

Xi-Qian Yu

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

184
papers

17,784
citations

75
h-index

131
g-index

195
ext. papers

21,630
ext. citations

15.1
avg. IF

6.9
L-index

#	Paper	IF	Citations
184	All-in-One Ionic/Electronic Dual-Carrier Conducting Framework Thickening All-Solid-State Electrode. <i>ACS Energy Letters</i> , 2022 , 7, 766-772	20.1	0
183	Coordination-Assisted Precise Construction of Metal Oxide Nanofilms for High-Performance Solid-State Batteries.. <i>Journal of the American Chemical Society</i> , 2022 ,	16.4	3
182	Probing lattice defects in crystalline battery cathode using hard X-ray nanoprobe with data-driven modeling. <i>Energy Storage Materials</i> , 2022 , 45, 647-655	19.4	0
181	Structural and chemical evolution in layered oxide cathodes of lithium-ion batteries revealed by synchrotron techniques.. <i>National Science Review</i> , 2022 , 9, nwab146	10.8	10
180	Controlling Li deposition below the interface. <i>EScience</i> , 2022 ,		15
179	Raising the intrinsic safety of layered oxide cathodes by surface re-lithiation with LLZTO garnet-type solid electrolytes.. <i>Advanced Materials</i> , 2022 , e2200655	24	5
178	Challenges and Recent Advances in High Capacity Li-Rich Cathode Materials for High Energy Density Lithium-Ion Batteries (Adv. Mater. 50/2021). <i>Advanced Materials</i> , 2021 , 33, 2170395	24	1
177	Mitigating the Kinetic Hindrance of Single-Crystalline Ni-Rich Cathode via Surface Gradient Penetration of Tantalum. <i>Angewandte Chemie</i> , 2021 , 133, 26739	3.6	6
176	Mitigating the Kinetic Hindrance of Single-Crystalline Ni-Rich Cathode via Surface Gradient Penetration of Tantalum. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 26535-26539	16.4	18
175	Oxygen-redox reactions in LiCoO ₂ cathode without O-O bonding during charge-discharge. <i>Joule</i> , 2021 , 5, 720-736	27.8	15
174	Whole-Voltage-Range Oxygen Redox in P2-Layered Cathode Materials for Sodium-Ion Batteries. <i>Advanced Materials</i> , 2021 , 33, e2008194	24	39
173	Challenges and Recent Advances in High Capacity Li-Rich Cathode Materials for High Energy Density Lithium-Ion Batteries. <i>Advanced Materials</i> , 2021 , e2005937	24	58
172	Enhancing the Thermal Stability of NASICON Solid Electrolyte Pellets against Metallic Lithium by Defect Modification. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 18743-18749	9.5	9
171	First-Principles Simulations for the Surface Evolution and Mn Dissolution in the Fully Delithiated Spinel LiMnO. <i>Langmuir</i> , 2021 , 37, 5252-5259	4	6
170	Synergistic Effect of Temperature and Electrolyte Concentration on Solid-State Interphase for High-Performance Lithium Metal Batteries. <i>Advanced Energy and Sustainability Research</i> , 2021 , 2, 2100010	1.6	1
169	Gaseous electrolyte additive BF ₃ for high-power Li/CFx primary batteries. <i>Energy Storage Materials</i> , 2021 , 38, 482-488	19.4	10
168	Fast Li Plating Behavior Probed by X-ray Computed Tomography. <i>Nano Letters</i> , 2021 , 21, 5254-5261	11.5	6

167	The Role of Electron Localization in Covalency and Electrochemical Properties of Lithium-Ion Battery Cathode Materials. <i>Advanced Functional Materials</i> , 2021 , 31, 2001633	15.6	9
166	Enhancing cycle stability of Li metal anode by using polymer separators coated with Ti-containing solid electrolytes. <i>Rare Metals</i> , 2021 , 40, 1357-1365	5.5	12
165	Na ₁₀ SnSb ₂ S ₁₂ : A nanosized air-stable solid electrolyte for all-solid-state sodium batteries. <i>Chemical Engineering Journal</i> , 2021 , 420, 127692	14.7	7
164	Sub-nanometric Manganous Oxide Clusters in Nitrogen Doped Mesoporous Carbon Nanosheets for High-Performance Lithium-Sulfur Batteries. <i>Nano Letters</i> , 2021 , 21, 700-708	11.5	26
163	Reaction Mechanisms of Ta-Substituted Cubic LiLaZrO with Solvents During Storage. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 38384-38393	9.5	3
162	In Situ X-ray Absorption Near-Edge Structure Calculation and Machine Learning Analysis of the Structural Evolution in Lithium-Ion Battery Cathode Materials. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 18979-18987	3.8	2
161	Amorphous anion-rich titanium polysulfides for aluminum-ion batteries. <i>Science Advances</i> , 2021 , 7,	14.3	18
160	The role of structural defects in commercial lithium-ion batteries. <i>Cell Reports Physical Science</i> , 2021 , 2, 100554	6.1	6
159	Boron-doped sodium layered oxide for reversible oxygen redox reaction in Na-ion battery cathodes. <i>Nature Communications</i> , 2021 , 12, 5267	17.4	21
158	Advanced Transmission X-ray Microscopy for Energy Materials and Devices 2021 , 45-64		
157	Depth-dependent valence stratification driven by oxygen redox in lithium-rich layered oxide. <i>Nature Communications</i> , 2020 , 11, 6342	17.4	13
156	Machine-learning-revealed statistics of the particle-carbon/binder detachment in lithium-ion battery cathodes. <i>Nature Communications</i> , 2020 , 11, 2310	17.4	75
155	The Thermal Stability of Lithium Solid Electrolytes with Metallic Lithium. <i>Joule</i> , 2020 , 4, 812-821	27.8	87
154	Suppressing transition metal dissolution and deposition in lithium-ion batteries using oxide solid electrolyte coated polymer separator. <i>Chinese Physics B</i> , 2020 , 29, 088201	1.2	4
153	An In Situ Formed Surface Coating Layer Enabling LiCoO ₂ with Stable 4.6 V High-Voltage Cycle Performances. <i>Advanced Energy Materials</i> , 2020 , 10, 2001413	21.8	87
152	Dual-Defects Adjusted Crystal-Field Splitting of LaCo Ni O Hollow Multishelled Structures for Efficient Oxygen Evolution. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 19691-19695	16.4	37
151	Realizing long-term cycling stability and superior rate performance of 4.5V LiCoO ₂ by aluminum doped zinc oxide coating achieved by a simple wet-mixing method. <i>Journal of Power Sources</i> , 2020 , 470, 228423	8.9	23
150	Mn Ion Dissolution Mechanism for Lithium-Ion Battery with LiMnO Cathode: Ultraviolet-Visible Spectroscopy and Molecular Dynamics Simulations. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 3051-3057	6.4	28

149	Dual-Defects Adjusted Crystal-Field Splitting of $\text{LaCo}_{1-x}\text{Ni}_x\text{O}_3$ Hollow Multishelled Structures for Efficient Oxygen Evolution. <i>Angewandte Chemie</i> , 2020 , 132, 19859-19863	3.6	4
148	Low-temperature fusion fabrication of Li-Cu alloy anode with in situ formed 3D framework of inert LiCu nanowires for excellent Li storage performance. <i>Science Bulletin</i> , 2020 , 65, 1907-1915	10.6	23
147	Increasing Poly(ethylene oxide) Stability to 4.5 V by Surface Coating of the Cathode. <i>ACS Energy Letters</i> , 2020 , 5, 826-832	20.1	91
146	Enabling Stable Cycling of 4.2 V High-Voltage All-Solid-State Batteries with PEO-Based Solid Electrolyte. <i>Advanced Functional Materials</i> , 2020 , 30, 1909392	15.6	77
145	In situ synthesis of a nickel concentration gradient structure of Ni-rich LiNiCoAlO with promising superior electrochemical properties at high cut-off voltage. <i>Nanoscale</i> , 2020 , 12, 11182-11191	7.7	14
144	Investigations on the Fundamental Process of Cathode Electrolyte Interphase Formation and Evolution of High-Voltage Cathodes. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 2319-2326	9.5	76
143	Approaching Practically Accessible Solid-State Batteries: Stability Issues Related to Solid Electrolytes and Interfaces. <i>Chemical Reviews</i> , 2020 , 120, 6820-6877	68.1	373
142	Neutron-based characterization techniques for lithium-ion battery research. <i>Chinese Physics B</i> , 2020 , 29, 018201	1.2	20
141	Insights of the anionic redox in $\text{P}_2\text{Na}_{0.67}\text{Ni}_{0.33}\text{Mn}_{0.67}\text{O}_2$. <i>Nano Energy</i> , 2020 , 78, 105285	17.1	22
140	Local spring effect in titanium-based layered oxides. <i>Energy and Environmental Science</i> , 2020 , 13, 4371-4380	3.9	2
139	Size effect on the growth and pulverization behavior of Si nanodomains in SiO anode. <i>Nano Energy</i> , 2020 , 78, 105101	17.1	22
138	Stacking Faults Hinder Lithium Insertion in Li_2RuO_3 . <i>Advanced Energy Materials</i> , 2020 , 10, 2002631	21.8	8
137	Hierarchical Defect Engineering for LiCoO_2 through Low-Solubility Trace Element Doping. <i>Chem</i> , 2020 , 6, 2759-2769	16.2	29
136	4.2 V poly(ethylene oxide)-based all-solid-state lithium batteries with superior cycle and safety performance. <i>Energy Storage Materials</i> , 2020 , 32, 191-198	19.4	28
135	Quantifying redox heterogeneity in single-crystalline LiCoO cathode particles. <i>Journal of Synchrotron Radiation</i> , 2020 , 27, 713-719	2.4	9
134	Local structure adaptability through multi cations for oxygen redox accommodation in Li-Rich layered oxides. <i>Energy Storage Materials</i> , 2020 , 24, 384-393	19.4	75
133	A stabilized PEO-based solid electrolyte via a facile interfacial engineering method for a high voltage solid-state lithium metal battery. <i>Chemical Communications</i> , 2020 , 56, 5633-5636	5.8	18
132	A dual-phase Li_xTa alloy with a patternable and lithiophilic 3D framework for improving lithium anode performance. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 22377-22384	13	17

131	Stabilizing the Oxygen Lattice and Reversible Oxygen Redox Chemistry through Structural Dimensionality in Lithium-Rich Cathode Oxides. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 4323-4327	16.4	81
130	Stabilizing the Oxygen Lattice and Reversible Oxygen Redox Chemistry through Structural Dimensionality in Lithium-Rich Cathode Oxides. <i>Angewandte Chemie</i> , 2019 , 131, 4367-4371	3.6	12
129	Influence of carbon coating on the electrochemical performance of SiO@C/graphite composite anode materials. <i>Chinese Physics B</i> , 2019 , 28, 068201	1.2	2
128	Trace doping of multiple elements enables stable battery cycling of LiCoO ₂ at 4.6 V. <i>Nature Energy</i> , 2019 , 4, 594-603	62.3	299
127	Improved electrochemical performance of Li(Ni _{0.6} Co _{0.2} Mn _{0.2})O ₂ at high charging cut-off voltage with Li _{1.4} Al _{0.4} Ti _{1.6} (PO ₄) ₃ surface coating. <i>Chinese Physics B</i> , 2019 , 28, 068202	1.2	10
126	Safe Lithium-Metal Anodes for LiO ₂ Batteries: From Fundamental Chemistry to Advanced Characterization and Effective Protection. <i>Batteries and Supercaps</i> , 2019 , 2, 638-658	5.6	48
125	Building aqueous K-ion batteries for energy storage. <i>Nature Energy</i> , 2019 , 4, 495-503	62.3	381
124	Suppression of Monoclinic Phase Transitions of O ₃ -Type Cathodes Based on Electronic Delocalization for Na-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 22067-22073	9.5	21
123	Lithium metal batteries capable of stable operation at elevated temperature. <i>Energy Storage Materials</i> , 2019 , 23, 646-652	19.4	50
122	Anomalous metal segregation in lithium-rich material provides design rules for stable cathode in lithium-ion battery. <i>Nature Communications</i> , 2019 , 10, 1650	17.4	42
121	Exploring reaction dynamics in lithium-sulfur batteries by time-resolved operando sulfur K-edge X-ray absorption spectroscopy. <i>Chemical Communications</i> , 2019 , 55, 4993-4996	5.8	6
120	Anionic Redox Reaction-Induced High-Capacity and Low-Strain Cathode with Suppressed Phase Transition. <i>Joule</i> , 2019 , 3, 612	27.8	2
119	Structural and mechanistic revelations on high capacity cation-disordered Li-rich oxides for rechargeable Li-ion batteries. <i>Energy Storage Materials</i> , 2019 , 16, 354-363	19.4	67
118	Li ⁺ Cation Mixing Enhanced Structural and Performance Stability of Li-Rich Layered Oxide. <i>Advanced Energy Materials</i> , 2019 , 9, 1901530	21.8	41
117	In-situ visualization of lithium plating in all-solid-state lithium-metal battery. <i>Nano Energy</i> , 2019 , 63, 103895	19.5	78
116	Surface-to-Bulk Redox Coupling through Thermally Driven Li Redistribution in Li- and Mn-Rich Layered Cathode Materials. <i>Journal of the American Chemical Society</i> , 2019 , 141, 12079-12086	16.4	38
115	Artificial solid electrolyte interphase based on polyacrylonitrile for homogenous and dendrite-free deposition of lithium metal. <i>Chinese Physics B</i> , 2019 , 28, 078202	1.2	0
114	An Ordered Ni -Ring Superstructure Enables a Highly Stable Sodium Oxide Cathode. <i>Advanced Materials</i> , 2019 , 31, e1903483	24	42

113	Reconstructed Orthorhombic V2O5 Polyhedra for Fast Ion Diffusion in K-Ion Batteries. <i>Chem</i> , 2019 , 5, 168-179	16.2	123
112	Anionic Redox Reaction-Induced High-Capacity and Low-Strain Cathode with Suppressed Phase Transition. <i>Joule</i> , 2019 , 3, 503-517	27.8	154
111	Decreasing transition metal triggered oxygen redox activity in Na-deficient oxides. <i>Energy Storage Materials</i> , 2019 , 20, 395-400	19.4	41
110	A P2/P3 composite layered cathode for high-performance Na-ion full batteries. <i>Nano Energy</i> , 2019 , 55, 143-150	17.1	85
109	Advanced Characterization Techniques in Promoting Mechanism Understanding for Lithium Sulfur Batteries. <i>Advanced Functional Materials</i> , 2018 , 28, 1707543	15.6	53
108	Na/vacancy disordering promises high-rate Na-ion batteries. <i>Science Advances</i> , 2018 , 4, eaar6018	14.3	229
107	Dynamic evolution of cathode electrolyte interphase (CEI) on high voltage LiCoO2 cathode and its interaction with Li anode. <i>Energy Storage Materials</i> , 2018 , 14, 1-7	19.4	158
106	Surface-protected LiCoO2 with ultrathin solid oxide electrolyte film for high-voltage lithium ion batteries and lithium polymer batteries. <i>Journal of Power Sources</i> , 2018 , 388, 65-70	8.9	82
105	Advanced Characterization Techniques for Sodium-Ion Battery Studies. <i>Advanced Energy Materials</i> , 2018 , 8, 1702588	21.8	88
104	Probing the Complexities of Structural Changes in Layered Oxide Cathode Materials for Li-Ion Batteries during Fast Charge-Discharge Cycling and Heating. <i>Accounts of Chemical Research</i> , 2018 , 51, 290-298	24.3	63
103	TiS2 as a high performance potassium ion battery cathode in ether-based electrolyte. <i>Energy Storage Materials</i> , 2018 , 12, 216-222	19.4	102
102	Electro-plating and stripping behavior on lithium metal electrode with ordered three-dimensional structure. <i>Nano Energy</i> , 2018 , 45, 463-470	17.1	54
101	High-Capacity Cathode Material with High Voltage for Li-Ion Batteries. <i>Advanced Materials</i> , 2018 , 30, 1705575	24	256
100	An Abnormal 3.7 Volt O3-Type Sodium-Ion Battery Cathode. <i>Angewandte Chemie</i> , 2018 , 130, 8310-8315	3.6	19
99	An Abnormal 3.7 Volt O3-Type Sodium-Ion Battery Cathode. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 8178-8183	16.4	82
98	A facile electrode preparation method for accurate electrochemical measurements of double-side-coated electrode from commercial Li-ion batteries. <i>Journal of Power Sources</i> , 2018 , 384, 172-177	8.9	5
97	Structure-Induced Reversible Anionic Redox Activity in Na Layered Oxide Cathode. <i>Joule</i> , 2018 , 2, 125-140	49.8	216
96	Evolution of redox couples in Li- and Mn-rich cathode materials and mitigation of voltage fade by reducing oxygen release. <i>Nature Energy</i> , 2018 , 3, 690-698	62.3	435

95	A high-performance rechargeable LiD 2 battery with quasi-solid-state electrolyte. <i>Chinese Physics B</i> , 2018 , 27, 078201	1.2	8
94	Exposing {010} Active Facets by Multiple-Layer Oriented Stacking Nanosheets for High-Performance Capacitive Sodium-Ion Oxide Cathode. <i>Advanced Materials</i> , 2018 , 30, e1803765	24	92
93	Improved electrochemical performances of high voltage LiCoO ₂ with tungsten doping. <i>Chinese Physics B</i> , 2018 , 27, 088202	1.2	7
92	Synchrotron Radiation Nanoscale X-ray Imaging Technology And Scientific Big Data Mining Assist Energy Materials Research. <i>Microscopy and Microanalysis</i> , 2018 , 24, 542-543	0.5	
91	Interfaces Between Cathode and Electrolyte in Solid State Lithium Batteries: Challenges and Perspectives. <i>Frontiers in Chemistry</i> , 2018 , 6, 616	5	105
90	Chemomechanical interplay of layered cathode materials undergoing fast charging in lithium batteries. <i>Nano Energy</i> , 2018 , 53, 753-762	17.1	105
89	Suppressing the voltage decay of low-cost P2-type iron-based cathode materials for sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 20795-20803	13	25
88	Homogeneous Interface Conductivity for Lithium Dendrite-Free Anode. <i>ACS Energy Letters</i> , 2018 , 3, 2259-226681	22	1
87	Suppressing Surface Lattice Oxygen Release of Li-Rich Cathode Materials via Heterostructured Spinel Li Mn O Coating. <i>Advanced Materials</i> , 2018 , 30, e1801751	24	222
86	Stabilizing Cathode Materials of Lithium-Ion Batteries by Controlling Interstitial Sites on the Surface. <i>Chem</i> , 2018 , 4, 1685-1695	16.2	45
85	In situ/operando synchrotron-based X-ray techniques for lithium-ion battery research. <i>NPG Asia Materials</i> , 2018 , 10, 563-580	10.3	167
84	In Situ Atomic-Scale Observation of Electrochemical Delithiation Induced Structure Evolution of LiCoO Cathode in a Working All-Solid-State Battery. <i>Journal of the American Chemical Society</i> , 2017 , 139, 4274-4277	16.4	109
83	Excellent Comprehensive Performance of Na-Based Layered Oxide Benefiting from the Synergetic Contributions of Multimetal Ions. <i>Advanced Energy Materials</i> , 2017 , 7, 1700189	21.8	69
82	In situ Visualization of State-of-Charge Heterogeneity within a LiCoO ₂ Particle that Evolves upon Cycling at Different Rates. <i>ACS Energy Letters</i> , 2017 , 2, 1240-1245	20.1	115
81	In Situ Neutron Diffraction Studies of the Ion Exchange Synthesis Mechanism of LiMgPON: Evidence for a Hidden Phase Transition. <i>Journal of the American Chemical Society</i> , 2017 , 139, 9192-9202	16.4	13
80	Designing Air-Stable O ₃ -Type Cathode Materials by Combined Structure Modulation for Na-Ion Batteries. <i>Journal of the American Chemical Society</i> , 2017 , 139, 8440-8443	16.4	219
79	Ti-Substituted NaNi Mn Ti O Cathodes with Reversible O ₃ -P ₃ Phase Transition for High-Performance Sodium-Ion Batteries. <i>Advanced Materials</i> , 2017 , 29, 1700210	24	233
78	High-capacity lithium-rich cathode oxides with multivalent cationic and anionic redox reactions for lithium ion batteries. <i>Science China Chemistry</i> , 2017 , 60, 1483-1493	7.9	21

77	Synchrotron X-ray Analytical Techniques for Studying Materials Electrochemistry in Rechargeable Batteries. <i>Chemical Reviews</i> , 2017 , 117, 13123-13186	68.1	291
76	Honeycomb-Ordered Na ₃ Ni _{1.5} M _{0.5} BiO ₆ (M = Ni, Cu, Mg, Zn) as High-Voltage Layered Cathodes for Sodium-Ion Batteries. <i>ACS Energy Letters</i> , 2017 , 2, 2715-2722	20.1	54
75	Correlations between Transition-Metal Chemistry, Local Structure, and Global Structure in Li ₂ Ru _{0.5} Mn _{0.5} O ₃ Investigated in a Wide Voltage Window. <i>Chemistry of Materials</i> , 2017 , 29, 9053-9065	9.6	28
74	Al ₂ O ₃ surface coating on LiCoO ₂ through a facile and scalable wet-chemical method towards high-energy cathode materials withstanding high cutoff voltages. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 24361-24370	13	89
73	Na-Ion Intercalation and Charge Storage Mechanism in 2D Vanadium Carbide. <i>Advanced Energy Materials</i> , 2017 , 7, 1700959	21.8	113
72	Finding a Needle in the Haystack: Identification of Functionally Important Minority Phases in an Operating Battery. <i>Nano Letters</i> , 2017 , 17, 7782-7788	11.5	33
71	A Self-Forming Composite Electrolyte for Solid-State Sodium Battery with Ultralong Cycle Life. <i>Advanced Energy Materials</i> , 2017 , 7, 1601196	21.8	158
70	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. <i>Nano Energy</i> , 2016 , 28, 164-177	17.1	36
69	Quantification of Honeycomb Number-Type Stacking Faults: Application to Na ₃ Ni ₂ BiO ₆ Cathodes for Na-Ion Batteries. <i>Inorganic Chemistry</i> , 2016 , 55, 8478-92	5.1	38
68	Utilizing Environmental Friendly Iron as a Substitution Element in Spinel Structured Cathode Materials for Safer High Energy Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2016 , 6, 1501662	21.8	25
67	A highly active and stable hydrogen evolution catalyst based on pyrite-structured cobalt phosphosulfide. <i>Nature Communications</i> , 2016 , 7, 10771	17.4	363
66	Visualizing non-equilibrium lithiation of spinel oxide via in situ transmission electron microscopy. <i>Nature Communications</i> , 2016 , 7, 11441	17.4	143
65	Strategies to curb structural changes of lithium/transition metal oxide cathode materials & the changes Effects on thermal & cycling stability. <i>Chinese Physics B</i> , 2016 , 25, 018205	1.2	13
64	Explore the Effects of Microstructural Defects on Voltage Fade of Li- and Mn-Rich Cathodes. <i>Nano Letters</i> , 2016 , 16, 5999-6007	11.5	55
63	High-Rate Charging Induced Intermediate Phases and Structural Changes of Layer-Structured Cathode for Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2016 , 6, 1600597	21.8	84
62	Sodium iron hexacyanoferrate with high Na content as a Na-rich cathode material for Na-ion batteries. <i>Nano Research</i> , 2015 , 8, 117-128	10	221
61	Effects of Mg doping on the remarkably enhanced electrochemical performance of Na ₃ V ₂ (PO ₄) ₃ cathode materials for sodium ion batteries. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 9578-9586	13	197
60	Probing Reversible Multielectron Transfer and Structure Evolution of Li _{1.2} Cr _{0.4} Mn _{0.4} O ₂ Cathode Material for Li-Ion Batteries in a Voltage Range of 1.0-4.8 V. <i>Chemistry of Materials</i> , 2015 , 27, 5238-5252	9.6	49

59	Effects of structural defects on the electrochemical activation of Li_2MnO_3 . <i>Nano Energy</i> , 2015 , 16, 143-151	15.1	50
58	Ti-substituted tunnel-type NaMnO_2 oxide as a negative electrode for aqueous sodium-ion batteries. <i>Nature Communications</i> , 2015 , 6, 6401	17.4	265
57	Direct Observation of the Redistribution of Sulfur and Polysulfides in LiS Batteries During the First Cycle by In Situ X-Ray Fluorescence Microscopy. <i>Advanced Energy Materials</i> , 2015 , 5, 1500072	21.8	74
56	O_3 -type layered transition metal oxide $\text{Na}(\text{NiCoFeTi})_{1/4}\text{O}_2$ as a high rate and long cycle life cathode material for sodium ion batteries. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 23261-23267	13	76
55	Sodiation Kinetics of Metal Oxide Conversion Electrodes: A Comparative Study with Lithiation. <i>Nano Letters</i> , 2015 , 15, 5755-63	11.5	100
54	Insight into the Atomic Structure of High-Voltage Spinel $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ Cathode Material in the First Cycle. <i>Chemistry of Materials</i> , 2015 , 27, 292-303	9.6	116
53	Quantitative Chromatographic Determination of Dissolved Elemental Sulfur in the Non-Aqueous Electrolyte for Lithium-Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2015 , 162, A203-A206	3.9	44
52	Probing the Mechanism of High Capacitance in 2D Titanium Carbide Using In Situ X-Ray Absorption Spectroscopy. <i>Advanced Energy Materials</i> , 2015 , 5, 1500589	21.8	374
51	A Novel High Capacity Positive Electrode Material with Tunnel-Type Structure for Aqueous Sodium-Ion Batteries. <i>Advanced Energy Materials</i> , 2015 , 5, 1501005	21.8	127
50	$\text{FeO}_{0.7}\text{F}_{1.3}/\text{C}$ Nanocomposite as a High-Capacity Cathode Material for Sodium-Ion Batteries. <i>Advanced Functional Materials</i> , 2015 , 25, 696-703	15.6	50
49	Sodium-Ion Batteries: $\text{FeO}_{0.7}\text{F}_{1.3}/\text{C}$ Nanocomposite as a High-Capacity Cathode Material for Sodium-Ion Batteries (Adv. Funct. Mater. 5/2015). <i>Advanced Functional Materials</i> , 2015 , 25, 823-823	15.6	
48	Quantitative and Qualitative Determination of Polysulfide Species in the Electrolyte of a Lithium-Sulfur Battery using HPLC ESI/MS with One-Step Derivatization. <i>Advanced Energy Materials</i> , 2015 , 5, 1401888	21.8	40
47	Transitions from near-surface to interior redox upon lithiation in conversion electrode materials. <i>Nano Letters</i> , 2015 , 15, 1437-44	11.5	92
46	Direct Observation of Sulfur Radicals as Reaction Media in Lithium Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2015 , 162, A474-A478	3.9	155
45	Feasibility of Using Li_2MoO_3 in Constructing Li-Rich High Energy Density Cathode Materials. <i>Chemistry of Materials</i> , 2014 , 26, 3256-3262	9.6	89
44	Ionic Conduction in Cubic $\text{Na}_3\text{TiP}_3\text{O}_{19}$, a Secondary Na-Ion Battery Cathode with Extremely Low Volume Change. <i>Chemistry of Materials</i> , 2014 , 26, 3295-3305	9.6	60
43	Understanding the Rate Capability of High-Energy-Density Li-Rich Layered $\text{Li}_{1.2}\text{Ni}_{0.15}\text{Co}_{0.1}\text{Mn}_{0.55}\text{O}_2$ Cathode Materials. <i>Advanced Energy Materials</i> , 2014 , 4, 1300950	21.8	393
42	Oxygen-Release-Related Thermal Stability and Decomposition Pathways of $\text{Li}_x\text{Ni}_{0.5}\text{Mn}_{1.5}\text{O}_4$ Cathode Materials. <i>Chemistry of Materials</i> , 2014 , 26, 1108-1118	9.6	64

41	Tuning charge-discharge induced unit cell breathing in layer-structured cathode materials for lithium-ion batteries. <i>Nature Communications</i> , 2014 , 5, 5381	17.4	145
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