

# Khalil Amine

## List of Publications by Year in descending order

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435  
papers

56,344  
citations

613

124  
h-index

1456

220  
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456  
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456  
docs citations

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times ranked

28443  
citing authors

#	ARTICLE	IF	CITATIONS
1	Atomistic Insights of Irreversible Li <sup>+</sup> Intercalation in MnO <sub>2</sub> Electrode. <i>Angewandte Chemie</i> , 2022, 134, e202113420.	1.6	3
2	Atomistic Insights of Irreversible Li <sup>+</sup> Intercalation in MnO <sub>2</sub> Electrode. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	8
3	Multiscale Understanding of Surface Structural Effects on High-Temperature Operational Resiliency of Layered Oxide Cathodes. <i>Advanced Materials</i> , 2022, 34, e2107326.	11.1	21
4	Simultaneously Blocking Chemical Crosstalk and Internal Short Circuit via Gel-Stretching Derived Nanoporous Non-Shrinkage Separator for Safe Lithium-Ion Batteries. <i>Advanced Materials</i> , 2022, 34, e2106335.	11.1	51
5	Efficient diffusion of superdense lithium <i>via</i> atomic channels for dendrite-free lithium-metal batteries. <i>Energy and Environmental Science</i> , 2022, 15, 196-205.	15.6	27
6	Solvation-protection-enabled high-voltage electrolyte for lithium metal batteries. <i>Nano Energy</i> , 2022, 92, 106720.	8.2	34
7	High Nickel and No Cobalt—The Pursuit of Next-Generation Layered Oxide Cathodes. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 23056-23065.	4.0	30
8	Native lattice strain induced structural earthquake in sodium layered oxide cathodes. <i>Nature Communications</i> , 2022, 13, 436.	5.8	29
9	Evidence of Morphological Change in Sulfur Cathodes upon Irradiation by Synchrotron X-rays. <i>ACS Energy Letters</i> , 2022, 7, 577-582.	8.8	7
10	Suppressing electrolyte-lithium metal reactivity via Li <sup>+</sup> -desolvation in uniform nano-porous separator. <i>Nature Communications</i> , 2022, 13, 172.	5.8	83
11	Ultrafast Metal Electrodeposition Revealed by In Situ Optical Imaging and Theoretical Modeling towards Fast-Charging Zn Battery Chemistry. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	13
12	Ultrafast Metal Electrodeposition Revealed by In Situ Optical Imaging and Theoretical Modeling towards Fast-Charging Zn Battery Chemistry. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	82
13	Transferring Liquid Metal to form a Hybrid Solid Electrolyte via a Wettability-Tuning Technology for Lithium-Metal Anodes. <i>Advanced Materials</i> , 2022, 34, e2200181.	11.1	28
14	Regulation of Surface Defect Chemistry toward Stable Ni-Rich Cathodes. <i>Advanced Materials</i> , 2022, 34, e2200744.	11.1	41
15	In Situ Formation of Polycyclic Aromatic Hydrocarbons as an Artificial Hybrid Layer for Lithium Metal Anodes. <i>Nano Letters</i> , 2022, 22, 263-270.	4.5	31
16	Understanding the Role of Lithium Iodide in Lithium-Oxygen Batteries. <i>Advanced Materials</i> , 2022, 34, e2106148.	11.1	26
17	Impacts of Dissolved Ni <sup>2+</sup> on the Solid Electrolyte Interphase on a Graphite Anode. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	4
18	Impacts of Dissolved Ni <sup>2+</sup> on the Solid Electrolyte Interphase on a Graphite Anode. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	31

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19	Pushing Lithium–Sulfur Batteries towards Practical Working Conditions through a Cathode–Electrolyte Synergy. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	14
20	Enabling high energy lithium metal batteries via single-crystal Ni-rich cathode material co-doping strategy. <i>Nature Communications</i> , 2022, 13, 2319.	5.8	143
21	Pushing Lithium–Sulfur Batteries towards Practical Working Conditions through a Cathode–Electrolyte Synergy. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	2
22	Unravelling the Nature of the Intrinsic Complex Structure of Binary–Phase Na–Layered Oxides. <i>Advanced Materials</i> , 2022, 34, e2202137.	11.1	21
23	How do super concentrated electrolytes push the Li-ion batteries and supercapacitors beyond their thermodynamic and electrochemical limits?. <i>Nano Energy</i> , 2022, 98, 107336.	8.2	21
24	Innenr¼cktitelbild: Impacts of Dissolved Ni <sup>2+</sup> on the Solid Electrolyte Interphase on a Graphite Anode ( <i>Angew. Chem.</i> 30/2022). <i>Angewandte Chemie</i> , 2022, 134, .	1.6	0
25	Entropy and crystal-facet modulation of P2-type layered cathodes for long-lasting sodium-based batteries. <i>Nature Communications</i> , 2022, 13, .	5.8	61
26	Atomically dispersed Pt and Fe sites and Pt–Fe nanoparticles for durable proton exchange membrane fuel cells. <i>Nature Catalysis</i> , 2022, 5, 503-512.	16.1	155
27	Origin and regulation of oxygen redox instability in high-voltage battery cathodes. <i>Nature Energy</i> , 2022, 7, 808-817.	19.8	55
28	Origin of structural degradation in Li-rich layered oxide cathode. <i>Nature</i> , 2022, 606, 305-312.	13.7	206
29	Recent progress in fundamental understanding of selenium-doped sulfur cathodes during charging and discharging with various electrolytes. , 2022, , 235-260.		0
30	Mesoscale-architecture-based crack evolution dictating cycling stability of advanced lithium ion batteries. <i>Nano Energy</i> , 2021, 79, 105420.	8.2	36
31	A high-energy and long-cycling lithium–sulfur pouch cell via a macroporous catalytic cathode with double-end binding sites. <i>Nature Nanotechnology</i> , 2021, 16, 166-173.	15.6	392
32	Full Concentration Gradient–Tailored Li–Rich Layered Oxides for High–Energy Lithium–Ion Batteries. <i>Advanced Materials</i> , 2021, 33, e2001358.	11.1	65
33	Revealing the Atomic Structures of Exposed Lateral Surfaces for Polymorphic Manganese Dioxide Nanowires. <i>Small Structures</i> , 2021, 2, 2000091.	6.9	18
34	In Situ Construction of Uniform and Robust Cathode–Electrolyte Interphase for Li–Rich Layered Oxides. <i>Advanced Functional Materials</i> , 2021, 31, 2009192.	7.8	81
35	Sustainable existence of solid mercury (Hg) nanoparticles at room temperature and their applications. <i>Chemical Science</i> , 2021, 12, 3226-3238.	3.7	10
36	<i>In Situ</i> Localized Polysulfide Injector for the Activation of Bulk Lithium Sulfide. <i>Journal of the American Chemical Society</i> , 2021, 143, 2185-2189.	6.6	31

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37	Atomic/molecular layer deposition for energy storage and conversion. <i>Chemical Society Reviews</i> , 2021, 50, 3889-3956.	18.7	109
38	Enabling stable and high-rate cycling of a Ni-rich layered oxide cathode for lithium-ion batteries by modification with an artificial Li <sup>+</sup> -conducting cathode-electrolyte interphase. <i>Journal of Materials Chemistry A</i> , 2021, 9, 11623-11631.	5.2	33
39	Strategies towards enabling lithium metal in batteries: interphases and electrodes. <i>Energy and Environmental Science</i> , 2021, 14, 5289-5314.	15.6	156
40	Understanding Co roles towards developing Co-free Ni-rich cathodes for rechargeable batteries. <i>Nature Energy</i> , 2021, 6, 277-286.	19.8	255
41	Correlating Catalyst Design and Discharged Product to Reduce Overpotential in Li <sub>2</sub> CO <sub>3</sub> Batteries. <i>Small</i> , 2021, 17, e2007760.	5.2	22
42	Vacancy-Enabled O3 Phase Stabilization for Manganese-Rich Layered Sodium Cathodes. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 8258-8267.	7.2	59
43	Vacancy-Enabled O3 Phase Stabilization for Manganese-Rich Layered Sodium Cathodes. <i>Angewandte Chemie</i> , 2021, 133, 8339-8348.	1.6	14
44	Whole-Voltage-Range Oxygen Redox in P2-Layered Cathode Materials for Sodium-Ion Batteries. <i>Advanced Materials</i> , 2021, 33, e2008194.	11.1	108
45	Solid-State Synthesis of Highly Dispersed Nitrogen-Coordinated Single Iron Atom Electrocatalysts for Proton Exchange Membrane Fuel Cells. <i>Nano Letters</i> , 2021, 21, 3633-3639.	4.5	32
46	A universal method to fabricating porous carbon for Li-O2 battery. <i>Nano Energy</i> , 2021, 82, 105782.	8.2	42
47	Unveiling decaying mechanism through quantitative structure-activity relationship in electrolytes for lithium-ion batteries. <i>Nano Energy</i> , 2021, 83, 105843.	8.2	23
48	LiMn <sub>2</sub> O <sub>4</sub> spinel and substituted cathodes. <i>Nature Energy</i> , 2021, 6, 566-566.	19.8	81
49	Understanding the Effect of Solid Electrocatalysts on Achieving Highly Energy-Efficient Lithium-Oxygen Batteries. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2100045.	2.8	2
50	Nanotechnology for Sulfur Cathodes. <i>ACS Nano</i> , 2021, 15, 8087-8094.	7.3	29
51	Complementary Electrolyte Design for Li Metal Batteries in Electric Vehicle Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 25879-25889.	4.0	10
52	Mesocrystallizing Nanograins for Enhanced Li + Storage. <i>Advanced Energy Materials</i> , 2021, 11, 2100503.	10.2	5
53	Enabling High-Performance NASICON-Based Solid-State Lithium Metal Batteries Towards Practical Conditions. <i>Advanced Functional Materials</i> , 2021, 31, 2102765.	7.8	32
54	Development of cathode-electrolyte-interphase for safer lithium batteries. <i>Energy Storage Materials</i> , 2021, 37, 77-86.	9.5	78

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55	Toward a mechanistic understanding of electrocatalytic nanocarbon. Nature Communications, 2021, 12, 3288.	5.8	35
56	Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> spinel anodes. Nature Energy, 2021, 6, 683-683.	19.8	68
57	In situ observation of thermal-driven degradation and safety concerns of lithiated graphite anode. Nature Communications, 2021, 12, 4235.	5.8	74
58	Thermal runaway mechanism of lithium-ion battery with LiNi <sub>0.8</sub> Mn <sub>0.1</sub> Co <sub>0.1</sub> O <sub>2</sub> cathode materials. Nano Energy, 2021, 85, 105878.	8.2	116
59	Unlocking the self-supported thermal runaway of high-energy lithium-ion batteries. Energy Storage Materials, 2021, 39, 395-402.	9.5	74
60	The passivity of lithium electrodes in liquid electrolytes for secondary batteries. Nature Reviews Materials, 2021, 6, 1036-1052.	23.3	201
61	Electronic properties of Ir <sub>3</sub> Li and ultra-nanocrystalline lithium superoxide formation. Nano Energy, 2021, 90, 106549.	8.2	3
62	Electrolytes Polymerization-Induced Cathode-Electrolyte-Interface for High Voltage Lithium-Ion Batteries. Advanced Energy Materials, 2021, 11, 2101956.	10.2	39
63	Layered Li-Ni-Mn-Co oxide cathodes. Nature Energy, 2021, 6, 933-933.	19.8	67
64	Wood Carbon Based Single-Atom Catalyst for Rechargeable Zn-Air Batteries. ACS Energy Letters, 2021, 6, 3624-3633.	8.8	103
65	Laser-Irradiated Holey Graphene-Supported Single-Atom Catalyst towards Hydrogen Evolution and Oxygen Reduction. Advanced Energy Materials, 2021, 11, 2101619.	10.2	43
66	A general strategy for batch development of high-performance and cost-effective sodium layered cathodes. Nano Energy, 2021, 89, 106371.	8.2	22
67	Tuning the linkage of structure units to enable stable spinel-based cathode in the wide potential window. Nano Energy, 2021, 89, 106457.	8.2	5
68	Superior long-term cycling of high-voltage lithium-ion batteries enabled by single-solvent electrolyte. Nano Energy, 2021, 89, 106299.	8.2	21
69	In-built ultraconformal interphases enable high-safety practical lithium batteries. Energy Storage Materials, 2021, 43, 248-257.	9.5	49
70	(S)TEM-EELS as an advanced characterization technique for lithium-ion batteries. Materials Chemistry Frontiers, 2021, 5, 5186-5193.	3.2	20
71	Principle in developing novel fluorinated sulfone electrolyte for high voltage lithium-ion batteries. Energy and Environmental Science, 2021, 14, 3029-3034.	15.6	44
72	Stress- and Interface-Compatible Red Phosphorus Anode for High-Energy and Durable Sodium-Ion Batteries. ACS Energy Letters, 2021, 6, 547-556.	8.8	33

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73	Prelithiated Li-Enriched Gradient Interphase toward Practical High-Energy NMC-Silicon Full Cell. ACS Energy Letters, 2021, 6, 320-328.	8.8	50
74	Uncommon Behavior of Li Doping Suppresses Oxygen Redox in P2-Type Manganese-Rich Sodium Cathodes. Advanced Materials, 2021, 33, e2107141.	11.1	34
75	Rational design of mechanically robust Ni-rich cathode materials via concentration gradient strategy. Nature Communications, 2021, 12, 6024.	5.8	80
76	High-Voltage and High-Safety Practical Lithium Batteries with Ethylene Carbonate-Free Electrolyte. Advanced Energy Materials, 2021, 11, 2102299.	10.2	59
77	The importance of anode protection towards lithium oxygen batteries. Journal of Materials Chemistry A, 2020, 8, 3563-3573.	5.2	65
78	Integrating Multiredox Centers into One Framework for High-Performance Organic Li-Ion Battery Cathodes. ACS Energy Letters, 2020, 5, 224-231.	8.8	59
79	Boosting Superior Lithium Storage Performance of Alloy-Based Anode Materials via Ultraconformal Sb Coating-Derived Favorable Solid-Electrolyte Interphase. Advanced Energy Materials, 2020, 10, 1903186.	10.2	29
80	<i>In Situ</i> Construction of an Ultrarobust and Lithiophilic Li-Enriched Li-N Nanoshield for High-Performance Ge-Based Anode Materials. ACS Energy Letters, 2020, 5, 3490-3497.	8.8	29
81	Cation Additive Enabled Rechargeable LiOH-Based Lithium-Oxygen Batteries. Angewandte Chemie - International Edition, 2020, 59, 22978-22982.	7.2	29
82	Local spring effect in titanium-based layered oxides. Energy and Environmental Science, 2020, 13, 4371-4380.	15.6	13
83	Developing high safety Li-metal anodes for future high-energy Li-metal batteries: strategies and perspectives. Chemical Society Reviews, 2020, 49, 5407-5445.	18.7	264
84	Charge Transport Properties of Lithium Superoxide in Li <sub>2</sub> O Batteries. ACS Applied Energy Materials, 2020, 3, 12575-12583.	2.5	17
85	TEM Studies on the Role of Local Chemistry and Atomic Structure in Battery Materials. Microscopy and Microanalysis, 2020, 26, 148-149.	0.2	1
86	Durable hybrid electrocatalysts for proton exchange membrane fuel cells. Nano Energy, 2020, 77, 105192.	8.2	21
87	A review of composite solid-state electrolytes for lithium batteries: fundamentals, key materials and advanced structures. Chemical Society Reviews, 2020, 49, 8790-8839.	18.7	461
88	A disordered rock salt anode for fast-charging lithium-ion batteries. Nature, 2020, 585, 63-67.	18.7	326
89	Lithium Anodes: Understanding the Reactivity of a Thin Li <sub>1.5</sub> Al <sub>0.5</sub> Ge <sub>1.5</sub> (PO <sub>4</sub> ) <sub>3</sub> Solid-State Electrolyte toward Metallic Lithium Anode (Adv. Energy Mater. 32/2020). Advanced Energy Materials, 2020, 10, 2070136.	10.2	2
90	TiO <sub>2</sub> Nanocrystal-Framed Li <sub>2</sub> TiSiO <sub>5</sub> Platelets for Low-Voltage Lithium Battery Anode. Advanced Functional Materials, 2020, 30, 2001909.	7.8	25

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91	Challenges and Strategies to Advance High-Energy Nickel-Rich Layered Lithium Transition Metal Oxide Cathodes for Harsh Operation. <i>Advanced Functional Materials</i> , 2020, 30, 2004748.	7.8	146
92	Direct observation of the formation and stabilization of metallic nanoparticles on carbon supports. <i>Nature Communications</i> , 2020, 11, 6373.	5.8	65
93	Titelbild: Cation Additive Enabled Rechargeable LiOH-Based Lithium-Oxygen Batteries ( <i>Angew. Chem.</i> ) Tj ETQq1 1 0.784314 rgBT	1.6	8
94	Probing the Thermal-Driven Structural and Chemical Degradation of Ni-Rich Layered Cathodes by Co/Mn Exchange. <i>Journal of the American Chemical Society</i> , 2020, 142, 19745-19753.	6.6	122
95	Cation Additive Enabled Rechargeable LiOH-Based Lithium-Oxygen Batteries. <i>Angewandte Chemie</i> , 2020, 132, 23178-23182.	1.6	8
96	From Sodium-Oxygen to Sodium-Air Battery: Enabled by Sodium Peroxide Dihydrate. <i>Nano Letters</i> , 2020, 20, 4681-4686.	4.5	31
97	Regulating the Hidden Solvation-Ion-Exchange in Concentrated Electrolytes for Stable and Safe Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2000901.	10.2	65
98	Harnessing the surface structure to enable high-performance cathode materials for lithium-ion batteries. <i>Chemical Society Reviews</i> , 2020, 49, 4667-4680.	18.7	88
99	Revealing the Structural Evolution and Phase Transformation of O3-Type $\text{NaNi}_{1/3}\text{Fe}_{1/3}\text{Mn}_{1/3}\text{O}_2$ Cathode Material on Sintering and Cycling Processes. <i>ACS Applied Energy Materials</i> , 2020, 3, 6107-6114.	2.5	19
100	Probing solid-state reaction through microstrain: A case study on synthesis of $\text{LiCoO}_2$ . <i>Journal of Power Sources</i> , 2020, 469, 228422.	4.0	17
101	Computational study of the adsorption of bimetallic clusters on alumina substrate. <i>Surface Science</i> , 2020, 700, 121682.	0.8	2
102	Oxygen-Based Anion Redox for Lithium Batteries. <i>Accounts of Chemical Research</i> , 2020, 53, 1436-1444.	7.6	21
103	Beyond the Polysulfide Shuttle and Lithium Dendrite Formation: Addressing the Sluggish Sulfur Redox Kinetics for Practical High-Energy Li-S Batteries. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 17634-17640.	7.2	67
104	Beyond the Polysulfide Shuttle and Lithium Dendrite Formation: Addressing the Sluggish Sulfur Redox Kinetics for Practical High-Energy Li-S Batteries. <i>Angewandte Chemie</i> , 2020, 132, 17787-17793.	1.6	10
105	Understanding the Reactivity of a Thin $\text{Li}_{1.5}\text{Al}_{0.5}\text{Ge}_{1.5}(\text{PO}_4)_3$ Solid-State Electrolyte toward Metallic Lithium Anode. <i>Advanced Energy Materials</i> , 2020, 10, 2001497.	10.2	49
106	Solvation Rule for Solid-Electrolyte Interphase Enabler in Lithium-Metal Batteries. <i>Angewandte Chemie</i> , 2020, 132, 18386-18390.	1.6	10
107	Solvation Rule for Solid-Electrolyte Interphase Enabler in Lithium-Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 18229-18233.	7.2	45
108	Design strategies for nonaqueous multivalent-ion and monovalent-ion battery anodes. <i>Nature Reviews Materials</i> , 2020, 5, 276-294.	23.3	284

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109	Toward a high-voltage fast-charging pouch cell with TiO <sub>2</sub> cathode coating and enhanced battery safety. <i>Nano Energy</i> , 2020, 71, 104643.	8.2	72
110	Optimization of oxygen electrode combined with soluble catalyst to enhance the performance of lithium–oxygen battery. <i>Energy Storage Materials</i> , 2020, 28, 73-81.	9.5	12
111	Solution Blowing Synthesis of Li-Conductive Ceramic Nanofibers. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 16200-16208.	4.0	15
112	Cationic and anionic redox in lithium-ion based batteries. <i>Chemical Society Reviews</i> , 2020, 49, 1688-1705.	18.7	152
113	A Facile Approach to High Precision Detection of Cell-to-Cell Variation for Li-ion Batteries. <i>Scientific Reports</i> , 2020, 10, 7182.	1.6	16
114	Bringing forward the development of battery cells for automotive applications: Perspective of R&D activities in China, Japan, the EU and the USA. <i>Journal of Power Sources</i> , 2020, 459, 228073.	4.0	109
115	Highly Reversible Sodiation/Desodiation from a Carbon-Sandwiched SnS <sub>2</sub> Nanosheet Anode for Sodium Ion Batteries. <i>Nano Letters</i> , 2020, 20, 3844-3851.	4.5	69
116	A practical phosphorus-based anode material for high-energy lithium-ion batteries. <i>Nano Energy</i> , 2020, 74, 104849.	8.2	56
117	Revisiting the Role of Conductivity and Polarity of Host Materials for Long-Life Lithium–Sulfur Battery. <i>Advanced Energy Materials</i> , 2020, 10, 1903934.	10.2	52
118	Nickel-based Cathode for Li-ion Batteries. , 2020, , 204-226.		0
119	High rate and long cycle life in Li-O <sub>2</sub> batteries with highly efficient catalytic cathode configured with Co <sub>3</sub> O <sub>4</sub> nanoflower. <i>Nano Energy</i> , 2019, 64, 103896.	8.2	71
120	Tuning Li <sub>2</sub> O <sub>2</sub> Formation Routes by Facet Engineering of MnO <sub>2</sub> Cathode Catalysts. <i>Journal of the American Chemical Society</i> , 2019, 141, 12832-12838.	6.6	107
121	Selective Growth of a Discontinuous Subnanometer Pd Film on Carbon Defects for Li–O <sub>2</sub> Batteries. <i>ACS Energy Letters</i> , 2019, 4, 2782-2786.	8.8	50
122	Correlation between manganese dissolution and dynamic phase stability in spinel-based lithium-ion battery. <i>Nature Communications</i> , 2019, 10, 4721.	5.8	182
123	Cooling Induced Surface Reconstruction during Synthesis of High-Ni Layered Oxides. <i>Advanced Energy Materials</i> , 2019, 9, 1901915.	10.2	34
124	<i>In Situ</i> Formed Ir <sub>3</sub> Li Nanoparticles as Active Cathode Material in Li–Oxygen Batteries. <i>Journal of Physical Chemistry A</i> , 2019, 123, 10047-10056.	1.1	11
125	Silica Restricting the Sulfur Volatilization of Nickel Sulfide for High-Performance Lithium–Oxygen Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1901153.	10.2	94
126	The Role of Ru in Improving the Activity of Pd toward Hydrogen Evolution and Oxidation Reactions in Alkaline Solutions. <i>ACS Catalysis</i> , 2019, 9, 9614-9621.	5.5	112



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127	An advanced high energy-efficiency rechargeable aluminum-selenium battery. <i>Nano Energy</i> , 2019, 66, 104159.	8.2	39
128	Insights into Li/Ni ordering and surface reconstruction during synthesis of Ni-rich layered oxides. <i>Journal of Materials Chemistry A</i> , 2019, 7, 513-519.	5.2	92
129	Rational Design of Graphene-Supported Single Atom Catalysts for Hydrogen Evolution Reaction. <i>Advanced Energy Materials</i> , 2019, 9, 1803689.	10.2	279
130	Sub-5-nm edge-rich 1T- $\text{ReSe}_2$ as bifunctional materials for hydrogen evolution and sodium-ion storage. <i>Nano Energy</i> , 2019, 58, 660-668.	8.2	41
131	Exploring the charge reactions in a $\text{Li}^+\text{O}_2$ system with lithium oxide cathodes and nonaqueous electrolytes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 15615-15620.	5.2	6
132	Insights into Structural Evolution of Lithium Peroxides with Reduced Charge Overpotential in $\text{Li}^+\text{O}_2$ System. <i>Advanced Energy Materials</i> , 2019, 9, 1900662.	10.2	38
133	Commercialization of Lithium Battery Technologies for Electric Vehicles. <i>Advanced Energy Materials</i> , 2019, 9, 1900161.	10.2	865
134	Revealing the Atomic Origin of Heterogeneous $\text{Li}^+$ Ion Diffusion by Probing Na. <i>Advanced Materials</i> , 2019, 31, e1805889.	11.1	30
135	E-fuel system: a conceptual breakthrough for energy storage. <i>Science Bulletin</i> , 2019, 64, 227-228.	4.3	5
136	A Selection Rule for Hydrofluoroether Electrolyte Cosolvent: Establishing a Linear Free-Energy Relationship in Lithium-Sulfur Batteries. <i>Angewandte Chemie</i> , 2019, 131, 10701-10705.	1.6	12
137	A Selection Rule for Hydrofluoroether Electrolyte Cosolvent: Establishing a Linear Free-Energy Relationship in Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 10591-10595.	7.2	36
138	Building ultraconformal protective layers on both secondary and primary particles of layered lithium transition metal oxide cathodes. <i>Nature Energy</i> , 2019, 4, 484-494.	19.8	345
139	Electrochemically primed functional redox mediator generator from the decomposition of solid state electrolyte. <i>Nature Communications</i> , 2019, 10, 1890.	5.8	49
140	Injection of oxygen vacancies in the bulk lattice of layered cathodes. <i>Nature Nanotechnology</i> , 2019, 14, 602-608.	15.6	321
141	Oxygen Release Degradation in $\text{Li}^+$ Ion Battery Cathode Materials: Mechanisms and Mitigating Approaches. <i>Advanced Energy Materials</i> , 2019, 9, 1900551.	10.2	293
142	Solvating power series of electrolyte solvents for lithium batteries. <i>Energy and Environmental Science</i> , 2019, 12, 1249-1254.	15.6	138
143	Intrinsic Role of Cationic Substitution in Tuning Li/Ni Mixing in High-Ni Layered Oxides. <i>Chemistry of Materials</i> , 2019, 31, 2731-2740.	3.2	85
144	Methacrylated gelatin-embedded fabrication of 3D graphene-supported $\text{Co}_3\text{O}_4$ nanoparticles for water splitting. <i>Nanoscale</i> , 2019, 11, 6866-6875.	2.8	13

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145	Nitrogen-coordinated single iron atom catalysts derived from metal organic frameworks for oxygen reduction reaction. <i>Nano Energy</i> , 2019, 61, 60-68.	8.2	192
146	Surface Modification for Suppressing Interfacial Parasitic Reactions of a Nickel-Rich Lithium-Ion Cathode. <i>Chemistry of Materials</i> , 2019, 31, 2723-2730.	3.2	114
147	Anti-Oxygen Leaking LiCoO <sub>2</sub> . <i>Advanced Functional Materials</i> , 2019, 29, 1901110.	7.8	60
148	Bridging the academic and industrial metrics for next-generation practical batteries. <i>Nature Nanotechnology</i> , 2019, 14, 200-207.	15.6	420
149	Lithium-Ion Batteries: Cooling Induced Surface Reconstruction during Synthesis of High-Ni Layered Oxides ( <i>Adv. Energy Mater.</i> 43/2019). <i>Advanced Energy Materials</i> , 2019, 9, 1970173.	10.2	0
150	Recent Advances in Flexible Zinc-Based Rechargeable Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1802605.	10.2	296
151	Fundamental Understanding of Water-Induced Mechanisms in Li <sup>+</sup> O <sub>2</sub> Batteries: Recent Developments and Perspectives. <i>Advanced Materials</i> , 2019, 31, e1805602.	11.1	52
152	In situ quantification of interphasial chemistry in Li-ion battery. <i>Nature Nanotechnology</i> , 2019, 14, 50-56.	15.6	373
153	Impact of alginate and fluoroethylene carbonate on the electrochemical performance of SiO <sub>2</sub> /SnCoC anode for lithium-ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2019, 23, 397-405.	1.2	2
154	Solid-State Lithium/Selenium-Sulfur Chemistry Enabled via a Robust Solid-Electrolyte Interphase. <i>Advanced Energy Materials</i> , 2019, 9, 1802235.	10.2	63
155	Cyclic carbonate for highly stable cycling of high voltage lithium metal batteries. <i>Energy Storage Materials</i> , 2019, 17, 284-292.	9.5	115
156	The Absence and Importance of Operando Techniques for Metal-Free Catalysts. <i>Advanced Materials</i> , 2019, 31, e1805609.	11.1	25
157	Ordering Heterogeneity of [MnO <sub>6</sub> ] Octahedra in Tunnel-Structured MnO <sub>2</sub> and Its Influence on Ion Storage. <i>Joule</i> , 2019, 3, 471-484.	11.7	123
158	Lithiation-Induced Non-Noble Metal Nanoparticles for Li <sup>+</sup> O <sub>2</sub> Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 811-818.	4.0	16
159	Native Vacancy Enhanced Oxygen Redox Reversibility and Structural Robustness. <i>Advanced Energy Materials</i> , 2019, 9, 1803087.	10.2	70
160	Correlation between long range and local structural changes in Ni-rich layered materials during charge and discharge process. <i>Journal of Power Sources</i> , 2019, 412, 336-343.	4.0	109
161	A Critical Review on Superoxide-Based Sodium-Oxygen Batteries. <i>Small Methods</i> , 2019, 3, 1800247.	4.6	29
162	Insights into the Na <sup>+</sup> Storage Mechanism of Phosphorus-Functionalized Hard Carbon as Ultrahigh Capacity Anodes. <i>Advanced Energy Materials</i> , 2018, 8, 1702781.	10.2	170

#	ARTICLE	IF	CITATIONS
163	Encapsulating Various Sulfur Allotropes within Graphene Nanocages for Long-Lasting Lithium Storage. <i>Advanced Functional Materials</i> , 2018, 28, 1706443.	7.8	60
164	High-Performance Anode Materials for Rechargeable Lithium-Ion Batteries. <i>Electrochemical Energy Reviews</i> , 2018, 1, 35-53.	13.1	514
165	Elucidating anionic oxygen activity in lithium-rich layered oxides. <i>Nature Communications</i> , 2018, 9, 947.	5.8	241
166	Insight into Ca <sup>2+</sup> Substitution Effects on O <sub>3</sub> Type NaNi <sub>1/3</sub> Fe <sub>1/3</sub> Mn <sub>1/3</sub> O <sub>2</sub> Cathode Materials for Sodium-Ion Batteries Application. <i>Small</i> , 2018, 14, e1704523.	5.2	97
167	Identification and Implications of Lithium Superoxide in Li <sup>+</sup> O <sub>2</sub> Batteries. <i>ACS Energy Letters</i> , 2018, 3, 1105-1109.	8.8	47
168	Effect of Componential Proportion in Bimetallic Electrocatalysts on the Aprotic Lithium-Oxygen Battery Performance. <i>Advanced Energy Materials</i> , 2018, 8, 1703230.	10.2	32
169	Stabilization of a High-Capacity and High-Power Nickel-Based Cathode for Li-Ion Batteries. <i>CheM</i> , 2018, 4, 690-704.	5.8	128
170	Reversible Redox Chemistry of Azo Compounds for Sodium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 2879-2883.	7.2	159
171	Reversible Redox Chemistry of Azo Compounds for Sodium-Ion Batteries. <i>Angewandte Chemie</i> , 2018, 130, 2929-2933.	1.6	33
172	Challenges in Developing Electrodes, Electrolytes, and Diagnostics Tools to Understand and Advance Sodium-Ion Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1702403.	10.2	221
173	High-Capacity Sodium Peroxide Based Na <sup>+</sup> O <sub>2</sub> Batteries with Low Charge Overpotential via a Nanostructured Catalytic Cathode. <i>ACS Energy Letters</i> , 2018, 3, 276-277.	8.8	15
174	Modifying the Surface of a High-Voltage Lithium-Ion Cathode. <i>ACS Applied Energy Materials</i> , 2018, 1, 2254-2260.	2.5	46
175	Operando liquid cell electron microscopy of discharge and charge kinetics in lithium-oxygen batteries. <i>Nano Energy</i> , 2018, 49, 338-345.	8.2	59
176	Mechanism of the First Lithiation/Delithiation Process in the Anode Material CoFeOPO <sub>4</sub> @C for Li-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2018, 122, 7139-7148.	1.5	18
177	Cations controlled growth of $\beta$ -MnO <sub>2</sub> crystals with tunable facets for electrochemical energy storage. <i>Nano Energy</i> , 2018, 48, 301-311.	8.2	56
178	Energy-driven surface evolution in beta-MnO <sub>2</sub> structures. <i>Nano Research</i> , 2018, 11, 206-215.	5.8	15
179	On the P <sub>2</sub> -Na <sub>x</sub> Co <sub>1-x</sub> (Mn <sub>2/3</sub> Ni <sub>1/3</sub> )O <sub>2</sub> Cathode Materials for Sodium-Ion Batteries: Synthesis, Electrochemical Performance, and Redox Processes Occurring during the Electrochemical Cycling. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 488-501.	4.0	32
180	Asymmetric K/Li-Ion Battery Based on Intercalation Selectivity. <i>ACS Energy Letters</i> , 2018, 3, 65-71.	8.8	36

#	ARTICLE	IF	CITATIONS
181	Electrostatic Self-Assembly Enabling Integrated Bulk and Interfacial Sodium Storage in 3D Titania-Graphene Hybrid. <i>Nano Letters</i> , 2018, 18, 336-346.	4.5	40
182	Dissolution, migration, and deposition of transition metal ions in Li-ion batteries exemplified by Mn-based cathodes – a critical review. <i>Energy and Environmental Science</i> , 2018, 11, 243-257.	15.6	618
183	Textile Inspired Lithium-Oxygen Battery Cathode with Decoupled Oxygen and Electrolyte Pathways. <i>Advanced Materials</i> , 2018, 30, 1704907.	11.1	92
184	Protecting Al foils for high-voltage lithium-ion chemistries. <i>Materials Today Energy</i> , 2018, 7, 18-26.	2.5	24
185	Triphase electrode performance adjustment for rechargeable ion batteries. <i>Nano Energy</i> , 2018, 43, 1-10.	8.2	34
186	Short Hydrogen Bonds on Reconstructed Nanocrystal Surface Enhance Oxygen Evolution Activity. <i>ACS Catalysis</i> , 2018, 8, 466-473.	5.5	20
187	The Recycling of Spent Lithium-Ion Batteries: a Review of Current Processes and Technologies. <i>Electrochemical Energy Reviews</i> , 2018, 1, 461-482.	13.1	215
188	Hybrid Li-Ion and Li-O <sub>2</sub> Battery Enabled by Oxyhalogen-Sulfur Electrochemistry. <i>Joule</i> , 2018, 2, 2381-2392.	11.7	14
189	Nitrogen and sulfur co-doped porous carbon sheets for energy storage and pH-universal oxygen reduction reaction. <i>Nano Energy</i> , 2018, 54, 192-199.	8.2	83
190	Temperature-Sensitive Structure Evolution of Lithium-Manganese-Rich Layered Oxides for Lithium-Ion Batteries. <i>Journal of the American Chemical Society</i> , 2018, 140, 15279-15289.	6.6	163
191	Insights into the Performance Degradation of Oxygen-Type Manganese-Rich Layered Oxide Cathodes for High-Voltage Sodium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2018, , .	2.5	2
192	Investigation of the Effect of Graphene-encapsulation on the O <sub>2</sub> Release Phenomenon from Li <sub>x</sub> CoO <sub>2</sub> , Studied by In-situ Heating STEM/EELS. <i>Microscopy and Microanalysis</i> , 2018, 24, 1626-1627.	0.2	0
193	Cationic Ordering Coupled to Reconstruction of Basic Building Units during Synthesis of High-Ni Layered Oxides. <i>Journal of the American Chemical Society</i> , 2018, 140, 12484-12492.	6.6	113
194	Fundamental Understanding and Material Challenges in Rechargeable Nonaqueous Li-O <sub>2</sub> Batteries: Recent Progress and Perspective. <i>Advanced Energy Materials</i> , 2018, 8, 1800348.	10.2	137
195	The Relationship between the Relative Solvating Power of Electrolytes and Shuttling Effect of Lithium Polysulfides in Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 12033-12036.	7.2	69
196	Identifying the Structural Evolution of the Sodium Ion Battery Na <sub>2</sub> FePO <sub>4</sub> F Cathode. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 11918-11923.	7.2	79
197	Identifying the Structural Evolution of the Sodium Ion Battery Na <sub>2</sub> FePO <sub>4</sub> F Cathode. <i>Angewandte Chemie</i> , 2018, 130, 12094-12099.	1.6	22
198	The Relationship between the Relative Solvating Power of Electrolytes and Shuttling Effect of Lithium Polysulfides in Lithium-Sulfur Batteries. <i>Angewandte Chemie</i> , 2018, 130, 12209-12212.	1.6	17

#	ARTICLE	IF	CITATIONS
199	Probing Thermal and Chemical Stability of Na <sub>x</sub> Ni <sub>1/3</sub> Fe <sub>1/3</sub> Mn <sub>1/3</sub> O <sub>2</sub> Cathode Material toward Safe Sodium-Ion Batteries. <i>Chemistry of Materials</i> , 2018, 30, 4909-4918.	3.2	64
200	Non-flammable electrolyte enables Li-metal batteries with aggressive cathode chemistries. <i>Nature Nanotechnology</i> , 2018, 13, 715-722.	15.6	964
201	Thermal Runaway of Lithium-Ion Batteries without Internal Short Circuit. <i>Joule</i> , 2018, 2, 2047-2064.	11.7	442
202	Solid electrolytes and interfaces in all-solid-state sodium batteries: Progress and perspective. <i>Nano Energy</i> , 2018, 52, 279-291.	8.2	211
203	Revealing the Rate-Limiting Li-Ion Diffusion Pathway in Ultrathick Electrodes for Li-Ion Batteries. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 5100-5104.	2.1	143
204	Tunnel Intergrowth Structures in Manganese Dioxide and Their Influence on Ion Storage. <i>Microscopy and Microanalysis</i> , 2018, 24, 1500-1501.	0.2	1
205	30 Years of Lithium-Ion Batteries. <i>Advanced Materials</i> , 2018, 30, e1800561.	11.1	3,039
206	Internally Referenced DOSY-NMR: A Novel Analytical Method in Revealing the Solution Structure of Lithium-Ion Battery Electrolytes. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 3714-3719.	2.1	25
207	Insights into the Distinct Lithiation/Sodiation of Porous Cobalt Oxide by in Operando Synchrotron X-ray Techniques and Ab Initio Molecular Dynamics Simulations. <i>Nano Letters</i> , 2017, 17, 953-962.	4.5	30
208	Selenium and Sulfur Chemistry for Rechargeable Lithium Batteries: Interplay of Cathode Structures, Electrolytes, and Interfaces. <i>ACS Energy Letters</i> , 2017, 2, 605-614.	8.8	110
209	Freestanding highly defect nitrogen-enriched carbon nanofibers for lithium ion battery thin-film anodes. <i>Journal of Materials Chemistry A</i> , 2017, 5, 5532-5540.	5.2	33
210	Revisiting the Corrosion of the Aluminum Current Collector in Lithium-Ion Batteries. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 1072-1077.	2.1	156
211	State-of-the-art characterization techniques for advanced lithium-ion batteries. <i>Nature Energy</i> , 2017, 2, .	19.8	337
212	Facet-Dependent Thermal Instability in LiCoO <sub>2</sub> . <i>Nano Letters</i> , 2017, 17, 2165-2171.	4.5	99
213	Comprehensive Enhancement of Nanostructured Lithium-Ion Battery Cathode Materials via Conformal Graphene Dispersion. <i>Nano Letters</i> , 2017, 17, 2539-2546.	4.5	81
214	Depolarization effect to enhance the performance of lithium ions batteries. <i>Nano Energy</i> , 2017, 33, 497-507.	8.2	79
215	Parasitic Reactions in Nanosized Silicon Anodes for Lithium-Ion Batteries. <i>Nano Letters</i> , 2017, 17, 1512-1519.	4.5	122
216	Tuning the Solid Electrolyte Interphase for Selective Li <sup>+</sup> and Na <sup>+</sup> Ion Storage in Hard Carbon. <i>Advanced Materials</i> , 2017, 29, 1606860.	11.1	157

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217	Toward Highly Efficient Electrocatalyst for Li <sup>+</sup> O <sub>2</sub> Batteries Using Biphasic N-Doping Cobalt@Graphene Multiple-Capsule Heterostructures. <i>Nano Letters</i> , 2017, 17, 2959-2966.	4.5	91
218	Open-Structured V <sub>2</sub> O <sub>5</sub> ·nH <sub>2</sub> O Nanoflakes as Highly Reversible Cathode Material for Monovalent and Multivalent Intercalation Batteries. <i>Advanced Energy Materials</i> , 2017, 7, 1602720.	10.2	116
219	Lithium Superoxide Hydrolysis and Relevance to Li <sup>+</sup> O <sub>2</sub> Batteries. <i>Journal of Physical Chemistry C</i> , 2017, 121, 9657-9661.	1.5	41
220	Electrolyte design strategies and research progress for room-temperature sodium-ion batteries. <i>Energy and Environmental Science</i> , 2017, 10, 1075-1101.	15.6	459
221	Holey two-dimensional transition metal oxide nanosheets for efficient energy storage. <i>Nature Communications</i> , 2017, 8, 15139.	5.8	343
222	Mass and charge transport relevant to the formation of toroidal lithium peroxide nanoparticles in an aprotic lithium-oxygen battery: An experimental and theoretical modeling study. <i>Nano Research</i> , 2017, 10, 4327-4336.	5.8	12
223	Oxygen-Rich Lithium Oxide Phases Formed at High Pressure for Potential Lithium-Air Battery Electrode. <i>Advanced Science</i> , 2017, 4, 1600453.	5.6	22
224	Sodium Peroxide Dihydrate or Sodium Superoxide: The Importance of the Cell Configuration for Sodium-Oxygen Batteries. <i>Small Methods</i> , 2017, 1, 1700102.	4.6	34
225	Insights into the structural effects of layered cathode materials for high voltage sodium-ion batteries. <i>Energy and Environmental Science</i> , 2017, 10, 1677-1693.	15.6	143
226	Two-Dimensional Holey Co <sub>3</sub> O <sub>4</sub> Nanosheets for High-Rate Alkali-Ion Batteries: From Rational Synthesis to in Situ Probing. <i>Nano Letters</i> , 2017, 17, 3907-3913.	4.5	158
227	Unique aqueous Li-ion/sulfur chemistry with high energy density and reversibility. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 6197-6202.	3.3	151
228	Burning lithium in CS <sub>2</sub> for high-performing compact Li <sub>2</sub> S@graphene nanocapsules for Li-S batteries. <i>Nature Energy</i> , 2017, 2, .	19.8	349
229	Advanced Lithium Batteries for Automobile Applications at ABAA-9. <i>ACS Energy Letters</i> , 2017, 2, 1628-1631.	8.8	4
230	Structure dependent electrochemical performance of Li-rich layered oxides in lithium-ion batteries. <i>Nano Energy</i> , 2017, 35, 370-378.	8.2	116
231	Solid state synthesis of layered sodium manganese oxide for sodium-ion battery by in-situ high energy X-ray diffraction and X-ray absorption near edge spectroscopy. <i>Journal of Power Sources</i> , 2017, 341, 114-121.	4.0	23
232	3D Hierarchical nano-flake/micro-flower iron fluoride with hydration water induced tunnels for secondary lithium battery cathodes. <i>Nano Energy</i> , 2017, 32, 10-18.	8.2	73
233	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. <i>Chemistry of Materials</i> , 2017, 29, 9053-9065.	3.2	40
234	Synthetic Control of Kinetic Reaction Pathway and Cationic Ordering in High-Ni Layered Oxide Cathodes. <i>Advanced Materials</i> , 2017, 29, 1606715.	11.1	127

#	ARTICLE	IF	CITATIONS
235	Understanding materials challenges for rechargeable ion batteries with in situ transmission electron microscopy. <i>Nature Communications</i> , 2017, 8, .	5.8	301
236	Lithium titanate hydrates with superfast and stable cycling in lithium ion batteries. <i>Nature Communications</i> , 2017, 8, 627.	5.8	110
237	Metal- $\kappa$ Batteries: Open-Structured $V_2O_5$ - $H_2O$ Nanoflakes as Highly Reversible Cathode Material for Monovalent and Multivalent Intercalation Batteries ( <i>Adv. Energy Mater.</i> 14/2017). <i>Advanced Energy Materials</i> , 2017, 7, .	10.2	23
238	Excess Li-Ion Storage on Reconstructed Surfaces of Nanocrystals To Boost Battery Performance. <i>Nano Letters</i> , 2017, 17, 6018-6026.	4.5	53
239	In Situ TEM Investigation of ZnO Nanowires during Sodiation and Lithiation Cycling. <i>Small Methods</i> , 2017, 1, 1700202.	4.6	45
240	Mechanistic Study of Electrolyte Additives to Stabilize High-Voltage Cathode-Electrolyte Interface in Lithium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 44542-44549.	4.0	58
241	Enabling the high capacity of lithium-rich anti-fluorite lithium iron oxide by simultaneous anionic and cationic redox. <i>Nature Energy</i> , 2017, 2, 963-971.	19.8	140
242	Exploring Highly Reversible 1.5-Electron Reactions ( $V^{3+}/V^{4+}/V^{5+}$ ) in $Na_3VCr(PO_4)_3$ Cathode for Sodium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 43632-43639.	4.0	134
243	Interfacial reactions in lithium batteries. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 303001.	1.3	13
244	In Situ Probing and Synthetic Control of Cationic Ordering in Ni-Rich Layered Oxide Cathodes. <i>Advanced Energy Materials</i> , 2017, 7, 1601266.	10.2	200
245	High performance lithium-manganese-rich cathode material with reduced impurities. <i>Nano Energy</i> , 2017, 31, 247-257.	8.2	25
246	Tuning the Mn Deposition on the Anode to Improve the Cycle Performance of the Mn-Based Lithium Ion Battery. <i>Advanced Materials Interfaces</i> , 2016, 3, 1500856.	1.9	35
247	3D-Printed Cathodes of $LiMn_1-xFe_xPO_4$ Nanocrystals Achieve Both Ultrahigh Rate and High Capacity for Advanced Lithium-Ion Battery. <i>Advanced Energy Materials</i> , 2016, 6, 1600856.	10.2	157
248	High-Rate, Durable Sodium-Ion Battery Cathode Enabled by Carbon-Coated Micro-Sized $Na_3V_2(PO_4)_3$ Particles with Interconnected Vertical Nanowalls. <i>Advanced Materials Interfaces</i> , 2016, 3, 1500740.	1.9	46
249	Enabling high energy density Li-ion batteries through $Li_2O$ activation. <i>Nano Energy</i> , 2016, 27, 196-201.	8.2	75
250	Nitrogen-Doped Nanoporous Graphenic Carbon: An Efficient Conducting Support for $O_2$ Cathode. <i>ChemNanoMat</i> , 2016, 2, 692-697.	1.5	38
251	Investigating Side Reactions and Coating Effects on High Voltage Layered Cathodes for Lithium Ion Batteries. <i>Microscopy and Microanalysis</i> , 2016, 22, 1312-1313.	0.2	0
252	Microstructural Evolution in Transition-metal-oxide Cathode Materials for Lithium-Ion Batteries. <i>Microscopy and Microanalysis</i> , 2016, 22, 1300-1301.	0.2	2

#	ARTICLE	IF	CITATIONS
253	The role of nanotechnology in the development of battery materials for electric vehicles. Nature Nanotechnology, 2016, 11, 1031-1038.	15.6	581
254	Insight into the Capacity Fading Mechanism of Amorphous $\text{Se}_2\text{S}_5$ Confined in Micro/Mesoporous Carbon Matrix in Ether-Based Electrolytes. Nano Letters, 2016, 16, 2663-2673.	4.5	83
255	Uniformly dispersed $\text{FeO}_x$ atomic clusters by pulsed arc plasma deposition: An efficient electrocatalyst for improving the performance of $\text{Li-O}_2$ battery. Nano Research, 2016, 9, 1913-1920.	5.8	16
256	Nanostructured Black Phosphorus/Ketjenblack Multiwalled Carbon Nanotubes Composite as High Performance Anode Material for Sodium-Ion Batteries. Nano Letters, 2016, 16, 3955-3965.	4.5	246
257	Atomic Layer Deposition for Lithium-Based Batteries. Advanced Materials Interfaces, 2016, 3, 1600564.	1.9	71
258	Systematic study on the discharge product of Pt-based lithium oxygen batteries. Journal of Power Sources, 2016, 332, 96-102.	4.0	20
259	Insights into the Effects of Zinc Doping on Structural Phase Transition of P2-Type Sodium Nickel Manganese Oxide Cathodes for High-Energy Sodium Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 22227-22237.	4.0	177
260	$\text{RuO}_2$ nanoparticles supported on $\text{MnO}_2$ nanorods as high efficient bifunctional electrocatalyst of lithium-oxygen battery. Nano Energy, 2016, 28, 63-70.	8.2	88
261	New Insights into the Instability of Discharge Products in $\text{Na-O}_2$ Batteries. ACS Applied Materials & Interfaces, 2016, 8, 20120-20127.	4.0	63
262	Platinum-Coated Hollow Graphene Nanocages as Cathode Used in Lithium-Oxygen Batteries. Advanced Functional Materials, 2016, 26, 7626-7633.	7.8	88
263	In Operando XRD and TXM Study on the Metastable Structure Change of $\text{NaNi}_{1/3}\text{Fe}_{1/3}\text{Mn}_{1/3}\text{O}_2$ under Electrochemical Sodium-Ion Intercalation. Advanced Energy Materials, 2016, 6, 1601306.	10.2	147
264	Facile Synthesis of Boron-Doped rGO as Cathode Material for High Energy $\text{Li-O}_2$ Batteries. ACS Applied Materials & Interfaces, 2016, 8, 23635-23645.	4.0	93
265	The influence of large cations on the electrochemical properties of tunnel-structured metal oxides. Nature Communications, 2016, 7, 13374.	5.8	180
266	Cascading Boost Effect on the Capacity of Nitrogen-Doped Graphene Sheets for Li- and Na-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 26722-26729.	4.0	46
267	Tuning of Thermal Stability in Layered $\text{Li}(\text{Ni}_x\text{Mn}_y\text{Co}_z)\text{O}_2$ . Journal of the American Chemical Society, 2016, 138, 13326-13334.	6.6	178
268	High Capacity of Hard Carbon Anode in Na-Ion Batteries Unlocked by $\text{PO}_x$ Doping. ACS Energy Letters, 2016, 1, 395-401.	8.8	172
269	Freestanding three-dimensional core-shell nanoarrays for lithium-ion battery anodes. Nature Communications, 2016, 7, 11774.	5.8	143
270	Anion-redox nanolithia cathodes for Li-ion batteries. Nature Energy, 2016, 1, .	19.8	171



#	ARTICLE	IF	CITATIONS
271	Protocol of Electrochemical Test and Characterization of Aprotic Li-O <sub>2</sub> Battery. Journal of Visualized Experiments, 2016, , .	0.2	2
272	An Effectively Activated Hierarchical Nano $\mu$ /Microspherical Li <sub>1.2</sub> Ni <sub>0.2</sub> Mn <sub>0.6</sub> O <sub>2</sub> Cathode for Long $\mu$ Life and High $\mu$ Rate Lithium $\mu$ Ion Batteries. ChemSusChem, 2016, 9, 728-735.	3.6	65
273	Pre-Lithiation of Li(Ni <sub>1-x</sub> Co <sub>x</sub> )O <sub>2</sub> Materials Enabling Enhancement of Performance for Li-Ion Battery. ACS Applied Materials & Interfaces, 2016, 8, 15361-15368.	4.0	32
274	Kinetic Study of Parasitic Reactions in Lithium-Ion Batteries: A Case Study on LiNi <sub>0.6</sub> Mn <sub>0.2</sub> Co <sub>0.2</sub> O <sub>2</sub> . ACS Applied Materials & Interfaces, 2016, 8, 3446-3451.	4.0	88
275	Dynamic study of (De)sodiation in alpha-MnO <sub>2</sub> nanowires. Nano Energy, 2016, 19, 382-390.	8.2	54
276	Solar-powered electrochemical energy storage: an alternative to solar fuels. Journal of Materials Chemistry A, 2016, 4, 2766-2782.	5.2	109
277	Probing cation intermixing in Li <sub>2</sub> SnO <sub>3</sub> . RSC Advances, 2016, 6, 31559-31564.	1.7	10
278	Mg-Enriched Engineered Carbon from Lithium-Ion Battery Anode for Phosphate Removal. ACS Applied Materials & Interfaces, 2016, 8, 2905-2909.	4.0	40
279	Solid-State Li-Ion Batteries Using Fast, Stable, Glassy Nanocomposite Electrolytes for Good Safety and Long Cycle-Life. Nano Letters, 2016, 16, 1960-1968.	4.5	124
280	Understanding atomic scale phenomena within the surface layer of a long-term cycled 5 V spinel electrode. Nano Energy, 2016, 19, 297-306.	8.2	18
281	A lithium $\mu$ oxygen battery based on lithium superoxide. Nature, 2016, 529, 377-382.	13.7	633
282	Atomic to Nanoscale Investigation of Functionalities of an Al <sub>2</sub> O <sub>3</sub> Coating Layer on a Cathode for Enhanced Battery Performance. Chemistry of Materials, 2016, 28, 857-863.	3.2	125
283	Insight into the Catalytic Mechanism of Bimetallic Platinum $\mu$ Copper Core $\mu$ Shell Nanostructures for Nonaqueous Oxygen Evolution Reactions. Nano Letters, 2016, 16, 781-785.	4.5	39
284	Synthesis of full concentration gradient cathode studied by high energy X-ray diffraction. Nano Energy, 2016, 19, 522-531.	8.2	66
285	Microstructural Characterization of Air Electrode Architectures in Lithium-Oxygen Batteries. Microscopy and Microanalysis, 2015, 21, 1373-1374.	0.2	3
286	Progress in Mechanistic Understanding and Characterization Techniques of Li $\mu$ S Batteries. Advanced Energy Materials, 2015, 5, 1500408.	10.2	400
287	Scalable Preparation of Ternary Hierarchical Silicon Oxide $\mu$ Nickel $\mu$ Graphite Composites for Lithium $\mu$ Ion Batteries. ChemSusChem, 2015, 8, 4073-4080.	3.6	40
288	A Rigid Naphthalenediimide Triangle for Organic Rechargeable Lithium $\mu$ Ion Batteries. Advanced Materials, 2015, 27, 2907-2912.	11.1	145

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289	Lithium-Rich Nanoscale $\text{Li}_{1.2}\text{Mn}_{0.54}\text{Ni}_{0.13}\text{Co}_{0.13}\text{O}_2$ Cathode Material Prepared by Co-Precipitation Combined Freeze Drying (CP-FD) for Lithium-Ion Batteries. <i>Energy Technology</i> , 2015, 3, 843-850.	1.8	46
290	High-Speed Fabrication of Lithium-Ion Battery Electrodes by UV-Curing. <i>Energy Technology</i> , 2015, 3, 469-475.	1.8	13
291	Dimeric $[\text{Mo}_2\text{S}_{12}]^{2+}$ Cluster: A Molecular Analogue of $\text{MoS}_2$ Edges for Superior Hydrogen-Evolution Electrocatalysis. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 15181-15185.	7.2	160
292	Exploring Lithium-ion Battery Performance through in situ Characterization. <i>Microscopy and Microanalysis</i> , 2015, 21, 1541-1542.	0.2	0
293	Anion Solvation in Carbonate-Based Electrolytes. <i>Journal of Physical Chemistry C</i> , 2015, 119, 27255-27264.	1.5	121
294	Frontispiece: Implications of the Unpaired Spins in Li-O <sub>2</sub> Battery Chemistry and Electrochemistry: A Mini-review. <i>ChemPlusChem</i> , 2015, 80, n/a-n/a.	1.3	0
295	Demonstration of highly efficient lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 4170-4179.	5.2	51
296	Interfacial Effects on Lithium Superoxide Disproportionation in Li-O <sub>2</sub> Batteries. <i>Nano Letters</i> , 2015, 15, 1041-1046.	4.5	92
297	A generalized method for high throughput in-situ experiment data analysis: An example of battery materials exploration. <i>Journal of Power Sources</i> , 2015, 279, 246-251.	4.0	11
298	Nanostructured cathode materials for rechargeable lithium batteries. <i>Journal of Power Sources</i> , 2015, 283, 219-236.	4.0	97
299	Enhanced rate performance of $\text{LiNi}_0.5\text{Mn}_1.5\text{O}_4$ fibers synthesized by electrospinning. <i>Nano Energy</i> , 2015, 15, 616-624.	8.2	27
300	Study on the Catalytic Activity of Noble Metal Nanoparticles on Reduced Graphene Oxide for Oxygen Evolution Reactions in Lithium-Air Batteries. <i>Nano Letters</i> , 2015, 15, 4261-4268.	4.5	149
301	Kinetics Tuning of Li-Ion Diffusion in Layered $\text{Li}(\text{Ni}_x\text{Mn}_y\text{Co}_z)\text{O}_2$ . <i>Journal of the American Chemical Society</i> , 2015, 137, 8364-8367.	6.6	292
302	Atomic-Resolution Visualization of Distinctive Chemical Mixing Behavior of Ni, Co, and Mn with Li in Layered Lithium Transition-Metal Oxide Cathode Materials. <i>Chemistry of Materials</i> , 2015, 27, 5393-5401.	3.2	108
303	Prelithiation Activates $\text{Li}(\text{Ni}_{0.5}\text{Mn}_{0.3}\text{Co}_{0.2})\text{O}_2$ for High Capacity and Excellent Cycling Stability. <i>Nano Letters</i> , 2015, 15, 5590-5596.	4.5	68
304	Improvement of Electrochemical Properties of Lithium-Oxygen Batteries Using a Silver Electrode. <i>Journal of Physical Chemistry C</i> , 2015, 119, 15036-15040.	1.5	22
305	Improve First-Cycle Efficiency and Rate Performance of Layered-Layered $\text{Li}_{1.2}\text{Mn}_{0.6}\text{Ni}_{0.2}\text{O}_2$ Using Oxygen Stabilizing Dopant. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 16040-16045.	4.0	42
306	Design of surface protective layer of $\text{LiF/FeF}_3$ nanoparticles in Li-rich cathode for high-capacity Li-ion batteries. <i>Nano Energy</i> , 2015, 15, 164-176.	8.2	162

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307	Theoretical Exploration of Various Lithium Peroxide Crystal Structures in a Li-Air Battery. <i>Energies</i> , 2015, 8, 529-548.	1.6	13
308	An organophosphine oxide redox shuttle additive that delivers long-term overcharge protection for 4 V lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 10710-10714.	5.2	24
309	The migration mechanism of transition metal ions in $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ . <i>Journal of Materials Chemistry A</i> , 2015, 3, 13031-13038.	5.2	20
310	Lithium-ion Batteries: A Rigid Naphthalenediimide Triangle for Organic Rechargeable Lithium-ion Batteries (Adv. Mater. 18/2015). <i>Advanced Materials</i> , 2015, 27, 2948-2948.	11.1	1
311	Pd nanoparticles on ZnO-passivated porous carbon by atomic layer deposition: an effective electrochemical catalyst for Li-O <sub>2</sub> battery. <i>Nanotechnology</i> , 2015, 26, 164003.	1.3	25
312	PEDOT-PSS coated ZnO/C hierarchical porous nanorods as ultralong-life anode material for lithium ion batteries. <i>Nano Energy</i> , 2015, 18, 253-264.	8.2	89
313	Review—Understanding and Mitigating Some of the Key Factors that Limit Non-Aqueous Lithium-Air Battery Performance. <i>Journal of the Electrochemical Society</i> , 2015, 162, A2439-A2446.	1.3	27
314	$\text{Fe}_2\text{O}_3$ Nanocrystalline Microspheres with Hybrid Behavior of Battery-Supercapacitor for Superior Lithium Storage. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 26284-26290.	4.0	58
315	Evolution of Lattice Structure and Chemical Composition of the Surface Reconstruction Layer in $\text{Li}_{1.2}\text{Ni}_{0.2}\text{Mn}_{0.6}\text{O}_2$ Cathode Material for Lithium Ion Batteries. <i>Nano Letters</i> , 2015, 15, 514-522.	4.5	261
316	Synthesis of high capacity cathodes for lithium-ion batteries by morphology-tailored hydroxide co-precipitation. <i>Journal of Power Sources</i> , 2015, 274, 451-457.	4.0	57
317	Implications of the Unpaired Spins in $\text{LiO}_2$ Battery Chemistry and Electrochemistry: A Minireview. <i>ChemPlusChem</i> , 2015, 80, 336-343.	1.3	17
318	Symmetrical Impedance Study on Inactivation Induced Degradation of Lithium Electrodes for Batteries Beyond Lithium-Ion. <i>Journal of the Electrochemical Society</i> , 2014, 161, A827-A830.	1.3	63
319	Rechargeable lithium batteries and beyond: Progress, challenges, and future directions. <i>MRS Bulletin</i> , 2014, 39, 395-401.	1.7	226
320	Effectively suppressing dissolution of manganese from spinel lithium manganate via a nanoscale surface-doping approach. <i>Nature Communications</i> , 2014, 5, 5693.	5.8	255
321	Molecular Engineering toward Stabilized Interface: An Electrolyte Additive for High-Performance Li-Ion Battery. <i>Journal of the Electrochemical Society</i> , 2014, 161, A2262-A2267.	1.3	10
322	Insight into Sulfur Reactions in $\text{LiS}$ Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 21938-21945.	4.0	120
323	Anatase Titania Nanorods as an Intercalation Anode Material for Rechargeable Sodium Batteries. <i>Nano Letters</i> , 2014, 14, 416-422.	4.5	422
324	Separator/Electrode Assembly Based on Thermally Stable Polymer for Safe Lithium-ion Batteries. <i>Advanced Energy Materials</i> , 2014, 4, 1301208.	10.2	19

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325	Aprotic and Aqueous Li <sup>+</sup> O <sup>2-</sup> Batteries. <i>Chemical Reviews</i> , 2014, 114, 5611-5640.	23.0	975
326	Understanding the Rate Capability of High-Energy-Density Li-Rich Layered Li <sub>1.2</sub> Ni <sub>0.15</sub> Co <sub>0.1</sub> Mn <sub>0.55</sub> O <sub>2</sub> Cathode Materials. <i>Advanced Energy Materials</i> , 2014, 4, 1300950.	10.2	480
327	Investigation of the Decomposition Mechanism of Lithium Bis(oxalate)borate (LiBOB) Salt in the Electrolyte of an Aprotic Li <sup>+</sup> O <sup>2-</sup> Battery. <i>Energy Technology</i> , 2014, 2, 348-354.	1.8	13
328	Controllable crystalline preferred orientation in Li-Co-Ni-Mn oxide cathode thin films for all-solid-state lithium batteries. <i>Nanoscale</i> , 2014, 6, 10611.	2.8	41
329	Migration of Mn cations in delithiated lithium manganese oxides. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 20697-20702.	1.3	22
330	A XANES study of LiVPO <sub>4</sub> F: a factor analysis approach. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 3254.	1.3	19
331	Li-Se battery: absence of lithium polyselenides in carbonate based electrolyte. <i>Chemical Communications</i> , 2014, 50, 5576-5579.	2.2	155
332	Molecular-Level Insights into the Reactivity of Siloxane-Based Electrolytes at a Lithium-Metal Anode. <i>ChemPhysChem</i> , 2014, 15, 2077-2083.	1.0	9
333	Effect of the size-selective silver clusters on lithium peroxide morphology in lithium-oxygen batteries. <i>Nature Communications</i> , 2014, 5, 4895.	5.8	186
334	Nanorod and Nanoparticle Shells in Concentration Gradient Core-Shell Lithium Oxides for Rechargeable Lithium Batteries. <i>ChemSusChem</i> , 2014, 7, 3295-3303.	3.6	18
335	Ultrasonic-assisted co-precipitation to synthesize lithium-rich cathode Li <sub>1.3</sub> Ni <sub>0.21</sub> Mn <sub>0.64</sub> O <sub>2</sub> + materials for lithium-ion batteries. <i>Journal of Power Sources</i> , 2014, 272, 922-928.	4.0	22
336	High Electrochemical Performances of Microsphere C-TiO <sub>2</sub> Anode for Sodium-Ion Battery. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 11295-11301.	4.0	213
337	High Capacity O <sub>3</sub> -Type Na[Li <sub>0.05</sub> (Ni <sub>0.25</sub> Fe <sub>0.25</sub> Mn <sub>0.5</sub> ) <sub>0.95</sub> ]O <sub>2</sub> Cathode for Sodium Ion Batteries. <i>Chemistry of Materials</i> , 2014, 26, 6165-6171.		175
338	Probing Thermally Induced Decomposition of Delithiated Li <sub>1.2</sub> Ni <sub>0.15</sub> Mn <sub>0.55</sub> Co <sub>0.1</sub> O <sub>2</sub> by in Situ High-Energy X-ray Diffraction. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 12692-12697.	4.0	47
339	Differentiating allotropic LiCoO <sub>2</sub> /Li <sub>2</sub> Co <sub>2</sub> O <sub>4</sub> : A structural and electrochemical study. <i>Journal of Power Sources</i> , 2014, 271, 97-103.	4.0	24
340	Development of Microstrain in Aged Lithium Transition Metal Oxides. <i>Nano Letters</i> , 2014, 14, 4873-4880.	4.5	171
341	Raman Evidence for Late Stage Disproportionation in a Li <sup>+</sup> O <sup>2-</sup> Battery. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 2705-2710.	2.1	144
342	Advanced Na[Ni <sub>0.25</sub> Fe <sub>0.5</sub> Mn <sub>0.25</sub> ]O <sub>2</sub> /C <sub>3</sub> O <sub>4</sub> Sodium-Ion Batteries Using EMS Electrolyte for Energy Storage. <i>Nano Letters</i> , 2014, 14, 1620-1626.		283

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343	Nanoarchitecture Multi-Structural Cathode Materials for High Capacity Lithium Batteries. <i>Advanced Functional Materials</i> , 2013, 23, 1070-1075.	7.8	169
344	Titanium-Based Anode Materials for Safe Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2013, 23, 959-969.	7.8	456
345	Formation of a Continuous Solid-Solution Particle and its Application to Rechargeable Lithium Batteries. <i>Advanced Functional Materials</i> , 2013, 23, 1028-1036.	7.8	39
346	Compatibility of lithium salts with solvent of the non-aqueous electrolyte in Li-O <sub>2</sub> batteries. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 5572.	1.3	76
347	Interactions of Dimethoxy Ethane with Li <sub>2</sub> O <sub>2</sub> Clusters and Likely Decomposition Mechanisms for Li-O <sub>2</sub> Batteries. <i>Journal of Physical Chemistry C</i> , 2013, 117, 8041-8049.	1.5	74
348	A high performance separator with improved thermal stability for Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2013, 1, 8538.	5.2	33
349	A nanostructured cathode architecture for low charge overpotential in lithium-oxygen batteries. <i>Nature Communications</i> , 2013, 4, 2383.	5.8	379
350	Synthesis of Porous Carbon Supported Palladium Nanoparticle Catalysts by Atomic Layer Deposition: Application for Rechargeable Lithium-O <sub>2</sub> Battery. <i>Nano Letters</i> , 2013, 13, 4182-4189.	4.5	184
351	Disproportionation in Li-O <sub>2</sub> Batteries Based on a Large Surface Area Carbon Cathode. <i>Journal of the American Chemical Society</i> , 2013, 135, 15364-15372.	6.6	282
352	Graphene-Based Three-Dimensional Hierarchical Sandwich-type Architecture for High-Performance Li/S Batteries. <i>Nano Letters</i> , 2013, 13, 4642-4649.	4.5	385
353	Mn(II) deposition on anodes and its effects on capacity fade in spinel lithium manganate-carbon systems. <i>Nature Communications</i> , 2013, 4, 2437.	5.8	409
354	Study of Thermal Decomposition of Li <sub>1-x</sub> (Ni <sub>1/3</sub> Mn <sub>1/3</sub> Co <sub>1/3</sub> ) <sub>0.9</sub> O <sub>2</sub> Using In-Situ High-Energy X-Ray Diffraction. <i>Advanced Energy Materials</i> , 2013, 3, 729-736.	10.2	48
355	3-Hexylthiophene as a Stabilizing Additive for High Voltage Cathodes in Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2013, 160, A268-A271.	1.3	55
356	The Effect of Oxygen Crossover on the Anode of a Li-O <sub>2</sub> Battery using an Ether-Based Solvent: Insights from Experimental and Computational Studies. <i>ChemSusChem</i> , 2013, 6, 51-55.	3.6	231
357	Silicon-Graphene Composite Anodes for High-Energy Lithium Batteries. <i>Energy Technology</i> , 2013, 1, 77-84.	1.8	18
358	In situ high-energy X-ray diffraction to study overcharge abuse of 18650-size lithium-ion battery. <i>Journal of Power Sources</i> , 2013, 230, 32-37.	4.0	91
359	Ultrasound Assisted Design of Sulfur/Carbon Cathodes with Partially Fluorinated Ether Electrolytes for Highly Efficient Li/S Batteries. <i>Advanced Materials</i> , 2013, 25, 1608-1615.	11.1	224
360	In situ fabrication of porous-carbon-supported $\gamma$ -MnO <sub>2</sub> nanorods at room temperature: application for rechargeable Li-O <sub>2</sub> batteries. <i>Energy and Environmental Science</i> , 2013, 6, 519.	15.6	175

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361	New class of nonaqueous electrolytes for long-life and safe lithium-ion batteries. <i>Nature Communications</i> , 2013, 4, 1513.	5.8	115
362	Improvement of long-term cycling performance of Li[Ni <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> ]O <sub>2</sub> by AlF <sub>3</sub> coating. <i>Journal of Power Sources</i> , 2013, 234, 201-207.	4.0	237
363	Formation of the Spinel Phase in the Layered Composite Cathode Used in Li-Ion Batteries. <i>ACS Nano</i> , 2013, 7, 760-767.	7.3	772
364	Cathode Material with Nanorod Structure—An Application for Advanced High-Energy and Safe Lithium Batteries. <i>Chemistry of Materials</i> , 2013, 25, 2109-2115.	3.2	137
365	Fluorinated electrolytes for 5 V lithium-ion battery chemistry. <i>Energy and Environmental Science</i> , 2013, 6, 1806.	15.6	462
366	Nanoscale Phase Separation, Cation Ordering, and Surface Chemistry in Pristine Li <sub>1.2</sub> Ni <sub>0.2</sub> Mn <sub>0.6</sub> O <sub>2</sub> for Li-Ion Batteries. <i>Chemistry of Materials</i> , 2013, 25, 2319-2326.	3.2	173
367	Synthesis and characterization of uniformly dispersed Fe <sub>3</sub> O <sub>4</sub> /Fe nanocomposite on porous carbon: application for rechargeable Li—O <sub>2</sub> batteries. <i>RSC Advances</i> , 2013, 3, 8276.	1.7	54
368	(De)Lithiation Mechanism of Li/SeS <sub>x</sub> (x = 0–7) Batteries Determined by in Situ Synchrotron X-ray Diffraction and X-ray Absorption Spectroscopy. <i>Journal of the American Chemical Society</i> , 2013, 135, 8047-8056.	6.6	332
369	Evidence for lithium superoxide-like species in the discharge product of a Li—O <sub>2</sub> battery. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 3764.	1.3	188
370	Mechanically alloyed composite anode materials based on SiO <sub>x</sub> —Sn <sub>x</sub> FeyCz for Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2013, 1, 4376.	5.2	24
371	Recent Research Progress on Non-aqueous Lithium-Air Batteries from Argonne National Laboratory. <i>Energies</i> , 2013, 6, 6016-6044.	1.6	46
372	Silicon-Graphene Composite Anodes for High-Energy Lithium Batteries. <i>Energy Technology</i> , 2013, 1, 77-84.	1.8	118
373	Molecular engineering towards safer lithium-ion batteries: a highly stable and compatible redox shuttle for overcharge protection. <i>Energy and Environmental Science</i> , 2012, 5, 8204.	15.6	105
374	A New Class of Lithium and Sodium Rechargeable Batteries Based on Selenium and Sulfur as a Positive Electrode. <i>Journal of the American Chemical Society</i> , 2012, 134, 4505-4508.	6.6	534
375	Chemistry and electrochemistry of concentric ring cathode Li <sub>1.42</sub> Ni <sub>0.25</sub> Mn <sub>0.75</sub> O <sub>2</sub> +I <sup>3</sup> for lithium batteries. <i>Journal of Materials Chemistry</i> , 2012, 22, 12039.	6.7	18
376	Sodium insertion in carboxylate based materials and their application in 3.6 V full sodium cells. <i>Energy and Environmental Science</i> , 2012, 5, 9632.	15.6	235
377	Nanostructured high-energy cathode materials for advanced lithium batteries. <i>Nature Materials</i> , 2012, 11, 942-947.	13.3	921
378	Challenges Facing Lithium Batteries and Electrical Double-Layer Capacitors. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 9994-10024.	7.2	2,407

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379	A Metal-Free, Lithium-Ion Oxygen Battery: A Step Forward to Safety in Lithium-Air Batteries. Nano Letters, 2012, 12, 5775-5779.	4.5	148
380	Conflicting Roles of Nickel in Controlling Cathode Performance in Lithium Ion Batteries. Nano Letters, 2012, 12, 5186-5191.	4.5	231
381	Smart Polymeric Cathode Material with Intrinsic Overcharge Protection Based on a 2,5-Di-tert-butyl-1,4-dimethoxybenzene Core Structure. Advanced Functional Materials, 2012, 22, 7.8 4485-4492.		7
382	The Role of AlF <sub>3</sub> Coatings in Improving Electrochemical Cycling of Li-Enriched Nickel-Manganese Oxide Electrodes for Li-Ion Batteries. Advanced Materials, 2012, 24, 1192-1196.	11.1	629
383	Batteries: The Role of AlF <sub>3</sub> Coatings in Improving Electrochemical Cycling of Li-Enriched Nickel-Manganese Oxide Electrodes for Li-Ion Batteries (Adv. Mater. 9/2012). Advanced Materials, 2012, 24, 1276-1276.	11.1	8
384	Double-Structured LiMn <sub>0.85</sub> Fe <sub>0.15</sub> PO <sub>4</sub> Coordinated with LiFePO <sub>4</sub> for Rechargeable Lithium Batteries. Angewandte Chemie - International Edition, 2012, 51, 1853-1856.	7.2	102
385	Growth mechanism of Ni <sub>0.3</sub> Mn <sub>0.7</sub> CO <sub>3</sub> precursor for high capacity Li-ion battery cathodes. Journal of Materials Chemistry, 2011, 21, 9290.	6.7	119
386	Composition-Tailored Synthesis of Gradient Transition Metal Precursor Particles for Lithium-Ion Battery Cathode Materials. Chemistry of Materials, 2011, 23, 1954-1963.	3.2	106
387	Combining the Pair Distribution Function and Computational Methods To Understand Lithium Insertion in Brookite (TiO <sub>2</sub> ). Inorganic Chemistry, 2011, 50, 5855-5857.	1.9	20
388	Computational Studies of Polysiloxanes: Oxidation Potentials and Decomposition Reactions. Journal of Physical Chemistry C, 2011, 115, 12216-12223.	1.5	89
389	Multi-scale study of thermal stability of lithiated graphite. Energy and Environmental Science, 2011, 4, 4023.	15.6	140
390	Dual Lithium Insertion and Conversion Mechanisms in a Titanium-Based Mixed-Anion Nanocomposite. Journal of the American Chemical Society, 2011, 133, 13240-13243.	6.6	34
391	Mechanism of capacity fade of MCMB/Li1.1[Ni1/3Mn1/3Co1/3]0.9O2 cell at elevated temperature and additives to improve its cycle life. Journal of Materials Chemistry, 2011, 21, 17754.	6.7	89
392	Solid state synthesis of LiFePO <sub>4</sub> studied by in situ high energy X-ray diffraction. Journal of Materials Chemistry, 2011, 21, 5604.	6.7	49
393	Advanced cathode materials for lithium-ion batteries. MRS Bulletin, 2011, 36, 498-505.	1.7	40
394	Toward high surface area TiO <sub>2</sub> brookite with morphology control. Journal of Materials Chemistry, 2011, 21, 3085.	6.7	33
395	Microscale spherical carbon-coated Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> as ultra high power anode material for lithium batteries. Energy and Environmental Science, 2011, 4, 1345.	15.6	433
396	A novel concentration-gradient Li[Ni <sub>0.83</sub> Co <sub>0.07</sub> Mn <sub>0.10</sub> ]O <sub>2</sub> cathode material for high-energy lithium-ion batteries. Journal of Materials Chemistry, 2011, 21, 10108.	6.7	126

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397	Novel redox shuttle additive for high-voltage cathode materials. Energy and Environmental Science, 2011, 4, 2858.	15.6	70
398	Novel functionalized electrolyte for MCMB/Li1.156Mn1.844O4 lithium-ion cells. Energy and Environmental Science, 2011, 4, 4567.	15.6	13
399	Increased Stability Toward Oxygen Reduction Products for Lithium-Air Batteries with Oligoether-Functionalized Silane Electrolytes. Journal of Physical Chemistry C, 2011, 115, 25535-25542.	1.5	166
400	Fused ring and linking groups effect on overcharge protection for lithium-ion batteries. Journal of Power Sources, 2011, 196, 1530-1536.	4.0	26
401	Template-assisted synthesis of high packing density SrLi <sub>2</sub> Ti <sub>6</sub> O <sub>14</sub> for use as anode in 2.7-V lithium-ion battery. Journal of Power Sources, 2011, 196, 2871-2874.	4.0	63
402	Nanostructured TiO <sub>2</sub> and Its Application in Lithium-Ion Storage. Advanced Functional Materials, 2011, 21, 3231-3241.	7.8	154
403	Single-Crystal Silicon Membranes with High Lithium Conductivity and Application in Lithium-Air Batteries. Advanced Materials, 2011, 23, 4947-4952.	11.1	46
404	Hollow lithiated metal oxide particles as lithium-ion battery cathode materials. Electrochimica Acta, 2011, 56, 1426-1431.	2.6	24
405	Understanding the redox shuttle stability of 3,5-di-tert-butyl-1,2-dimethoxybenzene for overcharge protection of lithium-ion batteries. Journal of Power Sources, 2010, 195, 4957-4962.	4.0	68
406	Silicon-Containing Carbonates—Synthesis, Characterization, and Additive Effects for Silicon-Based Polymer Electrolytes. Silicon, 2010, 2, 201-208.	1.8	23
407	A Novel Cathode Material with a Concentration Gradient for High-Energy and Safe Lithium-Ion Batteries. Advanced Functional Materials, 2010, 20, 485-491.	7.8	252
408	High-Performance Carbon-LiMnPO <sub>4</sub> Nanocomposite Cathode for Lithium Batteries. Advanced Functional Materials, 2010, 20, 3260-3265.	7.8	298
409	Nanostructured Anode Material for High-Power Battery System in Electric Vehicles. Advanced Materials, 2010, 22, 3052-3057.	11.1	359
410	Improved electrochemical properties of BiOF-coated 5V spinel Li[Ni <sub>0.5</sub> Mn <sub>1.5</sub> ]O <sub>4</sub> for rechargeable lithium batteries. Journal of Power Sources, 2010, 195, 2023-2028.	4.0	101
411	High-voltage performance of concentration-gradient Li[Ni <sub>0.67</sub> Co <sub>0.15</sub> Mn <sub>0.18</sub> ]O <sub>2</sub> cathode material for lithium-ion batteries. Electrochimica Acta, 2010, 55, 8621-8627.	2.6	98
412	Non-Annealed Graphene Paper as a Binder-Free Anode for Lithium-Ion Batteries. Journal of Physical Chemistry C, 2010, 114, 12800-12804.	1.5	233
413	Role of surface coating on cathode materials for lithium-ion batteries. Journal of Materials Chemistry, 2010, 20, 7606.	6.7	569
414	Lithium Tetrafluoro Oxalato Phosphate as Electrolyte Additive for Lithium-Ion Cells. Electrochemical and Solid-State Letters, 2010, 13, A11.	2.2	47



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415	$\text{MLi}_{2/3}\text{Ti}_6\text{O}_{14}$ (M = Sr, Ba, 2Na) Lithium Insertion Titanate Materials: A Comparative Study. <i>Inorganic Chemistry</i> , 2010, 49, 2822-2826.	1.9	88
416	Surface modification of cathode materials from nano- to microscale for rechargeable lithium-ion batteries. <i>Journal of Materials Chemistry</i> , 2010, 20, 7074.	6.7	214
417	Tailored Preparation Methods of $\text{TiO}_2$ Anatase, Rutile, Brookite: Mechanism of Formation and Electrochemical Properties. <i>Chemistry of Materials</i> , 2010, 22, 1173-1179.	3.2	325
418	Synthesis and characterization of alkylsilane ethers with oligo(ethylene oxide) substituents for safe electrolytes in lithium-ion batteries. <i>Journal of Materials Chemistry</i> , 2010, 20, 8224.	6.7	31
419	High-energy cathode material for long-life and safe lithium batteries. <i>Nature Materials</i> , 2009, 8, 320-324.	13.3	1,323
420	Redox shuttles for safer lithium-ion batteries. <i>Electrochimica Acta</i> , 2009, 54, 5605-5613.	2.6	148
421	$\text{Li}_x\text{Ni}_{0.25}\text{Mn}_{0.75}\text{O}_y$ (0.5 $\leq x \leq 2$ , 2 $\leq y \leq 2.75$ ) compounds for high-energy lithium-ion batteries. <i>Journal of Materials Chemistry</i> , 2009, 19, 4510.	6.7	116
422	Dual functioned BiOF-coated $\text{Li}[\text{Li}_{0.1}\text{Al}_{0.05}\text{Mn}_{1.85}]\text{O}_4$ for lithium batteries. <i>Journal of Materials Chemistry</i> , 2009, 19, 1995.	6.7	72
423	Nanoporous Structured $\text{LiFePO}_4$ with Spherical Microscale Particles Having High Volumetric Capacity for Lithium Batteries. <i>Electrochemical and Solid-State Letters</i> , 2009, 12, A181.	2.2	82
424	Low-temperature study of lithium-ion cells using a $\text{Li}_y\text{Sn}$ micro-reference electrode. <i>Journal of Power Sources</i> , 2007, 174, 373-379.	4.0	98
425	Synthesis of Spherical Nano- to Microscale Core-Shell Particles $\text{Li}[(\text{Ni}_{0.8}\text{Co}_{0.1}\text{Mn}_{0.1})_{1-x}(\text{Ni}_{0.5}\text{Mn}_{0.5})_x]\text{O}_2$ and Their Applications to Lithium Batteries. <i>Chemistry of Materials</i> , 2006, 18, 5159-5163.	3.2	116
426	Synthesis and Characterization of Tetra- and Trisiloxane-Containing Oligo(ethylene glycol)s Highly Conducting Electrolytes for Lithium Batteries. <i>Chemistry of Materials</i> , 2006, 18, 1289-1295.	3.2	57
427	Safety characteristics of $\text{Li}(\text{Ni}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05})\text{O}_2$ and $\text{Li}(\text{Ni}_{1/3}\text{Co}_{1/3}\text{Mn}_{1/3})\text{O}_2$ . <i>Electrochemistry Communications</i> , 2006, 8, 329-335.	2.3	238
428	Safety Characteristics of the $\text{Li}_4\text{Ti}_5\text{O}_{12}/\text{LiMn}_2\text{O}_4$ Li-Ion Battery. <i>Materials Research Society Symposia Proceedings</i> , 2006, 972, 1.	0.1	0
429	Contribution of the Structural Changes of $\text{LiNi}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$ Cathodes on the Exothermic Reactions in Li-Ion Cells. <i>Journal of the Electrochemical Society</i> , 2006, 153, A731.	1.3	102
430	Effects of additives on thermal stability of Li ion cells. <i>Journal of Power Sources</i> , 2005, 146, 116-120.	4.0	126
431	Synthesis and Ionic Conductivity of Cyclosiloxanes with Ethyleneoxy-Containing Substituents. <i>Chemistry of Materials</i> , 2005, 17, 5646-5650.	3.2	45
432	Synthesis and Characterization of $\text{Li}[(\text{Ni}_{0.8}\text{Co}_{0.1}\text{Mn}_{0.1})_{0.8}(\text{Ni}_{0.5}\text{Mn}_{0.5})_{0.2}]\text{O}_2$ with the Microscale Core-Shell Structure as the Positive Electrode Material for Lithium Batteries. <i>Journal of the American Chemical Society</i> , 2005, 127, 13411-13418.	6.6	417

#	ARTICLE	IF	CITATIONS
433	Reduction Mechanisms of Ethylene, Propylene, and Vinylethylene Carbonates. Journal of the Electrochemical Society, 2004, 151, A178.	1.3	181
434	Flame-retardant additives for lithium-ion batteries. Journal of Power Sources, 2003, 119-121, 383-387.	4.0	204
435	Tuning working potential of silicon-phosphorus anode via microstructure control for high-energy lithium-ion batteries. Journal of Solid State Electrochemistry, 0, , .	1.2	1