3</sub> Nb <sub>0.3</sub> Mn <sub>0.4</sub> O <sub>2</sub> Single-Crystal Cathode Material. Chemistry of Materials, 2018, 30, 1655-1666.	6.7	84
276	Another Strategy, Detouring Potential Decay by Fast Completion of Cation Mixing. Advanced Energy Materials, 2018, 8, 1703092.	19.5	30
277	Graphene-like Carbon–Nitride Monolayer: A Potential Anode Material for Na- and K-Ion Batteries. Journal of Physical Chemistry C, 2018, 122, 2481-2489.	3.1	150
278	Electrochemical Property of Li-Mn Cation Disordered Li-Rich Li <sub>2</sub> MnO <sub>3</sub> with NaCl Type Structure. Journal of the Electrochemical Society, 2018, 165, A291-A296.	2.9	18
279	A chemical redox reaction to generate rock salt-type materials: the case of Na3V2O5. Dalton Transactions, 2018, 47, 3112-3118.	3.3	4
280	Self‣tanding Porous LiCoO <sub>2</sub> Nanosheet Arrays as 3D Cathodes for Flexible Liâ€ion Batteries. Advanced Functional Materials, 2018, 28, 1705836.	14.9	114
281	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
282	High apacity Cathode Material with High Voltage for Liâ€lon Batteries. Advanced Materials, 2018, 30, 1705575.	21.0	333
283	Facet-Dependent Rock-Salt Reconstruction on the Surface of Layered Oxide Cathodes. Chemistry of Materials, 2018, 30, 692-699.	6.7	53
284	Rational synthesis of graphene-encapsulated uniform MnMoO4 hollow spheres as long-life and high-rate anodes for lithium-ion batteries. Journal of Colloid and Interface Science, 2018, 524, 256-262.	9.4	36
285	Achieving high capacity hybrid-cathode FeF <sub>3</sub> @Li <sub>2</sub> C <sub>6</sub> O <sub>6</sub> /rGO based on morphology control synthesis and interface engineering. Chemical Communications, 2018, 54, 3235-3238.	4.1	11
286	Structure-Induced Reversible Anionic Redox Activity in Na Layered Oxide Cathode. Joule, 2018, 2, 125-140.	24.0	311
287	Phase transitions and related electrochemical performances of Li-Rich layered cathode materials for high-energy lithium ion batteries. Journal of Alloys and Compounds, 2018, 732, 385-395.	5.5	21
288	Revitalized interest in vanadium pentoxide as cathode material for lithium-ion batteries and beyond. Energy Storage Materials, 2018, 11, 205-259.	18.0	221
289	Fluorination of Lithiumâ€Excess Transition Metal Oxide Cathode Materials. Advanced Energy Materials, 2018, 8, 1701533.	19.5	115
290	A review on first principles based studies for improvement of cathode material of lithium ion batteries. Journal of Energy Chemistry, 2018, 27, 219-237.	12.9	45
291	FUNDAMENTALS OF RECHARGEABLE BATTERIES AND ELECTROCHEMICAL POTENTIALS OF ELECTRODE MATERIALS., 2018,, 397-451.		3

#	Article	IF	CITATIONS
292	REVITALIZED INTEREST IN VANADIUM PENTOXIDE AS CATHODE MATERIAL FOR ALKALI-ION BATTERIES. , 2018, , 453-580.		0
293	Prospect and Reality of Niâ€Rich Cathode for Commercialization. Advanced Energy Materials, 2018, 8, 1702028.	19.5	574
294	Biphase Cobalt–Manganese Oxide with High Capacity and Rate Performance for Aqueous Sodiumâ€lon Electrochemical Energy Storage. Advanced Functional Materials, 2018, 28, 1703266.	14.9	25
295	Significantly improving cycling performance of cathodes in lithium ion batteries: The effect of Al2O3 and LiAlO2 coatings on LiNi0.6Co0.2Mn0.2O2. Nano Energy, 2018, 44, 111-120.	16.0	536
296	Synthesis and electrochemical properties of Li <sub>1.3</sub> Nb <sub>0.3</sub> Cr <sub>0.4</sub> O <sub>2</sub> as a high-capacity cathode material for rechargeable lithium batteries. Chemical Communications, 2018, 54, 13809-13812.	4.1	8
297	The Effect of Thermal Treatment Temperature and Duration on Electrochemistry Performance of LiNi1/3Co1/3Mn1/3O2 Cathode Materials for Lithium-ion Batteries. Current Nanoscience, 2018, 14, 440-447.	1.2	2
298	Solution-Deposited Solid-State Electrochromic Windows. IScience, 2018, 10, 80-86.	4.1	36
299	A monoclinic polymorph of sodium birnessite for ultrafast and ultrastable sodium ion storage. Nature Communications, 2018, 9, 5100.	12.8	142
300	Amorphization as a Pathway to Fast Charging Kinetics in Atomic Layer Deposition-Derived Titania Films for Lithium Ion Batteries. Chemistry of Materials, 2018, 30, 8871-8882.	6.7	22
301	Mitigating voltage decay in high-capacity Li1.2Ni0.2Mn0.6O2 cathode material by surface K+ doping. Electrochimica Acta, 2018, 291, 278-286.	5.2	27
302	Amorphous xLiF-FeSO4 (1†â‰ <b>â</b> € x†â‰ <b>ã</b> € 2) composites as a cathode material for lithium ion batteries. Solid Ionics, 2018, 326, 48-51.	l State 2.7	14
303	A Reversible Rocksalt to Amorphous Phase Transition Involving Anion Redox. Scientific Reports, 2018, 8, 15086.	3.3	21
304	Improved Electrochemical Performances of Carbon-coated Li2MoO3 Cathode Materials for Li-ion Batteries. International Journal of Electrochemical Science, 2018, 13, 4504-4511.	1.3	13
305	Short-Range Order and Unusual Modes of Nickel Redox in a Fluorine-Substituted Disordered Rocksalt Oxide Lithium-Ion Cathode. Chemistry of Materials, 2018, 30, 6945-6956.	6.7	72
306	Solid Halide Electrolytes with High Lithiumâ€lon Conductivity for Application in 4 V Class Bulkâ€Type Allâ€5olidâ€State Batteries. Advanced Materials, 2018, 30, e1803075.	21.0	566
307	OPGs: promising anode materials with high specific capacity and rate capability for Li/Na ion batteries. Nanoscale, 2018, 10, 17942-17948.	5.6	16
308	New Class of 3.7 V Fe-Based Positive Electrode Materials for Na-Ion Battery Based on Cation-Disordered Polyanion Framework. Chemistry of Materials, 2018, 30, 6346-6352.	6.7	23
309	Cationic Ordering Coupled to Reconstruction of Basic Building Units during Synthesis of High-Ni Layered Oxides. Journal of the American Chemical Society, 2018, 140, 12484-12492.	13.7	113

	Citation Rei	PORT	
Article		IF	CITATIONS
Constructing Unique Cathode Interface by Manipulating Functional Groups of Electrol for Graphite/LiNi <sub>0.6</sub> Co <sub>0.2</sub> Mn <sub>0.2</sub> O <sub>2Voltage. Journal of Physical Chemistry Letters, 2018, 9, 3434-3445.</sub>	yte Additive ›> Cells at High	4.6	77
Design principles for high transition metal capacity in disordered rocksalt Li-ion cathod Environmental Science, 2018, 11, 2159-2171.	es. Energy and	30.8	123
Identifying the Origin and Contribution of Surface Storage in TiO <sub>2</sub> (B) Nar by In Situ Dynamic Valence State Monitoring. Advanced Materials, 2018, 30, e180220	10tube Electrode 0.	21.0	90
Metastable and nanosize cation-disordered rocksalt-type oxides: revisit of stoichiomet LiMnO <sub>2</sub> and NaMnO <sub>2</sub> . Journal of Materials Chemistry A, 201	ric .8, 6, 13943-13951.	10.3	59
Cation-Disordered Li <sub>3</sub> VO <sub>4</sub> : Reversible Li Insertion/Deinsertio Quasi Li-Rich Layered Li <sub>1+<i>x</i></sub> [V <sub>1/2</sub> Li <sub>1/2</sub> ]C ( <i>x</i> = 0–1). Chemistry of Materials, 2018, 30, 4926-4934.	n Mechanism for ) <sub>2</sub>	6.7	26
2.20 Batteries. , 2018, , 629-662.			9
Nucleation of dislocations and their dynamics in layered oxide cathode materials during charging. Nature Energy, 2018, 3, 641-647	g battery	39.5	281

314	Cation-Disordered Li <sub>3</sub> VO <sub>4</sub> : Reversible Li Insertion/Deinsertion Mechanism for Quasi Li-Rich Layered Li <sub>1+<i>x</i></sub> [V <sub>1/2</sub> Li <sub>1/2</sub> ]O <sub>2</sub> ( <i>x</i> = 0–1). Chemistry of Materials, 2018, 30, 4926-4934.	6.7	26
315	2.20 Batteries. , 2018, , 629-662.		9
316	Nucleation of dislocations and their dynamics in layered oxide cathode materials during battery charging. Nature Energy, 2018, 3, 641-647.	39.5	281
317	Horizons for Liâ€Ion Batteries Relevant to Electroâ€Mobility: Highâ€Specificâ€Energy Cathodes and Chemically Active Separators. Advanced Materials, 2018, 30, e1801348.	21.0	105
318	Composite‣tructure Material Design for Highâ€Energy Lithium Storage. Small, 2018, 14, e1800887.	10.0	32
319	Study on Mo-doped of Li1.18Ni1/3Co1/3Mn1/3O2 Lithium-rich Ternary Cathode Materials. IOP Conference Series: Earth and Environmental Science, 2018, 153, 022025.	0.3	2
320	Li- and Mn-rich layered oxide cathode materials for lithium-ion batteries: a review from fundamentals to research progress and applications. Molecular Systems Design and Engineering, 2018, 3, 748-803.	3.4	127
321	Defects and lithium migration in Li2CuO2. Scientific Reports, 2018, 8, 6754.	3.3	30
322	Plasmaâ€Induced Amorphous Shell and Deep Cationâ€Site S Doping Endow TiO <sub>2</sub> with Extraordinary Sodium Storage Performance. Advanced Materials, 2018, 30, e1801013.	21.0	180
323	Double-Layer N,S-Codoped Carbon Protection of MnS Nanoparticles Enabling Ultralong-Life and High-Rate Lithium Ion Storage. ACS Applied Energy Materials, 2018, 1, 4867-4873.	5.1	22
324	Marcasite iron sulfide as a high-capacity electrode material for sodium storage. Journal of Materials Chemistry A, 2018, 6, 17111-17119.	10.3	26
325	In Situ Chelating Synthesis of Hierarchical LiNi <sub>1/3</sub> Co <sub>1/3</sub> Mn <sub>1/3</sub> O <sub>2</sub> Polyhedron Assemblies with Ultralong Cycle Life for Liâ€lon Batteries. Small, 2018, 14, e1704354.	10.0	27
326	Design of Nickel-Based Cation-Disordered Rock-Salt Oxides: The Effect of Transition Metal (M = V, Ti,) Tj ETQq0 0 Materials & Interfaces, 2018, 10, 21957-21964.	0 rgBT /O\ 8.0	verlock 10 Tr 37

327	Non-equilibrium microstructure of Li1.4Al0.4Ti1.6(PO4)3 superionic conductor by spark plasma sintering for enhanced ionic conductivity. Nano Energy, 2018, 51, 19-25.	16.0	24	
-----	---	------	----	--

#

310

312

ARTICLE IF CITATIONS Catalytic effect of nanostructured CeO2 coating on the electrochemical performance of 328 2.7 8 Li(Li,Ńi,Mn,Co)O2. Solid State Ionics, 2018, 324, 59-64. Understanding the Effect of Local Short-Range Ordering on Lithium Diffusion in Li1.3Nb0.3Mn0.4O2 11.7 Single-Crystal Cathode. CheM, 2018, 4, 2108-2123. Structural and mechanistic revelations on high capacity cation-disordered Li-rich oxides for 330 18.0 94 rechargeable Li-ion batteries. Energy Storage Materials, 2019, 16, 354-363. Effectively enhance high voltage stability of LiNi1/3Co1/3Mn1/3O2 cathode material with excellent 2.4 energy dénsity via La2O3 surface modified. lonics, 2019, 25, 2007-2016. Abundant nanoscale defects to eliminate voltage decay in Li-rich cathode materials. Energy Storage 332 18.0 144 Materials, 2019, 16, 220-227. Facile Fabrication of CFx-Pt Composites as a High-Performance Cathode for Primary Lithium Batteries. International Journal of Electrochemical Science, 2019, 14, 5738-5747. 1.3 Amorphous <i>x</i>NaF-FeSO<sub>4</sub> Systems (1 ≤i>x</i> â‰ı) with Excellent Cathode Properties 334 5.1 12 for Sodium-Ion Batteries. ACS Applied Energy Materials, 2019, 2, 5968-5974. Trace molybdenum doped Li2RuO3 as a cathode material with enhanced performance for lithium ion batteries. Sustainable Energy and Fuels, 2019, 3, 2697-2704. Impact of local composition on the energetics of E-centres in Silâ<sup>°</sup>xGex alloys. Scientific Reports, 2019, 336 3.3 4 9, 10849. Synthesis and investigation of electrochemical performance of mixed valent Li4FeMoO6 as positive electrode material in rechargeable lithium ion batteries. Journal of Power Sou<u>rces, 2019, 436, 226870.</u> Design and synthesis of electrode materials with both battery-type and capacitive charge storage. 338 18.0 135 Energy Storage Materials, 2019, 22, 235-255. Li–Ti Cation Mixing Enhanced Structural and Performance Stability of Liâ€Rich Layered Oxide. Advanced Energy Materials, 2019, 9, 1901530. Structural modulation of anthraquinone with different functional groups and its effect on 340 electrochemical properties for lithium-ion batteries. Journal of Central South University, 2019, 26, 3.0 5 1449-1457. Enhanced high-voltage cycling stability of Ni-rich LiNi0.8Co0.1Mn0.1O2 cathode coated with Li2O–2B2O3. Journal of Alloys and Compounds, 2019, 805, 991-998. 341 5.5 39 Short-range ordering in a battery electrode, the †cation-disordered' rocksalt Li<sub>1.25</sub>Nb<sub>0.25</sub>Mn<sub>0.5</sub>O<sub>2</sub>. Chemical Communications, 342 4.1 58 2019, 55, 9027-9030. Understanding Performance Degradation in Cationâ€Disordered Rockâ€Salt Oxide Cathodes. Advanced 343 84 Energy Materials, 2019, 9, 1901255. Identifying and Addressing Critical Challenges of High-Voltage Layered Ternary Oxide Cathode 344 6.7 164 Materials. Chemistry of Materials, 2019, 31, 6033-6065. Mechanochemical synthesis of cubic rocksalt Na<sub&gt;2&lt;/sub&gt;TiS&lt;sub&gt;3&lt;/sub&gt; as 345 novel active materials for all-solid-state sodium secondary batteries. Journal of the Ceramic Society 1.1 of Japan, 2019, 127, 514-517.

#	Article	IF	CITATIONS
346	Synthesis and electrochemical characterization of Mg–Al co-doped Li-rich Mn-based cathode materials. New Journal of Chemistry, 2019, 43, 12004-12012.	2.8	42
347	Heterocarbides Reinforced Electrochemical Energy Storage. Small, 2019, 15, 1903652.	10.0	7
348	F-doped Li1.15Ni0.275Ru0.575O2 cathode materials with long cycle life and improved rate performance. Electrochimica Acta, 2019, 326, 135015.	5.2	10
349	Electrochemical Properties of Three Li <sub>2</sub> Ni <sub>2</sub> TeO <sub>6</sub> Structural Polymorphs. Chemistry of Materials, 2019, 31, 9379-9388.	6.7	29
350	Novel Conjugated Side Chain Fluorinated Polymers Based on Fluorene for Lightâ€Emitting and Ternary Flash Memory Devices. ChemistryOpen, 2019, 8, 1267-1275.	1.9	6
351	Pharmacokinetics of ceftiofur sodium in cats following a single intravenous and subcutaneous injection. Journal of Veterinary Pharmacology and Therapeutics, 2019, 42, 602-608.	1.3	2
352	CLEASE: a versatile and user-friendly implementation of cluster expansion method. Journal of Physics Condensed Matter, 2019, 31, 325901.	1.8	41
353	Unraveling the Cationic and Anionic Redox Reactions in a Conventional Layered Oxide Cathode. ACS Energy Letters, 2019, 4, 2836-2842.	17.4	111
354	Elucidating and Mitigating the Degradation of Cationic–Anionic Redox Processes in Li <sub>1.2</sub> Mn <sub>0.4</sub> Ti <sub>0.4</sub> O <sub>2</sub> Cation-Disordered Cathode Materials. ACS Applied Materials & Interfaces, 2019, 11, 45674-45682.	8.0	31
355	Optimization for statistical tolerance allocation. Computer Aided Geometric Design, 2019, 75, 101788.	1.2	7
356	Nanoscale Y-doped ZrO2 modified LiNi0.88Co0.09Al0.03O2 cathode material with enhanced electrochemical properties for lithium-ion batteries. Solid State Ionics, 2019, 343, 115087.	2.7	12
357	Cation-Disordered Lithium-Excess Li–Fe–Ti Oxide Cathode Materials for Enhanced Li-Ion Storage. ACS Applied Materials & Interfaces, 2019, 11, 44144-44152.	8.0	22
358	In Situ Observation of the Effect of Accelerating Voltage on Electron Beam Damage of Layered Cathode Materials for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 44293-44299.	8.0	15
359	Boosting Cell Performance of LiNi <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> via Surface Structure Design. Small, 2019, 15, e1904854.	10.0	92
360	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
361	Targeted Construction of Amorphous MoS <sub><i>x</i></sub> with an Inherent Chain Molecular Structure for Improved Pseudocapacitive Lithiumâ€lon Response. Chemistry - A European Journal, 2019, 25, 15173-15181.	3.3	5
362	Improved cycling stability in high-capacity Li-rich vanadium containing disordered rock salt oxyfluoride cathodes. Journal of Materials Chemistry A, 2019, 7, 21244-21253.	10.3	37
363	Structure and electrochemical properties of C-coated Li <sub>2</sub> O–V <sub>2</sub> O <sub>5</sub> –P <sub>2</sub> O <sub>5</sub> glass-ceramic as cathode material for lithium-ion batteries. Functional Materials Letters, 2019, 12, 1951002.	1.2	16

#	Article	IF	CITATIONS
364	Ionic Transport in Potential Coating Materials for Mg Batteries. Chemistry of Materials, 2019, 31, 8087-8099.	6.7	82
365	Computational Insights into the Working Mechanism of the LiPF <sub>6</sub> –Graphite Dual-Ion Battery. Journal of Physical Chemistry C, 2019, 123, 23863-23871.	3.1	31
366	Synthesis and Redox Mechanism of Cation-Disordered, Rock-Salt Cathode-Material Li–Ni–Ti–Nb–O Compounds for a Li-Ion Battery. ACS Applied Materials & Interfaces, 2019, 11, 35777-35787.	8.0	31
367	Improving the structural stability and electrochemical performance of Na <sub>2</sub> Li <sub>2</sub> Ti <sub>6</sub> O <sub>14</sub> nanoparticles <i>via</i> MgF <sub>2</sub> coating. RSC Advances, 2019, 9, 15763-15771.	3.6	7
368	Local electronic structure modulation enhances operating voltage in Li-rich cathodes. Nano Energy, 2019, 66, 104102.	16.0	87
369	Suppressing Dissolution of Vanadium from Cation-Disordered Li <sub>2–<i>x</i></sub> VO <sub>2</sub> F via a Concentrated Electrolyte Approach. Chemistry of Materials, 2019, 31, 7941-7950.	6.7	27
370	Lithium-ion Battery Thermal Safety by Early Internal Detection, Prediction and Prevention. Scientific Reports, 2019, 9, 13255.	3.3	30
371	Application of nano Al2O3 particles as precipitate nucleus for preparation of high rate nickel-rich cathode materials. Journal of Power Sources, 2019, 439, 227038.	7.8	15
372	Design and Tuning of the Electrochemical Properties of Vanadium-Based Cation-Disordered Rock-Salt Oxide Positive Electrode Material for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 39848-39858.	8.0	21
373	Engineering the interplanar spacing of ammonium vanadates as a high-performance aqueous zinc-ion battery cathode. Journal of Materials Chemistry A, 2019, 7, 940-945.	10.3	291
374	Graphene/hBN Heterostructures as High-Capacity Cathodes with High Voltage for Next-Generation Aluminum Batteries. Journal of Physical Chemistry C, 2019, 123, 3959-3967.	3.1	30
375	Stabilizing the Oxygen Lattice and Reversible Oxygen Redox Chemistry through Structural Dimensionality in Lithiumâ€Rich Cathode Oxides. Angewandte Chemie - International Edition, 2019, 58, 4323-4327.	13.8	114
376	Stabilizing the Oxygen Lattice and Reversible Oxygen Redox Chemistry through Structural Dimensionality in Lithiumâ€Rich Cathode Oxides. Angewandte Chemie, 2019, 131, 4367-4371.	2.0	13
377	A New Type of Liâ€Rich Rockâ€Salt Oxide Li <sub>2</sub> Ni <sub>1/3</sub> Ru <sub>2/3</sub> O <sub>3</sub> with Reversible Anionic Redox Chemistry. Advanced Materials, 2019, 31, e1807825.	21.0	90
378	Improving the oxygen redox stability of NaCl-type cation disordered Li <sub>2</sub> MnO <sub>3</sub> in a composite structure of Li <sub>2</sub> MnO <sub>3</sub> and spinel-type LiMn <sub>2</sub> O <sub>4</sub> . Journal of Materials Chemistry A, 2019, 7, 5381-5390.	10.3	33
379	Dual-component LixTiO2@silica functional coating in one layer for performance enhanced LiNiO.6CoO.2MnO.2O2 cathode. Nano Energy, 2019, 58, 673-679.	16.0	84
380	Stabilizing nickel-rich layered oxide cathodes by magnesium doping for rechargeable lithium-ion batteries. Chemical Science, 2019, 10, 1374-1379.	7.4	201
381	Influence of oxygen percentage in calcination atmosphere on structure and electrochemical properties of LiNi0.8Co0.1Mn0.1O2 cathode material for lithium-ion batteries. Ceramics International, 2019, 45, 18965-18971.	4.8	5

ARTICLE IF CITATIONS Understanding the role of aluminium in determining the surface structure and electrochemical 382 5.6 4 performance of layered cathodes. Nanoscale, 2019, 11, 13007-13016. Research on the kinetic properties of the cation disordered rock-salt Li-excess Li1.25Nb0.25Mn0.5O2 2.7 material. Solid State Ionics, 2019, 339, 114999. Charge Transfer Band Gap as an Indicator of Hysteresis in Li-Disordered Rock Salt Cathodes for Li-Ion 384 13.7 81 Batteries. Journal of the American Chemical Society, 2019, 141, 11452-11464. Improved capacity and cycling stability of SnO2 nanoanode induced by amorphization during cycling for lithium ion batteries. Materials and Design, 2019, 180, 107973. Novel Ordered Rocksalt-Type Lithium-Rich Li<sub>2</sub>Ru<sub>1–<i>x</i>/i></sub>Ni<sub><i>x</i>/i></sub>O<sub>3â<sup>°</sup>δ</sub> (0.3 ≤i>x</i> ≤0.5)<sub>5 1</sub> 386 22 Cathode Material with Tunable Anionic Redox Potential. ACS Applied Energy Materials, 2019, 2, 5933-5944. Carbonâ€Coated Supraballs of Randomly Packed LiFePO 4 Nanoplates for High Rate and Stable Cycling of Liâ€Ion Batteries. Particle and Particle Systems Characterization, 2019, 36, 1900149. 2.3 Oxygen Activity in Li-Rich Disordered Rock-Salt Oxide and the Influence of LiNbO<sub>3</sub> Surface 388 6.7 33 Modification on the Electrochemical Performance. Chemistry of Materials, 2019, 31, 4330-4340. Towards superior cyclability of LiNi0.8Co0.1Mn0.1O2 cathode material for lithium ion batteries via 5.5 36 synergetic effects of Sb modification. Journal of Alloys and Compounds, 2019, 798, 93-103. Uniform Na<sup>+</sup> Dopingâ€Induced Defects in Li―and Mnâ€Rich Cathodes for Highâ€Performance 390 11.2 78 Lithiumâ€Ion Batteries. Advanced Science, 2019, 6, 1802114. Synthesis and electrochemical performance of Li3NbO4-based cation-disordered rock-salt cathode 5.5 materials for Li-ion batteries. Journal of Alloys and Compounds, 2019, 797, 961-969. Towards rational design of high performance Ni-rich layered oxide cathodes: The interplay of 392 31 7.8 borate-doping and excess lithium. Journal of Power Sources, 2019, 431, 40-47. Precise Surface Engineering of Cathode Materials for Improved Stability of Lithiumâ€Ion Batteries. 10.0 Small, 2019, 15, e1901019 Injection of oxygen vacancies in the bulk lattice of layered cathodes. Nature Nanotechnology, 2019, 14, 394 31.5 321 6Ŏ2-608. Low-temperature synthesized Li<sub>4</sub>Mn<sub>5</sub>O<sub>12</sub>-like cathode with hybrid 4.1 cation- and anion-redox capacities. Chemical Communications, 2019, 55, 8118-8121. Li-Rich Layered Oxides and Their Practical Challenges: Recent Progress and Perspectives. 397 25.5 158 Electrochemical Energy Reviews, 2019, 2, 277-311. Intrinsic Role of Cationic Substitution in Tuning Li/Ni Mixing in High-Ni Layered Oxides. Chemistry of Materials, 2019, 31, 2731-2740. Enhanced Cycling Stability of Cation Disordered Rock-Salt Li1.2Ti0.4Mn0.4O2 Material by Surface 399 3.6 30 Modification With Al2O3. Frontiers in Chemistry, 2019, 7, 107. Evolution of Local Structural Ordering and Chemical Distribution upon Delithiation of a Rock Saltâ€"Structured Li<sub>1.3</sub>Ta<sub>0.3</sub>Mn<sub>0.4</sub>O<sub>2</sub> Cathode. 14.9 Advanced Functional Materials, 2019, 29, 1808294.

ARTICLE IF CITATIONS One-step solvothermal synthesis of high-capacity Fe3O4/reduced graphene oxide composite for use in 401 5.5 42 Li-ion capacitor. Journal of Alloys and Čompounds, 2019, 788, 1119-1126. Achieving a high-performance Prussian blue analogue cathode with an ultra-stable redox reaction for 8.0 ammonium ion storage. Nanoscale Horizons, 2019, 4, 991-998. The Role of Zr Doping in Stabilizing Li[Ni<sub>0.6</sub>Co<sub>0.2</sub>Mn<sub>0.2</sub>]O<sub>2</sub> as a Cathode Material for 403 6.8 61 Lithiumâ€Ion Batteries. ChemSusChem, 2019, 12, 2439-2446. Computational Investigation and Experimental Realization of Disordered High-Capacity Li-Ion Cathodes 404 Based on Ni Redox. Chemistry of Materials, 2019, 31, 2431-2442. Amorphous Niâ€Rich Li(Ni<sub>1â^'</sub><i><sub>x</sub></i><sub>a^'</sub><i><sub>y</sub></i>Mn<i><sub>x</sub></i>Co<i><sub>y</sub></i>)O<sub 405 Positive Electrode Materials for Bulkâ€Type Allâ€Oxide Solidâ€State Batteries. Advanced Materials Interfaces, 2019, 6, 1802016. Enhanced Electrochemical Performances of Cobalt-Doped Li2MoO3 Cathode Materials. Materials, 2019, 12, 843. Revealing of the Activation Pathway and Cathode Electrolyte Interphase Evolution of Li-Rich 0.5Li<sub>2</sub>MnO<sub>3</sub>Â0.5LiNi<sub>0.3</sub>Co<sub>0.3</sub>Mn<sub>0.4</sub>O<sub>2</sub> 407 23 Cathode by in Situ Electrochemical Quartz Crystal Microbalance. ACS Applied Materials & amp; Interfaces, 2019, 11, 16214-16222. High specific capacity lithium ion battery cathode material prepared by synthesizing 408 7.8 vanadate–phosphate glass in reducing atmosphere. Journal of Power Sources, 2019, 424, 91-99. DFT calculations of the synergistic effect of  $\hat{l}$ »-MnO<sub>2</sub>/graphene composites for 409 2.8 27 electrochemical adsorption of lithium ions. Physical Chemistry Chemical Physics, 2019, 21, 8133-8140. Capturing Reversible Cation Migration in Layered Structure Materials for Naâ€Ion Batteries. Advanced Energy Materials, 2019, 9, 1900189. Hidden structural and chemical order controls lithium transport in cation-disordered oxides for 411 12.8 162 rechargeable batteries. Nature Communications, 2019, 10, 592. High Rate Li-Ion Batteries with Cation-Disordered Cathodes. Joule, 2019, 3, 1064-1079. 412 24.0 Understanding Surface Densified Phases in Ni-Rich Layered Compounds. ACS Energy Letters, 2019, 4, 413 17.4 64 811-818. Insights into the structural evolution and Li/O loss in high-Ni layered oxide cathodes. Nano Energy, 2019, 59, 327-335. 414 16.0 Radially Oriented Singleâ€Crystal Primary Nanosheets Enable Ultrahigh Rate and Cycling Properties of 415 LiNi<súb>0.8</sub>Čo<sub>0.1</sub>0.1</sub>O<sub>2</sub> Cathode Material for 19.5 240 Lithiumâ€Ion Batteries. Advanced Energy Materials, 2019, 9, 1803963. Ionic Transport in Doped Solid Electrolytes by Means of DFT Modeling and ML Approaches: A Case 3.1 Study of Ti-Doped KFeO<sub>2</sub>. Journal of Physical Chemistry C, 2019, 123, 29533-29542. A mechanism of defect-enhanced phase transformation kinetics in lithium iron phosphate olivine. Npj 417 8.7 25 Computational Materials, 2019, 5, . Rapid synthesis of MgCo<sub>2</sub>O<sub>4</sub> and Mg<sub>2/3</sub>Ni<sub>4/3</sub>O<sub>2</sub> nanocrystals in supercritical fluid for Mg-ion batteries. RSC Advances, 2019, 9, 36717-36725.

#	Article	IF	Citations
419	Enhanced piezoelectric properties of randomly oriented and aligned electrospun PVDF fibers by regulating the surface morphology. Journal of Applied Polymer Science, 2019, 136, 47049.	2.6	73
420	Studies on Anionic Redox in Li-Rich Cathode Materials of Li-Ion Batteries. Springer Theses, 2019, , .	0.1	0
422	Thermodynamic Activation of Charge Transfer in Anionic Redox Process for Li-Ion Batteries. Springer Theses, 2019, , 99-121.	0.1	3
423	Improved Cycling Performance of Liâ€Excess Cationâ€Disordered Cathode Materials upon Fluorine Substitution. Advanced Energy Materials, 2019, 9, 1802959.	19.5	127
424	Unexpectedly high energy density of a Li-Ion battery by oxygen redox in LiNiO2 cathode: First-principles study. Electrochimica Acta, 2019, 294, 166-172.	5.2	27
425	Topological construction of phosphorus and carbon composite and its application in energy storage. Energy Storage Materials, 2019, 20, 343-372.	18.0	43
426	Material Design Concept of Lithiumâ€Excess Electrode Materials with Rocksaltâ€Related Structures for Rechargeable Nonâ€Aqueous Batteries. Chemical Record, 2019, 19, 690-707.	5.8	59
427	Hin und zurück – die Entwicklung von LiNiO <sub>2</sub> als Kathodenaktivmaterial. Angewandte Chemie, 2019, 131, 10542-10569.	2.0	25
428	There and Back Again—The Journey of LiNiO <sub>2</sub> as a Cathode Active Material. Angewandte Chemie - International Edition, 2019, 58, 10434-10458.	13.8	400
429	Tuning the Reversibility of Oxygen Redox in Lithium-Rich Layered Oxides. Springer Theses, 2019, , 77-97.	0.1	0
430	Stable heteroepitaxial interface of Li-rich layered oxide cathodes with enhanced lithium storage. Energy Storage Materials, 2019, 21, 69-76.	18.0	53
431	Electrochemistry and redox characterization of rock-salt-type lithium metal oxides Li1+z/3Ni1/2-z/2Ti1/2+z/6O2 for Li-ion batteries. Journal of Alloys and Compounds, 2019, 773, 1-10.	5.5	54
432	Origin of Performance Differences of Nickelâ€Rich LiNi <sub>0.9</sub> Mn <sub>0.1</sub> O <sub>2</sub> Cathode Materials Synthesized in Oxygen and Air. Energy Technology, 2019, 7, 1800752.	3.8	13
433	A multifunctional silicotungstic acid-modified Li-rich manganese-based cathode material with excellent electrochemical properties. Journal of Solid State Electrochemistry, 2019, 23, 101-108.	2.5	1
434	Synthesis, characterization and catalytic properties of cobalt oxide recovered from spent lithium-ion batteries. Molecular Catalysis, 2020, 481, 110223.	2.0	9
435	Influence of pyrrole feeding ratios on physicochemical characteristics of high-performance multilayered PPy/PVC/PDA@FG-NH2 nanocomposites. Journal of Thermoplastic Composite Materials, 2020, 33, 1358-1382.	4.2	2
436	Kathodenmaterialien für wiederaufladbare Lithiumbatterien. Angewandte Chemie, 2020, 132, 2598-2626.	2.0	21
437	Advances in the Cathode Materials for Lithium Rechargeable Batteries. Angewandte Chemie - International Edition, 2020, 59, 2578-2605.	13.8	357

#	Article	IF	CITATIONS
438	Li29Zr9Nb3O40 based Li-ionic conductors as a new system of solid-state electrolytes. Journal of Alloys and Compounds, 2020, 816, 152517.	5.5	9
439	Single-crystal LiNi0.5Co0.2Mn0.3O2: a high thermal and cycling stable cathodes for lithium-ion batteries. Journal of Materials Science, 2020, 55, 2913-2922.	3.7	51
440	Design Principles for High-Capacity Mn-Based Cation-Disordered Rocksalt Cathodes. CheM, 2020, 6, 153-168.	11.7	103
441	Surface modification by fluorine doping to increase discharge capacity of Li1.2Ni0.2Mn0.6O2 cathode materials. Ionics, 2020, 26, 151-161.	2.4	25
442	Insights into P2-Type Layered Positive Electrodes for Sodium Batteries: From Long- to Short-Range Order. ACS Applied Materials & Interfaces, 2020, 12, 5017-5024.	8.0	25
443	Defect engineering of vanadium pentoxide for efficient lithium-ion storage. Electrochimica Acta, 2020, 333, 135513.	5.2	10
444	Impact of Nickel Substitution into Model Li-Rich Oxide Cathode Materials for Li-Ion Batteries. Chemistry of Materials, 2020, 32, 849-857.	6.7	16
446	High capacity Li/Ni rich Ni-Ti-Mo oxide cathode for Li-ion batteries. Solid State Ionics, 2020, 345, 115172.	2.7	6
447	Nanoscale Phenomena in Lithium-Ion Batteries. Chemical Reviews, 2020, 120, 6684-6737.	47.7	142
448	Ceramics for electrochemical storage. , 2020, , 549-709.		21
449	Influence of Nb Doping on Electrochemical Performance of Nanostructured Cation Disordered Li <sub>1+<i>x</i>/100</sub> Ni <sub>1/2–<i>x</i>/100</sub> Ti <sub>1/2–<i>x</i>/100</sub> Nb <sub><i>x Composites Cathode for Li-Ion Batteries. Journal of Nanoscience and Nanotechnology, 2020, 20, 452-459</i></sub>	/100 </td <td>/sub&gt;O<sub></sub></td>	/sub>O <sub></sub>
450	Tailoring the Cation Lattice for Chloride Lithiumâ€lon Conductors. Advanced Energy Materials, 2020, 10, 2002356.	19.5	56
451	Breaking Free from Cobalt Reliance in Lithium-Ion Batteries. IScience, 2020, 23, 101505.	4.1	80
452	Recent developments and challenges of Li-rich Mn-based cathode materials for high-energy lithium-ion batteries. Materials Today Energy, 2020, 18, 100518.	4.7	36
453	Mechanochemical synthesis: route to novel rock-salt-structured high-entropy oxides and oxyfluorides. Journal of Materials Science, 2020, 55, 16879-16889.	3.7	15
454	Effect of F Dopant on the Structural Stability, Redox Mechanism, and Electrochemical Performance of Li 2 MoO 3 Cathode Materials. Advanced Sustainable Systems, 2020, 4, 2000104.	5.3	5
455	Faradaic Electrodes Open a New Era for Capacitive Deionization. Advanced Science, 2020, 7, 2002213.	11.2	104
456	Solid state chemistry for developing better metal-ion batteries. Nature Communications, 2020, 11, 4976.	12.8	125

#	Article	IF	CITATIONS
457	Enabling high areal capacity for Co-free high voltage spinel materials in next-generation Li-ion batteries. Journal of Power Sources, 2020, 473, 228579.	7.8	55
458	Anionic redox reactions and structural degradation in a cation-disordered rock-salt Li <sub>1.2</sub> Ti <sub>0.4</sub> Mn <sub>0.4</sub> O <sub>2</sub> cathode material revealed by solid-state NMR and EPR. Journal of Materials Chemistry A, 2020, 8, 16515-16526.	10.3	37
459	Fluorination effect for stabilizing cationic and anionic redox activities in cation-disordered cathode materials. Energy Storage Materials, 2020, 32, 234-243.	18.0	42
460	Fully Exploited Oxygen Redox Reaction by the Interâ€Diffused Cations in Coâ€Free Liâ€Rich Materials for High Performance Liâ€Ion Batteries. Advanced Science, 2020, 7, 2001658.	11.2	17
461	Increasing Capacity in Disordered Rocksalt Cathodes by Mg Doping. Chemistry of Materials, 2020, 32, 10728-10736.	6.7	21
462	Sulfate-Containing Composite Based on Ni-Rich Layered Oxide LiNi0.8Mn0.1Co0.1O2 as High-Performance Cathode Material for Li-ion Batteries. Nanomaterials, 2020, 10, 2381.	4.1	12
463	Direct Observation of Defectâ€Aided Structural Evolution in a Nickelâ€Rich Layered Cathode. Angewandte Chemie, 2020, 132, 22276-22283.	2.0	15
464	Mn <sup>4+</sup> -Substituted Li-Rich Li <sub>1.2</sub> Mn <sub>0.4</sub> <sup>3+</sup> Mn <i><sub>x</sub></i> <sup>4+</sup> Ti <sub>0.4–<i>x&lt; Materials with High Energy Density. ACS Applied Materials &amp; Interfaces, 2020, 12, 40347-40354.</i></sub>	¦&ø/sub>	<b>Q₁₅</b> sub>2∢
465	Superoxide formation in Li <sub>2</sub> VO <sub>2</sub> F cathode material – a combined computational and experimental investigation of anionic redox activity. Journal of Materials Chemistry A, 2020, 8, 16551-16559.	10.3	18
466	Synthesis of Ni–rich LiNi0.83Co0.12Mn0.05O2 cathode materials with low residual Lithium content without washing. Solid State Ionics, 2020, 355, 115418.	2.7	4
467	How inactive d0 transition metal controls anionic redox in disordered Li-rich oxyfluoride cathodes. Energy Storage Materials, 2020, 32, 253-260.	18.0	16
468	Kinetic Rejuvenation of Li-Rich Li-Ion Battery Cathodes upon Oxygen Redox. ACS Applied Energy Materials, 2020, 3, 7931-7943.	5.1	12
469	A Fluorination Method for Improving Cationâ€Ðisordered Rocksalt Cathode Performance. Advanced Energy Materials, 2020, 10, 2001671.	19.5	43
470	Anion Reactivity in Cationâ€Disordered Rocksalt Cathode Materials: The Influence of Fluorine Substitution. Advanced Energy Materials, 2020, 10, 2001500.	19.5	38
471	Direct Observation of Defectâ€Aided Structural Evolution in a Nickelâ€Rich Layered Cathode. Angewandte Chemie - International Edition, 2020, 59, 22092-22099.	13.8	75
472	Proliferation of Atomic Shuffling through Mechanical Stress on Cationic Disorder Li <sub>4</sub> FeMoO <sub>6</sub> as a Cathode Material for a Lithium-Ion Battery. ACS Applied Energy Materials, 2020, 3, 8716-8724.	5.1	6
473	Designing disorder into crystalline materials. Nature Reviews Chemistry, 2020, 4, 657-673.	30.2	93
474	A disordered rock salt anode for fast-charging lithium-ion batteries. Nature, 2020, 585, 63-67.	27.8	326 _

#	Article	IF	Citations
475	Protective Spinel Coating for Li1.17Ni0.17Mn0.50Co0.17O2 Cathode for Li-Ion Batteries through Single-Source Precursor Approach. Nanomaterials, 2020, 10, 1870.	4.1	9
476	Li-rich cathodes for rechargeable Li-based batteries: reaction mechanisms and advanced characterization techniques. Energy and Environmental Science, 2020, 13, 4450-4497.	30.8	219
477	Effect of fluorination and Li-excess on the Li migration barrier in Mn-based cathode materials. Journal of Materials Chemistry A, 2020, 8, 19965-19974.	10.3	20
478	Superiority of Single-Crystal to Polycrystalline LiNi <i><sub>x</sub></i> Co <i><sub>y</sub></i> Mn <sub>1–<i>x</i>–<i>y</i></sub> O <sub>2</sub> Cathode Materials in Storage Behaviors for Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2020. 8, 14938-14948.	6.7	43
479	BCN monolayer for high capacity Al-based dual-ion batteries. Materials Advances, 2020, 1, 2418-2425.	5.4	10
480	Characterization of mechanical degradation in an all-solid-state battery cathode. Journal of Materials Chemistry A, 2020, 8, 17399-17404.	10.3	100
481	A comparative study of electrospun polyvinylidene fluoride and poly(vinylidenefluoride-co-trifluoroethylene) fiber webs: Mechanical properties, crystallinity, and piezoelectric properties. Journal of Engineered Fibers and Fabrics, 2020, 15, 155892502093929.	1.0	10
482	Hydrothermal preparing agglomerate LiNi0.8Co0.1Mn0.1O2 cathode material with submicron primary particle for alleviating microcracks. Journal of Power Sources, 2020, 477, 228701.	7.8	34
483	Redox Chemistry and the Role of Trapped Molecular O <sub>2</sub> in Li-Rich Disordered Rocksalt Oxyfluoride Cathodes. Journal of the American Chemical Society, 2020, 142, 21799-21809.	13.7	77
484	The Impact of Surface Structure Transformations on the Performance of Li-Excess Cation-Disordered Rocksalt Cathodes. Cell Reports Physical Science, 2020, 1, 100187.	5.6	20
485	Redox Behaviors in a Li-Excess Cation-Disordered Mn–Nb–O–F Rocksalt Cathode. Chemistry of Materials, 2020, 32, 4490-4498.	6.7	37
486	Co-Free Layered Cathode Materials for High Energy Density Lithium-Ion Batteries. ACS Energy Letters, 2020, 5, 1814-1824.	17.4	117
487	Role of Redoxâ€Inactive Transitionâ€Metals in the Behavior of Cationâ€Disordered Rocksalt Cathodes. Small, 2020, 16, e2000656.	10.0	37
488	Capacity Improvement by Nitrogen Doping to Lithium-Rich Cathode Materials with Stabilization Effect of Oxide Ions Redox. ACS Applied Energy Materials, 2020, 3, 4162-4167.	5.1	18
489	Electronegativity and doping in Si1-xGex alloys. Scientific Reports, 2020, 10, 7459.	3.3	13
490	Concurrently Approaching Volumetric and Specific Capacity Limits of Lithium Battery Cathodes via Conformal Pickering Emulsion Graphene Coatings. Advanced Energy Materials, 2020, 10, 2001216.	19.5	33
491	Tuning Cobaltâ€Free Nickelâ€Rich Layered LiNi <sub>0.9</sub> Mn <sub>0.1</sub> O <sub>2</sub> Cathode Material for Lithiumâ€Ion Batteries. ChemElectroChem, 2020, 7, 2637-2642.	3.4	24
492	Stabilization of Li-Rich Disordered Rocksalt Oxyfluoride Cathodes by Particle Surface Modification. ACS Applied Energy Materials, 2020, 3, 5937-5948.	5.1	19

#	Article	IF	CITATIONS
493	Self-Diffusion in Perovskite and Perovskite Related Oxides: Insights from Modelling. Applied Sciences (Switzerland), 2020, 10, 2286.	2.5	4
494	Superior Cycle Stability of Single Crystal Nickel-Rich Layered Oxides with Micron-Scale Grain Size as Cathode Material for Lithium Ion Batteries. International Journal of Electrochemical Science, 2020, 15, 5031-5041.	1.3	22
495	Effect of cation doping on the electrochemical properties of Li2MoO3 as a promising cathode material for lithium-ion battery. Ionics, 2020, 26, 4413-4422.	2.4	9
496	Interfacial kinetics induced phase separation enhancing low-temperature performance of lithium-ion batteries. Nano Energy, 2020, 75, 104977.	16.0	11
497	Influence of Electrolyte Additives on the Degradation of Li <sub>2</sub> VO <sub>2</sub> F Li-Rich Cathodes. Journal of Physical Chemistry C, 2020, 124, 12956-12967.	3.1	8
498	A new model on cation distribution in cation-disordered Li1+xTM1â^'xO2 cathodes. Solid State Ionics, 2020, 351, 115341.	2.7	5
499	Multi-Doped (Ga,B) Li[Ni <sub>0.885</sub> Co <sub>0.100</sub> Al <sub>0.015</sub> ]O <sub>2</sub> Cathode. Journal of the Electrochemical Society, 2020, 167, 100557.	2.9	13
500	Li2MoO3 microspheres with excellent electrochemical performances as cathode material for lithium-ion battery. Ionics, 2020, 26, 4401-4411.	2.4	6
501	The mechanism of V-modification in Li2CoSiO4 cathode material for Li-ion batteries: A combined first-principles and experimental study. Electrochimica Acta, 2020, 353, 136564.	5.2	9
502	A reversible oxygen redox reaction in bulk-type all-solid-state batteries. Science Advances, 2020, 6, eaax7236.	10.3	34
503	Mapping Competitive Reduction upon Charging in LiNi <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> Primary Particles. Chemistry of Materials, 2020, 32, 6161-6175.	6.7	5
504	Enabling reversible phase transition on K5/9Mn7/9Ti2/9O2 for high-performance potassium-ion batteries cathodes. Energy Storage Materials, 2020, 31, 20-26.	18.0	35
505	Evolution of Ni/Li antisites under the phase transition of a layered LiNi <sub>1/3</sub> Co <sub>1/3</sub> Mn <sub>1/3</sub> O <sub>2</sub> cathode. Journal of Materials Chemistry A, 2020, 8, 6337-6348.	10.3	36
506	Lattice Dynamical Approach for Finding the Lithium Superionic Conductor Li <sub>3</sub> Erl <sub>6</sub> . ACS Applied Energy Materials, 2020, 3, 3684-3691.	5.1	73
507	Ultrahigh power and energy density in partially ordered lithium-ion cathode materials. Nature Energy, 2020, 5, 213-221.	39.5	158
508	Hierarchical Fusiform Microrods Constructed by Parallelly Arranged Nanoplatelets of LiCoO <sub>2</sub> Material with Ultrahigh Rate Performance. ACS Applied Materials & Interfaces, 2020, 12, 17376-17384.	8.0	9
509	On stability and kinetics of Li-rich transition metal oxides and oxyfluorides. Journal of Materials Chemistry A, 2020, 8, 7956-7967.	10.3	13
510	The Role of Secondary Particle Structures in Surface Phase Transitions of Ni-Rich Cathodes. Chemistry of Materials, 2020, 32, 2884-2892.	6.7	60

#	Article	IF	CITATIONS
511	Understanding the Origin of Higher Capacity for Ni-Based Disordered Rock-Salt Cathodes. Chemistry of Materials, 2020, 32, 3447-3461.	6.7	16
512	Heating-temperature-dependent electrochemical-performance-enhanced surface structural evolution during chemical treatment of Li-rich layered material by sodium thiosulfate. Journal of Power Sources, 2020, 455, 227795.	7.8	10
513	Structural evolution at the oxidative and reductive limits in the first electrochemical cycle of Li1.2Ni0.13Mn0.54Co0.13O2. Nature Communications, 2020, 11, 1252.	12.8	89
514	Multiscale factors in designing alkali-ion (Li, Na, and K) transition metal inorganic compounds for next-generation rechargeable batteries. Energy and Environmental Science, 2020, 13, 4406-4449.	30.8	77
515	Harbinger of hysteresis in lithium-rich oxides: Anionic activity or defect chemistry of cation migration. Journal of Power Sources, 2020, 471, 228335.	7.8	10
516	Effects of annealing on electrochemical performance in graphene/V2O5 supercapacitor. Applied Surface Science, 2020, 512, 145626.	6.1	42
517	Layered ternary metal oxides: Performance degradation mechanisms as cathodes, and design strategies for high-performance batteries. Progress in Materials Science, 2020, 111, 100655.	32.8	115
518	Atomic-scale structural evolution of electrode materials in Li-ion batteries: a review. Rare Metals, 2020, 39, 205-217.	7.1	94
519	Cationic and anionic redox in lithium-ion based batteries. Chemical Society Reviews, 2020, 49, 1688-1705.	38.1	152
520	ldentifying the anionic redox activity in cation-disordered Li <sub>1.25</sub> Nb <sub>0.25</sub> Fe <sub>0.50</sub> O <sub>2</sub> /C oxide cathodes for Li-ion batteries. Journal of Materials Chemistry A, 2020, 8, 5115-5127.	10.3	32
521	Thermochemistry of cation disordered Li ion battery cathode materials, (M′ = Nb and Ta, M′′ = Mn and) <sup>·</sup>	Tj ĘŢQq0 C	) 0 <sub>3</sub> rgBT /Ove
522	In Situ Surface Protection for Enhancing Stability and Performance of LiNi <sub>0.5</sub> Mn <sub>0.3</sub> Co <sub>0.2</sub> O <sub>2</sub> at 4.8 V: The Working Mechanisms. , 2020, 2, 280-290.		44
523	Oxygen-deficient NiMoO4-xSx nanosheets perpendicularly grown on N-doped carbon nanosheets for high performance lithium-ion batteries. Journal of Power Sources, 2020, 455, 227947.	7.8	20
524	Cation-disordered rocksalt transition metal oxides and oxyfluorides for high energy lithium-ion cathodes. Energy and Environmental Science, 2020, 13, 345-373.	30.8	301
525	Role of Amorphous Phases in Enhancing Performances of Electrode Materials for Alkali Ion Batteries. Frontiers in Materials, 2020, 6, .	2.4	25
526	Polyanion-type electrode materials for advanced sodium-ion batteries. Materials Today Nano, 2020, 10, 100072.	4.6	57
527	Effect of Fluorination on Lithium Transport and Shortâ€Range Order in Disorderedâ€Rocksaltâ€Type Lithiumâ€lon Battery Cathodes. Advanced Energy Materials, 2020, 10, 1903240.	19.5	83
528	Utilizing Site Disorder in the Development of New Energy-Relevant Semiconductors. ACS Energy Letters, 2020, 5, 2027-2041.	17.4	46

#	Article	IF	CITATIONS
529	High Efficient and Environment Friendly Plasma-Enhanced Synthesis of Al2O3-Coated LiNi1/3Co1/3Mn1/3O2 With Excellent Electrochemical Performance. Frontiers in Chemistry, 2020, 8, 72.	3.6	11
530	Revealing the minor Li-ion blocking effect of LiCoO2 surface phase transition layer. Journal of Power Sources, 2020, 460, 228126.	7.8	39
531	Definition of Redox Centers in Reactions of Lithium Intercalation in Li <sub>3</sub> RuO <sub>4</sub> Polymorphs. Journal of the American Chemical Society, 2020, 142, 8160-8173.	13.7	12
532	Lithium Manganese Spinel Cathodes for Lithiumâ€lon Batteries. Advanced Energy Materials, 2021, 11, 2000997.	19.5	177
533	In Operando Visualization of Cation Disorder Unravels Voltage Decay in Niâ€Rich Cathodes. Small Methods, 2021, 5, e2000730.	8.6	18
534	Fundamental understanding of high-capacity lithium-excess cathodes with disordered rock salt structure. Journal of Materials Science and Technology, 2021, 74, 60-68.	10.7	8
535	Phosphoric acid and thermal treatments reveal the peculiar role of surface oxygen anions in lithium and manganese-rich layered oxides. Journal of Materials Chemistry A, 2021, 9, 264-273.	10.3	26
536	Beyond garnets, phosphates and phosphosulfides solid electrolytes: New ceramic perspectives for all solid lithium metal batteries. Journal of Power Sources, 2021, 482, 228949.	7.8	59
537	Carbon-coated cation-disordered rocksalt-type transition metal oxide composites for high energy Li-ion batteries. Ceramics International, 2021, 47, 1758-1765.	4.8	50
538	Advances in triboelectric nanogenerators for biomedical sensing. Biosensors and Bioelectronics, 2021, 171, 112714.	10.1	159
539	Cation-disordered rocksalt-type high-entropy cathodes for Li-ion batteries. Nature Materials, 2021, 20, 214-221.	27.5	290
540	Disorder in energy materials and strategies to model it. Advances in Physics: X, 2021, 6, .	4.1	1
541	Impact of Local Separation on the Structural and Electrochemical Behaviors in Li <sub>2</sub> MoO <sub>3</sub> LiCrO <sub>2</sub> Disordered Rock‧alt Cathode Material. Advanced Energy Materials, 2021, 11, 2002958.	19.5	16
542	In situ imaging analysis of the inhibition effect of functional coating on the volume expansion of silicon anodes. Chemical Engineering Journal, 2021, 417, 128122.	12.7	20
543	Recent Advances and Prospects of Atomic Substitution on Layered Positive Materials for Lithiumâ€ion Battery. Advanced Energy Materials, 2021, 11, 2003197.	19.5	31
544	In situ TEM revealing the effects of dislocations on lithium-ion migration in transition metal dichalcogenides. Journal of Energy Chemistry, 2021, 58, 280-284.	12.9	5
545	Synthesis and electrochemical properties of cationâ€disordered rockâ€salt <scp> <i>x</i> Li <sub>3</sub> NbO <sub>4</sub> </scp> ·(1 â^ <i>x</i> ) <scp>NiO</scp> compounds for Liâ€ion batteries. International Journal of Energy Research, 2021, 45, 3966-3978.	4.5	4
546	Promises and Challenges of Next-Generation "Beyond Li-ion―Batteries for Electric Vehicles and Grid Decarbonization. Chemical Reviews, 2021, 121, 1623-1669.	47.7	769

#	Article	IF	Citations
547	High electrochemical performance and structural stability of CoO nanosheets/CoO film as self-supported anodes for lithium-ion batteries. Ceramics International, 2021, 47, 5739-5746.	4.8	29
548	The role of metal substitutions in the development of Li batteries, part I: cathodes. Materials Advances, 2021, 2, 3474-3518.	5.4	22
549	Defect engineering of oxide perovskites for catalysis and energy storage: synthesis of chemistry and materials science. Chemical Society Reviews, 2021, 50, 10116-10211.	38.1	140
550	Deconvolution of intermixed redox processes in Ni-based cation-disordered Li-excess cathodes. Energy and Environmental Science, 2021, 14, 1553-1562.	30.8	17
551	Dealing with Quadrupolar Nuclei in Paramagnetic Systems. New Developments in NMR, 2021, , 106-129.	0.1	0
552	Blue-AsP monolayer as a promising anode material for lithium- and sodium-ion batteries: a DFT study. Physical Chemistry Chemical Physics, 2021, 23, 5143-5151.	2.8	28
553	Experimental considerations to study Li-excess disordered rock salt cathode materials. Journal of Materials Chemistry A, 2021, 9, 1720-1732.	10.3	19
554	A novel amorphous P <sub>4</sub> SSe <sub>2</sub> compound as an advanced anode for sodium-ion batteries in ether-based electrolytes. Journal of Materials Chemistry A, 2021, 9, 12029-12040.	10.3	21
555	Silica-nanoresin crosslinked composite polymer electrolyte for ambient-temperature all-solid-state lithium batteries. Materials Chemistry Frontiers, 2021, 5, 6502-6511.	5.9	16
556	Understanding the Mesoscale Degradation in Nickel-Rich Cathode Materials through Machine-Learning-Revealed Strain–Redox Decoupling. ACS Energy Letters, 2021, 6, 687-693.	17.4	42
557	Understanding cation-disordered rocksalt oxyfluoride cathodes. Journal of Materials Chemistry A, 2021, 9, 7826-7837.	10.3	21
558	Energy storage mechanisms in vacancy-ordered Wadsley–Roth layered niobates. Journal of Materials Chemistry A, 2021, 9, 20006-20023.	10.3	12
559	High-entropy energy materials: challenges and new opportunities. Energy and Environmental Science, 2021, 14, 2883-2905.	30.8	282
560	Long-Term Cycle Stability Enabled by the Incorporation of Ni into Li <sub>2</sub> MnO <sub>3</sub> Phase in the Mn-Based Li-Rich Layered Materials. ACS Energy Letters, 2021, 6, 789-798.	17.4	27
561	Metal-Ion Chelating Gel Polymer Electrolyte for Ni-Rich Layered Cathode Materials at a High Voltage and an Elevated Temperature. ACS Applied Materials & Interfaces, 2021, 13, 9965-9974.	8.0	9
562	Oxygen Redox Chemistry in Rechargeable Li-Ion and Na-Ion Batteries. Matter, 2021, 4, 490-527.	10.0	47
563	Understanding Co roles towards developing Co-free Ni-rich cathodes for rechargeable batteries. Nature Energy, 2021, 6, 277-286.	39.5	255
564	Water–Salt Oligomers Enable Supersoluble Electrolytes for Highâ€Performance Aqueous Batteries. Advanced Materials, 2021, 33, e2007470.	21.0	102

#	Article	IF	CITATIONS
565	A review on progress of lithium-rich manganese-based cathodes for lithium ion batteries. Journal of Power Sources, 2021, 487, 229362.	7.8	104
566	An Overview of Cation-Disordered Lithium-Excess Rocksalt Cathodes. ACS Energy Letters, 0, , 1358-1376.	17.4	50
567	Optimized synthesis condition and mechanism for novel spherical cobalt-free 0.6Li2MnO3·0.4Li[Fe1/3Ni1/3Mn1/3]O2 cathode. Journal of Power Sources, 2021, 487, 229410.	7.8	10
568	Evaluating Materials Design Parameters of Hole-Selective Contacts for Silicon Heterojunction Solar Cells. IEEE Journal of Photovoltaics, 2021, 11, 247-258.	2.5	7
569	Boosting the electrochromic performance of TiO2 nanowire film via successively evolving surface structure. Science China Chemistry, 2021, 64, 745-752.	8.2	5
570	Faster Diffusion and Higher Lithium-Ion Intercalation Capacity in Pb-Jarosite than Na-Jarosite. ACS Applied Energy Materials, 2021, 4, 2248-2256.	5.1	4
571	The exploration of a CuNb <sub>3</sub> O <sub>8</sub> Li <sup>+</sup> -storage anode compound. Materials Technology, 2022, 37, 814-821.	3.0	4
572	Challenges and Recent Advances in High Capacity Liâ€Rich Cathode Materials for High Energy Density Lithiumâ€lon Batteries. Advanced Materials, 2021, 33, e2005937.	21.0	253
573	Promising Electrode and Electrolyte Materials for Highâ€Energyâ€Density Thinâ€Film Lithium Batteries. Energy and Environmental Materials, 2022, 5, 133-156.	12.8	25
574	The role of cation ordering and disordering on mass transport in complex oxides. Current Opinion in Solid State and Materials Science, 2021, 25, 100899.	11.5	11
575	Understanding disorder in oxide-based electrode materials for rechargeable batteries. JPhys Energy, 2021, 3, 031002.	5.3	4
576	Fluorinationâ€Enhanced Surface Stability of Cationâ€Disordered Rocksalt Cathodes for Liâ€ion Batteries. Advanced Functional Materials, 2021, 31, 2101888.	14.9	28
577	Unveiling the role of Mn-interstitial defect and particle size on the Jahn-Teller distortion of the LiMn2O4 cathode material. Journal of Power Sources, 2021, 490, 229519.	7.8	11
578	Electrochemically Anodized V <sub>2</sub> O <sub>5</sub> as an Efficient Sodium Cathode. Energy & Fuels, 2021, 35, 8358-8364.	5.1	8
579	Unveiling the Influence of Carbon Impurity on Recovered NCM622 Cathode Material. ACS Sustainable Chemistry and Engineering, 2021, 9, 6087-6096.	6.7	14
580	Layered-rocksalt intergrown cathode for high-capacity zero-strain battery operation. Nature Communications, 2021, 12, 2348.	12.8	43
581	Challenges and future perspectives on sodium and potassium ion batteries for grid-scale energy storage. Materials Today, 2021, 50, 400-417.	14.2	161
582	Site-occupancy scheme in disordered Ca <sub>3</sub> RE <sub>2</sub> (BO <sub>3</sub> ) <sub>4</sub> : a dependence on rare-earth (RE) ionic radius. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2021, 77, 339-346.	1.1	4

#	Article	IF	CITATIONS
583	Determining the Criticality of Liâ€Excess for Disorderedâ€Rocksalt Liâ€Ion Battery Cathodes. Advanced Energy Materials, 2021, 11, 2100204.	19.5	31
584	Insights into Layered Oxide Cathodes for Rechargeable Batteries. Molecules, 2021, 26, 3173.	3.8	16
585	Heteroepitaxial interface of layered cathode materials for lithium ion batteries. Energy Storage Materials, 2021, 37, 161-189.	18.0	19
586	Ultra-Thin Mesoporous LiV <sub>3</sub> O <sub>8</sub> Nanosheet with Exceptionally Large Specific Area for Fast and Reversible Li Storage in Lithium-Ion Battery Cathode. Journal of the Electrochemical Society, 2021, 168, 050515.	2.9	7
587	Crystal defect modulation in cathode materials for non-lithium ion batteries: Progress and challenges. Materials Today, 2021, 45, 169-190.	14.2	53
588	Jahn–Teller Distortion Induced Mn <sup>2+</sup> â€Rich Cathode Enables Optimal Flexible Aqueous Highâ€Voltage Znâ€Mn Batteries. Advanced Science, 2021, 8, 2004995.	11.2	49
589	Oxygen anionic redox activated high-energy cathodes: Status and prospects. ETransportation, 2021, 8, 100118.	14.8	34
590	Non-topotactic reactions enable high rate capability in Li-rich cathode materials. Nature Energy, 2021, 6, 706-714.	39.5	65
591	Carbon Nanotube Supported Li-Excess Cation-Disordered Li1.24Fe0.38Ti0.38O2 Cathode with Enhanced Lithium-Ion Storage Performance. Journal of Electronic Materials, 2021, 50, 5029-5036.	2.2	4
592	Electrochemical ion insertion from the atomic to the device scale. Nature Reviews Materials, 2021, 6, 847-867.	48.7	84
593	Intrinsic Li Distribution in Layered Transition-Metal Oxides Using Low-Dose Scanning Transmission Electron Microscopy and Spectroscopy. Chemistry of Materials, 2021, 33, 4638-4650.	6.7	7
594	Enhanced structural and electrochemical stability of LiNi0.83Co0.11Mn0.06O2 cathodes by zirconium and aluminum co-doping for lithium-ion battery. Journal of Power Sources, 2021, 498, 229857.	7.8	19
595	Reversible Mn/Cr dual redox in cation-disordered Li-excess cathode materials for stable lithium ion batteries. Acta Materialia, 2021, 212, 116935.	7.9	16
596	Appearance of the 4 V signal without transformation to spinel-related oxides from loose-crystalline rock-salt LiMnO2. Journal of Power Sources, 2021, 497, 229788.	7.8	9
597	Superior Rate Capability and Cycling Stability in Partially Cation-Disordered Co-Free Li-Rich Layered Materials Enabled by an Initial Activation Process. Chemistry of Materials, 2021, 33, 5115-5126.	6.7	5
598	Coupling-Agent-Coordinated Uniform Polymer Coating on LiNi <sub>0.6</sub> Co <sub>0.2</sub> Mn <sub>0.2</sub> O <sub>2</sub> for Improved Electrochemical Performance at Elevated Temperatures. ACS Applied Materials & Interfaces, 2021, 13, 26971-26980.	8.0	10
599	Modulating the bonding properties of Li2MoO3 via non-equivalent cationic doping to enhance its stability and electrochemical performance for lithium-ion battery application. Ceramics International, 2021, 47, 18304-18313.	4.8	5
600	A fluorinated polymer sponge with superhydrophobicity for high-performance biomechanical energy harvesting. Nano Energy, 2021, 85, 106021.	16.0	55

#	Article	IF	CITATIONS
601	Assessing battery kinetics with machine learning. Matter, 2021, 4, 2671-2673.	10.0	0
602	Synthesis and Processing by Design of Highâ€Nickel Cathode Materials. Batteries and Supercaps, 2022, 5, .	4.7	11
603	Disordered Li-rich, Ti-based oxyfluoride cathode with multiple cation and anion redox chemistry. Chemical Engineering Journal, 2021, 417, 128189.	12.7	11
604	Formation of LiF Surface Layer During Direct Fluorination of High-Capacity Co-Free Disordered Rocksalt Cathodes. ACS Applied Materials & Interfaces, 2021, 13, 38221-38228.	8.0	13
605	Elucidating the Factors That Cause Cation Diffusion Shutdown in Spinel-Based Electrodes. Chemistry of Materials, 2021, 33, 6421-6432.	6.7	18
606	Interplay between Cation and Anion Redox in Ni-Based Disordered Rocksalt Cathodes. ACS Nano, 2021, 15, 13360-13369.	14.6	13
607	First-principles study of Mn antisite defect in Li2MnO3. Journal of Physics Condensed Matter, 2021, 33, 415201.	1.8	2
608	Role of Fluorine in Chemomechanics of Cation-Disordered Rocksalt Cathodes. Chemistry of Materials, 2021, 33, 7028-7038.	6.7	8
609	Li <sub>2</sub> NiO <sub>2</sub> F a New Oxyfluoride Disordered Rocksalt Cathode Material. Journal of the Electrochemical Society, 2021, 168, 080521.	2.9	6
610	Enhancing LiNiO2 cathode materials by concentration-gradient yttrium modification for rechargeable lithium-ion batteries. Journal of Energy Chemistry, 2021, 63, 312-319.	12.9	18
611	Low-temperature strategy to synthesize single-crystal LiNi0.8Co0.1Mn0.1O2 with enhanced cycling performances as cathode material for lithium-ion batteries. Nano Research, 2022, 15, 2052-2059.	10.4	32
612	The effect of electrochemically inactive Ti substituted for Ru in Li2Ru1-Ti O3 on structure and electrochemical performance. Journal of Energy Chemistry, 2021, 60, 222-228.	12.9	6
613	A new high-voltage plateau of Na3V2(PO4)3 for sodium ion batteries: A promising cathode with high energy density. Ceramics International, 2021, 47, 26579-26583.	4.8	15
614	Elucidating roles of cation disorder and spinel phase in high-capacity integrated spinel-layered cathodes. Journal of Power Sources, 2021, 507, 230315.	7.8	5
615	Cathode Materials for Li-Ion Batteries. , 2021, , 47-70.		0
616	Manganese-based oxide layer with oxygen vacancies to enable fast ion/charge mobility for durable LiNi0.8Co0.1Mn0.1O2 cathode. Ionics, 2021, 27, 5009-5019.	2.4	1
617	First-principles computational insights into lithium battery cathode materials. Electrochemical Energy Reviews, 2022, 5, 1-31.	25.5	21
618	Fundamental understanding and practical challenges of lithium-rich oxide cathode materials: Layered and disordered-rocksalt structure. Energy Storage Materials, 2021, 40, 51-71.	18.0	61

#	Article	IF	CITATIONS
619	Correlating ligand-to-metal charge transfer with voltage hysteresis in a Li-rich rock-salt compound exhibiting anionic redox. Nature Chemistry, 2021, 13, 1070-1080.	13.6	75
620	Exposure History and its Effect Towards Stabilizing Li Exchange Across Disordered Rock Salt Interfaces. ChemElectroChem, 2021, 8, 3982-3991.	3.4	4
621	Facile synthesis of 3D urchin-like V6O13 microflowers as cathode materials for high-capacity and high-rate lithium-ion batteries. Journal of Electroanalytical Chemistry, 2021, 900, 115742.	3.8	16
623	Recent advances in the structure and dynamics of complex oxides, with a focus on fundamentals. Current Opinion in Solid State and Materials Science, 2021, 25, 100942.	11.5	1
624	Effects of V2O5 and Fe2O3 on the structures and electrochemical performances of Li2O-V2O5-B2O3 glass materials in lithium-ion batteries. Journal of Alloys and Compounds, 2021, 879, 160293.	5.5	10
625	Spontaneous knitting behavior of 6.7-nm thin (NH4)0.38V2O5 nano- ribbons for binder-free zinc-ion batteries. Energy Storage Materials, 2021, 42, 286-294.	18.0	46
626	Recent advancements in development of different cathode materials for rechargeable lithium ion batteries. Journal of Energy Storage, 2021, 43, 103112.	8.1	32
627	Cation-vacancy induced Li+ intercalation pseudocapacitance at atomically thin heterointerface for high capacity and high power lithium-ion batteries. Journal of Energy Chemistry, 2021, 62, 281-288.	12.9	14
628	Enhanced electrochemical performances of LiNi0.5Co0.2Mn0.3O2 cathode material co-coated by graphene/TiO2. Current Applied Physics, 2021, 32, 1-10.	2.4	5
629	Grain size regulation for balancing cycle performance and rate capability of LiNi0.9Co0.055Mn0.045O2 single crystal nickel-rich cathode materials. Journal of Energy Chemistry, 2022, 65, 681-687.	12.9	35
630	Identifying the effect of fluorination on cation and anion redox activity in Mn based cation-disordered cathode. Journal of Colloid and Interface Science, 2022, 607, 1333-1342.	9.4	5
631	Polyaniline Encapsulated Amorphous V <sub>2</sub> O <sub>5</sub> Nanowireâ€Modified Multiâ€Functional Separators for Lithium–Sulfur Batteries. Small Methods, 2021, 5, e2001056.	8.6	86
632	Optimized electron occupancy of solid-solution transition metals for suppressing the oxygen evolution of Li <sub>2</sub> MnO <sub>3</sub> . Journal of Materials Chemistry A, 2021, 9, 9337-9346.	10.3	7
633	High-Entropy Structure Design in Layered Transition Metal Dichalcogenides. SSRN Electronic Journal, 0, , .	0.4	0
634	A Story of Disordered Arrangements. Matter, 2021, 4, 23-25.	10.0	3
635	Electrochemical Activity of Positive Electrode Material of P2-Na <i><sub>x</sub></i> [Mg <sub>0.33</sub> Mn <sub>0.67</sub> ]O <sub>2</sub> Sodium Ion Battery. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2021, 36, 623.	1.3	3
636	Principles of Transmission X-ray Microscopy and Its Applications in Battery Study. , 2021, , 65-90.		0
637	Rechargeable Alkali-Ion Battery Materials: Theory and Computation. Chemical Reviews, 2020, 120, 6977-7019.	47.7	145

# 638	ARTICLE High Ionic Conductivity Achieved in Li <sub>3</sub> Y(Br <sub>3</sub> Cl <sub>3</sub> ) Mixed Halide Solid Electrolyte via Promoted Diffusion Pathways and Enhanced Grain Boundary. ACS Energy Letters,	IF 17.4	CITATIONS 84
639	A new lithium diffusion model in layered oxides based on asymmetric but reversible transition metal migration. Energy and Environmental Science, 2020, 13, 1269-1278.	30.8	39
640	A novel solid state reaction route to the preparation of LiCoO2 using micro porous filter paper as scaffolds. Materials Research Express, 2020, 7, 065506.	1.6	7
641	Energetics and cathode voltages of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"&gt;<mml:mrow><mml:mi>Li</mml:mi><mml:mi>Molivines ( <mml:math) (xmlns:mml="http://www.w3.org/19&lt;/td&gt;&lt;td&gt;&gt; &lt; mml:ms&lt;br&gt;98&lt;b&gt;2M&lt;/b&gt;ath/N&lt;/td&gt;&lt;td&gt;ub&gt;&lt;mml:mi&lt;br&gt;⁄la&lt;b&gt;åk&lt;/b&gt;ML" 0.784314="" 1="" 10="" 50="" 617="" etqq1="" overlock="" rgbt="" td="" tf="" tj=""><m< td=""></m<></mml:math)></mml:mi></mml:mrow></mml:math 		
642	Possible high-potential limenite type <mmi:math xmlns:mml="http://www.w3.org/1998/Math/MathML"&gt; <mml:mrow> <mml:mi mathvariant="normal"&gt;N <mml:msub> <mml:mi mathvariant="normal"&gt;a <mml:mn> 1</mml:mn> </mml:mi </mml:msub> <mml:mi> M</mml:mi> <mml:msub> <mm mathvariant="normal"&gt;O <mml:mn> 3</mml:mn> </mm </mml:msub> <mml:mo> Â</mml:mo> <mml:mo> (<td>nl<del>24</del> ml:mi ml:mo&gt;<r< td=""><td>2 nml:mi&gt;M</td></r<></td></mml:mo></mml:mi </mml:mrow></mmi:math 	nl <del>24</del> ml:mi ml:mo> <r< td=""><td>2 nml:mi&gt;M</td></r<>	2 nml:mi>M
643	crystal-torture: A crystal tortuosity module. Journal of Open Source Software, 2019, 4, 1306.	4.6	3
644	A New Rechargeable Battery Design Based on Magnesium and Persulfate. Journal of Power and Energy Engineering, 2015, 03, 9-13.	0.6	1
645	The rise of X-ray spectroscopies for unveiling the functional mechanisms in batteries. Physical Chemistry Chemical Physics, 2021, 23, 23445-23465.	2.8	13
646	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
647	Coexistence of (O <sub>2</sub> ) <sup><i>n</i>â^'</sup> and Trapped Molecular O <sub>2</sub> as the Oxidized Species in P2-Type Sodium 3d Layered Oxide and Stable Interface Enabled by Highly Fluorinated Electrolyte. Journal of the American Chemical Society, 2021, 143, 18652-18664.	13.7	55
648	Toward Better Stability and Reversibility of the Mn <sup>4+</sup> /Mn <sup>2+</sup> Double Redox Activity in Disordered Rocksalt Oxyfluoride Cathode Materials. Chemistry of Materials, 2021, 33, 8235-8247.	6.7	18
649	Predicting Li-Rich Layered Oxide Compounds as High-Conductivity and Stable Solid Electrolytes. ACS Energy Letters, 2021, 6, 3793-3800.	17.4	5
650	Advances of entropy-stabilized homologous compounds for electrochemical energy storage. Journal of Energy Chemistry, 2022, 67, 276-289.	12.9	22
651	High-entropy structure design in layered transition metal dichalcogenides. Acta Materialia, 2022, 222, 117438.	7.9	9
652	Revealing the Thermodynamics and Kinetics of In-Plane Disordered Li <sub>2</sub> MnO <sub>3</sub> Structure in Li-Rich Cathodes. ACS Energy Letters, 2021, 6, 3836-3843.	17.4	32
653	Compatibility of Various Electrolytes with Cation Disordered Rocksalt Cathodes in Lithium Ion Batteries. ACS Applied Energy Materials, 2021, 4, 10909-10920.	5.1	9
654	Improving high-temperature performance of lithium-rich cathode by roll-to-roll atomic layer deposition of titania nanocoating for lithium-ion batteries. Journal of Energy Storage, 2021, 44, 103348.	8.1	7
655	Lithiumionen-Batterien. , 2015, , 157-254.		1

#	Article	IF	CITATIONS
656	Disordered Compounds. , 2016, , 295-322.		0
657	Lithiumionen-Batterien. , 2018, , 165-263.		0
658	Stabilization of Solid Solution Behavior for Monoclinic Li <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> <i>via.</i> Al <sup>3+</sup> Doping. Electrochemistry, 2019, 87, 341-347.	1.4	0
659	Highâ€Entropy Energy Materials in the Age of Big Data: A Critical Guide to Nextâ€Generation Synthesis and Applications. Advanced Energy Materials, 2021, 11, 2102355.	19.5	37
660	Cationic disordering modulated electrochemical performances of layer-structured Li2MoO3. Materials Today Physics, 2021, 21, 100561.	6.0	4
661	Realizing continuous cation order-to-disorder tuning in a class of high-energy spinel-type Li-ion cathodes. Matter, 2021, 4, 3897-3916.	10.0	32
662	Perspectives in Electrochemical in situ Structural Reconstruction of Cathode Materials for Multivalentâ€ion Storage. Energy and Environmental Materials, 2023, 6, .	12.8	23
663	Fundamentals of metal oxide/oxyfluoride electrodes for Li-/Na-ion batteries. Chemical Physics Reviews, 2021, 2, .	5.7	16
664	Pushing the boundaries of lithium battery research with atomistic modelling on different scales. Progress in Energy, 2022, 4, 012002.	10.9	12
665	Amorphous phosphorus chalcogenide as an anode material for lithium-ion batteries with high capacity and long cycle life. Journal of Energy Chemistry, 2022, 68, 658-668.	12.9	15
666	Unraveling transition-metal-mediated stability of spinel oxide via in situ neutron scattering. Journal of Energy Chemistry, 2022, 68, 60-70.	12.9	3
667	Implications of the BATTERY 2030+ Alâ€Assisted Toolkit on Future Lowâ€TRL Battery Discoveries and Chemistries. Advanced Energy Materials, 2022, 12, 2102698.	19.5	20
668	A novel composite of SnO nanoparticles and SiO2@N-doped carbon nanofibers with durable lifespan for diffusion-controlled lithium storage. Journal of Alloys and Compounds, 2022, 897, 162703.	5.5	10
669	Enhanced piezoelectricity of PVDF nanofibers via a plasticizer treatment for energy harvesting. Materials Research Express, 2021, 8, 125001.	1.6	10
670	High-capacity and cycling-stable anode for sodium ion batteries constructed from SnS2/MWCNTs nanocomposites. Journal of Alloys and Compounds, 2022, 897, 163029.	5.5	7
671	High Nickel and No Cobalt─The Pursuit of Next-Generation Layered Oxide Cathodes. ACS Applied Materials & Interfaces, 2022, 14, 23056-23065.	8.0	30
672	Ultrafast rate capability of V2O5 yolk-shell microspheres with hierarchical nanostructure as an aqueous lithium-ion battery anode. Electrochimica Acta, 2022, 410, 139792.	5.2	12
673	Ni/Li antisite induced disordered passivation layer for high-Ni layered oxide cathode material. Energy Storage Materials, 2022, 45, 720-729.	18.0	29

#	Article	IF	CITATIONS
674	Co2+/Co0 enhances the capacity of lithium-ion batteries in vanadium-based glass anode. Materials Today Communications, 2022, 30, 103047.	1.9	2
675	Native lattice strain induced structural earthquake in sodium layered oxide cathodes. Nature Communications, 2022, 13, 436.	12.8	29
676	Understanding anion-redox reactions in cathode materials of lithium-ion batteries through in situ characterization techniques: a review. Nanotechnology, 2022, 33, 182003.	2.6	11
677	Nextâ€Generation Cobaltâ€Free Cathodes – A Prospective Solution to the Battery Industry's Cobalt Problem. Advanced Energy Materials, 2022, 12, .	19.5	71
678	Influence of electrolyte structural evolution on battery applications: Cationic aggregation from dilute to high concentration. Aggregate, 2022, 3, .	9.9	37
679	Oxygen Loss in Layered Oxide Cathodes for Li-Ion Batteries: Mechanisms, Effects, and Mitigation. Chemical Reviews, 2022, 122, 5641-5681.	47.7	108
680	Li-rich channels as the material gene for facile lithium diffusion in halide solid electrolytes. EScience, 2022, 2, 79-86.	41.6	28
681	Toward high-energy Mn-based disordered-rocksalt Li-ion cathodes. Joule, 2022, 6, 53-91.	24.0	38
682	Investigating Particle Sizeâ€Dependent Redox Kinetics and Charge Distribution in Disordered Rocksalt Cathodes. Advanced Functional Materials, 2022, 32, .	14.9	10
683	Significantly fastened redox kinetics in single crystal layered oxide cathode by gradient doping. Nano Energy, 2022, 94, 106961.	16.0	42
684	Highly Graphitic Carbon Coating on Li <sub>1.25</sub> Nb <sub>0.25</sub> V <sub>0.5</sub> O <sub>2</sub> Derived from a Precursor with a Perylene Core for High-Power Battery Applications. Chemistry of Materials, 2022, 34, 1946-1955.	6.7	7
685	Fluorinationâ€Enhanced Surface Stability of Disordered Rocksalt Cathodes. Advanced Materials, 2022, 34, e2106256.	21.0	11
686	High-Voltage Reactivity and Long-Term Stability of Cation-Disordered Rocksalt Cathodes. Chemistry of Materials, 2022, 34, 1524-1532.	6.7	5
687	First-Principles Study on Cathode Properties of Li2MTiO4 and Na2MTiO4 (M = V, Cr, Mn, Fe, Co, Ni). Journal of the Physical Society of Japan, 2022, 91, .	1.6	0
688	Topologically protected oxygen redox in a layered manganese oxide cathode for sustainable batteries. Nature Sustainability, 2022, 5, 214-224.	23.7	44
689	Effect of transition metal cations on the local structure and lithium transport in disordered rock-salt oxides. Physical Chemistry Chemical Physics, 2022, 24, 5823-5832.	2.8	8
690	Status of Li(Na)-based anionic redox materials for better batteries. , 2023, , 6-45.		4
691	Structural and Electrochemical Insights from the Fluorination of Disordered Mn-Based Rock Salt Cathode Materials. Chemistry of Materials, 2022, 34, 2268-2281.	6.7	13

#	Article	IF	CITATIONS
693	Characterizing and Mitigating Chemomechanical Degradation in High-Energy Lithium-Ion Battery Cathode Materials. Accounts of Materials Research, 2022, 3, 511-524.	11.7	11
694	Solid-Phase Synthesis of ZnO@Bi <sub>2</sub> O <sub>3</sub> Core–Shell Composites for Long-Life NiZn Batteries. ACS Sustainable Chemistry and Engineering, 2022, 10, 2730-2739.	6.7	2
695	Lithium superionic conductors with corner-sharing frameworks. Nature Materials, 2022, 21, 924-931.	27.5	67
697	Improved Capacity Retention for a Disordered Rocksalt Cathode via Solvate Ionic Liquid Electrolytes. Batteries and Supercaps, 0, , .	4.7	2
701	Rational material design of Li-excess metal oxides with disordered rock salt structure. Current Opinion in Electrochemistry, 2022, 34, 100978.	4.8	15
702	Significance of gallium doping for high Ni, low Co/Mn layered oxide cathode material. Chemical Engineering Journal, 2022, 441, 135821.	12.7	34
703	Hetero-Element-Doped Molybdenum Oxide Materials for Energy Storage Systems. Nanomaterials, 2021, 11, 3302.	4.1	5
704	Multiscale computations and artificial intelligent models of electrochemical performance in Liâ€ion battery materials. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2022, 12, .	14.6	6
705	Atomistic modeling of Li- and post-Li-ion batteries. Physical Review Materials, 2022, 6, .	2.4	17
706	Optical, magnetic, thermodynamic, and dielectric studies of the disordered rock salt Li1.3Nb0.3Fe0.4O2 cathode for Li-ion batteries. Journal of Applied Physics, 2022, 131, .	2.5	0
707	Synergistic effect of Al–B co-doping to boost the LiNi0.9Co0.05Mn0.05O2 properties in lithium-ion batteries. Ceramics International, 2022, 48, 20605-20611.	4.8	6
708	Thermodynamically Driven Synthetic Optimization for Cationâ€Disordered Rock Salt Cathodes. Advanced Energy Materials, 2022, 12, .	19.5	20
710	Structural Stabilization of Cation Disordered Rock-Salt Cathode Materials: Coupling between High-Ratio Inactive Ti4+ Cation and Mn2+/Mn4+ Two-Electron Redox Pair. SSRN Electronic Journal, 0, , .	0.4	0
711	Lithium-Rich Rock Salt Type Sulfides-Selenides (Li2TiSexS3â^'x): High Energy Cathode Materials for Lithium-Ion Batteries. Materials, 2022, 15, 3037.	2.9	2
712	Research Progress in Lithiumâ€Excess Disordered Rockâ€Salt Oxides Cathode. Energy and Environmental Materials, 2022, 5, 1139-1154.	12.8	33
713	Sustainable Electric Vehicle Batteries for a Sustainable World: Perspectives on Battery Cathodes, Environment, Supply Chain, Manufacturing, Life Cycle, and Policy. Advanced Energy Materials, 2022, 12,	19.5	72
714	Electrochemically induced amorphous-to-rock-salt phase transformation in niobium oxide electrode for Li-ion batteries. Nature Materials, 2022, 21, 795-803.	27.5	69
715	Coincident formation of trapped molecular O2 in oxygen-redox-active archetypical Li 3d oxide cathodes unveiled by EPR spectroscopy. Energy Storage Materials, 2022, 50, 55-62.	18.0	11

#	Article	IF	CITATIONS
716	Manganese-based layered oxides for electrochemical energy storage: a review of degradation mechanisms and engineering strategies at the atomic level. Journal of Materials Chemistry A, 2022, 10, 19231-19253.	10.3	14
717	In situ analysis of gas evolution in liquid- and solid-electrolyte-based batteries with current and next-generation cathode materials. Journal of Materials Research, 2022, 37, 3146-3168.	2.6	21
718	Improved Electrochemical Kinetics and Interfacial Stability of Cobalt-Free Lithium-Rich Layered Oxides Via Thiourea Treatment. SSRN Electronic Journal, 0, , .	0.4	0
719	Unexpectedly Large Contribution of Oxygen to Charge Compensation Triggered by Structural Disordering: Detailed Experimental and Theoretical Study on a Li <sub>3</sub> NbO <sub>4</sub> –NiO Binary System. ACS Central Science, 2022, 8, 775-794.	11.3	10
720	P(VDF-TrFE)/ZnO nanocomposite synthesized by electrospinning: effect of ZnO nanofiller on physical, mechanical, thermal, rheological and piezoelectric properties. Polymer Bulletin, 2023, 80, 4859-4878.	3.3	7
721	Cycling-Driven Electrochemical Activation of Li-Rich NMC Positive Electrodes for Li-Ion Batteries. ACS Applied Energy Materials, 2022, 5, 7758-7769.	5.1	21
722	Capturing dynamic ligand-to-metal charge transfer with a long-lived cationic intermediate for anionic redox. Nature Materials, 2022, 21, 1165-1174.	27.5	34
723	Design principles for zero-strain Li-ion cathodes. Joule, 2022, 6, 1654-1671.	24.0	39
724	Developments in Surface/Interface Engineering of Niâ€Rich Layered Cathode Materials. Chemical Record, 2022, 22, .	5.8	10
725	Porosity Development at Li-Rich Layered Cathodes in All-Solid-State Battery during <i>In Situ</i> Delithiation. Nano Letters, 2022, 22, 4905-4911.	9.1	10
726	Enhancing the electrochemical performance of LiNi0.8Co0.1Mn0.1O2 cathodes through amorphous coatings. Electrochimica Acta, 2022, 425, 140745.	5.2	8
727	Alâ€Doping Driven Suppression of Capacity and Voltage Fadings in 4dâ€Element Containing Liâ€Ionâ€Battery Cathode Materials: Machine Learning and Density Functional Theory. Advanced Energy Materials, 2022, 12, .	19.5	42
728	Design and Development of Cathode Materials for Rechargeable Batteries. Batteries, 2022, 8, 68.	4.5	0
729	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
730	Understanding the Fluorination of Disordered Rocksalt Cathodes through Rational Exploration of Synthesis Pathways. Chemistry of Materials, 2022, 34, 7015-7028.	6.7	15
731	High Energy Density Electrode Materials with the Disordered Rocksalt Structure. Russian Journal of Electrochemistry, 2022, 58, 567-573.	0.9	1
732	Planar carbon allotrope B-graphyne as lithium-ion battery anode materials. Chemical Physics Letters, 2022, 804, 139897.	2.6	1
733	Persona of Transition Metal Ions in Solids: A Statistical Learning on Local Structures of Transition Metal Oxides. Advanced Science, 2022, 9, .	11.2	9

#	Article	IF	CITATIONS
734	Interfacial Cation Mixing and Microstructural Changes in Bilayer GTO/GZO Thin Films After Irradiation. Jom, 2022, 74, 4015-4025.	1.9	2
735	Triggering Anionic Redox Activity in Li <sub>3</sub> NbS <sub>4</sub> Through Cationic Disordering or Substitution. Advanced Energy Materials, 2022, 12, .	19.5	5
736	Equilibrium Particle Shape and Surface Chemistry of Disordered Li-Excess, Mn-Rich Li-ion Cathodes through First-Principles Modeling. Chemistry of Materials, 2022, 34, 7210-7219.	6.7	6
737	Achieving high-energy-density lithium-ion batteries through oxygen redox of cathode: From fundamentals to applications. Applied Physics Letters, 2022, 121, .	3.3	4
738	Structural Stabilization of Cation-Disordered Rock-Salt Cathode Materials: Coupling between a High-Ratio Inactive Ti <sup>4+</sup> Cation and a Mn <sup>2+</sup> /Mn <sup>4+</sup> Two-Electron Redox Pair. ACS Applied Materials & Interfaces, 2022, 14, 38865-38874.	8.0	7
739	Cation configuration in transition-metal layered oxides. Matter, 2022, 5, 3869-3882.	10.0	16
740	Ultra-stable Li  LiFePO4 batteries via advanced designing of localized high concentration electrolyte. Journal of Colloid and Interface Science, 2022, 628, 14-23.	9.4	11
741	High performance of co-doped V2O5 cathode material in V2O5-saturated (NH4)2SO4 electrolyte for ammonium ion battery. Journal of Alloys and Compounds, 2022, 925, 166652.	5.5	15
742	First principles investigation of anionic redox in bisulfate lithium battery cathodes. Physical Chemistry Chemical Physics, 2022, 24, 22756-22767.	2.8	1
743	Effect of cooling rate on the structure and electrochemical properties of Mn-based oxyfluorides with cation-disordered rock-salt structure. Chimica Techno Acta, 2022, 9, .	0.7	3
744	Effect of Disorder and Doping on Electronic Structure and Diffusion Properties of Li <sub>3</sub> V <sub>2</sub> O <sub>5</sub> . Journal of Physical Chemistry C, 2022, 126, 15549-15557.	3.1	3
745	Realizing high energy-density lithium-ion batteries: High Ni-content or high cut-off voltage of single-crystal layered cathodes?. Journal of Electroanalytical Chemistry, 2022, 924, 116847.	3.8	4
746	Tailoring electronic-ionic local environment for solid-state Li-O <sub>2</sub> battery by engineering crystal structure. Science Advances, 2022, 8, .	10.3	18
747	Ionâ€Migration Mechanism: An Overall Understanding of Anionic Redox Activity in Metal Oxide Cathodes of Li/Naâ€Ion Batteries. Advanced Materials, 2022, 34, .	21.0	35
748	Singleâ€Crystalline Niâ€Rich LiNi <i><sub>x</sub></i> Mn <i><sub>y</sub></i> Co <sub>1â^'</sub> <i><sub>x</sub></i> <sub>a^'</sub> <i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><i><sub>a^'</sub><isub>a''<isub>a''<isub>a''<isub>a''<isub>a''<isub>a''<isub>a''<isub>a''<isub>a''<isub>a''<isub>a''<isub>a''<isub>a''<isub>a''<isub>a''<isub>a''<isub>a''<isub>a''<isub>a''<isub>a''<isub>a''</isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></isub></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i>	ıb <b>ay≽∢</b> ‡sub∶	>< <b>⋬9</b> O <sub></sub>
749	Advances and challenges in multiscale characterizations and analyses for battery materials. Journal of Materials Research, O, , .	2.6	2
750	Enhancing Thermal and High-Voltage Cycling Stability of Ni-Rich Layered Cathodes through a Ti-Doping-Induced Surface-Disordered Structure. ACS Applied Energy Materials, 2022, 5, 12673-12681.	5.1	6
751	Theoretically evaluating two-dimensional tetragonal Si <sub>2</sub> Se <sub>2</sub> and SiSe <sub>2</sub> nanosheets as anode materials for alkali metal-ion batteries. Physical Chemistry Chemical Physics, 2022, 24, 26241-26253.	2.8	6

#	Article	IF	CITATIONS
752	Theory of Layered-Oxide Cathode Degradation in Li-ion Batteries by Oxidation-Induced Cation Disorder. Journal of the Electrochemical Society, 2022, 169, 100536.	2.9	7
753	An overview of cobalt-free, nickel-containing cathodes for Li-ion batteries. Materials Today Energy, 2022, 30, 101173.	4.7	10
754	Fluorinated Rocksalt Cathode with Ultraâ€high Active Li Content for Lithiumâ€ion Batteries. Angewandte Chemie - International Edition, 2022, 61, .	13.8	9
755	A medium-entropy transition metal oxide cathode for high-capacity lithium metal batteries. Nature Communications, 2022, 13, .	12.8	15
756	Improved Cycling Performance of Cation-Disordered Rock-Salt Li1.2Ti0.4Mn0.4O2 Cathode through Mo-Doping and Al2O3-Coating. Coatings, 2022, 12, 1613.	2.6	2
757	Cluster expansions of multicomponent ionic materials: Formalism and methodology. Physical Review B, 2022, 106, .	3.2	12
758	A Nearly Zero-Strain Li-Rich Rock-Salt Oxide with Multielectron Redox Reactions as a Cathode for Li-Ion Batteries. Chemistry of Materials, 2022, 34, 9711-9721.	6.7	7
759	Unraveling the Nature and Role of Layered Cation Ordering in Cation-Disordered Rock-Salt Cathodes. Journal of the American Chemical Society, 2022, 144, 19838-19848.	13.7	12
760	Surface chemical heterogeneous distribution in over-lithiated Li1+xCoO2 electrodes. Nature Communications, 2022, 13, .	12.8	9
761	Accurate Electronic Properties and Intercalation Voltages of Olivine-Type Li-Ion Cathode Materials from Extended Hubbard Functionals. , 2022, 1, .		10
762	Insight into the Effect of Oxygen Vacancies on Ion Intercalation and Polaron Conduction in LiV <sub>3</sub> O <sub>8</sub> Cathodes of Li-Ion Batteries. Journal of Physical Chemistry C, 2022, 126, 18216-18228.	3.1	1
763	Fluorinated Rocksalt Cathode with Ultraâ€high Active Li Content for Lithiumâ€ion Batteries. Angewandte Chemie, 0, , .	2.0	Ο
764	Investigation of degradation mechanism of LiCoO2/graphite batteries with multiscale characterization. Electrochimica Acta, 2022, 436, 141374.	5.2	4
765	Improvement of stability and capacity of Co-free, Li-rich layered oxide Li1.2Ni0.2Mn0.6O2 cathode material through defect control. Journal of Colloid and Interface Science, 2023, 630, 281-289.	9.4	11
766	Fluorine substitution enabled superior performance of NaxMn2-xO1.5F0.5 (xÂ=Â1.05–1.3) type Na-rich cathode. Chemical Engineering Journal, 2023, 454, 139876.	12.7	4
767	Solid-state NMR of energy storage materials. , 2022, , .		0
768	Improving the electrochemical properties of Ni-based cation-disordered cathode by Fe and F co-doping. Journal of Alloys and Compounds, 2023, 935, 167881.	5.5	0
769	Digital Twin Enables Rational Design of Ultrahighâ€Power Lithiumâ€Ion Batteries. Advanced Energy Materials, 2023, 13, .	19.5	5

#	Article	IF	CITATIONS
770	Are Fe-Li Antisite Defects Necessarily Detrimental to the Diffusion of Li + in LiFePO4/C?. Journal of the Electrochemical Society, 2022, 169, 120507.	2.9	2
771	Oxide Cathodes: Functions, Instabilities, Self Healing, and Degradation Mitigations. Chemical Reviews, 2023, 123, 811-833.	47.7	37
772	Understanding the different effects of 4d-transition metals on the performance of Li-rich cathode Li2MnO3 by first-principles. Physical Chemistry Chemical Physics, 0, , .	2.8	0
773	Reviving the rock-salt phases in Ni-rich layered cathodes by mechano-electrochemistry in all-solid-state batteries. Nano Energy, 2023, 105, 108016.	16.0	10
774	Search for stable host materials as low-voltage anodes for lithium-ion batteries: A mini-review. Energy Storage Materials, 2023, 55, 364-387.	18.0	11
775	Analyzing the effect of Li/Ni intermixing on Ni-rich layered cathode structures using atomistic simulation of the Li–Ni–Mn–Co–O quinary system. Journal of Power Sources, 2023, 556, 232535.	7.8	1
776	Nickel-rich layered oxide cathodes for lithium-ion batteries: Failure mechanisms and modification strategies. Journal of Energy Storage, 2023, 58, 106405.	8.1	13
777	One-step constructed oxygen vacancies and Fe-doping to improve the electrochemical performance of Li-rich Mn-based cathode. Journal of Alloys and Compounds, 2023, 937, 168426.	5.5	3
778	Investigating the local structure of Ti based MXene materials by temperature dependent X-ray absorption spectroscopy. Physical Chemistry Chemical Physics, 2023, 25, 3011-3019.	2.8	3
779	Improving the interfacial stability, conductivity, and electrochemical performance of Li2MoO3@g-C3N4 composite as a promising cathode for lithium-ion battery. Journal of Industrial and Engineering Chemistry, 2022, , .	5.8	0
780	Oxygen Vacancy Introduction to Increase the Capacity and Voltage Retention in Liâ€Excess Cathode Materials. Small Structures, 2023, 4, .	12.0	3
781	Eliminating interfacial O-involving degradation in Li-rich Mn-based cathodes for all-solid-state lithium batteries. Science Advances, 2022, 8, .	10.3	42
782	Reduced Potential Barrier of Sodium-Substituted Disordered Rocksalt Cathode for Oxygen Evolution Electrocatalysts. Nanomaterials, 2023, 13, 10.	4.1	6
783	Lithiumâ€Rich Li <sub>2</sub> TiS <sub>3</sub> Cathode Enables Highâ€Energy Sulfide Allâ€Solidâ€State Lithium Batteries. Advanced Energy Materials, 2023, 13, .	19.5	9
784	Synthesis and Structure Stabilization of Disordered Rock Salt Mn/V-Based Oxyfluorides as Cathode Materials for Li-Ion Batteries. ACS Materials Au, 2023, 3, 132-142.	6.0	5
785	Highly improved cyclic stability of Ni-rich/Li batteries with succinic anhydride as electrolyte additive and underlying mechanism. Journal of Energy Chemistry, 2023, 78, 80-90.	12.9	4
786	Zero-strain cathode materials for Li-ion batteries. Joule, 2022, 6, 2683-2685.	24.0	6
787	Bulk and Surface Stabilization Process of Metastable Li-Rich Disordered Rocksalt Oxyfluorides as Efficient Cathode Materials. Journal of the Electrochemical Society, 2022, 169, 120514.	2.9	4

#	Article	IF	CITATIONS
788	Optimizing Liâ€Excess Cationâ€Disordered Rocksalt Cathode Design Through Partial Li Deficiency. Advanced Energy Materials, 2023, 13, .	19.5	9
789	Alternate Synthesis Method for Highâ€Performance Manganese Rich Cation Disordered Rocksalt Cathodes. Advanced Energy Materials, 2023, 13, .	19.5	8
790	Activated Internetwork Pathways in Partiallyâ€Disordered Spinel Cathode Materials with Ultrahigh Rate Performance. Advanced Energy Materials, 2023, 13, .	19.5	2
791	Crystallinity Tuning of Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> : Unlocking Sodium Storage Capacity and Inducing Pseudocapacitance Behavior. Advanced Science, 2023, 10, .	11.2	10
792	Surface Phase Conversion in a High-Entropy Layered Oxide Cathode Material. ACS Applied Materials & Interfaces, 2023, 15, 4643-4651.	8.0	9
793	Towards commercialization of fluorinated cation-disordered rock-salt Li-ion cathodes. Frontiers in Chemistry, 0, 11, .	3.6	1
794	The versatile family of molybdenum oxides: synthesis, properties and recent applications. Journal of Physics Condensed Matter, 0, , .	1.8	3
795	Promoting Surface Electric Conductivity for Highâ€Rate LiCoO <sub>2</sub> . Angewandte Chemie, 2023, 135, .	2.0	2
796	Short range order in disordered spinels and the impact on cation vacancy transport. Journal of Materials Chemistry A, 2023, 11, 3471-3480.	10.3	1
797	A class of Ga-Al-P-based compounds with disordered lattice as advanced anode materials for Li-ion batteries. Journal of Energy Chemistry, 2023, 79, 12-21.	12.9	4
798	From atomistic modeling to materials design: computation-driven material development in lithium-ion batteries. Science China Chemistry, 2024, 67, 276-290.	8.2	2
799	Amorphous NiMo3S13/nickel foam integrated anode for lithium-ion batteries. Tungsten, 2024, 6, 438-446.	4.8	5
800	Development of a Rock-Salt Structure for High Energy Density Lithium-Ion Batteries. Electronic Materials Letters, 2023, 19, 359-366.	2.2	2
801	Lattice oxygen activation in disordered rocksalts for boosting oxygen evolution. Physical Chemistry Chemical Physics, 2023, 25, 4113-4120.	2.8	2
802	Revisiting Lithium―and Sodiumâ€Ion Storage in Hard Carbon Anodes. Advanced Materials, 2023, 35, .	21.0	22
803	Nanoscale domain imaging of Li-rich disordered rocksalt-type cathode materials with X-ray spectroscopic ptychography. Physical Chemistry Chemical Physics, 2023, 25, 3867-3874.	2.8	2
804	Critical intermediate Î²â€Łi <sub>2</sub> NiO <sub>3</sub> phase for structural degradation of Niâ€rich layered cathodes during thermal runaway. , 2023, 2, .		4
805	Promoting Surface Electric Conductivity for Highâ€Rate LiCoO <sub>2</sub> . Angewandte Chemie - International Edition, 2023, 62, .	13.8	25

#	Article	IF	CITATIONS
806	Electrochemical kinetic study and performance evaluation of surface-modified mesoporous sodium carbonophosphates nanostructures for pseudocapacitor applications. Journal of Alloys and Compounds, 2023, 939, 168711.	5.5	6
807	Structural and Electrochemical Properties of Li2O-V2O5-B2O3-Bi2O3 Glass and Glass-Ceramic Cathodes for Lithium-Ion Batteries. Molecules, 2023, 28, 229.	3.8	2
808	Monitoring the Formation of Nickel-Poor and Nickel-Rich Oxide Cathode Materials for Lithium-Ion Batteries with Synchrotron Radiation. Chemistry of Materials, 2023, 35, 1514-1526.	6.7	9
809	Partially Reversible Anionic Redox for Lithium-Excess Cobalt Oxides with Cation-Disordered Rocksalt Structure. Journal of Physical Chemistry C, 2023, 127, 2194-2203.	3.1	4
811	Anion-polarisation–directed short-range-order in antiperovskite Li <sub>2</sub> FeSO. Journal of Materials Chemistry A, 0, , .	10.3	1
812	Recent progress and perspectives on cation disordered rock-salt material for advanced Li-ion batteries. Journal of Materials Chemistry A, 2023, 11, 8426-8452.	10.3	9
813	Single-Phase Ternary Compounds with a Disordered Lattice and Liquid Metal Phase for High-Performance Li-Ion Battery Anodes. Nano-Micro Letters, 2023, 15, .	27.0	7
814	Tuning Bulk Redox and Altering Interfacial Reactivity in Highly Fluorinated Cation-Disordered Rocksalt Cathodes. ACS Applied Materials & Interfaces, 2023, 15, 18747-18762.	8.0	2
815	Computational insights into ionic conductivity of transition metal electrode materials for metal-ion batteries - A review. Solid State Ionics, 2023, 393, 116170.	2.7	10
816	Synthesis of LiMn2O4 nanostructures with controlled morphology. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2023, 292, 116410.	3.5	2
817	Studying Na criticality in NaxMn2â^'xO2 (xÂ=Â1.05–1.3) type Na-rich disordered rocksalt cathode for higher capacity. Materials Today Chemistry, 2023, 28, 101368.	3.5	0
818	A comprehensive review of foreign-ion doping and recent achievements for nickel-rich cathode materials. Energy Storage Materials, 2023, 57, 14-43.	18.0	29
819	Strong Anionic Repulsion for Fast Na Kinetics in P2â€Type Layered Oxides. Advanced Science, 2023, 10, .	11.2	8
820	Cathode Properties of <i>x</i> LiF–LiCrO <sub>2</sub> Composites ( <i>x</i> = 0–1.5) Prepared by Dry Ball-Milling Method for Lithium Ion Batteries. Journal of Physical Chemistry C, 2023, 127, 2866-2874.	3.1	1
821	Intercalation Chemistry of the Disordered Rocksalt Li <sub>3</sub> V <sub>2</sub> O <sub>5</sub> Anode from Cluster Expansions and Machine Learning Interatomic Potentials. Chemistry of Materials, 2023, 35, 1537-1546.	6.7	9
822	Specific countermeasures to intrinsic capacity decline issues and future direction of LiMn2O4 cathode. Energy Storage Materials, 2023, 57, 577-606.	18.0	21
823	A green repair pathway for spent spinel cathode material: Coupled mechanochemistry and solid-phase reactions. EScience, 2023, 3, 100110.	41.6	4
824	Mg Substitution Induced TM/Vacancy Disordering and Enhanced Structural Stability in Layered Oxide Cathode Materials. ACS Applied Materials & amp; Interfaces, 2023, 15, 11756-11764.	8.0	2

#	Article	IF	CITATIONS
825	Improved Electrode Reversibility of Nanosized Li <sub>1.15</sub> Nb <sub>0.15</sub> Mn <sub>0.7</sub> O <sub>2through Li<sub>3</sub>PO<sub>4</sub> Integration. Electrochemistry, 2023, 91, 037004-037004.</sub>	>: 9.4	1
826	Remarkably Enhanced Lattice Oxygen Participation in Perovskites to Boost Oxygen Evolution Reaction. Nanomaterials, 2023, 13, 905.	4.1	3
827	Challenges of Stable Ion Pathways in Cathode Electrode for Allâ€Solidâ€State Lithium Batteries: A Review. Advanced Energy Materials, 2023, 13, .	19.5	22
828	Direct observation of the ultrafast formation of cation-disordered rocksalt oxides as regenerable cathodes for lithium-ion batteries. Chemical Engineering Journal, 2023, 462, 142180.	12.7	2
829	Improved electrode reversibility of anionic redox with highly concentrated electrolyte solution and aramid-coated polyolefin separator. Energy Advances, 2023, 2, 508-512.	3.3	7
830	Toward Stable Cycling of a Costâ€Effective Cationâ€Disordered Rocksalt Cathode via Fluorination. Advanced Functional Materials, 2023, 33, .	14.9	6
831	Surface Lattice Modulation through Chemical Delithiation toward a Stable Nickel-Rich Layered Oxide Cathode. Journal of the American Chemical Society, 2023, 145, 7397-7407.	13.7	11
832	Activated nanolithia as an effective prelithiation additive for lithium-ion batteries. Journal of Materials Chemistry A, 2023, 11, 8757-8765.	10.3	7
833	Voltage Hysteresis in Transition Metal Oxide Cathodes for Li/Naâ€Ion Batteries. Advanced Functional Materials, 2023, 33, .	14.9	4
834	Grain Boundary Characterization and Potential Percolation of the Solid Electrolyte LLZO. Batteries, 2023, 9, 222.	4.5	4
835	From metal to cathode material: <i>in situ</i> formation of LiCoO <sub>2</sub> with enhanced cycling performance and suppressed phase transition. Journal of Materials Chemistry A, 2023, 11, 9913-9921.	10.3	2
836	Reversible cationic-anionic redox in disordered rocksalt cathodes enabled by fluorination-induced integrated structure design. Journal of Energy Chemistry, 2023, 82, 158-169.	12.9	6
837	Quantitative Decoupling of Oxygenâ€Redox and Manganeseâ€Redox Voltage Hysteresis in a Cationâ€Đisordered Rock Salt Cathode. Advanced Energy Materials, 2023, 13, .	19.5	5
838	In-situ formed hybrid phosphates coating layer enabling co-free Li-rich layered oxides with stable cycle performance. Materials Today Energy, 2023, 34, 101314.	4.7	1
839	Critical review on the degradation mechanisms and recent progress of Ni-rich layered oxide cathodes for lithium-ion batteries. EnergyChem, 2023, 5, 100103.	19.1	10
840	X-ray Absorption Spectroscopy Illustrates the Participation of Oxygen in the Electrochemical Cycling of Li <sub>4</sub> Mn <sub>2</sub> O <sub>5</sub> . Journal of Physical Chemistry C, 2023, 127, 7913-7920.	3.1	1
841	Low-Cost Mn-Based Cathode Materials for Lithium-Ion Batteries. Batteries, 2023, 9, 246.	4.5	4
842	The Nature of d0 Ion Effect on the Electrochemical Activity of the O2–/O–-Redox-Couple in Oxyfluorides with the Disordered Rock-Salt Structure. Russian Journal of Electrochemistry, 2023, 59, 204-212.	0.9	0

#	Article	IF	CITATIONS
843	Hierarchical amorphous vanadium oxide and carbon nanotubes microspheres with strong interface interaction for Superior performance aqueous Zinc-ion batteries. Journal of Colloid and Interface Science, 2023, 645, 542-550.	9.4	11
844	A Nearâ€Surface Structure Reconfiguration Strategy to Regulate Mn <sup>3+</sup> /Mn <sup>4+</sup> and O <sup>2â^`</sup> /(O <sub>2</sub> ) <sup>nâ^`</sup> Redox for Stabilizing Lithiumâ€Rich Oxide Cathode. Advanced Functional Materials, 2023, 33, .	14.9	6
845	Metal Polysulfides as High Capacity Electrode Active Materials — Toward Superior Secondary Batteries Based on Sulfur Chemistry. Electrochemistry, 2023, 91, 102003-102003.	1.4	1
846	Ethylene glycol-regulated ammonium vanadate with stable layered structure and favorable interplanar spacing as high-performance cathode for aqueous zinc ion batteries. Chinese Chemical Letters, 2023, 34, 108572.	9.0	2
847	Expandable Li Percolation Network: The Effects of Site Distortion in Cation-Disordered Rock-Salt Cathode Material. Journal of the American Chemical Society, 2023, 145, 11717-11726.	13.7	6
848	Understanding the limits to short-range order suppression in many-component disordered rock salt lithium-ion cathode materials. Journal of Materials Chemistry A, 2023, 11, 13765-13773.	10.3	3
849	Building Better Full Manganese-Based Cathode Materials for Next-Generation Lithium-Ion Batteries. Electrochemical Energy Reviews, 2023, 6, .	25.5	10
850	High-Performance High-Nickel Multi-Element Cathode Materials for Lithium-Ion Batteries. Batteries, 2023, 9, 319.	4.5	0
851	Cation Disordered Antiâ€Perovskite Cathode Materials with Enhanced Lithium Diffusion and Suppressed Phase Transition. Advanced Energy Materials, 2023, 13, .	19.5	0
852	Structures, issues, and optimization strategies of Ni-rich and Co-low cathode materials for lithium-ion battery. Chemical Engineering Journal, 2023, 470, 144051.	12.7	10
853	High-Capacity Oxide Cathode beyond 300 mAh/g. ACS Energy Letters, 2023, 8, 3025-3037.	17.4	13
854	Anionic Redox in Rechargeable Batteries: Mechanism, Materials, and Characterization. Advanced Functional Materials, 2023, 33, .	14.9	6
855	Enhancing the Electrode Gravimetric Capacity of Li <sub>1.2</sub> Mn <sub>0.4</sub> Ti <sub>0.4</sub> O <sub>2</sub> Cathode Using Interfacial Carbon Deposition and Carbon Nanotube-Mediated Electrical Percolation. ACS Applied Materials & amp; Interfaces, 2023, 15, 31711-31719.	8.0	2
856	First-principles design of nanostructured electrode materials for Na-ion batteries: challenges and perspectives. Physical Chemistry Chemical Physics, 2023, 25, 18623-18641.	2.8	2
857	Accessible Li Percolation and Extended Oxygen Oxidation Boundary in Rocksaltâ€like Cathode Enabled by Initial Liâ€deficient Nanostructure. Advanced Functional Materials, 0, , .	14.9	0
858	Ultrahighâ€Capacity Rocksalt Cathodes Enabled byÂCyclingâ€Activated Structural Changes. Advanced Energy Materials, 2023, 13, .	19.5	2
859	Cathode Materials and Chemistries for Magnesium Batteries: Challenges and Opportunities. Advanced Energy Materials, 2023, 13, .	19.5	12
860	Y3+ doping and electrochemical properties of LiFe0.5Mn0.5PO4@C cathode material for lithium-ion batteries. Journal of Alloys and Compounds, 2023, 960, 170610.	5.5	2

#	Article	IF	CITATIONS
861	Progress and challenges in electrochemical energy storage devices: Fabrication, electrode material, and economic aspects. Chemical Engineering Journal, 2023, 468, 143706.	12.7	29
862	Surface Modification on Nickel Rich Cathode Materials for Lithiumâ€lon Cells: A Mini Review. Chemical Record, 2023, 23, .	5.8	15
863	Unleashing the Potential of Sodiumâ€ion Batteries: Current State and Future Directions for Sustainable Energy Storage. Advanced Functional Materials, 2023, 33, .	14.9	15
864	Building Better Batteries: Solid-State Batteries with Li-Rich Oxide Cathodes. Energy Material Advances, 2023, 4, .	11.0	8
865	Boosting reversible anionic redox reaction with Li/Cu dual honeycomb centers. EScience, 2023, 3, 100159.	41.6	7
866	Enhancing the powering ability of triboelectric nanogenerator through output signal's management strategies. Nano Research, 2023, 16, 11783-11800.	10.4	6
867	Improving Li percolation and redox reversibility of Li-rich disordered rocksalt cathode with Mn2+/4+ double redox via inactive d0 Nb5+ substitution. Applied Surface Science, 2023, 638, 158049.	6.1	0
868	<i>Ab initio</i> study of short-range ordering in vanadium-based disordered rocksalt structures. Journal of Materials Chemistry A, 2023, 11, 17728-17736.	10.3	1
869	Layered Materials in the Magnesium Ion Batteries: Development History, Materials Structure, and Energy Storage Mechanism. Advanced Functional Materials, 2023, 33, .	14.9	3
870	Phase behavior tuning enable high-safety and crack-free Ni-rich layered cathode for lithium-ion battery. Chemical Engineering Journal, 2023, 472, 145113.	12.7	10
871	Carbon-coated high nickel cathode nanosheet with stable structure for lithium-ion batteries. Applied Physics A: Materials Science and Processing, 2023, 129, .	2.3	0
872	Harnessing Neural Networks for Elucidating X-ray Absorption Structure–Spectrum Relationships in Amorphous Carbon. Journal of Physical Chemistry C, 2023, 127, 16473-16484.	3.1	1
873	Synthesis of High-capacity and High-rate Intergrown Cathodes for Lithium-ion Batteries. Journal of Physics: Conference Series, 2023, 2563, 012014.	0.4	0
874	Cationic–Anionic Redox Chemistry in Multivalent Metalâ€ion Batteries: Recent Advances, Reaction Mechanism, Advanced Characterization Techniques, and Prospects. Advanced Functional Materials, 2023, 33, .	14.9	2
875	Cationic ordering transition in oxygenâ€redox layered oxide cathodes. , 2024, 6, .		1
876	Under pressure: offering fundamental insight into structural changes on ball milling battery materials. Energy and Environmental Science, 2023, 16, 5196-5209.	30.8	6
877	In Situ Gas Analysis by Differential Electrochemical Mass Spectrometry for Advanced Rechargeable Batteries: A Review. Advanced Energy Materials, 2023, 13, .	19.5	3
878	MXenes as Li-Ion Battery Electrodes: Progress and Outlook. Energy & Fuels, 2023, 37, 12541-12557.	5.1	5

#	Article	IF	CITATIONS
879	Enhanced Li <sup>+</sup> Diffusion and Lattice oxygen Stability by the High Entropy Effect in Disorderedâ€Rocksalt Cathodes. Angewandte Chemie, 2023, 135, .	2.0	0
880	Enhanced Li <sup>+</sup> Diffusion and Lattice oxygen Stability by the High Entropy Effect in Disorderedâ€Rocksalt Cathodes. Angewandte Chemie - International Edition, 2023, 62, .	13.8	3
881	First-Principles Studies on the Structural and Electronic Properties of α-Na <sub>2</sub> FePO <sub>4</sub> F with Strong Antisite Disorder. Inorganic Chemistry, 2023, 62, 15300-15309.	4.0	0
882	Investigation on the Origin of Sluggish Anionic Redox Kinetics in Cation-Disordered Cathode. Energies, 2023, 16, 6740.	3.1	Ο
883	In situ formed partially disordered phases as earth-abundant Mn-rich cathode materials. Nature Energy, 2024, 9, 27-36.	39.5	3
884	Disordered Rocksalts with Lattice Oxygen Activation as Efficient Oxygen Evolution Electrocatalysts. Transactions of Tianjin University, 2023, 29, 304-312.	6.4	3
885	Enhanced Electrochemical Performance of Disordered Rocksalt Cathodes Enabled by a Graphite Conductive Additive. ACS Applied Materials & amp; Interfaces, 2023, 15, 39253-39264.	8.0	1
886	Activation and Stabilization of Mnâ€Based Positive Electrode Materials by Doping Nonmetallic Elements. Advanced Energy Materials, 2023, 13, .	19.5	1
887	Realising higher capacity and stability for disordered rocksalt oxyfluoride cathode materials for Li ion batteries. RSC Advances, 2023, 13, 29343-29353.	3.6	2
888	Pseudocapacitive lithium-rich disordered rock salt vanadium oxide with 3D lithium-ion transport pathways for high-performance lithium-ion capacitor. Journal of Power Sources, 2023, 588, 233722.	7.8	1
889	Machine Learning Paves the Way for High Entropy Compounds Exploration: Challenges, Progress, and Outlook. Advanced Materials, 0, , .	21.0	3
890	Impact of the energy landscape on the ionic transport of disordered rocksalt cathodes. Physical Review Materials, 2023, 7, .	2.4	1
891	Effect of surface structure on electrochemical properties in Li1.2Ni0.2Ti0.6O2 cathode material. Journal of Materials Science, 2023, 58, 14440-14451.	3.7	0
892	Data driven design of compositionally complex energy materials. Computational Materials Science, 2023, 230, 112513.	3.0	1
893	Elucidating Structural Transition Dynamics in the Magnesium Cathode MgCr <sub>2</sub> O <sub>4</sub> . Chemistry of Materials, 2023, 35, 8455-8463.	6.7	0
894	Improving dual electrodes compatibility through tailoring solvation structures enabling high-performance and low-temperature Li  LiFePO4 batteries. Journal of Colloid and Interface Science, 2024, 654, 550-558.	9.4	0
895	A Unique Formation Process on Rapidly Activating Oxygen Redox in Co-Free Li-Rich Layered Cathodes for Long-Cycle Batteries. Journal of the Electrochemical Society, 0, , .	2.9	0
896	Unravelling the Chemical and Structural Evolution of Mn and Ti in Disordered Rocksalt Oxyfluoride Cathode Materials Using <i>Operando</i> X-ray Absorption Spectroscopy. Chemistry of Materials, 2023 35 8922-8935	6.7	1

		CITATION REPORT		
#	Article		IF	Citations
897	Unveiling the Evolution of LiCoO <sub>2</sub> beyond 4.6ÂV. ACS Energy Letters, 202	23, 8, 4806-4817.	17.4	4
898	Kinetics of Li Transport in Vanadium-Based Disordered Rocksalt Structures. Chemistry , ,	of Materials, 0,	6.7	Ο
899	Oxygen Loss on Disordered Li-Excess, Mn-Rich Li-Ion Cathode Li <sub>2</sub> MnO <su through First-Principles Modeling. Chemistry of Materials, 2023, 35, 9127-9134.</su 	b>2F	6.7	1
900	Design of a trigonal halide superionic conductor by regulating cation order-disorder. So 382, 573-579.	tience, 2023,	12.6	5
901	Solid electrolytes redefine ion conduction. Science, 2023, 382, 513-514.		12.6	0
902	Defects go green: using defects in nanomaterials for renewable energy and environmenes sustainability. Frontiers in Nanotechnology, 0, 5, .	ntal	4.8	0
903	A Dual Anion Chemistryâ€Based Superionic Glass Enabling Longâ€Cycling Allâ€Solidâ€ Batteries. Angewandte Chemie - International Edition, 2024, 63, .	£tate Sodiumâ€ <b>i</b> on	13.8	1
904	Advances in sodium-ion batteries at low-temperature: Challenges and strategies. Journa Chemistry, 2024, 90, 518-539.	al of Energy	12.9	0
905	Overâ€Stoichiometric Metastabilization of Cationâ€Disordered Rock Salts. Advanced N	Materials, 2023, 35, .	21.0	0
906	Atomic-scale probing of short-range order and its impact on electrochemical properties cation-disordered oxide cathodes. Nature Communications, 2023, 14, .	; in	12.8	0
907	The Mechanism of Fluorine Doping for the Enhanced Lithium Storage Behavior in Catio Cathode Oxide. Advanced Energy Materials, 2023, 13, .	nâ€Disordered	19.5	2
908	Electrodes for Li-ion batteries: From high-voltage LiCoO2 to Co-reduced/Co-free layered potential anodes. Nano Research, 0, , .	l oxides with	10.4	0
909	Rational regulation of defect-rich hierarchical porous carbon nanosheets as sustainable materials for potassium-ion storage. Journal of Energy Storage, 2024, 75, 109544.	anode	8.1	0
910	Promoting reversibility of layered potassium cathode through interstitial doping. Chem Engineering Journal, 2023, 477, 147021.	ical	12.7	0
911	Electrochemical oxygen evolution coupled structure and capacity decay of single-cryst LiNi0.6Co0.2Mn0.2O2 cathode materials. Journal of Power Sources, 2024, 589, 23371	al 4.	7.8	0
912	Controlling disorder. Nature Energy, 0, , .		39.5	0
913	Strategies to Achieve Stable Manganese Oxyfluorides by Tuning the Reactivity of Pure Fluorine. Inorganic Chemistry, 2023, 62, 19612-19621.	Molecular	4.0	0
914	A Dual Anion Chemistryâ€Based Superionic Glass Enabling Longâ€Cycling Allâ€Solidâ€ Batteries. Angewandte Chemie, 0, , .	State Sodiumâ€ <del>l</del> on	2.0	0

#	Article	IF	CITATIONS
915	Inconsistency between superstructure stability and long-term cyclability of oxygen redox in Na layered oxides. Energy and Environmental Science, 2024, 17, 668-679.	30.8	1
916	The effect of lithium sources and thermal treatment on the structure and electrochemistry of Li1.2Ti0.4Mn0.4O2 and Li1.3Nb0.3Mn0.4O2 cathodes. Journal of Solid State Electrochemistry, 0, , .	2.5	Ο
917	Stabilization of Oxygenâ€Ðependent Fe <sup>3+/4+</sup> Redox in Liâ€Excess DRX Cathode Exhibiting Anionic Redox via Transition Metal Combination. Advanced Functional Materials, 0, , .	14.9	1
918	Influence of Mo/V coupled multi-electron reactions and the crystalline phase transition of VO2 on high specific capacity of lithium-ion batteries. Journal of Solid State Chemistry, 2023, , 124532.	2.9	0
919	Results from Exploratory Work in Li-Rich Regions of the AE-Li-Ge Systems (AE = Ca, Sr, Ba). Crystals, 2024, 14, 57.	2.2	0
920	Enhanced cyclic stability of partially disordered spinel cathodes through direct fluorination with gaseous fluorine. Rare Metals, 2024, 43, 1635-1646.	7.1	0
921	Research progress in failure mechanisms and electrolyte modification of <scp>highâ€voltage</scp> nickelâ€rich layered oxideâ€based lithium metal batteries. InformaÄnÃ-Materiály, 2024, 6, .	17.3	1
922	Performance evaluation of lithium metal rechargeable batteries with a lithium excess cation-disordered rocksalt based positive electrode under high mass loading and lean electrolyte conditions. Energy Advances, 2024, 3, 248-254.	3.3	0
923	Modification Strategies and Challenges of Highâ€Performance Lithiumâ€Rich Manganeseâ€Based Cathode Materials. Energy Technology, 2024, 12, .	3.8	0
924	Structural Design Principle of Rocksalt Oxides for Li-Excess Cathode Materials. ACS Nano, 2024, 18, 2302-2311.	14.6	1
925	First principles calculation of composition dependence tracer and interdiffusion with phase change in γ/l³â€² superalloy: A case study of Ir/Ir3Nb. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2024, 84, 102659.	1.6	0
926	Mg/Fe site-specific dual-doping to boost the performance of cobalt-free nickle-rich layered oxide cathode for high-energy lithium-ion batteries. Journal of Energy Chemistry, 2024, 91, 670-679.	12.9	0
927	Unlocking Li superionic conductivity in face-centred cubic oxides via face-sharing configurations. Nature Materials, 2024, 23, 535-542.	27.5	0
928	A pre-fatigue training strategy to stabilize LiCoO <sub>2</sub> at high voltage. Energy and Environmental Science, 2024, 17, 2269-2278.	30.8	0
929	Exploring the Properties of Disordered Rocksalt Battery Cathode Materials by Advanced Characterization. Advanced Functional Materials, 0, , .	14.9	0
930	Lithium-rich sulfide Li <sub>2</sub> Ti <sub>1â^'<i>x</i></sub> Si <sub><i>x</i></sub> S <sub>3</sub> cathode materials optimized through Si-doping for high-capacity all-solid-state lithium-ion batteries. Journal of Materials Chemistry A, 2024, 12, 6038-6049.	10.3	0
931	Unravelling the peculiar role of Co and Al in highly Ni-rich layered oxide cathode materials. Chemical Engineering Journal, 2024, 484, 149599.	12.7	0
932	Advanced electrochemical and mechanical performance of a LiNi <sub>0.91</sub> Co <sub>0.06</sub> Mn <sub>0.03</sub> O <sub>2</sub> cathode <i>via</i> use of a NaCl flux agent. Journal of Materials Chemistry A, 2024, 12, 6465-6475.	10.3	0

#	Article	IF	CITATIONS
933	Dual-functional urea induced interface reaction enables the improved cycling stability of cation-disordered Li1.2Ti0.4Mn0.4O2 cathode. Journal of Solid State Electrochemistry, 0, , .	2.5	0
934	Comprehensive review of single-crystal Ni-rich cathodes: single-crystal synthesis and performance enhancement strategies. , 0, 3, .		Ο
935	Nb-doping of cation-disordered rocksalt oxides with B2O3 surface modification for superior performance cathode. Journal of Electroanalytical Chemistry, 2024, 957, 118137.	3.8	0
936	Fluorination Effect on Lithium- and Manganese-Rich Layered Oxide Cathodes. ACS Energy Letters, 2024, 9, 1249-1260.	17.4	0
937	Correlating concerted cations with oxygen redox in rechargeable batteries. Chemical Society Reviews, 2024, 53, 3561-3578.	38.1	0
938	The next frontier in Li-ion batteries: Intergrown cathodes?. , 2024, 3, 100158.		0
939	Li-ion batteries from an electronic structure viewpoint: From anionic redox to structural stability. Journal of Power Sources, 2024, 600, 234240.	7.8	0
940	Influence of Synthesis Parameters on the Short-Range Structure and Electrochemical Performances of Li <sub>2</sub> MnO <sub>2</sub> F. Inorganic Chemistry, 2024, 63, 5341-5350.	4.0	0
941	Securing cation vacancies to enable reversible Mg insertion/extraction in rocksalt oxides. Journal of Materials Chemistry A, 2024, 12, 9088-9101.	10.3	0
942	Redox Engineering of Feâ€Rich Disordered Rockâ€Salt Liâ€Ion Cathode Materials. Advanced Energy Materials, 0, , .	19.5	0
943	A green aqueous binder to enhance the electrochemical performance of Li-rich disordered rock salt cathode material. Journal of Colloid and Interface Science, 2024, 665, 80-87.	9.4	0