Before Li Ion Batteries

Chemical Reviews 118, 11433-11456 DOI: 10.1021/acs.chemrev.8b00422

Citation Report

#	Article	IF	CITATIONS
1	Enabling High Performance Potassiumâ€Based Dualâ€Graphite Battery Cells by Highly Concentrated Electrolytes. Batteries and Supercaps, 2019, 2, 992-1006.	2.4	39
2	Identifying the components of the solid–electrolyte interphase in Li-ion batteries. Nature Chemistry, 2019, 11, 789-796.	6.6	331
3	Inspirations from Chinese Ancient Wisdom: Strategies toward Stable Interfaces in Batteries. Matter, 2019, 1, 300-301.	5.0	2
4	Fluor und Lithium: Ideale Partner für Elektrolyte in wiederaufladbaren Hochleistungsbatterien. Angewandte Chemie, 2019, 131, 16124-16147.	1.6	31
5	Crumpled Nitrogen-Doped Graphene-Wrapped Phosphorus Composite as a Promising Anode for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 30858-30864.	4.0	50
6	In Situ Electrochemical Synthesis of Novel Lithium-Rich Organic Cathodes for All-Organic Li-Ion Full Batteries. ACS Applied Materials & Interfaces, 2019, 11, 32987-32993.	4.0	21
7	Metalâ€Organicâ€Frameworkâ€Based Cathodes for Enhancing the Electrochemical Performances of Batteries: A Review. ChemElectroChem, 2019, 6, 5358-5374.	1.7	36
8	Electrodeposited Cu/MWCNT composite-film: a potential current collector of silicon-based negative-electrodes for Li-Ion batteries. RSC Advances, 2019, 9, 21939-21945.	1.7	12
9	Designing Graphiteâ€Based Positive Electrodes and Their Properties in Dualâ€Ion Batteries Using Particle Sizeâ€Adjusted Active Materials. Energy Technology, 2019, 7, 1900528.	1.8	9
10	Intercalation chemistry of graphite: alkali metal ions and beyond. Chemical Society Reviews, 2019, 48, 4655-4687.	18.7	534
11	<i>In situ</i> formation of a multicomponent inorganic-rich SEI layer provides a fast charging and high specific energy Li-metal battery. Journal of Materials Chemistry A, 2019, 7, 17782-17789.	5.2	95
12	Cyclophosphazene-based hybrid polymer electrolytes obtained <i>via</i> epoxy–amine reaction for high-performance all-solid-state lithium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 18871-18879.	5.2	48
13	Recent Advances in Aerosolâ€Assisted Spray Processes for the Design and Fabrication of Nanostructured Metal Chalcogenides for Sodiumâ€ion Batteries. Chemistry - an Asian Journal, 2019, 14, 3127-3140.	1.7	19
14	Fluorine and Lithium: Ideal Partners for Highâ€Performance Rechargeable Battery Electrolytes. Angewandte Chemie - International Edition, 2019, 58, 15978-16000.	7.2	243
15	A safe and non-flammable sodium metal battery based on an ionic liquid electrolyte. Nature Communications, 2019, 10, 3302.	5.8	173
16	Tetrahydrothiophene 1-oxide as highly effective co-solvent for propylene carbonate-based electrolytes. Journal of Power Sources, 2019, 437, 226881.	4.0	9
17	Challenges and recent advancements of functionalization of two-dimensional nanostructured molybdenum trioxide and dichalcogenides. Nanoscale, 2019, 11, 15709-15738.	2.8	27
18	Butyronitrile-Based Electrolytes for Fast Charging of Lithium-Ion Batteries. Energies, 2019, 12, 2869.	1.6	17

#	Article	IF	CITATIONS
19	Intercalation pseudocapacitance in a NASICON-structured Na ₂ CrTi(PO ₄) ₃ @carbon nanocomposite: towards high-rate and long-lifespan sodium-ion-based energy storage. Journal of Materials Chemistry A, 2019, 7, 20604-20613.	5.2	18
20	Recent advances in understanding dendrite growth on alkali metal anodes. EnergyChem, 2019, 1, 100003.	10.1	146
21	High Capacity Utilization of Li Metal Anodes by Application of Celgard Separator-Reinforced Ternary Polymer Electrolyte. Journal of the Electrochemical Society, 2019, 166, A2142-A2150.	1.3	26
22	Enabling High-Voltage Lithium-Metal Batteries under Practical Conditions. Joule, 2019, 3, 1662-1676.	11.7	598
23	Ligand-Dependent Energetics for Dehydrogenation: Implications in Li-Ion Battery Electrolyte Stability and Selective Oxidation Catalysis of Hydrogen-Containing Molecules. Chemistry of Materials, 2019, 31, 5464-5474.	3.2	28
24	Bismuth Nanoparticle@Carbon Composite Anodes for Ultralong Cycle Life and Highâ€Rate Sodiumâ€lon Batteries. Advanced Materials, 2019, 31, e1904771.	11.1	201
25	A Coaxialâ€Interweaved Hybrid Lithium Metal Anode for Longâ€Lifespan Lithium Metal Batteries. Advanced Energy Materials, 2019, 9, 1901932.	10.2	73
26	Plating/Stripping Behavior of Actual Lithium Metal Anode. Advanced Energy Materials, 2019, 9, 1902254.	10.2	168
27	Roomâ€Temperature Liquid Metal Confined in MXene Paper as a Flexible, Freestanding, and Binderâ€Free Anode for Nextâ€Generation Lithiumâ€Ion Batteries. Small, 2019, 15, e1903214.	5.2	79
28	Exploiting Mechanistic Solvation Kinetics for Dualâ€Graphite Batteries with High Power Output at Extremely Low Temperature. Angewandte Chemie - International Edition, 2019, 58, 18892-18897.	7.2	117
29	Building better zinc-ion batteries: A materials perspective. EnergyChem, 2019, 1, 100022.	10.1	153
30	In Situ Volume Change Studies of Lithium Metal Electrode under Different Pressure. Journal of the Electrochemical Society, 2019, 166, A3675-A3678.	1.3	13
31	Exploiting Mechanistic Solvation Kinetics for Dualâ€Graphite Batteries with High Power Output at Extremely Low Temperature. Angewandte Chemie, 2019, 131, 19068-19073.	1.6	26
32	An Approach for Pre-Lithiation of Li _{1+<i>x</i>} Ni _{0.5} Mn _{1.5} O ₄ Cathodes Mitigating Active Lithium Loss. Journal of the Electrochemical Society, 2019, 166, A3531-A3538.	1.3	28
33	Architecting hierarchical shell porosity of hollow prussian blueâ€derived iron oxide for enhanced Li storage. Journal of Microscopy, 2019, 276, 53-62.	0.8	7
34	Phosphorizationâ€Induced Void ontaining Fe 3 O 4 Nanoparticles Enabling Low Lithiation/Delithiation Potential for Highâ€Performance Lithiumâ€Ion Batteries. ChemElectroChem, 2019, 6, 5060-5069.	1.7	10
35	Enabling reversible redox reactions in electrochemical cells using protected LiAl intermetallics as lithium metal anodes. Science Advances, 2019, 5, eaax5587.	4.7	84
36	On-chip micro/nano devices for energy conversion and storage. Nano Today, 2019, 28, 100764.	6.2	33

#	Article	IF	CITATIONS
37	Synthesis and Electrochemical Energy Storage Applications of Micro/Nanostructured Spherical Materials. Nanomaterials, 2019, 9, 1207.	1.9	15
38	The Role of Electrolyte Additives on the Interfacial Chemistry and Thermal Reactivity of Si-Anode-Based Li-Ion Battery. ACS Applied Energy Materials, 2019, 2, 6513-6527.	2.5	46
39	Li-free Cathode Materials for High Energy Density Lithium Batteries. Joule, 2019, 3, 2086-2102.	11.7	239
40	Probing and quantifying cathode charge heterogeneity in Li ion batteries. Journal of Materials Chemistry A, 2019, 7, 23628-23661.	5.2	55
41	Utilization of Petroleum Coke Soot as Energy Storage Material. Energies, 2019, 12, 3195.	1.6	3
42	Shedding X-ray Light on the Interfacial Electrochemistry of Silicon Anodes for Li-Ion Batteries. Accounts of Chemical Research, 2019, 52, 2673-2683.	7.6	25
43	A paradigm of storage batteries. Energy and Environmental Science, 2019, 12, 3203-3224.	15.6	154
44	Nonflammable Electrolytes for Lithium Ion Batteries Enabled by Ultraconformal Passivation Interphases. ACS Energy Letters, 2019, 4, 2529-2534.	8.8	112
45	Understanding the impact of calcination time of high-voltage spinel Li1+Ni0.5Mn1.5O4 on structure and electrochemical behavior. Electrochimica Acta, 2019, 325, 134901.	2.6	14
46	Molecular Brush with Dense PEG Side Chains: Design of a Well-Defined Polymer Electrolyte for Lithium-Ion Batteries. Macromolecules, 2019, 52, 7234-7243.	2.2	72
47	Tunable pseudocapacitive contribution by dimension control in nanocrystalline-constructed (Mg _{0.2} Co _{0.2} Ni _{0.2} Cu _{0.2} Zn _{0.2})O solid solutions to achieve superior lithium-storage properties. RSC Advances, 2019, 9, 28908-28915.	1.7	36
48	Salt-concentrated electrolytes for graphite anode in potassium ion battery. Solid State Ionics, 2019, 341, 115050.	1.3	33
49	Bifunctional Lithium Carboxylate for Stabilizing Both Lithium-Metal Anode and High-Voltage Cathode in Ether Electrolyte. ACS Applied Materials & amp; Interfaces, 2019, 11, 39715-39721.	4.0	5
50	Rambutan peel based hard carbons as anode materials for sodium ion battery. Fullerenes Nanotubes and Carbon Nanostructures, 2019, 27, 953-960.	1.0	18
51	Interfacial engineering of Ag nanodots/MoSe2 nanoflakes/Cu(OH)2 hybrid-electrode for lithium-ion battery. Journal of Colloid and Interface Science, 2019, 557, 635-643.	5.0	12
52	Cathodic electrodeposition of porous MnO ₂ film as binder-free cathode for high performance rechargeable Zinc-ion battery. Functional Materials Letters, 2019, 12, 1950073.	0.7	11
53	Scalable, Large-Area Printing of Pore-Array Electrodes for Ultrahigh Power Electrochemical Energy Storage. ACS Applied Materials & Interfaces, 2019, 11, 37859-37866.	4.0	14
54	Biomass-Derived Carbon Paper to Sandwich Magnetite Anode for Long-Life Li-Ion Battery. ACS Nano, 2019, 13, 11901-11911.	7.3	82

#	Article	IF	CITATIONS
55	Suppressing lithium dendrite formation by slowing its desolvation kinetics. Chemical Communications, 2019, 55, 13211-13214.	2.2	43
56	Diffusionless charge transfer. Nature Energy, 2019, 4, 93-94.	19.8	20
57	Hierarchically porous CuO nano-labyrinths as binder-free anodes for long-life and high-rate lithium ion batteries. Nano Energy, 2019, 59, 229-236.	8.2	67
58	Reversible Anion Storage in a Metal-Organic Framework for Dual-Ion Battery Systems. Journal of the Electrochemical Society, 2019, 166, A5474-A5482.	1.3	50
59	Potassium perylene-tetracarboxylate with two-electron redox behaviors as a highly stable organic anode for K-ion batteries. Chemical Communications, 2019, 55, 1801-1804.	2.2	84
60	Unravelling charge/discharge and capacity fading mechanisms in dual-graphite battery cells using an electron inventory model. Energy Storage Materials, 2019, 21, 414-426.	9.5	50
61	The Power of Stoichiometry: Conditioning and Speciation of MgCl ₂ /AlCl ₃ in Tetraethylene Glycol Dimethyl Ether-Based Electrolytes. ACS Applied Materials & Interfaces, 2019, 11, 24057-24066.	4.0	34
62	Electrochemical Performance of Large-Grained NaCrO ₂ Cathode Materials for Na-Ion Batteries Synthesized by Decomposition of Na ₂ Cr ₂ O ₇ ·2H ₂ O. Chemistry of Materials, 2019, 31, 5214-5223.	3.2	34
63	A 2D/2D graphitic carbon nitride/N-doped graphene hybrid as an effective polysulfide mediator in lithium–sulfur batteries. Materials Chemistry Frontiers, 2019, 3, 1807-1815.	3.2	19
64	Alloy Anodes for Rechargeable Alkali-Metal Batteries: Progress and Challenge. , 2019, 1, 217-229.		135
65	Physicochemical and Electrochemical Properties of 1,1,2,2â€Tetrafluoroethylâ€2,2,3,3â€Tetrafluoropropyl Ether as a Coâ€Solvent for Highâ€Voltage Lithiumâ€Ion Electrolytes. ChemElectroChem, 2019, 6, 3747-3755.	1.7	28
66	Building an Interfacial Framework: Li/Garnet Interface Stabilization through a Cu ₆ Sn ₅ Layer. ACS Energy Letters, 2019, 4, 1725-1731.	8.8	71
67	Hierarchical porous CoO /carbon nanocomposite for enhanced lithium storage. Journal of Electroanalytical Chemistry, 2019, 847, 113202.	1.9	6
68	Improved Interfaces of Mechanically Modified Lithium Electrodes with Solid Polymer Electrolytes. Advanced Materials Interfaces, 2019, 6, 1900518.	1.9	14
69	Surface-Modified Tin Nanoparticles and Their Electrochemical Performance in Lithium Ion Battery Cells. ACS Applied Nano Materials, 2019, 2, 3577-3589.	2.4	19
70	Facile preparation of novel and active 2D nanosheets from non-layered and traditionally non-exfoliable earth-abundant materials. Journal of Materials Chemistry A, 2019, 7, 15411-15419.	5.2	28
71	Polypyrrole-Modified Prussian Blue Cathode Material for Potassium Ion Batteries via In Situ Polymerization Coating. ACS Applied Materials & Interfaces, 2019, 11, 22339-22345.	4.0	75
72	Self-Assembled Porous-Silica within N-Doped Carbon Nanofibers as Ultra-flexible Anodes for Soft Lithium Batteries. IScience, 2019, 16, 122-132.	1.9	31

#	Article	IF	CITATIONS
73	Chromatographic Techniques in the Research Area of Lithium Ion Batteries: Current State-of-the-Art. Separations, 2019, 6, 26.	1.1	44
74	1-ethyl-3-methylimidazolium tetrafluoroborate (EMI-BF4) as an ionic liquid-type electrolyte additive to enhance the low-temperature performance of LiNi0.5Co0.2Mn0.3O2/graphite batteries. Electrochimica Acta, 2019, 317, 146-154.	2.6	46
75	LiPF ₆ Stabilizer and Transition-Metal Cation Scavenger: A Bifunctional Bipyridine-Based Ligand for Lithium-Ion Battery Application. Chemistry of Materials, 2019, 31, 4025-4033.	3.2	22
76	Research and development of advanced battery materials in China. Energy Storage Materials, 2019, 23, 144-153.	9.5	168
77	Recent progress in liquid electrolytes for lithium metal batteries. Current Opinion in Electrochemistry, 2019, 17, 106-113.	2.5	66
78	Effective Chemical Prelithiation Strategy for Building a Silicon/Sulfur Li-Ion Battery. ACS Energy Letters, 2019, 4, 1717-1724.	8.8	151
79	Crumpled Ti3C2Tx (MXene) nanosheet encapsulated LiMn2O4 for high performance lithium-ion batteries. Electrochimica Acta, 2019, 309, 362-370.	2.6	56
80	Machine Learning the Voltage of Electrode Materials in Metal-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 18494-18503.	4.0	104
81	Bowl-like double carbon layer architecture of hollow carbon@FePO4@reduced graphene oxide composite as high-performance cathodes for sodium and lithium ion batteries. Journal of Alloys and Compounds, 2019, 795, 34-44.	2.8	22
82	Lithium-Powder Based Electrodes Modified with Znl ₂ for Enhanced Electrochemical Performance of Lithium-Metal Batteries. Journal of the Electrochemical Society, 2019, 166, A1400-A1407.	1.3	14
83	A new HILIC-ICP-SF-MS method for the quantification of organo(fluoro)phosphates as decomposition products of lithium ion battery electrolytes. RSC Advances, 2019, 9, 11413-11419.	1.7	8
84	Siloxane-based polymer electrolytes for solid-state lithium batteries. Energy Storage Materials, 2019, 23, 466-490.	9.5	114
85	Facile Synthesis of Amorphous Ge Supported by Ni Nanopyramid Arrays as an Anode Material for Sodiumâ€ion Batteries. ChemistryOpen, 2019, 8, 298-303.	0.9	19
86	Key Issues Hindering a Practical Lithium-Metal Anode. Trends in Chemistry, 2019, 1, 152-158.	4.4	328
87	Sulfurâ€Based Composite Electrode with Interconnected Mesoporous Carbon for Allâ€ S olidâ€ S tate Lithium–Sulfur Batteries. Energy Technology, 2019, 7, 1900077.	1.8	38
88	Highly Stable and High Rateâ€Performance Naâ€lon Batteries Using Polyanionic Anthraquinone as the Organic Cathode. ChemSusChem, 2019, 12, 2181-2185.	3.6	43
89	Confronting the Challenges of Nextâ€Generation Silicon Anodeâ€Based Lithiumâ€lon Batteries: Role of Designer Electrolyte Additives and Polymeric Binders. ChemSusChem, 2019, 12, 2515-2539.	3.6	170
90	3D Hierarchical Porous Graphene-Based Energy Materials: Synthesis, Functionalization, and Application in Energy Storage and Conversion. Electrochemical Energy Reviews, 2019, 2, 332-371.	13.1	82

	Сітаті	CITATION REPORT	
#	Article	IF	CITATIONS
91	A review of rechargeable batteries for portable electronic devices. InformaÄnÃ-Materiály, 2019, 1, 6-32.	8.5	694
92	Fast Charging Lithium Batteries: Recent Progress and Future Prospects. Small, 2019, 15, e1805389.	5.2	277
93	Electrochromic Poly(chalcogenoviologen)s as Anode Materials for Highâ€Performance Organic Radical Lithiumâ€lon Batteries. Angewandte Chemie, 2019, 131, 8556-8561.	1.6	22
94	Cross Talk between Transition Metal Cathode and Li Metal Anode: Unraveling Its Influence on the Deposition/Dissolution Behavior and Morphology of Lithium. Advanced Energy Materials, 2019, 9, 1900574.	10.2	123
95	The dendrite growth in 3D structured lithium metal anodes: Electron or ion transfer limitation?. Energy Storage Materials, 2019, 23, 556-565.	9.5	126
96	Monochromatic "Photoinitibitorâ€â€Mediated Holographic Photopolymer Electrolytes for Lithiumâ€lor Batteries. Advanced Science, 2019, 6, 1900205.	٦ 5.6	18
97	A novel aqueous ammonium dual-ion battery based on organic polymers. Journal of Materials Chemistry A, 2019, 7, 11314-11320.	5.2	99
98	Electrochromic Poly(chalcogenoviologen)s as Anode Materials for Highâ€Performance Organic Radical Lithiumâ€lon Batteries. Angewandte Chemie - International Edition, 2019, 58, 8468-8473.	7.2	134
99	On the Factors Affecting Aging and Selfâ€Discharge of Lithium–Sulfur Cells. Effect of Positive Electrode Composition. Energy Technology, 2019, 7, 1900134.	1.8	14
100	NMR as a powerful tool to study lithium ion battery electrolytes. Annual Reports on NMR Spectroscopy, 2019, 97, 121-162.	0.7	6
101	A review of polyaniline based materials as anodes for lithiumion batteries. IOP Conference Series: Materials Science and Engineering, 2019, 677, 022115.	0.3	12
102	Reaction Product Analyses of the Most Active "Inactive―Material in Lithium-Ion Batteries—The Electrolyte. I: Themal Stress and Marker Molecules. Chemistry of Materials, 2019, 31, 9970-9976.	3.2	17
103	Reaction Product Analysis of the Most Active "Inactive―Material in Lithium-Ion Batteries—The Electrolyte. II: Battery Operation and Additive Impact. Chemistry of Materials, 2019, 31, 9977-9983.	3.2	27
104	LiMnPO ₄ -olivine deposited on a nanoporous alloy as an additive-free electrode for lithium ion batteries. Dalton Transactions, 2019, 48, 17037-17044.	1.6	2
105	3D architectures with Co ₂ (OH) ₂ CO ₃ nanowires wrapped by reduced graphene oxide as superior rate anode materials for Li-ion batteries. Nanoscale, 2019, 11, 21180-21187.	2.8	25
106	Self-healing and shape-memory solid polymer electrolytes with high mechanical strength facilitated by a poly(vinyl alcohol) matrix. Polymer Chemistry, 2019, 10, 6561-6569.	1.9	51
107	Lithium-ion battery pioneers awarded Chemistry Nobel. Physics Today, 2019, 72, 20-24.	0.3	2
108	A Long Journey of Lithium: From the Big Bang to Our Smartphones. Energy and Environmental Materials, 2019, 2, 229-233.	7.3	55

#	Article	IF	CITATIONS
109	Tuning surface conductivity and stability for high-performance Li- and Mn-rich cathode materials. New Journal of Chemistry, 2019, 43, 18943-18950.	1.4	9
110	Novel zinc–iodine hybrid supercapacitors with a redox iodide ion electrolyte and B, N dual-doped carbon electrode exhibit boosted energy density. Journal of Materials Chemistry A, 2019, 7, 24400-24407.	5.2	68
111	<i>In situ</i> ⁷ Li-NMR analysis of lithium metal surface deposits with varying electrolyte compositions and concentrations. Physical Chemistry Chemical Physics, 2019, 21, 26084-26094.	1.3	41
112	"Allâ€Inâ€One―integrated ultrathin SnS ₂ @3D multichannel carbon matrix power highâ€areal–capacity lithium battery anode. , 2019, 1, 276-288.		47
113	Overcharge Investigations of LiCoO ₂ /Graphite Lithium Ion Batteries with Different Electrolytes. ACS Applied Energy Materials, 2019, 2, 8615-8624.	2.5	14
115	Anion amphiprotic ionic liquids as protic electrolyte matrices allowing sodium metal plating. Chemical Communications, 2019, 55, 12523-12526.	2.2	7
116	Molecular dynamics investigation of reduced ethylene carbonate aggregation at the onset of solid electrolyte interphase formation. Physical Chemistry Chemical Physics, 2019, 21, 22449-22455.	1.3	5
117	The effect of graphitization degree of carbonaceous material on the electrochemical performance for aluminum-ion batteries. RSC Advances, 2019, 9, 38990-38997.	1.7	29
118	Zinc–air batteries: are they ready for prime time?. Chemical Science, 2019, 10, 8924-8929.	3.7	211
119	Probing Electrolyte Solvents at Solid/Liquid Interface Using Gap-Mode Surface-Enhanced Raman Spectroscopy. Journal of the Electrochemical Society, 2019, 166, A178-A187.	1.3	28
120	Past and Present of LiFePO4: From Fundamental Research to Industrial Applications. CheM, 2019, 5, 3-6.	5.8	73
121	Recycling of Lithium From Li-ion Batteries. , 2020, , 546-554.		4
122	The Effects of Mechanical and Thermal Loads during Lithiumâ€lon Pouch Cell Formation and Their Impacts on Process Time. Energy Technology, 2020, 8, 1900118.	1.8	18
123	Capacity Distribution of Large Lithiumâ€lon Battery Pouch Cells in Context with Pilot Production Processes. Energy Technology, 2020, 8, 1900196.	1.8	21
124	Synergetic Coupling of Lithiophilic Sites and Conductive Scaffolds for Dendriteâ€Free Lithium Metal Anodes. Small Methods, 2020, 4, 1900177.	4.6	31
125	Understanding and suppression strategies toward stable Li metal anode for safe lithium batteries. Energy Storage Materials, 2020, 25, 644-678.	9.5	207
126	Towards high-performance lithium metal anodes via the modification of solid electrolyte interphases. Journal of Energy Chemistry, 2020, 45, 7-17.	7.1	74
127	Three dimensional porous frameworks for lithium dendrite suppression. Journal of Energy Chemistry, 2020, 44, 73-89.	7.1	104

#	Article	IF	CITATIONS
128	Poly(phenylacetylene)s bearing thianthrene groups as high-voltage organic cathode materials for lithium batteries. Reactive and Functional Polymers, 2020, 146, 104365.	2.0	20
129	Sb@S–N–C nanocomposite as long-cycle stable anode material for lithium ion batteries. Journal of Alloys and Compounds, 2020, 814, 152161.	2.8	7
130	Design Strategies to Enable the Efficient Use of Sodium Metal Anodes in Highâ€Energy Batteries. Advanced Materials, 2020, 32, e1903891.	11.1	173
131	Promoted rate and cycling capability of Li–S batteries enabled by targeted selection of co-solvent for the electrolyte. Energy Storage Materials, 2020, 25, 131-136.	9.5	23
132	Uniform lithium electrodeposition for stable lithium-metal batteries. Nano Energy, 2020, 67, 104172.	8.2	27
133	Regeneration and reutilization of cathode materials from spent lithium-ion batteries. Chemical Engineering Journal, 2020, 383, 123089.	6.6	213
134	A reality check and tutorial on electrochemical characterization of battery cell materials: How to choose the appropriate cell setup. Materials Today, 2020, 32, 131-146.	8.3	193
135	Dual-ion batteries: The emerging alternative rechargeable batteries. Energy Storage Materials, 2020, 25, 1-32.	9.5	160
136	Lithium ion battery electrolyte degradation of field-tested electric vehicle battery cells – A comprehensive analytical study. Journal of Power Sources, 2020, 447, 227370.	4.0	65
137	Artificial Intelligence Investigation of NMC Cathode Manufacturing Parameters Interdependencies. Batteries and Supercaps, 2020, 3, 60-67.	2.4	93
138	Advanced Materials for Sodiumâ€ion Capacitors with Superior Energy–Power Properties: Progress and Perspectives. Small, 2020, 16, e1902843.	5.2	45
139	MnO nanorods coated by Co-decorated N-doped carbon as anodes for high performance lithium ion batteries. Applied Surface Science, 2020, 504, 144479.	3.1	34
140	A non-aqueous sodium hexafluorophosphate-based electrolyte degradation study: Formation and mitigation of hydrofluoric acid. Journal of Power Sources, 2020, 447, 227363.	4.0	39
141	In Situ Construction of Multibuffer Structure 3D CoSn@SnO x /CoO x @C Anode Material for Ultralong Life Lithium Storage. Energy Technology, 2020, 8, 1900829.	1.8	11
142	Achievements, Challenges, and Prospects of Calcium Batteries. Chemical Reviews, 2020, 120, 6331-6357.	23.0	219
143	Reciprocal space imaging of ionic correlations in intercalation compounds. Nature Materials, 2020, 19, 63-68.	13.3	34
144	Si and Geâ€Based Anode Materials for Liâ€; Naâ€; and Kâ€ion Batteries: A Perspective from Structure to Electrochemical Mechanism. Small, 2020, 16, e1905260.	5.2	133
145	La-doping and carbon-coating collaboratively enhance the cycling and rate properties of LiFeBO3 for Li-ion battery. Chemical Physics Letters, 2020, 741, 137090.	1.2	7

ARTICLE IF CITATIONS Boosting High-Rate Zinc-Storage Performance by the Rational Design of Mn2O3 Nanoporous 14.4 57 146 Architecture Cathode. Nano-Micro Letters, 2020, 12, 14. A mini-review: emerging all-solid-state energy storage electrode materials for flexible devices. 147 2.8 Nanoscale, 2020, 12, 3560-3573. Insights into P2-Type Layered Positive Electrodes for Sodium Batteries: From Long- to Short-Range 148 4.0 25 Order. ACS Applied Materials & amp; Interfaces, 2020, 12, 5017-5024. The Electrolyte Frontier: A Manifesto. Joule, 2020, 4, 281-285. 149 Flexible 3D carbon cloth as a high-performing electrode for energy storage and conversion. 150 2.8 81 Nanoscale, 2020, 12, 5261-5285. A Redoxâ€Active 2D Metal–Organic Framework for Efficient Lithium Storage with Extraordinary High Capacity. Angewandte Chemie, 2020, 132, 5311-5315. 1.6 A Redoxâ€Active 2D Metal–Organic Framework for Efficient Lithium Storage with Extraordinary High 152 7.2 189 Capacity. Angewandte Chemie - International Edition, 2020, 59, 5273-5277. Scalable construction of SiO/wrinkled MXene composite by a simple electrostatic self-assembly 153 4.8 strategy as anode for high-energy lithium-ion batteries. Chinese Chemical Letters, 2020, 31, 980-983. In-situ constructing Na3V2(PO4)2F3/carbon nanocubes for fast ion diffusion with high-performance 154 6.6 53 Na+-storage. Chemical Engineering Journal, 2020, 387, 123952. Selenium sulfide cathode with copper foam interlayer for promising magnesium electrochemistry. 54 Energy Storage Materials, 2020, 26, 23-31. Enabling Highâ€Voltage Lithium Metal Batteries by Manipulating Solvation Structure in Ester 156 1.6 39 Electrolyte. Angewandte Chemie, 2020, 132, 3533-3538. Enabling Highâ€Voltage Lithium Metal Batteries by Manipulating Solvation Structure in Ester 156 Electrolyte. Angewandte Chemie - International Edition, 2020, 59, 3505-3510. Constructing a liquid-metal based self-healing artificial solid electrolyte interface layer for Li metal 158 1.3 22 anode protection in lithium metal battery. Materials Letters, 2020, 262, 127194. Deciphering the paradox between the Co-intercalation of sodium-solvent into graphite and its 159 irreversible capacity. Energy Storage Materials, 2020, 26, 32-39. Realizing Reversible Conversionâ€Alloying of Sb(V) in Polyantimonic Acid for Fast and Durable Lithium― 160 10.2 57 and Potassiumâ€Ion Storage. Advanced Energy Materials, 2020, 10, 1903119. Electrolyte Regulation towards Stable Lithiumâ€Metal Anodes in Lithium–Sulfur Batteries with Sulfurized Polyacrylonitrile Cathodes. Angewandte Chemie - International Edition, 2020, 59, 108 10732-10745. Molybdenum carbide nanostructures for electrocatalytic polysulfide conversion in 162 4.1 19 lithium–polysulfide batteries. Nanoscale Horizons, 2020, 5, 501-506. Tailoring Electrolyte Additives with Synergistic Functional Moieties for Silicon Negative Electrode-Based Lithium Ion Batteries: A Case Study on Lactic Acid <i>O</i>-Carboxyanhydride. 3.2 Chemistry of Materials, 2020, 32, 173-185.

		CITATION REPORT	
#	Article	IF	CITATIONS
164	A metal-free battery working at â^80Â °C. Energy Storage Materials, 2020, 26, 585-592.	9.5	35
165	Bimodal nanoporous NiO@Ni–Si network prepared by dealloying method for stable Li-ion storage Journal of Power Sources, 2020, 449, 227550.	2. 4.0	42
166	Synthesis and Electrochemical Characterization of Lithium Carboxylate 2D Compounds as Highâ€Performance Anodes for Liâ^'Ion Batteries. ChemElectroChem, 2020, 7, 306-313.	1.7	8
167	Probing Li-ion concentration in an operating lithium ion battery using in situ Raman spectroscopy. Journal of Power Sources, 2020, 449, 227361.	4.0	19
168	The intrinsic behavior of lithium fluoride in solid electrolyte interphases on lithium. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 73-79.	3.3	220
169	An Insoluble Anthraquinone Dimer with Nearâ€Plane Structure as a Cathode Material for Lithiumâ€ Batteries. ChemSusChem, 2020, 13, 2436-2442.	łon 3.6	26
170	The reduction of interfacial transfer barrier of Li ions enabled by inorganics-rich solid-electrolyte interphase. Energy Storage Materials, 2020, 28, 401-406.	9.5	55
171	Dioxolanone-Anchored Poly(allyl ether)-Based Cross-Linked Dual-Salt Polymer Electrolytes for High-Voltage Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2020, 12, 567-579.	4.0	31
172	Mechanochemical Synthesis of Fe–Si-Based Anode Materials for High-Energy Lithium Ion Full-Cells ACS Applied Energy Materials, 2020, 3, 743-758.	s. 2.5	35
173	Morphological Reversibility of Modified Li-Based Anodes for Next-Generation Batteries. ACS Energy Letters, 2020, 5, 152-161.	8.8	53
174	Tailored Synthesis of Coralâ€Like CoTiO ₃ /Co ₃ O ₄ /TiO _{ Nanobelts with Superior Lithium Storage Capability. Energy Technology, 2020, 8, 1900774.}	2 1.8	13
175	Improving Electrochemical Stability and Lowâ€Temperature Performance with Water/Acetonitrile Hybrid Electrolytes. Advanced Energy Materials, 2020, 10, 1902654.	10.2	144
176	Electrolyte Regulation towards Stable Lithiumâ€Metal Anodes in Lithium–Sulfur Batteries with Sulfurized Polyacrylonitrile Cathodes. Angewandte Chemie, 2020, 132, 10821-10834.	1.6	80
177	Ceramics for electrochemical storage. , 2020, , 549-709.		21
178	Poly(vinylphenoxazine) as Fast-Charging Cathode Material for Organic Batteries. ACS Sustainable Chemistry and Engineering, 2020, 8, 238-247.	3.2	56
179	From Solidâ€Solution Electrodes and the Rockingâ€Chair Concept to Today's Batteries. Angewand Chemie, 2020, 132, 542-546.	te 1.6	28
180	A compact inorganic layer for robust anode protection in lithiumâ€sulfur batteries. InformaÄnÃ- Materiály, 2020, 2, 379-388.	8.5	197
181	The effect of Sn substitution on the structure and oxygen activity of Na0.67Ni0.33Mn0.67O2 catho materials for sodium ion batteries. Journal of Power Sources, 2020, 449, 227554.	ode 4.0	38

#	Article	IF	CITATIONS
182	Electrode Engineering by Atomic Layer Deposition for Sodiumâ€Ion Batteries: From Traditional to Advanced Batteries. Advanced Functional Materials, 2020, 30, 1906890.	7.8	36
183	Synthesis of porous ZnCo2O4 micro-cube with large tap density and its application in anode for lithium-ion battery. Journal of Alloys and Compounds, 2020, 821, 153289.	2.8	10
184	From Solidâ€Solution Electrodes and the Rockingâ€Chair Concept to Today's Batteries. Angewandte Chemie - International Edition, 2020, 59, 534-538.	7.2	124
185	Emerging interfacial chemistry of graphite anodes in lithium-ion batteries. Chemical Communications, 2020, 56, 14570-14584.	2.2	79
186	High energy lithium ion capacitors using hybrid cathodes comprising electrical double layer and intercalation host multi-layers. Energy Storage Materials, 2020, 33, 408-415.	9.5	18
187	Current status and future perspectives of lithium metal batteries. Journal of Power Sources, 2020, 480, 228803.	4.0	109
188	Prospects of membraneless mixed-reactant microfluidic fuel cells: Evolution through numerical simulation. Renewable and Sustainable Energy Reviews, 2020, 134, 110045.	8.2	13
189	Small Groups, Big Impact: Eliminating Li+ Traps in Single-Ion Conducting Polymer Electrolytes. IScience, 2020, 23, 101417.	1.9	20
190	Sodium plating and stripping from Na-β"-alumina ceramics beyond 1000ÂmA/cm2. Materials Today Energy, 2020, 18, 100515.	2.5	14
191	Stress-resilient electrode materials for lithium-ion batteries: strategies and mechanisms. Chemical Communications, 2020, 56, 13301-13312.	2.2	13
192	Rational design of vanadium chalcogenides for sodium-ion batteries. Journal of Power Sources, 2020, 478, 228769.	4.0	21
193	Propylene carbonate-nitrile solvent blends for thermally stable gel polymer lithium ion battery electrolytes. Journal of Power Sources, 2020, 478, 229047.	4.0	14
194	Bismuth dots imbedded in ultralong nitrogen-doped carbon tubes for highly efficient lithium ion storage. Inorganic Chemistry Frontiers, 2020, 7, 4854-4864.	3.0	4
195	Atomic-scale studies of garnet-type Mg3Fe2Si3O12: Defect chemistry, diffusion and dopant properties. Journal of Power Sources Advances, 2020, 3, 100016.	2.6	2
196	An oxo-verdazyl radical for a symmetrical non-aqueous redox flow battery. Journal of Materials Chemistry A, 2020, 8, 22280-22291.	5.2	34
197	Graphene-Wrapped ZnMn ₂ O ₄ Nanoparticles with Enhanced Performance as Lithium-Ion Battery Anode Materials. Nano, 2020, 15, 2050117.	0.5	3
198	Impact of single vs. blended functional electrolyte additives on interphase formation and overall lithium ion battery performance. Journal of Solid State Electrochemistry, 2020, 24, 3145-3156.	1.2	3
199	Wheat Bran Derived Carbon toward Cost-Efficient and High Performance Lithium Storage. ACS Sustainable Chemistry and Engineering, 2020, 8, 15898-15905.	3.2	11

#	Article	IF	CITATIONS
200	Heteroatom-doped carbon catalysts for zinc–air batteries: progress, mechanism, and opportunities. Energy and Environmental Science, 2020, 13, 4536-4563.	15.6	209
201	Elucidating the Improved Electrolyte Stability with Novel Benzimidazole Salt on the Li Anode Surface: Insights into Interfacial Reactions. Journal of Physical Chemistry C, 2020, 124, 23523-23531.	1.5	8
202	Multifunctional Fluoroethylene Carbonate for Improving High-Temperature Performance of LiNi _{0.8} Mn _{0.1} Co _{0.1} O ₂ SiO _{<i>x</i>} @Graphite Lithium-Ion Batteries. ACS Applied Energy Materials, 2020, 3, 9989-10000.	2.5	19
203	Combining SANS and VSANS to Extend Q-Range for Morphology Investigation of Silicon-Graphite Anodes. Journal of Surface Investigation, 2020, 14, S156-S160.	0.1	2
204	Rational design of FeTiO ₃ /C hybrid nanotubes: promising lithium ion anode with enhanced capacity and cycling performance. Chemical Communications, 2020, 56, 12640-12643.	2.2	10
205	Complexation behaviour of LiCl and LiPF ₆ – model studies in the solid-state and in solution using a bidentate picolyl-based ligand. Chemical Communications, 2020, 56, 13335-13338.	2.2	5
206	Synthesis of polyanionic anthraquinones as new insoluble organic cathodes for organic Na-ion batteries. International Journal of Hydrogen Energy, 2020, 45, 24573-24581.	3.8	15
207	Addition of yttrium oxide as an effective way to enhance the cycling stability of LiCoO2 cathode material for Li-ion batteries. Solid State Ionics, 2020, 355, 115426.	1.3	19
208	Water electrolysers with closed and open electrochemical systems. Nature Materials, 2020, 19, 1140-1150.	13.3	326
209	Accurate regulation of pore distribution and atomic arrangement enabling highly efficient dual-carbon lithium ion capacitors. Journal of Materials Chemistry A, 2020, 8, 22230-22239.	5.2	7
210	A High-Performance Aqueous Zinc-Bromine Static Battery. IScience, 2020, 23, 101348.	1.9	71
211	Identical Materials but Different Effects of Film-Forming Electrolyte Additives in Li Ion Batteries: Performance of a Benchmark System as the Key. Chemistry of Materials, 2020, 32, 6279-6284.	3.2	22
212	Analysis of Carbonate Decomposition During Solid Electrolyte Interphase Formation in Isotope‣abeled Lithium Ion Battery Electrolytes: Extending the Knowledge about Electrolyte Soluble Species. Batteries and Supercaps, 2020, 3, 1183-1192.	2.4	21
213	Chemical Vapor Deposition-Assisted Fabrication of Self-Assembled Co/MnO@C Composite Nanofibers as Advanced Anode Materials for High-Capacity Li-Ion Batteries. Langmuir, 2020, 36, 14342-14351.	1.6	6
214	Data-driven assessment of electrode calendering process by combining experimental results, in silico mesostructures generation and machine learning. Journal of Power Sources, 2020, 480, 229103.	4.0	70
215	Lithium fluorinated sulfonimide-based solid polymer electrolytes for Li LiFePO4 cell: The impact of anionic structure. Solid State Ionics, 2020, 358, 115519.	1.3	16
216	Enabling Ether-Based Electrolytes for Long Cycle Life of Lithium-Ion Batteries at High Charge Voltage. ACS Applied Materials & Interfaces, 2020, 12, 54893-54903.	4.0	35
217	Lithium Metal Anodes with Nonaqueous Electrolytes. Chemical Reviews, 2020, 120, 13312-13348.	23.0	393

#	Article	IF	CITATIONS
218	Construction of an Electron Bridge in Polyoxometalates/Graphene Oxide Ultrathin Nanosheets To Boost the Lithium Storage Performance. Energy & Fuels, 2020, 34, 16968-16977.	2.5	11
219	Coupling–Decoupling Transition between Li ⁺ Transport and Segmental Relaxation in Solid Polymer Electrolytes. ACS Applied Polymer Materials, 2020, 2, 5358-5364.	2.0	9
220	Integrated Composite Polymer Electrolyte Cross-Linked with SiO ₂ -Reinforced Layer for Enhanced Li-Ion Conductivity and Lithium Dendrite Inhibition. ACS Applied Energy Materials, 2020, 3, 8552-8561.	2.5	18
221	Guiding Smooth Li Plating and Stripping by a Spherical Island Model for Lithium Metal Anodes. ACS Applied Materials & Interfaces, 2020, 12, 38098-38105.	4.0	17
222	Electropolymerization Triggered <i>in Situ</i> Surface Modification of Electrode Interphases: Alleviating First-Cycle Lithium Loss in Silicon Anode Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2020, 8, 12788-12798.	3.2	13
223	Sulfur-based redox chemistry for electrochemical energy storage. Coordination Chemistry Reviews, 2020, 422, 213445.	9.5	28
224	The stable lithium metal cell with two-electrode biomass carbon. Electrochimica Acta, 2020, 356, 136824.	2.6	11
225	Mitigating the Shielding Effect of Ether Oxygen in Poly(ethylene glycol) on Boron Atoms in Boronâ€Doped Poly(ethylene glycol) Hybrid Polymer Electrolyte by Introducing Siloxane Spacers. ChemElectroChem, 2020, 7, 3353-3360.	1.7	1
226	Boosting the performance of half/full lithium-ion batteries by designing smart architecture anode of SnS2 nanosheet coating on NiCo2S4 hollow spheres. Journal of Alloys and Compounds, 2020, 847, 156505.	2.8	19
227	Operando X-ray absorption spectroscopy investigations on NaxNi1/3Fe1/3Mn1/3O2 positive electrode materials for sodium and sodium ion batteries. Journal of Power Sources, 2020, 473, 228557.	4.0	11
228	Anode-free rechargeable lithium metal batteries: Progress and prospects. Energy Storage Materials, 2020, 32, 386-401.	9.5	136
229	Performance and behavior of LLZO-based composite polymer electrolyte for lithium metal electrode with high capacity utilization. Nano Energy, 2020, 77, 105196.	8.2	32
230	Interface Engineering for Lithium Metal Anodes in Liquid Electrolyte. Advanced Energy Materials, 2020, 10, 2001257.	10.2	236
231	An In Situ Crossâ€Linked Nonaqueous Polymer Electrolyte for Zincâ€Metal Polymer Batteries and Hybrid Supercapacitors. Small, 2020, 16, e2002528.	5.2	24
232	A facile strategy to reconcile 3D anodes and ceramic electrolytes for stable solid-state Li metal batteries. Energy Storage Materials, 2020, 32, 458-464.	9.5	35
233	Cobalt Oxide Grown on Biomass Carbon as a Threeâ€Dimensional Selfâ€Supporting Negative Electrode with High Area Specific Capacity. ChemistrySelect, 2020, 5, 8998-9004.	0.7	5
234	Quantification of Dead Lithium via In Situ Nuclear Magnetic Resonance Spectroscopy. Cell Reports Physical Science, 2020, 1, 100139.	2.8	67
235	From Liâ€lon Batteries toward Naâ€lon Chemistries: Challenges and Opportunities. Advanced Energy Materials, 2020, 10, 2001310.	10.2	269

#	ARTICLE	IF	Citations
	Cr-Doped Li-Rich Nickel Cobalt Manganese Oxide as a Positive Electrode Material in Li-Ion Batteries to		
236	Enhance Cycling Stability. ACS Applied Energy Materials, 2020, 3, 8646-8657.	2.5	23
237	Realizing high zinc reversibility in rechargeable batteries. Nature Energy, 2020, 5, 743-749.	19.8	658
238	Electrical and electrochemical studies of core–shell structured nanorods of LiMn2O4@PANI composite. Journal of Materials Science: Materials in Electronics, 2020, 31, 19526-19540.	1.1	5
239	Novel Mg7V4O16(OH)2·H2O and Mg3(VO4)2: preparation, characterization, and performance as lithium-ion anode materials. Journal of Materials Science: Materials in Electronics, 2020, 31, 19931-19942.	1.1	0
240	KTiOPO4-structured electrode materials for metal-ion batteries: A review. Journal of Power Sources, 2020, 480, 228840.	4.0	38
241	Yolk–shell structured FeS/MoS ₂ @nitrogen-doped carbon nanocubes with sufficient internal void space as an ultrastable anode for potassium-ion batteries. Journal of Materials Chemistry A, 2020, 8, 23983-23993.	5.2	49
242	Phytoremediation of Soil Contaminated with Lithium Ion Battery Active Materials—A Proof-of-Concept Study. Recycling, 2020, 5, 26.	2.3	8
243	Enabling Stable Highâ€Voltage LiCoO ₂ Operation by Using Synergetic Interfacial Modification Strategy. Advanced Functional Materials, 2020, 30, 2004664.	7.8	119
244	Stabilizing P3â€Type Oxides as Cathodes for Highâ€Rate and Longâ€Life Sodium Ion Batteries by Disordered Distribution of Transition Metals. Small Methods, 2020, 4, 2000422.	4.6	33
245	Solid electrolyte interphase (SEI) in potassium ion batteries. Energy and Environmental Science, 2020, 13, 4583-4608.	15.6	187
246	Li-rich cathodes for rechargeable Li-based batteries: reaction mechanisms and advanced characterization techniques. Energy and Environmental Science, 2020, 13, 4450-4497.	15.6	219
247	Effects of Film Formation on the Electrodeposition of Lithium. ChemElectroChem, 2020, 7, 4336-4342.	1.7	12
248	Diatomiteâ€Đerived Hierarchical Porous Crystallineâ€AmorphousNetwork for Highâ€Performance and Sustainable Si Anodes. Advanced Functional Materials, 2020, 30, 2005956.	7.8	36
249	Polymer electrolytes for rechargeable lithium metal batteries. Sustainable Energy and Fuels, 2020, 4, 5469-5487.	2.5	41
250	Recent Advances of Emerging 2D MXene for Stable and Dendriteâ€Free Metal Anodes. Advanced Functional Materials, 2020, 30, 2004613.	7.8	140
251	Polymer–Inorganic Nanocomposite Coating with High Ionic Conductivity and Transference Number for a Stable Lithium Metal Anode. ACS Applied Materials & Interfaces, 2020, 12, 41620-41626.	4.0	24
252	Facile Fabrication of Polymer Electrolytes via Lithium Salt-Accelerated Thiol-Michael Addition for Lithium-Ion Batteries. Macromolecules, 2020, 53, 7450-7459.	2.2	19
253	Insight into the Bonding and Aggregation of Alkyllithiums by Experimental Charge Density Studies and Energy Decomposition Analyses. Journal of the American Chemical Society, 2020, 142, 15897-15906.	6.6	22

#	Article	IF	CITATIONS
254	Hydrothermal preparing agglomerate LiNi0.8Co0.1Mn0.1O2 cathode material with submicron primary particle for alleviating microcracks. Journal of Power Sources, 2020, 477, 228701.	4.0	34
255	Material balance in the O ₂ electrode of Li–O ₂ cells with a porous carbon electrode and TEGDME-based electrolytes. RSC Advances, 2020, 10, 42971-42982.	1.7	20
256	Potential jumps at transport bottlenecks cause instability of nominally ionic solid electrolytes in electrochemical cells. Acta Materialia, 2020, 199, 264-277.	3.8	38
257	Designing Advanced In Situ Electrode/Electrolyte Interphases for Wide Temperature Operation of 4.5 V Li LiCoO ₂ Batteries. Advanced Materials, 2020, 32, e2004898.	11.1	123
259	Alkali Metal Cations Bonding to Carboxylate Anions: Studies using Mass Spectrometry and Quantum Chemical Calculations. Journal of Physical Chemistry A, 2020, 124, 4390-4399.	1.1	2
260	A retrospective on lithium-ion batteries. Nature Communications, 2020, 11, 2499.	5.8	563
261	Review of the Design of Current Collectors for Improving the Battery Performance in Lithium-Ion and Post-Lithium-Ion Batteries. Electrochem, 2020, 1, 124-159.	1.7	53
262	Hierarchical Li-rich oxide microspheres assembled from {010} exposed primary grains for high-rate lithium-ion batteries. New Journal of Chemistry, 2020, 44, 8486-8493.	1.4	9
263	Sputter coating of lithium metal electrodes with lithiophilic metals for homogeneous and reversible lithium electrodeposition and electrodissolution. Materials Today, 2020, 39, 137-145.	8.3	32
264	Scalable Multilayer Printing of Graphene Interfacial Layers for Ultrahigh Power Lithiumâ€ l on Storage. Energy Technology, 2020, 8, 2000253.	1.8	4
265	A Chronicle Review of Nonsilicon (Sn, Sb, Ge)â€Based Lithium/Sodiumâ€Ion Battery Alloying Anodes. Small Methods, 2020, 4, 2000218.	4.6	220
266	Solid Electrolyte Interphase Evolution on Lithium Metal Electrodes Followed by Scanning Electrochemical Microscopy Under Realistic Battery Cycling Current Densities. ChemElectroChem, 2020, 7, 3590-3596.	1.7	17
267	A review on energy chemistry of fast-charging anodes. Chemical Society Reviews, 2020, 49, 3806-3833.	18.7	323
268	Low-cost 3D porous sea-hedgehog-like NiCo ₂ O ₄ /C as anode for Li-ion battery. Nanotechnology, 2020, 31, 415704.	1.3	8
269	A robust, highly stretchable ion-conducive skin for stable lithium metal batteries. Chemical Engineering Journal, 2020, 396, 125254.	6.6	46
270	In-situ growth of hierarchical N-doped CNTs/Ni Foam scaffold for dendrite-free lithium metal anode. Energy Storage Materials, 2020, 29, 332-340.	9.5	80
271	Impact of the silicon particle size on the pre-lithiation behavior of silicon/carbon composite materials for lithium ion batteries. Journal of Power Sources, 2020, 464, 228224.	4.0	40
272	Reliable liquid electrolytes for lithium metal batteries. Energy Storage Materials, 2020, 30, 113-129.	9.5	92

ARTICLE IF CITATIONS # Superior fast-charging capability of graphite anode via facile surface treatment for lithium-ion 273 2.2 59 batteries. Microporous and Mesoporous Materials, 2020, 305, 110325. Progress and Challenges on Battery Waste Management :A Critical Review. ChemistrySelect, 2020, 5, 274 23 6182-6193. Fast sample preparation for organo(fluoro)phosphate quantification approaches in lithium ion 275 battery electrolytes by means of gas chromatographic techniques. Journal of Chromatography A, 1.8 1 2020, 1624, 461258. Slime-inspired polyacrylic acid-borax crosslinked binder for high-capacity bulk silicon anodes in 4.0 lithium-ion batteries. Journal of Power Sources, 2020, 468, 228365. An asymmetric quasi-solid electrolyte for high-performance Li metal batteries. Chemical 277 2.2 14 Communications, 2020, 56, 7195-7198. Assessing the Oxidation Behavior of EC:DMC Based Electrolyte on Non-Catalytically Active Surface. 278 1.3 24 Journal of the Electrochemical Society, 2020, 167, 080530. Enabling SiO<i>_x</i>/C Anode with High Initial Coulombic Efficiency through a Chemical Pre-Lithiation Strategy for High-Energy-Density Lithium-Ion Batteries. ACS Applied Materials & amp; Interfaces, 2020, 12, 27202-27209. 279 4.0 112 Progress on Lithium Dendrite Suppression Strategies from the Interior to Exterior by Hierarchical 280 5.2 Structure Designs. Small, 2020, 16, e2000699. A Simple and Highly Efficient Method toward High-Density Garnet-Type LLZTO Solid-State Electrolyte. 281 4.0 71 ACS Applied Materials & amp; Interfaces, 2020, 12, 30313-30319. Wetting Phenomena and their Effect on the Electrochemical Performance of Surfaceâ€Tailored Lithium Metal Electrodes in Contact with Crossâ€linked Polymeric Electrolytes. Angewandte Chemie -7.2 International Edition, 2020, 59, 17145-17153. A CO₂-Assisted Sodiumâ€"Phenanthrenequinone Battery. Journal of Physical Chemistry 283 3 2.1 Letters, 2020, 11, 5350-5353. Hollow carbon nanospheres: syntheses and applications for post lithium-ion batteries. Materials 284 3.2 Chemistry Frontiers, 2020, 4, 2283-2306. Single solvent and single salt. Nature Energy, 2020, 5, 498-499. 285 19.8 0 Opportunities and Reality of Aqueous Rechargeable Batteries. Advanced Energy Materials, 2020, 10, 10.2 2001386. On the origin of non-monotonic variation of the lattice parameters of 287 LiNi_{1/3}Co_{1/3}Mn_{1/3}O₂ with lithiation/delithiation: a 5.210 first-principles study. Journal of Materials Chemistry A, 2020, 8, 13832-13841. BenetzungsvorgÄ**r**ge und ihr Einfluss auf die elektrochemischen Eigenschaften von oberflÜhenangepassten Lithiumâ€Metallâ€Elektroden in Kontakt mit quervernetzten Polymerâ€Elektrolyten. Angewandte Chemie, 2020, 132, 17293-17302 289 Why Celluloseâ€Based Electrochemical Energy Storage Devices?. Advanced Materials, 2021, 33, e2000892. 11.1 125 Investigating the oxidation state of Fe from LiFePO₄â€based lithium ion battery cathodes via 290 1.3 capillary electrophoresis. Electrophoresis, 2020, 41, 1549-1556.

#	Article	IF	CITATIONS
291	Engineering cathode-electrolyte interface of graphite to enable ultra long-cycle and high-power dual-ion batteries. Journal of Power Sources, 2020, 471, 228466.	4.0	55
292	A chemically stabilized sulfur cathode for lean electrolyte lithium sulfur batteries. Proceedings of the United States of America, 2020, 117, 14712-14720.	3.3	102
294	Inâ€Plane Lithium Growth Enabled by Artificial Nitrateâ€Rich Layer: Fast Deposition Kinetics and Desolvation/Adsorption Mechanism. Small, 2020, 16, e2000769.	5.2	26
295	Fast Charging Materials for High Power Applications. Advanced Energy Materials, 2020, 10, 2001128.	10.2	136
296	Synthesis of Cu2CO3(OH)2/SnO2@GO composite as novel anode material for lithium ion battery application. Chemical Physics, 2020, 538, 110901.	0.9	2
297	Poly(dihydroxybenzoquinone): its high-density and robust charge storage capability in rechargeable acidic polymer–air batteries. Chemical Communications, 2020, 56, 4055-4058.	2.2	29
298	Sandwich-Structured Ordered Mesoporous Polydopamine/MXene Hybrids as High-Performance Anodes for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 14993-15001.	4.0	48
299	Nonâ€Flammable Fluorinated Phosphorus(III)â€Based Electrolytes for Advanced Lithiumâ€Ion Battery Performance. ChemElectroChem, 2020, 7, 1499-1508.	1.7	13
300	Oxygen redox activity with small voltage hysteresis in Na0.67Cu0.28Mn0.72O2 for sodium-ion batteries. Energy Storage Materials, 2020, 28, 300-306.	9.5	105
301	A Diffusionâ€â€Reaction Competition Mechanism to Tailor Lithium Deposition for Lithiumâ€Metal Batteries. Angewandte Chemie - International Edition, 2020, 59, 7743-7747.	7.2	219
302	Morphological and Chemical Mapping of Columnar Lithium Metal. Chemistry of Materials, 2020, 32, 2803-2814.	3.2	10
303	Poly(Ethylene Oxide)-based Electrolyte for Solid-State-Lithium-Batteries with High Voltage Positive Electrodes: Evaluating the Role of Electrolyte Oxidation in Rapid Cell Failure. Scientific Reports, 2020, 10, 4390.	1.6	162
304	Thickness-Dependent Beneficial Effect of the ZnO Layer on Tailoring the Li/Li ₇ La ₃ Zr ₂ O ₁₂ Interface. ACS Applied Materials & Interfaces, 2020, 12, 13836-13841.	4.0	20
305	The influence of formation temperature on the solid electrolyte interphase of graphite in lithium ion batteries. Journal of Energy Chemistry, 2020, 49, 335-338.	7.1	55
306	NASICON Na ₃ V ₂ (PO ₄) ₃ Enables Quasi-Two-Stage Na ⁺ and Zn ²⁺ Intercalation for Multivalent Zinc Batteries. Chemistry of Materials, 2020, 32, 3028-3035.	3.2	75
307	Carbon Nanotubes Coupled with Metal Ion Diffusion Layers Stabilize Oxide Conversion Reactions in High-Voltage Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 16276-16285.	4.0	14
308	Galvanic Corrosion of Lithiumâ€₽owderâ€Based Electrodes. Advanced Energy Materials, 2020, 10, 2000017.	10.2	62
309	Quantitative spatially resolved <i>post-mortem</i> analysis of lithium distribution and transition metal depositions on cycled electrodes <i>via</i> a laser ablation-inductively coupled plasma-optical emission spectrometry method. RSC Advances, 2020, 10, 7083-7091.	1.7	5

#	Article	IF	CITATIONS
310	3D printing of cellular materials for advanced electrochemical energy storage and conversion. Nanoscale, 2020, 12, 7416-7432.	2.8	56
311	Facile fabrication of a hybrid polymer electrolyte <i>via</i> initiator-free thiol–ene photopolymerization for high-performance all-solid-state lithium metal batteries. Polymer Chemistry, 2020, 11, 2732-2739.	1.9	22
312	Critical Factors Dictating Reversibility of the Zinc Metal Anode. Energy and Environmental Materials, 2020, 3, 516-521.	7.3	110
313	Ultrastable Silicon Anode by Three-Dimensional Nanoarchitecture Design. ACS Nano, 2020, 14, 4374-4382.	7.3	107
314	Mediated Fuel Cells: Soluble Redox Mediators and Their Applications to Electrochemical Reduction of O ₂ and Oxidation of H ₂ , Alcohols, Biomass, and Complex Fuels. Chemical Reviews, 2020, 120, 3749-3786.	23.0	113
315	Selfâ€Healing Materials for Energyâ€Storage Devices. Advanced Functional Materials, 2020, 30, 1909912.	7.8	121
316	A New Class of Ionically Conducting Fluorinated Ether Electrolytes with High Electrochemical Stability. Journal of the American Chemical Society, 2020, 142, 7393-7403.	6.6	225
317	Basic knowledge in battery research bridging the gap between academia and industry. Materials Horizons, 2020, 7, 1937-1954.	6.4	94
318	Compositions and Formation Mechanisms of Solid-Electrolyte Interphase on Microporous Carbon/Sulfur Cathodes. Chemistry of Materials, 2020, 32, 3765-3775.	3.2	27
319	Advanced Liquid Electrolytes for Rechargeable Li Metal Batteries. Advanced Functional Materials, 2020, 30, 1910777.	7.8	201
320	Inâ€Situ Electropolymerization Enables Ultrafast Long Cycle Life and Highâ€Voltage Organic Cathodes for Lithium Batteries. Angewandte Chemie - International Edition, 2020, 59, 11992-11998.	7.2	91
321	A Diffusionâ€â€Reaction Competition Mechanism to Tailor Lithium Deposition for Lithiumâ€Metal Batteries. Angewandte Chemie, 2020, 132, 7817-7821.	1.6	37
322	High-Voltage All-Solid-State Lithium Battery with Sulfide-Based Electrolyte: Challenges for the Construction of a Bipolar Multicell Stack and How to Overcome Them. ACS Applied Energy Materials, 2020, 3, 3162-3168.	2.5	40
323	Silver Decorated Reduced Graphene Oxide as Electrocatalyst for Zinc–Air Batteries. Energies, 2020, 13, 462.	1.6	32
324	Undercooling-directed NaCl crystallization: an approach towards nanocavity-linked graphene networks for fast lithium and sodium storage. Nanoscale, 2020, 12, 7622-7630.	2.8	19
325	The Role of Diphenyl Carbonate Additive on the Interfacial Reactivity of Positive Electrodes in Li-ion Batteries. Journal of the Electrochemical Society, 2020, 167, 040522.	1.3	8
326	Fast Capacitive Energy Storage and Long Cycle Life in a Deintercalation–Intercalation Cathode Material. Small, 2020, 16, 1906025.	5.2	2
327	Functional Localized High-Concentration Ether-Based Electrolyte for Stabilizing High-Voltage Lithium-Metal Battery. ACS Applied Materials & Interfaces, 2020, 12, 33710-33718.	4.0	59

#	Article	IF	CITATIONS
328	Thiourea-based polyimide/RGO composite cathode: A comprehensive study of storage mechanism with alkali metal ions. Science China Materials, 2020, 63, 1929-1938.	3.5	13
329	An alternative means of advanced energy storage by electrochemical modification. JPhys Energy, 2020, 2, 021006.	2.3	0
330	F doped Li3VO4: An advanced anode material with optimized rate capability and durable lifetime. Electrochimica Acta, 2020, 354, 136655.	2.6	14
331	Fluorinated carboxylate ester-based electrolyte for lithium ion batteries operated at low temperature. Chemical Communications, 2020, 56, 9640-9643.	2.2	61
332	Perspective on Highâ€Energy Carbonâ€Based Supercapacitors. Energy and Environmental Materials, 2020, 3, 286-305.	7.3	124
333	Accessing copper oxidation states of dissolved negative electrode current collectors in lithium ion batteries. Electrophoresis, 2020, 41, 1568-1575.	1.3	12
334	Revisiting the strategies for stabilizing lithium metal anodes. Journal of Materials Chemistry A, 2020, 8, 13874-13895.	5.2	54
335	Harbinger of hysteresis in lithium-rich oxides: Anionic activity or defect chemistry of cation migration. Journal of Power Sources, 2020, 471, 228335.	4.0	10
336	Role of Oxygen Deficiency and Microstructural Voids/Gaps in Nanostructures of Ca ₂ Fe ₂ O ₅ as an Anode Toward Next-Generation High-Performance Li-Ion Batteries. ACS Applied Energy Materials, 2020, 3, 6360-6373.	2.5	18
337	Direct surface coating of high voltage LiCoO ₂ cathode with P(VDF-HFP) based gel polymer electrolyte. RSC Advances, 2020, 10, 24533-24541.	1.7	5
338	Stable cycling of small molecular organic electrode materials enabled by high concentration electrolytes. Energy Storage Materials, 2020, 31, 318-327.	9.5	56
339	A "dendrite-eating―separator for high-areal-capacity lithium-metal batteries. Energy Storage Materials, 2020, 31, 181-186.	9.5	71
340	An aromatic carbonyl compound-linked conjugated microporous polymer as an advanced cathode material for lithium-organic batteries. Materials Chemistry Frontiers, 2020, 4, 2697-2703.	3.2	34
341	Illustration of experimental, machine learning, and characterization methods for study of performance of Liâ€ion batteries. International Journal of Energy Research, 2020, 44, 9513-9526.	2.2	15
342	Lattice softening enables highly reversible sodium storage in anti-pulverization Bi–Sb alloy/carbon nanofibers. Energy Storage Materials, 2020, 27, 270-278.	9.5	64
343	Improved electrochemical property of Ni-rich LiNi0.6Co0.2Mn0.2O2 cathode via in-situ ZrO2 coating for high energy density lithium ion batteries. Chemical Engineering Journal, 2020, 389, 124403.	6.6	125
344	Tin modification of sodium manganese hexacyanoferrate as a superior cathode material for sodium ion batteries. Electrochimica Acta, 2020, 342, 135928.	2.6	21
345	Coordination compounds in lithium storage and lithium-ion transport. Chemical Society Reviews, 2020, 49, 1624-1642.	18.7	87

#	Article	IF	CITATIONS
346	Waterproof lithium metal anode enabled by cross-linking encapsulation. Science Bulletin, 2020, 65, 909-916.	4.3	60
347	Acyclic Acetals in Propylene Carbonate-Based Electrolytes for Advanced and Safer Graphite-Based Lithium Ion Batteries. Journal of the Electrochemical Society, 2020, 167, 040509.	1.3	14
348	Fundamentals and Challenges of Lithium Ion Batteries at Temperatures between â^'40 and 60 °C. Advanced Energy Materials, 2020, 10, 1904152.	10.2	200
349	Flexible electrochemical energy storage: The role of composite materials. Composites Science and Technology, 2020, 192, 108102.	3.8	82
350	Mn ²⁺ or Mn ³⁺ ? Investigating transition metal dissolution of manganese species in lithium ion battery electrolytes by capillary electrophoresis. Electrophoresis, 2020, 41, 697-704.	1.3	39
351	Ionomers from Step-Growth Polymerization: Highly Ordered Ionic Aggregates and Ion Conduction. Macromolecules, 2020, 53, 1777-1784.	2.2	9
352	Solidâ€State Lithium–Sulfur Battery Enabled by Thioâ€LiSICON/Polymer Composite Electrolyte and Sulfurized Polyacrylonitrile Cathode. Advanced Functional Materials, 2020, 30, 1910123.	7.8	77
353	Achieving Ultrahighâ€Rate and Highâ€Safety Li ⁺ Storage Based on Interconnected Tunnel Structure in Microâ€Size Niobium Tungsten Oxides. Advanced Materials, 2020, 32, e1905295.	11.1	95
354	Highly Interconnected Nanorods and Nanosheets Based on a Hierarchically Layered Metal–Organic Framework for a Flexible, High-Performance Energy Storage Device. ACS Sustainable Chemistry and Engineering, 2020, 8, 3773-3785.	3.2	35
355	Is the Cation Innocent? An Analytical Approach on the Cationic Decomposition Behavior of <i>N</i> -Butyl- <i>N</i> -methylpyrrolidinium Bis(trifluoromethanesulfonyl)imide in Contact with Lithium Metal. Chemistry of Materials, 2020, 32, 2389-2398.	3.2	31
356	Biodegradable Bacterial Cellulose-Supported Quasi-Solid Electrolyte for Lithium Batteries. ACS Applied Materials & Interfaces, 2020, 12, 13950-13958.	4.0	45
357	Built-In Catalysis in Confined Nanoreactors for High-Loading Li–S Batteries. ACS Nano, 2020, 14, 3365-3377.	7.3	147
358	Degradation and Aging Routes of Ni-Rich Cathode Based Li-Ion Batteries. Batteries, 2020, 6, 8.	2.1	73
359	Longâ€lifespan Polyanionic Organic Cathodes for Highly Efficient Organic Sodiumâ€ion Batteries. ChemSusChem, 2020, 13, 1991-1996.	3.6	26
360	Engineering of Sn and Preâ€Lithiated Sn as Negative Electrode Materials Coupled to Garnet Taâ€LLZO Solid Electrolyte for Allâ€Solidâ€State Li Batteries. Batteries and Supercaps, 2020, 3, 557-565.	2.4	10
361	Uncharted Waters: Super-Concentrated Electrolytes. Joule, 2020, 4, 69-100.	11.7	305
362	Preferential occupation of Na in P3-type layered cathode material for sodium ion batteries. Nano Energy, 2020, 70, 104535.	8.2	26
363	Development of Safe and Sustainable Dualâ€lon Batteries Through Hybrid Aqueous/Nonaqueous Electrolytes. Advanced Energy Materials, 2020, 10, 1902709.	10.2	51

#	Article	IF	CITATIONS
364	Functional Electrolyte of Fluorinated Ether and Ester for Stabilizing Both 4.5 V LiCoO ₂ Cathode and Lithium Metal Anode. ACS Applied Materials & Interfaces, 2020, 12, 8316-8323.	4.0	44
365	Insights on the cycling behavior of a highly-prelithiated silicon–graphite electrode in lithium-ion cells. JPhys Energy, 2020, 2, 024002.	2.3	18
366	Biomass-derived porous graphitic carbon materials for energy and environmental applications. Journal of Materials Chemistry A, 2020, 8, 5773-5811.	5.2	234
367	Chemically Prelithiated Hardâ€Carbon Anode for High Power and High Capacity Liâ€Ion Batteries. Small, 2020, 16, e1907602.	5.2	144
368	Sustainable Recycling Technology for Li-Ion Batteries and Beyond: Challenges and Future Prospects. Chemical Reviews, 2020, 120, 7020-7063.	23.0	957
369	Self-Healing Solid Polymer Electrolyte Facilitated by a Dynamic Cross-Linked Polymer Matrix for Lithium-Ion Batteries. Macromolecules, 2020, 53, 1024-1032.	2.2	125
370	Transition metal dichalcogenides for alkali metal ion batteries: engineering strategies at the atomic level. Energy and Environmental Science, 2020, 13, 1096-1131.	15.6	266
371	Multi-electron reactions of vanadium-based nanomaterials for high-capacity lithium batteries: challenges and opportunities. Materials Today Nano, 2020, 10, 100073.	2.3	30
372	C ₆₀ (OH) ₁₂ and Its Nanocomposite for High-Performance Lithium Storage. ACS Nano, 2020, 14, 1600-1608.	7.3	11
373	Metal Organic Framework Derivative Improving Lithium Metal Anode Cycling. Advanced Functional Materials, 2020, 30, 1907579.	7.8	49
374	A fluorinated polycarbonate based all solid state polymer electrolyte for lithium metal batteries. Electrochimica Acta, 2020, 337, 135843.	2.6	43
375	Clarification of Decomposition Pathways in a Stateâ€ofâ€theâ€Art Lithium Ion Battery Electrolyte through ¹³ C‣abeling of Electrolyte Components. Angewandte Chemie - International Edition, 2020, 59, 6128-6137.	7.2	81
376	Ethylene carbonate-free electrolytes for Li-ion battery: Study of the solid electrolyte interphases formed on graphite anodes. Journal of Power Sources, 2020, 451, 227804.	4.0	37
377	Clarification of Decomposition Pathways in a Stateâ€ofâ€theâ€Art Lithium Ion Battery Electrolyte through 13 Câ€Labeling of Electrolyte Components. Angewandte Chemie, 2020, 132, 6184-6193.	1.6	18
378	Analysis for Science Librarians of the 2019 Nobel Prize in Chemistry: Lithium-Ion Batteries. Science and Technology Libraries, 2020, 39, 51-67.	0.8	4
379	Thiophene-rich conjugated microporous polymers as anode materials for high performance lithium- and sodium-ion batteries. Solid State Ionics, 2020, 347, 115247.	1.3	18
380	A method for quantitative analysis of gases evolving during formation applied on LiNi0.6Mn0.2Co0.2O2 â^£â^£ natural graphite lithium ion battery cells using gas chromatography - barrier discharge ionization detector. Journal of Chromatography A, 2020, 1622, 461122.	1.8	13
381	The electrochemical property and crystal structure of Li1+xNi0.45Co0.1Mn0.45O2 (0.05â‰ ¤ â‰ 0 .4) cathode materials under 4.6V cut-off. Journal of Alloys and Compounds, 2020, 831, 154489.	2.8	3

#	Article	IF	CITATIONS
382	Three-dimensional cross-linked MnO/Sb hybrid nanowires co-embedded nitrogen-doped carbon tubes as high-performance anode materials for lithium-ion batteries. Journal of Alloys and Compounds, 2020, 835, 155239.	2.8	19
383	Metalâ€lon Coupled Electron Transfer Kinetics in Intercalationâ€Based Transition Metal Oxides. Advanced Energy Materials, 2020, 10, 1903933.	10.2	59
384	Dynamic bonded supramolecular binder enables high-performance silicon anodes in lithium-ion batteries. Journal of Power Sources, 2020, 463, 228208.	4.0	57
385	Enhanced ionic conductivity and mechanical properties via dynamic-covalent boroxine bonds in solid polymer electrolytes. Journal of Membrane Science, 2020, 608, 118218.	4.1	32
386	Inâ€Situ Electropolymerization Enables Ultrafast Long Cycle Life and Highâ€Voltage Organic Cathodes for Lithium Batteries. Angewandte Chemie, 2020, 132, 12090-12096.	1.6	21
387	Toward Critical Electrode/Electrolyte Interfaces in Rechargeable Batteries. Advanced Functional Materials, 2020, 30, 1909887.	7.8	251
388	Silicon Anode with High Initial Coulombic Efficiency by Modulated Trifunctional Binder for Highâ€Arealâ€Capacity Lithiumâ€Ion Batteries. Advanced Energy Materials, 2020, 10, 1903110.	10.2	221
389	Lithium Bonds in Lithium Batteries. Angewandte Chemie - International Edition, 2020, 59, 11192-11195.	7.2	99
390	Lithium Metal Interface Modification for Highâ€Energy Batteries: Approaches and Characterization. Batteries and Supercaps, 2020, 3, 828-859.	2.4	38
391	Accelerated Optimization Methods for Forceâ€Field Parametrization in Battery Electrode Manufacturing Modeling. Batteries and Supercaps, 2020, 3, 721-730.	2.4	37
392	Conducting Redox Polymer as a Robust Organic Electrodeâ€Active Material in Acidic Aqueous Electrolyte towards Polymer–Air Secondary Batteries. ChemSusChem, 2020, 13, 2280-2285.	3.6	25
393	Toward Green Battery Cells: Perspective on Materials and Technologies. Small Methods, 2020, 4, 2000039.	4.6	177
394	Novel layered K0.7Mn0.7Ni0.3O2 cathode material with enlarged diffusion channels for high energy density sodium-ion batteries. Science China Materials, 2020, 63, 1163-1170.	3.5	15
395	An electrochemical evaluation of nitrogen-doped carbons as anodes for lithium ion batteries. Carbon, 2020, 164, 261-271.	5.4	53
396	Recent advances and historical developments of high voltage lithium cobalt oxide materials for rechargeable Li-ion batteries. Journal of Power Sources, 2020, 460, 228062.	4.0	150
397	A three-dimensional TiO2-Graphene architecture with superior Li ion and Na ion storage performance. Journal of Power Sources, 2020, 461, 228129.	4.0	22
398	Poly(ε-caprolactone)-block-poly(ethylene glycol)-block-poly(ε-caprolactone)-based hybrid polymer electrolyte for lithium metal batteries. Journal of Membrane Science, 2020, 607, 118132.	4.1	41
399	A wide-temperature superior ionic conductive polymer electrolyte for lithium metal battery. Nano Energy, 2020, 73, 104786.	8.2	120

# 400	ARTICLE Mobile Ions in Composite Solids. Chemical Reviews, 2020, 120, 4169-4221.	IF 23.0	Citations 193
401	High-Rate Layered Cathode of Lithium-Ion Batteries through Regulating Three-Dimensional Agglomerated Structure. Energies, 2020, 13, 1602.	1.6	14
402	Electrospun 3D Structured Carbon Current Collector for Li/S Batteries. Nanomaterials, 2020, 10, 745.	1.9	19
403	Approaching energy-dense and cost-effective lithium–sulfur batteries: From materials chemistry and price considerations. Energy, 2020, 201, 117718.	4.5	43
404	Composite Polymer Electrolyte Incorporating Metal–Organic Framework Nanosheets with Improved Electrochemical Stability for All-Solid-State Li Metal Batteries. ACS Applied Materials & Interfaces, 2020, 12, 20514-20521.	4.0	73
405	Improving the NMC111â^£Polymer Electrolyte Interface by Cathode Composition and Processing. Journal of the Electrochemical Society, 2020, 167, 070546.	1.3	10
406	In-Situ Formed Protecting Layer from Organic/Inorganic Concrete for Dendrite-Free Lithium Metal Anodes. Nano Letters, 2020, 20, 3911-3917.	4.5	58
407	Advanced Electrolytes for Fastâ€Charging Highâ€Voltage Lithiumâ€Ion Batteries in Wideâ€Temperature Range. Advanced Energy Materials, 2020, 10, 2000368.	10.2	159
408	Lithium Bonds in Lithium Batteries. Angewandte Chemie, 2020, 132, 11288-11291.	1.6	20
409	Alluaudite Battery Cathodes. Small Methods, 2020, 4, 2000051.	4.6	22
410	Uniform Li Plating/Stripping within Ni Macropore Arrays Enabled by Regulated Electric Field Distribution for Ultra-Stable Li-Metal Anodes. IScience, 2020, 23, 101089.	1.9	1
411	Methyl-group functionalization of pyrazole-based additives for advanced lithium ion battery electrolytes. Journal of Power Sources, 2020, 461, 228159.	4.0	10
412	A High-Rate Lithium Manganese Oxide-Hydrogen Battery. Nano Letters, 2020, 20, 3278-3283.	4.5	30
413	Template-assisted loading of Fe ₃ O ₄ nanoparticles inside hollow carbon "rooms―to achieve high volumetric lithium storage. Nanoscale, 2020, 12, 10816-10826.	2.8	27
414	Quantum electrocatalysts: theoretical picture, electrochemical kinetic isotope effect analysis, and conjecture to understand microscopic mechanisms. Physical Chemistry Chemical Physics, 2020, 22, 11219-11243.	1.3	19
415	"Ship in a Bottle―design of ZIF-9@CoAl LDH hybrid compound as a high performance asymmetric supercapacitor. New Journal of Chemistry, 2020, 44, 7528-7540.	1.4	21
416	Towards High-Performance Li-rich NCMâ^£â^£Graphite Cells by Germanium-Polymer Coating of the Positive Electrode Material. Journal of the Electrochemical Society, 2020, 167, 060524.	1.3	14
417	Novel In Situ Gas Formation Analysis Technique Using a Multilayer Pouch Bag Lithium Ion Cell Equipped with Gas Sampling Port. Journal of the Electrochemical Society, 2020, 167, 060516.	1.3	23

#	Article	IF	CITATIONS
418	Li/Mn-Rich Cathode Materials with Low-Cobalt Content and Core-Shell Particle Design for High-Energy Lithium Ion Batteries. Journal of the Electrochemical Society, 2020, 167, 060519.	1.3	14
419	Lithium Manganese Spinel Cathodes for Lithiumâ€lon Batteries. Advanced Energy Materials, 2021, 11, 2000997.	10.2	177
420	Electrolyte solvation chemistry for lithium–sulfur batteries with electrolyte-lean conditions. Journal of Energy Chemistry, 2021, 55, 80-91.	7.1	57
421	Finding the sweet spot: Li/Mn-rich cathode materials with fine-tuned core–shell particle design for high-energy lithium ion batteries. Electrochimica Acta, 2021, 366, 137413.	2.6	14
422	Understanding all solid-state lithium batteries through in situ transmission electron microscopy. Materials Today, 2021, 42, 137-161.	8.3	64
423	Directly conversion the biomass-waste to Si/C composite anode materials for advanced lithium ion batteries. Chinese Chemical Letters, 2021, 32, 5-8.	4.8	21
424	"Double guarantee mechanism―of Ca ²⁺ -intercalation and rGO-integration ensures hydrated vanadium oxide with high performance for aqueous zinc-ion batteries. Inorganic Chemistry Frontiers, 2021, 8, 79-89.	3.0	59
425	Si-on-Graphite fabricated by fluidized bed process for high-capacity anodes of Li-ion batteries. Chemical Engineering Journal, 2021, 407, 126603.	6.6	31
426	History of Solid Polymer Electrolyteâ€Based Solidâ€ S tate Lithium Metal Batteries: A Personal Account. Israel Journal of Chemistry, 2021, 61, 94-100.	1.0	33
427	Fe2O3–TeO2–MoO3 semiconductor glass-ceramics as anode materials for high specific capacity lithium ion batteries. Materials Chemistry and Physics, 2021, 258, 123894.	2.0	17
428	Rational Design of Coreâ€Shell ZnTe@Nâ€Doped Carbon Nanowires for High Gravimetric and Volumetric Alkali Metal Ion Storage. Advanced Functional Materials, 2021, 31, 2006425.	7.8	75
429	Polyimide separators for rechargeable batteries. Journal of Energy Chemistry, 2021, 58, 170-197.	7.1	82
430	Recent progress and prospects of Li-CO2 batteries: Mechanisms, catalysts and electrolytes. Energy Storage Materials, 2021, 34, 148-170.	9.5	88
431	Ordered Self-supporting NiV LDHs@P-Nickel foam Nano-array as High-Performance supercapacitor electrode. Journal of Colloid and Interface Science, 2021, 583, 1-12.	5.0	53
432	Regulating Interfacial Chemistry in Lithiumâ€lon Batteries by a Weakly Solvating Electrolyte**. Angewandte Chemie, 2021, 133, 4136-4143.	1.6	74
433	Study of electrochemical performance and thermal property of LiNi0.5Co0.2Mn0.3O2 cathode materials coated with a novel oligomer additive for high-safety lithium-ion batteries. Chemical Engineering Journal, 2021, 405, 126727.	6.6	26
434	Advanced electrolyte design for stable lithium metal anode: From liquid to solid. Nano Energy, 2021, 80, 105516.	8.2	111
435	Non-metallic charge carriers for aqueous batteries. Nature Reviews Materials, 2021, 6, 109-123.	23.3	250

#	Article	IF	CITATIONS
436	Phosphatized mild-prepared-NiCo LDHs cabbage-like spheres exhibit excellent performance as a supercapacitor electrode. New Journal of Chemistry, 2021, 45, 251-261.	1.4	25
437	Covalent organic framework based lithium-ion battery: Fundamental, design and characterization. EnergyChem, 2021, 3, 100048.	10.1	94
438	A review of lithium-ion battery safety concerns: The issues, strategies, and testing standards. Journal of Energy Chemistry, 2021, 59, 83-99.	7.1	768
439	Enabling Mgâ€Based Ionic Liquid Electrolytes for Hybrid Dualâ€Ion Capacitors. Batteries and Supercaps, 2021, 4, 504-512.	2.4	14
440	A General Templateâ€Induced Sulfuration Approach for Preparing Bifunctional Hollow Sulfides for Highâ€Performance Al―and Liâ€ion Batteries. Energy Technology, 2021, 9, 2000900.	1.8	5
441	Electro-chemo-mechanics of lithium in solid state lithium metal batteries. Energy and Environmental Science, 2021, 14, 602-642.	15.6	95
442	Foldable potassium-ion batteries enabled by free-standing and flexible SnS ₂ @C nanofibers. Energy and Environmental Science, 2021, 14, 424-436.	15.6	142
443	Mn‣ubstituted Tunnelâ€Type Polyantimonic Acid Confined in a Multidimensional Integrated Architecture Enabling Superfastâ€Charging Lithiumâ€Ion Battery Anodes. Advanced Science, 2021, 8, 2002866.	5.6	23
444	Hydrogen bond chemistry in Fe4[Fe(CN)6]3 host for aqueous NH4+ batteries. Chemical Engineering Journal, 2021, 421, 127759.	6.6	57
445	Mixed lithium fluoride-nitride ionic conducting interphase for dendrite-free lithium metal anode. Applied Surface Science, 2021, 541, 148294.	3.1	4
446	Theory of coupled ion-electron transfer kinetics. Electrochimica Acta, 2021, 367, 137432.	2.6	64
447	Constructing reduced graphene oxide network aerogel supported TiO2(B) (Bronze phase TiO2) as anode material for lithium-ion storage. Journal of Alloys and Compounds, 2021, 853, 157330.	2.8	9
448	Large-scale automotive battery cell manufacturing: Analyzing strategic and operational effects on manufacturing costs. International Journal of Production Economics, 2021, 232, 107982.	5.1	84
449	Li dendrites inhibition realized by lithiophilic and ion/electron conductive 3D skeleton for Li metal anodes. Chemical Engineering Journal, 2021, 421, 127872.	6.6	11
450	Quasi-solid single ion conducting polymer electrolyte membrane containing novel fluorinated poly(arylene ether sulfonimide) for lithium metal batteries. Journal of Power Sources, 2021, 484, 229267.	4.0	28
451	Effect of Li plating during formation of lithium ion batteries on their cycling performance and thermal safety. Journal of Power Sources, 2021, 484, 229306.	4.0	25
452	Recent Advances and Perspectives of Znâ€Metal Free "Rockingâ€Chairâ€â€Type Znâ€ŀon Batteries. Advanced Energy Materials, 2021, 11, 2002529.	10.2	111
453	Identifying the Critical Anion–Cation Coordination to Regulate the Electric Double Layer for an Efficient Lithiumâ€Metal Anode Interface. Angewandte Chemie, 2021, 133, 4261-4266.	1.6	25

#	Article	IF	CITATIONS
454	Modified H ₂ V ₃ O ₈ to Enhance the Electrochemical Performance for Liâ€ion Insertion: The Influence of Prelithiation and Moâ€6ubstitution. ChemSusChem, 2021, 14, 1112-1121.	3.6	11
455	Carbon materials for ion-intercalation involved rechargeable battery technologies. Chemical Society Reviews, 2021, 50, 2388-2443.	18.7	255
456	Evoking High-Donor-Number-Assisted and Organosulfur-Mediated Conversion in Lithium–Sulfur Batteries. ACS Energy Letters, 2021, 6, 224-231.	8.8	51
457	Identifying the Critical Anion–Cation Coordination to Regulate the Electric Double Layer for an Efficient Lithiumâ€Metal Anode Interface. Angewandte Chemie - International Edition, 2021, 60, 4215-4220.	7.2	145
458	Quantumâ€Matter Bi/TiO ₂ Heterostructure Embedded in Nâ€Đoped Porous Carbon Nanosheets for Enhanced Sodium Storage. Small Structures, 2021, 2, 2000085.	6.9	77
459	Achieving long-cycling sodium-ion full cells in ether-based electrolyte with vinylene carbonate additive. Journal of Energy Chemistry, 2021, 57, 650-655.	7.1	37
460	Biomass-derived biochar materials as sustainable energy sources for electrochemical energy storage devices. Renewable and Sustainable Energy Reviews, 2021, 137, 110464.	8.2	134
461	Exploiting the Degradation Mechanism of NCM523Graphite Lithiumâ€ion Full Cells Operated at High Voltage. ChemSusChem, 2021, 14, 595-613.	3.6	56
462	Revealing the working mechanism of a multi-functional block copolymer binder for lithium-sulfur batteries. Journal of Energy Chemistry, 2021, 59, 1-8.	7.1	8
463	Regulating Interfacial Chemistry in Lithiumâ€lon Batteries by a Weakly Solvating Electrolyte**. Angewandte Chemie - International Edition, 2021, 60, 4090-4097.	7.2	373
464	Failure Analysis of Garnet-Type Solid State Electrolyte LLZO by Electrochemical Method. Lecture Notes in Electrical Engineering, 2021, , 551-559.	0.3	0
465	Heteroatoms Doped Porous Carbon Nanostructures Recovered from Agriculture Waste for Energy Conversion and Storage. Topics in Mining, Metallurgy and Materials Engineering, 2021, , 465-512.	1.4	0
466	Cation-disorder zinc blende Zn _{0.5} Ge _{0.5} P compound and Zn _{0.5} Ge _{0.5} P–TiC–C composite as high-performance anodes for Li-ion batteries. Journal of Materials Chemistry A, 2021, 9, 9124-9133.	5.2	8
467	Electrolytes: From a Thorn Comes a Rose, and from a Rose, a Thorn. Israel Journal of Chemistry, 2021, 61, 85-93.	1.0	4
468	The role of metal substitutions in the development of Li batteries, part I: cathodes. Materials Advances, 2021, 2, 3474-3518.	2.6	22
469	Theoretically Quantifying the Effect of Pre-Lithiation on Energy Density of Li-Ion Batteries. Journal of the Electrochemical Society, 2021, 168, 010532.	1.3	7
470	Revealing the Impact of Film-Forming Electrolyte Additives on Lithium Metal Batteries via Solid-State NMR/MRI Analysis. Journal of Physical Chemistry C, 2021, 125, 252-265.	1.5	25
471	Gas-phase oxidation modification strategy of spent graphite from spent LiFePO ₄ with enhanced initial coulombic efficiency for lithium-ion battery anodes. Sustainable Energy and Fuels, 2021, 5, 5594-5602.	2.5	0

#	Article	IF	CITATIONS
472	Understanding the Outstanding Highâ€Voltage Performance of NCM523 Graphite Lithium Ion Cells after Elimination of Ethylene Carbonate Solvent from Conventional Electrolyte. Advanced Energy Materials, 2021, 11, 2003738.	10.2	86
473	Polyeutectic-based stable and effective electrolytes for high-performance energy storage systems. Energy and Environmental Science, 2021, 14, 931-939.	15.6	21
474	A flame-retardant polymer electrolyte for high performance lithium metal batteries with an expanded operation temperature. Energy and Environmental Science, 2021, 14, 3510-3521.	15.6	156
475	The lithium metal anode in Li–S batteries: challenges and recent progress. Journal of Materials Chemistry A, 2021, 9, 10012-10038.	5.2	45
476	Post-lithium-ion battery cell production and its compatibility with lithium-ion cell production infrastructure. Nature Energy, 2021, 6, 123-134.	19.8	612
477	Zwitterionic polymer-derived nitrogen and sulfur co-doped carbon-coated Na ₃ V ₂ (PO ₄) ₂ F ₃ as a cathode material for sodium ion battery energy storage. New Journal of Chemistry, 2021, 45, 19391-19401.	1.4	15
478	Molecular redox species for next-generation batteries. Chemical Society Reviews, 2021, 50, 5863-5883.	18.7	53
479	N-Doped carbon encapsulating Bi nanoparticles derived from metal–organic frameworks for high-performance sodium-ion batteries. Journal of Materials Chemistry A, 2021, 9, 22048-22055.	5.2	33
480	Emerging trends in anion storage materials for the capacitive and hybrid energy storage and beyond. Chemical Society Reviews, 2021, 50, 6734-6789.	18.7	93
481	Sodium storage with high plateau capacity in nitrogen doped carbon derived from melamine–terephthalaldehyde polymers. Journal of Materials Chemistry A, 2021, 9, 8711-8720.	5.2	9
482	Recent advances of noble-metal-free bifunctional oxygen reduction and evolution electrocatalysts. Chemical Society Reviews, 2021, 50, 7745-7778.	18.7	385
483	Key Figure Based Incoming Inspection of Lithium-Ion Battery Cells. Batteries, 2021, 7, 9.	2.1	11
484	Constructing nitrided interfaces for stabilizing Li metal electrodes in liquid electrolytes. Chemical Science, 2021, 12, 8945-8966.	3.7	72
485	Energy consumption and environmental consequences. , 2021, , 1-55.		0
486	Realizing poly(ethylene oxide) as a polymer for solid electrolytes in high voltage lithium batteries <i>via</i> simple modification of the cell setup. Materials Advances, 0, , .	2.6	30
487	<i>In situ</i> synthesis of graphitic C ₃ N ₄ –poly(1,3-dioxolane) composite interlayers for stable lithium metal anodes. Sustainable Energy and Fuels, 2021, 5, 2433-2440.	2.5	30
488	Thionated benzo[<i>c</i>]thiophen-1(3 <i>H</i>)-one as an organic cathode with high capacity for sulfur-rich all organic lithium-ion batteries. Journal of Materials Chemistry A, 2021, 9, 14444-14450.	5.2	12
489	Gel-polymer electrolytes based on polyurethane ionomers for lithium power sources. RSC Advances, 2021, 11, 21548-21559.	1.7	5

#	Article	IF	CITATIONS
490	Phase evolution of electrochemically potassium intercalated graphite. Journal of Materials Chemistry A, 2021, 9, 11187-11200.	5.2	27
491	<i>In situ</i> polymerization process: an essential design tool for lithium polymer batteries. Energy and Environmental Science, 2021, 14, 2708-2788.	15.6	140
492	Phase Evolution of Trirutile Li _{0.5} FeF ₃ for Lithium-Ion Batteries. Chemistry of Materials, 2021, 33, 868-880.	3.2	15
493	Lithium Salt-Induced <i>In Situ</i> Living Radical Polymerizations Enable Polymer Electrolytes for Lithium-Ion Batteries. Macromolecules, 2021, 54, 874-887.	2.2	44
494	On the Beneficial Impact of Li ₂ CO ₃ as Electrolyte Additive in NCM523 â^¥ Graphite Lithium Ion Cells Under Highâ€Voltage Conditions. Advanced Energy Materials, 2021, 11, 2003756.	10.2	59
495	A rechargeable zinc-air battery based on zinc peroxide chemistry. Science, 2021, 371, 46-51.	6.0	551
496	Opportunities and Challenges of Lithium Ion Batteries in Automotive Applications. ACS Energy Letters, 2021, 6, 621-630.	8.8	471
497	Flexible 3D Graphene-based Electrodes for Ultrahigh Performance Lithium Ion Batteries. Chemistry in the Environment, 2021, , 57-85.	0.2	0
498	Unifying the clustering kinetics of lithium polysulfides with the nucleation behavior of Li ₂ S in lithium–sulfur batteries. Journal of Materials Chemistry A, 2021, 9, 13242-13251.	5.2	28
499	Recent Progress in Extending the Cycleâ€Life of Secondary Znâ€Air Batteries. ChemNanoMat, 2021, 7, 354-367.	1.5	37
500	3,3â€Diethylene Diâ€Sulfite (DES) as a Highâ€Voltage Electrolyte Additive for 4.5â€V LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ /Graphite Batteries with Enhanced Performances. ChemElectroChem, 2021, 8, 745-754.	1.7	14
501	In Situ Electrolyte Gelation to Prevent Chemical Crossover in Li Metal Batteries. Advanced Materials Interfaces, 2021, 8, 2002152.	1.9	2
502	Application of Gas Chromatography Hyphenated to Atmospheric Pressure Chemical Ionization-Quadrupole-Time-of-Flight-Mass Spectrometry (GC-APCI-Q-TOF-MS) for Structure Elucidation of Degradation Products Based on the Cation in Pyr ₁₄ TFSI. Journal of the Electrochemical Society, 2021, 168, 026501.	1.3	4
503	Strategies in Structure and Electrolyte Design for Highâ€Performance Lithium Metal Batteries. Advanced Functional Materials, 2021, 31, 2009694.	7.8	122
504	What Is the Right Carbon for Practical Anode in Alkali Metal Ion Batteries?. Small Science, 2021, 1, 2000063.	5.8	25
505	Hostâ€Guest Interactions Enhance the Performance of Viologen Electrolytes for Aqueous Organic Redox Flow Batteries. Batteries and Supercaps, 2021, 4, 923-928.	2.4	18
506	Case study of N-carboxyanhydrides in silicon-based lithium ion cells as a guideline for systematic electrolyte additive research. Cell Reports Physical Science, 2021, 2, 100327.	2.8	16
507	Half-Cell Cumulative Efficiency Forecasts Full-Cell Capacity Retention in Lithium-Ion Batteries. ACS Energy Letters, 2021, 6, 1082-1086.	8.8	34

ARTICLE IF CITATIONS Hierarchical Tripleâ€Shelled MnCo₂O₄ Hollow Microspheres as 508 5.2 26 Highâ€Performance Anode Materials for Potassiumâ€Ion Batteries. Small, 2021, 17, e2007597. Ensemble Design of Electrode–Electrolyte Interfaces: Toward High-Performance Thin-Film 509 38 All-Solid-State Ľi–Metal Batteries. ACS Nano, 2021, 15, 4561-4575. Polycarbonate-Based Lithium Salt-Containing Electrolytes: New Insights into Thermal Stability. 510 1.5 12 Journal of Physical Chemistry C, 2021, 125, 4371-4378. Systematic Investigation of Electrochemical Performances for Lithium-Ion Batteries with Si/Graphite Anodes: Effect of Electrolytes Based on Fluoroethylene Carbonate and Linear Carbonates. ACS Applied Energy Materials, 2021, 4, 2419-2429. 2.5 Promoting the synergistic effect of sulfur immobilization and polysulfides trapping by nitrogen functionalized interconnected hollow carbon nanocages for high-performance lithium–sulfur 512 4.0 28 batteries. Journal of Power Sources, 2021, 486, 229358. One-step large-scale fabrication of Bi@N-doped carbon for ultrahigh-rate and long-life sodium-ionÂbattery anodes. Journal of Materials Science, 2021, 56, 11000-11010. 1.7 Insights into the Solubility of Poly(vinylphenothiazine) in Carbonate-Based Battery Electrolytes. ACS 514 4.0 23 Applied Materials & amp; Interfaces, 2021, 13, 12442-12453. Dibenzo[<i>a</i>,<i>e</i>]Cyclooctatetraeneâ€Functionalized Polymers as Potential Battery Electrode 2.0 9 Materials. Macromolecular Rapid Communications, 2021, 42, e2000725. Nucleation and Growth Mechanism of Anionâ€Derived Solid Electrolyte Interphase in Rechargeable 516 7.2 77 Batteries. Angewandte Chemie - International Edition, 2021, 60, 8521-8525. A Growing Appreciation for the Role of LiF in the Solid Electrolyte Interphase. Advanced Energy 10.2 Materials, 2021, 11, 2100046. In-situ constructing uniform polymer network for iron oxide microspheres: A novel approach to improve the cycling stability of the conversion electrodes through chemical interaction. Journal of 518 4.06 Power Sources, 2021, 489, 229510. A Thorough Analysis of Two Different Preâ€Lithiation Techniques for Silicon/Carbon Negative 519 2.4 Electrodes in Lithium Ion Batteries. Batteries and Supercaps, 2021, 4, 1163-1174. Sustainable Battery Materials for Nextâ€Generation Electrical Energy Storage. Advanced Energy and 520 2.8 52 Sustainability Research, 2021, 2, 2000102. New Insights into the N–S Bond Formation of a Sulfurized-Polyacrylonitrile Cathode Material for Lithium–Sulfur Batteries. ACS Applied Materials & amp; Interfaces, 2021, 13, 14230-14238. Wadsley–Roth Crystallographic Shear Structure Niobiumâ€Based Oxides: Promising Anode Materials 522 70 5.6 for Highâ€Safety Lithiumâ€Ion Batteries. Advanced Science, 2021, 8, e2004855. Customizing Active Materials and Polymeric Binders: Stern Requirements to Realize Silicon-Graphite 24 Anode Based Lithium-Ion Batteries.. Journal of Energy Storage, 2021, 35, 102098. Architectural Engineering Achieves Highâ€Performance Alloying Anodes for Lithium and Sodium Ion 524 5.242 Batteries. Small, 2021, 17, e2005248. Operando Synchrotron X-ray Diffraction Studies on TiS₂: The Effect of Propylene 1.3 Carbonate on Reduction Mechanism. Journal of the Electrochemical Society, 2021, 168, 030514.

#	Article	IF	Citations
526	Glucose-Assisted One-Pot Hydrothermal Synthesis of Hierarchical-Structured MoS2/C Quasi-Hollow Microspheres for High-Performance Lithium Ion Battery. Polymers, 2021, 13, 837.	2.0	6
527	Confined Selenium in N-Doped Mesoporous Carbon Nanospheres for Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 16558-16566.	4.0	27
528	Intrinsic differences and realistic perspectives of lithium-sulfur and magnesium-sulfur batteries. Communications Materials, 2021, 2, .	2.9	34
529	2021 roadmap on lithium sulfur batteries. JPhys Energy, 2021, 3, 031501.	2.3	74
530	Intercalation as a versatile tool for fabrication, property tuning, and phase transitions in 2D materials. Npj 2D Materials and Applications, 2021, 5, .	3.9	113
531	A universal synthesis of N, S, Cl-doped carbon materials directly from dye waste liquid for high performance lithium storage. Waste Disposal & Sustainable Energy, 2021, 3, 107-115.	1.1	4
532	Nucleation and Growth Mechanism of Anionâ€Derived Solid Electrolyte Interphase in Rechargeable Batteries. Angewandte Chemie, 2021, 133, 8602-8606.	1.6	16
533	Theory prediction of PC3 monolayer as a promising anode material in potassium-ion batteries. lonics, 2021, 27, 2465-2471.	1.2	7
534	Rapid Interfacial Exchange of Li Ions Dictates High Coulombic Efficiency in Li Metal Anodes. ACS Energy Letters, 0, , 1162-1169.	8.8	41
535	Benzophenone as indicator detecting lithium metal inside solid state electrolyte. Journal of Power Sources, 2021, 492, 229661.	4.0	6
536	Lithium Metal Batteries Enabled by Synergetic Additives in Commercial Carbonate Electrolytes. ACS Energy Letters, 2021, 6, 1839-1848.	8.8	200
537	Early Detection of Failing Automotive Batteries Using Gas Sensors. Batteries, 2021, 7, 25.	2.1	37
538	Highâ€Energy Aqueous Sodiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2021, 60, 11943-11948.	7.2	100
539	Lithiophilic N-doped carbon bowls induced Li deposition in layered graphene film for advanced lithium metal batteries. Nano Research, 2022, 15, 352-360.	5.8	93
540	Highâ€Energy Aqueous Sodiumâ€lon Batteries. Angewandte Chemie, 2021, 133, 12050-12055.	1.6	13
541	The Sand equation and its enormous practical relevance for solid-state lithium metal batteries. Materials Today, 2021, 44, 9-14.	8.3	47
542	Thick electrode with thickness-independent capacity enabled by assembled two-dimensional porous nanosheets. Energy Storage Materials, 2021, 36, 265-271.	9.5	30
543	Designed high-performance lithium-ion battery electrodes using a novel hybrid model-data driven approach. Energy Storage Materials, 2021, 36, 435-458.	9.5	55

		15	C
#	ARTICLE Ultravioletâ€Cured Semiâ€Interpenetrating Network Polymer Electrolytes for Highâ€Performance	IF	CITATIONS
544	Quasiâ€Solidâ€State Lithium Metal Batteries. Chemistry - A European Journal, 2021, 27, 7773-7780.	1.7	8
545	Battery Materials Design Essentials. Accounts of Materials Research, 2021, 2, 319-326.	5.9	24
546	Review—Energy Storage through Graphite Intercalation Compounds. Journal of the Electrochemical Society, 2021, 168, 040541.	1.3	11
547	Challenges and perspectives of covalent organic frameworks for advanced alkali-metal ion batteries. Science China Chemistry, 2021, 64, 1267-1282.	4.2	99
548	Area Oversizing of Lithium Metal Electrodes in Solid‧tate Batteries: Relevance for Overvoltage and thus Performance?. ChemSusChem, 2021, 14, 2163-2169.	3.6	8
549	Solvents adjusted pure phase CoCO3 as anodes for high cycle stability. Journal of Advanced Ceramics, 2021, 10, 509-519.	8.9	22
550	Highly Potassiophilic Carbon Nanofiber Paper Derived from Bacterial Cellulose Enables Ultra-Stable Dendrite-Free Potassium Metal Anodes. ACS Applied Materials & Interfaces, 2021, 13, 17629-17638.	4.0	27
551	Influence of Aging on the Failing Behavior of Automotive Lithium-Ion Batteries. Batteries, 2021, 7, 23.	2.1	15
552	Two-Dimensional π-Conjugated Frameworks as a Model System to Unveil a Multielectron-Transfer-Based Energy Storage Mechanism. Accounts of Chemical Research, 2021, 54, 3003-3015.	7.6	13
553	Layered Intercalation Materials. Advanced Materials, 2021, 33, e2004557.	11.1	92
554	Lithium-metal host anodes with top-to-bottom lithiophilic gradients for prolonged cycling of rechargeable lithium batteries. Journal of Power Sources, 2021, 495, 229773.	4.0	19
555	Cationâ€Assisted Lithiumâ€Ion Transport for Highâ€Performance PEOâ€based Ternary Solid Polymer Electrolytes. Angewandte Chemie - International Edition, 2021, 60, 11919-11927.	7.2	80
556	An ordinary differential equation model for simulating secondary battery reactions. Electrochemistry Communications, 2021, 126, 107011.	2.3	2
557	Thermophysical abuse couplings in batteries: From electrodes to cells. MRS Bulletin, 2021, 46, 410-419.	1.7	2
558	Direct Multielement Analysis of Polydisperse Microparticles by Classification-Single-Particle ICP-OES in the Field of Lithium-Ion Battery Electrode Materials. Analytical Chemistry, 2021, 93, 7532-7539.	3.2	11
559	Revisiting polyanionic LiFePO ₄ battery material for electric vehicles. Functional Materials Letters, 2021, 14, 2130006.	0.7	10
560	Reversible Cycling of Graphite Electrodes in Propylene Carbonate Electrolytes Enabled by Ethyl Isothiocyanate. ACS Applied Materials & Interfaces, 2021, 13, 26023-26033.	4.0	12
561	A Biomassâ€Based Integral Approach Enables Liâ€S Full Pouch Cells with Exceptional Power Density and Energy Density. Advanced Science, 2021, 8, e2101182.	5.6	21

#	Article	IF	CITATIONS
562	Mixed electron-ion-water transfer in macromolecular radicals for metal-free aqueous batteries. Cell Reports Physical Science, 2021, 2, 100414.	2.8	20
563	Hydrolysis of LiPF ₆ -Containing Electrolyte at High Voltage. ACS Energy Letters, 2021, 6, 2096-2102.	8.8	119
564	Natural Self-Confined Structure Effectively Suppressing Volume Expansion toward Advanced Lithium Storage. ACS Applied Materials & amp; Interfaces, 2021, 13, 24634-24642.	4.0	5
565	Modeling cyclic voltammetry during solid electrolyte interphase formation: Baseline scenario of a dynamically evolving tunneling barrier resulting from a homogeneous single-phase insulating film. Journal of Chemical Physics, 2021, 154, 174703.	1.2	5
566	Phosphorus and Oxygen Dualâ€Doped Porous Carbon Spheres with Enhanced Reaction Kinetics as Anode Materials for Highâ€Performance Potassiumâ€Ion Hybrid Capacitors. Advanced Functional Materials, 2021, 31, 2102060.	7.8	96
567	Galvanic Couples in Ionic Liquidâ€Based Electrolyte Systems for Lithium Metal Batteries—An Overlooked Cause of Galvanic Corrosion?. Advanced Energy Materials, 2021, 11, 2101021.	10.2	22
568	Porous polyetherimide separators controlled inâ€situ by tetrabutyl titanate as polymer electrolyte with ionic liquid for lithiumâ€oxygen batteries. International Journal of Energy Research, 2021, 45, 16603-16617.	2.2	2
569	Polymers for aluminium secondary batteries: Solubility, ionogel formation and chloroaluminate speciation. Polymer, 2021, 224, 123707.	1.8	6
570	Enabling Aqueous Processing for LiNi _{0.5} Mn _{1.5} O ₄ â€Based Positive Electrodes in Lithiumâ€Ion Batteries by Applying Lithiumâ€Based Processing Additives. Advanced Energy and Sustainability Research, 2021, 2, 2100075.	2.8	11
571	Benefits of Fast Battery Formation in a Model System. Journal of the Electrochemical Society, 2021, 168, 050543.	1.3	8
572	119Sn and 7Li Solid-State NMR of the Binary Li–Sn Intermetallics: Structural Fingerprinting and Impact on the Isotropic 119Sn Shift via DFT Calculations. Chemistry of Materials, 2021, 33, 3499-3514.	3.2	10
573	Cationâ€Assisted Lithiumâ€Ion Transport for Highâ€Performance PEOâ€based Ternary Solid Polymer Electrolytes. Angewandte Chemie, 2021, 133, 12026-12034.	1.6	6
574	Effects of Conjugated Structure on the Magnesium Storage Performance of Dianhydrides. ChemPhysChem, 2021, 22, 1455-1460.	1.0	11
575	Advances in Lithium–Sulfur Batteries: From Academic Research to Commercial Viability. Advanced Materials, 2021, 33, e2003666.	11.1	357
576	Dual Confinement of CoSe ₂ Nanorods with Polyphosphazene-Derived Heteroatom-Doped Carbon and Reduced Graphene Oxide for Potassium-Ion Batteries. ACS Omega, 2021, 6, 17113-17125.	1.6	12
577	A Selfâ€Limited Freeâ€Standing Sulfide Electrolyte Thin Film for Allâ€Solidâ€State Lithium Metal Batteries. Advanced Functional Materials, 2021, 31, 2101985.	7.8	77
578	Accelerated Polysulfide Redox in Binderâ€Free Li ₂ S Cathodes Promises Highâ€Energyâ€Density Lithium–Sulfur Batteries. Advanced Energy Materials, 2021, 11, 2100957.	10.2	35
579	Zn ²⁺ Induced Phase Transformation of K ₂ MnFe(CN) ₆ Boosts Highly Stable Zincâ€lon Storage. Advanced Energy Materials, 2021, 11, 2003639.	10.2	127

#	Article	IF	CITATIONS
580	The journey of an electrifying (r)evolution. Nature Communications, 2021, 12, 4153.	5.8	2
581	Design of safe, long-cycling and high-energy lithium metal anodes in all working conditions: Progress, challenges and perspectives. Energy Storage Materials, 2021, 38, 157-189.	9.5	52
582	Recent Advances in Transition Metal Dichalcogenide Cathode Materials for Aqueous Rechargeable Multivalent Metal-Ion Batteries. Nanomaterials, 2021, 11, 1517.	1.9	27
583	Lithium Host:Advanced architecture components for lithium metal anode. Energy Storage Materials, 2021, 38, 276-298.	9.5	89
584	Solidâ€State Post Li Metal Ion Batteries: A Sustainable Forthcoming Reality?. Advanced Energy Materials, 2021, 11, .	10.2	49
585	Caffeine-Derived Noble Carbons as Ball Milling-Resistant Cathode Materials for Lithium-Ion Capacitors. ACS Applied Materials & Interfaces, 2021, 13, 29612-29618.	4.0	3
586	Internal field study of 21700 battery based on long-life embedded wireless temperature sensor. Acta Mechanica Sinica/Lixue Xuebao, 2021, 37, 895-901.	1.5	19
587	Transforming Materials into Practical Automotive Lithiumâ€ion Batteries. Advanced Materials Technologies, 2021, 6, 2100152.	3.0	6
588	Effect of cross-linking on electrochemical performances of polyaniline as the cathode material of lithium-ion batteries. Polymer Bulletin, 2022, 79, 5261-5278.	1.7	7
589	Designing and preparing carbon anode materials modified with N and Fe-nanoparticle: Creating the interior electric field to improve their electrochemical performance. Electrochimica Acta, 2021, 383, 138367.	2.6	3
590	Catalytic Hexadecachlorophthalocyanine Cobalt-Coated Host Materials for Li–S Batteries. ACS Applied Energy Materials, 2021, 4, 7743-7750.	2.5	3
591	Design Principle, Optimization Strategies, and Future Perspectives of Anode-Free Configurations for High-Energy Rechargeable Metal Batteries. Electrochemical Energy Reviews, 2021, 4, 601-631.	13.1	69
592	Electrochemical Surface Plasmon Resonance Spectroscopy for Investigation of the Initial Process of Lithium Metal Deposition. Journal of the American Chemical Society, 2021, 143, 11160-11170.	6.6	16
593	Defected molybdenum disulfide catalyst engineered by nitrogen doping for advanced lithium–oxygen battery. Electrochimica Acta, 2021, 383, 138369.	2.6	13
594	Lithium deposition in single-ion conducting polymer electrolytes. Cell Reports Physical Science, 2021, 2, 100496.	2.8	10
595	Electrospun Composite Gel Polymer Electrolytes with High Thermal Conductivity toward Wide Temperature Lithium Metal Batteries. ACS Applied Energy Materials, 2021, 4, 8130-8141.	2.5	11
596	Increasing the Lithium Ion Mobility in Poly(Phosphazene)-Based Solid Polymer Electrolytes through Tailored Cation Doping. Journal of the Electrochemical Society, 2021, 168, 070559.	1.3	4
597	Mesoporous silica anchored on reduced graphene oxide nanocomposite as anode for superior lithium-ion capacitor. Rare Metals, 2022, 41, 368-377.	3.6	32

# 598	ARTICLE Tracking the evolution of processes occurring in silicon anodes in lithium ion batteries by 3D visualization of relaxation times. Journal of Electroanalytical Chemistry, 2021, 892, 115309.	IF 1.9	CITATIONS
599	Defects, diffusion and dopants in Li8SnO6. Heliyon, 2021, 7, e07460.	1.4	3
600	An Aqueous Binder for High-Areal-Capacity Fe ₃ O ₄ -Based Anodes in Lithium-Ion Batteries. ACS Applied Energy Materials, 2021, 4, 7201-7208.	2.5	23
601	Synthesis of pomegranate-shaped micron ZnMn2O4 with enhanced lithium storage capability. Journal of Materiomics, 2021, 7, 699-707.	2.8	11
602	Effective Solid Electrolyte Interphase Formation on Lithium Metal Anodes by Mechanochemical Modification. ACS Applied Materials & amp; Interfaces, 2021, 13, 34227-34237.	4.0	17
603	Effect of Building Block Connectivity and Ion Solvation on Electrochemical Stability and Ionic Conductivity in Novel Fluoroether Electrolytes. ACS Central Science, 2021, 7, 1232-1244.	5.3	34
604	Identification of Li _{<i>x</i>} Sn Phase Transitions During Lithiation of Tin Nanoparticle-Based Negative Electrodes from Ex Situ ¹¹⁹ Sn MAS NMR and Operando ⁷ Li NMR and XRD. ACS Applied Energy Materials, 2021, 4, 7278-7287.	2.5	8
605	Future Material Developments for Electric Vehicle Battery Cells Answering Growing Demands from an End-User Perspective. Energies, 2021, 14, 4223.	1.6	21
606	A Three-Dimensional Surface Layer and a Composite Aphroid Layer Constructed by a Facile Rolling Method for High-Performance Li Metal Anodes. ACS Applied Energy Materials, 2021, 4, 8108-8116.	2.5	8
607	Study of Rechargeable Batteries Using Advanced Spectroscopic and Computational Techniques. Condensed Matter, 2021, 6, 26.	0.8	1
608	Fast Charging of Lithiumâ€lon Batteries: A Review of Materials Aspects. Advanced Energy Materials, 2021, 11, 2101126.	10.2	407
609	Evaluating the Passivation Layer of Freshly Cleaved Silicon Surfaces by Binary Silaneâ€Based Electrolytes. Batteries and Supercaps, 2021, 4, 1611.	2.4	2
610	Ion-conductive self-healing polymer network based on reversible imine bonding for Si electrodes. Journal of Power Sources, 2021, 499, 229968.	4.0	20
611	Bridging the Gap between Small Molecular π-Interactions and Their Effect on Phenothiazine-Based Redox Polymers in Organic Batteries. ACS Applied Energy Materials, 2021, 4, 7622-7631.	2.5	9
612	Facile synthesis of V2O3@N-doped carbon nanosheet arrays on nickel foam as free-standing electrode for high performance lithium ion batteries. Catalysis Today, 2021, 374, 117-123.	2.2	13
613	Degradation Diagnostics from the Subsurface of Lithiumâ€lon Battery Electrodes. Energy and Environmental Materials, 2022, 5, 662-669.	7.3	9
614	Advanced cathode materials in dualâ€ion batteries: Progress and prospect. Electrochemical Science Advances, 2022, 2, e2100127.	1.2	9
615	Optimize the surface of the Li-rich cathode materials with lithium phosphate and polyaniline to improve the electrochemical performance. Ionics, 2021, 27, 4649-4661.	1.2	2

#	Article	IF	CITATIONS
616	Pragmatic Approaches to Correlate between the Physicochemical Properties of a Linear Poly(ethylene) Tj ETQq0 Journal of Physical Chemistry C, 2021, 125, 18089-18097.	0 0 rgBT /C 1.5	Verlock 10 T 18
617	Re-evaluating common electrolyte additives for high-voltage lithium ion batteries. Cell Reports Physical Science, 2021, 2, 100521.	2.8	32
618	Viscoelastic polyborosiloxanes as artificial solid electrolyte interphase on lithium metal anodes. Electrochimica Acta, 2021, 388, 138526.	2.6	6
619	Covalent Organic Frameworks and Their Derivatives for Better Metal Anodes in Rechargeable Batteries. ACS Nano, 2021, 15, 12741-12767.	7.3	71
620	Sulfurâ€containing compounds as electrolyte additives for lithiumâ€ion batteries. InformaÄnÃ-Materiály, 2021, 3, 1364-1392.	8.5	60
621	Nitrogen-enriched graphene framework from a large-scale magnesiothermic conversion of CO2 with synergistic kinetics for high-power lithium-ion capacitors. NPG Asia Materials, 2021, 13, .	3.8	29
622	Anchoring ultrafine CoP and CoSb nanoparticles into rich N-doped carbon nanofibers for efficient potassium storage. Science China Materials, 2022, 65, 43-50.	3.5	18
623	In situ Observation of Li Depositionâ€Induced Cracking in Garnet Solid Electrolytes. Energy and Environmental Materials, 2022, 5, 524-532.	7.3	36
624	Highly Reversible Anion Redox of Manganeseâ€Based Cathode Material Realized by Electrochemical Ion Exchange for Lithiumâ€lon Batteries. Advanced Functional Materials, 2021, 31, 2103594.	7.8	22
625	Stressâ€Regulation Design of Lithium Alloy Electrode toward Stable Battery Cycling. Energy and Environmental Materials, 2023, 6, .	7.3	11
626	Investigation of Polymer/Ceramic Composite Solid Electrolyte System: The Case of PEO/LGPS Composite Electrolytes. ACS Sustainable Chemistry and Engineering, 2021, 9, 11314-11322.	3.2	32
627	Mechanisms of Si Nanoparticle Formation by Molten Salt Magnesiothermic Reduction of Silica for Lithiumâ€ion Battery Anodes. ChemElectroChem, 2021, 8, 3181-3191.	1.7	6
628	Applying Machine Learning to Rechargeable Batteries: From the Microscale to the Macroscale. Angewandte Chemie - International Edition, 2021, 60, 24354-24366.	7.2	67
629	The passivity of lithium electrodes in liquid electrolytes for secondary batteries. Nature Reviews Materials, 2021, 6, 1036-1052.	23.3	201
630	Singleâ€Ion Conducting Soft Electrolytes for Semiâ€Solid Lithium Metal Batteries Enabling Cell Fabrication and Operation under Ambient Conditions. Advanced Energy Materials, 2021, 11, 2101813.	10.2	26
631	The Origin of Gaseous Decomposition Products Formed During SEI Formation Analyzed by Isotope Labeling in Lithium″on Battery Electrolytes. Batteries and Supercaps, 2021, 4, 1731-1738.	2.4	16
632	Enhancement of ZIF-8 derived N-doped carbon/silicon composites for anode in lithium ions batteries. Journal of Alloys and Compounds, 2021, 872, 159712.	2.8	13
633	Advanced Electrolytes Enabling Safe and Stable Rechargeable Liâ€Metal Batteries: Progress and Prospects. Advanced Functional Materials, 2021, 31, 2105253.	7.8	102

ARTICLE IF CITATIONS Fabrication of Elastic Cyclodextrin-Based Triblock Polymer Electrolytes for All-Solid-State Lithium 634 2.5 16 Metal Batteries. ACS Applied Energy Materials, 2021, 4, 9402-9411. Applying Machine Learning to Rechargeable Batteries: From the Microscale to the Macroscale. 1.6 Angéwandte Chemie, 2021, 133, 24558-24570. How to avoid dendrite formation in metal batteries: Innovative strategies for dendrite suppression. 636 8.2 116 Nano Energy, 2021, 86, 106142. A Multifunctional Dualâ€Salt Localized Highâ€Concentration Electrolyte for Fast Dynamic Highâ€Voltage Lithium Battery in Wide Temperature Range. Advanced Energy Materials, 2021, 11, 2101775. Impact of Lithiumâ€Ion Coordination on Lithium Electrodeposition. Energy and Environmental 638 7.3 5 Materials, 2023, 6, . Science of Electrode Processes in the 21st Century: Fundamental Understanding of Microscopic Mechanisms towards Advancing Electrochemical Technologies. Bulletin of the Chemical Society of Japan, 2021, 94, 2423-2434. High-Performance Polymeric Lithium Salt Electrode Material from Phenolâ€"Formaldehyde 640 4.0 15 Condensation. ACS Applied Materials & amp; Interfaces, 2021, 13, 37289-37298. Boron and Phosphorus Dual-Doped Carbon Coating Improves Electrochemical Performances of LiFe_{0.8}Mn_{0.2}PO₄ Cathode Materials. ACS Applied Energy 2.5 14 Materials, 2021, 4, 8003-8015. Hard Carbon Anodes for Nextâ€Generation Liâ€Ion Batteries: Review and Perspective. Advanced Energy 642 10.2 213 Materials, 2021, 11, 2101650. Quantification of aging mechanisms of carbon-coated and uncoated silicon thin film anodes in 643 lithium metal and lithium ion cells. Journal of Energy Storage, 2021, 41, 102812. Synthesis of SnW3O9/C as novel anode material for lithium-ion battery application. Journal of 644 1.1 0 Materials Science: Materials in Electronics, 2021, 32, 23935-23943. A Desolvationâ€Free Sodium Dualâ€Ion Chemistry for High Power Density and Extremely Low Temperature. Angewandte Chemie, 2021, 133, 24051. Opportunities and Limitations of Ionic Liquid―and Organic Carbonate Solventâ€Based Electrolytes for 646 3.6 22 Mgâ€Ionâ€Based Dualâ€Ion Batteries. ChemSusChem, 2021, 14, 4480-4498. Electrostatic Selfâ€Assembly of CoSe₂ HBs/Ti₃C₂T_x Composites for Longâ€cycleâ€life Sodium Ion Batteries. ChemElectroChem, 2021, 8, 4047-4053. 647 1.7 Elucidation of the influence of operating temperature in LiNi0.8Co0.15Al0.05O2/silicon and LiNi0.8Co0.15Al0.05O2/graphite pouch cells batteries cycle-life degradation. Journal of Energy Storage, 648 3.9 7 2021, 41, 102989. Dualâ€Ligand Znâ€Based Metal–Organic Framework as Reversible and Stable Anode Material for Next 649 1.8 Generation Lithiumâ€Ion Batteries. Energy Technology, 2021, 9, 2100212. Highly Graphitic Nâ€Doped Biomassâ€Derived Hard Carbon with a Low Operating Potential for 650 1.8 7 Potassiumâ€Ion Batteries. Energy Technology, 2021, 9, 2100644. Machine Learning-Assisted Discovery of High-Voltage Organic Materials for Rechargeable Batteries. 1.5 Journal of Physical Chemistry C, 2021, 125, 21352-21358.

#	Article	IF	CITATIONS
652	Understanding the effect of Nb substitution on Li-Mn-rich layered oxides. Electrochimica Acta, 2021, 390, 138801.	2.6	5
653	Carbon nitride derived nitrogen-doped carbon nanosheets for high-rate lithium-ion storage. Chemical Engineering Science, 2021, 241, 116709.	1.9	34
654	Controlled Experiments and Optimized Theory of Absorption Spectra of Li Metal and Salts. ACS Applied Materials & Interfaces, 2021, 13, 45488-45495.	4.0	8
655	First-principles computational insights into lithium battery cathode materials. Electrochemical Energy Reviews, 2022, 5, 1-31.	13.1	21
656	Revisiting lithium metal anodes from a dynamic and realistic perspective. EnergyChem, 2021, 3, 100063.	10.1	11
657	Enabling Atomicâ€Scale Imaging of Sensitive Potassium Metal and Related Solid Electrolyte Interphases Using Ultralowâ€Dose Cryoâ€TEM. Advanced Materials, 2021, 33, e2102666.	11.1	19
658	Surface-Functionalized Separator for Stable and Reliable Lithium Metal Batteries: A Review. Nanomaterials, 2021, 11, 2275.	1.9	13
659	A Desolvationâ€Free Sodium Dualâ€lon Chemistry for High Power Density and Extremely Low Temperature. Angewandte Chemie - International Edition, 2021, 60, 23858-23862.	7.2	54
660	<i>In Situ</i> Visualization of Lithium Penetration through Solid Electrolyte and Dead Lithium Dynamics in Solid-State Lithium Metal Batteries. ACS Nano, 2021, 15, 19070-19079.	7.3	42
661	Self-assembled ZnO-rGO nanocomposite, a solid-state transformation to control its crystallite size. Journal of Alloys and Compounds, 2021, 875, 159992.	2.8	8
662	Current density induced growth of Li15Si4 alloy in silicon-carbon anodes during first lithiation process. Journal of Energy Storage, 2021, 41, 102930.	3.9	5
663	In situ observation of cracking and self-healing of solid electrolyte interphases during lithium deposition. Science Bulletin, 2021, 66, 1754-1763.	4.3	16
664	Toward Unraveling the Origin of Lithium Fluoride in the Solid Electrolyte Interphase. Chemistry of Materials, 2021, 33, 7315-7336.	3.2	39
665	Coupling a Three-Dimensional Nanopillar and Robust Film to Guide Li-Ion Flux for Dendrite-Free Lithium Metal Anodes. ACS Applied Materials & Interfaces, 2021, 13, 45416-45425.	4.0	8
666	Improved Lithium-Ion Transport Within the LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ Secondary Cathode Particles Through a Template-Assisted Synthesis Route. ACS Sustainable Chemistry and Engineering, 2021, 9, 12560-12574.	3.2	4
667	Strategies for Dendrite-Free lithium metal Anodes: A Mini-review. Journal of Electroanalytical Chemistry, 2021, 897, 115499.	1.9	20
668	A Microcapsuleâ€Assistant Selfâ€Healing Magnesium Battery Cathodes. Energy Technology, 2021, 9, 2100393.	1.8	2
669	Degradation Mechanism of Monocrystalline Ni-Rich Li[Ni _x Mn _y Co _{z }]O ₂ (NMC) Active Material in Lithium Ion Batteries. Journal of the Electrochemical Society, 2021, 168, 090532.	1.3	13

# 670	ARTICLE Carbon materials for stable Li metal anodes: Challenges, solutions, and outlook. , 2021, 3, 957-975.	IF	CITATIONS
671	Suppressing Polysulfide Shuttling in Lithium–Sulfur Batteries via a Multifunctional Conductive Binder. Small Methods, 2021, 5, e2100839.	4.6	14
672	A polyanionic anthraquinone organic cathode for pure small-molecule organic Li-ion batteries. International Journal of Hydrogen Energy, 2021, 46, 36801-36810.	3.8	5
673	Changes of porosity of hard carbons during mechanical treatment and the relevance for sodium-ion anodes. Carbon, 2022, 186, 55-63.	5.4	20
674	A hierarchical dual-carbon supported ZnMn2O4/C composite as an anode material for Li-ion batteries. Journal of Alloys and Compounds, 2021, 877, 160242.	2.8	12
675	Melt-diffused binary solid–solid ionic mixture in a porous polymeric host as free-standing solid electrolyte for lithium batteries. Journal of Electroanalytical Chemistry, 2021, 899, 115698.	1.9	6
676	Areca-inspired core-shell structured MnO@C composite towards enhanced lithium-ion storage. Carbon, 2021, 184, 706-713.	5.4	19
677	Lithium–copper alloy embedded in 3D porous copper foam with enhanced electrochemical performance toward lithium metal batteries. Materials Today Energy, 2021, 22, 100871.	2.5	11
678	Redistributing Zn-ion flux by interlayer ion channels in Mg-Al layered double hydroxide-based artificial solid electrolyte interface for ultra-stable and dendrite-free Zn metal anodes. Energy Storage Materials, 2021, 41, 230-239.	9.5	109
679	Understanding solid electrolyte interphases: Advanced characterization techniques and theoretical simulations. Nano Energy, 2021, 89, 106489.	8.2	43
680	Modulating Zn deposition via ceramic-cellulose separator with interfacial polarization effect for durable zinc anode. Nano Energy, 2021, 89, 106322.	8.2	162
681	Phosphorus-doped lithium- and manganese-rich layered oxide cathode material for fast charging lithium-ion batteries. Journal of Energy Chemistry, 2021, 62, 538-545.	7.1	23
682	LiOx-modification of Ni and Co3O4 surfaces: An XPS, LEIS and LEED study. Surface Science, 2021, 713, 121915.	0.8	9
683	A review of the publication and patent landscape of anode materials for lithium ion batteries. Journal of Energy Storage, 2021, 43, 103231.	3.9	10
684	Synergetic enhancement of sodium storage in gallium-based heterostructures. Nano Energy, 2021, 89, 106395.	8.2	15
685	Appreciating the role of polysulfides in lithium-sulfur batteries and regulation strategies by electrolytes engineering. Energy Storage Materials, 2021, 42, 645-678.	9.5	36
686	Recent progress on heterostructure materials for next-generation sodium/potassium ion batteries. Renewable and Sustainable Energy Reviews, 2021, 151, 111640.	8.2	46
687	Carbon-Binder Migration: A Three-Dimensional Drying Model for Lithium-ion Battery Electrodes. Energy Storage Materials, 2021, 43, 337-347.	9.5	46

#	Article	IF	CITATIONS
688	Nonflammable nonaqueous electrolytes for lithium batteries. Current Opinion in Electrochemistry, 2021, 30, 100781.	2.5	3
689	Reinforcing effect of single-wall carbon nanotubes on the LiNi0.6Co0.2Mn0.2O2 composite cathode for high-energy–density all-solid-state Li-ion batteries. Applied Surface Science, 2021, 568, 150934.	3.1	13
690	Enhanced pseudocapacitive behaviors of Sb-based anodes for lithium ion batteries via dual modification approach of Fe doping combined with double carbon coatings. Journal of Alloys and Compounds, 2021, 889, 161658.	2.8	6
691	Structural dimension gradient design of oxygen framework to suppress the voltage attenuation and hysteresis in lithium-rich materials. Chemical Engineering Journal, 2022, 427, 130723.	6.6	9
692	A novel nanosheets-coated multi-layered SnO2@NiMoO4 microsphere as high-performance Li-ion battery anode. Journal of Alloys and Compounds, 2021, 889, 161733.	2.8	4
693	Biomass-derived hierarchical N, P codoped porous 3D-carbon framework@TiO2 hybrids as advanced anode for lithium ion batteries. Journal of Colloid and Interface Science, 2022, 606, 577-587.	5.0	38
694	Stable Li storage in micron-sized SiO particles with rigid-flexible coating. Journal of Energy Chemistry, 2022, 64, 309-314.	7.1	19
695	Facile self-assembly of carbon-free vanadium sulfide nanosheet for stable and high-rate lithium-ion storage. Journal of Colloid and Interface Science, 2022, 607, 145-152.	5.0	25
696	Ultrathin graphitic C3N4 lithiophilic nanosheets regulating Li+ flux for lithium metal batteries. Ionics, 2021, 27, 1069-1079.	1.2	20
697	Application of Mössbauer Spectroscopy to Li-Ion and Na-Ion Batteries. Topics in Applied Physics, 2021, , 319-379.	0.4	0
698	Fast lithium-ion conductivity in the â€~empty-perovskite' <i>n</i> = 2 Ruddlesden–Popper-type oxysulphide Y ₂ Ti ₂ S ₂ O ₅ . Journal of Materials Chemistry A, 2021, 9, 7068-7084.	5.2	8
699	Prospects and limitations of single-crystal cathode materials to overcome cross-talk phenomena in high-voltage lithium ion cells. Journal of Materials Chemistry A, 2021, 9, 7546-7555.	5.2	62
700	Recent Progress of Porous Materials in Lithiumâ€Metal Batteries. Small Structures, 2021, 2, 2000118.	6.9	61
701	Firstâ€Cycle Oxidative Generation of Lithium Nucleation Sites Stabilizes Lithiumâ€Metal Electrodes. Advanced Energy Materials, 2021, 11, 2003674.	10.2	18
702	Spray-dried assembly of 3D N,P-Co-doped graphene microspheres embedded with core–shell CoP/MoP@C nanoparticles for enhanced lithium-ion storage. Dalton Transactions, 2021, 50, 4555-4566.	1.6	15
703	Lithium-Ion Batteries. , 2021, , .		2
704	Chapter 5. 2D Nanomaterial-based Polymer Composite Electrolytes for Lithium-based Batteries. Inorganic Materials Series, 2021, , 204-274.	0.5	2
705	Carbonaceous Electrode Materials. , 2021, , .		0

#	Article	IF	CITATIONS
706	Atomic Layer Deposition of 2D Metal Dichalcogenides for Electronics, Catalysis, Energy Storage, and Beyond. Advanced Materials Interfaces, 2021, 8, 2001677.	1.9	39
707	High-Voltage "Single-Crystal―Cathode Materials for Lithium-Ion Batteries. Energy & Fuels, 2021, 35, 1918-1932.	2.5	93
708	Controlled synthesis of Li1.17Ni0.21Mn0.54Co0.08O2 as a cathode material for Li ion batteries. Journal of Electroanalytical Chemistry, 2021, 881, 114957.	1.9	9
709	Biomass-based materials for green lithium secondary batteries. Energy and Environmental Science, 2021, 14, 1326-1379.	15.6	157
710	How has external knowledge contributed to lithium-ion batteries for the energy transition?. IScience, 2021, 24, 101995.	1.9	10
711	Review on Li Deposition in Working Batteries: From Nucleation to Early Growth. Advanced Materials, 2021, 33, e2004128.	11.1	205
712	Interconnected NiCo ₂ O ₄ nanosheet arrays grown on carbon cloth as a host, adsorber and catalyst for sulfur species enabling high-performance Li–S batteries. Nanoscale Advances, 2021, 3, 1690-1698.	2.2	10
713	Advanced Electrode Materials in Lithium Batteries: Retrospect and Prospect. Energy Material Advances, 2021, 2021, .	4.7	179
714	Highâ€Safety and Highâ€Energyâ€Density Lithium Metal Batteries in a Novel Ionicâ€Liquid Electrolyte. Advanced Materials, 2020, 32, e2001741.	11.1	176
715	Oxygenâ€Deficient Blue TiO ₂ for Ultrastable and Fast Lithium Storage. Advanced Energy Materials, 2020, 10, 1903107.	10.2	83
716	Unraveling the Mechanisms of Lithium Metal Plating/Stripping via In Situ/Operando Analytical Techniques. Advanced Energy Materials, 2021, 11, 2003004.	10.2	49
717	Recent Progress in Understanding Solid Electrolyte Interphase on Lithium Metal Anodes. Advanced Energy Materials, 2021, 11, 2003092.	10.2	271
718	Enabling 6C Fast Charging of Liâ€lon Batteries with Graphite/Hard Carbon Hybrid Anodes. Advanced Energy Materials, 2021, 11, 2003336.	10.2	116
719	<scp>Redoxâ€Active</scp> Porous Organic Polymers for Energy Storage. Bulletin of the Korean Chemical Society, 2021, 42, 159-167.	1.0	13
720	Niederdimensionale Materialien für die ersten Liâ€lonenbatterien. Nachrichten Aus Der Chemie, 2019, 67, 48-51.	0.0	2
721	Full Activation of Mn ⁴⁺ /Mn ³⁺ Redox in Na ₄ MnCr(PO ₄) ₃ as a Highâ€Voltage and Highâ€Rate Cathode Material for Sodiumâ€Ion Batteries. Small, 2020, 16, e2001524.	5.2	98
722	Recent advances and perspectives in stable and dendrite-free potassium metal anodes. Energy Storage Materials, 2020, 30, 206-227.	9.5	95
723	A multifunctional electrolyte with highly-coordinated solvation structure-in-nonsolvent for rechargeable lithium batteries. Journal of Energy Chemistry, 2020, 51, 362-371.	7.1	18

#	Article	IF	Citations
724	New Concepts in Electrolytes. Chemical Reviews, 2020, 120, 6783-6819.	23.0	554
725	Symmetric, Robust, and High-Voltage Organic Redox Flow Battery Model Based on a Helical Carbenium Ion Electrolyte. ACS Applied Energy Materials, 2021, 4, 9-14.	2.5	29
726	Accelerated lithium-ion conduction in covalent organic frameworks. Chemical Communications, 2020, 56, 10465-10468.	2.2	40
727	In Situ Analysis of NMCâ^£graphite Li-Ion Batteries by Means of Complementary Electrochemical Methods. Journal of the Electrochemical Society, 2020, 167, 090528.	1.3	17
728	Editors' Choice—Mechanistic Elucidation of Anion Intercalation into Graphite from Binary-Mixed Highly Concentrated Electrolytes via Complementary ¹⁹ F MAS NMR and XRD Studies. Journal of the Electrochemical Society, 2020, 167, 140526.	1.3	31
729	Approaching Electrochemical Limits of Mg _x Cl _y ^{z+} Complex-Based Electrolytes for Mg Batteries by Tailoring the Solution Structure. Journal of the Electrochemical Society, 2020, 167, 160505.	1.3	9
730	A consistent model for the key complex in chronic beryllium disease. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 2020, 75, 413-419.	0.3	4
731	Green Synthesis of Polypyrrole coated Manganesee(II) Vanadate Nanoflower Composite as Cathode Materials. International Journal of Electrochemical Science, 2020, 15, 371-381.	0.5	6
732	Carbon Anode Materials for Rechargeable Alkali Metal Ion Batteries and in-situ Characterization Techniques. Frontiers in Chemistry, 2020, 8, 607504.	1.8	25
733	Impact of Surface Chemistry of Silicon Nanoparticles on the Structural and Electrochemical Properties of Si/Ni3.4Sn4 Composite Anode for Li-Ion Batteries. Nanomaterials, 2021, 11, 18.	1.9	3
734	Battery and Energy Metals: Future Drivers of the Minerals Industry?. SEG Discovery, 2021, , 11-18.	1.2	14
735	Pressure-tailored lithium deposition and dissolution in lithium metal batteries. Nature Energy, 2021, 6, 987-994.	19.8	208
736	Enhanced electrochemical performance of Si/C electrode through surface modification using SrF2 particle. International Journal of Minerals, Metallurgy and Materials, 2021, 28, 1621-1628.	2.4	5
737	Cooperative Shielding of Bi-Electrodes via In Situ Amorphous Electrode–Electrolyte Interphases for Practical High-Energy Lithium-Metal Batteries. Journal of the American Chemical Society, 2021, 143, 16768-16776.	6.6	68
738	Formation, lithium storage properties and mechanism of nanoporous germanium fabricated by dealloying. Journal of Chemical Physics, 2021, 155, 184702.	1.2	2
739	Flexible, Self‣upported Anode for Organic Batteries with a Matched Hierarchical Current Collector System for Boosted Current Density. Small, 2021, 17, 2103885.	5.2	3
740	In-situ determination of onset lithium plating for safe Li-ion batteries. Journal of Energy Chemistry, 2022, 67, 255-262.	7.1	30
741	Organophosphorus Hybrid Solid Electrolyte Interphase Layer Based on Li <i>_x</i> PO ₄ Enables Uniform Lithium Deposition for Highâ€Performance Lithium Metal Batteries. Advanced Functional Materials, 2022, 32, 2107923.	7.8	27

#	Article	IF	CITATIONS
742	Solvent Coâ€Intercalationâ€Induced Activation and Capacity Fade Mechanism of Fewâ€IMultiâ€Layered MXenes in Lithium Ion Batteries. Small, 2021, 17, e2104130.	5.2	12
743	Supramolecular Viologen–Cyclodextrin Electrolytes for Aqueous Organic Redox Flow Batteries. ACS Applied Energy Materials, 2021, 4, 12353-12364.	2.5	11
744	Recent Advances and Perspectives in Lithiumâ^'Sulfur Pouch Cells. Molecules, 2021, 26, 6341.	1.7	12
745	Metal-organic frameworks and their derivatives in stable Zn metal anodes for aqueous Zn-ion batteries. ChemPhysMater, 2022, 1, 252-263.	1.4	25
746	A Quinone-Based Cathode Material for High-Performance Organic Lithium and Sodium Batteries. ACS Applied Energy Materials, 2021, 4, 12084-12090.	2.5	9
747	Layered K0.54Mn0.78Mg0.22O2 as a high-performance cathode material for potassium-ion batteries. Nano Research, 2022, 15, 3143-3149.	5.8	9
748	Lithiation Mechanism and Improved Electrochemical Performance of TiSnSb-Based Negative Electrodes for Lithium-Ion Batteries. Chemistry of Materials, 2021, 33, 8173-8182.	3.2	2
749	Chemical Preintercalation of H ₂ V ₃ O ₈ â€reduced Graphene Oxide Composites for Improved Na―and Liâ€ion Battery Cathodes. ChemElectroChem, 2021, 8, 4223-4232.	1.7	7
750	Multisalt chemistry in ion transport and interface of lithium metal polymer batteries. Energy Storage Materials, 2022, 44, 263-277.	9.5	17
751	Poly (methyl vinyl ether-alt-maleic anhydride) as an ecofriendly electrolyte additive for high-voltage lithium-rich oxides with improved stability of interphase. Electrochimica Acta, 2021, 400, 139467.	2.6	4
752	Online sample pretreatment for analysis of decomposition products in lithium ion battery by liquid chromatography hyphenated with ion trap-time of flight-mass spectrometry or inductively coupled plasma-sector field-mass spectrometry. Journal of Chromatography A, 2021, 1658, 462594.	1.8	1
753	Suppression of lithium dendrite by aramid nanofibrous aerogel separator. Journal of Power Sources, 2021, 515, 230608.	4.0	10
754	An experimental-based Domino prediction model of thermal runaway propagation in 18,650 lithium-ion battery modules. International Journal of Heat and Mass Transfer, 2021, 181, 122024.	2.5	24
755	Ionic liquid plasticizers comprising solvating cations for lithium metal polymer batteries. Electrochimica Acta, 2021, 398, 139333.	2.6	10
756	Quantitative determination of solid electrolyte interphase and cathode electrolyte interphase homogeneity in multi-layer lithium ion cells. Journal of Energy Storage, 2021, 44, 103208.	3.9	17
757	Enabling High-Voltage Lithium Metal Batteries Under Practical Conditions. SSRN Electronic Journal, 0,	0.4	Ο
758	Comprehensive Insights into the Porosity of Lithium-Ion Battery Electrodes: A Comparative Study on Positive Electrodes Based on LiNi0.6Mn0.2Co0.2O2 (NMC622). Batteries, 2021, 7, 70.	2.1	17
759	The importance of electrode interfaces and interphases for rechargeable metal batteries. Nature Communications, 2021, 12, 6240.	5.8	49

#	Article	IF	CITATIONS
760	Electrochemically Induced Deformation Determines the Rate of Lithium Intercalation in Bulk TiS ₂ . ACS Energy Letters, 2021, 6, 4173-4178.	8.8	11
761	Exploiting the Degradation Mechanism of NCM523   Graphite Lithiumâ€ion Full Cells Operated at High Voltage. ChemSusChem, 2021, 14, 491-491.	3.6	2
762	Graphene-Wrapped FeOOH Nanorods with Enhanced Performance as Lithium-Ion Battery Anode. Nano, 2021, 16, 2150005.	0.5	1
763	Dual strategy with Li-ion solvation and solid electrolyte interphase for high Coulombic efficiency of lithium metal anode. Energy Storage Materials, 2022, 44, 48-56.	9.5	29
764	Research progress on electrochemical properties of electrolyte and its interphase. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 228205-228205.	0.2	1
765	Brief overview of microscopic physical image of ion transport in electrolytes. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 226601.	0.2	27
766	Mechanism Analysis of Preparation of Anode Materials for Lithium-Ion Batteries. Hans Journal of Chemical Engineering and Technology, 2020, 10, 192-207.	0.0	0
767	Nickel-based metal–organic framework-derived Ni/NC/KB as a separator coating for high capacity lithium–sulfur batteries. Sustainable Energy and Fuels, 2021, 5, 6372-6380.	2.5	6
769	Understanding of the Mechanism Enables Controllable Chemical Prelithiation of Anode Materials for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 53996-54004.	4.0	12
770	Hierarchical nanostructured MnF2 fabricated using rapid microwave synthesis as abnormal high-capacity of anode materials for Li-ion batteries. Journal of Physics and Chemistry of Solids, 2022, 161, 110477.	1.9	6
771	Potassium Fluoride and Carbonate Lead to Cell Failure in Potassium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 53841-53849.	4.0	17
772	Advances and Prospects of Dualâ€lon Batteries. Advanced Energy Materials, 2021, 11, 2102498.	10.2	73
773	Al2O3 protective coating on silicon thin film electrodes and its effect on the aging mechanisms of lithium metal and lithium ion cells. Journal of Energy Storage, 2021, 44, 103479.	3.9	13
775	Increased performance of an all-organic redox flow battery model <i>via</i> nitration of the [4]helicenium DMQA ion electrolyte. Materials Advances, 2022, 3, 216-223.	2.6	13
776	Recent progress of magnetic field application in lithium-based batteries. Nano Energy, 2022, 92, 106703.	8.2	55
777	Gradient nano-recipes to guide lithium deposition in a tunable reservoir for anode-free batteries. Energy Storage Materials, 2022, 45, 40-47.	9.5	24
778	A new cyclic carbonate enables high power/ low temperature lithium-ion batteries. Energy Storage Materials, 2022, 45, 14-23.	9.5	27
779	Demonstrating Apparently Inconspicuous but Sensitive Impacts on the Rollover Failure of Lithium-Ion Batteries at a High Voltage. ACS Applied Materials & Interfaces, 2021, 13, 57241-57251.	4.0	21

~	_
CITATION	REDUBL
CHARLON	REI ORI

#	Article	IF	CITATIONS
780	Prussian blue-graphene oxide composite cathode for a sodium-ion capacitor with improved cyclic stability and energy density. Journal of Alloys and Compounds, 2022, 898, 162952.	2.8	7
781	30 Li ⁺ â€Accommodating Covalent Organic Frameworks as Ultralong Cyclable Highâ€Capacity Liâ€Ion Battery Electrodes. Advanced Functional Materials, 2022, 32, 2108798.	7.8	59
782	Anatase titanium dioxide as rechargeable ion battery electrode - A chronological review. Energy Storage Materials, 2022, 45, 201-264.	9.5	45
783	High-Efficiency Zinc-Metal Anode Enabled by Liquefied Gas Electrolytes. ACS Energy Letters, 2021, 6, 4426-4430.	8.8	21
784	Sustainable Materials from Fish Industry Waste for Electrochemical Energy Systems. Energies, 2021, 14, 7928.	1.6	10
785	Stable Electrode/Electrolyte Interface for High-Voltage NCM 523 Cathode Constructed by Synergistic Positive and Passive Approaches. ACS Applied Materials & Interfaces, 2021, 13, 57107-57117.	4.0	23
786	On the Origin of Reversible and Irreversible Reactions in LiNi _x Co _{(1â^x)/2} Mn _{(1â^x)/2} O ₂ . Journal of the Electrochemical Society, 2021, 168, 120533.	1.3	15
787	Lithiophilic Carbon Nanofiber/Graphene Nanosheet Composite Scaffold Prepared by a Scalable and Controllable Biofabrication Method for Ultrastable Dendriteâ€Free Lithiumâ€Metal Anodes. Small, 2022, 18, e2104735.	5.2	10
788	Semi-Immobilized Molecular Electrocatalysts for High-Performance Lithium–Sulfur Batteries. Journal of the American Chemical Society, 2021, 143, 19865-19872.	6.6	173
789	An overview on the use of metal vanadium oxides and vanadates in supercapacitors and rechargeable batteries. International Journal of Energy Research, 2022, 46, 3983-4000.	2.2	12
790	Highâ€Throughput Experimentation and Computational Freeway Lanes for Accelerated Battery Electrolyte and Interface Development Research. Advanced Energy Materials, 2022, 12, 2102678.	10.2	40
791	Dependence of Separator Thickness on Li-Ion Battery Energy Density. Journal of the Electrochemical Society, 2021, 168, 110545.	1.3	4
792	Controllable Morphology Tailoring with Solvothermal Method Toward LiMnPO4/C Cathode Materials for Improved Performance and Favorable Thermostability. Acta Metallurgica Sinica (English) Tj ETQq0 0	01gBT/O	ve s lock 10 T
793	LiCoO2/Graphite Cells with Localized High Concentration Carbonate Electrolytes for Higher Energy Density. Liquids, 2021, 1, 60-74.	0.8	5
794	Photochemically driven solid electrolyte interphase for extremely fast-charging lithium-ion batteries. Nature Communications, 2021, 12, 6807.	5.8	32
795	Ultrahigh Capacity Retention of a Li ₂ ZrO ₃ -Coated Ni-Rich LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ Cathode Material through Covalent Interfacial Engineering. ACS Applied Energy Materials, 2021, 4, 13785-13795.	2.5	16
796	Synergistic Effects of Surface Coating and Bulk Doping in Niâ€Rich Lithium Nickel Cobalt Manganese Oxide Cathode Materials for Highâ€Energy Lithium Ion Batteries. ChemSusChem, 2022, 15, .	3.6	9
797	Understanding the Role of Commercial Separators and Their Reactivity toward LiPF ₆ on the Failure Mechanism of Highâ€Voltage NCM523 Graphite Lithium Ion Cells. Advanced Energy Materials, 2022, 12, 2102599.	10.2	35

#	Article	IF	CITATIONS
798	Nanostructured alkali and alkaline earth metal interfaces for high-energy batteries. Frontiers of Nanoscience, 2021, 19, 327-359.	0.3	1
799	Beyond fluorine: sustainable ternary polymer electrolytes for lithium batteries. Green Chemistry, 2021, 23, 9935-9944.	4.6	7
800	A comparative overview of carbon anodes for nonaqueous alkali metal-ion batteries. Journal of Materials Chemistry A, 2021, 9, 27140-27169.	5.2	25
801	Determinants of lithium-ion battery technology cost decline. Energy and Environmental Science, 2021, 14, 6074-6098.	15.6	46
802	Construction of a hetero-epitaxial nanostructure at the interface of Li-rich cathode materials to boost their rate capability and cycling performances. Nanoscale, 2021, 13, 20488-20497.	2.8	9
803	Impact of nanomaterials on Li-ion battery anodes. Frontiers of Nanoscience, 2021, 19, 55-98.	0.3	1
804	Lignin-derived materials and their applications in rechargeable batteries. Green Chemistry, 2022, 24, 565-584.	4.6	37
805	Ce(NO3)3 as an electrolyte additive to regulate uniform lithium deposition for stable all-solid-state batteries. Solid State Ionics, 2022, 374, 115831.	1.3	4
806	Interfacing Siâ€Based Electrodes: Impact of Liquid Electrolyte and Its Components. Advanced Materials Interfaces, 2022, 9, .	1.9	9
807	Designing of carbon cloth @ Co-MOF @ SiO2 as superior flexible anode for lithium-ion battery. Journal of Alloys and Compounds, 2022, 902, 163680.	2.8	17
808	Two-dimensional graphene-based Li4Ti5O12 with hierarchical pore structure and large pseudocapacitive effect as high-rate and long-cycle anode material for lithium-ion batteries. Electrochimica Acta, 2022, 405, 139814.	2.6	16
809	Density functional theory guidance on rare earth doping—inhibition of lattice oxygen evolution in lithium-rich layered manganese oxide materials. Journal of Alloys and Compounds, 2022, 899, 163311.	2.8	8
810	Issues and Challenges of Rechargeable Lithium Batteries. , 2020, , 38-98.		2
811	Aluminum-ion intercalation and reduced graphene oxide wrapping enable the electrochemical properties of hydrated V2O5 for Zn-ion storage. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 641, 128473.	2.3	13
812	Mixed-conducting properties of annealed polyacrylonitrile activated by n-doping of conjugated domains. Chemical Science, 2021, 13, 225-235.	3.7	4
813	Oxidative Stabilization of Dilute Ether Electrolytes via Anion Modification. ACS Energy Letters, 2022, 7, 675-682.	8.8	15
814	Boron-doping-induced defect engineering enables high performance of a graphene cathode for aluminum batteries. Inorganic Chemistry Frontiers, 2022, 9, 925-934.	3.0	16
815	Principles and Challenges of Lithium–Sulfur Batteries. Modern Aspects of Electrochemistry, 2022, , 1-18.	0.2	1

#	Article	IF	CITATIONS
816	Does Cell Polarization Matter in Single-Ion Conducting Electrolytes?. ACS Applied Materials & Interfaces, 2022, 14, 5211-5222.	4.0	13
817	The Role of Silicon in Silicon-Graphite Composite Electrodes Regarding Specific Capacity, Cycle Stability, and Expansion. Journal of the Electrochemical Society, 2022, 169, 010504.	1.3	28
818	Suppressing electrolyte-lithium metal reactivity via Li+-desolvation in uniform nano-porous separator. Nature Communications, 2022, 13, 172.	5.8	83
820	MnO2 nanosheet modified N, P co-doping carbon nanofibers on carbon cloth as lithiophilic host to construct high-performance anodes for Li metal batteries. Journal of Energy Chemistry, 2022, 69, 270-281.	7.1	20
821	Leveraging cryogenic electron microscopy for advancing battery design. Matter, 2022, 5, 26-42.	5.0	20
822	Magnesium Substitution in Niâ€Rich NMC Layered Cathodes for Highâ€Energy Lithium Ion Batteries. Advanced Energy Materials, 2022, 12, .	10.2	63
823	Nonreactive Electrolyte Additives for Stable Lithium Metal Anodes. ACS Applied Energy Materials, 2022, 5, 3-13.	2.5	12
824	Concentrated LiFSI–Ethylene Carbonate Electrolytes and Their Compatibility with High-Capacity and High-Voltage Electrodes. ACS Applied Energy Materials, 2022, 5, 585-595.	2.5	15
825	Research progress on electrolytes for fast-charging lithium-ion batteries. Chinese Chemical Letters, 2023, 34, 107122.	4.8	25
827	Reduction Mechanism of Solid Electrolyte Interphase Formation on Lithium Metal Anode: Fluorine-Rich Electrolyte. Journal of the Electrochemical Society, 2022, 169, 010503.	1.3	5
828	Tetrakis coumarin as efficient electrode material for rechargeable lithium ion battery. Journal of Electroanalytical Chemistry, 2022, 908, 116081.	1.9	2
829	Nanoporous germanium prepared by a mechanochemical reaction with enhanced lithium storage properties. Dalton Transactions, 2022, 51, 3075-3080.	1.6	2
830	New insights on MXene and its advanced hybrid materials for lithium-ion batteries. Sustainable Energy and Fuels, 2022, 6, 971-1013.	2.5	18
831	Unveiling the interaction of reactions and phase transition during thermal abuse of Li-ion batteries. Journal of Power Sources, 2022, 522, 230881.	4.0	24
832	Multiscale and hierarchical reaction mechanism in a lithium-ion battery. Chemical Physics Reviews, 2022, 3, .	2.6	11
833	Activity volcano plots for the oxygen reduction reaction using FeN4 complexes: From reported experimental data to the electrochemical meaning. Current Opinion in Electrochemistry, 2022, 32, 100923.	2.5	12
834	Highly stable operation of LiCoO2 at cut-off ≥ 4.6ÂV enabled by synergistic structural and interfacial manipulation. Energy Storage Materials, 2022, 46, 406-416.	9.5	48
835	Highly stable lithium metal anode enabled by lithiophilic and spatial-confined spherical-covalent organic framework. Energy Storage Materials, 2022, 46, 374-383.	9.5	45

#	Article	IF	CITATIONS
836	Effect of osmotic ballast properties on the performance of a concentration gradient battery. Water Research, 2022, 212, 118076.	5.3	3
837	A review of lithium-O2/CO2 and lithium-CO2 batteries: Advanced electrodes/materials/electrolytes and functional mechanisms. Nano Energy, 2022, 95, 106964.	8.2	27
838	Recognizing the nitrogen/oxygen co-doped lithiophilicity chemistry toward molten Li infusion for fabricating composite Li metal anode. Journal of Alloys and Compounds, 2022, 903, 163553.	2.8	4
839	Room-temperature liquid metal engineered iron current collector enables stable and dendrite-free sodium metal batteries in carbonate electrolytes. Journal of Materials Science and Technology, 2022, 115, 156-165.	5.6	18
840	Polyacrylic acid and β-cyclodextrin polymer cross-linking binders to enhance capacity performance of silicon/carbon composite electrodes in lithium-ion batteries. Journal of Colloid and Interface Science, 2022, 613, 857-865.	5.0	18
841	é",硫电æ±ç»¼å•性èf½ååææå‡ç–ç•¥. Chinese Science Bulletin, 2022, , .	0.4	1
842	Dendriteâ€Free Zinc Deposition Induced by Zincâ€Phytate Coating for Longâ€Life Aqueous Zinc Batteries. Batteries and Supercaps, 2022, 5, .	2.4	7
843	Interfaces and Interphases in Batteries: How to Identify and Monitor Them Properly Using Surface Sensitive Characterization Techniques. Advanced Materials Interfaces, 2022, 9, .	1.9	9
844	Synthetic Methodologies for Si ontaining Li‣torage Electrode Materials. Advanced Energy and Sustainability Research, 2022, 3, .	2.8	6
845	Organosilane based artificial solid electrolyte interface layer for stable metallic lithium anode. Applied Surface Science, 2022, 586, 152806.	3.1	10
846	An Oxygenâ€Resistant and Selfâ€Eliminating Passivated Layer for Highly Stable Lithium Metal Batteries. Advanced Functional Materials, 0, , 2112645.	7.8	6
847	Porphyrin-based conjugated microporous polymers with dual active sites as anode materials for lithium-organic batteries. International Journal of Hydrogen Energy, 2022, 47, 10902-10910.	3.8	14
848	The Battery Component Readiness Level (BC-RL) framework: A technology-specific development framework. Journal of Power Sources Advances, 2022, 14, 100089.	2.6	8
849	Bis(fluorosulfonyl)imide-based electrolyte for rechargeable lithium batteries: A perspective. Journal of Power Sources Advances, 2022, 14, 100088.	2.6	19
850	Synthesis and characterization of Al and Zr-dual-doped lithium cobalt oxide cathode for Li-ion batteries using a facile hydrothermal approach. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 641, 128493.	2.3	9
851	Engineering Interlayer Space of Vanadium Oxide by Pyridinesulfonic Acid-Assisted Intercalation of Polypyrrole Enables Enhanced Aqueous Zinc-Ion Storage. ACS Applied Materials & Interfaces, 2021, 13, 61154-61165.	4.0	40
852	Highly Reversible Mg Metal Anodes Enabled by Interfacial Liquid Metal Engineering for High-Energy Mg-S Batteries. SSRN Electronic Journal, 0, , .	0.4	0
853	Glucose hydrothermal encapsulation of carbonized silicone polyester to prepare anode materials for lithium batteries with improved cycle stability. RSC Advances, 2022, 12, 9238-9248.	1.7	5

#	Article	IF	Citations
854	Ultrafine Mo2c-Mo2n Heterojunction Anchored on Three-Dimensional Porous N-Doped Carbon Framework for Hydrogen Evolution Reaction and Lithium-Ion Batteries. SSRN Electronic Journal, 0, , .	0.4	0
	Framework for Hydrogen Evolution Reaction and Ethnum-ion Batteries. SSRN Electronic Journal, 0, , .		
855	One-step fabrication of robust lithium ion battery separators by polymerization-induced phase separation. Journal of Materials Chemistry A, 2022, 10, 10557-10568.	5.2	10
856	Effective Stabilization of Ncm622 Cathodes in Aqueous/Non-Aqueous Hybrid Electrolytes by Adding a Phosphazene Derivate as Co-Solvent. SSRN Electronic Journal, 0, , .	0.4	0
857	Interconnected 3D fluorinated graphene host enables an ultrastable lithium metal anode. New Journal of Chemistry, 2022, 46, 8981-8990.	1.4	5
858	Tessellated N-doped carbon/CoSe ₂ as trap-catalyst sulfur hosts for room-temperature sodium–sulfur batteries. Inorganic Chemistry Frontiers, 2022, 9, 1743-1751.	3.0	6
859	CHAIN: unlocking informatics-aided design of Li metal anode from materials to applications. Rare Metals, 2022, 41, 1477-1489.	3.6	42
860	Quinoneâ€Amine Polymer Nanoparticles Prepared through Facile Precipitation Polymerization as Ultrafast and Ultralong Cycle Life Cathode Materials for Lithiumâ€Ion Batteries. Advanced Functional Materials, 2022, 32, .	7.8	39
861	Dendriteâ€Free Lithium Deposition and Stripping Regulated by Aligned Microchannels for Stable Lithium Metal Batteries. Advanced Functional Materials, 2022, 32, .	7.8	40
862	Low Currentâ€Density Stable Zincâ€Metal Batteries Via Aqueous/Organic Hybrid Electrolyte. Batteries and Supercaps, 2022, 5, .	2.4	42
863	Single-Ion <i>versus</i> Dual-Ion Conducting Electrolytes: The Relevance of Concentration Polarization in Solid-State Batteries. ACS Applied Materials & Interfaces, 2022, 14, 11559-11566.	4.0	34
864	Advances in carbon materials for stable lithium metal batteries. New Carbon Materials, 2022, 37, 1-24.	2.9	31
865	Solid/Quasiâ€ S olid Phase Conversion of Sulfur in Lithium–Sulfur Battery. Small, 2022, 18, e2106970.	5.2	21
866	Tailoring the Lithium Solid Electrolyte Interphase for Highly Concentrated Electrolytes with Direct Exposure to Halogenated Solvents. ACS Applied Energy Materials, 2022, 5, 2768-2779.	2.5	4
867	Flexible Free-Standing Fe ₂ O ₃ Nanoparticle/Carbon Shells/Graphene Films for Advanced Lithium-Ion Batteries. ACS Applied Nano Materials, 2022, 5, 5017-5024.	2.4	13
868	Impact of Degree of Graphitization, Surface Properties and Particle Size Distribution on Electrochemical Performance of Carbon Anodes for Potassiumâ€Ion Batteries. Batteries and Supercaps, 2022, 5, .	2.4	9
869	Machine learning in energy storage materials. , 2022, 1, 175-195.		45
870	Introducing a Pseudocapacitive Lithium Storage Mechanism into Graphite by Defect Engineering for Fast-Charging Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 16279-16288.	4.0	21
872	Highly stabilized and lowly polarized Li anodes using a hybrid surface film with inner Li-Zn nucleation sites and outer LiF-rich protection texture. Science China Materials, 2022, 65, 1779-1788.	3.5	4

_	_
CITATION	REDUBT
CHAILON	KLI OKI

#	Article	IF	CITATIONS
873	Advanced Machine Learning Methods for Learning from Sparse Data in High-Dimensional Spaces: A Perspective on Uses in the Upstream of Development of Novel Energy Technologies. Physchem, 2022, 2, 72-95.	0.5	8
874	Applications of polymers in lithium-ion batteries with enhanced safety and cycle life. Journal of Polymer Research, 2022, 29, 1.	1.2	11
875	Poly(1,5-diaminoanthraquinone) as a High-Capacity Bipolar Cathode for Rechargeable Magnesium Batteries. ACS Applied Energy Materials, 2022, 5, 3004-3012.	2.5	16
876	A Dualâ€Functional Titanium Nitride Chloride Layered Matrix with Facile Lithiumâ€Ion Diffusion Path and Decoupled Electron Transport as Highâ€Capacity Anodes. Advanced Functional Materials, 2022, 32, .	7.8	8
877	Design strategies for low temperature aqueous electrolytes. , 2022, 1, e9120003.		94
878	Overâ€Potential Tailored Thin and Dense Lithium Carbonate Growth in Solid Electrolyte Interphase for Advanced Lithium Ion Batteries. Advanced Energy Materials, 2022, 12, .	10.2	32
879	Modification of Nitrate Ion Enables Stable Solid Electrolyte Interphase in Lithium Metal Batteries. Angewandte Chemie - International Edition, 2022, 61, .	7.2	96
880	Enhancing Capacity and Stability of Anionic MOFs as Electrode Material by Cation Exchange. Frontiers in Chemistry, 2022, 10, 836325.	1.8	1
881	Ethylene Carbonateâ€Free Electrolytes for Stable, Safer Highâ€Nickel Lithiumâ€Ion Batteries. Advanced Energy Materials, 2022, 12, .	10.2	27
882	Synergistical Stabilization of Li Metal Anodes and LiCoO ₂ Cathodes in High-Voltage Liâ^¥LiCoO ₂ Batteries by Potassium Selenocyanate (KSeCN) Additive. ACS Energy Letters, 2022, 7, 1364-1373.	8.8	49
883	Modification of Nitrate Ion Enables Stable Solid Electrolyte Interphase in Lithium Metal Batteries. Angewandte Chemie, 2022, 134, .	1.6	9
884	Investigation of Lithium Polyacrylate Binders for Aqueous Processing of Niâ€Rich Lithium Layered Oxide Cathodes for Lithiumâ€ion Batteries. ChemSusChem, 2022, 15, .	3.6	5
885	Influence of Polarizability on the Structure, Dynamic Characteristics, and Ion-Transport Mechanisms in Polymeric Ionic Liquids. Journal of Physical Chemistry B, 2022, 126, 2583-2592.	1.2	11
886	Comparative X-ray Photoelectron Spectroscopy Study of the SEI and CEI in Three Different Lithium Ion Cell Formats. Journal of the Electrochemical Society, 2022, 169, 030533.	1.3	8
887	Lithiumâ€Diffusion Induced Capacity Losses in Lithiumâ€Based Batteries. Advanced Materials, 2022, 34, e2108827.	11.1	44
888	Crosslinked network solid polymer electrolyte with selfâ€healing ability and high stability for lithium metal battery. Polymer International, 2022, 71, 1201-1209.	1.6	5
889	A zwitterionic salt with one sulfonate and two ether functional groups as an additive for lithium-ion battery electrolyte. Electrochemistry Communications, 2022, 137, 107269.	2.3	3
890	Enhancing the Structure and Interface Stability of LiNi _{0.83} Co _{0.12} Mn _{0.05} O ₂ Cathode Material for Li-Ion Batteries via Facile CeP ₂ O ₇ Coating. ACS Sustainable Chemistry and Engineering. 2022. 10. 4881-4893.	3.2	2

#	Article	IF	CITATIONS
891	Passive direct methanol fuel cells as a sustainable alternative to batteries in hearing aid devices – An overview. International Journal of Hydrogen Energy, 2022, 47, 16552-16567.	3.8	20
893	Improved Capacity Retention for a Disordered Rocksalt Cathode via Solvate Ionic Liquid Electrolytes. Batteries and Supercaps, 0, , .	2.4	2
894	Direct investigation of the interparticle-based state-of-charge distribution of polycrystalline NMC532 in lithium ion batteries by classification-single-particle-ICP-OES. Journal of Power Sources, 2022, 527, 231204.	4.0	6
895	Balanced solvation/de-solvation of electrolyte facilitates Li-ion intercalation for fast charging and low-temperature Li-ion batteries. Nano Energy, 2022, 98, 107265.	8.2	49
896	Diffusion Limited Current Density: A Watershed in Electrodeposition of Lithium Metal Anode. Advanced Energy Materials, 2022, 12, .	10.2	42
897	Smart interfaces in Li-ion batteries: Near-future key challenges. Electrochimica Acta, 2022, 415, 140258.	2.6	8
898	Effect of lithium salt type on silicon anode for lithium-ion batteries. Electrochimica Acta, 2022, 413, 140159.	2.6	9
899	Local superconcentration via solvating ionic liquid electrolytes for safe 4.3V lithium metal batteries. Electrochimica Acta, 2022, 415, 140181.	2.6	4
900	Highly reversible Mg metal anodes enabled by interfacial liquid metal engineering for high-energy Mg-S batteries. Energy Storage Materials, 2022, 48, 447-457.	9.5	46
901	Mitigating irreversible capacity loss for higher-energy lithium batteries. Energy Storage Materials, 2022, 48, 44-73.	9.5	25
902	Metal-organic framework derived cobalt phosphide nanoparticles encapsulated within hierarchical hollow carbon superstructure for stable sodium storage. Chemical Engineering Journal, 2022, 438, 134279.	6.6	11
903	Oxidation of benzyl alcohol using linear paired electrolysis. Journal of Environmental Chemical Engineering, 2022, 10, 107490.	3.3	1
904	Revealing the critical effect of solid electrolyte interphase on the deposition and detriment of Co(â¡) ions to graphite anode. Journal of Energy Chemistry, 2022, 69, 389-396.	7.1	13
905	A robust in-situ catalytic graphitization combined with salt-template strategy towards fast lithium-ions storage. Journal of Alloys and Compounds, 2022, 908, 164717.	2.8	1
906	A flexible free-standing FeF3/reduced graphene oxide film as cathode for advanced lithium-ion battery. Journal of Alloys and Compounds, 2022, 909, 164702.	2.8	17
907	Understanding the anchoring effect on Li plating with Indium Tin oxide layer functionalized hosts for Li metal anodes. Chemical Engineering Journal, 2022, 440, 135827.	6.6	10
908	Non-flammable fluorobenzene-diluted highly concentrated electrolytes enable high-performance Li-metal and Li-ion batteries. Journal of Colloid and Interface Science, 2022, 619, 399-406.	5.0	12
909	Highly conductive self-healing polymer electrolytes based on synergetic dynamic bonds for highly safe lithium metal batteries. Chemical Engineering Journal, 2022, 442, 136083.	6.6	18

# 910	ARTICLE Overview of batteries and battery management for electric vehicles. Energy Reports, 2022, 8, 4058-4084.	IF 2.5	Citations 184
911	Designing safer lithium-based batteries with nonflammable electrolytes: A review. EScience, 2021, 1, 163-177.	25.0	147
912	Flexible, solid-state, fiber-network-reinforced composite solid electrolyte for long lifespan solid lithium-sulfurized polyacrylonitrile battery. Nano Research, 2022, 15, 3290-3298.	5.8	10
913	A Toolbox of Reference Electrodes for Lithium Batteries. Advanced Functional Materials, 2022, 32, .	7.8	27
914	Cobalt Recovery from Li-Ion Battery Recycling: A Critical Review. Metals, 2021, 11, 1999.	1.0	37
915	Schiff $\hat{a} \in b$ ases for sustainable battery and supercapacitor electrodes. Exploration, 2021, 1, .	5.4	21
916	An Activeâ€Oxygenâ€Scavenging Oriented Cathodeâ€Electrolyteâ€Interphase for Longâ€Life Lithiumâ€Rich Cath Materials. Small, 2022, 18, e2106072.	ode 5.2	16
917	Preactivation Strategy for a Wide Temperature Range <i>In Situ</i> Gel Electrolyte-Based LiNi _{0.5} Co _{0.2} Mn _{0.3} O ₂ â^¥Si–Graphite Battery. ACS Applied Materials & Interfaces, 2021, 13, 59843-59854.	4.0	10
918	Frontiers and Structural Engineering for Building Flexible Zinc–Air Batteries. Advanced Science, 2022, 9, e2103954.	5.6	20
919	Activating the Stepwise Intercalation–Conversion Reaction of Layered Copper Sulfide toward Extremely High Capacity Zinc-Metal-Free Anodes for Rocking-Chair Zinc-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 1126-1137.	4.0	26
921	Ultrastable Orthorhombic Na ₂ TiSiO ₅ Anode for Lithiumâ€lon Battery. Advanced Energy Materials, 2022, 12, .	10.2	18
922	Digitalization of Battery Manufacturing: Current Status, Challenges, and Opportunities. Advanced Energy Materials, 2022, 12, .	10.2	51
923	Ammonium enables reversible aqueous Zn battery chemistries by tailoring the interphase. One Earth, 2022, 5, 413-421.	3.6	10
924	Search for New Anode Materials for High Performance Li-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 20326-20348.	4.0	40
925	Acidâ€inâ€Clay Electrolyte for Wideâ€Temperatureâ€Range and Longâ€Cycle Proton Batteries. Advanced Materials, 2022, 34, e2202063.	11.1	16
926	Recent Progress on the Low and High Temperature Performance of Nanoscale Engineered Li-ion Battery Cathode Materials. Nanotechnology, 2022, , .	1.3	3
927	An overview on properties and applications of magnetorheological fluids: Dampers, batteries, valves and brakes. Journal of Energy Storage, 2022, 50, 104648.	3.9	32
928	A Facile and Low-Cost Wet-Chemistry Artificial Interface Engineering for Garnet-Based Solid-State Li Metal Batteries. SSRN Electronic Journal, 0, , .	0.4	1

ARTICLE IF CITATIONS Construction of Porous Cotio3 Microrods with Enhanced Performance as Lithium-Ion Battery Anode. 929 0.4 0 SSRN Electronic Journal, 0, , Advances in nanomaterials for sulfurized carbon cathodes., 2022, 241-270. Advanced Dualâ€Ion Batteries with Highâ€Capacity Negative Electrodes Incorporating Black Phosphorus. 931 5.6 11 Advanced Science, 2022, , 2201116. Understanding and modifications on lithium deposition in lithium metal batteries. Rare Metals, 2022, 41, 2800-2818. Toward Practical Highâ€Energyâ€Density Lithium–Sulfur Pouch Cells: A Review. Advanced Materials, 2022, 933 11.1 112 34, e2201555. Synergistic Structural Engineering of Tunnelâ€Type Polyantimonic Acid Enables Dualâ€Boosted 934 10.2 Volumetric and Areal Lithium Energy Storage. Advanced Energy Materials, 0, , 2200653. High Ionâ€Selectivity of Garnet Solid Electrolyte Enabling Separation of Metallic Lithium. Energy and 935 7.3 1 Environmental Materials, 2023, 6, . Defining Aging Marker Molecules of 1,3â€Propane Sultone for Targeted Identification in Spent LiNi _{0.6} Co _{0.2} Mn _{0.2} O ₂ ||AG Cells. Energy Technology, 936 1.8 937 Electrolytes for high-voltage lithium batteries. Trends in Chemistry, 2022, 4, 627-642. 25 4.4 Battery Powder as a Source of Novel Graphene Nanocarbons. Physica Status Solidi (B): Basic Research, Sieving carbons promise practical anodes with extensible low-potential plateaus for sodium batteries. 939 4.6 55 National Science Review, 2022, 9, . An analysis of the promise of Li–O2 and Li–S batteries incorporating plasmonic metal nanostructures. 940 2.5 Materials Today Energy, 2022, 27, 101033. Recycling of lithium iron phosphate batteries: Status, technologies, challenges, and prospects. 941 8.2 87 Renewable and Sustainable Energy Reviews, 2022, 163, 112515. A self-purifying electrolyte enables high energy Li ion batteries. Energy and Environmental Science, 2022, 15, 3331-3342. 942 15.6 Construction of Dendrite-free Lithium Metal Electrode Using Three-Dimensional Porous Copper and 943 0.51 Zinc Coatings. Acta Chimica Sinica, 2022, 80, 517. Critical Evaluation of Potentiostatic Holds as Accelerated Predictors of Capacity Fade during 944 Calendar Aging. Journal of the Electrochemical Society, 2022, 169, 050531. Mechanistic Insight on the Stability of Ether and Fluorinated Ether Solvent-Based Lithium 945 Bis(fluoromethanesulfonyl) Electrolytes near Li Metal Surface. Journal of Physical Chemistry C, 2022, 1.56 126, 8953-8963.

CITATION REPORT

946Applying Classical, <i>Ab Initio</i>, and Machine-Learning Molecular Dynamics Simulations to the
Liquid Electrolyte for Rechargeable Batteries. Chemical Reviews, 2022, 122, 10970-11021.23.0138

#	Article	IF	CITATIONS
947	Recent Developments in Electrolyte Materials for Rechargeable Batteries. Materials Horizons, 2022, , 369-415.	0.3	1
948	V-substituted pyrochlore-type polyantimonic acid for highly enhanced lithium-ion storage. Chinese Chemical Letters, 2023, 34, 107545.	4.8	О
949	Coating of a Novel Lithium-Containing Hybrid Oligomer Additive on Nickel-Rich LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ Cathode Materials for High-Stability and High-Safety Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2022, 10, 7394-7408.	3.2	14
950	Molecular engineering regulation redoxâ€dualâ€activeâ€center covalent organic frameworksâ€based anode for highâ€performance Li storage. EcoMat, 2022, 4, .	6.8	24
951	Review of room-temperature liquid metals for advanced metal anodes in rechargeable batteries. Energy Storage Materials, 2022, 50, 473-494.	9.5	35
952	Realizing highly reversible and deeply rechargeable Zn anode by porous zeolite layer. Journal of Power Sources, 2022, 540, 231659.	4.0	5
953	Ru clusters anchored on Magnéli phase Ti4O7 nanofibers enables flexible and highly efficient Li–O2 batteries. Energy Storage Materials, 2022, 50, 355-364.	9.5	28
954	Coupling core–shell Bi@Void@TiO ₂ heterostructures into carbon nanofibers for achieving fast potassium storage and long cycling stability. Journal of Materials Chemistry A, 2022, 10, 12908-12920.	5.2	12
955	Towards Low-Voltage and High-Capacity Conversion-Based Oxide Anodes Via Configuration Entropy Optimization. SSRN Electronic Journal, 0, , .	0.4	0
956	Lithophilic Zn-Doped Cuo/Zno Nanoarrays Modified 3d Scaffold Inducing Lithium Lateral Plating Achieving Highly Stable Lithium Metal Anode. SSRN Electronic Journal, 0, , .	0.4	0
957	Sodium-pillared vanadium oxides as next-gen materials: Does co-inserted water control the cyclic stability of vanadates in an aqueous electrolyte?. Electrochimica Acta, 2022, 425, 140603.	2.6	2
958	Atomicâ€5cale Design of Anode Materials for Alkali Metal (Li/Na/K)â€Ion Batteries: Progress and Perspectives. Advanced Energy Materials, 2022, 12, .	10.2	56
959	Advances and perspectives on one-dimensional nanostructure electrode materials for potassium-ion batteries. Materials Today, 2022, 56, 114-134.	8.3	26
960	Electrochemical Polishing: An Effective Strategy for Eliminating Li Dendrites. Advanced Functional Materials, 2022, 32, .	7.8	9
961	Effective stabilization of NCM622 cathodes in aqueous/non-aqueous hybrid electrolytes by adding a phosphazene derivate as Co-solvent. Journal of Power Sources, 2022, 541, 231670.	4.0	3
962	Generalized synthesis of NaCrO ₂ particles for high-rate sodium ion batteries prepared by microfluidic synthesis in segmented flow. Dalton Transactions, 2022, 51, 10466-10474.	1.6	1
963	Enhancing Structural and Cycle Stability of Prussian Blue Cathode Materials for Calcium-Ion Batteries by Introducing Divalent Fe. SSRN Electronic Journal, 0, , .	0.4	0
964	Developing a nitrile-based lithium-conducting electrolyte for low temperature operation. Journal of Materials Chemistry A, 2022, 10, 19972-19983.	5.2	2

#	Article	IF	CITATIONS
965	Toward High Temperature Sodium Metal Batteries via Regulating the Electrolyte/Electrode Interfacial Chemistries. ACS Energy Letters, 2022, 7, 2032-2042.	8.8	37
966	Electrospun polyimide@organic-montmorillonite composite separator with enhanced mechanical and thermal performances for high-safety lithium-ion battery. Journal of Materials Science, 2022, 57, 11796-11808.	1.7	3
967	Dataâ€Ðriven Analysis of Highâ€Throughput Experiments on Liquid Battery Electrolyte Formulations: Unraveling the Impact of Composition on Conductivity**. Chemistry Methods, 2022, 2, .	1.8	5
968	Highly crystalline vinylene-linked covalent organic frameworks enhanced solid polycarbonate electrolyte for dendrite-free solid lithium metal batteries. Nano Research, 2022, 15, 8083-8090.	5.8	11
969	Cationic Solid-State Electrolytes. ACS Symposium Series, 0, , 255-274.	0.5	0
970	Is Youtube Qualified as an Information Source for Regenerative Endodontics?. Meandros Medical and Dental Journal, 2022, 23, 188-193.	0.1	0
971	Optical Study of the Surface Film Formed during Li-Metal Deposition and Dissolution Investigated by Surface Plasmon Resonance Spectroscopy. ACS Applied Materials & Interfaces, 2022, 14, 28370-28377.	4.0	2
972	A High-Performance Polyurethane–Polydopamine Polymeric Binder for Silicon Microparticle Anodes in Lithium-Ion Batteries. ACS Applied Energy Materials, 2022, 5, 7571-7581.	2.5	12
973	Laser-radiated tellurium vacancies enable high-performance telluride molybdenum anode for aqueous zinc-ion batteries. Energy Storage Materials, 2022, 51, 29-37.	9.5	22
974	Regulating zinc metal anodes <i>via</i> novel electrolytes in rechargeable zinc-based batteries. Journal of Materials Chemistry A, 2022, 10, 14692-14708.	5.2	12
975	Modulation and Quantitative Study of Conformal Electrode-Electrolyte Interfacial Chemistry Toward High-Energy-Density Lini0.6co0.2mn0.2o2â€−Sio-C Pouch Cells. SSRN Electronic Journal, 0, , .	0.4	0
976	Honeycomb-Like Three-Dimensional Reduced Graphene Oxide Supported Nicoo2/Rgo Composite Anode Material for Lithium Storage. SSRN Electronic Journal, 0, , .	0.4	0
977	Diazonium Salts and Related Compounds in Electrochemical Energy Storage and Conversion. Physical Chemistry in Action, 2022, , 427-451.	0.1	2
978	Back to the Basics: Advanced Understanding of the As-Defined Solid Electrolyte Interphase on Lithium Metal Electrodes. SSRN Electronic Journal, 0, , .	0.4	0
979	Sandwich-Structural Ionogel Electrolyte with Core-Shell Ionic-Conducting Nanocomposites for Stable Li Metal Battery. SSRN Electronic Journal, 0, , .	0.4	0
980	Exploring smart graphitic carbon nitride material toward flexible energy storage supercapacitors. , 2022, , 21-37.		0
981	Synchrotron radiation based X-ray techniques for analysis of cathodes in Li rechargeable batteries. RSC Advances, 2022, 12, 20360-20378.	1.7	5
982	Failure Analysis of High-Energy-Density Lithium‒Sulfur Pouch Cells. SSRN Electronic Journal, 0, , .	0.4	Ο

#	Article	IF	CITATIONS
983	Lifepo4@C/Graphene Composite and In-Situ Prepared Nafepo4@C/Graphene Composite as High-Performance Cathode Materials for Electrochemical Energy Storage. SSRN Electronic Journal, 0, , .	0.4	0
984	3d Electronic Channels Wrapped Large-Sized Snse as Flexible Electrode for Sodium-Ion Batteries. SSRN Electronic Journal, 0, , .	0.4	0
985	Before Lithium-Ion Batteries: The Age of Primary Cells [Historical]. IEEE Industrial Electronics Magazine, 2022, 16, 73-77.	2.3	1
986	Operando Investigations of the Interfacial Electrochemical Kinetics of Metallic Lithium Anodes via Temperature-Dependent Electrochemical Impedance Spectroscopy. Journal of Physical Chemistry C, 2022, 126, 10968-10976.	1.5	17
987	Highly reversible Zn metal anode enabled by sustainable hydroxyl chemistry. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	41
988	Tailoring the metal electrode morphology via electrochemical protocol optimization for long-lasting aqueous zinc batteries. Nature Communications, 2022, 13, .	5.8	101
989	Magnetic Actuation Enables Programmable Lithium Metal Engineering. Advanced Energy Materials, 2022, 12, .	10.2	27
990	Electrochemical Lithium Intercalation into Graphite in a Mixed Glyme–Propylene Carbonate Electrolyte. Journal of Physical Chemistry C, 2022, 126, 10977-10985.	1.5	1
991	Determination of Average Coulombic Efficiency for Rechargeable Magnesium Metal Anodes in Prospective Electrolyte Solutions. ACS Applied Materials & Interfaces, 2022, 14, 30952-30961.	4.0	6
992	Mechanistically Novel <scp>Frontalâ€Inspired</scp> In Situ Photopolymerization: An Efficient Electrode Electrolyte Interface Engineering Method for High Energy Lithium Metal Polymer Batteries. Energy and Environmental Materials, 2023, 6, .	7.3	1
993	Enhancing the Interfacial Stability of Highâ€Energy Si/Graphite LiNi _{0.88} Co _{0.09} Mn _{0.03} O ₂ Batteries Employing a Dualâ€Anion Ionic Liquidâ€based Electrolyte. Batteries and Supercaps, 2022, 5, .	2.4	3
994	Anti-catalytic and zincophilic layers integrated zinc anode towards efficient aqueous batteries for ultra-long cycling stability. Nano Research, 2022, 15, 8076-8082.	5.8	28
995	Chemomechanics of Rechargeable Batteries: Status, Theories, and Perspectives. Chemical Reviews, 2022, 122, 13043-13107.	23.0	59
996	Heterogeneity and Nanostructure of Superconcentrated LiTFSl–EmimTFSI Hybrid Aqueous Electrolytes: Beyond the 21 m Limit of Water-in-Salt Electrolyte. Journal of Physical Chemistry B, 2022, 126, 5291-5304.	1.2	8
997	Lithiophilic onion-like carbon spheres as lithium metal uniform deposition host. Journal of Colloid and Interface Science, 2022, 627, 783-792.	5.0	12
998	Opportunities and Challenges of Li ₂ C ₄ O ₄ as Preâ€Lithiation Additive for the Positive Electrode in NMC622 Silicon/Graphite Lithium Ion Cells. Advanced Science, 2022, 9, .	5.6	20
999	Bifunctional mechanism and electrochemical performance of self-healing nitrile ether electrolyte additives in 4.5 V LiCoO2/artificial graphite lithium-ion batteries. Journal of Power Sources, 2022, 542, 231799.	4.0	12
1000	A facile and low-cost wet-chemistry artificial interface engineering for garnet-based solid-state Li metal batteries. Nano Energy, 2022, 101, 107603.	8.2	26

#	Article	IF	CITATIONS
1001	Differentiating the dominant intrinsic kinetics for lithium dendrite growth under different circumstances by computational study. Computational Materials Science, 2022, 213, 111637.	1.4	0
1002	Synthesis of porous Mn-based spinel microspheres with enhanced lithium storage properties. Journal of Alloys and Compounds, 2022, 922, 166237.	2.8	3
1003	Integrated pyrazine-based porous aromatic frameworks/carbon nanotube composite as cathode materials for aqueous zinc ion batteries. Chemical Engineering Journal, 2022, 450, 138051.	6.6	19
1004	Ultra-stable Zn metal batteries with dendrite-free Cu-Sn alloy induced high-quality composite Zn mesh. Chemical Engineering Journal, 2022, 450, 137979.	6.6	24
1005	Surface engineering of mesoporous TiO2 nanosheets for boosting lithium storage. Research on Chemical Intermediates, 2022, 48, 3883-3895.	1.3	1
1006	Sieving carbons reconfigure non-graphitic carbons for practical sodium batteries. National Science Review, 2022, 9, .	4.6	4
1007	Challenges and advances of organic electrode materials for sustainable secondary batteries. Exploration, 2022, 2, .	5.4	20
1008	Exploring the Insertion Properties of Mg2+ in H2v3o8 as a Function of the Water Content in the Organic Electrolyte. SSRN Electronic Journal, 0, , .	0.4	0
1009	Monodispersed flower-like MXene@VO ₂ clusters for aqueous zinc ion batteries with superior rate performance. Nanoscale, 2022, 14, 11655-11663.	2.8	11
1010	Synergistic effect of fluorinated solvent and Mg2+ enabling 4.6â€V LiCoO2 performances. Chinese Chemical Letters, 2023, 34, 107711.	4.8	2
1011	Superstructure Control of Anionic Redox Behavior in Manganese-Based Cathode Materials for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 35822-35832.	4.0	7
1012	Recent Developments and Future Prospects of Transition Metal Compounds as Electrode Materials for Potassiumâ€Ion Hybrid Capacitors. Advanced Materials Technologies, 2023, 8, .	3.0	11
1013	Influence of the Ambient Storage of LiNi0.8Mn0.1Co0.1O2 Powder and Electrodes on the Electrochemical Performance in Li-ion Technology. Batteries, 2022, 8, 79.	2.1	2
1014	Advanced Nonflammable Organic Electrolyte Promises Safer Liâ€Metal Batteries: From Solvation Structure Perspectives. Advanced Materials, 2023, 35, .	11.1	35
1015	In Situ Highâ€performance Gel Polymer Electrolyte with Dualâ€reactive Crossâ€linking for Lithium Metal Batteries. Energy and Environmental Materials, 2024, 7, .	7.3	4
1016	Radiolysis of Electrolytes in Batteries: A Quick and Efficient Screening Process for the Selection of Electrolyteâ€Additive Formulations. Small Methods, 2022, 6, .	4.6	2
1017	Quantifying the apparent electron transfer number of electrolyte decomposition reactions in anode-free batteries. Joule, 2022, 6, 2122-2137.	11.7	30
1018	Understanding Synthesis–Structure–Performance Correlations of Nanoarchitectured Activated Carbons for Electrochemical Applications and Carbon Capture. Advanced Functional Materials, 2022, 32, .	7.8	32

#	Article	IF	CITATIONS
1019	Insights into the Electrochemical Performance of 1.8 Ah Pouch and 18650 Cylindrical NMC:LFP Si:C Blend Li-ion Cells. Batteries, 2022, 8, 97.	2.1	2
1020	The Crucial Role of Electrode Potential of a Working Anode in Dictating the Structural Evolution of Solid Electrolyte Interphase. Angewandte Chemie, 0, , .	1.6	1
1021	Dual Structureâ€Material Design of Separators toward Dendriteâ€Free Lithium Metal Anodes. ChemSusChem, 0, , .	3.6	1
1022	Failure analysis of high-energy-density lithium‒sulfur pouch cells. Energy Storage Materials, 2022, 53, 315-321.	9.5	29
1023	<i>Operando</i> Quantified Lithium Plating Determination Enabled by Dynamic Capacitance Measurement in Working Liâ€ion Batteries. Angewandte Chemie - International Edition, 2022, 61, .	7.2	22
1024	First AIE probe for lithium-metal anodes. Matter, 2022, 5, 3530-3540.	5.0	8
1025	A novel Nafionâ€Functionalized Polyethersulfone(PES)â€based ionâ€permselective separator for high performance Liâ€O ₂ batteries using Lil as a redox mediator. International Journal of Energy Research, 0, , .	2.2	0
1026	Enabling Long-Cycling Life of Si-on-Graphite Composite Anodes via Fabrication of a Multifunctional Polymeric Artificial Solid–Electrolyte Interphase Protective Layer. ACS Applied Materials & Interfaces, 2022, 14, 38824-38834.	4.0	9
1027	Nonâ€Flammable Ester Electrolyte with Boosted Stability Against Li for Highâ€Performance Li Metal Batteries. Angewandte Chemie, 2022, 134, .	1.6	8
1028	Machine Learning Predicts the X-ray Photoelectron Spectroscopy of the Solid Electrolyte Interface of Lithium Metal Battery. Journal of Physical Chemistry Letters, 2022, 13, 8047-8054.	2.1	16
1029	Rechargeable Iodine Batteries: Fundamentals, Advances, and Perspectives. ACS Nano, 2022, 16, 13554-13572.	7.3	26
1030	Suppression and Mechanism of Voltage Decay in Sb-Doped Lithium-Rich Layered Oxide Cathode Materials. Journal of Physical Chemistry Letters, 2022, 13, 8214-8220.	2.1	11
1031	Revealing the Role, Mechanism, and Impact of AlF ₃ Coatings on the Interphase of Silicon Thin Film Anodes. Advanced Energy Materials, 2022, 12, .	10.2	10
1032	TiC Nanomaterials with Varying Dimensionalities as Anode Materials for Lithium-Ion Batteries. ACS Applied Nano Materials, 2022, 5, 11787-11796.	2.4	5
1033	<i>Operando</i> Quantified Lithium Plating Determination Enabled by Dynamic Capacitance Measurement in Working Liâ€ion Batteries. Angewandte Chemie, 2022, 134, .	1.6	2
1034	Nonâ€Flammable Ester Electrolyte with Boosted Stability Against Li for Highâ€Performance Li Metal Batteries. Angewandte Chemie - International Edition, 2022, 61, .	7.2	55
1035	Oneâ€Step Synthesis of Multiâ€Coreâ€Void@Shell Structured Silicon Anode for Highâ€Performance Lithiumâ€Ion Batteries. Small, 2022, 18, .	5.2	15
1036	The Crucial Role of Electrode Potential of a Working Anode in Dictating the Structural Evolution of Solid Electrolyte Interphase. Angewandte Chemie - International Edition, 2022, 61, .	7.2	39

#	Article	IF	Citations
1037	An Undoped Triâ€Phase Coexistent Cathode Material for Sodiumâ€Ion Batteries. Advanced Functional Materials, 2022, 32, .	7.8	18
1038	Tug-of-War in the Selection of Materials for Battery Technologies. Batteries, 2022, 8, 105.	2.1	7
1039	Interfacial engineering on metal anodes in rechargeable batteries. EnergyChem, 2022, 4, 100089.	10.1	12
1040	Towards better Mg metal anodes in rechargeable Mg batteries: Challenges, strategies, and perspectives. Energy Storage Materials, 2022, 52, 299-319.	9.5	43
1041	Revealing the lithium dendrite deposition/dissolution progression based on Monte Carlo method. Journal of Energy Storage, 2022, 55, 105473.	3.9	4
1042	Tunable dual cationic redox couples boost bifunctional oxygen electrocatalysis for long-term rechargeable Zn-air batteries. Journal of Colloid and Interface Science, 2022, 628, 922-930.	5.0	9
1043	Enhancing structural and cycle stability of Prussian blue cathode materials for calcium-ion batteries by introducing divalent Fe. Chemical Engineering Journal, 2023, 451, 138650.	6.6	6
1044	Lithiophilic Zn-doped CuO/ZnO nanoarrays modified 3D scaffold inducing lithium lateral plating achieving highly stable lithium metal anode. Chemical Engineering Journal, 2023, 451, 138410.	6.6	14
1045	Diethyl carbonate (DEC) gas sensor based on CeO ₂ loaded In ₂ O ₃ hollow spheres for thermal runaway monitoring of Li-ion batteries. Japanese Journal of Applied Physics, 2022, 61, 107002.	0.8	2
1046	Back to the basics: Advanced understanding of the as-defined solid electrolyte interphase on lithium metal electrodes. Journal of Power Sources, 2022, 549, 232118.	4.0	9
1047	Experimental assessment of the discharge characteristics of multi-type retired lithium-ion batteries in parallel for echelon utilization. Journal of Energy Storage, 2022, 55, 105539.	3.9	9
1048	Modulation and quantitative study of conformal electrode-electrolyte interfacial chemistry toward high-energy-density LiNi0.6Co0.2Mn0.2O2â€−SiO-C pouch cells. Energy Storage Materials, 2022, 53, 424-434.	9.5	3
1049	3D electronic channels wrapped Large-Sized SnSe as flexible electrode for Sodium-Ion batteries. Applied Surface Science, 2022, 606, 154955.	3.1	2
1050	Sandwich-structural ionogel electrolyte with core–shell ionic-conducting nanocomposites for stable Li metal battery. Chemical Engineering Journal, 2023, 451, 138993.	6.6	5
1051	Capacity prediction of K-ion batteries: a machine learning based approach for high throughput screening of electrode materials. Materials Advances, 2022, 3, 7833-7845.	2.6	7
1052	Stable organic radicals and their untapped potential in ionic liquids. Australian Journal of Chemistry, 2022, , .	0.5	1
1053	<i>In situ</i> characterization of lithium-metal anodes. Journal of Materials Chemistry A, 2022, 10, 17917-17947.	5.2	14
1054	Recent advances in dendrite-free lithium metal anodes for high-performance batteries. Physical Chemistry Chemical Physics, 2022, 24, 19996-20011.	1.3	34

#	Article	IF	CITATIONS
1055	Preparation of Cotton Straw Based Multi-pore Biomass Charcoal, Characterization and Electrochemical Properties. Lecture Notes in Electrical Engineering, 2022, , 139-155.	0.3	0
1056	Atomistic insights into the morphology of deposited Li. Journal of Materials Chemistry A, 2022, 10, 18577-18591.	5.2	3
1057	Recent progress in electrochromic energy storage materials and devices: a minireview. Materials Horizons, 2022, 9, 2949-2975.	6.4	42
1058	Defective Nano-Structure Regulating C-F Bond for Lithium/Fluorinated Carbon Batteries with Dual High-Performance. SSRN Electronic Journal, 0, , .	0.4	0
1059	Polycyclic Aromatic Hydrocarbon-Enabled Wet Chemical Prelithiation and Presodiation for Batteries. Batteries, 2022, 8, 99.	2.1	7
1060	A Minireview on the Regeneration of NCM Cathode Material Directly from Spent Lithium-Ion Batteries with Different Cathode Chemistries. Inorganics, 2022, 10, 141.	1.2	8
1061	Lambda Carrageenan as a Water-Soluble Binder for Silicon Anodes in Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2022, 10, 12620-12629.	3.2	13
1062	Noncoordinating Flame-Retardant Functional Electrolyte Solvents for Rechargeable Lithium-Ion Batteries. Journal of the American Chemical Society, 2022, 144, 18240-18245.	6.6	33
1063	Structureâ€Activity Relationships of a Niâ€MOF, a Niâ€MOFâ€rGO, and pyrolyzed Ni/C@rGO Structures for Sodium―ion Batteries. ChemistrySelect, 2022, 7, .	0.7	2
1064	Electric Vehicle Batteries: Status and Perspectives of Data-Driven Diagnosis and Prognosis. Batteries, 2022, 8, 142.	2.1	25
1065	Dual″on Intercalation Chemistry Enabling Hybrid Metal″on Batteries. ChemSusChem, 2023, 16, .	3.6	7
1066	Progress and challenges of prelithiation technology for lithiumâ€ion battery. , 2022, 4, 1107-1132.		46
1067	Probing the Phase Transition during the Formation of Lithium Lanthanum Zirconium Oxide Solid Electrolyte. ACS Applied Materials & amp; Interfaces, 2022, 14, 41978-41987.	4.0	4
1068	Surface Characterization and Optimization of Porous Zinc Anodes to Improve Cycle Stability by Mitigating Dendritic Growth. Journal of the Electrochemical Society, 2022, 169, 100511.	1.3	3
1069	Heteroleptic Coordination Polymer Electrolytes Initiated by Lewis-Acidic Eutectics for Solid Zinc–Metal Batteries. Chemistry of Materials, 2022, 34, 8975-8986.	3.2	13
1070	Direct recovery: A sustainable recycling technology for spent lithium-ion battery. Energy Storage Materials, 2023, 54, 120-134.	9.5	82
1071	Anion Donicity of Liquid Electrolytes for Lithium Carbon Fluoride Batteries. Angewandte Chemie - International Edition, 2022, 61, .	7.2	11
1072	High-Energy and Long-Lasting Organic Electrode for a Rechargeable Aqueous Battery. ACS Energy Letters, 2022, 7, 3637-3645.	8.8	10

#	Article	IF	CITATIONS
1073	Unlocking the Low-Temperature Potential of Propylene Carbonate to â^'30 °C via <i>N</i> -Methylpyrrolidone. ACS Applied Materials & Interfaces, 2022, 14, 45484-45493.	4.0	11
1074	Anion Donicity of Liquid electrolytes for Lithium Carbon Fluoride Batteries. Angewandte Chemie, 0, , .	1.6	0
1075	Exploring the insertion properties of Mg2+ in H2V3O8 as a function of the water content in the organic electrolyte. Electrochimica Acta, 2022, 434, 141294.	2.6	3
1076	Honeycomb structured nano MOF for high-performance sodium-ion hybrid capacitor. Chemical Engineering Journal, 2023, 452, 139585.	6.6	11
1077	A Nonflammable Highâ€Voltage 4.7 V Anodeâ€Free Lithium Battery. Advanced Materials, 2022, 34, .	11.1	24
1078	In-situ growing nanowires on biomass corn pods as free-standing electrodes with low surface reaction barrier for Li-, Al-, and Na-ion batteries. Applied Surface Science, 2023, 608, 155223.	3.1	5
1079	Highly Stable Lithium Metal Batteries by Regulating the Lithium Nitrate Chemistry with a Modified Eutectic Electrolyte. Advanced Energy Materials, 2022, 12, .	10.2	22
1080	Improving Wetting Behavior and Câ€Rate Capability of Lithiumâ€Ion Batteries by Plasma Activation. Energy Technology, 2023, 11, .	1.8	2
1081	Strategies for formulation optimization of composite positive electrodes for lithium ion batteries based on layered oxide, spinel, and olivine-type active materials. Journal of Power Sources, 2022, 551, 232179.	4.0	5
1082	A porous carbon based on the surface and structural regulation of wasted lignin for long-cycle lithium-ion battery. International Journal of Biological Macromolecules, 2022, 222, 1414-1422.	3.6	12
1083	In-situ polymerized separator enables propylene carbonate electrolyte compatible with high-performance lithium batteries. Journal of Power Sources, 2022, 551, 232172.	4.0	6
1084	Towards the Intercalation and Lithium Plating Mechanism for High Safety and Fast-Charging Lithium-ion Batteries: A Review. , 0, 1, .		1
1085	Battery materials. , 2023, , 308-363.		0
1086	Co-intercalation-free ether electrolytes for graphitic anodes in lithium-ion batteries. Energy and Environmental Science, 2022, 15, 4823-4835.	15.6	24
1087	Six-membered-ring inorganic materials for electrochemical applications. Trends in Chemistry, 2022, , .	4.4	0
1088	Effective electron–ion percolation network enabled by <i>in situ</i> lithiation for dendrite-free Li metal battery. Applied Physics Letters, 2022, 121, 153901.	1.5	1
1089	Suppressing Chemical Corrosions of Lithium Metal Anodes. Advanced Energy Materials, 2022, 12, .	10.2	11
1090	How to Promote the Industrial Application of SiO <i>_x</i> Anode Prelithiation: Capability, Accuracy, Stability, Uniformity, Cost, and Safety. Advanced Energy Materials, 2022, 12, .	10.2	22

#	Article	IF	CITATIONS
1091	Size controllable single-crystalline Ni-rich cathodes for high-energy lithium-ion batteries. National Science Review, 2023, 10, .	4.6	26
1092	Energy Storage Applications. Nanoscience and Technology, 2023, , 237-265.	1.5	Ο
1093	Recent progress in constructing halogenated interfaces for highly stable lithium metal anodes. Energy Storage Materials, 2023, 54, 732-775.	9.5	22
1094	Optimization of graphite/silicon-based composite electrodes for lithium ion batteries regarding the interdependencies of active and inactive materials. Journal of Power Sources, 2022, 552, 232252.	4.0	5
1095	Defective nano-structure regulating C-F bond for lithium/fluorinated carbon batteries with dual high-performance. Nano Energy, 2022, 104, 107905.	8.2	17
1096	Fluorinated ether decomposition in localized high concentration electrolytes. Journal of Power Sources, 2023, 553, 232299.	4.0	8
1097	Electronic structure modulation of Ru/W20O58 catalyst via interfacial Ru–O–W bridging bond for high-performance Li–O2 batteries. Applied Surface Science, 2023, 609, 155453.	3.1	9
1098	Constructing a 700 Wh kgâ^'1-level rechargeable lithium-sulfur pouch cell. Journal of Energy Chemistry, 2023, 76, 181-186.	7.1	48
1099	Sandwich structured ultra-strong-heat-shielding aerogel/copper composite insulation board for safe lithium-ion batteries modules. Journal of Energy Chemistry, 2023, 76, 438-447.	7.1	14
1100	Ultra-long cycle life organic-sodium batteries enabled by thiophene-based porphyrin in-situ electropolymerization. Chemical Engineering Journal, 2023, 453, 139951.	6.6	5
1101	Solid-state NMR of energy storage materials. , 2022, , .		0
1102	From lithium to emerging mono- and multivalent-cation-based rechargeable batteries: non-aqueous organic electrolyte and interphase perspectives. Energy and Environmental Science, 2023, 16, 11-52.	15.6	35
1103	Honeycomb-like three-dimensional reduced graphene oxide supported NiCoO2/rGO composite anode material to boost lithium storage performance. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2023, 287, 116101.	1.7	6
1104	Reversible lithium plating in the pores of a graphite electrode delivers additional capacity for existing lithium-ion batteries enabled by a compatible electrolyte. Chemical Engineering Journal, 2023, 454, 140290.	6.6	3
1105	Visualizing surface-enriched Li storage with a nanopore-array model battery. Nano Research, 2023, 16, 5026-5032.	5.8	1
1106	Probing Capacity Trends in MLi ₂ Ti ₆ O ₁₄ Lithium-Ion Battery Anodes Using Calorimetric Studies. ACS Omega, 0, , .	1.6	1
1107	Status Quo on Graphene Electrode Catalysts for Improved Oxygen Reduction and Evolution Reactions in Li-Air Batteries. Molecules, 2022, 27, 7851.	1.7	3
1108	N-doped porous carbon from direct KOH activation of Victorian brown coal for high-rate energy storage performance. Journal of Analytical and Applied Pyrolysis, 2022, 168, 105785.	2.6	5

		CITATION RE	PORT	
#	Article		IF	CITATIONS
1109	Sodium–gallium alloy layer for fast and reversible sodium deposition. SusMat, 2022,	2, 699-707.	7.8	17
1110	Long-life lithium-metal batteries with dendrite-free anodes enabled by Zn(TFSI)2 additi Alloys and Compounds, 2023, 936, 168108.	ve. Journal of	2.8	3
1111	Highly Stable Asymmetric Viologen as an Anolyte for Aqueous Organic and Halideâ€Ba Batteries. Energy Technology, 2023, 11, .	sed Redox Flow	1.8	4
1112	TiO2/Cu2O heterostructure enabling selective and uniform lithium deposition towards metal anodes. Nano Research, 2023, 16, 4917-4925.	stable lithium	5.8	6
1113	A Review of the Application of Carbon Materials for Lithium Metal Batteries. Batteries,	2022, 8, 246.	2.1	9
1114	Deciphering and modulating energetics of solvation structure enables aggressive high- chemistry of Li metal batteries. CheM, 2023, 9, 650-664.	voltage	5.8	47
1115	Coordinating Anions "to the Rescue―of the Lithium Ion Mobility in Ternary Solid F Plasticized With Ionic Liquids. Advanced Energy Materials, 2023, 13, .	olymer Electrolytes	10.2	25
1116	Surface-controlled sodium-ion storage mechanism of Li4Ti5O12 anode. Energy Storag 54, 724-731.	e Materials, 2023,	9.5	13
1117	Single lithium–ion transport and electrochemical stability triggered by organoborate for self-assembled PAS–co–2PEG solid electrolytes for lithium–sulfur battery. Ch Journal, 2023, 456, 140991.	zwitterions nemical Engineering	6.6	3
1118	Interface engineering enabled high-performance layered P3-type K0.5MnO2 cathode for potassium-ion batteries. Electrochimica Acta, 2023, 439, 141571.	or low-cost	2.6	2
1119	Structure regulation induced high capacity and ultra-stable cycling of conjugated orga for Li-ion batteries. Journal of Materials Chemistry A, 2022, 11, 77-83.	nic cathodes	5.2	5
1120	Novel Ni–Ge–P anodes for lithium-ion batteries with enhanced reversibility and rec potential. Inorganic Chemistry Frontiers, 2023, 10, 699-711.	luced redox	3.0	35
1121	FeP nanorods anchored in N-rich porous carbon for high performance Li-ions storage. J Electroanalytical Chemistry, 2023, 928, 117059.	ournal of	1.9	1
1122	Rechargeable and highly stable Mn metal batteries based on organic electrolyte. Chem Communications, 2023, 59, 1337-1340.	ical	2.2	2
1123	Polysaccharide hydrogel electrolytes with robust interfacial contact to electrodes for q state flexible aqueous zinc ion batteries with efficient suppressing of dendrite growth. Colloid and Interface Science, 2023, 633, 142-154.		5.0	16
1124	Fundamentals and advances of ligand field theory in understanding structure-electroch property relationship of intercalation-type electrode materials for rechargeable batteria in Materials Science, 2023, 133, 101055.		16.0	16
1125	Liquid-Metal Batteries for Next Generation. , 2022, , 1-22.			0
1126	Investigation of guided wave dispersion curves of Lithium-ion batteries at different sta- levels 2022	te of charge		0

#	Article	IF	CITATIONS
1127	The EDLC Energy Storage Device Based on a Natural Gelatin (NG) Biopolymer: Tuning the Capacitance through Plasticizer Variation. Polymers, 2022, 14, 5044.	2.0	2
1128	Emerging Chalcohalide Materials for Energy Applications. Chemical Reviews, 2023, 123, 327-378.	23.0	34
1129	Boosting the capability of Li2C2O4 as cathode pre-lithiation additive for lithium-ion batteries. Nano Research, 2023, 16, 3872-3878.	5.8	11
1130	Ultrathin Solid Polymer Electrolyte Design for Highâ€Performance Li Metal Batteries: A Perspective of Synthetic Chemistry. Advanced Science, 2023, 10, .	5.6	16
1131	Strategies toward High-Loading Lithium–Sulfur Batteries. ACS Energy Letters, 2023, 8, 116-150.	8.8	65
1132	Failure Mechanisms at the Interfaces between Lithium Metal Electrodes and a Single-Ion Conducting Polymer Gel Electrolyte. ACS Applied Materials & Interfaces, 2022, 14, 53893-53903.	4.0	4
1133	The role of oxygen heteroatoms in the surface (electro)chemistry of carbon materials. , 2022, 1, 162-174.		2
1134	Anode-Free Rechargeable Sodium-Metal Batteries. Batteries, 2022, 8, 272.	2.1	7
1135	Double hollow Zn2SnO4/SnO2@N-doped carbon nanocubes as anode material for High-performance Li-ion batteries. Chemical Physics Letters, 2023, 813, 140285.	1.2	5
1137	Fluorinated Solid tate Electrolytes for Lithium Batteries: Interface Design and Ion Conduction Mechanisms. Advanced Engineering Materials, 2023, 25, .	1.6	2
1138	Enhanced Electrolyte Transport and Kinetics Mitigate Graphite Exfoliation and Li Plating in Fastâ€Charging Liâ€Ion Batteries. Advanced Energy Materials, 2023, 13, .	10.2	8
1139	Thiolate-Based Electrolytes with Anion-Dominated Solvation for Highly Stable Lithium Metal Batteries. Journal of Physical Chemistry C, 2022, 126, 21181-21187.	1.5	3
1140	Lithium halide cathodes for Li metal batteries. Joule, 2023, 7, 83-94.	11.7	13
1141	Valorization of Camellia oleifera oil processing byproducts to value-added chemicals and biobased materials: A critical review. Green Energy and Environment, 2024, 9, 28-53.	4.7	3
1142	Secondary Batteries for Mobile Applications: From Lead to Lithium [Historical]. IEEE Industrial Electronics Magazine, 2022, 16, 60-68.	2.3	1
1143	Building Bridges: Unifying Design and Development Aspects for Advancing Non-Aqueous Redox-Flow Batteries. Batteries, 2023, 9, 4.	2.1	6
1145	Designing better electrolytes. Science, 2022, 378, .	6.0	146
1146	Solidâ€State Li Ion Batteries with Oxide Solid Electrolytes: Progress and Perspective. Energy Technology, 2023, 11, .	1.8	14

#	Article	IF	CITATIONS
1148	Consequences of Different Pressures and Electrolytes on the Irreversible Expansion of Lithium Metal Half Cells. Batteries and Supercaps, 0, , .	2.4	5
1149	Deciphering the effects of electrolyte concentration on the performance of lithium batteries by correlative surface characterization. Journal of Chemical Physics, 2022, 157, 224203.	1.2	0
1151	Failure mechanism of LiNi0.6Co0.2Mn0.2O2 cathodes in aqueous/non-aqueous hybrid electrolyte. Journal of Materials Chemistry A, 0, , .	5.2	0
1152	<i>In situ</i> UV-cured composite electrolytes for highly efficient quasi-solid-state lithium ion batteries with wide temperature range applications. Sustainable Energy and Fuels, 2023, 7, 986-995.	2.5	1
1154	Longâ€Term Cycling Stability of Porphyrin Electrode for Li/Na Charge Storage at High Temperature. ChemSusChem, 2023, 16, .	3.6	0
1155	Revealing the Impact of Different Ironâ€Based Precursors on the â€~Catalytic' Graphitization for Synthesis of Anode Materials for Lithium Ion Batteries. ChemElectroChem, 2023, 10, .	1.7	1
1156	Synthetic porous carbons for clean energy storage and conversion. EnergyChem, 2023, 5, 100099.	10.1	6
1157	Core–Shell Structured Polyimide@γ-Al ₂ O ₃ Nanofiber Separators for Lithium-Ion Batteries. ACS Applied Energy Materials, 2023, 6, 1692-1701.	2.5	3
1158	Synergistic role of functional electrolyte additives containing phospholane-based derivative to address interphasial chemistry and phenomena in NMC811 Si-graphite cells. Journal of Power Sources, 2023, 557, 232570.	4.0	3
1159	Highly-concentrated bis(fluorosulfonyl)imide-based ternary gel polymer electrolytes for high-voltage lithium metal batteries. Journal of Power Sources, 2023, 557, 232554.	4.0	8
1160	Interfaces and interphases in batteries. Journal of Power Sources, 2023, 559, 232652.	4.0	32
1161	High-performance lithium metal batteries enabled by fluorinated aromatic diluent assisted nonflammable localized high-concentration electrolytes. Journal of Power Sources, 2023, 559, 232631.	4.0	5
1162	Fast and reliable calibration of thermal-physical model of lithium-ion battery: a sensitivity-based method. Journal of Energy Storage, 2023, 59, 106435.	3.9	4
1163	Towards Lowâ€Voltage and Highâ€Capacity Conversionâ€Based Oxide Anodes by Configuration Entropy Optimization. ChemElectroChem, 2023, 10, .	1.7	1
1164	Inner Lithium Fluoride (LiF)-Rich Solid Electrolyte Interphase Enabled by a Smaller Solvation Sheath for Fast-Charging Lithium Batteries. ACS Applied Materials & Interfaces, 2023, 15, 1201-1209.	4.0	3
1165	A non-academic perspective on the future of lithium-based batteries. Nature Communications, 2023, 14,	5.8	135
1167	Polypropylene carbonate-based electrolytes as model for a different approach towards improved ion transport properties for novel electrolytes. Physical Chemistry Chemical Physics, 2023, 25, 4810-4823.	1.3	6
1168	Application of First Principles Computations Based on Density Functional Theory (DFT) in Cathode Materials of Sodium-Ion Batteries. Batteries, 2023, 9, 86.	2.1	3

#	Article	IF	CITATIONS
1169	SDF-based conjugated microporous polymers cathode materials with high cycle stability for lithium-ion batteries. Journal of Materials Science: Materials in Electronics, 2023, 34, .	1.1	0
1170	Solidâ€State Batteries Based on Organic Cathode Materials. Batteries and Supercaps, 2023, 6, .	2.4	3
1171	Research progress on the construction of synergistic electrocatalytic ORR/OER self-supporting cathodes for zinc–air batteries. Journal of Materials Chemistry A, 2023, 11, 4400-4427.	5.2	33
1172	Semiconducting Quantum Dots for Energy Conversion and Storage. Advanced Functional Materials, 2023, 33, .	7.8	22
1173	Review—Flow Batteries from 1879 to 2022 and Beyond. Journal of the Electrochemical Society, 2023, 170, 030505.	1.3	4
1174	In-situ constructed SnO2 gradient buffer layer as a tight and robust interphase toward Li metal anodes in LATP solid state batteries. Journal of Energy Chemistry, 2023, 80, 89-98.	7.1	12
1175	Magnesium: properties and rich chemistry for new material synthesis and energy applications. Chemical Society Reviews, 2023, 52, 2145-2192.	18.7	17
1176	Recent advances in modified commercial separators for lithium–sulfur batteries. Journal of Materials Chemistry A, 2023, 11, 7833-7866.	5.2	23
1177	Assessment of the calendar aging of lithium-ion batteries for a long-term—Space missions. Frontiers in Energy Research, 0, 11, .	1.2	6
1178	An Edible Rechargeable Battery. Advanced Materials, 2023, 35, .	11.1	15
1179	Nature-inspired interfacial engineering for highly stable Zn metal anodes. Energy Storage Materials, 2023, 58, 279-286.	9.5	6
1180	Probing inhomogeneity of electrical-thermal distribution on electrode during fast charging for lithium-ion batteries. Applied Energy, 2023, 336, 120868.	5.1	3
1181	Superlattice-like alternating layered Zn2SiO4/C with large interlayer spacing for high-performance sodium storage. Electrochimica Acta, 2023, 449, 142163.	2.6	2
1182	A Schiff based p-phenylenediimine polymer as high capacity anode materials for stable lithium ion batteries. Electrochimica Acta, 2023, 450, 142276.	2.6	4
1183	Recent advances and future perspectives of rechargeable chloride-based batteries. Nano Energy, 2023, 110, 108364.	8.2	10
1184	Three-dimensional experimental-scale phase-field modeling of dendrite formation in rechargeable lithium-metal batteries. Journal of Energy Storage, 2023, 62, 106854.	3.9	5
1185	Structural, electronic, mechanical and thermodynamic properties of lithium-rich layered oxides cathode materials for lithium-ion battery: Computational study. Materials Today Communications, 2023, 35, 105738.	0.9	4
1186	The effects of functionalization of imidazolium-based ionic liquid electrolytes on the lithium-ion transport. Journal of Energy Storage, 2023, 64, 107197.	3.9	1

#	Article	IF	Citations
1187	Highly nitrogen-doped carbon nanosheets derived from Cu-melamine coordination framework for fast lithium and sodium storage. Materials Research Bulletin, 2023, 164, 112258.	2.7	1
	last lithium and soulum storage. Materials Research bulletin, 2023, 104, 112236.		
1188	Lithium-metal, Lithium-ion and Other Batteries. , 2023, , 292-372.		0
1189	A black phosphorus-graphite hybrid as a Li-ion regulator enabling stable lithium deposition. , 2022, 52, 3.		0
1190	Electrolyte regulating and interface engineering for high voltage LiCoO2 lithium metal batteries. Applied Surface Science, 2023, 616, 156447.	3.1	3
1191	Ultrasmall CoS nanoparticles embedded in heteroatom-doped carbon for sodium-ion batteries and mechanism explorations via synchrotron X-ray techniques. Journal of Energy Chemistry, 2023, 79, 373-381.	7.1	16
1192	Electrolytes for Batteries. , 2022, , 1-24.		0
1193	The ENEA′s 2019–2021 Three‥ear Research Project on Electrochemical Energy Storage. ChemElectroChem, 2023, 10, .	1.7	1
1194	Electrolyte design for Li-ion batteries under extreme operating conditions. Nature, 2023, 614, 694-700.	13.7	175
1195	Nanoâ€singleâ€crystalâ€constructed submicron MnCO ₃ hollow spindles enabled by solid precursor transition combined Ostwald ripening in situ on graphene toward exceptional interfacial and capacitive lithium storage. , 2023, 5, .		16
1196	Nanostructure Engineering and Electronic Modulation of a PtNi Alloy Catalyst for Enhanced Oxygen Reduction Electrocatalysis in Zinc–Air Batteries. Journal of Physical Chemistry Letters, 2023, 14, 1740-1747.	2.1	11
1197	Highly Lithiophilic Three-Dimension Framework of Vertical CuO Nanorod Arrays Decorated Carbon Cloth for Dendrite-Free Li Metal Anode. Batteries, 2023, 9, 127.	2.1	0
1198	A Review of Polymerâ€based Solidâ€State Electrolytes for Lithiumâ€Metal Batteries: Structure, Kinetic, Interface Stability, and Application. Batteries and Supercaps, 2023, 6, .	2.4	14
1199	LiFePO4@C/graphene composite and in situ prepared NaFePO4@C/graphene composite as high-performance cathode materials for electrochemical energy storage. Journal of Materials Science: Materials in Electronics, 2023, 34, .	1.1	1
1200	Design Criteria of Dilute Ether Electrolytes toward Reversible and Fast Intercalation Chemistry of Graphite Anode in Li-Ion Batteries. ACS Energy Letters, 2023, 8, 1379-1389.	8.8	13
1201	Recent progress in electrolyte design for advanced lithium metal batteries. SmartMat, 2023, 4, .	6.4	13
1202	Current Status and Future Perspective on Lithium Metal Anode Production Methods. Advanced Energy Materials, 2023, 13, .	10.2	38
1203	Facile Construction of Nano-Dimensional Bi Encapsulated in N-Doped Porous Carbon Frameworks for High-Performance Sodium-Ion Hybrid Capacitors. ACS Applied Energy Materials, 2023, 6, 3071-3080.	2.5	5
1204	Simultaneous tailoring of hydrogen evolution and dendrite growth <i>via</i> a fertilizer-derived additive for the stabilization of the zinc anode interface. Journal of Materials Chemistry A, 2023, 11, 6403-6412.	5.2	7

#	Article	IF	CITATIONS
1205	Stability of solid electrolyte interphases and calendar life of lithium metal batteries. Energy and Environmental Science, 2023, 16, 1548-1559.	15.6	11
1206	Design of a Teflon‣ike Anion for Unprecedently Enhanced Lithium Metal Polymer Batteries. Advanced Energy Materials, 2023, 13, .	10.2	4
1207	Controlled Isotropic Canalization of Microsized Silicon Enabling Stable Highâ€Rate and High‣oading Lithium Storage. Advanced Materials, 2023, 35, .	11.1	10
1208	Challenges and Opportunities to Mitigate the Catastrophic Thermal Runaway of Highâ€Energy Batteries. Advanced Energy Materials, 2023, 13, .	10.2	22
1209	Interfacial Issues and Modification of Solid Electrolyte Interphase for Li Metal Anode in Liquid and Solid Electrolytes. Advanced Energy Materials, 2023, 13, .	10.2	34
1210	Complexes of LiF and LiCl with LiF, LiCl, LiH, HF, HCl, H ₂ , Li ₂ , F ₂ , Cl ₂ , FCl, H ₂ O and NH ₃ . Structures, energies and vibrational frequencies. Molecular Physics, 2023, 121, .	0.8	0
1211	Next-generation intelligent laboratories for materials design and manufacturing. MRS Bulletin, 2023, 48, 179-185.	1.7	5
1212	Revealing the importance of suppressing formation of lithium hydride and hydrogen in Li anode protection. , 2023, 2, 337-347.		4
1213	Alternative Energy Carriers: Unique Interfaces for Electrochemical Hydrogenic Transformations. Advanced Energy Materials, 2023, 13, .	10.2	4
1214	Development of All-Solid-State Li-Ion Batteries: From Key Technical Areas to Commercial Use. Batteries, 2023, 9, 157.	2.1	9
1215	A Pulse Impedance Technique for Fast State of Health Estimation of EV Lithium-Ion Batteries. Mechanisms and Machine Science, 2023, , 220-233.	0.3	0
1216	Enabling an Intrinsically Safe and Highâ€Energyâ€Đensity 4.5ÂVâ€Class Lithiumâ€Ion Battery with Synergistically Incorporated Fast Ion Conductors. Advanced Energy Materials, 2023, 13, .	10.2	11
1217	Facile synthesis of nitrogen-doped graphene, and its advanced electrochemical activity toward efficient lithium ion storage. Functional Materials Letters, 0, , .	0.7	0
1218	Boronic Ester Transesterification Accelerates Ion Conduction for Comb-like Solid Polymer Electrolytes. Macromolecules, 2023, 56, 2494-2504.	2.2	14
1219	Unlocking the full energy densities of carbon-based supercapacitors. Materials Research Letters, 2023, 11, 517-546.	4.1	9
1220	Nanosecond Laser Annealing of NMC 811 Cathodes for Enhanced Performance. Journal of the Electrochemical Society, 2023, 170, 030520.	1.3	3
1221	A Perspective on the Critical Design Criteria for Anode-free Li Metal Batteries. , 0, 1, .		0
1222	Gasâ€phase fluorination of conjugated microporous polymer microspheres for effective interfacial stabilization in lithium metal anodes. , 2023, 5, .		3

#	Article	IF	CITATIONS
1223	Research progress of "rocking chair―type zinc-ion batteries with zinc metal-free anodes. Chinese Chemical Letters, 2023, 34, 108307.	4.8	9
1224	2D Layered Nanomaterials as Fillers in Polymer Composite Electrolytes for Lithium Batteries. Advanced Energy Materials, 2023, 13, .	10.2	21
1225	Characterizing the Impact of Mg-Doped Li Metal Anode and Excess Electrons on High Concentration Electrolyte Interfacial Stability: A Theoretical Study. ACS Applied Energy Materials, 2023, 6, 3291-3300.	2.5	0
1226	In Situ Measurement of Current Distribution in Large-Format Li-Ion Cells. Modern Aspects of Electrochemistry, 2023, , 31-68.	0.2	0
1227	Less is more: a perspective on thinning lithium metal towards high-energy-density rechargeable lithium batteries. Chemical Society Reviews, 2023, 52, 2553-2572.	18.7	36
1228	Highâ€Energyâ€Density Lithium Metal Batteries with Impressive Li ⁺ Transport Dynamic and Wideâ€Temperature Performance from â^'60 to 60°C. Small, 2023, 19, .	5.2	3
1229	Identifying the Synergistic Na ⁺ /Zn ²⁺ Co-Intercalation Mechanism for Boosting Electrochemical Performance of Na ₄ Fe ₃ (PO ₄) ₂ P ₂ O ₇ in Zn-Ion Batteries., 2023, 5, 1170-1178.		11
1230	Online Real-Time Detection of the Degradation Products of Lithium Oxygen Batteries. ACS Energy Letters, 2023, 8, 1811-1817.	8.8	5
1231	Structure, Electrochemical, and Transport Properties of Li- and F-Modified P2-Na2/3Ni1/3Mn2/3O2 Cathode Materials for Na-Ion Batteries. Coatings, 2023, 13, 626.	1.2	2
1232	Quantum Chemical Characteristics of Additives That Enable the Use of Propylene Carbonate-Based Electrolytes. International Journal of Energy Research, 2023, 2023, 1-14.	2.2	2
1233	Adsorptionâ€Assisted Redox Center in Porous Organic Frameworks for Boosting Lithium Storage. ChemSusChem, 0, , .	3.6	0
1234	Differentiating between Ion Transport and Plating–Stripping Phenomena in Magnesium Battery Electrolytes Using <i>Operando</i> Raman Spectroscopy. ACS Energy Letters, 2023, 8, 1864-1869.	8.8	2
1235	Power supplies for cardiovascular implantable electronic devices. EcoMat, 2023, 5, .	6.8	9
1236	Metal/covalent organic frameworks for aqueous rechargeable zinc-ion batteries. Science China Chemistry, 2024, 67, 247-259.	4.2	9
1237	A high performance composite separator with robust environmental stability for dendrite-free lithium metal batteries. Journal of Colloid and Interface Science, 2023, 642, 321-329.	5.0	2
1238	Emerging electrolytes with fluorinated solvents for rechargeable lithium-based batteries. Chemical Society Reviews, 2023, 52, 2713-2763.	18.7	58
1239	Influence of Lithium Metal Deposition on Thermal Stability: Combined DSC and Morphology Analysis of Cyclic Aged Lithium Metal Batteries. Journal of the Electrochemical Society, 0, , .	1.3	1
1240	High Initial Coulombic Efficiency Hard Carbon Anodes Enabled by Facile Surface Annealing Engineering. Chemistry - an Asian Journal, 2023, 18, .	1.7	2

#	Article	IF	Citations
1241	Metallic and Dimensional Optimization of Metal–Organic Frameworks for Highâ€Performance Lithiumâ€6ulfur Batteries. Chemistry - A European Journal, 2023, 29, .	1.7	1
1242	Electrochemical Devices. , 2023, , 223-291.		0
1243	Interphases. , 2023, , 602-713.		0
1244	A novel calculation strategy for optimized prediction of the reduction of electrochemical window at anode. Chinese Physics B, O, , .	0.7	1
1245	Electrostatic Potential as Solvent Descriptor to Enable Rational Electrolyte Design for Lithium Batteries. Advanced Energy Materials, 2023, 13, .	10.2	14
1246	Effective regulation towards electrochemical stability of superionic solid electrolyte via facile dual-halogen strategy. Chemical Engineering Journal, 2023, 465, 143036.	6.6	6
1247	Electrochemical Imaging of Interfaces in Energy Storage via Scanning Probe Methods: Techniques, Applications, and Prospects. Annual Review of Analytical Chemistry, 2023, 16, 93-115.	2.8	2
1248	Dual Role of Bis(borate) Additive in Electrode/Electrolyte Interface Layer Construction for High-Voltage NCM 523 Cathode. ACS Applied Energy Materials, 2023, 6, 4817-4824.	2.5	4
1249	Mixedâ€phase WO ₃ Cocatalysts on Hierarchical Siâ€based Photocathode for Efficient Photoelectrochemical Li Extraction. Angewandte Chemie, 2023, 135, .	1.6	0
1250	Chemical synthesized nano-Li3V2O5 anode for high-rate rechargeable Li-ion batteries at low temperature. Journal of Energy Storage, 2023, 66, 107472.	3.9	0
1251	Mixedâ€phase WO ₃ Cocatalysts on Hierarchical Siâ€based Photocathode for Efficient Photoelectrochemical Li Extraction. Angewandte Chemie - International Edition, 2023, 62, .	7.2	5
1254	Advances in functional organic material-based interfacial engineering on metal anodes for rechargeable secondary batteries. Nanoscale, 2023, 15, 9256-9289.	2.8	5
1256	Structure andÂStability ofÂModern Electrolytes inÂNanoscale Confinements fromÂMolecular Dynamics Perspective. Composites Science and Technology, 2023, , 125-144.	0.4	1
1276	The use of superoxide ions in electrochemistry. , 2024, , 344-358.		0
1278	Molecular-scale synchrotron X-ray investigations of solid-liquid interfaces in lithium-ion batteries. , 2023, , .		0
1284	Li-ion batteries as energy storage for solar power plant. AIP Conference Proceedings, 2023, , .	0.3	0
1323	A reflection on polymer electrolytes for solid-state lithium metal batteries. Nature Communications, 2023, 14, .	5.8	15
1329	Aligned carbon nanotubes for lithium-ion batteries: A review. Nano Research, 2023, 16, 12384-12410.	5.8	1

#	Article	IF	CITATIONS
1331	Small-molecule organic electrode materials for rechargeable batteries. Science China Chemistry, 2023, 66, 3070-3104.	4.2	6
1338	Single-atom site catalysis in Li–S batteries. Physical Chemistry Chemical Physics, 2023, 25, 25942-25960.	1.3	1
1351	The Promise of 3D Printed Solid Polymer Electrolytes for Developing Sustainable Batteries: A Techno-Commercial Perspective. International Journal of Precision Engineering and Manufacturing - Green Technology, 0, , .	2.7	0
1354	Recent status, key strategies and challenging perspectives of fast-charging graphite anodes for lithium-ion batteries. Energy and Environmental Science, 2023, 16, 4834-4871.	15.6	14
1360	Metal-ion battery. , 2024, , 237-242.		0
1372	Nanotechnology for electrochemical energy storage. Nature Nanotechnology, 2023, 18, 1117-1117.	15.6	1
1373	Synthesis and Properties of Layered Materials. Engineering Materials, 2023, , 17-44.	0.3	0
1375	Safety of lithium battery materials chemistry. Journal of Materials Chemistry A, 2023, 11, 25236-25246.	5.2	1
1378	Reappraisal of hard carbon anodes for practical lithium/sodium-ion batteries from the perspective of full-cell matters. Energy and Environmental Science, 2023, 16, 5688-5720.	15.6	6
1387	Fundamentals of Vanadium-Based Nanomaterials. , 2023, , 1-15.		0
1392	Recent progress in SEI engineering for boosting Li metal anodes. Materials Horizons, 2024, 11, 388-407.	6.4	2
1393	3D-hosted lithium metal anodes. Chemical Society Reviews, 0, , .	18.7	1
1409	Designing electrolytesÂand interphases for high-energy lithium batteries. Nature Reviews Chemistry, 2024, 8, 30-44.	13.8	5
1413	Preparation and Structural Investigation of Olivine Structured LiFePO4. Springer Proceedings in Materials, 2024, , 245-255.	0.1	0
1425	Renewable energy and associated technologies and the scarcity of metal. , 2024, , 45-63.		0
1451	Recent advances in electrolyte molecular design for alkali metal batteries. Chemical Science, 2024, 15, 4238-4274.	3.7	0
1464	Strategies to enable microsized alloy anodes for high-energy and long-life alkali-ion batteries. , 0, , .		0
1471	High-Performance Carbon from Recycled Mattress for Supercapacitor Devices. Engineering Materials, 2024, , 321-346.	0.3	0

ARTICLE

IF CITATIONS