Xi-Qian Yu

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Structural and chemical evolution in layered oxide cathodes of lithium-ion batteries revealed by synchrotron techniques. National Science Review, 2022, 9, nwab146.	4.6	27
2	Probing lattice defects in crystalline battery cathode using hard X-ray nanoprobe with data-driven modeling. Energy Storage Materials, 2022, 45, 647-655.	9.5	7
3	All-in-One Ionic–Electronic Dual-Carrier Conducting Framework Thickening All-Solid-State Electrode. ACS Energy Letters, 2022, 7, 766-772.	8.8	7
4	Solid Polymer Electrolyte Reinforced with a Li _{1.3} Al _{0.3} Ti _{1.7} (PO ₄) ₃ -Coated Separator for All-Solid-State Lithium Batteries. ACS Applied Materials & Interfaces, 2022, 14, 1195-1202.	4.0	33
5	Coordination-Assisted Precise Construction of Metal Oxide Nanofilms for High-Performance Solid-State Batteries. Journal of the American Chemical Society, 2022, 144, 2179-2188.	6.6	38
6	Topologically protected oxygen redox in a layered manganese oxide cathode for sustainable batteries. Nature Sustainability, 2022, 5, 214-224.	11.5	44
7	Controlling Li deposition below the interface. EScience, 2022, 2, 47-78.	25.0	110
8	Screening LiMn ₂ O ₄ Surface Modification Schemes under Theoretical Guidance. ACS Applied Materials & Interfaces, 2022, 14, 10353-10362.	4.0	14
9	Anomalous Thermal Decomposition Behavior of Polycrystalline LiNi _{0.8} Mn _{0.1} Co _{0.1} O ₂ in PEOâ€Based Solid Polymer Electrolyte. Advanced Functional Materials, 2022, 32, .	7.8	19
10	Raising the Intrinsic Safety of Layered Oxide Cathodes by Surface Reâ€Lithiation with LLZTO Garnetâ€Type Solid Electrolytes. Advanced Materials, 2022, 34, e2200655.	11.1	30
11	Exploiting the synergistic effects of multiple components with a uniform design method for developing low-temperature electrolytes. Energy Storage Materials, 2022, 50, 598-605.	9.5	22
12	The Role of Electron Localization in Covalency and Electrochemical Properties of Lithiumâ€ion Battery Cathode Materials. Advanced Functional Materials, 2021, 31, 2001633.	7.8	21
13	Enhancing cycle stability of Li metal anode by using polymer separators coated with Ti-containing solid electrolytes. Rare Metals, 2021, 40, 1357-1365.	3.6	27
14	Na10SnSb2S12: A nanosized air-stable solid electrolyte for all-solid-state sodium batteries. Chemical Engineering Journal, 2021, 420, 127692.	6.6	36
15	Sub-nanometric Manganous Oxide Clusters in Nitrogen Doped Mesoporous Carbon Nanosheets for High-Performance Lithium–Sulfur Batteries. Nano Letters, 2021, 21, 700-708.	4.5	60
16	Oxygen-redox reactions in LiCoO2 cathode without O–O bonding during charge-discharge. Joule, 2021, 5, 720-736.	11.7	56
17	Wholeâ€Voltageâ€Range Oxygen Redox in P2‣ayered Cathode Materials for Sodiumâ€lon Batteries. Advanced Materials, 2021, 33, e2008194.	11.1	108
18	Challenges and Recent Advances in High Capacity Liâ€Rich Cathode Materials for High Energy Density Lithiumâ€Ion Batteries. Advanced Materials, 2021, 33, e2005937.	11.1	253

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19	Enhancing the Thermal Stability of NASICON Solid Electrolyte Pellets against Metallic Lithium by Defect Modification. ACS Applied Materials & Interfaces, 2021, 13, 18743-18749.	4.0	29
20	First-Principles Simulations for the Surface Evolution and Mn Dissolution in the Fully Delithiated Spinel LiMn ₂ 0 ₄ . Langmuir, 2021, 37, 5252-5259.	1.6	17
21	Synergistic Effect of Temperature and Electrolyte Concentration on Solidâ€State Interphase for Highâ€Performance Lithium Metal Batteries. Advanced Energy and Sustainability Research, 2021, 2, 2100010.	2.8	2
22	Releasing oxygen from the bulk. Nature Energy, 2021, 6, 572-573.	19.8	32
23	Gaseous electrolyte additive BF3 for high-power Li/CFx primary batteries. Energy Storage Materials, 2021, 38, 482-488.	9.5	52
24	Fast Li Plating Behavior Probed by X-ray Computed Tomography. Nano Letters, 2021, 21, 5254-5261.	4.5	19
25	Reaction Mechanisms of Ta-Substituted Cubic Li ₇ La ₃ Zr ₂ O ₁₂ with Solvents During Storage. ACS Applied Materials & Interfaces, 2021, 13, 38384-38393.	4.0	14
26	In Situ X-ray Absorption Near-Edge Structure Calculation and Machine Learning Analysis of the Structural Evolution in Lithium-Ion Battery Cathode Materials. Journal of Physical Chemistry C, 2021, 125, 18979-18987.	1.5	8
27	Amorphous anion-rich titanium polysulfides for aluminum-ion batteries. Science Advances, 2021, 7, .	4.7	63
28	The role of structural defects in commercial lithium-ion batteries. Cell Reports Physical Science, 2021, 2, 100554.	2.8	32
29	Boron-doped sodium layered oxide for reversible oxygen redox reaction in Na-ion battery cathodes. Nature Communications, 2021, 12, 5267.	5.8	122
30	Advanced Transmission X-ray Microscopy for Energy Materials and Devices. , 2021, , 45-64.		0
31	Mitigating the Kinetic Hindrance of Singleâ€Crystalline Niâ€Rich Cathode via Surface Gradient Penetration of Tantalum. Angewandte Chemie, 2021, 133, 26739-26743.	1.6	14
32	Mitigating the Kinetic Hindrance of Singleâ€Crystalline Niâ€Rich Cathode via Surface Gradient Penetration of Tantalum. Angewandte Chemie - International Edition, 2021, 60, 26535-26539.	7.2	80
33	In Situ Visualization of Li-Whisker with Grating-Interferometry-Based Tricontrast X-ray Microtomography. , 2021, 3, 1786-1792.		8
34	Challenges and Recent Advances in High Capacity Liâ€Rich Cathode Materials for High Energy Density Lithiumâ€Ion Batteries (Adv. Mater. 50/2021). Advanced Materials, 2021, 33, .	11.1	3
35	Local structure adaptability through multi cations for oxygen redox accommodation in Li-Rich layered oxides. Energy Storage Materials, 2020, 24, 384-393.	9.5	101
36	Investigations on the Fundamental Process of Cathode Electrolyte Interphase Formation and Evolution of High-Voltage Cathodes. ACS Applied Materials & Interfaces, 2020, 12, 2319-2326.	4.0	186

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37	Approaching Practically Accessible Solid-State Batteries: Stability Issues Related to Solid Electrolytes and Interfaces. Chemical Reviews, 2020, 120, 6820-6877.	23.0	891
38	Neutron-based characterization techniques for lithium-ion battery research. Chinese Physics B, 2020, 29, 018201.	0.7	31
39	Insights of the anionic redox in P2–Na0.67Ni0.33Mn0.67O2. Nano Energy, 2020, 78, 105285.	8.2	49
40	Local spring effect in titanium-based layered oxides. Energy and Environmental Science, 2020, 13, 4371-4380.	15.6	13
41	Size effect on the growth and pulverization behavior of Si nanodomains in SiO anode. Nano Energy, 2020, 78, 105101.	8.2	51
42	Stacking Faults Hinder Lithium Insertion in Li ₂ RuO ₃ . Advanced Energy Materials, 2020, 10, 2002631.	10.2	22
43	Hierarchical Defect Engineering for LiCoO2 through Low-Solubility Trace Element Doping. CheM, 2020, 6, 2759-2769.	5.8	74
44	4.2Ââ€∢V poly(ethylene oxide)-based all-solid-state lithium batteries with superior cycle and safety performance. Energy Storage Materials, 2020, 32, 191-198.	9.5	77
45	Quantifying redox heterogeneity in single-crystalline LiCoO ₂ cathode particles. Journal of Synchrotron Radiation, 2020, 27, 713-719.	1.0	12
46	Depth-dependent valence stratification driven by oxygen redox in lithium-rich layered oxide. Nature Communications, 2020, 11, 6342.	5.8	34
47	Machine-learning-revealed statistics of the particle-carbon/binder detachment in lithium-ion battery cathodes. Nature Communications, 2020, 11, 2310.	5.8	143
48	The Thermal Stability of Lithium Solid Electrolytes with Metallic Lithium. Joule, 2020, 4, 812-821.	11.7	197
49	Suppressing transition metal dissolution and deposition in lithium-ion batteries using oxide solid electrolyte coated polymer separator*. Chinese Physics B, 2020, 29, 088201.	0.7	6
50	An In Situ Formed Surface Coating Layer Enabling LiCoO ₂ with Stable 4.6 V Highâ€Voltage Cycle Performances. Advanced Energy Materials, 2020, 10, 2001413.	10.2	201
51	Dualâ€Defects Adjusted Crystalâ€Field Splitting of LaCo _{1â^'<i>x</i>} Ni _{<i>x</i>} O _{3â^'<i>î´</i>} Hollow Multishelled Structures for Efficient Oxygen Evolution. Angewandte Chemie - International Edition, 2020, 59, 19691-19695	7.2	80
52	Realizing long-term cycling stability and superior rate performance of 4.5ÂV–LiCoO2 by aluminum doped zinc oxide coating achieved by a simple wet-mixing method. Journal of Power Sources, 2020, 470, 228423.	4.0	57
53	Mn Ion Dissolution Mechanism for Lithium-Ion Battery with LiMn ₂ O ₄ Cathode: <i>In Situ</i> Ultraviolet–Visible Spectroscopy and <i>Ab Initio</i> Molecular Dynamics Simulations. Journal of Physical Chemistry Letters, 2020, 11, 3051-3057.	2.1	60
54	Dualâ€Defects Adjusted Crystalâ€Field Splitting of LaCo _{1â^'<i>x</i>} Ni _{<i>x</i>} O _{3â^'<i>î´</i>} Hollow Multishelled Structures for Efficient Oxygen Evolution. Angewandte Chemie, 2020, 132, 19859-19863.	1.6	5

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55	Low-temperature fusion fabrication of Li-Cu alloy anode with in situ formed 3D framework of inert LiCu nanowires for excellent Li storage performance. Science Bulletin, 2020, 65, 1907-1915.	4.3	50
56	Increasing Poly(ethylene oxide) Stability to 4.5 V by Surface Coating of the Cathode. ACS Energy Letters, 2020, 5, 826-832.	8.8	192
57	Enabling Stable Cycling of 4.2 V Highâ€Voltage Allâ€Solidâ€State Batteries with PEOâ€Based Solid Electrolyte. Advanced Functional Materials, 2020, 30, 1909392.	7.8	204
58	<i>In situ</i> synthesis of a nickel concentration gradient structure of Ni-rich LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ with promising superior electrochemical properties at high cut-off voltage. Nanoscale, 2020, 12, 11182-11191.	2.8	22
59	A stabilized PEO-based solid electrolyte <i>via</i> a facile interfacial engineering method for a high voltage solid-state lithium metal battery. Chemical Communications, 2020, 56, 5633-5636.	2.2	43
60	Characterization Techniques for Lithium Metal Anodes at Multiple Spatial Scales. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2020, .	2.2	4
61	Structural and mechanistic revelations on high capacity cation-disordered Li-rich oxides for rechargeable Li-ion batteries. Energy Storage Materials, 2019, 16, 354-363.	9.5	94
62	Li–Ti Cation Mixing Enhanced Structural and Performance Stability of Liâ€Rich Layered Oxide. Advanced Energy Materials, 2019, 9, 1901530.	10.2	76
63	In-situ visualization of lithium plating in all-solid-state lithium-metal battery. Nano Energy, 2019, 63, 103895.	8.2	109
64	Surface-to-Bulk Redox Coupling through Thermally Driven Li Redistribution in Li- and Mn-Rich Layered Cathode Materials. Journal of the American Chemical Society, 2019, 141, 12079-12086.	6.6	47
65	Artificial solid electrolyte interphase based on polyacrylonitrile for homogenous and dendrite-free deposition of lithium metal. Chinese Physics B, 2019, 28, 078202.	0.7	1
66	An Ordered Ni ₆ â€Ring Superstructure Enables a Highly Stable Sodium Oxide Cathode. Advanced Materials, 2019, 31, e1903483.	11.1	65
67	A dual-phase Li–Ca alloy with a patternable and lithiophilic 3D framework for improving lithium anode performance. Journal of Materials Chemistry A, 2019, 7, 22377-22384.	5.2	42
68	Stabilizing the Oxygen Lattice and Reversible Oxygen Redox Chemistry through Structural Dimensionality in Lithiumâ€Rich Cathode Oxides. Angewandte Chemie - International Edition, 2019, 58, 4323-4327.	7.2	114
69	Stabilizing the Oxygen Lattice and Reversible Oxygen Redox Chemistry through Structural Dimensionality in Lithiumâ€Rich Cathode Oxides. Angewandte Chemie, 2019, 131, 4367-4371.	1.6	13
70	Influence of carbon coating on the electrochemical performance of SiO@C/graphite composite anode materials*. Chinese Physics B, 2019, 28, 068201.	0.7	6
71	Trace doping of multiple elements enables stable battery cycling of LiCoO2 at 4.6 V. Nature Energy, 2019, 4, 594-603.	19.8	572
72	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*. Chinese Physics B, 2019, 28, 068202.	0.7	16

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73	Safe Lithiumâ€Metal Anodes for Liâ^'O ₂ Batteries: From Fundamental Chemistry to Advanced Characterization and Effective Protection. Batteries and Supercaps, 2019, 2, 638-658.	2.4	67
74	Building aqueous K-ion batteries for energy storage. Nature Energy, 2019, 4, 495-503.	19.8	630
75	Suppression of Monoclinic Phase Transitions of O3-Type Cathodes Based on Electronic Delocalization for Na-Ion Batteries. ACS Applied Materials & amp; Interfaces, 2019, 11, 22067-22073.	4.0	48
76	Lithium metal batteries capable of stable operation at elevated temperature. Energy Storage Materials, 2019, 23, 646-652.	9.5	87
77	Anomalous metal segregation in lithium-rich material provides design rules for stable cathode in lithium-ion battery. Nature Communications, 2019, 10, 1650.	5.8	60
78	Exploring reaction dynamics in lithium–sulfur batteries by time-resolved <i>operando</i> sulfur K-edge X-ray absorption spectroscopy. Chemical Communications, 2019, 55, 4993-4996.	2.2	9
79	Anionic Redox Reaction-Induced High-Capacity and Low-Strain Cathode with Suppressed Phase Transition. Joule, 2019, 3, 612.	11.7	3
80	Reconstructed Orthorhombic V2O5 Polyhedra for Fast Ion Diffusion in K-Ion Batteries. CheM, 2019, 5, 168-179.	5.8	174
81	Anionic Redox Reaction-Induced High-Capacity and Low-Strain Cathode with Suppressed Phase Transition. Joule, 2019, 3, 503-517.	11.7	262
82	Decreasing transition metal triggered oxygen redox activity in Na-deficient oxides. Energy Storage Materials, 2019, 20, 395-400.	9.5	58
83	A P2/P3 composite layered cathode for high-performance Na-ion full batteries. Nano Energy, 2019, 55, 143-150.	8.2	142
84	Advanced Characterization Techniques in Promoting Mechanism Understanding for Lithium–Sulfur Batteries. Advanced Functional Materials, 2018, 28, 1707543.	7.8	81
85	Na ⁺ /vacancy disordering promises high-rate Na-ion batteries. Science Advances, 2018, 4, eaar6018.	4.7	341
86	Dynamic evolution of cathode electrolyte interphase (CEI) on high voltage LiCoO2 cathode and its interaction with Li anode. Energy Storage Materials, 2018, 14, 1-7.	9.5	307
87	Surface-protected LiCoO2 with ultrathin solid oxide electrolyte film for high-voltage lithium ion batteries and lithium polymer batteries. Journal of Power Sources, 2018, 388, 65-70.	4.0	139
88	Advanced Characterization Techniques for Sodiumâ€lon Battery Studies. Advanced Energy Materials, 2018, 8, 1702588.	10.2	122
89	Probing the Complexities of Structural Changes in Layered Oxide Cathode Materials for Li-Ion Batteries during Fast Charge–Discharge Cycling and Heating. Accounts of Chemical Research, 2018, 51, 290-298.	7.6	78
90	TiS2 as a high performance potassium ion battery cathode in ether-based electrolyte. Energy Storage Materials, 2018, 12, 216-222.	9.5	129

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91	Electro-plating and stripping behavior on lithium metal electrode with ordered three-dimensional structure. Nano Energy, 2018, 45, 463-470.	8.2	81
92	High apacity Cathode Material with High Voltage for Liâ€lon Batteries. Advanced Materials, 2018, 30, 1705575.	11.1	333
93	An Abnormal 3.7â€Volt O3â€Type Sodiumâ€ion Battery Cathode. Angewandte Chemie, 2018, 130, 8310-8315.	1.6	23
94	An Abnormal 3.7â€Volt O3â€Type Sodiumâ€lon Battery Cathode. Angewandte Chemie - International Edition, 2018, 57, 8178-8183.	7.2	109
95	A facile electrode preparation method for accurate electrochemical measurements of double-side-coated electrode from commercial Li-ion batteries. Journal of Power Sources, 2018, 384, 172-177.	4.0	6
96	Structure-Induced Reversible Anionic Redox Activity in Na Layered Oxide Cathode. Joule, 2018, 2, 125-140.	11.7	311
97	Synchrotron Radiation Nanoscale X-ray Imaging Technology And Scientific Big Data Mining Assist Energy Materials Research. Microscopy and Microanalysis, 2018, 24, 542-543.	0.2	0
98	Interfaces Between Cathode and Electrolyte in Solid State Lithium Batteries: Challenges and Perspectives. Frontiers in Chemistry, 2018, 6, 616.	1.8	175
99	Chemomechanical interplay of layered cathode materials undergoing fast charging in lithium batteries. Nano Energy, 2018, 53, 753-762.	8.2	173
100	Suppressing the voltage decay of low-cost P2-type iron-based cathode materials for sodium-ion batteries. Journal of Materials Chemistry A, 2018, 6, 20795-20803.	5.2	54
101	Homogeneous Interface Conductivity for Lithium Dendrite-Free Anode. ACS Energy Letters, 2018, 3, 2259-2266.	8.8	124
102	Suppressing Surface Lattice Oxygen Release of Liâ€Rich Cathode Materials via Heterostructured Spinel Li ₄ Mn ₅ O ₁₂ Coating. Advanced Materials, 2018, 30, e1801751.	11.1	348
103	Stabilizing Cathode Materials of Lithium-Ion Batteries by Controlling Interstitial Sites on the Surface. CheM, 2018, 4, 1685-1695.	5.8	63
104	In situ/operando synchrotron-based X-ray techniques for lithium-ion battery research. NPG Asia Materials, 2018, 10, 563-580.	3.8	261
105	Evolution of redox couples in Li- and Mn-rich cathode materials and mitigation of voltage fade by reducing oxygen release. Nature Energy, 2018, 3, 690-698.	19.8	675
106	A high-performance rechargeable Li–O ₂ battery with quasi-solid-state electrolyte. Chinese Physics B, 2018, 27, 078201.	0.7	14
107	Exposing {010} Active Facets by Multipleâ€Layer Oriented Stacking Nanosheets for Highâ€Performance Capacitive Sodiumâ€Ion Oxide Cathode. Advanced Materials, 2018, 30, e1803765.	11.1	142
108	Improved electrochemical performances of high voltage LiCoO ₂ with tungsten doping. Chinese Physics B, 2018, 27, 088202.	0.7	12

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109	In Situ Atomic-Scale Observation of Electrochemical Delithiation Induced Structure Evolution of LiCoO ₂ Cathode in a Working All-Solid-State Battery. Journal of the American Chemical Society, 2017, 139, 4274-4277.	6.6	142
110	Excellent Comprehensive Performance of Naâ€Based Layered Oxide Benefiting from the Synergetic Contributions of Multimetal Ions. Advanced Energy Materials, 2017, 7, 1700189.	10.2	82
111	In situ Visualization of State-of-Charge Heterogeneity within a LiCoO ₂ Particle that Evolves upon Cycling at Different Rates. ACS Energy Letters, 2017, 2, 1240-1245.	8.8	159
112	<i>In Situ</i> Neutron Diffraction Studies of the Ion Exchange Synthesis Mechanism of Li ₂ Mg ₂ P ₃ O ₉ N: Evidence for a Hidden Phase Transition. Journal of the American Chemical Society, 2017, 139, 9192-9202.	6.6	19
113	Designing Air-Stable O3-Type Cathode Materials by Combined Structure Modulation for Na-Ion Batteries. Journal of the American Chemical Society, 2017, 139, 8440-8443.	6.6	303
114	Tiâ€&ubstituted NaNi _{0.5} Mn _{0.5â€} <i>_x</i> Ti <i>_x</i> O ₂ Cathodes with Reversible O3â`'P3 Phase Transition for Highâ€Performance Sodiumâ€Ion Batteries. Advanced Materials, 2017, 29, 1700210.	11.1	309
115	High-capacity lithium-rich cathode oxides with multivalent cationic and anionic redox reactions for lithium ion batteries. Science China Chemistry, 2017, 60, 1483-1493.	4.2	26
116	Synchrotron X-ray Analytical Techniques for Studying Materials Electrochemistry in Rechargeable Batteries. Chemical Reviews, 2017, 117, 13123-13186.	23.0	390
117	Honeycomb-Ordered Na ₃ Ni _{1.5} M _{0.5} BiO ₆ (M = Ni, Cu,) Tj ET 2715-2722.	Qq1 1 0.7 8.8	'84314 rgB 70
118	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. Chemistry of Materials, 2017, 29, 9053-9065.	3.2	40
119	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. Journal of Materials Chemistry A, 2017, 5, 24361-24370.	5.2	127
120	Naâ€ion Intercalation and Charge Storage Mechanism in 2D Vanadium Carbide. Advanced Energy Materials, 2017, 7, 1700959.	10.2	168
121	Finding a Needle in the Haystack: Identification of Functionally Important Minority Phases in an Operating Battery. Nano Letters, 2017, 17, 7782-7788.	4.5	42
122	A Selfâ€Forming Composite Electrolyte for Solidâ€State Sodium Battery with Ultralong Cycle Life. Advanced Energy Materials, 2017, 7, 1601196.	10.2	231
123	Visualizing non-equilibrium lithiation of spinel oxide via in situ transmission electron microscopy. Nature Communications, 2016, 7, 11441.	5.8	162
124	Strategies to curb structural changes of lithium/transition metal oxide cathode materials & the changes' effects on thermal & cycling stability. Chinese Physics B, 2016, 25, 018205.	0.7	13
125	Explore the Effects of Microstructural Defects on Voltage Fade of Li- and Mn-Rich Cathodes. Nano Letters, 2016, 16, 5999-6007.	4.5	64
126	Highâ€Rate Charging Induced Intermediate Phases and Structural Changes of Layerâ€Structured Cathode for Lithiumâ€Ion Batteries. Advanced Energy Materials, 2016, 6, 1600597.	10.2	110

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127	Structural integrity—Searching the key factor to suppress the voltage fade of Li-rich layered cathode materials through 3D X-ray imaging and spectroscopy techniques. Nano Energy, 2016, 28, 164-171.	8.2	44
128	Quantification of Honeycomb Number-Type Stacking Faults: Application to Na ₃ Ni ₂ BiO ₆ Cathodes for Na-Ion Batteries. Inorganic Chemistry, 2016, 55, 8478-8492.	1.9	51
129	Utilizing Environmental Friendly Iron as a Substitution Element in Spinel Structured Cathode Materials for Safer High Energy Lithium″on Batteries. Advanced Energy Materials, 2016, 6, 1501662.	10.2	35
130	A highly active and stable hydrogen evolution catalyst based on pyrite-structured cobalt phosphosulfide. Nature Communications, 2016, 7, 10771.	5.8	418
131	Structural Evolution of Spinel Iron Oxide during Nonequilibrium Lithiation. ECS Meeting Abstracts, 2016, , .	0.0	0
132	Probing the Mechanism of High Capacitance in 2D Titanium Carbide Using In Situ Xâ€Ray Absorption Spectroscopy. Advanced Energy Materials, 2015, 5, 1500589.	10.2	521
133	A Novel High Capacity Positive Electrode Material with Tunnelâ€Type Structure for Aqueous Sodiumâ€lon Batteries. Advanced Energy Materials, 2015, 5, 1501005.	10.2	161
134	FeO _{0.7} F _{1.3} /C Nanocomposite as a Highâ€Capacity Cathode Material for Sodiumâ€ion Batteries. Advanced Functional Materials, 2015, 25, 696-703.	7.8	59
135	Sodiumâ€lon Batteries: FeO _{0.7} F _{1.3} /C Nanocomposite as a High apacity Cathode Material for Sodiumâ€lon Batteries (Adv. Funct. Mater. 5/2015). Advanced Functional Materials, 2015, 25, 823-823.	7.8	0
136	Quantitative and Qualitative Determination of Polysulfide Species in the Electrolyte of a Lithium–Sulfur Battery using HPLC ESI/MS with One‣tep Derivatization. Advanced Energy Materials, 2015, 5, 1401888.	10.2	43
137	Transitions from Near-Surface to Interior Redox upon Lithiation in Conversion Electrode Materials. Nano Letters, 2015, 15, 1437-1444.	4.5	97
138	Direct Observation of Sulfur Radicals as Reaction Media in Lithium Sulfur Batteries. Journal of the Electrochemical Society, 2015, 162, A474-A478.	1.3	178
139	Sodium iron hexacyanoferrate with high Na content as a Na-rich cathode material for Na-ion batteries. Nano Research, 2015, 8, 117-128.	5.8	292
140	Effects of Mg doping on the remarkably enhanced electrochemical performance of Na ₃ V ₂ (PO ₄) ₃ cathode materials for sodium ion batteries. Journal of Materials Chemistry A, 2015, 3, 9578-9586.	5.2	236
141	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. Chemistry of Materials, 2015, 27, 5238-5252.	3.2	57
142	Effects of structural defects on the electrochemical activation of Li2MnO3. Nano Energy, 2015, 16, 143-151.	8.2	73
143	Ti-substituted tunnel-type Na0.44MnO2 oxide as a negative electrode for aqueous sodium-ion batteries. Nature Communications, 2015, 6, 6401.	5.8	316
144	Direct Observation of the Redistribution of Sulfur and Polysufides in Li–S Batteries During the First Cycle by In Situ Xâ€Ray Fluorescence Microscopy. Advanced Energy Materials, 2015, 5, 1500072.	10.2	84

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145	O3-type layered transition metal oxide Na(NiCoFeTi) _{1/4} O ₂ as a high rate and long cycle life cathode material for sodium ion batteries. Journal of Materials Chemistry A, 2015, 3, 23261-23267.	5.2	95
146	Sodiation Kinetics of Metal Oxide Conversion Electrodes: A Comparative Study with Lithiation. Nano Letters, 2015, 15, 5755-5763.	4.5	122
147	Insight into the Atomic Structure of High-Voltage Spinel LiNi _{0.5} Mn _{1.5} O ₄ Cathode Material in the First Cycle. Chemistry of Materials, 2015, 27, 292-303.	3.2	151
148	Quantitative Chromatographic Determination of Dissolved Elemental Sulfur in the Non-Aqueous Electrolyte for Lithium-Sulfur Batteries. Journal of the Electrochemical Society, 2015, 162, A203-A206.	1.3	55
149	A highly reversible, low-strain Mg-ion insertion anode material for rechargeable Mg-ion batteries. NPG Asia Materials, 2014, 6, e120-e120.	3.8	130
150	Structural Changes and Thermal Stability of Charged LiNi _{<i>x</i>} Mn _{<i>y</i>} Co _{<i>z</i>} O ₂ Cathode Materials Studied by Combined <i>In Situ</i> Time-Resolved XRD and Mass Spectroscopy. ACS Applied Materials & amp; Interfaces, 2014, 6, 22594-22601.	4.0	731
151	Feasibility of Using Li ₂ MoO ₃ in Constructing Li-Rich High Energy Density Cathode Materials. Chemistry of Materials, 2014, 26, 3256-3262.	3.2	106
152	Ionic Conduction in Cubic Na ₃ TiP ₃ O ₉ N, a Secondary Na-Ion Battery Cathode with Extremely Low Volume Change. Chemistry of Materials, 2014, 26, 3295-3305.	3.2	68
153	Understanding the Rate Capability of Highâ€Energyâ€Density Liâ€Rich Layered Li _{1.2} Ni _{0.15} Co _{0.1} Mn _{0.55} O ₂ Cathode Materials. Advanced Energy Materials, 2014, 4, 1300950.	10.2	480
154	Oxygen-Release-Related Thermal Stability and Decomposition Pathways of Li _{<i>x</i>} Ni _{0.5} Mn _{1.5} O ₄ Cathode Materials. Chemistry of Materials, 2014, 26, 1108-1118.	3.2	75
155	Tuning charge–discharge induced unit cell breathing in layer-structured cathode materials for lithium-ion batteries. Nature Communications, 2014, 5, 5381.	5.8	180
156	Tuning the electrochemical performances of anthraquinone organic cathode materials for Li-ion batteries through the sulfonic sodium functional group. RSC Advances, 2014, 4, 19878-19882.	1.7	110
157	Remarkably Improved Electrode Performance of Bulk MnS by Forming a Solid Solution with FeS – Understanding the Li Storage Mechanism. Advanced Functional Materials, 2014, 24, 5557-5566.	7.8	49
158	Identifying the Critical Role of Li Substitution in P2–Na _{<i>x</i>} [Li _{<i>y</i>} Ni _{<i>z</i>} Mn _{1–<i>y</i>–<i>z</i> (0 < <i>x</i>, <i>y</i>, <i>z</i> < 1) Intercalation Cathode Materials for High-Energy Na-Ion Batteries. Chemistry of Materials, 2014, 26, 1260-1269.}]0<	sub>2
159	Role of Surface Structure on Li-Ion Energy Storage Capacity of Two-Dimensional Transition-Metal Carbides. Journal of the American Chemical Society, 2014, 136, 6385-6394.	6.6	1,164
160	A long-life lithium-ion battery with a highly porous TiNb ₂ O ₇ anode for large-scale electrical energy storage. Energy and Environmental Science, 2014, 7, 2220-2226.	15.6	312
161	Combining In Situ Synchrotron Xâ€Ray Diffraction and Absorption Techniques with Transmission Electron Microscopy to Study the Origin of Thermal Instability in Overcharged Cathode Materials for Lithiumâ€lon Batteries. Advanced Functional Materials, 2013, 23, 1047-1063.	7.8	458
162	Electrochemical properties of P2-phase Na0.74CoO2 compounds as cathode material for rechargeable sodium-ion batteries. Electrochimica Acta, 2013, 87, 388-393.	2.6	140

#	Article	IF	CITATIONS
163	A zero-strain layered metal oxide as the negative electrode for long-life sodium-ion batteries. Nature Communications, 2013, 4, 2365.	5.8	515
164	Correlating Structural Changes and Gas Evolution during the Thermal Decomposition of Charged Li _{<i>x</i>} Ni _{0.8} Co _{0.15} Al _{0.05} O ₂ Cathode Materials. Chemistry of Materials, 2013, 25, 337-351.	3.2	317
165	A Size-Dependent Sodium Storage Mechanism in Li ₄ Ti ₅ O ₁₂ Investigated by a Novel Characterization Technique Combining in Situ X-ray Diffraction and Chemical Sodiation. Nano Letters, 2013, 13, 4721-4727.	4.5	212
166	Divalent Iron Nitridophosphates: A New Class of Cathode Materials for Li-Ion Batteries. Chemistry of Materials, 2013, 25, 3929-3931.	3.2	23
167	Origin of additional capacities in metal oxide lithium-ion battery electrodes. Nature Materials, 2013, 12, 1130-1136.	13.3	635
168	Triplite LiFeSO4F as cathode material for Li-ion batteries. Journal of Power Sources, 2013, 244, 716-720.	4.0	18
169	Phase transition behavior of NaCrO2 during sodium extraction studied by synchrotron-based X-ray diffraction and absorption spectroscopy. Journal of Materials Chemistry A, 2013, 1, 11130.	5.2	84
170	Sodium Storage and Transport Properties in Layered Na ₂ Ti ₃ O ₇ for Roomâ€Temperature Sodiumâ€Ion Batteries. Advanced Energy Materials, 2013, 3, 1186-1194.	10.2	456
171	Interplay between two-phase and solid solution reactions in high voltage spinel cathode material for lithium ion batteries. Journal of Power Sources, 2013, 242, 736-741.	4.0	24
172	Cathode Materials: Combining In Situ Synchrotron Xâ€Ray Diffraction and Absorption Techniques with Transmission Electron Microscopy to Study the Origin of Thermal Instability in Overcharged Cathode Materials for Lithiumâ€Ion Batteries (Adv. Funct. Mater. 8/2013). Advanced Functional Materials, 2013, 23, 1046-1046.	7.8	7
173	High rate delithiation behaviour of LiFePO4 studied by quick X-ray absorption spectroscopy. Chemical Communications, 2012, 48, 11537.	2.2	53
174	Shape evolution of patterned amorphous and polycrystalline silicon microarray thin film electrodes caused by lithium insertion and extraction. Journal of Power Sources, 2012, 216, 131-138.	4.0	117
175	Electrochemical decomposition of Li2CO3 in NiO–Li2CO3 nanocomposite thin film and powder electrodes. Journal of Power Sources, 2012, 218, 113-118.	4.0	93
176	α-MnO2 as a cathode material for rechargeable Mg batteries. Electrochemistry Communications, 2012, 23, 110-113.	2.3	292
177	Enhanced Li+ ion transport in LiNi0.5Mn1.5O4 through control of site disorder. Physical Chemistry Chemical Physics, 2012, 14, 13515.	1.3	167
178	Si-Cu Thin Film Electrode with Kirkendall Voids Structure for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2012, 159, A2076-A2081.	1.3	26
179	Lithium storage performance in ordered mesoporous MoS2 electrode material. Microporous and Mesoporous Materials, 2012, 151, 418-423.	2.2	173
180	A new in situ synchrotron X-ray diffraction technique to study the chemical delithiation of LiFePO4. Chemical Communications, 2011, 47, 7170.	2.2	36

#	Article	IF	CITATIONS
181	Amorphous Hierarchical Porous GeO _{<i>x</i>} as High-Capacity Anodes for Li Ion Batteries with Very Long Cycling Life. Journal of the American Chemical Society, 2011, 133, 20692-20695.	6.6	288
182	Alumina oated Patterned Amorphous Silicon as the Anode for a Lithiumâ€Ion Battery with High Coulombic Efficiency. Advanced Materials, 2011, 23, 4938-4941.	11.1	397
183	Kinetic analysis on LiFePO4 thin films by CV, GITT, and EIS. Electrochimica Acta, 2011, 56, 4869-4875.	2.6	435
184	Electrochromic Behavior of Transparent Li[sub 4]Ti[sub 5]O[sub 12]/FTO Electrode. Electrochemical and Solid-State Letters, 2010, 13, J99.	2.2	24
185	Nanocrystalline MnO thin film anode for lithium ion batteries with low overpotential. Electrochemistry Communications, 2009, 11, 791-794.	2.3	170
186	Needle-like LiFePO4 thin films prepared by an off-axis pulsed laser deposition technique. Thin Solid Films, 2009, 517, 2618-2622.	0.8	29
187	Electrochemical performance of LiFePO4 thin films with different morphology and crystallinity. Electrochimica Acta, 2009, 54, 6565-6569.	2.6	38
188	Reversible lithium storage in LiF/Ti nanocomposites. Physical Chemistry Chemical Physics, 2009, 11, 9497.	1.3	61
189	Li-storage in LiFe1/4Mn1/4Co1/4Ni1/4PO4 solid solution. Electrochemistry Communications, 2008, 10, 1347-1350.	2.3	43
190	Overpotential and electrochemical impedance analysis on Cr2O3 thin film and powder electrode in rechargeable lithium batteries. Solid State Ionics, 2008, 179, 2390-2395.	1.3	34