30 Years of Lithiumâ€Ion Batteries

Advanced Materials

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Citation Report

#	Article	IF	Citations
1	Supercritical CO₂-assisted synthesis of 3D porous SiOC/Se cathode for ultrahigh areal capacity and long cycle life Liâ€“Se batteries. Journal of Materials Chemistry A, 2018, 6, 24773-24782.	5.2	26
2	Designing Lithiumâ€“Sulfur Batteries with High-Loading Cathodes at a Lean Electrolyte Condition. ACS Applied Materials & Interfaces, 2018, 10, 43749-43759.	4.0	27
3	Unraveling the Redox Couples of V^{III}/V^{IV} Mixed-Valent Na₃V₂(PO₄)₂O_{1.6}F_{1.4} Cathode by Parallel-Mode EPR and In Situ/Ex Situ NMR. Journal of Physical Chemistry C, 2018, 122, 27224-27232.	1.5	35
4	Mechanistic Origin of the High Performance of Yolk@Shell Bi₂S₃@N-Doped Carbon Nanowire Electrodes. ACS Nano, 2018, 12, 12597-12611.	7.3	213
5	Phytic Acid-Assisted Formation of Hierarchical Porous CoP/C Nanoboxes for Enhanced Lithium Storage and Hydrogen Generation. ACS Nano, 2018, 12, 12238-12246.	7.3	175
6	Before Li Ion Batteries. Chemical Reviews, 2018, 118, 11433-11456.	23.0	1,492
7	Translating Materials-Level Performance into Device-Relevant Metrics for Zinc-Based Batteries. Joule, 2018, 2, 2519-2527.	11.7	134
8	A Facile, Lowâ€Cost Hotâ€Pressing Process for Fabricating Lithiumâ€“Sulfur Cells with Stable Dynamic and Static Electrochemistry. Advanced Materials, 2018, 30, e1805571.	11.1	38
9	Three-Electron Redox Enabled Dithiocarboxylate Electrode for Superior Lithium Storage Performance. ACS Applied Materials & Interfaces, 2018, 10, 35469-35476.	4.0	24
10	Metal-Organic Frameworks for Batteries. Joule, 2018, 2, 2235-2259.	11.7	462
11	The Dualâ€Play of 3D Conductive Scaffold Embedded with Co, N Codoped Hollow Polyhedra toward Highâ€Performance Liâ€“S Full Cell. Advanced Energy Materials, 2018, 8, 1802561.	10.2	114
12	Coaxial Î±-MnSe@N-doped carbon double nanotubes as superior anode materials in Li/Na-ion half/full batteries. Journal of Materials Chemistry A, 2018, 6, 15797-15806.	5.2	65
13	Ultrahigh Malleability of the Lithiation-Induced Li_xSi Phase. ACS Applied Energy Materials, 2018, 1, 4211-4220.	2.5	16
14	Fast chargeable P2â€“K~2/3[Ni1/3Mn2/3]O2 for potassium ion battery cathodes. Journal of Power Sources, 2019, 438, 226992.	4.0	31
15	Design, synthesis and lithium-ion storage capability of Al_{0.5}Nb_{24.5}O₆₂. Journal of Materials Chemistry A, 2019, 7, 19862-19871.	5.2	96
16	Multiscale Buffering Engineering in Siliconâ€“Carbon Anode for Ultrastable Li-Ion Storage. ACS Nano, 2019, 13, 10179-10190.	7.3	73
17	Multifunctional Nano-Architecting of Si Electrode for High-Performance Lithium-Ion Battery Anode. Journal of the Electrochemical Society, 2019, 166, A2776-A2783.	1.3	6
18	A modeling framework to assess specific energy, costs and environmental impacts of Li-ion and Na-ion batteries. Sustainable Energy and Fuels, 2019, 3, 3061-3070.	2.5	36

#	Article	IF	Citations
19	Biofilm Nanofiber-Coated Separators for Dendrite-Free Lithium Metal Anode and Ultrahigh-Rate Lithium Batteries. ACS Applied Materials & Interfaces, 2019, 11, 32373-32380.	4.0	59
20	Sn nanocrystals embedded in porous TiO₂/C with improved capacity for sodium-ion batteries. Inorganic Chemistry Frontiers, 2019, 6, 2675-2681.	3.0	13
21	On the Lithiation Mechanism of Amorphous Silicon Electrodes in Li-Ion Batteries. Journal of Physical Chemistry C, 2019, 123, 22027-22039.	1.5	34
22	Top-down tailoring of nanostructured manganese molybdate enhances its lithium storage properties. CrystEngComm, 2019, 21, 5374-5381.	1.3	10
23	Hydrodynamic force-induced rapid assembly of mesoporous MnO/C hollow microtube as an anode material for lithium-ion batteries. Ceramics International, 2019, 45, 22281-22291.	2.3	6
24	Revealing the Chemical and Structural Evolution of V2O5 Nanoribbons in Lithium-Ion Batteries Using in Situ Transmission Electron Microscopy. Analytical Chemistry, 2019, 91, 11055-11062.	3.2	18
25	Enhanced low-temperature Li-ion storage in MXene titanium carbide by surface oxygen termination. 2D Materials, 2019, 6, 045025.	2.0	46
26	Prospects of carbon nanomaterials for energy storage and conversion. , 2019, , 423-430.		2
27	Electrostatic Self-assembly of 0Dâ€“2D SnO2 Quantum Dots/Ti3C2Tx MXene Hybrids as Anode for Lithium-Ion Batteries. Nano-Micro Letters, 2019, 11, 65.	14.4	112
28	Enhanced performance of S-doped Sb/Sb2O3/CNT/GNR nanocomposite as anode material in lithium-ion batteries. Journal of Alloys and Compounds, 2019, 807, 151647.	2.8	27
29	Advanced Lithium Metalâ€“Carbon Nanotube Composite Anode for High-Performance Lithiumâ€“Oxygen Batteries. Nano Letters, 2019, 19, 6377-6384.	4.5	70
30	Structure Rearrangement and V(IV) Doping for V₂O₅ as Ultralong-Life and Ultrahigh-Rate Cathode in Aqueous Zinc-Ion Batteries. Journal of the Electrochemical Society, 2019, 166, A2805-A2813.	1.3	15
31	A hollow CuS nanocube cathode for rechargeable Mg batteries: effect of the structure on the performance. Journal of Materials Chemistry A, 2019, 7, 21410-21420.	5.2	58
32	Electrospun carbon nanofiber-based composites for lithium-ion batteries: Structure optimization towards high performance. Composites Communications, 2019, 15, 135-148.	3.3	31
33	Intercalation chemistry of graphite: alkali metal ions and beyond. Chemical Society Reviews, 2019, 48, 4655-4687.	18.7	534
34	Synthesis and Applications of Graphene/Iron(III) Oxide Composites. ChemElectroChem, 2019, 6, 4922-4948.	1.7	7
35	An innovation: Dendrite free quinone paired with ZnMn2O4 for zinc ion storage. Materials Today Energy, 2019, 13, 323-330.	2.5	73
36	The Effects of Reversibility of H2-H3 Phase Transition on Ni-Rich Layered Oxide Cathode for High-Energy Lithium-Ion Batteries. Frontiers in Chemistry, 2019, 7, 500.	1.8	51

#	Article	IF	Citations
37	CdS@MoS2 coreâ€“shell nanospheres: a new electrode for lithium ion batteries. Journal of Materials Science: Materials in Electronics, 2019, 30, 14456-14463.	1.1	5
38	P2-type Na0.67Co0.35Ti0.20Mn0.44La0.01O2 cathode material with high-rate capability for sodium-ion batteries. Journal of Rare Earths, 2019, 37, 1296-1304.	2.5	4
39	Na3FePO4CO3 as a cathode for hybrid-ion batteriesâ€”study of Na+/Li+ electrochemical exchange. Ionics, 2019, 25, 5829-5838.	1.2	11
40	Highâ€Performance, Lowâ€Cost, and Denseâ€Structure Electrodes with High Mass Loading for Lithiumâ€Ion Batteries. Advanced Functional Materials, 2019, 29, 1903961.	7.8	93
41	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
42	A Highâ€Rate and Longâ€Life Aqueous Rechargeable Ammonium Zinc Hybrid Battery. ChemSusChem, 2019, 12, 3732-3736.	3.6	62
43	Encapsulating NiCo₂O₄ inside metalâ€“organic framework sandwiched graphene oxide 2D composite nanosheets for high-performance lithium-ion batteries. Nanoscale, 2019, 11, 15166-15172.	2.8	27
44	Role of Stress Concentrations on the Electrochemical Response of a Li-Ion Battery Anode Particle. Journal of the Electrochemical Society, 2019, 166, A2574-A2588.	1.3	8
45	Thick Electrode Batteries: Principles, Opportunities, and Challenges. Advanced Energy Materials, 2019, 9, 1901457.	10.2	407
46	Facile synthesis of three-dimensional MgFe2O4/graphene aerogel composites for high lithium storage performance and its application in full cell. Materials and Design, 2019, 182, 108043.	3.3	17
47	3D Interconnected Porous Graphitic Carbon@MoS2 Anchored on Carbonized Cotton Cloth as an Anode for Enhanced Lithium Storage Performance. Electrochimica Acta, 2019, 320, 134616.	2.6	23
48	Intercalation pseudocapacitance in a NASICON-structured Na₂CrTi(PO₄)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
49	Ag-functionalized exfoliated V2O5 nanosheets: a flexible and binder-free cathode for lithium-ion batteries. Journal of Materials Science, 2019, 54, 12713-12722.	1.7	19
50	ZnO Nanowires as a Promotor of High Photoinduced Efficiency and Voltage Gain for Cathode Battery Recharging. ACS Applied Energy Materials, 2019, 2, 6254-6262.	2.5	7
51	Phenolic hydroxyl functionalized partially reduced graphene oxides for symmetric supercapacitors with significantly enhanced electrochemical performance. Journal of Power Sources, 2019, 435, 226799.	4.0	37
52	Direct observation of reversible conversion and alloying reactions in a Bi₂(MoO₄)₃-based lithium-ion battery anode. Journal of Materials Chemistry A, 2019, 7, 17906-17913.	5.2	9
53	Surface-Based Li⁺ Complex Enables Uniform Lithium Deposition for Stable Lithium Metal Anodes. ACS Applied Energy Materials, 2019, 2, 4602-4608.	2.5	32
54	A multi-shelled V₂O₃/C composite with an overall coupled carbon scaffold enabling ultrafast and stable lithium/sodium storage. Journal of Materials Chemistry A, 2019, 7, 19234-19240.	5.2	45

#	Article	IF	Citations
55	Correlation between manganese dissolution and dynamic phase stability in spinel-based lithium-ion battery. Nature Communications, 2019, 10, 4721.	5.8	182
56	Dendriteâ€Free Lithium Deposition via a Superfilling Mechanism for Highâ€Performance Liâ€Metal Batteries. Advanced Materials, 2019, 31, e1903248.	11.1	106
57	Electrodeposition Technologies for Liâ€Based Batteries: New Frontiers of Energy Storage. Advanced Materials, 2020, 32, e1903808.	11.1	70
58	Bismuth Nanoparticle@Carbon Composite Anodes for Ultralong Cycle Life and Highâ€Rate Sodiumâ€Ion Batteries. Advanced Materials, 2019, 31, e1904771.	11.1	201
59	Atroposelective Arene Formation by Carbeneâ€Catalyzed Formal [4+2] Cycloaddition. Angewandte Chemie - International Edition, 2019, 58, 17625-17630.	7.2	96
60	Effects of oxalic acid concentration on the microstructures and properties of nano-VO2(B). Journal of Solid State Electrochemistry, 2019, 23, 2951-2959.	1.2	9
61	Anisotropically Electrochemicalâ€“Mechanical Evolution in Solidâ€State Batteries and Interfacial Tailored Strategy. Angewandte Chemie - International Edition, 2019, 58, 18647-18653.	7.2	43
62	High-performance symmetric lithium-ion batteries constructed with a new bi-functional electrode Li- and Mn-rich layered oxide 0.3Li2MnO3Â·0.7LiNi1/3Co1/3Mn1/3O2. Electrochimica Acta, 2019, 325, 134932.	2.6	8
63	Improving electrochemical performance of lithium-rich cathode material Li1.2Mn0.52Ni0.13Co0.13W0.02O2 coated with Li2WO4 for lithiumÂion batteries. Journal of Alloys and Compounds, 2019, 811, 152023.	2.8	21
64	Elucidation of Anionic and Cationic Redox Reactions in a Prototype Sodium-Layered Oxide Cathode. ACS Applied Materials & Interfaces, 2019, 11, 41304-41312.	4.0	43
65	Facile synthesis of LiVO3 and its electrochemical behavior in rechargeable lithium batteries. Journal of Electroanalytical Chemistry, 2019, 853, 113505.	1.9	18
66	High-Rate and High-Voltage Aqueous Rechargeable Zinc Ammonium Hybrid Battery from Selective Cation Intercalation Cathode. ACS Applied Energy Materials, 2019, 2, 6984-6989.	2.5	61
67	Anisotropically Electrochemicalâ€“Mechanical Evolution in Solidâ€State Batteries and Interfacial Tailored Strategy. Angewandte Chemie, 2019, 131, 18820-18826.	1.6	12
68	Demanding energy from carbon. , 2019, 1, 8-12.		118
69	Hollow Î±â€Fe₂O₃ Nanotubes Embedded in Graphene Aerogel as Highâ€Performance Anode Material for Lithiumâ€Ion Batteries. ChemistrySelect, 2019, 4, 11370-11377.	0.7	16
70	Thermally Durable Lithiumâ€Ion Capacitors with High Energy Density from All Hydroxyapatite Nanowireâ€Enabled Fireâ€Resistant Electrodes and Separators. Advanced Energy Materials, 2019, 9, 1902497.	10.2	34
71	Preparation of Highly Porous PAN-LATP Membranes as Separators for Lithium Ion Batteries. Nanomaterials, 2019, 9, 1581.	1.9	13
72	O3â€Type Layered Niâ€Rich Oxide: A Highâ€Capacity and Superiorâ€Rate Cathode for Sodiumâ€Ion Batteries. Small, 2019, 15, e1905311.	5.2	41

#	Article	IF	Citations
73	An Improved High-rate Discharging Performance of â€œUnbalancedâ€•LiFePO₄ Cathodes with Different LiFePO₄ Loadings by a Grid-patterned Micrometer Size-holed Electrode Structuring. Electrochemistry, 2019, 87, 370-378.	0.6	10
74	Atroposelective Arene Formation by Carbeneâ€Catalyzed Formal [4+2] Cycloaddition. Angewandte Chemie, 2019, 131, 17789-17794.	1.6	30
75	The critical role of carbon in marrying silicon and graphite anodes for highâ€energy lithiumâ€ion batteries. , 2019, 1, 57-76.		261
76	Benzyltriethylammonium Chloride Electrolyte for Highâ€Performance Alâ€ion Batteries. ChemNanoMat, 2019, 5, 1367-1372.	1.5	12
77	An Ultrahigh Energy Density Quasiâ€Solidâ€State Zinc Ion Microbattery with Excellent Flexibility and Thermostability. Advanced Energy Materials, 2019, 9, 1901957.	10.2	111
78	Phosphorizationâ€Induced Voidâ€Containing Fe 3 O 4 Nanoparticles Enabling Low Lithiation/Delithiation Potential for Highâ€Performance Lithiumâ€ion Batteries. ChemElectroChem, 2019, 6, 5060-5069.	1.7	10
79	Targeted Construction of Amorphous MoS_x with an Inherent Chain Molecular Structure for Improved Pseudocapacitive Lithiumâ€ion Response. Chemistry - A European Journal, 2019, 25, 15173-15181.	1.7	5
80	Cu-Al Composite as the Negative Electrode for Long-life Al-Ion Batteries. Journal of the Electrochemical Society, 2019, 166, A3539-A3545.	1.3	20
81	Cobalt atoms dispersed on hierarchical carbon nitride support as the cathode electrocatalyst for high-performance lithium-polysulfide batteries. Science Bulletin, 2019, 64, 1875-1880.	4.3	54
82	Spherical graphite produced from waste semi-coke with enhanced properties as an anode material for Li-ion batteries. Sustainable Energy and Fuels, 2019, 3, 3116-3127.	2.5	16
83	Novel fabrication of Li4Ti5O12 coated LiMn2O4 nanorods as cathode materials with long-term cyclic stability at high ambient temperature. International Journal of Electrochemical Science, 2019, 14, 7673-7683.	0.5	5
84	Using Different Ions to Tune Graphene Stack Structures from Sheet- to Onion-Like During Plasma Exfoliation, with Supercapacitor Applications. Nanoscale Research Letters, 2019, 14, 141.	3.1	14
85	Carbon quantum dot-based composites for energy storage and electrocatalysis: Mechanism, applications and future prospects. Nano Energy, 2019, 66, 104093.	8.2	174
86	Utilization of Petroleum Coke Soot as Energy Storage Material. Energies, 2019, 12, 3195.	1.6	3
87	An MXene/CNTs@P nanohybrid with stable Tiâ€“Oâ€“P bonds for enhanced lithium ion storage. Journal of Materials Chemistry A, 2019, 7, 21766-21773.	5.2	97
88	A paradigm of storage batteries. Energy and Environmental Science, 2019, 12, 3203-3224.	15.6	154
89	Improvement of Hard Carbon Electrode Performance by Manipulating SEI Formation at High Charging Rates. ACS Applied Materials & Interfaces, 2019, 11, 34796-34804.	4.0	39
90	Improved Electrochemical Properties of LiMn2O4-Based Cathode Material Co-Modified by Mg-Doping and Octahedral Morphology. Materials, 2019, 12, 2807.	1.3	17

#	Article	IF	Citations
91	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
92	Poly(5-vinylbenzothiadiazole) for High-Performance Lithium-Ion Batteries. ACS Applied Energy Materials, 2019, 2, 7315-7320.	2.5	18
93	Simple synthesis of TiNb6O17/C composite toward high-rate lithium storage. Journal of Materials Science, 2019, 54, 14825-14833.	1.7	8
94	Controlled Synthesis of Na₃(VOPO₄)₂F Cathodes with an Ultralong Cycling Performance. ACS Applied Energy Materials, 2019, 2, 7474-7482.	2.5	31
95	Facile one-pot synthesis of Ge/TiO₂ nanocomposite structures with improved electrochemical performance. Nanoscale, 2019, 11, 17415-17424.	2.8	18
96	Si anode for next-generation lithium-ion battery. Current Opinion in Electrochemistry, 2019, 18, 46-54.	2.5	48
97	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
98	Multiscale Multiphase Lithiation and Delithiation Mechanisms in a Composite Electrode Unraveled by SimultaneousOperandoSmall-Angle and Wide-Angle X-Ray Scattering. ACS Nano, 2019, 13, 11538-11551.	7.3	40
99	Resolving local dynamics of dual ions at the nanoscale in electrochemically active materials. Nano Energy, 2019, 66, 104160.	8.2	14
100	Preparation of Ternary Precursor Derived from Spent LiNixCoyMn1â^'xâ^'yO2 Materials. Jom, 2019, 71, 4492-4499.	0.9	7
101	Enhanced reversible lithium storage property of Sn0.1V2O5 in the voltage window of 1.5â€“4.0â€‰V. Solid State Ionics, 2019, 341, 115028.	1.3	9
102	Ultrahighâ€Capacity and Fireâ€Resistant LiFePO₄â€Based Composite Cathodes for Advanced Lithiumâ€Ion Batteries. Advanced Energy Materials, 2019, 9, 1802930.	10.2	114
103	Mechanochemical Synthesis of Î³â€Graphyne with Enhanced Lithium Storage Performance. Small, 2019, 15, e1804710.	5.2	59
104	F-doped LiFePO4@N/B/F-doped carbon as high performance cathode materials for Li-ion batteries. Applied Surface Science, 2019, 476, 761-768.	3.1	51
105	Spinel (Ni0.4Co0.4Mn0.2)3O4 nanoparticles as conversion-type anodes for Li- and Na-ion batteries. Ceramics International, 2019, 45, 7552-7559.	2.3	17
106	Flame Aerosol Synthesis and Electrochemical Characterization of Ni-Rich Layered Cathode Materials for Li-Ion Batteries. ACS Applied Energy Materials, 2019, 2, 1319-1329.	2.5	23
107	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
108	A New Type of Liâ€Rich Rockâ€Salt Oxide Li₂Ni_{1/3}Ru_{2/3}O₃ with Reversible Anionic Redox Chemistry. Advanced Materials, 2019, 31, e1807825.	11.1	90

#	Article	IF	Citations
109	Room-Temperature Potassiumâ€“Sulfur Batteries Enabled by Microporous Carbon Stabilized Small-Molecule Sulfur Cathodes. ACS Nano, 2019, 13, 2536-2543.	7.3	80
110	Embedding CoO nanoparticles in a yolkâ€“shell N-doped porous carbon support for ultrahigh and stable lithium storage. Journal of Materials Chemistry A, 2019, 7, 4036-4046.	5.2	46
111	Defect chemical studies on oxygen release from the Li-rich cathode material Li_{1.2}Mn_{0.6}Ni_{0.2}O_{2â^'Î´}. Journal of Materials Chemistry A, 2019, 7, 5009-5019.	5.2	47
112	MOF derived CoO-NCNTs two-dimensional networks for durable lithium and sodium storage. Journal of Materials Chemistry A, 2019, 7, 4126-4133.	5.2	64
113	Expanded hydrated vanadate for high-performance aqueous zinc-ion batteries. Energy and Environmental Science, 2019, 12, 2273-2285.	15.6	512
114	The impact of vertical Ï€-extension on redox mechanisms of aromatic diimide dyes. Chinese Chemical Letters, 2019, 30, 2254-2258.	4.8	15
115	Design and understanding of core/branch-structured VS₂ nanosheets@CNTs as high-performance anode materials for lithium-ion batteries. Nanoscale, 2019, 11, 13343-13353.	2.8	66
116	Si nanoparticles embedded in 3D carbon framework constructed by sulfur-doped carbon fibers and graphene for anode in lithium-ion battery. Inorganic Chemistry Frontiers, 2019, 6, 1996-2003.	3.0	16
117	Facile in situ growth of ZnO nanosheets standing on Ni foam as binder-free anodes for lithium ion batteries. RSC Advances, 2019, 9, 19253-19260.	1.7	17
118	Electrode Materials for High-Performance Sodium-Ion Batteries. Materials, 2019, 12, 1952.	1.3	62
119	Boosting the stable Li storage performance in one-dimensional LiLaxMn2-xO4 nanorods at elevated temperature. Ceramics International, 2019, 45, 19351-19359.	2.3	23
120	Structure and Transport Properties of Lithium-Doped Aprotic and Protic Ionic Liquid Electrolytes: Insights from Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2019, 123, 5588-5600.	1.2	19
121	Ultra-fine zinc oxide nanocrystals decorated three-dimensional macroporous polypyrrole inverse opal as efficient sulfur hosts for lithium/sulfur batteries. Chemical Engineering Journal, 2019, 375, 122055.	6.6	36
122	A Li₂Sâ€“TiS₂â€Electrolyte Composite for Stable Li₂Sâ€Based Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2019, 9, 1901397.	10.2	41
123	Solidâ€State Lithium Batteries: Bipolar Design, Fabrication, and Electrochemistry. ChemElectroChem, 2019, 6, 3842-3859.	1.7	80
124	Smart Materials and Design toward Safe and Durable Lithium Ion Batteries. Small Methods, 2019, 3, 1900323.	4.6	47
125	Improved capacity and cycling stability of SnO2 nanoanode induced by amorphization during cycling for lithium ion batteries. Materials and Design, 2019, 180, 107973.	3.3	30
126	Highly enhanced electrochemical performances of LiNi0.815Co0.15Al0.035O2 by coating via conductively LiTiO2 for lithium-ion batteries. Ceramics International, 2019, 45, 18398-18405.	2.3	34

#	Article	IF	Citations
127	Xâ€ray Nanoâ€computed Tomography of Electrochemical Conversion in Lithiumâ€ion Battery. ChemSusChem, 2019, 12, 3550-3561.	3.6	14
128	Inorganic Cyanogels and Their Derivatives for Electrochemical Energy Storage and Conversion. , 2019, 1, 158-170.		57
129	Understanding the Role of Overpotentials in Lithium Ion Conversion Reactions: Visualizing the Interface. ACS Nano, 2019, 13, 7825-7832.	7.3	16
130	Electrospun 3D CNFâ€“SiO2 fabricated using non-biodegradable silica gel as prospective anode for lithiumâ€“ion batteries. Ionics, 2019, 25, 5305-5313.	1.2	15
131	Preparation of spinel LiMn2O4 with porous microscopic morphology by simple coprecipitation-microwave synthesis method. Ionics, 2019, 25, 5213-5220.	1.2	4
132	Improving the Electrochemical Performance and Structural Stability of the LiNi_{0.8}Co_{0.15}Al_{0.05}O₂ Cathode Material at High-Voltage Charging through Ti Substitution. ACS Applied Materials & Interfaces, 2019, 11, 23213-23221.	4.0	57
133	Recent Development in Separators for Highâ€Temperature Lithiumâ€ion Batteries. Small, 2019, 15, e1901689.	5.2	158
134	Electrochemical Analysis of Factors Affecting the Kinetic Capabilities of an Ionic Liquid Electrolyte. Journal of the Electrochemical Society, 2019, 166, A1677-A1684.	1.3	7
135	E-fuel system: a conceptual breakthrough for energy storage. Science Bulletin, 2019, 64, 227-228.	4.3	5
136	Uniform Na⁺ Dopingâ€Induced Defects in Liâ€and Mnâ€Rich Cathodes for Highâ€Performance Lithiumâ€ion Batteries. Advanced Science, 2019, 6, 1802114.	5.6	78
137	Unlocking the potential of commercial carbon nanofibers as free-standing positive electrodes for flexible aluminum ion batteries. Journal of Materials Chemistry A, 2019, 7, 15123-15130.	5.2	32
138	A review on pyrophosphate framework cathode materials for sodium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 15006-15025.	5.2	117
139	A Selection Rule for Hydrofluoroether Electrolyte Cosolvent: Establishing a Linear Freeâ€Energy Relationship in Lithiumâ€“Sulfur Batteries. Angewandte Chemie, 2019, 131, 10701-10705.	1.6	12
140	A Selection Rule for Hydrofluoroether Electrolyte Cosolvent: Establishing a Linear Freeâ€Energy Relationship in Lithiumâ€“Sulfur Batteries. Angewandte Chemie - International Edition, 2019, 58, 10591-10595.	7.2	36
141	Labâ€Scale In Situ Xâ€Ray Diffraction Technique for Different Battery Systems: Designs, Applications, and Perspectives. Small Methods, 2019, 3, 1900119.	4.6	39
142	Mechanochemically synthesized pyrite and its electrochemical behavior as cathode for lithium batteries. Journal of Solid State Electrochemistry, 2019, 23, 1929-1938.	1.2	9
143	Nanocomposite of Mo₂N Quantum Dots@MoO₃@Nitrogen-Doped Carbon as a High-Performance Anode for Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2019, 7, 10198-10206.	3.2	30
144	Current Status and Future Prospects of Metalâ€“Sulfur Batteries. Advanced Materials, 2019, 31, e1901125.	11.1	422

#	Article	IF	Citations
145	Li-Ions Transport Promoting and Highly Stable Solidâ€“Electrolyte Interface on Si in Multilayer Si/C through Thickness Control. ACS Nano, 2019, 13, 5602-5610.	7.3	42
146	In Situ TEM of Phosphorus-Dopant-Induced Nanopore Formation in Delithiated Silicon Nanowires. ACS Applied Materials & Interfaces, 2019, 11, 17313-17320.	4.0	11
147	Solution Synthesis of Porous Silicon Particles as an Anode Material for Lithium Ion Batteries. Chemistry - A European Journal, 2019, 25, 9071-9077.	1.7	25
148	Functional materials: making the world go round. Physical Chemistry Chemical Physics, 2019, 21, 8988-8991.	1.3	4
149	Polymer Binders Constructed through Dynamic Noncovalent Bonds for Highâ€Capacity Siliconâ€Based Anodes. Chemistry - A European Journal, 2019, 25, 10976-10994.	1.7	42
150	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
151	The Challenge of Lithium Metal Anodes for Practical Applications. Small Methods, 2019, 3, 1800551.	4.6	74
152	Multivalent metal ion hybrid capacitors: a review with a focus on zinc-ion hybrid capacitors. Journal of Materials Chemistry A, 2019, 7, 13810-13832.	5.2	312
153	Fewâ€Layer Boron Nitride with Engineered Nitrogen Vacancies for Promoting Conversion of Polysulfide as a Cathode Matrix for Lithiumâ€“Sulfur Batteries. Chemistry - A European Journal, 2019, 25, 8112-8117.	1.7	39
154	Carbon clothâ€“supported Fe2O3 derived from Prussian blue as self-standing anodes for high-performance lithium-ion batteries. Journal of Nanoparticle Research, 2019, 21, 1.	0.8	9
155	Unlocking the Lithium Storage Capacity of Aluminum by Molecular Immobilization and Purification. Advanced Materials, 2019, 31, e1901372.	11.1	23
156	Self-chargeable sodium-ion battery for soft electronics. Nano Energy, 2019, 61, 435-441.	8.2	30
157	Increase and discretization of the energy barrier for individual LiNi_xCo_yMn_yO₂ (x + 2y =1) particles with the growth of a Li₂CO₃ surface film. Journal of Materials Chemistry A, 2019, 7, 12723-12731.	5.2	43
158	One-pot synthesis of Ag-decorated pomegranate seed-like Fe3O4 composite for high-performance lithium-ion battery. Ionics, 2019, 25, 4099-4107.	1.2	6
159	Siloxane-based polymer electrolytes for solid-state lithium batteries. Energy Storage Materials, 2019, 23, 466-490.	9.5	114
160	Comparison of the Ammoniacal Leaching Behavior of Layered LiNi_xCo_yMn_{1â€“xâ€“y}O₂ (x = 1/3, 0.5, 0.8) Cathode Materials. ACS Sustainable Chemistry and Engineering, 2019, 7, 7750-7759.	3.2	43
161	Understanding the Reaction Mechanism of Lithiumâ€“Sulfur Batteries by In Situ/Operando X-ray Absorption Spectroscopy. Arabian Journal for Science and Engineering, 2019, 44, 6217-6229.	1.7	6
162	Crossâ€Linking Tinâ€Based Metalâ€Organic Frameworks with Encapsulated Silicon Nanoparticles: Highâ€Performance Anodes for Lithiumâ€Ion Batteries. ChemElectroChem, 2019, 6, 2056-2063.	1.7	25

#	Article	IF	Citations
163	CO₂-sourced polycarbonates as solid electrolytes for room temperature operating lithium batteries. Journal of Materials Chemistry A, 2019, 7, 9844-9853.	5.2	29
164	Simultaneously tuning cationic and anionic redox in a P2-Na_{0.67}Mn_{0.75}Ni_{0.25}O₂ cathode material through synergic Cu/Mg co-doping. Journal of Materials Chemistry A, 2019, 7, 9099-9109.	5.2	76
165	Li-Rich Layered Oxides and Their Practical Challenges: Recent Progress and Perspectives. Electrochemical Energy Reviews, 2019, 2, 277-311.	13.1	158
166	Persistent zinc-ion storage in mass-produced V2O5 architectures. Nano Energy, 2019, 60, 171-178.	8.2	149
167	3D Graphene Networks Encapsulated with Ultrathin SnS Nanosheets@Hollow Mesoporous Carbon Spheres Nanocomposite with Pseudocapacitanceâ€Enhanced Lithium and Sodium Storage Kinetics. Small, 2019, 15, e1900565.	5.2	62
168	Recent progress on lithium-ion batteries with high electrochemical performance. Science China Chemistry, 2019, 62, 533-548.	4.2	136
169	Cyclohexanehexone with Ultrahigh Capacity as Cathode Materials for Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2019, 58, 7020-7024.	7.2	252
170	Structural Engineering of Hierarchical Microâ€nanostructured Geâ€“C Framework by Controlling the Nucleation for Ultralongâ€Life Li Storage. Advanced Energy Materials, 2019, 9, 1900081.	10.2	99
171	Catalytic Synthesis of Hard/Soft Carbon Hybrids with Heteroatom Doping for Enhanced Sodium Storage. ChemistrySelect, 2019, 4, 3551-3558.	0.7	9
172	Inverse opal manganese dioxide constructed by few-layered ultrathin nanosheets as high-performance cathodes for aqueous zinc-ion batteries. Nano Research, 2019, 12, 1347-1353.	5.8	95
173	Exploring competitive features of stationary sodium ion batteries for electrochemical energy storage. Energy and Environmental Science, 2019, 12, 1512-1533.	15.6	402
174	Electrolytes for Dualâ€Carbon Batteries. ChemElectroChem, 2019, 6, 2615-2629.	1.7	59
175	Fast Charging Lithium Batteries: Recent Progress and Future Prospects. Small, 2019, 15, e1805389.	5.2	277
176	High-Energy Nickel-Rich Layered Cathode Stabilized by Ionic Liquid Electrolyte. Journal of the Electrochemical Society, 2019, 166, A873-A879.	1.3	27
179	Deciphering the Reaction Mechanism of Lithiumâ€“Sulfur Batteries by In Situ/Operando Synchrotronâ€Based Characterization Techniques. Advanced Energy Materials, 2019, 9, 1900148.	10.2	96
180	Bricklike Ca₉Co₁₂O₂₈ as an Active/Inactive Composite for Lithium-Ion Batteries with Enhanced Rate Performances. ACS Omega, 2019, 4, 6452-6458.	1.6	7
181	Rationally assembled rGO/Sn/Na₂Zr(PO₄)₂ nanocomposites as high performance anode materials for lithium and sodium ion batteries. Sustainable Energy and Fuels, 2019, 3, 1509-1516.	2.5	2
182	Sheet-type Li6PS5Cl-infiltrated Si anodes fabricated by solution process for all-solid-state lithium-ion batteries. Journal of Power Sources, 2019, 426, 143-150.	4.0	84

#	Article	IF	Citations
183	Coâ€“Fe Mixed Metal Phosphide Nanocubes with Highly Interconnected-Pore Architecture as an Efficient Polysulfide Mediator for Lithiumâ€“Sulfur Batteries. ACS Nano, 2019, 13, 4731-4741.	7.3	212
184	Tailoring NaVO3 as a novel stable cathode for lithium rechargeable batteries. Electrochimica Acta, 2019, 307, 224-231.	2.6	7
185	High volumetric capacity Fe2TeO6 as a novel anode material for alkali-ion batteries. Materials Letters, 2019, 246, 157-160.	1.3	10
186	Cyclohexanehexone with Ultrahigh Capacity as Cathode Materials for Lithiumâ€Ion Batteries. Angewandte Chemie, 2019, 131, 7094-7098.	1.6	51
187	Multi-shell hollow structured Sb2S3 for sodium-ion batteries with enhanced energy density. Nano Energy, 2019, 60, 591-599.	8.2	136
188	Understanding the Li-ion storage mechanism in a carbon composited zinc sulfide electrode. Journal of Materials Chemistry A, 2019, 7, 15640-15653.	5.2	48
189	Synthesis and Electrochemical Research of Milled Antimony and Red Phosphorus Hybrid Inlaid with Graphene Sheets as Anodes for Lithiumâ€“Sodium Storage. Energy Technology, 2019, 7, 1801022.	1.8	7
190	Hollow Co3O4 Nanosphere Surrounded by N-Doped Graphitic Carbon Filled within Multilayer-Sandwiched Graphene Network: A High-Performance Anode for Lithium Storage. Inorganic Chemistry, 2019, 58, 3416-3424.	1.9	21
191	Stable and ultrafast lithium storage for LiFePO4/C nanocomposites enabled by instantaneously carbonized acetylenic carbon-rich polymer. Carbon, 2019, 147, 19-26.	5.4	31
192	Simultaneously Dual Modification of Niâ€Rich Layered Oxide Cathode for Highâ€Energy Lithiumâ€Ion Batteries. Advanced Functional Materials, 2019, 29, 1808825.	7.8	430
193	Hierarchical Microâ€Nano Sheet Arrays of Nickelâ€“Cobalt Double Hydroxides for Highâ€Rate Niâ€“Zn Batteries. Advanced Science, 2019, 6, 1802002.	5.6	202
194	Niobiumâ€Based Oxides Toward Advanced Electrochemical Energy Storage: Recent Advances and Challenges. Small, 2019, 15, e1804884.	5.2	130
195	Multicoreâ€“Shell Bi@Nâ€doped Carbon Nanospheres for High Power Density and Long Cycle Life Sodiumâ€• and Potassiumâ€Ion Anodes. Advanced Functional Materials, 2019, 29, 1809195.	7.8	268
196	A fast and stable Li metal anode incorporating an Mo₆S₈ artificial interphase with super Li-ion conductivity. Journal of Materials Chemistry A, 2019, 7, 6038-6044.	5.2	34
197	Double-shell Li-rich layered oxide hollow microspheres with sandwich-like carbon@spinel@layered@spinel@carbon shells as high-rate lithium ion battery cathode. Nano Energy, 2019, 59, 184-196.	8.2	194
198	Sequential growth of hierarchical N-doped carbon-MoS₂ nanocomposites with variable nanostructures. Journal of Materials Chemistry A, 2019, 7, 6197-6204.	5.2	22
199	Preparation of LiNi1/3Co1/3Mn1/3O2/polytriphenylamine cathode composites with enhanced electrochemical performances towards reversible lithium storage. Ceramics International, 2019, 45, 9726-9735.	2.3	8
200	Red Phosphorus Potassiumâ€Ion Battery Anodes. Advanced Science, 2019, 6, 1801354.	5.6	97

#	Article	IF	Citations
201	Bridging the academic and industrial metrics for next-generation practical batteries. Nature Nanotechnology, 2019, 14, 200-207.	15.6	420
202	Li⁺ Ion-Conducting Sulfonate-Based Neutral Metalâ€“Organic Framework. ACS Sustainable Chemistry and Engineering, 2019, 7, 4619-4624.	3.2	46
203	Effectively enhanced structural stability and electrochemical properties of LiNi_{0.5}Mn_{1.5}O₄cathode materialsviapoly-(3,4-ethylenedioxythiophene)-in situcoated for high voltage Li-ion batteries. RSC Advances, 2019, 9, 3081-3091.	1.7	12
204	Carbon/Binderâ€Free NiO@NiO/NF with In Situ Formed Interlayer for Highâ€Arealâ€Capacity Lithium Storage. Advanced Energy Materials, 2019, 9, 1803690.	10.2	44
205	Graphene oxide linked with N, Nâ€²-diamino-1,4,5,8-naphthalenetetracarboxylic bisimide as a stable cathode material for lithium-ion batteries. Ionics, 2019, 25, 2987-2995.	1.2	11
206	State of Charge Equalization of Battery Modules Using Single-Phase Cascaded Multilevel Converters. , 2019, , .		1
207	Development of a Polymeric Arrayed Waveguide Grating Interrogator for Fast and Precise Lithium-Ion Battery Status Monitoring. Batteries, 2019, 5, 66.	2.1	8
208	A Method to Diagnose Failures in High Voltage Contactors and Fuse for Safe Operation of Battery Pack. , 2019, , .		2
209	Battery Management System Hardware Design for a Student Electric Racing Car. IFAC-PapersOnLine, 2019, 52, 74-79.	0.5	1
210	Nitrogen and phosphorus co-doped 3D hierarchical porous carbon network with highly-reversible performance in sodium storage. Ceramics International, 2019, 45, 24500-24507.	2.3	11
211	Expediting redox kinetics of sulfur species by atomicâ€scale electrocatalysts in lithiumâ€“sulfur batteries. InformaÄnÃ-MateriÃ¡ly, 2019, 1, 533-541.	8.5	261
212	Carbon materials for traffic power battery. ETransportation, 2019, 2, 100033.	6.8	37
213	A Facile, One-Step Synthesis of Silicon/Silicon Carbide/Carbon Nanotube Nanocomposite as a Cycling-Stable Anode for Lithium Ion Batteries. Nanomaterials, 2019, 9, 1624.	1.9	39
214	Hierarchical Composite of Roseâ€Like VS₂@S/Nâ€Doped Carbon with Expanded (001) Planes for Superior Liâ€Ion Storage. Small, 2019, 15, e1903904.	5.2	64
215	Mg2+â€“W6+ co-doped Li2ZnTi3O8 anode with outstanding room, high and low temperature electrochemical performance for lithium-ion batteries. Inorganic Chemistry Frontiers, 2019, 6, 3288-3294.	3.0	15
216	Dynamically visualizing battery reactions by operando Kelvin probe force microscopy. Communications Chemistry, 2019, 2, .	2.0	25
217	Interpenetrating graphene network bct-C₄₀: a promising anode material for Li ion batteries. Physical Chemistry Chemical Physics, 2019, 21, 23485-23491.	1.3	9
218	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

#	Article	IF	Citations
219	Covalent organic framework-regulated ionic transportation for high-performance lithium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 26540-26548.	5.2	48
220	Corrosion/Passivation Behavior of Concentrated Ionic Liquid Electrolytes and Its Impact on the Li-Ion Battery Performance. Journal of the Electrochemical Society, 2019, 166, A3959-A3964.	1.3	27
221	Tiâ€Based Oxide Anode Materials for Advanced Electrochemical Energy Storage: Lithium/Sodium Ion Batteries and Hybrid Pseudocapacitors. Small, 2019, 15, e1904740.	5.2	121
222	Supremely elastic gel polymer electrolyte enables a reliable electrode structure for silicon-based anodes. Nature Communications, 2019, 10, 5586.	5.8	80
223	A facile non-solvent induced phase separation process for preparation of highly porous polybenzimidazole separator for lithium metal battery application. Scientific Reports, 2019, 9, 19320.	1.6	24
224	Probing the Nature of Li⁺/Ni²⁺ Disorder on the Structure and Electrochemical Performance in Ni-Based Layered Oxide Cathodes. Journal of the Electrochemical Society, 2019, 166, A4097-A4105.	1.3	18
225	Facile One-Step Dynamic Hydrothermal Synthesis of Spinel LiMn2O4/Carbon Nanotubes Composite as Cathode Material for Lithium-Ion Batteries. Materials, 2019, 12, 4123.	1.3	5
226	A Flexible and Boron-Doped Carbon Nanotube Film for High-Performance Li Storage. Frontiers in Chemistry, 2019, 7, 832.	1.8	22
227	Anion amphiprotic ionic liquids as protic electrolyte matrices allowing sodium metal plating. Chemical Communications, 2019, 55, 12523-12526.	2.2	7
228	A germanium and zinc chalcogenide as an anode for a high-capacity and long cycle life lithium battery. RSC Advances, 2019, 9, 35045-35049.	1.7	6
229	The surface passivation of Ge(100) and Ge(111) anodes in Geâ€“air batteries with different doping types and concentrations. RSC Advances, 2019, 9, 39582-39588.	1.7	9
230	Anion effects on the solvation structure and properties of imide lithium salt-based electrolytes. RSC Advances, 2019, 9, 41837-41846.	1.7	31
231	Zincâ€“air batteries: are they ready for prime time?. Chemical Science, 2019, 10, 8924-8929.	3.7	211
232	A Proficient Li-Ion Batteries State of Health Assessment Based on Event-Driven Processing. , 2019, , .		0
233	Rechargeable Seawater Batteriesâ€”From Concept to Applications. Advanced Materials, 2019, 31, e1804936.	11.1	73
234	Prussian blue derived metal oxides/graphene foam as anode materials for high-performance lithium-ion batteries. Journal of Materials Science: Materials in Electronics, 2019, 30, 982-990.	1.1	10
235	Design and property investigations of manganese-based cathode material LiÎ´Ni0.25-zMn0.75-zCo2zOy (0 â‰¤ Tj ETQq0 0 0 rgBT /Overl	2.6	7
236	ZIF-8-Templated Hollow Cubelike Si/SiO₂@C Nanocomposites for Superior Lithium Storage Performance. ACS Applied Energy Materials, 2019, 2, 531-538.	2.5	29

#	Article	IF	Citations
237	Lithium Acetylide: A Spectroscopic Marker for Lithium Deposition During Fast Charging of Li-Ion Cells. ACS Applied Energy Materials, 2019, 2, 873-881.	2.5	32
238	N-graphene motivated SnO2@SnS2 heterostructure quantum dots for high performance lithium/sodium storage. Energy Storage Materials, 2019, 20, 225-233.	9.5	159
239	Conformal Conducting Polymer Shells on V₂O₅ Nanosheet Arrays as a Highâ€Rate and Stable Zincâ€Ion Battery Cathode. Advanced Materials Interfaces, 2019, 6, 1801506.	1.9	170
240	Li-Rich Layered/Spinel Cathode Composite 3/4[Li₂MnO₃Â·LiCxO₂]Â·1/4[LiCxMnO₄] (Cx =) Tj ETQq1 1 0.784314 rgBT /Over 166, A5065-A5074.	1.3	6
241	Tuning Anionic Redox Activity and Reversibility for a Highâ€Capacity Liâ€Rich Mnâ€Based Oxide Cathode via an Integrated Strategy. Advanced Functional Materials, 2019, 29, 1806706.	7.8	121
242	Massâ€Production of Electrospun Carbon Nanofiber Containing SiO_x for Lithiumâ€Ion Batteries with Enhanced Capacity. Macromolecular Materials and Engineering, 2019, 304, 1800564.	1.7	15
243	A facile strategy toward sodium-ion batteries with ultra-long cycle life and high initial Coulombic Efficiency: Free-standing porous carbon nanofiber film derived from bacterial cellulose. Energy Storage Materials, 2019, 22, 105-112.	9.5	87
244	Core-shell Fe2N@amorphous carbon nanocomposite-filled 3D graphene framework: An additive-free anode material for lithium-ion batteries. Chemical Engineering Journal, 2019, 360, 1063-1070.	6.6	36
245	SnSb alloy nanoparticles embedded in N-doped porous carbon nanofibers as a high-capacity anode material for lithium-ion batteries. Journal of Alloys and Compounds, 2019, 777, 775-783.	2.8	35
246	Nanocoating of Ce-tannic acid metal-organic coordination complex: surface modification of layered Li1.2Mn0.6Ni0.2O2 by CeO2 coating for lithium-ion batteries. Ionics, 2019, 25, 3031-3040.	1.2	9
247	Synthesis of carbon-coated VBO3 nanoparticles on graphene sheets as anode material for lithium-ion batteries by freeze-drying method. Journal of Alloys and Compounds, 2019, 780, 49-54.	2.8	3
248	Highly reversible ZnO@ZIFâ€“8-derived nitrogen-doped carbon in the presence of fluoroethylene carbonate for high-performance lithium-ion battery anode. Journal of Alloys and Compounds, 2019, 773, 960-969.	2.8	44
249	Synthesis Strategies and Structural Design of Porous Carbonâ€Incorporated Anodes for Sodiumâ€Ion Batteries. Small Methods, 2020, 4, 1900163.	4.6	49
250	Integration of Graphite and Silicon Anodes for the Commercialization of Highâ€Energy Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2020, 59, 110-135.	7.2	460
251	Graphitâ€•undâ€Siliciumâ€Anoden fÃ¼r Lithiumionenâ€•Hochenergiebatterien. Angewandte Chemie, 2020, 132, 112-138.	1.6	23
252	Electrochemical performance of vertically grown WS2 layers on TiNb2O7 nanostructures for lithium-ion battery anodes. Chemical Engineering Journal, 2020, 382, 122800.	6.6	28
253	A gel polymer electrolyte based on PVDF-HFP modified double polymer matrices via ultraviolet polymerization for lithium-sulfur batteries. Journal of Colloid and Interface Science, 2020, 558, 145-154.	5.0	52
254	Preparation of porous FeS2-C/RG composite for sodium ion batteries. Chemical Engineering Journal, 2020, 380, 122549.	6.6	42

#	Article	IF	Citations
255	Overview on the applications of three-dimensional printing for rechargeable lithium-ion batteries. Applied Energy, 2020, 257, 114002.	5.1	66
256	3D ultraviolet polymerized electrolyte based on PEO modified PVDF-HFP electrospun membrane for high-performance lithium-sulfur batteries. Electrochimica Acta, 2020, 329, 135108.	2.6	40
257	Molecular Dynamics Simulations of Polymerâ€"Ionic Liquid (1-Ethyl-3-methylimidazolium) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 667 Td (Information and Modeling, 2020, 60, 485-499.	2.5	23
258	A review on cathode materials for advanced lithium ion batteries: microstructure designs and performance regulations. Nanotechnology, 2020, 31, 012001.	1.3	45
259	Confined seeds derived sodium titanate/graphene composite with synergistic storage ability toward high performance sodium ion capacitors. Chemical Engineering Journal, 2020, 379, 122418.	6.6	23
260	Spatially homogeneous copper foam as surface dendrite-free host for zinc metal anode. Chemical Engineering Journal, 2020, 379, 122248.	6.6	308
261	FeIII chelated organic anode with ultrahigh rate performance and ultra-long cycling stability for lithium-ion batteries. Energy Storage Materials, 2020, 24, 432-438.	9.5	25
262	Electrochemical single-particle measurements of electrode materials for Li-ion batteries: Possibilities, insights and implications for future development. Electrochimica Acta, 2020, 330, 135160.	2.6	29
263	Surface Ni-rich engineering towards highly stable Li1.2Mn0.54Ni0.13Co0.13O2 cathode materials. Energy Storage Materials, 2020, 25, 76-85.	9.5	47
264	Adsorption energy engineering of nickel oxide hybrid nanosheets for high areal capacity flexible lithium-ion batteries. Energy Storage Materials, 2020, 25, 41-51.	9.5	261
265	New Anthraquinoneâ€Based Conjugated Microporous Polymer Cathode with Ultrahigh Specific Surface Area for Highâ€Performance Lithiumâ€Ion Batteries. Advanced Functional Materials, 2020, 30, 1908074.	7.8	91
266	A Review of Composite Lithium Metal Anode for Practical Applications. Advanced Materials Technologies, 2020, 5, .	3.0	111
267	H3IDC-assisted synthesis of mesoporous ultrafine Co3O4/N-doped carbon nanowires as a high rate and long-life anode for Lithium-ion batteries. Journal of Alloys and Compounds, 2020, 818, 152826.	2.8	13
268	Twoâ€Dimensional Germanium Sulfide Nanosheets as an Ultraâ€Stable and High Capacity Anode for Lithium Ion Batteries. Chemistry - A European Journal, 2020, 26, 6554-6560.	1.7	13
269	Bismuth ion battery â€" A new member in trivalent battery technology. Energy Storage Materials, 2020, 25, 100-104.	9.5	3
270	Hollow cobalt oxide nanoparticles embedded porous reduced graphene oxide anode for high performance lithium ion batteries. Applied Surface Science, 2020, 508, 145311.	3.1	20
271	Ferroconcrete-inspired design of a nonwoven graphene fiber fabric reinforced electrode for flexible fast-charging sodium ion storage devices. Journal of Materials Chemistry A, 2020, 8, 2777-2788.	5.2	17
272	Enhanced electrochemical properties of Ni-rich LiNi0.8Co0.1Mn0.1O2 by SnO2 coating under high cutoff voltage. Ionics, 2020, 26, 2681-2688.	1.2	9

#	Article	IF	Citations
273	Mn₂O₃/Al₂O₃ cathode material derived from a metalâ€“organic framework with enhanced cycling performance for aqueous zinc-ion batteries. Dalton Transactions, 2020, 49, 711-718.	1.6	41
274	Non-solvating, side-chain polymer electrolytes as lithium single-ion conductors: synthesis and ion transport characterization. Polymer Chemistry, 2020, 11, 461-471.	1.9	56
275	Plasmaâ€Enabled Ternary SnO₂@Sn/Nitrogenâ€Doped Graphene Aerogel Anode for Sodiumâ€Ion Batteries. ChemElectroChem, 2020, 7, 1358-1364.	1.7	26
276	A controllable strategy for the self-assembly of WM nanocrystals/nitrogen-doped porous carbon superstructures (M = O, C, P, S, and Se) for sodium and potassium storage. Journal of Materials Chemistry A, 2020, 8, 2047-2065.	5.2	29
277	Stroboscopic neutron diffraction applied to fast time-resolved operando studies on Li-ion batteries (d-LiNi_{0.5}Mn_{1.5}O₄vs. graphite). Journal of Materials Chemistry A, 2020, 8, 1288-1297.	5.2	15
278	Molecular Dynamics Investigation of Correlations in Ion Transport in MeTFSI/EMIMâ€“TFSI (Me = Li, Na) Electrolytes. Journal of Physical Chemistry B, 2020, 124, 413-421.	1.2	29
279	Optimizing the Void Size of Yolkâ€“Shell Bi@Void@C Nanospheres for High-Power-Density Sodium-Ion Batteries. Nano Letters, 2020, 20, 758-767.	4.5	129
280	ALD-Modified LiNi_{0.33}Mn_{0.33}Co_{0.33}O₂ Paired with Macroporous Silicon for Lithium-Ion Batteries: An Investigation on Lithium Trapping, Resistance Rise, and Cycle-Life Performance. ACS Applied Energy Materials, 2020, 3, 456-468.	2.5	12
281	Graphitic Carbon Nitride (gâ€C₃N₄): An Interface Enabler for Solidâ€State Lithium Metal Batteries. Angewandte Chemie, 2020, 132, 3728-3733.	1.6	32
282	Benzoquinoneâ€and Naphthoquinoneâ€Bearing Polymers Synthesized by Ringâ€Opening Metathesis Polymerization as Cathode Materials for Lithiumâ€Ion Batteries. ChemSusChem, 2020, 13, 334-340.	3.6	27
283	Engineering LiNi_{0.5}Co_{0.2}Mn_{0.3}O₂/poly(propylene) Tj ETQq0 0 0 rgBT /Overlock 10 Storage, 2020, 2, e109.	2.3	24
284	High-rate cyclability and stability of LiMn2O4 cathode materials for lithium-ion batteries from low-cost natural Î²â^'MnO2. Energy Storage Materials, 2020, 26, 423-432.	9.5	69
285	Unlocking the Poly(vinylidene fluoride-co-hexafluoropropylene)/Li10GeP2S12 composite solid-state Electrolytes for Dendrite-Free Li metal batteries assisting with perfluoropolyethers as bifunctional adjuvant. Journal of Power Sources, 2020, 446, 227365.	4.0	74
286	Implementation of large-scale Li-ion battery energy storage systems within the EMEA region. Applied Energy, 2020, 260, 114166.	5.1	84
287	Crosstalk shielding of transition metal ions for long cycling lithiumâ€“metal batteries. Journal of Materials Chemistry A, 2020, 8, 4283-4289.	5.2	51
288	High-Performance Lithium Ion Batteries Combining Submicron Silicon and Thiopheneâ€“Terephthalic Acid-Conjugated Polymer Binders. ACS Sustainable Chemistry and Engineering, 2020, 8, 1043-1049.	3.2	21
289	Molecular-confinement synthesis of sub-nano Fe/N/C catalysts with high oxygen reduction reaction activity and excellent durability for rechargeable Zn-Air batteries. Journal of Power Sources, 2020, 450, 227660.	4.0	27
290	Layered Cathode Materials for Lithium-Ion Batteries: Review of Computational Studies on LiNi_{1â€“xâ€“y}Co_xMn_yO₂ and LiNi_{1â€“xâ€“y}Co_xAl_yO₂. Chemistry of Materials, 2020, 32, 915-952.	3.2	196

#	Article	IF	Citations
291	Mesoporous TiO₂ Spheres as Advanced Anodes for Low-Cost, Safe, and High-Areal-Capacity Lithium-Ion Full Batteries. ACS Applied Nano Materials, 2020, 3, 1019-1027.	2.4	25
292	Graphitic Carbon Nitride (gâ€C₃N₄): An Interface Enabler for Solidâ€State Lithium Metal Batteries. Angewandte Chemie - International Edition, 2020, 59, 3699-3704.	7.2	220
293	Arc-discharge production of high-quality fluorine-modified graphene as anode for Li-ion battery. Chemical Engineering Journal, 2020, 392, 123668.	6.6	25
294	Dramatic improvement enabled by incorporating thermal conductive TiN into Si-based anodes for lithium ion batteries. Energy Storage Materials, 2020, 29, 367-376.	9.5	55
295	Ultrafast kinetics net electrode assembled via MoSe2/MXene heterojunction for high-performance sodium-ion batteries. Chemical Engineering Journal, 2020, 385, 123839.	6.6	141
296	An Insoluble Anthraquinone Dimer with Nearâ€Plane Structure as a Cathode Material for Lithiumâ€Ion Batteries. ChemSusChem, 2020, 13, 2436-2442.	3.6	26
297	Mitigation of voltage decay in Li-rich layered oxides as cathode materials for lithium-ion batteries. Nano Research, 2020, 13, 151-159.	5.8	15
298	Defect Engineering of Iron-Rich Orthosilicate Cathode Materials with Enhanced Lithium-Ion Intercalation Capacity and Kinetics. ACS Applied Energy Materials, 2020, 3, 675-686.	2.5	3
299	4-Aminobenzoic acid as a novel electrolyte additive for improved electrochemical performance of Li1.2Ni0.2Mn0.6O2 cathodes via in situ electrochemical polymerization. Electrochimica Acta, 2020, 331, 135465.	2.6	9
300	The selective colorimetric probe based on a macrocyclic Sm(III) complex for detecting lithium ion and its performance in the psychiatric drug. Dyes and Pigments, 2020, 174, 108027.	2.0	9
301	Unveiling and Amplifying the Benefits of Carbon-Coated Aluminum Current Collectors for Sustainable LiNi_{0.5}Mn_{1.5}O₄ Cathodes. ACS Applied Energy Materials, 2020, 3, 218-230.	2.5	25
302	Controllable Fabrication and Li Storage Kinetics of 1â€‰D Spinel LiMn₂O₄ Positive Materials for Liâ€ion Batteries: Anâ€‰Exploration of Critical Diameter. ChemSusChem, 2020, 13, 803-810.	3.6	10
303	Influence of cut-off voltage on the lithium storage performance of Nb12W11O63 anode. Electrochimica Acta, 2020, 332, 135380.	2.6	19
304	Lithium Sulfide-Embedded Three-Dimensional Heterogeneous Micro-/Mesoporous Interwoven Carbon Architecture as the Cathode of Lithiumâ€“Sulfur Batteries. ACS Sustainable Chemistry and Engineering, 2020, 8, 351-361.	3.2	10
305	Capacity degradation mechanism and improvement actions for 4 V-class all-solid-state lithium-metal polymer batteries. Chemical Engineering Journal, 2020, 392, 123665.	6.6	34
306	A compact inorganic layer for robust anode protection in lithiumâ€sulfur batteries. InformaÄnÃ-MateriÃ¡ly, 2020, 2, 379-388.	8.5	197
307	Twoâ€Dimensional Materialâ€Functionalized Separators for Highâ€Energyâ€Density Metalâ€“Sulfur and Metalâ€Based Batteries. ChemSusChem, 2020, 13, 1366-1378.	3.6	20
308	Sycamore-fruit-like SnO2@C nanocomposites: Rational fabrication, highly reversible capacity and superior rate capability anode material for Li storage. Electrochimica Acta, 2020, 331, 135297.	2.6	13

#	Article	IF	Citations
309	A flexible CNT@nickel silicate composite film for high-performance sodium storage. Journal of Energy Chemistry, 2020, 47, 29-37.	7.1	31
310	Proton Inserted Manganese Dioxides as a Reversible Cathode for Aqueous Zn-Ion Batteries. ACS Applied Energy Materials, 2020, 3, 319-327.	2.5	44
311	Assembly of MXene/PP Separator and Its Enhancement for Ni-Rich LiNi0.8Co0.1Mn0.1O2 Electrochemical Performance. Polymers, 2020, 12, 2192.	2.0	21
312	Emerging interfacial chemistry of graphite anodes in lithium-ion batteries. Chemical Communications, 2020, 56, 14570-14584.	2.2	79
313	Mayenite Electrides and Their Doped Forms for Oxygen Reduction Reaction in Solid Oxide Fuel Cells. Energies, 2020, 13, 4978.	1.6	0
314	Chemical binding and conformal coating of sub-10Ânm Snâ€“Ni alloy layer on nanostructured carbon matrices enabling enhanced lithium storage. Surface and Coatings Technology, 2020, 400, 126068.	2.2	2
315	Ultralight and fire-extinguishing current collectors for high-energy and high-safety lithium-ion batteries. Nature Energy, 2020, 5, 786-793.	19.8	168
316	Lithium Salt Dissociation in Diblock Copolymer Electrolyte Using Fourier Transform Infrared Spectroscopy. Frontiers in Energy Research, 2020, 8, .	1.2	25
317	Breaking Free from Cobalt Reliance in Lithium-Ion Batteries. IScience, 2020, 23, 101505.	1.9	80
318	Function and Application of Defect Chemistry in Highâ€Capacity Electrode Materials for Liâ€Based Batteries. Chemistry - an Asian Journal, 2020, 15, 3620-3636.	1.7	12
319	Projecting the Competition between Energy-Storage Technologies in the Electricity Sector. Joule, 2020, 4, 2162-2184.	11.7	48
320	Lithium Metal-Based Composite: An Emerging Material for Next-Generation Batteries. Matter, 2020, 3, 1009-1030.	5.0	35
321	Precise Synthesis of Fe-N₂ Sites with High Activity and Stability for Long-Life Lithiumâ€“Sulfur Batteries. ACS Nano, 2020, 14, 16105-16113.	7.3	120
322	Solid state polymer ionogel electrolyte for use in Liâ€ion batteries. SPE Polymers, 2020, 1, 55-65.	1.4	5
323	Atomic-scale studies of garnet-type Mg3Fe2Si3O12: Defect chemistry, diffusion and dopant properties. Journal of Power Sources Advances, 2020, 3, 100016.	2.6	2
324	Interphases Formation and Analysis at the Lithiumâ€“Aluminumâ€“Titaniumâ€“Phosphate (LATP) and Lithiumâ€“Manganese Oxide Spinel (LMO) Interface during Highâ€Temperature Bonding. Energy Technology, 2020, 8, 2000634.	1.8	4
325	Interface Between Solid-State Electrolytes and Li-Metal Anodes: Issues, Materials, and Processing Routes. ACS Applied Materials & Interfaces, 2020, 12, 47181-47196.	4.0	62
326	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
327	Heteroatom-doped carbon catalysts for zincâ€“air batteries: progress, mechanism, and opportunities. Energy and Environmental Science, 2020, 13, 4536-4563.	15.6	209
328	Multifunctional Fluoroethylene Carbonate for Improving High-Temperature Performance of LiNi_{0.8}Mn_{0.1}Co_{0.1}O₂||SiO_x@Graphite Lithium-Ion Batteries. ACS Applied Energy Materials, 2020, 3, 9989-10000.	2.5	19
329	Dual redox mediators accelerate the electrochemical kinetics of lithium-sulfur batteries. Nature Communications, 2020, 11, 5215.	5.8	113
330	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
331	Understanding the Design Principles of Advanced Aqueous Zincâ€ion Battery Cathodes: From Transport Kinetics to Structural Engineering, and Future Perspectives. Advanced Energy Materials, 2020, 10, 2002354.	10.2	193
332	Dualâ€Carbonâ€Confined SnS Nanostructure with High Capacity and Long Cycle Life for Lithiumâ€ion Batteries. Energy and Environmental Materials, 2021, 4, 562-568.	7.3	24
333	A Collaborative Strategy for Boosting Lithium Storage Performance of Iron Phosphide by Fabricating Hollow Structure and Doping Cobalt Species. ChemistrySelect, 2020, 5, 11378-11382.	0.7	5
334	A scalable approach of using biomass derived glycerol to synthesize cathode materials for lithium-ion batteries. Journal of Cleaner Production, 2020, 271, 122518.	4.6	9
335	Lithium-air, lithium-sulfur, and sodium-ion, which secondary battery category is more environmentally friendly and promising based on footprint family indicators?. Journal of Cleaner Production, 2020, 276, 124244.	4.6	27
336	Nitrogen-doped carbon-wrapped porous FeMnO3 nanocages derived from etched prussian blue analogues as high-performance anode for lithium ion batteries. Journal of Power Sources, 2020, 475, 228683.	4.0	27
337	Recent progress in aqueous monovalent-ion batteries with organic materials as promising electrodes. Materials Today Energy, 2020, 18, 100547.	2.5	48
338	Fast Charging Li-Ion Batteries for a New Era of Electric Vehicles. Cell Reports Physical Science, 2020, 1, 100212.	2.8	54
339	Encapsulation of Se into Hierarchically Porous Carbon Microspheres with Optimized Pore Structure for Advanced Naâ€“Se and Kâ€“Se Batteries. ACS Nano, 2020, 14, 13203-13216.	7.3	86
340	A single-ion conducting covalent organic framework for aqueous rechargeable Zn-ion batteries. Chemical Science, 2020, 11, 11692-11698.	3.7	51
341	Boosting the Performance of Solidâ€State Lithium Battery Based on Hybridizing Micronâ€Sized LATP in a PEO/PVDFâ€HFP Heterogeneous Polymer Matrix. Energy Technology, 2020, 8, 2000444.	1.8	12
342	Ultrasound-induced wireless energy harvesting: From materials strategies to functional applications. Nano Energy, 2020, 77, 105131.	8.2	69
343	Electrolyte Oxidation Pathways in Lithium-Ion Batteries. Journal of the American Chemical Society, 2020, 142, 15058-15074.	6.6	160
344	Cell degradation quantificationâ€”a performance metric-based approach. JPhys Energy, 2020, 2, 034003.	2.3	1

#	Article	IF	Citations
345	Improvement of Battery Life and Energy Economy for Electric Vehicles with Two-Speed Transmission. Energies, 2020, 13, 3409.	1.6	4
346	Activating an MXene as a host for EMIm⁺ by electrochemistry-driven Fe-ion pre-intercalation. Journal of Materials Chemistry A, 2020, 8, 16265-16270.	5.2	17
347	Rational Design of 2D h-BAs Monolayer as Advanced Sulfur Host for High Energy Density Liâ€“S Batteries. ACS Applied Energy Materials, 2020, 3, 7306-7317.	2.5	23
348	Advances in Organic Anode Materials for Naâ€/Kâ€Ion Rechargeable Batteries. ChemSusChem, 2020, 13, 4866-4884.	3.6	55
349	Electrolytes based on nano-2D interlayer structure of Al-pillared clays for solid-state lithium battery. Journal of Materials Science: Materials in Electronics, 2020, 31, 13874-13888.	1.1	3
350	Enhanced electrochemical performance of a promising anode material FeVO4 by tungsten doping. Ceramics International, 2020, 46, 21360-21366.	2.3	9
351	Unraveling the Nature of Excellent Potassium Storage in Smallâ€Molecule Se@Peapodâ€Like Nâ€Doped Carbon Nanofibers. Advanced Materials, 2020, 32, e2003879.	11.1	104
352	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
353	Progress of 3D network binders in silicon anodes for lithium ion batteries. Journal of Materials Chemistry A, 2020, 8, 25548-25570.	5.2	88
354	Design Strategies of Safe Electrolytes for Preventing Thermal Runaway in Lithium Ion Batteries. Chemistry of Materials, 2020, 32, 9821-9848.	3.2	100
355	Incorporation of Titanium into Ni-Rich Layered Cathode Materials for Lithium-Ion Batteries. ACS Applied Energy Materials, 2020, 3, 12204-12211.	2.5	17
356	One-Step Low-Temperature Molten Salt Synthesis of Two-Dimensional Si@SiO_x@C Hybrids for High-Performance Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 55844-55855.	4.0	36
357	Using In-Situ Laboratory and Synchrotron-Based X-ray Diffraction for Lithium-Ion Batteries Characterization: A Review on Recent Developments. Condensed Matter, 2020, 5, 75.	0.8	37
358	Porous Si/Fe2O3 Dual Network Anode for Lithiumâ€“Ion Battery Application. Nanomaterials, 2020, 10, 2331.	1.9	11
359	Impact of Silicon/Graphite Composite Electrode Porosity on the Cycle Life of 18650 Lithium-Ion Cell. ACS Applied Energy Materials, 2020, 3, 11873-11885.	2.5	16
360	Insight into Electrical and Dielectric Relaxation of Doped Tellurite Lithium-Silicate Glasses with Regard to Ionic Charge Carrier Number Density Estimation. Materials, 2020, 13, 5232.	1.3	1
361	Impact of Residual Lithium on the Adoption of High-Nickel Layered Oxide Cathodes for Lithium-Ion Batteries. Chemistry of Materials, 2020, 32, 9479-9489.	3.2	81
362	Will Sulfide Electrolytes be Suitable Candidates for Constructing a Stable Solid/Liquid Electrolyte Interface?. ACS Applied Materials & Interfaces, 2020, 12, 52845-52856.	4.0	15

#	Article	IF	Citations
363	Unveiling the dimensionality effect of conductive fillers in thick battery electrodes for high-energy storage systems. Applied Physics Reviews, 2020, 7, .	5.5	43
364	Rapid Online Solid-State Battery Diagnostics with Optically Pumped Magnetometers. Applied Sciences (Switzerland), 2020, 10, 7864.	1.3	9
365	Tailoring Ion-Conducting Interphases on Magnesium Metals for High-Efficiency Rechargeable Magnesium Metal Batteries. ACS Energy Letters, 2020, 5, 3733-3740.	8.8	30
366	Elucidating the Mechanism of Li Insertion into Fe_{1â€“x}S/Carbon via In Operando Synchrotron Studies. ACS Applied Materials & Interfaces, 2020, 12, 52691-52700.	4.0	9
367	An Urgent Call to Spent LIB Recycling: Whys and Wherefores for Graphite Recovery. Advanced Energy Materials, 2020, 10, 2002238.	10.2	167
368	Elucidation of the role of lithium iodide as an additive for the <scp>liquidâ€based</scp> synthesis of <scp> Li ₇ P ₂ S ₈ I </scp> solid electrolyte. International Journal of Energy Research, 2020, 44, 11542-11549.	2.2	3
369	Multiscale Hierarchically Engineered Carbon Nanosheets Derived from Covalent Organic Framework for Potassiumâ€ion Batteries. Small Methods, 2020, 4, 2000159.	4.6	36
370	Investigating the role of crystallographic orientation of single crystalline silicon on their electrochemical lithiation behavior: Surface chemistry of Si determines the bulk lithiation. Surfaces and Interfaces, 2020, 20, 100585.	1.5	0
371	Cedarwood Bark-Derived Hard Carbon as an Anode for High-Performance Sodium-Ion Batteries. Energy & Fuels, 2020, 34, 11489-11497.	2.5	22
372	Harnessing the unique features of MXenes for sulfur cathodes. Tungsten, 2020, 2, 162-175.	2.0	25
373	Sulfur-based redox chemistry for electrochemical energy storage. Coordination Chemistry Reviews, 2020, 422, 213445.	9.5	28
374	Synergy of binders and electrolytes in enabling microsized alloy anodes for high performance potassium-ion batteries. Nano Energy, 2020, 77, 105118.	8.2	82
375	Formation mechanism of sol-gel synthesized Li7â˜'3Al La3Zr2O12 and the influence of abnormal grain growth on ionic conductivity. Solid State Ionics, 2020, 354, 115407.	1.3	19
376	Carbon coated 3D Nb₂O₅ hollow nanospheres with superior performance as an anode for high energy Li-ion capacitors. Sustainable Energy and Fuels, 2020, 4, 4868-4877.	2.5	12
377	Constructing a Low-Impedance Interface on a High-Voltage LiNi_{0.8}Co_{0.1}Mn_{0.1}O₂ Cathode with 2,4,6-Triphenyl Boroxine as a Film-Forming Electrolyte Additive for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 37013-37026.	4.0	86
378	A redox-active organic cation for safer high energy density Li-ion batteries. Journal of Materials Chemistry A, 2020, 8, 17156-17162.	5.2	9
379	Preâ€activation and Defects Introduced via Citric Acid to Mitigate Capacity and Voltage Fading in Liâ€rich Cathode. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2020, 646, 1285-1291.	0.6	6
380	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

#	Article	IF	Citations
381	The effect of carboxyl group position of pyrazinedicarboxylic acid on electrochemical performances in lithium ion batteries anode. Journal of Power Sources, 2020, 473, 228515.	4.0	4
382	The effect of mild activation on the electrochemical performance of pitch-coated graphite for the lithium-ion battery anode material. Materials Letters, 2020, 278, 128421.	1.3	13
383	Air-stable means more: designing air-defendable lithium metals for safe and stable batteries. Materials Horizons, 2020, 7, 2619-2634.	6.4	37
384	Mitigating the Impact of Thermal Binder Removal for Direct Li-Ion Battery Recycling. ACS Sustainable Chemistry and Engineering, 2020, 8, 12511-12515.	3.2	29
385	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
386	Defect, transport, and dopant properties of andradite garnet Ca3Fe2Si3O12. AIP Advances, 2020, 10, .	0.6	6
387	Calenderingâ€Compatible Macroporous Architecture for Siliconâ€“Graphite Composite toward Highâ€Energy Lithiumâ€Ion Batteries. Advanced Materials, 2020, 32, e2003286.	11.1	111
388	Excellent performance of a modified graphite anode for lithium-ion battery application. Ionics, 2020, 26, 5367-5373.	1.2	10
389	Covalently Bonded Siâ€“Polymer Nanocomposites Enabled by Mechanochemical Synthesis as Durable Anode Materials. ACS Applied Materials & Interfaces, 2020, 12, 39127-39134.	4.0	18
390	Stress Relief Principle of Micronâ€Sized Anodes with Large Volume Variation for Practical Highâ€Energy Lithiumâ€Ion Batteries. Advanced Functional Materials, 2020, 30, 2004841.	7.8	37
391	Nanocomposite Ionogel Electrolytes for Solidâ€State Rechargeable Batteries. Advanced Energy Materials, 2020, 10, 2002135.	10.2	37
392	Microwaveâ€Synthesized TiO 2 Nanotube as a Durable Li + â€Storage Electrode Material. ChemistrySelect, 2020, 5, 9022-9029.	0.7	4
393	Perspectives for electrochemical capacitors and related devices. Nature Materials, 2020, 19, 1151-1163.	13.3	1,187
394	Review on comprehending and enhancing the initial Coulombic efficiency of anode materials in lithium-ion/sodium-ion batteries. Nano Energy, 2020, 77, 105143.	8.2	282
395	Recent advances and perspectives of 2D silicon: Synthesis and application for energy storage and conversion. Energy Storage Materials, 2020, 32, 115-150.	9.5	74
396	Active Materials for Aqueous Zinc Ion Batteries: Synthesis, Crystal Structure, Morphology, and Electrochemistry. Chemical Reviews, 2020, 120, 7795-7866.	23.0	950
397	Relaxation analysis of NCAs in high-voltage region and effect of cobalt content. Journal of Electroanalytical Chemistry, 2020, 878, 114566.	1.9	1
398	An elegant coupling: Freeze-casting and versatile polymer composites. Progress in Polymer Science, 2020, 109, 101289.	11.8	69

#	Article	IF	Citations
399	Heteroatom-doped carbon networks enabling robust and flexible silicon anodes for high energy Li-ion batteries. Journal of Materials Chemistry A, 2020, 8, 18338-18347.	5.2	47
400	Recent advances in Ni-rich layered oxide particle materials for lithium-ion batteries. Particuology, 2020, 53, 1-11.	2.0	60
401	Tuning Both Anionic and Cationic Redox Chemistry of Li-Rich Li_{1.2}Mn_{0.6}Ni_{0.2}O₂ via a â€œThree-in-Oneâ€•Strategy. Chemistry of Materials, 2020, 32, 9404-9414.	3.2	27
402	Diffusion of lithium ions in Lithium-argyrodite solid-state electrolytes. Npj Computational Materials, 2020, 6, .	3.5	30
403	Reversible charge storage of ferrocene-adsorbed activated carbon using ionic liquid electrolytes. Chemical Physics Letters, 2020, 755, 137795.	1.2	8
404	Hydrothermal Activation of Porous Nitrogen-Doped Carbon Materials for Electrochemical Capacitors and Sodium-Ion Batteries. Nanomaterials, 2020, 10, 2163.	1.9	41
405	Boosting Coulombic Efficiency of Conversionâ€Reaction Anodes for Potassiumâ€Ion Batteries via Confinement Effect. Advanced Functional Materials, 2020, 30, 2007712.	7.8	68
406	Exploiting Selfâ€Healing in Lithium Batteries: Strategies for Nextâ€Generation Energy Storage Devices. Advanced Energy Materials, 2020, 10, 2002815.	10.2	38
407	Metastable oxysulfide surface formation on LiNi_{0.5}Mn_{1.5}O₄ single crystal particles by carbothermal reaction with sulfur-doped heterocarbon nanoparticles: new insight into their structural and electrochemical characteristics, and their potential applications. Journal of Materials Chemistry A, 2020, 8, 22302-22314.	5.2	17
408	Impact of PSBpin Content on the Electrochemical Properties of PTMA-PSBpin Copolymer Cathodes. ACS Applied Energy Materials, 2020, 3, 9296-9304.	2.5	5
409	Advanced Materials Prepared via Metallic Reduction Reactions for Electrochemical Energy Storage. Small Methods, 2020, 4, 2000613.	4.6	15
410	Deeply understanding the Zn anode behaviour and corresponding improvement strategies in different aqueous Zn-based batteries. Energy and Environmental Science, 2020, 13, 3917-3949.	15.6	480
411	Fire Hazard of Lithium-ion Battery Energy Storage Systems: 1. Module to Rack-scale Fire Tests. Fire Technology, 2023, 59, 3049-3075.	1.5	1
412	Ballâ€Milling Strategy for Fast and Stable Potassiumâ€Ion Storage in Antimonyâ€Carbon Composite Anodes. ChemElectroChem, 2020, 7, 4587-4593.	1.7	6
413	Challenges and Strategy on Parasitic Reaction for Highâ€Performance Nonaqueous Lithiumâ€“Oxygen Batteries. Advanced Energy Materials, 2020, 10, 2001789.	10.2	62
414	Advances in the Design of 3Dâ€Structured Electrode Materials for Lithiumâ€Metal Anodes. Advanced Materials, 2020, 32, e2002193.	11.1	165
415	Heterojunction-structured MnCO₃@NiO composites and their enhanced electrochemical performance. Dalton Transactions, 2020, 49, 14483-14489.	1.6	13
416	Rational design of MOFs-derived Fe3O4@C interwoven with carbon nanotubes as sulfur host for advanced lithiumâ€sulfur batteries. Journal of Electroanalytical Chemistry, 2020, 877, 114608.	1.9	11

#	Article	IF	Citations
417	Thermal Management of Stationary Battery Systems: A Literature Review. Energies, 2020, 13, 4194.	1.6	17
418	Elastic Na_xMoS₂-Carbon-BASE Triple Interface Direct Robust Solidâ€“Solid Interface for All-Solid-State Naâ€“S Batteries. Nano Letters, 2020, 20, 6837-6844.	4.5	29
419	Diffusion-Dependent Graphite Electrode for All-Solid-State Batteries with Extremely High Energy Density. ACS Energy Letters, 2020, 5, 2995-3004.	8.8	53
420	Stabilization of Sn Anode through Structural Reconstruction of a Cuâ€“Sn Intermetallic Coating Layer. Advanced Materials, 2020, 32, e2003684.	11.1	53
421	Ni-Co Double Hydroxide Grown on Graphene Oxide for Enhancing Lithium Ion Storage. Energy & Fuels, 2020, 34, 13032-13037.	2.5	32
422	Understanding Charge Storage in Hydrated Layered Solids MOPO₄ (M = V, Nb) with Tunable Interlayer Chemistry. ACS Nano, 2020, 14, 13824-13833.	7.3	6
423	Highly adhesive and stretchable binder for silicon-based anodes in Li-ion batteries. Ionics, 2020, 26, 5889-5896.	1.2	10
424	Porous lithium cobalt oxide fabricated from metalâ€“organic frameworks as a high-rate cathode for lithium-ion batteries. RSC Advances, 2020, 10, 31889-31893.	1.7	4
425	Matchmaker of Marriage between a Li Metal Anode and NASICON-Structured Solid-State Electrolyte: Plastic Crystal Electrolyte and Three-Dimensional Host Structure. ACS Applied Materials & Interfaces, 2020, 12, 44754-44761.	4.0	22
426	Mace-like carbon fibers@Fe3O4@carbon composites as anode materials for lithium-ion batteries. Ionics, 2020, 26, 5923-5934.	1.2	9
427	Large-size carbon-coated SnO2 composite as improved anode material for lithium ion batteries. Ionics, 2020, 26, 5879-5887.	1.2	10
428	N-Heterocyclic Linkages Are Produced from Condensation of Amidines onto Graphitic Carbon. Chemistry of Materials, 2020, 32, 8512-8521.	3.2	4
429	Hollow nanoparticle-assembled hierarchical NiCo₂O₄ nanofibers with enhanced electrochemical performance for lithium-ion batteries. Inorganic Chemistry Frontiers, 2020, 7, 4101-4112.	3.0	27
430	Integrating Conductivity, Captivity, and Immobility Ability into N/O Dualâ€Doped Porous Carbon Nanocage Anchored with CNT as an Effective Se Host for Advanced Kâ€Se Battery. Advanced Functional Materials, 2020, 30, 2003871.	7.8	45
431	Progress and Prospects of Transition Metal Sulfides for Sodium Storage. Advanced Fiber Materials, 2020, 2, 314-337.	7.9	74
432	Recent Advances of Emerging 2D MXene for Stable and Dendriteâ€Free Metal Anodes. Advanced Functional Materials, 2020, 30, 2004613.	7.8	140
433	Defect and structural evolution under high-energy ion irradiation informs battery materials design for extreme environments. Nature Communications, 2020, 11, 4548.	5.8	28
434	Tailoring MXene-Based Materials for Sodium-Ion Storage: Synthesis, Mechanisms, and Applications. Electrochemical Energy Reviews, 2020, 3, 766-792.	13.1	86

#	Article	IF	Citations
435	Alkali Metal-Modified P2 NaxMnO2: Crystal Structure and Application in Sodium-Ion Batteries. Inorganic Chemistry, 2020, 59, 12143-12155.	1.9	9
436	Ionic liquid-modified poly(propylene carbonate)-based electrolyte for all-solid-state lithium battery. Ionics, 2020, 26, 5503-5511.	1.2	8
437	Electrode Engineering of Redox-Active Conjugated Microporous Polymers for Ultra-High Areal Capacity Organic Batteries. ACS Energy Letters, 2020, 5, 2945-2953.	8.8	59
438	3D carbon-coated stannous sulfide-molybdenum disulfide anodes for advanced lithium-ion batteries. Materials Advances, 2020, 1, 2323-2331.	2.6	5
439	Tailoring desolvation kinetics enables stable zinc metal anodes. Journal of Materials Chemistry A, 2020, 8, 19367-19374.	5.2	136
440	Freestanding Na₃V₂O₂(PO₄)₂F/Graphene Aerogels as High-Performance Cathodes of Sodium-Ion Full Batteries. ACS Applied Materials & Interfaces, 2020, 12, 41419-41428.	4.0	33
441	Evaluation of the Volumetric Activity of the Air Electrode in a Zincâ€“Air Battery Using a Nitrogen and Sulfur Co-doped Metal-free Electrocatalyst. ACS Applied Materials & Interfaces, 2020, 12, 57064-57070.	4.0	6
442	SiGe@Cu films as stable and high energy density anodes for lithium-ion microbatteries. Emergent Materials, 2020, 3, 779-790.	3.2	2
443	Two-Phase Electrochemical Proton Transport and Storage in Î±-MoO3 for Proton Batteries. Cell Reports Physical Science, 2020, 1, 100225.	2.8	40
444	Metalâ€Tellurium Batteries: A Rising Energy Storage System. Small Structures, 2020, 1, 2000005.	6.9	46
445	PEG-assisted hydrothermal synthesis of porous Li3V2(PO4)3 frameworks for lithium-ion batteries. Emergent Materials, 2020, 3, 331-337.	3.2	6
446	Interfacial nanoarchitectonics for responsive cellular biosystems. Materials Today Bio, 2020, 8, 100075.	2.6	13
447	Simple Glycerol-Assisted and Morphology-Controllable Solvothermal Synthesis of Lithium-Ion Battery-Layered Li_{1.2}Mn_{0.54}Ni_{0.13}Co_{0.13}O₂ Cathode Materials. ACS Applied Materials & Interfaces, 2020, 12, 55926-55935.	4.0	15
448	Material balance in the O₂ electrode of Liâ€“O₂ cells with a porous carbon electrode and TEGDME-based electrolytes. RSC Advances, 2020, 10, 42971-42982.	1.7	20
449	Ionic conductivity enhancement in solid polymer electrolytes by electrochemicalin situformation of an interpenetrating network. RSC Advances, 2020, 10, 41296-41304.	1.7	13
450	Carbon-Coated Self-Assembled Ultrathin T-Nb₂O₅ Nanosheets for High-Rate Lithium-Ion Storage with Superior Cycling Stability. ACS Applied Energy Materials, 2020, 3, 12037-12045.	2.5	26
451	Bending good beats breaking bad: phase separation patterns in individual cathode particles upon lithiation and delithiation. Materials Horizons, 2020, 7, 3275-3290.	6.4	14
452	Event-Driven Coulomb Counting for Effective Online Approximation of Li-Ion Battery State of Charge. Energies, 2020, 13, 5600.	1.6	24

#	Article	IF	Citations
453	Underpotential lithium plating on graphite anodes caused by temperature heterogeneity. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29453-29461.	3.3	94
454	2D Sandwiched Nano Heterostructures Endow MoSe₂/TiO_{2â˜'}_x/Graphene with High Rate and Durability for Sodium Ion Capacitor and Its Solid Electrolyte Interphase Dependent Sodiation/Desodiation Mechanism. Small, 2020, 16, e2004457.	5.2	38
455	Investigation of alkali-ion (Li, Na and K) intercalation in manganese hexacyanoferrate KxMnFe(CN)6 as cathode material. Chemical Engineering Journal, 2020, 396, 125269.	6.6	44
456	Recognition of Ionic Liquids as High-Voltage Electrolytes for Supercapacitors. Frontiers in Chemistry, 2020, 8, 261.	1.8	59
457	Enhanced electrochemical properties of ZnO encapsulated in carbon nanofibers as anode material for lithium-ion batteries. Ionics, 2020, 26, 4351-4361.	1.2	6
458	Potassium phosphate monobasic induced decoration from the surface into the bulk lattice for Ni-rich cathode materials with enhanced cell performance. Sustainable Energy and Fuels, 2020, 4, 3352-3362.	2.5	10
459	A facile synthesis of non-aqueous LiPO2F2 solution as the electrolyte additive for high performance lithium ion batteries. Chinese Chemical Letters, 2020, 31, 3209-3212.	4.8	19
460	Ni-doped Ni3S2 nanoflake intertexture grown on graphene oxide as sheet-like anode for high-performance lithium-ion batteries. Journal of Alloys and Compounds, 2020, 835, 155418.	2.8	24
461	Realizing High Volumetric Lithium Storage by Compact and Mechanically Stable Anode Designs. ACS Energy Letters, 2020, 5, 1986-1995.	8.8	72
462	Mapping and Metastability of Heterogeneity in LiMn₂O₄ Battery Electrodes with High Energy Density. Journal of the Electrochemical Society, 2020, 167, 020526.	1.3	5
463	Atomicâ€Scale Dispersed Feâ€Based Catalysts Confined on Nitrogenâ€Doped Graphene for Liâ€S Batteries: Polysulfides with Enhanced Conversion Efficiency. Chemistry - A European Journal, 2020, 26, 10314-10320.	1.7	24
464	Highly ordered carbon nanotubes to improve the conductivity of LiNi0.8Co0.15Al0.05O2 for Li-ion batteries. Journal of Materials Science, 2020, 55, 12082-12090.	1.7	8
465	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
466	Cobalt Oxide Nanocubes Encapsulated in Graphene Aerogel as Integrated Anodes for Lithiumâ€Ion Batteries. ChemistrySelect, 2020, 5, 5323-5329.	0.7	8
467	Binderâ€Free TiO₂â€Coated Polypropylene Separators for Advanced Lithiumâ€Ion Batteries. Energy Technology, 2020, 8, 2000228.	1.8	16
468	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
469	Sensitive magnetometry reveals inhomogeneities in charge storage and weak transient internal currents in Li-ion cells. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 10667-10672.	3.3	43
470	An effective way of co-precipitating Ni2+, Mn2+ and Co2+ by using ammonium oxalate as precipitant for Ni-rich Li-ion batteries cathode. Journal of Materials Science, 2020, 55, 11535-11544.	1.7	14

#	Article	IF	Citations
471	PEDOT Encapsulated and Mechanochemically Engineered Silicate Nanocrystals for High Energy Density Cathodes. Advanced Materials Interfaces, 2020, 7, 2000226.	1.9	4
472	Scalable Multilayer Printing of Graphene Interfacial Layers for Ultrahigh Power Lithiumâ€Ion Storage. Energy Technology, 2020, 8, 2000253.	1.8	4
473	Interfacial effect of Co4S3â€“Co9S8 nanoparticles hosted on rGO sheets derived from molecular precursor pyrolysis on enhancing electrochemical behaviour. Catalysis Science and Technology, 2020, 10, 3622-3634.	2.1	11
474	Large-Scale Electric-Field Confined Silicon with Optimized Charge-Transfer Kinetics and Structural Stability for High-Rate Lithium-Ion Batteries. ACS Nano, 2020, 14, 7066-7076.	7.3	114
475	Conjugated porous polymers: incredibly versatile materials with far-reaching applications. Chemical Society Reviews, 2020, 49, 3981-4042.	18.7	162
477	A novel Mg/Na hybrid battery based on Na2VTi(PO4)3 cathode: Enlightening the Na-intercalation cathodes by a metallic Mg anode and a dual-ion Mg2+/Na+ electrolyte. Chemical Engineering Journal, 2020, 399, 125689.	6.6	13
478	A review on energy chemistry of fast-charging anodes. Chemical Society Reviews, 2020, 49, 3806-3833.	18.7	323
479	Intercalated water in aqueous batteries. , 2020, 2, 251-264.		42
480	Stabilize lithium metal anode through constructing a lithiophilic viscoelastic interface based on hydroxypropyl methyl cellulose. Chemical Engineering Journal, 2020, 399, 125687.	6.6	22
481	Theoretical Simulation and Modeling of Three-Dimensional Batteries. Cell Reports Physical Science, 2020, 1, 100078.	2.8	34
482	Three-Dimensional Topotactic Host Structure-Secured Ultrastable VP-CNO Composite Anodes for Long Lifespan Lithium- and Sodium-Ion Capacitors. ACS Applied Materials & Interfaces, 2020, 12, 29218-29227.	4.0	3
483	Oneâ€Pot Templateâ€Free Crossâ€Linking Synthesis of SiO_xâ€“SnO₂@C Hollow Spheres as a High Volumetric Capacity Anode for Lithiumâ€Ion Batteries. Energy Technology, 2020, 8, 2000314.	1.8	18
484	Atomically dispersed metal active centers as a chemically tunable platform for energy storage devices. Journal of Materials Chemistry A, 2020, 8, 15358-15372.	5.2	16
485	Cotton-derived carbon cloth enabling dendrite-free Li deposition for lithium metal batteries. Journal of Power Sources, 2020, 465, 228291.	4.0	29
486	Reliable liquid electrolytes for lithium metal batteries. Energy Storage Materials, 2020, 30, 113-129.	9.5	92
487	In situ regulated solid electrolyte interphase via reactive separators for highly efficient lithium metal batteries. Energy Storage Materials, 2020, 30, 27-33.	9.5	90
488	Synthesis of three-dimensional Sn@Ti3C2 by layer-by-layer self-assembly for high-performance lithium-ion storage. Journal of Colloid and Interface Science, 2020, 577, 329-336.	5.0	25
489	Tuning the carrier density of TiO2 nanotube arrays by controlling the oxygen vacancies for improved areal capacitance in supercapacitor applications. Materials Chemistry and Physics, 2020, 248, 122925.	2.0	25

#	Article	IF	Citations
490	Plasma-treated Bombyx mori cocoon separators for high-performance and sustainable lithium-ion batteries. Materials Today Sustainability, 2020, 9, 100041.	1.9	9
491	Superior Cycle Stability of Single Crystal Nickel-Rich Layered Oxides with Micron-Scale Grain Size as Cathode Material for Lithium Ion Batteries. International Journal of Electrochemical Science, 2020, 15, 5031-5041.	0.5	22
492	Nanostructure Design Strategies for Aqueous Zincâ€ion Batteries. ChemElectroChem, 2020, 7, 2957-2978.	1.7	44
493	Monodispersed FeS nanoparticles confined in 3D interconnected carbon nanosheets network as an anode for high-performance lithium-ion batteries. Journal of Materials Science, 2020, 55, 12139-12150.	1.7	11
494	Electrophoretic deposition of nanographitic flakes/Co3O4 nanocomposite layers synthesized by solvothermal process for improved lithium-ion-battery anode. Journal of Solid State Chemistry, 2020, 288, 121471.	1.4	9
495	Nitrification protection of Si monocrystal nanoparticles into the graphene matrix as the high-performance anode material for lithium-ion batteries. Materials Chemistry and Physics, 2020, 249, 123156.	2.0	8
496	Atomically dispersed metal sites anchored in N-doped carbon nanosheets with enhanced Li storage performance. Materials Chemistry Frontiers, 2020, 4, 2157-2167.	3.2	12
497	Polyaniline Electrode Activation in Li Cells. Journal of the Electrochemical Society, 2020, 167, 080501.	1.3	10
498	Tungsten nitride nanoparticles anchored on porous borocarbonitride as high-rate anode for lithium ion batteries. Chemical Engineering Journal, 2020, 399, 125705.	6.6	38
499	Delayed Phase Transition and Improved Cycling/Thermal Stability by Spinel LiNi_{0.5}Mn_{1.5}O₄ Modification for LiCoO₂ Cathode at High Voltages. ACS Applied Materials & Interfaces, 2020, 12, 27339-27349.	4.0	41
500	Enabling SiO_x/C Anode with High Initial Coulombic Efficiency through a Chemical Pre-Lithiation Strategy for High-Energy-Density Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 27202-27209.	4.0	112
501	A fluorine-substituted pyrrolidinium-based ionic liquid for high-voltage Li-ion batteries. Chemical Communications, 2020, 56, 7317-7320.	2.2	14
502	Ga-doped lithium lanthanum zirconium oxide electrolyte for solid-state Li batteries. Electrochimica Acta, 2020, 353, 136536.	2.6	18
503	12 years roadmap of the sulfur cathode for lithium sulfur batteries (2009â€“2020). Energy Storage Materials, 2020, 30, 346-366.	9.5	189
504	Metalâ€organic frameworks for solid-state electrolytes. Energy and Environmental Science, 2020, 13, 2386-2403.	15.6	182
505	Understanding the Roles of Tris(trimethylsilyl) Phosphite (TMSPi) in LiNi_{0.8}Mn_{0.1}Co_{0.1}O₂ (NMC811)/Siliconâ€“Graphite (Siâ€“Gr) Lithiumâ€ion Batteries. Advanced Materials Interfaces, 2020, 7, 2000277.	1.9	56
506	Improved solid-state synthesis and electrochemical properties of LiNi0.6Mn0.2Co0.2O2 cathode materials for lithium-ion batteries. Journal of Alloys and Compounds, 2020, 844, 156034.	2.8	11
507	Peat-derived hard carbon electrodes with superior capacity for sodium-ion batteries. RSC Advances, 2020, 10, 20145-20154.	1.7	26

#	Article	IF	Citations
508	3D Nanostructures for the Next Generation of Highâ€Performance Nanodevices for Electrochemical Energy Conversion and Storage. Advanced Energy Materials, 2020, 10, 2001460.	10.2	106
509	Oxygenâ€Deficient Birnessiteâ€MnO₂ for Highâ€Performing Rechargeable Aqueous Zincâ€Ion Batteries. ChemNanoMat, 2020, 6, 1357-1364.	1.5	22
510	Large-scale synthesis of lithium- and manganese-rich materials with uniform thin-film Al2O3 coating for stable cathode cycling. Science China Materials, 2020, 63, 1683-1692.	3.5	23
511	Design and Construction of Graphitic/Amorphous Heterophase Porous Carbon with a Lotus-Leaf-like Surface Microstructure for High-Performance Li-Ion and Na-Ion Batteries. Industrial & Engineering Chemistry Research, 2020, 59, 11475-11484.	1.8	14
512	Effect of crystallite size on the phase transition behavior of heterosite FePO₄. Physical Chemistry Chemical Physics, 2020, 22, 15478-15487.	1.3	6
513	A FigureÂof Merit for Flexible Batteries. Joule, 2020, 4, 1346-1349.	11.7	81
514	Interfacial redox behaviors of sulfide electrolytes in fast-charging all-solid-state lithium metal batteries. Energy Storage Materials, 2020, 31, 267-273.	9.5	45
515	Pristine MOF and COF materials for advanced batteries. Energy Storage Materials, 2020, 31, 115-134.	9.5	149
516	Activating Li₂S as the Lithium-Containing Cathode in Lithiumâ€“Sulfur Batteries. ACS Energy Letters, 2020, 5, 2234-2245.	8.8	125
517	Opportunities and Reality of Aqueous Rechargeable Batteries. Advanced Energy Materials, 2020, 10, 2001386.	10.2	92
518	Recent Developments for Aluminumâ€“Air Batteries. Electrochemical Energy Reviews, 2020, 3, 344-369.	13.1	96
519	Bubble-sheet-like Ni0.85Co2.15V2O8 nanosheets for high-rate lithium storage. Ceramics International, 2020, 46, 14488-14495.	2.3	2
520	Honeycomb-like amorphous VPO4/C spheres with improved sodium storage performance as anode materials for sodium-ion batteries. Ionics, 2020, 26, 3669-3676.	1.2	7
521	Recent Developments and Future Challenges in Designing Rechargeable Potassium-Sulfur and Potassium-Selenium Batteries. Energies, 2020, 13, 2791.	1.6	13
522	Mixed Anionic and Cationic Redox Chemistry in a Tetrathiomolybdate Amorphous Coordination Framework. Angewandte Chemie - International Edition, 2020, 59, 16579-16586.	7.2	15
523	Mixed Anionic and Cationic Redox Chemistry in a Tetrathiomolybdate Amorphous Coordination Framework. Angewandte Chemie, 2020, 132, 16722.	1.6	1
524	Improved solid electrolyte interphase and Li-storage performance of Si/graphite anode with ethylene sulfate as electrolyte additive. Functional Materials Letters, 2020, 13, 2051041.	0.7	13
525	Preparation of pitch-based carbon microbeads by a simultaneous spheroidization and stabilization process for lithium-ion batteries. Chemical Engineering Journal, 2020, 400, 125948.	6.6	49

#	Article	IF	Citations
526	Twoâ€Dimensional NiO@Câ€N Nanosheets Composite as a Superior Lowâ€Temperature Anode Material for Advanced Lithiumâ€/Sodiumâ€Ion Batteries. ChemElectroChem, 2020, 7, 3616-3622.	1.7	22
527	Modeling and Simulation of Flow Batteries. Advanced Energy Materials, 2020, 10, 2000758.	10.2	66
528	Exploration of Advanced Electrode Materials for Approaching Highâ€Performance Nickelâ€Based Superbatteries. Small, 2020, 16, e2001340.	5.2	26
529	N-doped 3D porous carbon materials derived from hierarchical porous IRMOF-3 using a citric acid modulator: fabrication and application in lithium ion batteries as anode materials. Dalton Transactions, 2020, 49, 9369-9376.	1.6	8
530	The Electronic Conductivity of Single Crystalline Gaâ€Stabilized Cubic Li₇La₃Zr₂O₁₂: A Technologically Relevant Parameter for Allâ€Solidâ€State Batteries. Advanced Materials Interfaces, 2020, 7, 2000450.	1.9	33
531	Hierarchical N-doped carbon nanosheets submicrospheres enable superior electrochemical properties for potassium ion capacitors. Journal of Power Sources, 2020, 469, 228415.	4.0	57
532	Fast Charging Materials for High Power Applications. Advanced Energy Materials, 2020, 10, 2001128.	10.2	136
533	Self-assembly formation of hierarchical mixed spinel MnCo2O4 porous nanospheres confined by polypyrrole pyrolytic carbon for high-performance lithium storage. Materials Today Energy, 2020, 17, 100451.	2.5	15
534	Na 3 V 2 (PO 4) 3 â€Supported Electrospun Carbon Nanofiber Nonwoven Fabric as Selfâ€Standing Naâ€Ion Cell Cathode. ChemElectroChem, 2020, 7, 1652-1659.	1.7	16
535	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
536	Supramolecular Chiral Nanoarchitectonics. Advanced Materials, 2020, 32, e1905657.	11.1	150
537	Lithiation Abilities of SiC Bulks and Surfaces: A First-Principles Study. Journal of Physical Chemistry C, 2020, 124, 7031-7038.	1.5	13
538	Recycling lithium-ion batteries: adding value with multiple lives. Green Chemistry, 2020, 22, 2244-2254.	4.6	28
539	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
540	A High-Capacity Ammonium Vanadate Cathode for Zinc-Ion Battery. Nano-Micro Letters, 2020, 12, 67.	14.4	85
541	NASICON Na₃V₂(PO₄)₃ Enables Quasi-Two-Stage Na⁺ and Zn²⁺ Intercalation for Multivalent Zinc Batteries. Chemistry of Materials, 2020, 32, 3028-3035.	3.2	75
542	Pseudo Jahnâ€“Teller Origin of Buckling Deformation of Two-dimensional Group-IV-Based Triphosphides as an Anode of Sodium-Ion Batteries. Journal of Physical Chemistry C, 2020, 124, 7699-7707.	1.5	0
543	A fluoroxalate cathode material for potassium-ion batteries with ultra-long cyclability. Nature Communications, 2020, 11, 1225.	5.8	173

#	Article	IF	Citations
544	Rational design of the pea-pod structure of SiO_x/C nanofibers as a high-performance anode for lithium ion batteries. Inorganic Chemistry Frontiers, 2020, 7, 1762-1769.	3.0	31
545	Low-temperature preparation of mesoporous TiO2 honeycomb-like structure on TiO2 nanotube arrays as binder-free anodes for lithium-ion batteries. Journal of Electroanalytical Chemistry, 2020, 863, 114088.	1.9	19
546	Acrylic random copolymer and network binders for silicon anodes in lithium-ion batteries. Journal of Power Sources, 2020, 458, 228054.	4.0	37
547	Hierarchical Fusiform Microrods Constructed by Parallelly Arranged Nanoplatelets of LiCoO₂ Material with Ultrahigh Rate Performance. ACS Applied Materials & Interfaces, 2020, 12, 17376-17384.	4.0	9
548	Three-dimensional graphene-supported nickel disulfide nanoparticles promise stable and fast potassium storage. Nanoscale, 2020, 12, 8255-8261.	2.8	35
549	The effect of oxygen vacancy and spinel phase integration on both anionic and cationic redox in Li-rich cathode materials. Journal of Materials Chemistry A, 2020, 8, 7733-7745.	5.2	101
550	3D Periodic Ion Transport Channel to Suppress Top Deposition toward Stable Lithium Metal Anode. Batteries and Supercaps, 2020, 3, 773-779.	2.4	3
551	High-Energy Density Liâ€“O₂ Battery with a Polymer Electrolyte-Coated CNT Electrode via the Layer-by-Layer Method. ACS Applied Materials & Interfaces, 2020, 12, 17385-17395.	4.0	21
552	Polyanion-type cathode materials for sodium-ion batteries. Chemical Society Reviews, 2020, 49, 2342-2377.	18.7	422
553	Selfâ€Healing Materials for Energyâ€Storage Devices. Advanced Functional Materials, 2020, 30, 1909912.	7.8	121
554	Basic knowledge in battery research bridging the gap between academia and industry. Materials Horizons, 2020, 7, 1937-1954.	6.4	94
555	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
556	Featured properties of Li⁺-based battery anode: Li₄Ti₅O₁₂. RSC Advances, 2020, 10, 14071-14079.	1.7	14
557	Bottomâ€Up Synthesis of Advanced Carbonaceous Anode Materials Containing Sulfur for Naâ€Ion Batteries. Advanced Functional Materials, 2020, 30, 2000592.	7.8	37
558	A Diffusionâ€â€Reaction Competition Mechanism to Tailor Lithium Deposition for Lithiumâ€Metal Batteries. Angewandte Chemie, 2020, 132, 7817-7821.	1.6	37
559	Enhanced Electrochemical Performance of Liâ€•and Mnâ€Rich Cathode Materials by Particle Blending and Surface Coating. ChemistrySelect, 2020, 5, 3052-3061.	0.7	5
560	Probing the Structure-Performance Relationship of Lithium-Ion Battery Cathodes Using Pore-Networks Extracted from Three-Phase Tomograms. Journal of the Electrochemical Society, 2020, 167, 040528.	1.3	17
561	A Highâ€Performance Liâ€“Mnâ€“O Liâ€rich Cathode Material with Rhombohedral Symmetry via Intralayer Li/Mn Disordering. Advanced Materials, 2020, 32, e2000190.	11.1	83

#	Article	IF	Citations
562	Operando Acoustic Monitoring of SEI Formation and Long-Term Cycling in NMC/SiGr Composite Pouch Cells. Journal of the Electrochemical Society, 2020, 167, 020517.	1.3	36
563	Shaping the Future of Solidâ€State Electrolytes through Computational Modeling. Advanced Materials, 2020, 32, e1908041.	11.1	22
564	Towards a Highâ€Performance Lithiumâ€Metal Battery with Glyme Solution and an Olivine Cathode. ChemElectroChem, 2020, 7, 2376-2388.	1.7	11
565	Lithiumâ€“Oxygen Batteries and Related Systems: Potential, Status, and Future. Chemical Reviews, 2020, 120, 6626-6683.	23.0	593
566	3D interwoven MXene networks fabricated by the assistance of bacterial celluloses as high-performance cathode material for rechargeable magnesium battery. Applied Surface Science, 2020, 528, 146985.	3.1	20
567	Nanostructured liquid-crystalline Li-ion conductors with high oxidation resistance: molecular design strategy towards safe and high-voltage-operation Li-ion batteries. Chemical Science, 2020, 11, 10631-10637.	3.7	29
568	Nanostructured T-Nb2O5-based composite with reduced graphene oxide for improved performance lithium-ion battery anode. Journal of Materials Science, 2020, 55, 13062-13074.	1.7	30
569	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
570	Structural and Thermodynamic Understandings in Mnâ€Based Sodium Layered Oxides during Anionic Redox. Advanced Science, 2020, 7, 2001263.	5.6	38
571	Fundamental promise of anthraquinone functionalized graphene based next generation battery electrodes: a DFT study. Journal of Materials Chemistry A, 2020, 8, 14152-14161.	5.2	11
572	â€œWater in salt/ionic liquidâ€•electrolyte for 2.8ÂV aqueous lithium-ion capacitor. Science Bulletin, 2020, 65, 1812-1822.	4.3	56
573	Oxygen-Based Anion Redox for Lithium Batteries. Accounts of Chemical Research, 2020, 53, 1436-1444.	7.6	21
574	Electroactive Covalent Organic Frameworks: Design, Synthesis, and Applications. Advanced Materials, 2020, 32, e2002038.	11.1	148
575	Perspective on Highâ€Energy Carbonâ€Based Supercapacitors. Energy and Environmental Materials, 2020, 3, 286-305.	7.3	124
576	Anionic redox in Na-based layered oxide cathodes: a review with focus on mechanism studies. Materials Today Energy, 2020, 17, 100474.	2.5	32
577	Laserâ€Induced Silicon Oxide for Anodeâ€Free Lithium Metal Batteries. Advanced Materials, 2020, 32, e2002850.	11.1	92
578	Organic-based active electrode materials for potassium batteries: status and perspectives. Journal of Materials Chemistry A, 2020, 8, 17296-17325.	5.2	32
579	Facile electrostatic assembly of Si@MXene superstructures for enhanced lithium-ion storage. Journal of Colloid and Interface Science, 2020, 580, 68-76.	5.0	24

#	Article	IF	Citations
580	Facilitating Interfacial Stability Via Bilayer Heterostructure Solid Electrolyte Toward Highâ€energy, Safe and Adaptable Lithium Batteries. Advanced Energy Materials, 2020, 10, 2000709.	10.2	79
581	Performance Enhancement of Polymer Electrode Materials for Lithium-Ion Batteries: From a Rigid Homopolymer to Soft Copolymers. ACS Applied Materials & Interfaces, 2020, 12, 32666-32672.	4.0	15
582	Efficient and Facile Electrochemical Process for the Production of High-Quality Lithium Hexafluorophosphate Electrolyte. ACS Applied Materials & Interfaces, 2020, 12, 32771-32777.	4.0	5
583	Boosted Charge Transfer in Twinborn Î±-(Mn₂O₃â€“MnO₂) Heterostructures: Toward High-Rate and Ultralong-Life Zinc-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 32526-32535.	4.0	70
584	Three-dimensional graphene-wrapped porous carbon/sulfur composite for cathode of lithiumâ€“sulfur battery. SN Applied Sciences, 2020, 2, 1.	1.5	3
585	Xenes as an Emerging 2D Monoelemental Family: Fundamental Electrochemistry and Energy Applications. Advanced Functional Materials, 2020, 30, 2002885.	7.8	66
586	Lithium Accommodation in a Redoxâ€Active Covalent Triazine Framework for High Areal Capacity and Fastâ€Charging Lithiumâ€Ion Batteries. Advanced Functional Materials, 2020, 30, 2003761.	7.8	86
587	Ultrasensitive Detection of Electrolyte Leakage from Lithium-Ion Batteries by Ionically Conductive Metal-Organic Frameworks. Matter, 2020, 3, 904-919.	5.0	42
588	Hybridizing Li@Mn6 and Sb@Ni6 superstructure units to tune the electrochemical performance of Li-rich layered oxides. Nano Energy, 2020, 77, 105157.	8.2	10
589	Natural Soft/Rigid Superlattices as Anodes for Highâ€Performance Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2020, 59, 17494-17498.	7.2	20
590	Electroactive poly(vinylidene fluoride)-based materials: recent progress, challenges, and opportunities. , 2020, , 1-43.		7
591	Advances in ultrathin borophene materials. Chemical Engineering Journal, 2020, 401, 126109.	6.6	42
592	Dipotassium terephthalate as promising potassium storing anode with DFT calculations. Materials Today Energy, 2020, 17, 100454.	2.5	12
593	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
594	Solvation Rule for Solidâ€Electrolyte Interphase Enabler in Lithiumâ€Metal Batteries. Angewandte Chemie, 2020, 132, 18386-18390.	1.6	10
595	Natural Soft/Rigid Superlattices as Anodes for Highâ€Performance Lithiumâ€Ion Batteries. Angewandte Chemie, 2020, 132, 17647-17651.	1.6	2
596	Solvation Rule for Solidâ€Electrolyte Interphase Enabler in Lithiumâ€Metal Batteries. Angewandte Chemie - International Edition, 2020, 59, 18229-18233.	7.2	45
597	Terahertz electron paramagnetic resonance spectroscopy using continuous-wave frequency-tunable photomixers based on photoconductive antennae. Applied Physics Letters, 2020, 116, .	1.5	7

#	Article	IF	Citations
598	Toward High-Energy Batteries: High-Voltage Stability via Superstructure Control. Joule, 2020, 4, 296-298.	11.7	1
599	Improved Performance of Li-ion Polymer Batteries Through Improved Pulse Charging Algorithm. Applied Sciences (Switzerland), 2020, 10, 895.	1.3	24
600	Design strategies for nonaqueous multivalent-ion and monovalent-ion battery anodes. Nature Reviews Materials, 2020, 5, 276-294.	23.3	284
601	The Development of Vanadyl Phosphate Cathode Materials for Energy Storage Systems: A Review. Chemistry - A European Journal, 2020, 26, 8190-8204.	1.7	21
602	Toward a high-voltage fast-charging pouch cell with TiO2 cathode coating and enhanced battery safety. Nano Energy, 2020, 71, 104643.	8.2	72
603	One-Step Incorporation of Nitrogen and Vanadium between Ti₃C₂T_x MXene Interlayers Enhances Lithium Ion Storage Capability. Journal of Physical Chemistry C, 2020, 124, 6012-6021.	1.5	24
604	Engineering defectâ€enabled 3D porous MoS₂/C architectures for high performance lithiumâ€ion batteries. Journal of the American Ceramic Society, 2020, 103, 4453-4462.	1.9	20
605	Scientific Attention to Sustainability and SDGs: Meta-Analysis of Academic Papers. Energies, 2020, 13, 975.	1.6	19
606	Cationic and anionic redox in lithium-ion based batteries. Chemical Society Reviews, 2020, 49, 1688-1705.	18.7	152
607	Synergistic effect of organic plasticizer and lepidolite filler on polymer electrolytes for all-solid high-voltage Liâ€“metal batteries. Journal of Materials Chemistry A, 2020, 8, 5968-5974.	5.2	41
608	Fundamentals and Challenges of Lithium Ion Batteries at Temperatures between â˜'40 and 60 Â°C. Advanced Energy Materials, 2020, 10, 1904152.	10.2	200
609	A cyclic phosphate-based battery electrolyte for high voltage and safe operation. Nature Energy, 2020, 5, 291-298.	19.8	250
610	Recent advances in anodic interface engineering for solid-state lithium-metal batteries. Materials Horizons, 2020, 7, 1667-1696.	6.4	60
611	Proton-conducting oxides for energy conversion and storage. Applied Physics Reviews, 2020, 7, .	5.5	249
612	Prospects of organic electrode materials for practical lithium batteries. Nature Reviews Chemistry, 2020, 4, 127-142.	13.8	772
613	Insight into the Superior Lithium Storage Properties of Ultrafine CoO Nanoparticles Confined in a 3â€‰D Bimodal Ordered Mesoporous Carbon CMKâ€9 Anode. ChemSusChem, 2020, 13, 2952-2965.	3.6	25
614	Ionomers from Step-Growth Polymerization: Highly Ordered Ionic Aggregates and Ion Conduction. Macromolecules, 2020, 53, 1777-1784.	2.2	9
615	LLZO@EmimFSI@PEO derived hybrid solid electrolyte for high-energy lithium metal batteries. Materials Technology, 2020, 35, 618-624.	1.5	13

#	Article	IF	Citations
616	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
617	Graphene-coffee waste derived carbon composites as electrodes for optimized lithium ion capacitors. Carbon, 2020, 162, 273-282.	5.4	68
618	Rational Design of a Laminated Dual-Polymer/Polymerâ€“Ceramic Composite Electrolyte for High-Voltage All-Solid-State Lithium Batteries. , 2020, 2, 317-324.		59
619	Lithium Salt Diffusion in Diblock Copolymer Electrolyte Using Fourier Transform Infrared Spectroscopy. Journal of Physical Chemistry B, 2020, 124, 2040-2047.	1.2	13
620	Scalable Route to Electroactive and Light Active Perylene Diimide Dye Polymer Binder for Lithium-Ion Batteries. ACS Applied Energy Materials, 2020, 3, 2271-2277.	2.5	21
621	Wrapping Sb₂Te₃ with a Graphite Layer toward High Volumetric Energy and Long Cycle Li-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 16264-16275.	4.0	25
622	Entropy Change Characteristics of the LiNi_{0.5}Mn_{1.5}O₄ Cathode Material for Lithium-Ion Batteries. ACS Omega, 2020, 5, 4109-4114.	1.6	11
623	Intertwined Nanosponge Solid-State Polymer Electrolyte for Rollable and Foldable Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 11657-11668.	4.0	22
624	Cyclic Aminosilaneâ€Based Additive Ensuring Stable Electrodeâ€“Electrolyte Interfaces in Liâ€Ion Batteries. Advanced Energy Materials, 2020, 10, 2000012.	10.2	91
625	Coâ€Crosslinked Waterâ€Soluble Biopolymers as a Binder for Highâ€Voltage LiNi_{0.5}Mn_{1.5}O₄ | Graphite Lithiumâ€Ion Full Cells. ChemSusChem, 2020, 13, 2650-2660.	3.6	26
626	Metal chalcogenides for potassium storage. InformaÄ•nÃ-MateriÃ¡ly, 2020, 2, 437-465.	8.5	154
627	Biodegradable Bacterial Cellulose-Supported Quasi-Solid Electrolyte for Lithium Batteries. ACS Applied Materials & Interfaces, 2020, 12, 13950-13958.	4.0	45
628	Co₃S₄@Li₇P₃S₁₁ Hexagonal Platelets as Cathodes with Superior Interfacial Contact for All-Solid-State Lithium Batteries. ACS Applied Materials & Interfaces, 2020, 12, 14079-14086.	4.0	41
629	Niâ€Rich/Coâ€Poor Layered Cathode for Automotive Liâ€Ion Batteries: Promises and Challenges. Advanced Energy Materials, 2020, 10, 1903864.	10.2	242
630	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
631	The polymerization capability of alkenyl phosphates and application as gel copolymer electrolytes for lithium ion batteries with high flame-retardancy. Reactive and Functional Polymers, 2020, 149, 104535.	2.0	7
632	A small-strain niobium nitride anode with ordered mesopores for ultra-stable potassium-ion batteries. Journal of Materials Chemistry A, 2020, 8, 3119-3127.	5.2	36
633	Effectively suppressing lithium dendrite growth via an es-LiSPCE single-ion conducting nano fiber membrane. Journal of Materials Chemistry A, 2020, 8, 2518-2528.	5.2	33

#	Article	IF	Citations
634	Fast and reversible zinc ion intercalation in Al-ion modified hydrated vanadate. Nano Energy, 2020, 70, 104519.	8.2	188
635	Monitoring Polysulfide Solubility and Diffusion in Fluorinated Etherâ€Based Electrolytes by Operando Raman Spectroscopy. Batteries and Supercaps, 2020, 3, 397-401.	2.4	12
636	Issues and Future Perspective on Zinc Metal Anode for Rechargeable Aqueous Zincâ€ion Batteries. Energy and Environmental Materials, 2020, 3, 146-159.	7.3	475
637	Diffusion and migration in polymer electrolytes. Progress in Polymer Science, 2020, 103, 101220.	11.8	100
638	Pyridinic-Nitrogen-Containing Carbon Cathode: Efficient Electrocatalyst for Seawater Batteries. ACS Applied Energy Materials, 2020, 3, 1602-1608.	2.5	21
639	A review on silicon nanowire-based anodes for next-generation high-performance lithium-ion batteries from a material-based perspective. Sustainable Energy and Fuels, 2020, 4, 1577-1594.	2.5	98
640	Local confinement and alloy/dealloy activation of Snâ€“Cu nanoarrays for high-performance lithium-ion battery. Electrochimica Acta, 2020, 336, 135690.	2.6	12
641	Beyond Lithium-Based Batteries. Materials, 2020, 13, 425.	1.3	47
642	Biomass-derived porous graphitic carbon materials for energy and environmental applications. Journal of Materials Chemistry A, 2020, 8, 5773-5811.	5.2	234
643	High-Performance Lithium-Rich Layered Oxide Material: Effects of Preparation Methods on Microstructure and Electrochemical Properties. Materials, 2020, 13, 334.	1.3	20
644	Thermal safety study of Liâ€ion batteries under limited overcharge abuse based on coupled electrochemicalâ€thermal model. International Journal of Energy Research, 2020, 44, 3607-3625.	2.2	37
645	Sustainable Recycling Technology for Li-Ion Batteries and Beyond: Challenges and Future Prospects. Chemical Reviews, 2020, 120, 7020-7063.	23.0	957
646	Green route synthesis of Li+ ion nanoparticles for application in large discharge capacity of batteries. Inorganic and Nano-Metal Chemistry, 2020, 50, 205-209.	0.9	2
647	Preparation and electrochemical performance of P5+-doped Li4Ti5O12 as anode material for lithium-ion batteries. Nanotechnology, 2020, 31, 205402.	1.3	7
648	Self-assembly of ZnO nanoparticles attached to 3D pleated Zn3(PO4)2/C from cola for enhanced lithium storage. Applied Surface Science, 2020, 508, 145288.	3.1	12
649	Facile synthesis of ceramic SiC-based nanocomposites and the superior electrochemical lithiation/delithiation performances. Materials Chemistry and Physics, 2020, 243, 122618.	2.0	7
650	Advantageous Functional Integration of Adsorptionâ€Intercalationâ€Conversion Hybrid Mechanisms in 3D Flexible Nb₂O₅@Hard Carbon@MoS₂@Soft Carbon Fiber Paper Anodes for Ultrafast and Superâ€Stable Sodium Storage. Advanced Functional Materials, 2020, 30, 1908665.	7.8	67
651	C₆₀(OH)₁₂ and Its Nanocomposite for High-Performance Lithium Storage. ACS Nano, 2020, 14, 1600-1608.	7.3	11

#	Article	IF	Citations
652	A Novel Mechanically Robust Leafâ€Shaped Tin Dioxide Liâ€Ion Battery Anode and Its Dynamic Structural Transformation and Electronâ€Transfer Simulation. Energy Technology, 2020, 8, 1901149.	1.8	1
653	Dramatic improvement in the performance of graphene as Li/Na battery anodes with suitable electrolytic solvents. Carbon, 2020, 161, 570-576.	5.4	12
654	Flexible nonwoven ZrO2 ceramic membrane as an electrochemically stable and flame-resistant separator for high-power rechargeable batteries. Chemical Engineering Journal, 2020, 388, 124259.	6.6	45
655	A fluorinated polycarbonate based all solid state polymer electrolyte for lithium metal batteries. Electrochimica Acta, 2020, 337, 135843.	2.6	43
656	Exploring the origin of electrochemical performance of Cr-doped LiNi0.5Mn1.5O4. Physical Chemistry Chemical Physics, 2020, 22, 3831-3838.	1.3	13
657	In-situ formation of atomic-level Mn-Sn interfacial compounds for enhanced Li-ion integrated anode. Applied Surface Science, 2020, 508, 145243.	3.1	3
658	Electrochemical reaction mechanism of amorphous iron selenite with ultrahigh rate and excellent cyclic stability performance as new anode material for lithium-ion batteries. Chemical Engineering Journal, 2020, 389, 124350.	6.6	42
659	Freestanding SnS Carbon Composite Nanofiber Material with Excellent Electrochemical Performance as Binderâ€Free Negative Electrode for Lithiumâ€ion Batteries. ChemistrySelect, 2020, 5, 1792-1796.	0.7	7
660	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
661	Electrochemically Stable, High Transference Number Lithium Bis(malonato)borate Polymer Solution Electrolytes. Chemistry of Materials, 2020, 32, 3794-3804.	3.2	22
662	Metalâ€Ion Coupled Electron Transfer Kinetics in Intercalationâ€Based Transition Metal Oxides. Advanced Energy Materials, 2020, 10, 1903933.	10.2	59
663	Y-doped Li4Ti5-xYxO12 with Y2Ti2O7 surface modification anode materials: Superior rate capability and ultra long cyclability for half/full lithium-ion batteries. Journal of Alloys and Compounds, 2020, 835, 155327.	2.8	8
664	Dynamic bonded supramolecular binder enables high-performance silicon anodes in lithium-ion batteries. Journal of Power Sources, 2020, 463, 228208.	4.0	57
665	Lithium Storage in Nanoporous Complex Oxide 12CaOâ€¢7Al2O3 (C12A7). Energies, 2020, 13, 1547.	1.6	4
666	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
667	Niobium-based oxide anodes toward fast and safe energy storage: a review. Materials Today Nano, 2020, 11, 100082.	2.3	36
668	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
669	Engineering of three-dimensional nanohybrids: Co9S8 nanocrystal coated hollow carbon nanosphere for advanced lithium storage. Applied Surface Science, 2020, 514, 146092.	3.1	27

#	Article	IF	Citations
670	Porous FeP/C composite nanofibers as high-performance anodes for Li-ion/Na-ion batteries. Materials Today Energy, 2020, 16, 100410.	2.5	23
671	An Extremely Fast Charging Li₃V₂(PO₄)₃ Cathode at a 4.8 V Cutoff Voltage for Li-Ion Batteries. ACS Energy Letters, 2020, 5, 1763-1770.	8.8	69
672	Molybdenum-Tellurite Oxide Glass: Synthesis and Applications for Lithium-Ion Batteries and Zn-Air Batteries. Journal of Electronic Materials, 2020, 49, 3819-3829.	1.0	4
673	Review of Emerging Potassiumâ€“Sulfur Batteries. Advanced Materials, 2020, 32, e1908007.	11.1	91
674	Analyzing Energy Materials by Cryogenic Electron Microscopy. Advanced Materials, 2020, 32, e1908293.	11.1	61
675	Enhancing Oxygen Reduction Activity of Ptâ€based Electrocatalysts: From Theoretical Mechanisms to Practical Methods. Angewandte Chemie, 2020, 132, 18490-18504.	1.6	24
676	Enhancing Oxygen Reduction Activity of Ptâ€based Electrocatalysts: From Theoretical Mechanisms to Practical Methods. Angewandte Chemie - International Edition, 2020, 59, 18334-18348.	7.2	174
677	Lithium Metal Interface Modification for Highâ€Energy Batteries: Approaches and Characterization. Batteries and Supercaps, 2020, 3, 828-859.	2.4	38
678	Toward Green Battery Cells: Perspective on Materials and Technologies. Small Methods, 2020, 4, 2000039.	4.6	177
679	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
680	Bringing forward the development of battery cells for automotive applications: Perspective of R&D activities in China, Japan, the EU and the USA. Journal of Power Sources, 2020, 459, 228073.	4.0	109
681	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
682	Controlled Prelithiation of SnO₂/C Nanocomposite Anodes for Building Full Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 19423-19430.	4.0	55
683	Improving the Thermal Stability of NMC 622 Li-Ion Battery Cathodes through Doping During Coprecipitation. ACS Applied Materials & Interfaces, 2020, 12, 18512-18518.	4.0	42
684	Improving the Structure and Cycling Stability of Ni-Rich Layered Cathodes by Dual Modification of Yttrium Doping and Surface Coating. ACS Applied Materials & Interfaces, 2020, 12, 19483-19494.	4.0	91
685	MXene Frameworks Promote the Growth and Stability of LiF-Rich Solidâ€“Electrolyte Interphases on Silicon Nanoparticle Bundles. ACS Applied Materials & Interfaces, 2020, 12, 18541-18550.	4.0	44
686	Enhancing High-Temperature and High-Voltage Performances of Single-Crystal LiNi_{0.5}Co_{0.2}Mn_{0.3}O₂ Cathodes through a LiBO₂/LiAlO₂ Dual-Modification Strategy. ACS Sustainable Chemistry and Engineering, 2020, 8, 6293-6304.	3.2	59
687	Lithium intercalation edge effects and doping implications for graphite anodes. Journal of Materials Chemistry A, 2020, 8, 7947-7955.	5.2	25

#	Article	IF	Citations
688	Unconventional capacity increase kinetics of a chemically engineered SnO₂ aerogel anode for long-term stable lithium-ion batteries. Journal of Materials Chemistry A, 2020, 8, 8244-8254.	5.2	39
689	The Influence of Micro-Structured Anode Current Collectors in Combination with Highly Concentrated Electrolyte on the Coulombic Efficiency of In-Situ Deposited Li-Metal Electrodes with Different Counter Electrodes. Batteries, 2020, 6, 20.	2.1	6
690	High-Rate Layered Cathode of Lithium-Ion Batteries through Regulating Three-Dimensional Agglomerated Structure. Energies, 2020, 13, 1602.	1.6	14
691	Soft X-ray Absorption Spectroscopic Investigation of Li(Ni0.8Co0.1Mn0.1)O2 Cathode Materials. Nanomaterials, 2020, 10, 759.	1.9	9
692	PY₁₃FSI-Infiltrated SBA-15 as Nonflammable and High Ion-Conductive Ionogel Electrolytes for Quasi-Solid-State Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 22981-22991.	4.0	34
693	Surface double coating of a LiNiaCobAl1â^'aâ^'bO2 (a > 0.85) cathode with TiOx and Li2CO3 to apply a water-based hybrid polymer binder to Li-ion batteries. RSC Advances, 2020, 10, 13642-13654.	1.7	9
694	Thermodynamic analysis and kinetic optimization of high-energy batteries based on multi-electron reactions. National Science Review, 2020, 7, 1367-1386.	4.6	31
695	Adjusting the interface structure of graphdiyne by H and F co-doping for enhanced capacity and stability in Li-ion battery. Energy Storage Materials, 2020, 29, 131-139.	9.5	61
696	Ultrahigh capacity 2D anode materials for lithium/sodium-ion batteries: an entirely planar B₇P₂ monolayer with suitable pore size and distribution. Journal of Materials Chemistry A, 2020, 8, 10301-10309.	5.2	44
697	Understanding the Role of Solvents on the Morphological Structure and Li-Ion Conductivity of Poly(vinylidene fluoride)-Based Polymer Electrolytes. Journal of the Electrochemical Society, 2020, 167, 070552.	1.3	39
698	A heatproof electrospun PES/PVDF composite membrane as an advanced separator for lithiumâ€ion batteries. Journal of Applied Polymer Science, 2020, 137, 49328.	1.3	11
699	Approaching energy-dense and cost-effective lithiumâ€“sulfur batteries: From materials chemistry and price considerations. Energy, 2020, 201, 117718.	4.5	43
700	Inclusion complexation enhanced cycling performance of iodine/carbon composites for lithiumâ€“iodine battery. Journal of Power Sources, 2020, 463, 228212.	4.0	31
701	In situ fabrication of ultrathin few-layered WSe2 anchored on N, P dual-doped carbon by bioreactor for half/full sodium/potassium-ion batteries with ultralong cycling lifespan. Journal of Colloid and Interface Science, 2020, 574, 217-228.	5.0	67
702	Facile fabrication of graphitization-enhanced wrinkled paper-like N-doped porous carbon via a ZnCl₂-modified NaCl-template method for use as an anode in lithium ion batteries. Sustainable Energy and Fuels, 2020, 4, 3477-3486.	2.5	8
703	Fundamentals of Electrolytes for Solid-State Batteries: Challenges and Perspectives. Frontiers in Materials, 2020, 7, .	1.2	72
704	Higher Than 90% Initial Coulombic Efficiency with Staghornâ€Coralâ€Like 3D Porous LiFeO₂_x as Anode Materials for Liâ€Ion Batteries. Advanced Materials, 2020, 32, e1908285.	11.1	34
705	Ultrafast and Stable Liâ€(De)intercalation in a Large Single Crystal Hâ€Nb₂O₅ Anode via Optimizing the Homogeneity of Electron and Ion Transport. Advanced Materials, 2020, 32, e2001001.	11.1	78

#	Article	IF	Citations
706	Understanding Highâ€Rate K⁺â€Solvent Coâ€Intercalation in Natural Graphite for Potassiumâ€Ion Batteries. Angewandte Chemie, 2020, 132, 13017-13024.	1.6	28
707	Understanding Highâ€Rate K⁺â€Solvent Coâ€Intercalation in Natural Graphite for Potassiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2020, 59, 12917-12924.	7.2	112
708	Boosted electrochemical performance of LiNi0.5Mn1.5O4 via synergistic modification of Li+-Conductive Li2ZrO3 coating layer and superficial Zr-doping. Electrochimica Acta, 2020, 343, 136105.	2.6	36
709	Lithium fluoride additive for inorganic LiAlCl4Â·3SO2 electrolyte toward stable lithium metal anode. Electrochimica Acta, 2020, 345, 136193.	2.6	6
710	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
711	Prediction of overcharge-induced serious capacity fading in nickel cobalt aluminum oxide lithium-ion batteries using electrochemical impedance spectroscopy. Journal of Power Sources, 2020, 461, 228168.	4.0	48
712	Coreâ€“Shell Structured Nanofibers for Lithium Ion Battery Separator with Wide Shutdown Temperature Window and Stable Electrochemical Performance. ACS Applied Polymer Materials, 2020, 2, 1989-1996.	2.0	31
713	The Current State of Aqueous Zn-Based Rechargeable Batteries. ACS Energy Letters, 2020, 5, 1665-1675.	8.8	271
714	Conversion of a microwave synthesized alkali-metal MOF to a carbonaceous anode for Li-ion batteries. RSC Advances, 2020, 10, 13732-13736.	1.7	10
715	Polymer reinforced carbon fiber interfaces for high energy density structural lithium-ion batteries. Sustainable Energy and Fuels, 2020, 4, 2661-2668.	2.5	49
716	Boosting chem-insertion and phys-adsorption in S/N co-doped porous carbon nanospheres for high-performance symmetric Li-ion capacitors. Journal of Materials Chemistry A, 2020, 8, 11529-11537.	5.2	30
717	Restricted lithiation into a layered V₂O₅ cathode towards building â€œrocking-chairâ€•type Li-ion batteries and beyond. Journal of Materials Chemistry A, 2020, 8, 9483-9495.	5.2	25
718	Synthesis and integration of thin film solid state electrolytes for 3D Li-ion microbatteries. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	0.9	9
719	A Four-Layers Hamburger-Structure PVDF-HFP/Al₂O₃/PE/PVDF-HFP Composite Separator for Pouch Lithium-Ion Batteries with Enhanced Safety and Reliability. Journal of the Electrochemical Society, 2020, 167, 090507.	1.3	10
720	Scalable Synthesis of Microsized, Nanocrystalline Zn_{0.9}Fe_{0.1}Oâ€C Secondary Particles and Their Use in Zn_{0.9}Fe_{0.1}Oâ€C/LiNi_{0.5}Mn_{1.5}O₄ Lithiumâ€Ion Full Cells. ChemSusChem, 2020, 13, 3504-3513.	3.6	14
721	High-performance Li-organic battery based on thiophene-containing porous organic polymers with different morphology and surface area as the anode materials. Chemical Engineering Journal, 2020, 395, 124975.	6.6	32
722	Perovskite-type CaMnO3 anode material for highly efficient and stable lithium ion storage. Journal of Colloid and Interface Science, 2021, 584, 698-705.	5.0	21
723	Multiscale Understanding and Architecture Design of High Energy/Power Lithiumâ€Ion Battery Electrodes. Advanced Energy Materials, 2021, 11, 2000808.	10.2	143

#	Article	IF	Citations
724	Stabilization Perspective on Metal Anodes for Aqueous Batteries. Advanced Energy Materials, 2021, 11, 2000962.	10.2	106
725	Strategies for Rational Design of Highâ€Power Lithiumâ€ion Batteries. Energy and Environmental Materials, 2021, 4, 19-45.	7.3	53
726	Niobium oxyphosphate nanosheet assembled two-dimensional anode material for enhanced lithium storage. Journal of Energy Chemistry, 2021, 53, 268-275.	7.1	14
727	Structural, electrical and electrochemical studies of sodium ion conducting blend polymer electrolytes. Materials Today: Proceedings, 2021, 34, 780-786.	0.9	3
728	Lithium iron phosphate batteries recycling: An assessment of current status. Critical Reviews in Environmental Science and Technology, 2021, 51, 2232-2259.	6.6	52
729	Interphases, Interfaces, and Surfaces of Active Materials in Rechargeable Batteries and Perovskite Solar Cells. Advanced Materials, 2021, 33, e1905245.	11.1	30
730	Electrochemical and structural evolution of structured V2O5 microspheres during Li-ion intercalation. Journal of Energy Chemistry, 2021, 55, 108-113.	7.1	19
731	Host Materials Anchoring Polysulfides in Liâ€“S Batteries Reviewed. Advanced Energy Materials, 2021, 11, 2001304.	10.2	254
732	Mo₃Nb₁₄O₄₄: A New Li⁺ Container for Highâ€Performance Electrochemical Energy Storage. Energy and Environmental Materials, 2021, 4, 65-71.	7.3	37
733	Rational design of robust nano-Si/graphite nanocomposites anodes with strong interfacial adhesion for high-performance lithium-ion batteries. Chinese Chemical Letters, 2021, 32, 910-913.	4.8	16
734	Bio-mimicking organic-inorganic hybrid ladder-like polysilsesquioxanes as a surface modifier for polyethylene separator in lithium-ion batteries. Journal of Membrane Science, 2021, 620, 118886.	4.1	19
735	A novel approach for synthesis of expanded graphite and its enhanced lithium storage properties. Journal of Energy Chemistry, 2021, 59, 292-298.	7.1	17
736	Tailoring carboxyl tubular carbon nanofibers/MnO₂ composites for highâ€performance lithiumâ€ion battery anodes. Journal of the American Ceramic Society, 2021, 104, 1402-1414.	1.9	6
737	â€œDouble guarantee mechanismâ€•of Ca²⁺-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
738	Armed lithium metal anodes with functional skeletons. Materials Today Nano, 2021, 13, 100103.	2.3	38
739	Solidâ€State Liâ€“Metal Batteries: Challenges and Horizons of Oxide and Sulfide Solid Electrolytes and Their Interfaces. Advanced Energy Materials, 2021, 11, .	10.2	312
740	Al4B2O9 nanorods-modified solid polymer electrolytes with decent integrated performance. Science China Materials, 2021, 64, 296-306.	3.5	8
741	Interface Issues and Challenges in Allâ€Solidâ€State Batteries: Lithium, Sodium, and Beyond. Advanced Materials, 2021, 33, e2000721.	11.1	248

#	Article	IF	Citations
742	Fabrication and applications of 2D black phosphorus in catalyst, sensing and electrochemical energy storage. Journal of Alloys and Compounds, 2021, 850, 156580.	2.8	35
743	Architecting robust interphase on high voltage cathodes via aromatic polyamide. Chemical Engineering Journal, 2021, 403, 126366.	6.6	15
744	Highly stable aqueous rechargeable Zn-ion battery: The synergistic effect between NaV6O15 and V2O5 in skin-core heterostructured nanowires cathode. Journal of Energy Chemistry, 2021, 55, 25-33.	7.1	44
745	Promoting K ion storage property of SnS2 anode by structure engineering. Chemical Engineering Journal, 2021, 406, 126902.	6.6	52
746	Fe2O3â€“TeO2â€“MoO3 semiconductor glass-ceramics as anode materials for high specific capacity lithium ion batteries. Materials Chemistry and Physics, 2021, 258, 123894.	2.0	17
747	Mesoporous VO2(B) nanorods deposited onto graphene architectures for enhanced rate capability and cycle life of Li ion battery cathodes. Journal of Alloys and Compounds, 2021, 855, 157361.	2.8	24
748	Tailoring percolative conduction networks and reaction interfaces via infusion of polymeric ionic conductor for high-performance solid-state batteries. Chemical Engineering Journal, 2021, 408, 127274.	6.6	5
749	Improved Na storage and Coulombic efficiency in TiP2O7@C microflowers for sodium ion batteries. Nano Research, 2021, 14, 139-147.	5.8	18
750	Regulating Interfacial Chemistry in Lithiumâ€ion Batteries by a Weakly Solvating Electrolyte**. Angewandte Chemie, 2021, 133, 4136-4143.	1.6	74
751	3D copper-confined N-Doped graphene/carbon nanotubes network as high-performing lithium-ion battery anode. Journal of Alloys and Compounds, 2021, 850, 156701.	2.8	19
752	A Review of Modification Methods of Solid Electrolytes for Allâ€Solidâ€State Sodiumâ€ion Batteries. Energy Technology, 2021, 9, 2000682.	1.8	19
753	MXene-based porous and robust 2D/2D hybrid architectures with dispersed Li3Ti2(PO4)3 as superior anodes for lithium-ion battery. Chemical Engineering Journal, 2021, 405, 127049.	6.6	31
754	Crucial role of water content on the electrochemical performance of Î±-Ni(OH)2 as an anode material for lithium-ion batteries. Ionics, 2021, 27, 65-74.	1.2	17
755	Reducing the thickness of solid-state electrolyte membranes for high-energy lithium batteries. Energy and Environmental Science, 2021, 14, 12-36.	15.6	236
756	<scp> Machine learning approach in exploring the electrolyte additives effect on cycling performance of LiNi ₀ </scp> _. <scp> ₅ Mn ₁ </scp> _. <scp> ₅ O ₄ cathode and graphite anodeâ€based lithiumâ€ion cell </scp>. International Journal of Energy Research, 2021, 45, 4133-4144.	2.2	7
757	The environmental footprint of electric vehicle battery packs during the production and use phases with different functional units. International Journal of Life Cycle Assessment, 2021, 26, 97-113.	2.2	17
758	Research Progress of Highâ€Performance Organic Material Pyreneâ€4,5,9,10â€Tetraone in Secondary Batteries. ChemElectroChem, 2021, 8, 352-359.	1.7	25
759	Realizing efficient sodium storage property with NASICON-type Na2VTi(PO4)3 modified by nitrogen and sulfur dual-doped carbon layer for sodium ion batteries. Journal of Alloys and Compounds, 2021, 856, 157992.	2.8	12

#	Article	IF	Citations
760	Vanadate-based electrodes for rechargeable batteries. Materials Chemistry Frontiers, 2021, 5, 1585-1609.	3.2	12
761	A comprehensive understanding of the anionic redox chemistry in layered oxide cathodes for sodium-ion batteries. Science China Chemistry, 2021, 64, 385-402.	4.2	40
762	Foldable potassium-ion batteries enabled by free-standing and flexible SnS₂@C nanofibers. Energy and Environmental Science, 2021, 14, 424-436.	15.6	142
763	Mnâ€Substituted 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
764	Intelligent optimization of bioleaching process for waste lithiumâ€ion batteries: An application of support vector regression approach. International Journal of Energy Research, 2021, 45, 6152-6162.	2.2	9
765	MXenes for Rechargeable Batteries Beyond the Lithiumâ€Ion. Advanced Materials, 2021, 33, e2004039.	11.1	224
766	Impact of Local Separation on the Structural and Electrochemical Behaviors in Li₂MoO₃ï¿LiCrO₂ Disordered Rockâ€Salt Cathode Material. Advanced Energy Materials, 2021, 11, 2002958.	10.2	16
767	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
768	Viability of Low Molecular Weight Lignin in Developing Thiolâ€Ene Polymer Electrolytes with Balanced Thermomechanical and Conductive Properties. Macromolecular Rapid Communications, 2021, 42, 2000477.	2.0	5
769	A redox-active conjugated microporous polymer cathode for high-performance lithium/potassium-organic batteries. Science China Chemistry, 2021, 64, 72-81.	4.2	33
770	Textile Composite Electrodes for Flexible Batteries and Supercapacitors: Opportunities and Challenges. Advanced Energy Materials, 2021, 11, 2002838.	10.2	78
771	Zinc Metal Energy Storage Devices under Extreme Conditions of Low Temperatures. Batteries and Supercaps, 2021, 4, 389-406.	2.4	23
772	A review of current collectors for lithium-ion batteries. Journal of Power Sources, 2021, 485, 229321.	4.0	188
773	Oxygen-defect-rich coating with nanoporous texture as both anode host and artificial SEI for dendrite-mitigated lithiumâ€“metal batteries. Journal of Materials Chemistry A, 2021, 9, 5606-5618.	5.2	40
774	Two-dimensional hierarchical Mn₂O₃@graphene as a high rate and ultrastable cathode for aqueous zinc-ion batteries. Journal of Materials Chemistry C, 2021, 9, 1326-1332.	2.7	23
775	Insights into the Nanostructure, Solvation, and Dynamics of Liquid Electrolytes through Smallâ€Angle Xâ€Ray Scattering. Advanced Energy Materials, 2021, 11, 2002821.	10.2	37
776	High-performance metalâ€“iodine batteries enabled by a bifunctional dendrite-free Liâ€“Na alloy anode. Journal of Materials Chemistry A, 2021, 9, 538-545.	5.2	18
777	Identifying the Critical Anionâ€“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
778	Macromolecular Design of Lithium Conductive Polymer as Electrolyte for Solidâ€State Lithium Batteries. Small, 2021, 17, e2005762.	5.2	85
779	Zero-to-one (or more) nanoarchitectonics: how to produce functional materials from zero-dimensional single-element unit, fullerene. Materials Advances, 2021, 2, 582-597.	2.6	30
780	Phosphonium Bromides Regulating Solid Electrolyte Interphase Components and Optimizing Solvation Sheath Structure for Suppressing Lithium Dendrite Growth. Advanced Functional Materials, 2021, 31, 2009013.	7.8	75
781	Solid Polymer Electrolytes from Copolymers Based on Vinyl Dimethyl Phosphonate and Vinylidene Fluoride. Macromolecular Chemistry and Physics, 2021, 222, .	1.1	6
782	Identifying the Critical Anionâ€“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
783	Recent Advances on Carbonâ€Based Materials for High Performance Lithiumâ€Ion Capacitors. Batteries and Supercaps, 2021, 4, 407-428.	2.4	31
784	Engineering capacitive contribution in dual carbon-confined Fe3O4 nanoparticle enabling superior Li+ storage capability. Journal of Materials Science, 2021, 56, 5100-5112.	1.7	3
785	A highly efficient andÂinformative method to identify ion transport networks in fast ion conductors. Acta Materialia, 2021, 203, 116490.	3.8	32
786	High-performance all-organic aqueous batteries based on a poly(imide) anode and poly(catechol) cathode. Journal of Materials Chemistry A, 2021, 9, 505-514.	5.2	35
787	Advanced gel polymer electrolytes for safe and durable lithium metal batteries: Challenges, strategies, and perspectives. Energy Storage Materials, 2021, 34, 515-535.	9.5	165
788	Coral-like CoMoO4 hierarchical structure uniformly encapsulated by graphene-like N-doped carbon network as an anode for high-performance lithium-ion batteries. Journal of Colloid and Interface Science, 2021, 586, 11-19.	5.0	27
789	Organic Cathode Materials for Lithiumâ€Ion Batteries: Past, Present, and Future. Advanced Energy and Sustainability Research, 2021, 2, 2000044.	2.8	61
790	Inhibiting Solvent Coâ€Intercalation in a Graphite Anode by a Localized Highâ€Concentration Electrolyte in Fastâ€Charging Batteries. Angewandte Chemie, 2021, 133, 3444-3448.	1.6	44
791	Thin buffer layer assist carbon-modifying separator for long-life lithium metal anodes. Journal of Energy Chemistry, 2021, 57, 61-68.	7.1	8
792	Sodium ion storage performance and mechanism in orthorhombic V2O5 single-crystalline nanowires. Science China Materials, 2021, 64, 557-570.	3.5	36
793	Boosting potassium-ion storage in large-diameter carbon nanotubes/MoP hybrid. Journal of Colloid and Interface Science, 2021, 584, 875-884.	5.0	18
794	Inhibiting Solvent Coâ€Intercalation in a Graphite Anode by a Localized Highâ€Concentration Electrolyte in Fastâ€Charging Batteries. Angewandte Chemie - International Edition, 2021, 60, 3402-3406.	7.2	238
795	Hybridized cobalt/manganese vanadates as high-performance anodes in lithium ion battery. Materials Letters, 2021, 283, 128782.	1.3	8

#	Article	IF	Citations
796	Stable Lithium Storage at Subzero Temperatures for Highâ€capacity Co₃O₄@graphene Composite Anodes. ChemNanoMat, 2021, 7, 61-70.	1.5	19
797	Strategies towards the challenges of zinc metal anode in rechargeable aqueous zinc ion batteries. Energy Storage Materials, 2021, 35, 19-46.	9.5	212
798	Copper-substituted NaxMO2 (MÂ=ÂFe, Mn) cathodes for sodium ion batteries: Enhanced cycling stability through suppression of Mn(III) formation. Chemical Engineering Journal, 2021, 406, 126830.	6.6	39
799	Hierarchically porous Cu current collector with lithiophilic Cu O interphase towards high-performance lithium metal batteries. Journal of Energy Chemistry, 2021, 58, 292-299.	7.1	41
800	Effect of ball-milling solvent on the structure and lithium storage performance of Fe₂SiO₄/C nanocomposite. Materials Research Innovations, 2021, 25, 342-347.	1.0	2
801	Nickel Metaphosphate as a Conversion Positive Electrode for Lithiumâ€ion Batteries. Batteries and Supercaps, 2021, 4, 195-204.	2.4	6
802	A selenium-doped carbon anode of high performance for lithium ion batteries. Journal of Solid State Electrochemistry, 2021, 25, 457-464.	1.2	10
803	Regulating Interfacial Chemistry in Lithiumâ€ion Batteries by a Weakly Solvating Electrolyte**. Angewandte Chemie - International Edition, 2021, 60, 4090-4097.	7.2	373
804	LiFePO4/C nanoparticle with fast ion/electron transfer capability obtained by adjusting pH values. Journal of Materials Science, 2021, 56, 640-648.	1.7	10
805	Towards efficient binders for silicon based lithium-ion battery anodes. Chemical Engineering Journal, 2021, 406, 126807.	6.6	99
806	Recent Progress on Layered Cathode Materials for Nonaqueous Rechargeable Magnesium Batteries. Small, 2021, 17, e1902767.	5.2	55
807	A phthalocyanine-grafted MAâ€“VA framework polymer as a high performance anode material for lithium/sodium-ion batteries. Dalton Transactions, 2021, 50, 9858-9870.	1.6	9
808	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
809	Additive Manufacturing of 3D Microlattice Lithium-Ion Battery Electrodes: A Review. Minerals, Metals and Materials Series, 2021, , 111-120.	0.3	1
810	Thermodynamics of the double sulfates Na2M2+(SO4)2Â·nH2O (M = Mg, Mn, Co, Ni, Cu, Zn, n = 2 or 4) of the blÃ¶diteâ€“krÃ¶hnkite family. RSC Advances, 2021, 11, 374-379.	1.7	3
811	Self-supporting V₂O₅ nanofiber-based electrodes for magnesiumâ€“lithium-ion hybrid batteries. RSC Advances, 2021, 11, 1354-1359.	1.7	5
812	ZnOâ€Based Conversion/Alloying Negative Electrodes for Lithiumâ€ion Batteries: Impact of Mixing Intimacy. Energy Technology, 2021, 9, 2001084.	1.8	7
813	Effects of Annealing on Electrochemical Properties of Solvothermally Synthesized Cu2SnS3 Anode Nanomaterials. Nanoscale Research Letters, 2021, 16, 17.	3.1	0

#	Article	IF	Citations
814	Relaxation Analysis of Li_xNi_{0.8}Co_{0.1}Mn_{0.1}O₂ after Lithium Extraction to High-Voltage Region (x â‰ 0.12). Journal of the Electrochemical Society, 2021, 168, 010518.	1.3	4
815	Electrolytes: From a Thorn Comes a Rose, and from a Rose, a Thorn. Israel Journal of Chemistry, 2021, 61, 85-93.	1.0	4
816	The role of metal substitutions in the development of Li batteries, part I: cathodes. Materials Advances, 2021, 2, 3474-3518.	2.6	22
817	Ultralong cycling and wide temperature range of lithium metal batteries enabled by solid polymer electrolytes interpenetrated with a poly(liquid crystal) network. Journal of Materials Chemistry A, 2021, 9, 6232-6241.	5.2	33
818	Tin nanoparticle/3D framework carbon composite derived from sodium citrate as the stable anode of lithium-ion batteries. Ionics, 2021, 27, 1003-1011.	1.2	6
819	A fibrous thiazolothiazole-bridged viologen polymer for high-performance lithium-ion batteries. Journal of Materials Chemistry A, 2021, 9, 18506-18514.	5.2	26
820	Triggering the phase transition and capacity enhancement of Nb₂O₅ for fast-charging lithium-ion storage. Journal of Materials Chemistry A, 2021, 9, 14534-14544.	5.2	14
821	Recent advances in the synthesis of mesoporous materials and their application to lithium-ion batteries and hybrid supercapacitors. Korean Journal of Chemical Engineering, 2021, 38, 227-247.	1.2	37
822	Construction of the POMOF@Polypyrrole Composite with Enhanced Ion Diffusion and Capacitive Contribution for High-Performance Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 6265-6275.	4.0	52
823	Two-dimensional ZrC₂ as a novel anode material with high capacity for sodium ion battery. Physical Chemistry Chemical Physics, 2021, 23, 12731-12738.	1.3	8
824	Electrospun Fibrous Vanadium Pentoxide Cathodes for Lithium-Ion Batteries. Materials Horizons, 2021, , 499-537.	0.3	0
825	A controllable thermal-sensitivity separator with an organicâ€“inorganic hybrid interlayer for high-safety lithium-ion batteries. Materials Chemistry Frontiers, 2021, 5, 2313-2319.	3.2	10
826	Electrochemical Activity of Nitrogenâ€Containing Groups in Organic Electrode Materials and Related Improvement Strategies. Advanced Energy Materials, 2021, 11, 2002523.	10.2	59
827	Reducing Cell to Cell Variation of Lithium-Ion Battery Packs During Operation. IEEE Access, 2021, 9, 24994-25001.	2.6	15
828	sp²carbon-conjugated covalent organic frameworks: synthesis, properties, and applications. Materials Chemistry Frontiers, 2021, 5, 2931-2949.	3.2	58
829	Suppressing multiphase transitions of an O3-NaNi_{0.5}Mn_{0.5}O₂ cathode by iron and magnesium co-doping towards sodium-ion batteries. Materials Chemistry Frontiers, 2021, 5, 5344-5350.	3.2	15
830	Tiâ€Based Surface Integrated Layer and Bulk Doping for Stable Voltage and Long Life of Liâ€Rich Layered Cathodes. Advanced Functional Materials, 2021, 31, 2009310.	7.8	59
831	A Lowâ€Cost and Scalable Carbon Coated SiOâ€Based Anode Material for Lithiumâ€Ion Batteries. ChemistryOpen, 2021, 10, 380-386.	0.9	13

#	Article	IF	Citations
832	Formation mechanism of the solid electrolyte interphase in different ester electrolytes. Journal of Materials Chemistry A, 2021, 9, 19664-19668.	5.2	59
833	A General Strategy for Antimonyâ€Based Alloy Nanocomposite Embedded in Swissâ€Cheeseâ€Like Nitrogenâ€Doped Porous Carbon for Energy Storage. Advanced Functional Materials, 2021, 31, 2009433.	7.8	62
834	Molecular redox species for next-generation batteries. Chemical Society Reviews, 2021, 50, 5863-5883.	18.7	53
835	Enabling stable and high-rate cycling of a Ni-rich layered oxide cathode for lithium-ion batteries by modification with an artificial Li⁺-conducting cathode-electrolyte interphase. Journal of Materials Chemistry A, 2021, 9, 11623-11631.	5.2	33
836	Enhanced performance of Mo₂P monolayer as lithium-ion battery anode materials by carbon and nitrogen doping: a first principles study. Physical Chemistry Chemical Physics, 2021, 23, 4030-4038.	1.3	26
837	Recent advances of noble-metal-free bifunctional oxygen reduction and evolution electrocatalysts. Chemical Society Reviews, 2021, 50, 7745-7778.	18.7	385
838	matExplorer: Visual Exploration on Predicting Ionic Conductivity for Solid-state Electrolytes. IEEE Transactions on Visualization and Computer Graphics, 2022, 28, 65-75.	2.9	5
839	Exploring the redox decomposition of ethylene carbonateâ€“propylene carbonate in Li-ion batteries. Materials Advances, 2021, 2, 1747-1751.	2.6	18
840	Electrospun Nanofibrous Polyvinylidene Fluoride-co-Hexafluoropropylene-Based Polymer Gel Electrolytes for Lithium-Ion Batteries. Materials Horizons, 2021, , 95-119.	0.3	0
841	Applications of Metal-organic Frameworks (MOFs) Materials in Lithium-ion Battery/Lithium-metal Battery Electrolytes. Acta Chimica Sinica, 2021, 79, 139.	0.5	10
842	Graphite-like structure of disordered polynaphthalene hard carbon anode derived from the carbonization of perylene-3,4,9,10-tetracarboxylic dianhydride for fast-charging lithium-ion batteries. New Journal of Chemistry, 2021, 45, 16658-16669.	1.4	8
843	Morphology regulation of Ga particles from ionic liquids and their lithium storage properties. New Journal of Chemistry, 2021, 45, 4408-4413.	1.4	6
844	Ti₃C₂T_x with a hydroxyl-rich surface for metal sulfides as high performance electrode materials for sodium/lithium storage. Journal of Materials Chemistry A, 2021, 9, 14013-14024.	5.2	32
845	Electrochemical lithium recovery with lithium iron phosphate: what causes performance degradation and how can we improve the stability?. Sustainable Energy and Fuels, 2021, 5, 3124-3133.	2.5	14
846	Mechanism of Li nucleation at graphite anodes and mitigation strategies. Journal of Materials Chemistry A, 2021, 9, 16798-16804.	5.2	13
847	Interfacial chemistry in anode-free batteries: challenges and strategies. Journal of Materials Chemistry A, 2021, 9, 7396-7406.	5.2	65
848	Proton solvent-controllable synthesis of manganese oxalate anode material for lithium-ion batteries. RSC Advances, 2021, 11, 23259-23269.	1.7	16
849	Regulation methods for the Zn/electrolyte interphase and the effectiveness evaluation in aqueous Zn-ion batteries. Energy and Environmental Science, 2021, 14, 5669-5689.	15.6	314

#	Article	IF	Citations
850	In situ surface-enhanced Raman spectroelectrochemistry reveals the molecular conformation of electrolyte additives in Li-ion batteries. Journal of Materials Chemistry A, 2021, 9, 20024-20031.	5.2	7
851	Radical polymer-grafted carbon nanotubes as high-performance cathode materials for lithium organic batteries with promoted n-/p-type redox reactions. Journal of Power Sources, 2021, 483, 229136.	4.0	27
852	High Rate Lithium Ion Battery with Niobium Tungsten Oxide Anode. Journal of the Electrochemical Society, 2021, 168, 010525.	1.3	23
853	Synthesis and electrochemical properties of Zn₂Ti₃O₈/g-C₃N₄ composites as anode materials for Li-ion batteries. Dalton Transactions, 2021, 50, 11137-11146.	1.6	4
854	Oxygen vacancies boosted the electrochemical kinetics of Nb₂O_{5â^'x} for superior lithium storage. Chemical Communications, 2021, 57, 8182-8185.	2.2	14
855	In-Situ Synchrotron X-Ray Characterizations of Battery Materials. , 2021, , .		2
856	Advancedin situtechnology for Li/Na metal anodes: an in-depth mechanistic understanding. Energy and Environmental Science, 2021, 14, 3872-3911.	15.6	27
857	Niobium pentoxide based materials for high rate rechargeable electrochemical energy storage. Materials Horizons, 2021, 8, 1130-1152.	6.4	51
858	Facile and Effective Positive Temperature Coefficient (PTC) Layer for Safer Lithium-Ion Batteries. Journal of Physical Chemistry C, 2021, 125, 1761-1766.	1.5	19
859	Phase Evolution of Trirutile Li_{0.5}FeF₃ for Lithium-Ion Batteries. Chemistry of Materials, 2021, 33, 868-880.	3.2	15
860	A novel sodium-ion supercabattery based on vacancy defective Niâ€“Coâ€“Mn ternary perovskite fluoride electrode materials. Journal of Materials Chemistry A, 2021, 9, 14276-14284.	5.2	18
861	Advanced separators based on aramid nanofiber (ANF) membranes for lithium-ion batteries: a review of recent progress. Journal of Materials Chemistry A, 2021, 9, 12923-12946.	5.2	54
862	CHAPTER 4. 3D Graphene-based Materials for Enhancing the Energy Density of Sodium Ion Batteries. Chemistry in the Environment, 2021, , 86-114.	0.2	0
863	Metalâ€“Organic Aerogel Assisted Reduced Graphene Oxide Coated Sulfur as a Cathode Material for Lithium Sulfur Batteries. Energy & Fuels, 2021, 35, 2742-2749.	2.5	13
864	MeTFSI (Me = Li, Na) Solvation in Ethylene Carbonate and Fluorinated Ethylene Carbonate: A Molecular Dynamics Study. Journal of Physical Chemistry B, 2021, 125, 1248-1258.	1.2	11
865	Functional thiophene-diketopyrrolopyrrole-based polymer derivatives as organic anode materials for lithium-ion batteries. Nanoscale, 2021, 13, 2673-2684.	2.8	14
866	Nb2CT MXene: High capacity and ultra-long cycle capability for lithium-ion battery by regulation of functional groups. Journal of Energy Chemistry, 2021, 53, 387-395.	7.1	61
867	Recent Progress in Extending the Cycleâ€Life of Secondary Znâ€Air Batteries. ChemNanoMat, 2021, 7, 354-367.	1.5	37

#	Article	IF	Citations
868	Effect of the Secondary Rutile Phase in Singleâ€Step Synthesized Carbonâ€Coated Anatase TiO₂ Nanoparticles as Lithiumâ€Ion Anode Material. Energy Technology, 2021, 9, 2001067.	1.8	7
869	Multiscale Deficiency Integration by Na-Rich Engineering for High-Stability Li-Rich Layered Oxide Cathodes. ACS Applied Materials & Interfaces, 2021, 13, 8239-8248.	4.0	23
870	Reducing Time to Discovery: Materials and Molecular Modeling, Imaging, Informatics, and Integration. ACS Nano, 2021, 15, 3971-3995.	7.3	36
871	Pathways of Developing Highâ€Energyâ€Density Flexible Lithium Batteries. Advanced Materials, 2021, 33, e2004419.	11.1	68
872	High-Operating Voltage, Long-Life Layered Oxides for Sodium Ion Batteries Enabled by Cosubstitution of Titanium and Magnesium. ACS Sustainable Chemistry and Engineering, 2021, 9, 2534-2542.	3.2	16
873	Homogenous lithium plating/stripping regulation by a mass-producible Zn particles modified Li-metal composite anode. Nano Research, 2021, 14, 3999-4005.	5.8	24
874	Comparative analysis of different separators for the electrochemical performances and long-term stability of high-power lithium-ion batteries. Ionics, 2021, 27, 1551-1558.	1.2	8
875	N, N-Dimethylacetamideâ€“water mixed solvent synthesis of mesoporous MnC2O4 rod as high performance anode material for lithium-ion batteries. Ionics, 2021, 27, 1413-1422.	1.2	1
876	Low-temperature synthesis of Fe2(MoO4)3nanosheets: A cathode for sodium ion batteries with kinetics enhancement. Nano Research, 2021, 14, 3977.	5.8	7
877	Long-cycling and dendrite-free lithium metal anodes via salt chemistry. Green Energy and Environment, 2021, 6, 791-793.	4.7	7
878	Ultrathin Liâ€“Siâ€“O Coating Layer to Stabilize the Surface Structure and Prolong the Cycling Life of Single-Crystal LiNi_{0.6}Co_{0.2}Mn_{0.2}O₂ Cathode Materials at 4.5 V. ACS Applied Materials & Interfaces, 2021, 13, 10952-10963.	4.0	37
879	Structure and Transport of Solvent Ligated Octahedral Mg-Ion in an Aqueous Battery Electrolyte. Journal of Chemical & Engineering Data, 2021, 66, 1543-1554.	1.0	4
880	Beyond the State of the Art of Electric Vehicles: A Fact-Based Paper of the Current and Prospective Electric Vehicle Technologies. World Electric Vehicle Journal, 2021, 12, 20.	1.6	52
881	Electrophoretic Deposition of Outâ€ofâ€Plane Oriented Active Material for Lithiumâ€Ion Batteries. Energy Technology, 2021, 9, 2000936.	1.8	3
882	Multi-factor principle for electrolyte additive molecule design for facilitating the development of electrolyte chemistry. Green Energy and Environment, 2022, 7, 1-2.	4.7	2
883	Structural origin of the high-voltage instability of lithium cobalt oxide. Nature Nanotechnology, 2021, 16, 599-605.	15.6	148
884	Hybrid TiO₂/Graphite/Nanodiamond Anode for Realizing High Performance Lithium Ion Battery. ChemistrySelect, 2021, 6, 1458-1465.	0.7	8
885	Studies of Ozone-Sensitized Low- and High-Temperature Oxidations of Diethyl Carbonate. Journal of Physical Chemistry A, 2021, 125, 1760-1765.	1.1	5

#	Article	IF	Citations
886	Stabilization of Organic Cathodes by a Temperature-Induced Effect Enabling Higher Energy and Excellent Cyclability. ACS Applied Materials & Interfaces, 2021, 13, 7178-7187.	4.0	16
887	CuP2 as high-capacity and long-cycle-life anode for potassium-ion batteries. Journal of Energy Chemistry, 2021, 63, 246-252.	7.1	18
888	Molecular Engineering of Aromatic Imides for Organic Secondary Batteries. Small, 2021, 17, e2005752.	5.2	37
889	Regulating Lithium Electrodeposition with Laser-Structured Current Collectors for Stable Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2021, 13, 8417-8425.	4.0	12
890	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	15
891	Process strategies for laser cutting of electrodes in lithium-ion battery production. Journal of Laser Applications, 2021, 33, .	0.8	15
892	Molecular Understanding of Electrochemicalâ€“Mechanical Responses in Carbon-Coated Silicon Nanotubes during Lithiation. Nanomaterials, 2021, 11, 564.	1.9	7
893	Low Resistance and High Stable Solidâ€“Liquid Electrolyte Interphases Enable Highâ€Voltage Solidâ€State Lithium Metal Batteries. Advanced Functional Materials, 2021, 31, 2010611.	7.8	34
894	Benzoic Anhydride as a Bifunctional Electrolyte Additive for Hydrogen Fluoride Capture and Robust Film Construction over Highâ€Voltage Liâ€ion Batteries. ChemSusChem, 2021, 14, 2067-2075.	3.6	17
895	An Overview of Cation-Disordered Lithium-Excess Rocksalt Cathodes. ACS Energy Letters, 0, , 1358-1376.	8.8	50
896	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	12
897	Exploration of materials electrochemistry in rechargeable batteries using advanced in situ/operando x-ray absorption spectroscopy. Electronic Structure, 2021, 3, 013001.	1.0	4
898	Formation of Li2CO3 Nanostructures for Lithium-Ion Battery Anode Application by Nanotransfer Printing. Materials, 2021, 14, 1585.	1.3	0
899	Phase transformations and hysteresis in Si-based anode materials. Applied Physics Letters, 2021, 118, .	1.5	10
900	Controllable Synthesis, Core-Shell Nanostructures, and Supercapacitor Performance of Highly Uniform Polypyrrole/Polyaniline Nanospheres. ACS Applied Energy Materials, 2021, 4, 3701-3711.	2.5	28
901	Designing Spinel Li4Ti5O12 Electrode as Anode Material for Poly(ethylene)oxide-Based Solid-State Batteries. Materials, 2021, 14, 1213.	1.3	9
902	Engineering Allâ€Purpose Amorphous Carbon Nanotubes with High N/Oâ€Coâ€Doping Content to Bridge the Alkaliâ€ion Batteries and Li Metal Batteries. Small, 2021, 17, e2006566.	5.2	19
903	Learning from biology: biomimetic carbon cells promote high-power potassium ion batteries. National Science Review, 2021, 8, nwab043.	4.6	4

#	Article	IF	Citations
904	In Situ and Operando Characterizations of 2D Materials in Electrochemical Energy Storage Devices. Small Science, 2021, 1, 2000076.	5.8	50
905	Understanding the Effectiveness of Phospholane Electrolyte Additives in Lithiumâ€Ion Batteries under Highâ€Voltage Conditions. ChemElectroChem, 2021, 8, 972-982.	1.7	5
906	Assessing the Reactivity of Hard Carbon Anodes: Linking Material Properties with Electrochemical Response Upon Sodiumâ€and Lithiumâ€Ion Storage. Batteries and Supercaps, 2021, 4, 960-977.	2.4	23
907	An Anode Material for Lithium Storage: Si@N,S-Doped Carbon Synthesized via In Situ Self-Polymerization. ACS Applied Energy Materials, 2021, 4, 3555-3562.	2.5	5
908	Polymer Molecular Engineering Enables Rapid Electron/Ion Transport in Ultraâ€Thick Electrode for Highâ€Energyâ€Density Flexible Lithiumâ€Ion Battery. Advanced Functional Materials, 2021, 31, .	7.8	27
909	Structural Engineering of Covalent Organic Frameworks for Rechargeable Batteries. Advanced Energy Materials, 2021, 11, 2003054.	10.2	61
910	3D Hierarchical Carbon-Rich Micro-/Nanomaterials for Energy Storage and Catalysis. Electrochemical Energy Reviews, 2021, 4, 269-335.	13.1	108
911	Wadsleyâ€“Roth Crystallographic Shear Structure Niobiumâ€Based Oxides: Promising Anode Materials for Highâ€Safety Lithiumâ€Ion Batteries. Advanced Science, 2021, 8, e2004855.	5.6	70
912	Architectural Engineering Achieves Highâ€Performance Alloying Anodes for Lithium and Sodium Ion Batteries. Small, 2021, 17, e2005248.	5.2	42
913	Advances of polymer binders for <scp>siliconâ€based</scp> anodes in high energy density <scp>lithiumâ€ion</scp> batteries. InformaÄnÃ-MateriÃ¡ly, 2021, 3, 460-501.	8.5	163
915	Confined Selenium in N-Doped Mesoporous Carbon Nanospheres for Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 16558-16566.	4.0	27
916	Realizing Highâ€Performance Li/Naâ€Ion Half/Full Batteries via the Synergistic Coupling of Nanoâ€Iron Sulfide and Sâ€doped Graphene. ChemSusChem, 2021, 14, 1936-1947.	3.6	8
917	Controlling Vanadate Nanofiber Interlayer via Intercalation with Conducting Polymers: Cathode Material Design for Rechargeable Aqueous Zinc Ion Batteries. Advanced Functional Materials, 2021, 31, 2100005.	7.8	60
918	Scalable Synthesis of Porous SiFe@C Composite with Excellent Lithium Storage. Chemistry - A European Journal, 2021, 27, 6963-6972.	1.7	4
919	Thermodynamically and Physically Stable Dendrite-Free Li Interface with Layered Boron Nitride Separators. ACS Sustainable Chemistry and Engineering, 2021, 9, 4185-4193.	3.2	7
920	A Î”EÂ= 0.63 V Bifunctional Oxygen Electrocatalyst Enables Highâ€Rate and Longâ€Cycling Zincâ€“Air Batteries. Advanced Materials, 2021, 33, e2008606.	11.1	154
921	BN nanosheets in-situ mosaic on MOF-5 derived porous carbon skeleton for high-performance lithium-ion batteries. Journal of Alloys and Compounds, 2021, 857, 157571.	2.8	16
922	Challenges and Recent Advances in High Capacity Liâ€Rich Cathode Materials for High Energy Density Lithiumâ€Ion Batteries. Advanced Materials, 2021, 33, e2005937.	11.1	253

#	Article	IF	Citations
923	Advanced Tri-Layer Carbon Matrices with Ï€â€“Ï€ Stacking Interaction for Binder-Free Lithium-Ion Storage. ACS Applied Materials & Interfaces, 2021, 13, 16516-16527.	4.0	18
924	Amorphous carbon-based materials as platform for advanced high-performance anodes in lithium secondary batteries. Nano Research, 2021, 14, 2053-2066.	5.8	26
925	Robust Observer Design for Mitigating the Impact of Unknown Disturbances on State of Charge Estimation of Lithium Iron Phosphate Batteries Using Fractional Calculus. IEEE Transactions on Vehicular Technology, 2021, 70, 3218-3231.	3.9	22
926	In-situ carbon encapsulation of ultrafine VN in yolk-shell nanospheres for highly reversible sodium storage. Carbon, 2021, 175, 289-298.	5.4	27
927	Engineering MnO/C microsphere for enhanced lithium storage. Journal of Alloys and Compounds, 2021, 861, 157961.	2.8	21
928	Stabilization of High-Energy Cathode Materials of Metal-Ion Batteries: Control Strategies and Synthesis Protocols. Energy & Fuels, 2021, 35, 7511-7527.	2.5	11
929	Architecting Amorphous Vanadium Oxide/MXene Nanohybrid via Tunable Anodic Oxidation for Highâ€Performance Sodiumâ€Ion Batteries. Advanced Energy Materials, 2021, 11, 2100757.	10.2	99
930	UiO-66 Metalâ€“Organic Framework as an Anode for a Potassium-Ion Battery: Quantum Mechanical Analysis. Journal of Physical Chemistry C, 2021, 125, 9679-9687.	1.5	21
931	Ion Pairing, Clustering and Transport in a LiFSI-TMP Electrolyte as Functions of Salt Concentration using Molecular Dynamics Simulations. Journal of the Electrochemical Society, 2021, 168, 040511.	1.3	14
933	Stable Cycling of Solid-State Lithium Metal Batteries at Room Temperature via Reducing Electrode/Electrolyte Interfacial Resistance. Journal of Materials Engineering and Performance, 2021, 30, 4543-4551.	1.2	2
934	N-Doped Carbon-Wrapped Cobaltâ€“Manganese Oxide Nanosheets Loaded into a Three-Dimensional Graphene Nanonetwork as a Free-Standing Anode for Lithium-Ion Storage. ACS Applied Nano Materials, 2021, 4, 3619-3630.	2.4	12
935	Synergetic Advantages of Atomically Coupled 2D Inorganic and Graphene Nanosheets as Versatile Building Blocks for Diverse Functional Nanohybrids. Advanced Materials, 2021, 33, e2005922.	11.1	49
936	Demystifying the Lattice Oxygen Redox in Layered Oxide Cathode Materials of Lithium-Ion Batteries. ACS Nano, 2021, 15, 6061-6104.	7.3	77
937	Graphene/PVDF Composites for Ni-rich Oxide Cathodes toward High-Energy Density Li-ion Batteries. Materials, 2021, 14, 2271.	1.3	7
938	Opportunities and challenges for aqueous metal-proton batteries. Matter, 2021, 4, 1252-1273.	5.0	63
939	High-Performance Lithium Sulfur Batteries Based on Multidimensional Graphene-CNT-Nanosulfur Hybrid Cathodes. Batteries, 2021, 7, 26.	2.1	10
940	In Situ and Operando Characterizations of 2D Materials in Electrochemical Energy Storage Devices. Small Science, 2021, 1, 2170010.	5.8	13
941	A Highâ€Rate and Ultrastable Aqueous Zincâ€Ion Battery with a Novel MgV₂O₆·1.7H₂O Nanobelt Cathode. Small, 2021, 17, e2100318.	5.2	58

#	Article	IF	Citations
942	Self-Supported Sheets-on-Wire CuO@Ni(OH)2/Zn(OH)2 Nanoarrays for High-Performance Flexible Quasi-Solid-State Supercapacitor. Processes, 2021, 9, 680.	1.3	21
943	Lowâ€Cost and Heatâ€Resistant Poly(catechol/polyamine)â€Silica Composite Membrane for Highâ€Performance Lithiumâ€Ion Batteries. ChemElectroChem, 2021, 8, 1369-1376.	1.7	4
944	Poor Stability of Li₂CO₃ in the Solid Electrolyte Interphase of a Lithiumâ€Metal Anode Revealed by Cryoâ€Electron Microscopy. Advanced Materials, 2021, 33, e2100404.	11.1	147
945	Function-convertible metal-organic crystal derived from liquid-solid interfacial reaction for lithium-sulfur batteries. Journal of Power Sources, 2021, 491, 229593.	4.0	7
946	Solvents adjusted pure phase CoCO3 as anodes for high cycle stability. Journal of Advanced Ceramics, 2021, 10, 509-519.	8.9	22
947	Sn Alloy and Graphite Addition to Enhance Initial Coulombic Efficiency and Cycling Stability of SiO Anodes for Liâ€Ion Batteries. Energy and Environmental Materials, 2022, 5, 353-359.	7.3	15
948	Visual Analysis on Machine Learning Assisted Prediction of Ionic Conductivity for Solid-State Electrolytes. , 2021, , .		2
949	FeS₂ Nanoparticles Encapsulated in N/S-Doped Hollow Carbon Spheres as Anode Materials for Potassium-Ion Batteries. ACS Applied Nano Materials, 2021, 4, 4863-4871.	2.4	15
950	Phase Engineering of CoMoO 4 Anode Materials toward Improved Cycle Life for Li + Storage â€. Chinese Journal of Chemistry, 2021, 39, 1121-1128.	2.6	6
951	Insight into the capacity decay mechanism of cycled LiNi_{0.5}Co_{0.2}Mn_{0.3}O₂ cathodes via in situ x-ray diffraction. Nanotechnology, 2021, 32, 295701.	1.3	17
952	Rational Electrolyte Design to Form Inorganicâ€“Polymeric Interphase on Silicon-Based Anodes. ACS Energy Letters, 2021, 6, 1811-1820.	8.8	39
953	Dicyanotriphenylamine-Based Polyimides as High-Performance Electrodes for Next Generation Organic Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 17467-17477.	4.0	19
954	Enhanced Cycling and Rate Capability by Epitaxially Matched Conductive Cubic TiO Coating on LiCoO₂ Cathode Films. ACS Applied Energy Materials, 2021, 4, 5024-5033.	2.5	14
955	Smart Parking Systems: Reviewing the Literature, Architecture and Ways Forward. Smart Cities, 2021, 4, 623-642.	5.5	31
956	Crystal Alignment Technology of Electrode Material for Enhancing Electrochemical Performance in Lithium Ion Battery. Journal of the Electrochemical Society, 2021, 168, 040502.	1.3	11
957	Graphene collage on Ni-rich layered oxide cathodes for advanced lithium-ion batteries. Nature Communications, 2021, 12, 2145.	5.8	54
958	In Situ/Operando (Soft) Xâ€ray Spectroscopy Study of Beyond Lithiumâ€ion Batteries. Energy and Environmental Materials, 2021, 4, 139-157.	7.3	26
959	A Novel Electrolyte Additive Enables High-Voltage Operation of Nickel-Rich Oxide/Graphite Cells. Journal of Physical Chemistry Letters, 2021, 12, 4327-4338.	2.1	16

#	Article	IF	Citations
960	Fabrication and electrochemical characterization of a novel spinel Li2Ni0.5Mn1.5O4 cathode coated with conductive glass for Lithium-ions batteries. Advanced Powder Technology, 2021, 32, 1802-1809.	2.0	3
961	Electrochemical property of hierarchical flower-like Î±-Ni(OH)2 as an anode material for lithium-ion batteries. Solid State Ionics, 2021, 363, 115595.	1.3	17
962	Batteries & Supercaps: Beyond Lithiumâ€Ion Batteries. Batteries and Supercaps, 2021, 4, 1036-1038.	2.4	12
963	Rational Design and Engineering of Oneâ€Dimensional Hollow Nanostructures for Efficient Electrochemical Energy Storage. Angewandte Chemie - International Edition, 2021, 60, 20102-20118.	7.2	123
964	Unraveling the Mechanism of Chalcopyriteâ€™s Superior Performance for Lithium Storage. ACS Applied Energy Materials, 2021, 4, 5086-5093.	2.5	8
965	Facile Self-Assembly Solvothermal Preparation of CuO/Cu₂O/Coal-Based Reduced Graphene Oxide Nanosheet Composites as an Anode for High-Performance Lithium-Ion Batteries. Energy & Fuels, 2021, 35, 8961-8969.	2.5	13
966	Engineering the Active Sites of Graphene Catalyst: From CO₂ Activation to Activate Li-CO₂ Batteries. ACS Nano, 2021, 15, 9841-9850.	7.3	71
967	The critical role of inorganic nanofillers in solid polymer composite electrolyte for Li⁺ transportation. , 2021, 3, 482-508.		68
968	Kâ€Ion Battery Cathode Design Utilizing Trigonal Prismatic Ligand Field. Advanced Materials, 2021, 33, e2101788.	11.1	55
969	An ordinary differential equation model for simulating secondary battery reactions. Electrochemistry Communications, 2021, 126, 107011.	2.3	2
970	A Comprehensive Solution for Ni-Rich Cathodes by Lithium Silicate Coating. Journal of the Electrochemical Society, 2021, 168, 050539.	1.3	2
971	Machine learning of materials design and state prediction for lithium ion batteries. Chinese Journal of Chemical Engineering, 2021, 37, 1-11.	1.7	29
972	An Ultrahigh Performance Zincâ€Organic Battery using Poly(catechol) Cathode in Zn(TFSI)₂â€Based Concentrated Aqueous Electrolytes. Advanced Energy Materials, 2021, 11, 2100939.	10.2	93
973	Effects of charging protocols on the cycling performance for high-energy lithium-ion batteries using a graphite-SiOx composite anode and Li-rich layered oxide cathode. Journal of Power Sources, 2021, 495, 229793.	4.0	16
974	Ultrafine TiO₂ Nanoparticle Supported Nitrogenâ€Rich Graphitic Porous Carbon as an Efficient Anode Material for Potassiumâ€Ion Batteries. Advanced Energy and Sustainability Research, 2021, 2, 2100042.	2.8	8
975	A Safe and Sustainable Lithiumâ€Ionâ€“Oxygen Battery based on a Lowâ€Cost Dualâ€Carbon Electrodes Architecture. Advanced Materials, 2021, 33, e2100827.	11.1	14
976	Rational Design and Engineering of Oneâ€Dimensional Hollow Nanostructures for Efficient Electrochemical Energy Storage. Angewandte Chemie, 2021, 133, 20262-20278.	1.6	13
977	Boron-doped Sb/SbO₂@rGO composites with tunable components and enlarged lattice spacing for high-rate sodium-ion batteries. Journal Physics D: Applied Physics, 2021, 54, 315505.	1.3	4

#	Article	IF	Citations
978	Energy recovery for hybrid hydraulic excavators: flywheel-based solutions. Automation in Construction, 2021, 125, 103648.	4.8	23
979	10 Î¼mâ€Thick Highâ€Strength Solid Polymer Electrolytes with Excellent Interface Compatibility for Flexible Allâ€Solidâ€State Lithiumâ€Metal Batteries. Advanced Materials, 2021, 33, e2100353.	11.1	244
980	Interfaces in Solid Electrolyte Interphase: Implications for Lithium-Ion Batteries. Journal of Physical Chemistry C, 2021, 125, 11301-11309.	1.5	22
981	In Situ TEM Studies of Sodium Polysulfides Electrochemistry in High Temperature Naâ€“S Nanobatteries. Small, 2021, 17, e2100846.	5.2	10
982	Effects of Comonomers on the Performance of Stable Phosphonate-Based Gel Terpolymer Electrolytes for Sodium-Ion Batteries with Ultralong Cycling Stability. ACS Applied Materials & Interfaces, 2021, 13, 25024-25035.	4.0	11
983	Synthesis and electrochemical performance of mesoporous MnC2O4 nanorod/rGO composite anode for lithium-ion batteries. Journal of Materials Science: Materials in Electronics, 2021, 32, 15069-15079.	1.1	8
984	Challenges, fabrications and horizons of oxide solid electrolytes for solidâ€state lithium batteries. Nano Select, 2021, 2, 2256-2274.	1.9	26
985	Metalâ€“Organic Framework@Polyacrylonitrile-Derived Potassiophilic Nanoporous Carbon Nanofiber Paper Enables Stable Potassium Metal Anodes. ACS Applied Energy Materials, 2021, 4, 6245-6252.	2.5	23
986	Zirconium disulfides as an electrode material alternative for Li-ion batteries. Applied Surface Science, 2021, 547, 149029.	3.1	12
987	Aluminum and lithium sulfur batteries: a review of recent progress and future directions. Journal of Physics Condensed Matter, 2021, 33, 253002.	0.7	7
988	Oxygen anionic redox activated high-energy cathodes: Status and prospects. ETransportation, 2021, 8, 100118.	6.8	34
989	Hierarchical Microspheres Constructed by Te@Nâ€Doped Carbon for Efficient Potassium Storage. European Journal of Inorganic Chemistry, 2021, 2021, 2141-2147.	1.0	7
990	Towards Superior Electrochemical Property of Nickel-High Cathode Materials with a Multi-Functional Modification Strategy. Journal of the Electrochemical Society, 2021, 168, 050518.	1.3	0
991	Electrochemical Performance and Elevated Temperature Properties of the TiO₂-Coated Li[Ni_{0.8}Co_{0.1}Mn_{0.1}]O₂ Cathode Material for High-Safety Li-Ion Batteries. ACS Applied Energy Materials, 2021, 4, 5304-5315.	2.5	25
992	Co₃Se₄ Quantum Dots as an Ultrastable Host Material for Potassiumâ€Ion Intercalation. Advanced Materials, 2021, 33, e2102164.	11.1	40
993	Macaroniâ€Like Blueâ€Gray Nb₂O₅ Nanotubes for Highâ€Reversible Lithiumâ€Ion Storage. Advanced Energy and Sustainability Research, 2021, 2, 2100028.	2.8	6
994	Electrospun Materials for Batteries Moving Beyond Lithium-Ion Technologies. Electrochemical Energy Reviews, 2022, 5, 211-241.	13.1	44
995	Optical lithium sensors. Coordination Chemistry Reviews, 2021, 435, 213801.	9.5	17

#	Article	IF	Citations
996	Rock-Salt MnS_{0.5}Se_{0.5} Nanocubes Assembled on N-Doped Graphene Forming van der Waals Heterostructured Hybrids as High-Performance Anode for Lithium- and Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 22608-22620.	4.0	31
997	Subâ€Thick Electrodes with Enhanced Transport Kinetics via In Situ Epitaxial Heterogeneous Interfaces for High Arealâ€Capacity Lithium Ion Batteries. Small, 2021, 17, e2100778.	5.2	141
998	Silver Iodide as a Host Material of Sulfur for Liâ€“S Battery. Journal of the Electrochemical Society, 0, , .	1.3	3
999	Transport of Propylene Carbonate-LiTFSI Electrolytes in P(VDF-HFP) Using Time-resolved ATR-FTIR Spectroscopy: Diffusion Coefficients and Molecular Interactions. Chinese Journal of Polymer Science (English Edition), 2021, 39, 975-983.	2.0	0
1000	2D Graphitic Carbon Nitride for Energy Conversion and Storage. Advanced Functional Materials, 2021, 31, 2102540.	7.8	190
1001	Advances in Lithiumâ€“Sulfur Batteries: From Academic Research to Commercial Viability. Advanced Materials, 2021, 33, e2003666.	11.1	357
1002	Dual Confinement of CoSe₂ Nanorods with Polyphosphazene-Derived Heteroatom-Doped Carbon and Reduced Graphene Oxide for Potassium-Ion Batteries. ACS Omega, 2021, 6, 17113-17125.	1.6	12
1003	Hierarchical Fe/Fe3C/C nanofibers as anodes for high capacity and rate in lithium ion batteries. Ionics, 2021, 27, 3663-3669.	1.2	10
1004	Life Cycle Assesment of Powertrains Based on a Battery, Hydrogen Fuel Cells, and Internal Combustion Engine for Urban Buses under the Conditions of Moscow Oblast. Russian Journal of Applied Chemistry, 2021, 94, 793-812.	0.1	3
1005	Aging processes in high voltage lithium-ion capacitors containing liquid and gel-polymer electrolytes. Journal of Power Sources, 2021, 496, 229797.	4.0	7
1006	Covalent Organic Frameworks for Batteries. Advanced Functional Materials, 2021, 31, 2100505.	7.8	154
1007	Rational design of MXene-based films for energy storage: Progress, prospects. Materials Today, 2021, 46, 183-211.	8.3	83
1008	New Battery with Borides as Both Anode and Cathode Materials. Energy & Fuels, 2021, 35, 10315-10321.	2.5	6
1009	Fabrication of a Sandwichâ€like VS₄â€Graphene Composite via Selfâ€assembly for Highly Stable Lithiumâ€ion Batteries. ChemElectroChem, 2021, 8, 2266-2271.	1.7	10
1010	Covalent Organic Framework-Based Electrolytes for Fast Li⁺ Conduction and High-Temperature Solid-State Lithium-Ion Batteries. Chemistry of Materials, 2021, 33, 5058-5066.	3.2	45
1011	Oxygen Defects Engineering of VO₂Â·xH₂O Nanosheets via In Situ Polypyrrole Polymerization for Efficient Aqueous Zinc Ion Storage. Advanced Functional Materials, 2021, 31, 2103070.	7.8	153
1012	Stabilizing Li-metal host anode with LiF-rich solid electrolyte interphase. Nano Convergence, 2021, 8, 18.	6.3	12
1013	A new 2D carbon allotrope C₅₆₈ as a high-capacity electrode material for lithium-ion batteries. Fullerenes Nanotubes and Carbon Nanostructures, 2022, 30, 385-391.	1.0	4

#	Article	IF	Citations
1014	Conjugated Polymers with Benzoyl-N-methylpyridinium Units: An Effective Design Strategy for High-Performance Lithium-Ion Batteries. Chemistry of Materials, 2021, 33, 4596-4605.	3.2	11
1015	Metalâ€“Organic Frameworks Reinforce the Carbon Nanotube Sponge-Derived Robust Three-Dimensional Sulfur Host for Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2021, 13, 28036-28048.	4.0	23
1016	The Role of Pilot Lines in Bridging the Gap Between Fundamental Research and Industrial Production for Lithiumâ€Ion Battery Cells Relevant to Sustainable Electromobility: A Review. Energy Technology, 2021, 9, 2100132.	1.8	25
1017	A review on the stability and surface modification of layered transition-metal oxide cathodes. Materials Today, 2021, 46, 155-182.	8.3	132
1018	Advances and Perspectives of Cathode Storage Chemistry in Aqueous Zinc-Ion Batteries. ACS Nano, 2021, 15, 9244-9272.	7.3	272
1019	Aluminum-air batteries: A review of alloys, electrolytes and design. Journal of Power Sources, 2021, 498, 229762.	4.0	74
1020	MnSn₂ and MnSn₂â€“TiO₂ nanostructured anode materials for lithium-ion batteries. Nanotechnology, 2021, 32, 375402.	1.3	6
1021	Graphene-coated micro/nanostructure hard carbon with improved electrochemical performance for sodium-ion battery. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	7
1022	Effect of Additives on Wettability, Thermal Stability and Electrochemical Properties of Î³-Al2O3-Coating Separator for Lithium-Ion Batteries. Journal of Electrochemical Energy Conversion and Storage, 2022, 19, .	1.1	1
1023	Transforming Materials into Practical Automotive Lithiumâ€Ion Batteries. Advanced Materials Technologies, 2021, 6, 2100152.	3.0	6
1024	Functional Separators Regulating Ion Transport Enabled by Metalâ€Organic Frameworks for Dendriteâ€Free Lithium Metal Anodes. Advanced Functional Materials, 2021, 31, 2102938.	7.8	119
1025	Investigating Ternary Liâ€“Mgâ€“Si Zintl Phase Formation and Evolution for Si Anodes in Li-Ion Batteries with Mg(TFSI)₂ Electrolyte Additive. Chemistry of Materials, 2021, 33, 4960-4970.	3.2	10
1026	Advanced in-situ characterizations of nanocomposite electrodes for sodium-ion batteries â€“ A short review. Composites Communications, 2021, 25, 100635.	3.3	16
1027	Prospects challenges and stability of 2D MXenes for clean energy conversion and storage applications. Npj 2D Materials and Applications, 2021, 5, .	3.9	163
1028	Accelerated Atomistic Modeling of Solid-State Battery Materials With Machine Learning. Frontiers in Energy Research, 2021, 9, .	1.2	25
1029	Effect of diffusion constant on the morphology of dendrite growth in lithium metal batteries. Journal of Chemical Physics, 2021, 154, 234705.	1.2	1
1030	Effect of resin lamination on tensile strength characteristics of SUS304 stainless steel thin film. International Journal of Advanced Manufacturing Technology, 2021, 116, 1081-1088.	1.5	2
1031	Inhibiting Oxygen Release from Liâ€rich, Mnâ€rich Layered Oxides at the Surface with a Solution Processable Oxygen Scavenger Polymer. Advanced Energy Materials, 2021, 11, 2100552.	10.2	64

#	Article	IF	Citations
1032	Recent Advances in Conversion-Type Electrode Materials for Post Lithium-Ion Batteries. , 2021, 3, 956-977.		66
1033	A novel surface modification strategy for Li-rich Mn-based layered oxide cathodes of high-capacity and high-cyclic stability by an additive of LiBH4 to the electrolyte. Functional Materials Letters, 2021, 14, 2140003.	0.7	3
1034	CuCo₂O₄ Hollow Microspheres with Graphene Composite Targeting Superior Lithium-Ion Storage. Langmuir, 2021, 37, 8426-8434.	1.6	10
1035	Construction of multifunctional and flame retardant separator towards stable lithium-sulfur batteries with high safety. Chemical Engineering Journal, 2021, 416, 129087.	6.6	65
1036	Recent advances and challenges in solar photovoltaic and energy storage materials: future directions in Indian perspective. JPhys Energy, 2021, 3, 034018.	2.3	10
1037	Redox Charge Transfer Kinetics and Reversibility of VO₂ in Aqueous and Nonâ€Aqueous Electrolytes of Naâ€Ion Storage. Energy and Environmental Materials, 2022, 5, 1222-1228.	7.3	4
1038	Well-dispersed Sb2O3 nanoparticles encapsulated in multi-channel-carbon nanofibers as high-performance anode materials for Li/dual-ion batteries. International Journal of Hydrogen Energy, 2021, 46, 26308-26317.	3.8	10
1039	Regulating the electronic structure of CoP nanoflowers by molybdenum incorporation for enhanced lithium and sodium storage. Journal of Power Sources, 2021, 500, 229975.	4.0	15
1040	Iron Phosphide Confined in Carbon Nanofibers as a Free-Standing Flexible Anode for High-Performance Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 34074-34083.	4.0	24
1041	O3-NaFe_(1/3â€“x)Ni_{1/3}Mn_{1/3}Al_xO₂ Cathodes with Improved Air Stability for Na-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 33015-33023.	4.0	31
1042	Probing Mechanistic Insights into Highly Efficient Lithium Storage of C₆₀ Fullerene Enabled via Threeâ€Electronâ€Redox Chemistry. Advanced Science, 2021, 8, e2101759.	5.6	10
1043	Analytical transmission electron microscopy for emerging advanced materials. Matter, 2021, 4, 2309-2339.	5.0	71
1044	Recycling and Direct-Regeneration of Cathode Materials from Spent Ternary Lithium-Ion Batteries by Hydrometallurgy: Status Quo and Recent Developments. Johnson Matthey Technology Review, 2021, 65, 431-452.	0.5	13
1045	Revisit Electrolyte Chemistry of Hard Carbon in Ether for Na Storage. Jacs Au, 2021, 1, 1208-1216.	3.6	28
1046	A review on experimental and theoretical studies of perovskite barium zirconate proton conductors. Emergent Materials, 2021, 4, 999-1027.	3.2	46
1047	Interstitial lithium doping in SrTiO₃. AIP Advances, 2021, 11, 075029.	0.6	2
1048	Na4Co3(PO4)2P2O7/NC Composite as a Negative Electrode for Sodium-Ion Batteries. ACS Applied Energy Materials, 2021, 4, 8076-8084.	2.5	7
1049	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.	1.9	10

#	Article	IF	Citations
1050	Defects, diffusion and dopants in Li8SnO6. Heliyon, 2021, 7, e07460.	1.4	3
1051	In-situ UV cured acrylonitrile grafted epoxidized natural rubber (ACN-g-ENR) â€“ LiTFSI solid polymer electrolytes for lithium-ion rechargeable batteries. Reactive and Functional Polymers, 2021, 164, 104938.	2.0	8
1052	Synthesis of pomegranate-shaped micron ZnMn2O4 with enhanced lithium storage capability. Journal of Materiomics, 2021, 7, 699-707.	2.8	11
1053	Compensation of the Irreversible Loss of Si-Anodes via Prelithiated NMC/LMO Blend Cathode. Journal of the Electrochemical Society, 2021, 168, 070550.	1.3	1
1054	Optical property of hexagonal (2H) silicon crystal. Semiconductor Science and Technology, 2021, 36, 095023.	1.0	4
1055	A Chlorine-Free Electrolyte Based on Non-nucleophilic Magnesium Bis(diisopropyl)amide and Ionic Liquid for Rechargeable Magnesium Batteries. ACS Applied Materials & Interfaces, 2021, 13, 32957-32967.	4.0	19
1056	Atomic-scale regulation of anionic and cationic migration in alkali metal batteries. Nature Communications, 2021, 12, 4184.	5.8	57
1057	Trade structure and risk transmission in the international automotive Li-ion batteries trade. Resources, Conservation and Recycling, 2021, 170, 105591.	5.3	24
1058	Future Material Developments for Electric Vehicle Battery Cells Answering Growing Demands from an End-User Perspective. Energies, 2021, 14, 4223.	1.6	21
1059	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
1060	Adsorption of K Ions on Single-Layer GeC for Potential Anode of K Ion Batteries. Nanomaterials, 2021, 11, 1900.	1.9	6
1061	Simultaneous Energy Storage and Seawater Desalination using Rechargeable Seawater Battery: Feasibility and Future Directions. Advanced Science, 2021, 8, e2101289.	5.6	26
1062	Formation of Surface Impurities on Lithiumâ€“Nickelâ€“Manganeseâ€“Cobalt Oxides in the Presence of CO₂ and H₂O. Journal of the American Chemical Society, 2021, 143, 10261-10274.	6.6	21
1063	SnO2 confining growth in layered graphene fibers toward superb volumetric lithium storage and flexibility. Applied Surface Science, 2021, 555, 149719.	3.1	3
1064	Synthesis of pompon-like ZnO microspheres as host materials and the catalytic effects of nonconductive metal oxides for lithium-sulfur batteries. Journal of Industrial and Engineering Chemistry, 2021, 99, 309-316.	2.9	15
1065	Ternary Siâ€“SiOâ€“Al Composite Films as High-Performance Anodes for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 34447-34456.	4.0	20
1066	A glance of the layered transition metal oxide cathodes in sodium and lithium-ion batteries: difference and similarities. Nanotechnology, 2021, 32, 422501.	1.3	11
1067	Ion-conductive self-healing polymer network based on reversible imine bonding for Si electrodes. Journal of Power Sources, 2021, 499, 229968.	4.0	20

#	Article	IF	Citations
1068	Spongy-like N, S-codoped ultrathin layered carbon assembly for realizing high performance sodium-ion batteries. FlatChem, 2021, 28, 100258.	2.8	6
1069	Concentrated Electrolytes Widen the Operating Temperature Range of Lithiumâ€Ion Batteries. Advanced Science, 2021, 8, e2101646.	5.6	54
1070	Electrospun CoSe@NC nanofiber membrane as an effective polysulfides adsorption-catalysis interlayer for Li-S batteries. Chemical Engineering Journal, 2022, 430, 131911.	6.6	43
1071	Preparation of SnS nanosheetâ€“loaded traditional Chinese medicine slagâ€“derived carbon composite (SnS/NC) by one-pot hydrothermal method used as anodes for lithium-ion batteries. Ionics, 0, , .	1.2	2
1072	The free-standing cathode fabricated with nano-CoSe2 embedded in mesoporous carbon nanosheets towards high performance Li/SeS2 batteries. Chemical Engineering Journal, 2021, 418, 129475.	6.6	11
1073	Degradation Diagnostics from the Subsurface of Lithiumâ€Ion Battery Electrodes. Energy and Environmental Materials, 2022, 5, 662-669.	7.3	9
1074	3-Thiopheneboronic acid: an effective additive for regulation on electrode/electrolyte interphase of lithium metal battery with high-loading cathode. Electrochimica Acta, 2021, 386, 138485.	2.6	16
1075	An Atomic Insight into the Chemical Origin and Variation of the Dielectric Constant in Liquid Electrolytes. Angewandte Chemie, 2021, 133, 21643-21648.	1.6	9
1076	Reaction Mechanisms of Ta-Substituted Cubic Li₇La₃Zr₂O₁₂ with Solvents During Storage. ACS Applied Materials & Interfaces, 2021, 13, 38384-38393.	4.0	14
1077	Anchoring SbxOy/SnO2 nano-heterojunction on reduced graphene oxide as lithium ion batteries anodes with remarkable rate performance and excellent cycle stability. Ionics, 2021, 27, 4205-4216.	1.2	2
1078	Interface Improvement of Li_{6.4}La₃Zr_{1.6}Ta_{0.6}O₁₂@La₂Sn₂O₇ and Cathode Transfer Printing Technology with Splendid Electrochemical Performance for Solid-State Lithium Batteries. ACS Applied Materials & Interfaces, 2021, 13, 39414-39423.	4.0	2
1079	Reactive pathways toward parasitic release of singlet oxygen in metal-air batteries. Npj Computational Materials, 2021, 7, .	3.5	14
1080	Air-Stable Li₆CoO₄@Li₅FeO₄ Pre-Lithiation Reagent in Cathode Enabling High Performance Lithium-Ion Batteries. Journal of the Electrochemical Society, 2021, 168, 080510.	1.3	19
1081	Advanced Current Collectors with Carbon Nanofoams for Electrochemically Stable Lithiumâ€"Sulfur Cells. Nanomaterials, 2021, 11, 2083.	1.9	10
1082	Regulation of SEI Formation by Anion Receptors to Achieve Ultraâ€Stable Lithiumâ€Metal Batteries. Angewandte Chemie - International Edition, 2021, 60, 19232-19240.	7.2	66
1083	Covalent Organic Frameworks and Their Derivatives for Better Metal Anodes in Rechargeable Batteries. ACS Nano, 2021, 15, 12741-12767.	7.3	71
1084	Raspberry-Shaped Nickel-Enhanced MnO-Based Carbon-Containing Nanostructures as Anode Materials for Li-Ion Batteries. ACS Applied Nano Materials, 2021, 4, 7925-7934.	2.4	6
1085	Resynthesis of NMC Type Cathode from Spent Lithium-Ion Batteries: A Review. Materials Science Forum, 0, 1044, 3-14.	0.3	0

#	Article	IF	Citations
1086	Degradation-resistant TiO2@Sn anodes for high-capacity lithium-ion batteries. Journal of Materials Science, 2021, 56, 17156-17166.	1.7	0
1087	Electrolyte Design Enabling a Highâ€Safety and Highâ€Performance Si Anode with a Tailored Electrodeâ€“Electrolyte Interphase. Advanced Materials, 2021, 33, e2103178.	11.1	135
1088	Enhanced Activity and Reversibility of Anionic Redox by Tuning Lithium Vacancies in Li-Rich Cathode Materials. ACS Applied Materials & Interfaces, 2021, 13, 39480-39490.	4.0	22
1089	In-situ selective surface engineering of graphene micro-supercapacitor chips. Nano Research, 2022, 15, 1492-1499.	5.8	19
1090	Three-dimensional Li-ion transportation in Li2MnO3-integrated LiNi0.8Co0.1Mn0.1O2. Journal of Energy Chemistry, 2021, 63, 376-384.	7.1	12
1091	Hierarchically Micro/Nanostructured Current Collectors Induced by Ultrafast Femtosecond Laser Strategy for Highâ€Performance Lithiumâ€ion Batteries. Energy and Environmental Materials, 2022, 5, 969-976.	7.3	12
1092	Fabrication of Borate-Based Porous Polymer Electrolytes Containing Cyclic Carbonate for High-Performance Lithium Metal Batteries. ACS Applied Energy Materials, 2021, 4, 9582-9593.	2.5	13
1093	Circular economy of Li Batteries: Technologies and trends. Journal of Energy Storage, 2021, 40, 102690.	3.9	65
1094	Stressâ€Regulation Design of Lithium Alloy Electrode toward Stable Battery Cycling. Energy and Environmental Materials, 2023, 6, .	7.3	11
1095	Constructing Highâ€Performance Liâ€ion Capacitors via Cobalt Fluoride with Excellent Cyclic Stability as Anode and Coconut Shell Biomassâ€Derived Carbon as Cathode Materials. ChemistrySelect, 2021, 6, 8349-8360.	0.7	6
1096	Cycling Rateâ€Induced Spatiallyâ€Resolved Heterogeneities in Commercial Cylindrical Liâ€ion Batteries. Small Methods, 2021, 5, e2100512.	4.6	12
1097	Regulation of SEI Formation by Anion Receptors to Achieve Ultraâ€Stable Lithiumâ€Metal Batteries. Angewandte Chemie, 2021, 133, 19381-19389.	1.6	13
1098	Facile synthesis and electrochemical properties of amorphous/crystalline VO(PO3)2@C as the anodes for Lithium-ion battery. Journal of Electroanalytical Chemistry, 2021, 895, 115541.	1.9	4
1099	Manganese Sulphate Fertilizer Potential as Raw Material of LMR-NMC Lithium-Ion Batteries: A Review. Materials Science Forum, 0, 1044, 59-72.	0.3	0
1100	Microsized fayalite Fe2SiO4 as anode material: the structure, electrochemical properties and working mechanism. Journal of Electroceramics, 2021, 47, 31-41.	0.8	5
1101	Two-Phase Transition Induced Amorphous Metal Phosphides Enabling Rapid, Reversible Alkali-Metal Ion Storage. ACS Nano, 2021, 15, 13486-13494.	7.3	23
1102	A Micrometerâ€Sized Silicon/Carbon Composite Anode Synthesized by Impregnation of Petroleum Pitch in Nanoporous Silicon. Advanced Materials, 2021, 33, e2103095.	11.1	99
1103	Recent advances in materials and device technologies for aqueous hybrid supercapacitors. Science China Materials, 2022, 65, 10-31.	3.5	25

#	Article	IF	Citations
1104	MoS₂/Polythiophene Composite Cathode as a Potential Host for Rechargeable Aluminum Batteries: Deciphering the Impact of Processing on the Performance. ACS Applied Energy Materials, 2021, 4, 9227-9239.	2.5	11
1105	An Overview of Electrochemical Batteries for ESS Applied to PV Systems Connected to the Grid. , 2021, , .		1
1106	Design high performance biomass-derived renewable carbon material for electric energy storage system. Journal of Cleaner Production, 2021, 309, 127391.	4.6	10
1107	High-Performance Polymeric Lithium Salt Electrode Material from Phenolâ€“Formaldehyde Condensation. ACS Applied Materials & Interfaces, 2021, 13, 37289-37298.	4.0	15
1108	Effects of a Sodium Phosphate Electrolyte Additive on Elevated Temperature Performance of Spinel Lithium Manganese Oxide Cathodes. Materials, 2021, 14, 4670.	1.3	1
1109	Analysis of Electrochemical Impedance Spectroscopy on Zinc-Air Batteries Using the Distribution of Relaxation Times. Batteries, 2021, 7, 56.	2.1	8
1110	Hierarchical Bismuthâ€“Carbon Microfoam Hybrid Structure Achieves Superior Sodium-Ion Storage. ACS Applied Energy Materials, 2021, 4, 8285-8293.	2.5	3
1111	An Atomic Insight into the Chemical Origin and Variation of the Dielectric Constant in Liquid Electrolytes. Angewandte Chemie - International Edition, 2021, 60, 21473-21478.	7.2	74
1112	Ultralight and High Thermal Conductive Current Collector Derived from Polyimide for Advanced LIBs. ACS Applied Energy Materials, 2021, 4, 9721-9730.	2.5	7
1113	Hard Carbon Anodes for Nextâ€Generation Liâ€Ion Batteries: Review and Perspective. Advanced Energy Materials, 2021, 11, 2101650.	10.2	213
1114	Concentration Distribution and Stresses in Porous Electrodes with Particle-Particle Contact. Journal of the Electrochemical Society, 2021, 168, 090507.	1.3	5
1115	Trimetallic Metalâ€Organic Framework Nanoframe Superstructures: A Stressâ€Buffering Architecture Engineering of Anode Material toward Boosted Lithium Storage Performance. Energy and Environmental Materials, 2023, 6, .	7.3	7
1116	Airâ€stable inorganic solidâ€state electrolytes for high energy density lithium batteries: Challenges, strategies, and prospects. InformaÄnÃ-MateriÃ¡ly, 2022, 4, .	8.5	71
1117	Optimal Charging Profile Design for Attaining Desired State of Charge in Symmetric Electrochemical Capacitor With Efficiency Analysis. IEEE Transactions on Industry Applications, 2021, 57, 5264-5273.	3.3	6
1118	Self-healable hydrogel electrolyte for dendrite-free and self-healable zinc-based aqueous batteries. Materials Today Physics, 2021, 20, 100458.	2.9	33
1119	Studying the Conversion Mechanism to Broaden Cathode Options in Aqueous Zincâ€Ion Batteries. Angewandte Chemie, 2021, 133, 25318-25325.	1.6	34
1120	Recent progress in barium zirconate proton conductors for electrochemical hydrogen device applications: A review. Ceramics International, 2021, 47, 23725-23748.	2.3	75
1121	Modified bornite materials with high electrochemical performance for sodium and lithium storage. Energy Storage Materials, 2021, 40, 150-158.	9.5	13

#	Article	IF	Citations
1122	Design of Conductive Binders for LiFePO₄ Cathodes with Long-Term Cycle Life. ACS Sustainable Chemistry and Engineering, 2021, 9, 13277-13286.	3.2	11
1123	Tailoring Porous Transition Metal Oxide for High-Performance Lithium Storage. Journal of Physical Chemistry C, 2021, 125, 22435-22445.	1.5	7
1124	Diaper-derived Seleniumâ€“carbon composites as High-capacity Anodes for Sodium-ion Batteries. Chemical Engineering Journal, 2021, 430, 132705.	6.6	14
1125	Studying the Conversion Mechanism to Broaden Cathode Options in Aqueous Zincâ€Ion Batteries. Angewandte Chemie - International Edition, 2021, 60, 25114-25121.	7.2	84
1126	On the use of electrochemical impedance spectroscopy to characterize and model the aging phenomena of lithium-ion batteries: a critical review. Journal of Power Sources, 2021, 505, 229860.	4.0	114
1127	The Bis(Î· 6 â€benzene)lithium Cation: A Fundamental Mainâ€Group Organometallic Species. Angewandte Chemie, 2021, 133, 23061.	1.6	1
1128	Ultrafast reactionâ€sintering of grain sizeâ€controlled titanium niobate from TiO 2 and Nb 2 O 5. International Journal of Ceramic Engineering & Science, 0, , .	0.5	1
1129	Advanced Nanocelluloseâ€Based Composites for Flexible Functional Energy Storage Devices. Advanced Materials, 2021, 33, e2101368.	11.1	251
1130	Mechanistic Insights into the Structural Modulation of Transition Metal Selenides to Boost Potassium Ion Storage Stability. ACS Nano, 2021, 15, 14697-14708.	7.3	44
1131	Chemical Design for Both Molecular and Morphology Optimization toward Highâ€Performance Lithiumâ€Ion Batteries Cathode Material Based on Covalent Organic Framework. Advanced Functional Materials, 2022, 32, 2107703.	7.8	47
1132	Constructing ultrastable electrode/electrolyte interface for rapid potassium ion storage capability via salt chemistry and interfacial engineering. Nano Research, 2022, 15, 2083-2091.	5.8	13
1133	Risk management over the life cycle of lithium-ion batteries in electric vehicles. Renewable and Sustainable Energy Reviews, 2021, 148, 111240.	8.2	83
1134	A new insight into Li-staging, in-situ electrochemical exfoliation, and superior Li storage characteristics of highly crystalline few-layered graphene. Journal of Energy Storage, 2021, 41, 102908.	3.9	5
1135	Regulation of an Inner Helmholtz Plane by hierarchical porous biomass activated carbon for stable cathode electrolyte interphase films. Vacuum, 2021, 191, 110331.	1.6	18
1136	High-Performance Core-Shell Structured SiO_x@Si-Silicide Nanocomposite Anode Material for Lithium-Ion Rechargeable Batteries. Journal of the Electrochemical Society, 2021, 168, 090558.	1.3	3
1137	Interfacial Model Deciphering Highâ€Voltage Electrolytes for High Energy Density, High Safety, and Fastâ€Charging Lithiumâ€Ion Batteries. Advanced Materials, 2021, 33, e2102964.	11.1	122
1138	Status and Challenges of Cathode Materials for Roomâ€Temperature Sodiumâ€“Sulfur Batteries. Small Science, 2021, 1, 2100059.	5.8	28
1139	An optimized 3D polymer alloy interface for durability and safety for Li metal batteries. Chemical Engineering Journal, 2021, 420, 130002.	6.6	14

#	Article	IF	Citations
1140	Graphene-Enhanced Battery Components in Rechargeable Lithium-Ion and Lithium Metal Batteries. Journal of Carbon Research, 2021, 7, 65.	1.4	8
1141	Dextran Sulfate Lithium as Versatile Binder to Stabilize Highâ€Voltage LiCoO₂ to 4.6 V. Advanced Energy Materials, 2021, 11, 2101864.	10.2	80
1142	Progresses in Sustainable Recycling Technology of Spent Lithiumâ€Ion Batteries. Energy and Environmental Materials, 2022, 5, 1012-1036.	7.3	131
1143	From Lithiumâ€Metal toward Anodeâ€Free Solidâ€State Batteries: Current Developments, Issues, and Challenges. Advanced Functional Materials, 2021, 31, 2106608.	7.8	98
1144	Fabrication of ZnSe/C Hollow Polyhedrons for Lithium Storage. Chemistry - A European Journal, 2021, 27, 14989-14995.	1.7	4
1145	Carbonitridation Pyrolysis Synthesis of Prussian Blue Analogâ€Derived Carbon Hybrids for Lithiumâ€Ion Batteries. Advanced Sustainable Systems, 2021, 5, 2100223.	2.7	9
1146	Mixed-metal MOF-derived Coâ€“Mnâ€“O hollow spheres as anodes for lithium storage. Materials Today Energy, 2021, 21, 100825.	2.5	3
1147	Research Progress on Coating Structure of Silicon Anode Materials for Lithiumâ€Ion Batteries. ChemSusChem, 2021, 14, 5135-5160.	3.6	38
1148	Low-sintering-temperature garnet oxides by conformal sintering-aid coating. Cell Reports Physical Science, 2021, 2, 100569.	2.8	28
1149	Carbon coating on metal oxide materials for electrochemical energy storage. Nanotechnology, 2021, 32, 502004.	1.3	10
1150	Unraveling the Role of Fluorinated Alkyl Carbonate Additives in Improving Cathode Performance in Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 46478-46487.	4.0	19
1151	Robust and high thermal-stable composite polymer electrolyte reinforced by PI nanofiber network. Nanotechnology, 2021, 32, 495401.	1.3	9
1152	Solution-processed perylene diimide-ethylene diamine cathodes for aqueous zinc ion batteries. Journal of Colloid and Interface Science, 2021, 598, 36-44.	5.0	22
1153	Parameter-independent error correction for potential measurements by reference electrode in lithium-ion batteries. Journal of Energy Chemistry, 2022, 67, 34-45.	7.1	5
1154	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
1155	Thermalâ€Responsive and Fireâ€Resistant Materials for Highâ€Safety Lithiumâ€Ion Batteries. Small, 2021, 17, e2103679.	5.2	35
1156	Pathway of in situ polymerization of 1,3-dioxolane in LiPF6 electrolyte on Li metal anode. Materials Today Energy, 2021, 21, 100730.	2.5	22
1157	Sodium Superionic Conductors (NASICONs) as Cathode Materials for Sodium-Ion Batteries. Electrochemical Energy Reviews, 2021, 4, 793-823.	13.1	59

#	Article	IF	Citations
1158	Rational Design of Effective Binders for LiFePO4 Cathodes. Polymers, 2021, 13, 3146.	2.0	9
1159	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
1160	The Bis(î· 6 â€benzene)lithium Cation: A Fundamental Mainâ€Group Organometallic Species. Angewandte Chemie - International Edition, 2021, 60, 22879-22884.	7.2	3
1161	Prognostics for lithium-ion batteries using a two-phase gamma degradation process model. Reliability Engineering and System Safety, 2021, 214, 107797.	5.1	34
1162	Tuning morphology, defects and functional group types in hard carbon via phosphorus doped for rapid sodium storage. Carbon, 2021, 183, 415-427.	5.4	38
1163	Germanium-modified silicon as anodes in Siâ€“Ge air batteries with enhanced properties. Journal of Physics and Chemistry of Solids, 2021, 157, 110226.	1.9	9
1164	A novel method for carbon removal and valuable metal recovery by incorporating steam into the reduction-roasting process of spent lithium-ion batteries. Waste Management, 2021, 134, 100-109.	3.7	36
1165	Direct visualization of lattice oxygen evolution and related electronic properties of Li1.2Ni0.2Mn0.6O2 cathode materials. Applied Surface Science, 2021, 563, 150334.	3.1	10
1166	A design of the cathode substrate for high-loading polysulfide cathodes in lean-electrolyte lithium-sulfur cells. Chemical Engineering Journal, 2021, 422, 130363.	6.6	61
1167	Lithiumâ€“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
1168	ConFlat cell for operando electrochemical X-ray studies of lithium-ion battery materials in commercially relevant conditions. Journal of Applied Crystallography, 2021, 54, 1416-1423.	1.9	1
1169	Waste-glass-derived silicon/CNTs composite with strong Si-C covalent bonding for advanced anode materials in lithium-ion batteries. Applied Surface Science, 2021, 563, 150280.	3.1	25
1170	Solid-state polymer electrolytes with polypropylene separator-reinforced sandwich structure for room-temperature lithium ion batteries. Journal of Membrane Science, 2021, 638, 119713.	4.1	24
1171	Unlocking fast and reversible sodium intercalation in NASICON Na4MnV(PO4)3 by fluorine substitution. Energy Storage Materials, 2021, 42, 307-316.	9.5	59
1172	Electric vehicles: To what extent are environmentally friendly and cost effective? â€“ Comparative study by european countries. Renewable and Sustainable Energy Reviews, 2021, 151, 111548.	8.2	33
1173	A region-specific raw material and lithium-ion battery criticality methodology with an assessment of NMC cathode technology. Applied Energy, 2021, 302, 117512.	5.1	19
1174	A thermoresponsive composite separator loaded with paraffin@SiO2 microparticles for safe and stable lithium batteries. Journal of Energy Chemistry, 2021, 62, 423-430.	7.1	36
1175	Self-assembly of carbon nanotubes on a hollow carbon polyhedron to enhance the potassium storage cycling stability of metal organic framework-derived metallic selenide anodes. Journal of Colloid and Interface Science, 2021, 601, 60-69.	5.0	21

#	Article	IF	Citations
1176	3D ordered macroporous amorphous Nb2O5 as anode material for high-performance sodium-ion batteries. Applied Surface Science, 2021, 567, 150862.	3.1	17
1177	Circumventing chemo-mechanical failure of Sn foil battery anode by grain refinement and elaborate porosity design. Journal of Energy Chemistry, 2021, 62, 477-484.	7.1	19
1178	Phthalocyanine-based covalent organic frameworks as novel anode materials for high-performance lithium-ion/sodium-ion batteries. Chemical Engineering Journal, 2021, 425, 131630.	6.6	45
1179	Oxygen vacancy engineering of carbon-encapsulated (Co,Mn)(Co,Mn)2O4 from metal-organic framework towards boosted lithium storage. Chemical Engineering Journal, 2021, 425, 130661.	6.6	29
1180	MnOx bound on oxidized multi-walled carbon nanotubes as anode for lithium-ion batteries. Chemical Engineering Journal, 2021, 426, 131335.	6.6	20
1181	Reduced graphene oxide supported ZIF-67 derived CoP enables high-performance potassium ion storage. Journal of Colloid and Interface Science, 2021, 604, 319-326.	5.0	32
1182	Cobalt-free concentration-gradient Li[Ni0.9Mn0.1]O2 cathode material for lithium-ion batteries. Journal of Alloys and Compounds, 2021, 885, 161005.	2.8	16
1183	Cyanide-metal framework derived porous MoO3-Fe2O3 hybrid micro- octahedrons as superior anode for lithium-ion batteries. Chemical Engineering Journal, 2021, 426, 130347.	6.6	24
1184	Boosting the lithium storage performance by synergistically coupling ultrafine heazlewoodite nanoparticle with N, S co-doped carbon. Journal of Colloid and Interface Science, 2021, 604, 368-377.	5.0	24
1185	NiCo2N hollow sphere with interconnected nanosheets shell: A potential anode material for high performance lithium-ion batteries. Chemical Engineering Journal, 2021, 425, 130607.	6.6	14
1186	In vacuo XPS investigation of surface engineering for lithium metal anodes with plasma treatment. Journal of Energy Chemistry, 2022, 66, 295-305.	7.1	21
1187	Engineering solid-electrolyte interface from aqueous deep-eutectic solvent to enhance the capacity and lifetime of self-assembled heterostructures of 1T-MoS2/graphene. Chemical Engineering Journal, 2022, 427, 130966.	6.6	16
1188	Selective separation and recovery of lithium, nickel, MnO2, and Co2O3 from LiNi0.5Mn0.3Co0.2O2 in spent battery. Chemosphere, 2022, 286, 131897.	4.2	6
1189	Silicon anode systems for lithium-ion batteries. , 2022, , 3-46.		2
1190	Co0.85Se hollow polyhedrons entangled by carbon nanotubes as a high-performance cathode for magnesium secondary batteries. Chemical Engineering Journal, 2022, 428, 129545.	6.6	22
1191	Highly reversible cycling with Dendrite-Free lithium deposition enabled by robust SEI layer with low charge transfer activation energy. Applied Surface Science, 2022, 572, 151439.	3.1	8
1192	Space and interface confinement effect of necklace-box structural FeS2/WS2 carbon nanofibers to enhance Na+ storage performance and electrochemical kinetics. Chemical Engineering Journal, 2022, 427, 131002.	6.6	37
1193	Constructing stable surface structures enabling fast charging for Li-rich layered oxide cathodes. Chemical Engineering Journal, 2022, 427, 132036.	6.6	37

#	Article	IF	Citations
1194	Stable Li storage in micron-sized SiO particles with rigid-flexible coating. Journal of Energy Chemistry, 2022, 64, 309-314.	7.1	19
1195	Ultrathin graphitic C3N4 lithiophilic nanosheets regulating Li+ flux for lithium metal batteries. Ionics, 2021, 27, 1069-1079.	1.2	20
1196	Coreâ˜shell GaP@C nanoparticles with a thin and uniform carbon coating as a promising anode material for rechargeable lithium-ion batteries. Dalton Transactions, 2021, 50, 1703-1711.	1.6	6
1197	Fabrication of a microcapsule extinguishing agent with a coreâ€“shell structure for lithium-ion battery fire safety. Materials Advances, 0, , .	2.6	14
1198	Smartphone power management based on ConvLSTM model. Neural Computing and Applications, 2021, 33, 8017-8029.	3.2	6
1199	Towards high-areal-capacity aqueous zincâ€“manganese batteries: promoting MnO₂ dissolution by redox mediators. Energy and Environmental Science, 2021, 14, 4418-4426.	15.6	104
1200	(S)TEM-EELS as an advanced characterization technique for lithium-ion batteries. Materials Chemistry Frontiers, 2021, 5, 5186-5193.	3.2	20
1201	Principle in developing novel fluorinated sulfone electrolyte for high voltage lithium-ion batteries. Energy and Environmental Science, 2021, 14, 3029-3034.	15.6	44
1202	Element substitution of a spinel LiMn₂O₄cathode. Journal of Materials Chemistry A, 2021, 9, 21532-21550.	5.2	51
1203	Ag coated 3D-Cu foam as a lithiophilic current collector for enabling Li₂S-based anode-free batteries. Chemical Communications, 2021, 57, 3708-3711.	2.2	21
1204	Coreâ€“Shell Structured Fe₇S₈@C Nanospheres as a High-Performance Anode Material for Potassium-Ion Batteries. Energy & Fuels, 2021, 35, 3490-3496.	2.5	19
1205	Recent Progress of Porous Materials in Lithiumâ€Metal Batteries. Small Structures, 2021, 2, 2000118.	6.9	61
1206	Heteroarchitecturing a novel three-dimensional hierarchical MoO₂/MoS₂/carbon electrode material for high-energy and long-life lithium storage. Journal of Materials Chemistry A, 2021, 9, 13001-13007.	5.2	26
1207	Crystalline chlorinated contorted hexabenzocoronene: a universal organic anode for advanced alkali-ion batteries. Journal of Materials Chemistry A, 2021, 9, 20607-20614.	5.2	5
1208	Electrochemical energy storage devices working in extreme conditions. Energy and Environmental Science, 2021, 14, 3323-3351.	15.6	140
1209	Potassium-ion batteries: outlook on present and future technologies. Energy and Environmental Science, 2021, 14, 2186-2243.	15.6	402
1210	Cracked bark-inspired ternary metallic sulfide (NiCoMnS4) nanostructure on carbon cloth for high-performance aqueous asymmetric supercapacitors. Science China Materials, 2021, 64, 1632-1641.	3.5	32
1211	Thermally modulated lithium iron phosphate batteries for mass-market electric vehicles. Nature Energy, 2021, 6, 176-185.	19.8	232

#	Article	IF	Citations
1212	The Sc2WxMo3â^'xO12 series as electrodes in alkali-ion batteries. CrystEngComm, 2021, 23, 3880-3891.	1.3	1
1213	Chapter 5. 2D Nanomaterial-based Polymer Composite Electrolytes for Lithium-based Batteries. Inorganic Materials Series, 2021, , 204-274.	0.5	2
1214	Simulation and optimization of silicon/carbon core-shell structures in lithium-ion batteries based on electrochemical-mechanical coupling model. Wuli Xuebao/Acta Physica Sinica, 2021, 70, 178201.	0.2	2
1215	Superior performance for lithium-ion battery with organic cathode and ionic liquid electrolyte. Journal of Energy Chemistry, 2021, 52, 28-32.	7.1	23
1216	Scalable synthesis of silicon nanoplate-decorated graphite for advanced lithium-ion battery anodes. Nanoscale, 2021, 13, 2820-2824.	2.8	12
1217	Fundamental Properties of Li+-Based Battery Anode. , 2021, , 59-77.		0
1218	Performance Degradation of Lithiumâ€Ion Batteries with LiNi 0.33 Co 0.33 Mn 0.33 O 2 Cathodes during Longâ€Term, Highâ€Temperature Storage: Behaviors and Mechanism. ChemElectroChem, 2021, 8, 403-410.	1.7	2
1219	Characterization of the interfacial Li-ion exchange process in a ceramicâ€“polymer composite by solid state NMR. Journal of Materials Chemistry A, 2021, 9, 17812-17820.	5.2	21
1220	Self-assembled cationic organic nanosheets: role of positional isomers in a guanidinium-core for efficient lithium-ion conduction. Chemical Science, 2021, 12, 13878-13887.	3.7	5
1221	Constructing Liâ€Rich Artificial SEI Layer in Alloyâ€“Polymer Composite Electrolyte to Achieve High Ionic Conductivity for Allâ€Solidâ€State Lithium Metal Batteries. Advanced Materials, 2021, 33, e2004711.	11.1	82
1222	High-Voltage â€œSingle-Crystalâ€•Cathode Materials for Lithium-Ion Batteries. Energy & Fuels, 2021, 35, 1918-1932.	2.5	93
1223	Insight into the microscopic morphology and electrochemical performance correlation mechanism upon calcination at different temperatures of a novel spherical cobalt-free 0.6Li2MnO3Â·0.4Li[Fe1/3Ni1/3Mn1/3]O2 cathode. Sustainable Energy and Fuels, 0, , .	2.5	4
1224	A novel zwitterionic polymer binder with enhanced ionic conductivity for water-processable LiFePO₄ cathodes. New Journal of Chemistry, 2021, 45, 11130-11135.	1.4	1
1225	Correlated biphasic features of improved rate capability upon Ga doping in LiNi_{0.6}Mn_{0.2}Co_{0.2}O₂. Journal of Materials Chemistry A, 2021, 9, 23323-23334.	5.2	11
1226	Investigating the Compatibility of TTMSP and FEC Electrolyte Additives for LiNi_{0.5}Mn_{0.3}Co_{0.2}O₂ (NMC)â€“Silicon Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 2662-2673.	4.0	45
1227	A Naphthalene Diimide Covalent Organic Framework: Comparison of Cathode Performance in Lithium-Ion Batteries with Amorphous Cross-linked and Linear Analogues, and Its Use in Aqueous Lithium-Ion Batteries. ACS Applied Energy Materials, 2021, 4, 350-356.	2.5	20
1228	In situ growth of polyimide nanoarrays on conductive carbon supports for high-rate charge storage and long-lived metal-free cathodes. Journal of Materials Chemistry A, 2021, 9, 10652-10660.	5.2	17
1229	Highly sensitive 2D organic field-effect transistors for the detection of lithium-ion battery electrolyte leakage. Chemical Communications, 2021, 57, 3464-3467.	2.2	5

#	Article	IF	Citations
1230	Pillared Mo₂TiC₂ MXene for high-power and long-life lithium and sodium-ion batteries. Nanoscale Advances, 2021, 3, 3145-3158.	2.2	46
1231	Review on Li Deposition in Working Batteries: From Nucleation to Early Growth. Advanced Materials, 2021, 33, e2004128.	11.1	205
1232	Re-examining rates of lithium-ion battery technology improvement and cost decline. Energy and Environmental Science, 2021, 14, 1635-1651.	15.6	211
1233	Understanding multi-scale battery degradation with a macro-to-nano zoom through its hierarchy. Journal of Materials Chemistry A, 2021, 9, 19886-19893.	5.2	14
1234	Advanced Electrode Materials in Lithium Batteries: Retrospect and Prospect. Energy Material Advances, 2021, 2021, .	4.7	179
1235	Intrinsic Structure Modification of Electrode Materials for Aqueous Metalâ€Ion and Metalâ€Air Batteries. Advanced Functional Materials, 2021, 31, 2006855.	7.8	36
1236	Layered Heterostructure Ionogel Electrolytes for Highâ€Performance Solidâ€State Lithiumâ€Ion Batteries. Advanced Materials, 2021, 33, e2007864.	11.1	51
1237	Oxygenâ€Deficient Blue TiO₂ for Ultrastable and Fast Lithium Storage. Advanced Energy Materials, 2020, 10, 1903107.	10.2	83
1238	Significantly Improved Cyclability of Conversionâ€Type Transition Metal Oxyfluoride Cathodes by Homologous Passivation Layer Reconstruction. Advanced Energy Materials, 2020, 10, 1903333.	10.2	33
1239	The Failure of Solid Electrolyte Interphase on Li Metal Anode: Structural Uniformity or Mechanical Strength?. Advanced Energy Materials, 2020, 10, 1903645.	10.2	182
1240	Unraveling the Mechanisms of Lithium Metal Plating/Stripping via In Situ/Operando Analytical Techniques. Advanced Energy Materials, 2021, 11, 2003004.	10.2	49
1241	Conductorâ€Free Anode of Transition Metal Dichalcogenide Nanosheets Selfâ€Assembled with Graft Polymer Liâ€Ion Channels. Advanced Energy Materials, 2021, 11, 2003243.	10.2	11
1242	Submicrospherical and Porous Bi 2 S 3 Protected by Nitrogenâ€Doped Carbon for Practical Anode Fabrication of Liâ€Ion Batteries. ChemNanoMat, 2020, 6, 598-603.	1.5	6
1243	Suitability of energy sources for automotive application â€“ A review. Applied Energy, 2020, 271, 115169.	5.1	68
1244	Constructing volcanic-like mesoporous hard carbon with fast electrochemical kinetics for potassium-ion batteries and hybrid capacitors. Applied Surface Science, 2020, 525, 146563.	3.1	22
1245	3D Graphene Materials from the Reduction of CO2. Accounts of Materials Research, 2021, 2, 48-58.	5.9	27
1246	New Concepts in Electrolytes. Chemical Reviews, 2020, 120, 6783-6819.	23.0	554
1247	Considering Critical Factors of Silicon/Graphite Anode Materials for Practical High-Energy Lithium-Ion Battery Applications. Energy & Fuels, 2021, 35, 944-964.	2.5	85

#	Article	IF	Citations
1248	Enhanced Electrochemical Performance and Thermal Stability of ZrO₂- and rGOâ€“ZrO₂-Coated Li[Ni_{0.8}Co_{0.1}Mn_{0.1}]O₂ Cathode Material for Li-Ion Batteries. ACS Applied Energy Materials, 2021, 4, 934-945.	2.5	14
1249	An inverse opal Cu₂Nb₃₄O₈₇ anode for high-performance Li⁺ storage. Chemical Communications, 2020, 56, 7321-7324.	2.2	18
1250	Accelerated lithium-ion conduction in covalent organic frameworks. Chemical Communications, 2020, 56, 10465-10468.	2.2	40
1251	Flexible metalâ€“gas batteries: a potential option for next-generation power accessories for wearable electronics. Energy and Environmental Science, 2020, 13, 1933-1970.	15.6	121
1252	Recent advances of hollow-structured sulfur cathodes for lithiumâ€“sulfur batteries. Materials Chemistry Frontiers, 2020, 4, 2517-2547.	3.2	19
1253	Ultrafine antimony (Sb) nanoparticles encapsulated into a carbon microfiber framework as an excellent LIB anode with a superlong life of more than 5000 cycles. Nanotechnology, 2020, 31, 215403.	1.3	8
1254	A first-principles study of Janus monolayer TiSSe and VSSe as anode materials in alkali metal ion batteries. Nanotechnology, 2021, 32, 025702.	1.3	16
1255	A novel solid state reaction route to the preparation of LiCoO2 using micro porous filter paper as scaffolds. Materials Research Express, 2020, 7, 065506.	0.8	7
1256	Glovebox-integrated XES and XAS station for in situ studies in tender x-ray region. Electronic Structure, 2020, 2, 047001.	1.0	4
1257	An Atomistic Perspective on the Effect of Strain Rate and Lithium Fraction on the Mechanical Behavior of Silicon Electrodes. Journal of Applied Mechanics, Transactions ASME, 2020, 87, .	1.1	9
1258	In Situ Analysis of NMCâˆ£graphite Li-Ion Batteries by Means of Complementary Electrochemical Methods. Journal of the Electrochemical Society, 2020, 167, 090528.	1.3	17
1259	Dual Effect of Structure and Hydration on Magnesium-Ion Insertion into Electrodeposited V2O5 Thin Films. Journal of the Electrochemical Society, 2020, 167, 110523.	1.3	7
1260	Lithium-Silicon Compounds as Electrode Material for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2020, 167, 130522.	1.3	8
1261	Reviewâ€”Open-Framework Structure Based Cathode Materials Coupled with Metallic Anodes for Rechargeable Multivalent Ion Batteries. Journal of the Electrochemical Society, 2020, 167, 160530.	1.3	4
1262	Electrochemical Dilatometry of Si-Bearing Electrodes: Dimensional Changes and Experiment Design. Journal of the Electrochemical Society, 2020, 167, 160551.	1.3	31
1263	Stable silicon electrodes with vinylidene fluoride polymer binder for lithium-ion batteries. Himia, Fizika Ta Tehnologia Poverhni, 2020, 11, 58-71.	0.2	5
1264	Recent Advances on Surface Modification of Li- and Mn-Rich Cathode Materials. Acta Chimica Sinica, 2019, 77, 1115.	0.5	9
1265	Unveiling the inherent functions of the rock-salt phase character and multi-dimensional structural engineering of the NiCoO₂anode for high-power and long-life lithium ion batteries. Journal of Materials Chemistry A, 2021, 9, 24971-24984.	5.2	11

#	Article	IF	Citations
1266	Recent progress in tackling Zn anode challenges for Zn ion batteries. Journal of Materials Chemistry A, 2021, 9, 25750-25772.	5.2	29
1267	Controllable Synthesis and Electrochemical Research of Zn₂TiO₄ Spheres as New Anode Materials for Lithium Ion Batteries. Advanced Sustainable Systems, 2021, 5, 2100149.	2.7	7
1268	A Review on Recent Advances for Boosting Initial Coulombic Efficiency of Silicon Anodic Lithium Ion batteries. Small, 2022, 18, e2102894.	5.2	60
1269	Toad egg-like bismuth nanoparticles encapsulated in an N-doped carbon microrod via supercritical acetone as anodes in lithium-ion batteries. Journal of Industrial and Engineering Chemistry, 2022, 106, 128-141.	2.9	7
1270	Revealing the Fast and Durable Na⁺ Insertion Reactions in a Layered Na₃Fe₃(PO₄)₄ Anode for Aqueous Na-Ion Batteries. ACS Materials Au, 2022, 2, 63-71.	2.6	7
1271	Graphene-Based Cathode Materials for Lithium-Ion Capacitors: A Review. Nanomaterials, 2021, 11, 2771.	1.9	18
1272	Reversible Cationâ€Mediated Anionic Redox in Defect Spinel Structure for High Power Batteries. Advanced Functional Materials, 2022, 32, 2108278.	7.8	3
1273	From Active Materials to Battery Cells: A Straightforward Tool to Determine Performance Metrics and Support Developments at an Applicationâ€Relevant Level. Advanced Energy Materials, 2021, 11, 2102647.	10.2	23
1274	Evaluation of Selected Ionic Liquids as Electrolytes for Silicon Anodes in Li-Ion Batteries. Journal of the Electrochemical Society, 2021, 168, 110506.	1.3	15
1275	Organophosphorus Hybrid Solid Electrolyte Interphase Layer Based on Li_xPO₄ Enables Uniform Lithium Deposition for Highâ€Performance Lithium Metal Batteries. Advanced Functional Materials, 2022, 32, 2107923.	7.8	27
1276	Grapheneâ€Supported Atomically Dispersed Metals as Bifunctional Catalysts for Nextâ€Generation Batteries Based on Conversion Reactions. Advanced Materials, 2022, 34, e2105812.	11.1	106
1277	Advanced Multifunctional Aqueous Rechargeable Batteries Design: From Materials and Devices to Systems. Advanced Materials, 2022, 34, e2104327.	11.1	78
1278	Role of Electrolyte in Overcoming the Challenges of LiNiO₂ Cathode in Lithium Batteries. ACS Energy Letters, 2021, 6, 3809-3816.	8.8	34
1279	Nb2O5 nanoparticles embedding in graphite hybrid as a high-rate and long-cycle anode for lithium-ion batteries. Rare Metals, 2022, 41, 814-821.	3.6	28
1280	Enhanced Electrochemical Performance of LiNi_{0.8}Co_{0.1}Mn_{0.1}O₂ with SiO₂ Surface Coating Via Homogeneous Precipitation. ChemElectroChem, 2021, 8, 4321-4327.	1.7	16
1281	Preparation and sodium ions storage performance of vanadium pentoxide/titanium dioxide composite. Ionics, 2021, 27, 5179.	1.2	1
1282	Green Recycling Methods to Treat Lithiumâ€Ion Batteries Eâ€Waste: A Circular Approach to Sustainability. Advanced Materials, 2022, 34, e2103346.	11.1	148
1283	A Quinone-Based Cathode Material for High-Performance Organic Lithium and Sodium Batteries. ACS Applied Energy Materials, 2021, 4, 12084-12090.	2.5	9

#	Article	IF	Citations
1284	Improved Na+ ion storage capacity of Na2O-Bi2O3 glass anode network: effect of TiO2 nanocrystals. Ionics, 2022, 28, 307.	1.2	2
1285	Rational design of mechanically robust Ni-rich cathode materials via concentration gradient strategy. Nature Communications, 2021, 12, 6024.	5.8	80
1286	Improving Fast and Safe Transfer of Lithium Ions in Solid-State Lithium Batteries by Porosity and Channel Structure of Polymer Electrolyte. ACS Applied Materials & Interfaces, 2021, 13, 48525-48535.	4.0	57
1287	Cobalt Coordinated Cyano Covalent-Organic Framework for High-Performance Potassium-Organic Batteries. ACS Applied Materials & Interfaces, 2021, 13, 48913-48922.	4.0	36
1288	Progress of Binder Structures in Silicon-Based Anodes for Advanced Lithium-Ion Batteries: A Mini Review. Frontiers in Chemistry, 2021, 9, 712225.	1.8	28
1289	Elucidating the Redox Behavior during Atomic Layer Deposition on Lithium-Ion Battery Cathode Materials. Chemistry of Materials, 2021, 33, 8079-8088.	3.2	10
1290	Computational Auxiliary for the Progress of Sodium-Ion Solid-State Electrolytes. ACS Nano, 2021, 15, 17232-17246.	7.3	42
1291	Multiscale Observations of Inhomogeneous Bilayer SEI Film on a Conversionâ€Alloying SnO 2 Anode. Small Methods, 2021, 5, 2101111.	4.6	8
1292	Kinetically-controlled formation of Fe2O3 nanoshells and its potential in Lithium-ion batteries. Chemical Engineering Journal, 2022, 433, 133188.	6.6	6
1293	Tunable Synthesis of 3D Niobium Oxynitride Nanosheets for Lithium-Ion Hybrid Capacitors with High Energy/Power Density. ACS Sustainable Chemistry and Engineering, 2021, 9, 14569-14578.	3.2	7
1294	How Temperature, Pressure, and Salt Concentration Affect Correlations in LiTFSI/EMIM-TFSI Electrolytes: A Molecular Dynamics Study. Journal of Physical Chemistry B, 2021, 125, 12292-12302.	1.2	5
1295	Investigation of Capacity Increase in Schiff-Base Networks as the Organic Anode for Lithium-Ion Batteries. ACS Applied Energy Materials, 2021, 4, 12882-12891.	2.5	16
1296	A Comparison of Solid Electrolyte Interphase Formation and Evolution on Highly Oriented Pyrolytic and Disordered Graphite Negative Electrodes in Lithiumâ€Ion Batteries. Small, 2021, 17, e2105292.	5.2	18
1297	Triggering anomalous capacity by nanoengineered ordered mesoporous structure for Co3O4 anode material in Li-ion rechargeable batteries. Applied Surface Science, 2022, 575, 151744.	3.1	8
1298	Achieving superior high-rate cyclability of LiNi0.5Mn1.5O4 cathode material via constructing stable CuO modification interface. Journal of Electroanalytical Chemistry, 2021, 903, 115825.	1.9	6
1299	Hierarchical core/shell titanium dioxide/molybdenum disulfide nanosheets coupled with carbon architecture for superior lithium/sodium ion storage. Journal of Colloid and Interface Science, 2022, 608, 2641-2649.	5.0	7
1300	Anode interface in all-solid-state lithium-metal batteries: Challenges and strategies. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 228805.	0.2	5
1301	Multiscale Modelling and Simulation of Advanced Battery Materials. SEMA SIMAI Springer Series, 2021, , 69-113.	0.4	2

#	Article	IF	Citations
1302	Selective Phosphorization Boosting High-Performance NiO/Ni2Co4P3 Microspheres as Anode Materials for Lithium Ion Batteries. Materials, 2021, 14, 24.	1.3	2
1304	Spherical Li4Ti5O12/NiO Composite With Enhanced Capacity and Rate Performance as Anode Material for Lithium-Ion Batteries. Frontiers in Chemistry, 2020, 8, 626388.	1.8	4
1305	Effects of Lithium Plating Morphology on Thermal Safety for Lithium Ion Batteries. , 0, , .		0
1306	Study of the Test Conditions and Thermostability of an Overcharge Test for Large Capacity Lithium-Ion Batteries. Journal of Electrochemical Energy Conversion and Storage, 2021, 18, .	1.1	1
1307	MOFs and their derivatives as Sn-based anode materials for lithium/sodium ion batteries. Journal of Materials Chemistry A, 2021, 9, 27234-27251.	5.2	33
1308	In-situ construction of edge site-enriched VS4/graphene hybrids toward high-performance lithium storage. Chemical Engineering Journal, 2022, 430, 133044.	6.6	6
1309	Application of expanded graphite-based materials for rechargeable batteries beyond lithium-ions. Nanoscale, 2021, 13, 19291-19305.	2.8	29
1310	Direct recycling technologies of cathode in spent lithium-ion batteries. Clean Technologies and Recycling, 2021, 1, 124-151.	1.3	29
1311	Mechanochemical synthesis of sodium carboxylates as anode materials in sodium ion batteries. Journal of Materials Chemistry A, 2021, 9, 27361-27369.	5.2	7
1312	Facile synthesis and electrochemical properties of Na-rich anti-perovskite solid electrolytes. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 228201-228201.	0.2	2
1313	Catechol-containing Polymers for Electrochemical Energy Storage. RSC Polymer Chemistry Series, 2020, , 245-287.	0.1	0
1314	Densely vertical-grown NiFe hydroxide nanosheets on a 3D nickel skeleton as a dendrite-free lithium anode. Chemical Communications, 2021, 57, 12988-12991.	2.2	0
1315	Polymer-templated mesoporous lithium titanate microspheres for high-performance lithium batteries. Materials Advances, 2022, 3, 362-372.	2.6	5
1317	An experimental validation of the adoption of dc-dc converters for the impedance measurement in Li-Ion batteries. , 2021, , .		1
1318	Tailoring Co3d and O2p Band Centers to Inhibit Oxygen Escape for Stable 4.6â€…V LiCoO₂ Cathodes. Angewandte Chemie - International Edition, 2021, 60, 27102-27112.	7.2	89
1319	Nickel Fluoride Nanorods as Anode Materials for Li-Ion Hybrid Capacitors. ACS Applied Nano Materials, 2021, 4, 11601-11610.	2.4	8
1320	Tailoring Co3d and O2p Band Centers to Inhibit Oxygen Escape for Stable 4.6â€…V LiCoO₂ Cathodes. Angewandte Chemie, 2021, 133, 27308-27318.	1.6	20
1321	Wide-temperature rechargeable Li metal batteries enabled by an in-situ fabricated composite gel electrolyte with a hierarchical structure. Fundamental Research, 2022, 2, 611-618.	1.6	3

#	Article	IF	Citations
1322	Emerging Characterization Techniques for Electrode Interfaces in Sulfideâ€Based Allâ€Solidâ€State Lithium Batteries. Small Structures, 2022, 3, 2100146.	6.9	21
1323	Ultrasmall antimony nanodots embedded in carbon nanowires with three-dimensional porous structure for high-performance potassium dual-ion batteries. Chemical Engineering Journal, 2022, 431, 133444.	6.6	43
1324	Charge Storage Behavior of Carbon Nanoparticles toward Alkali Metal Ions at Fast-Charging Rates. ACS Applied Energy Materials, 0, , .	2.5	2
1325	In Situ Room-Temperature Cross-Linked Highly Branched Biopolymeric Binder Based on the Dielsâ€“Alder Reaction for High-Performance Silicon Anodes in Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 56095-56108.	4.0	11
1327	Template-free synthesis of Co-based oxides nanotubes as potential anodes for lithium-ion batteries. Journal of Alloys and Compounds, 2022, 895, 162611.	2.8	21
1328	Challenges and development of lithium-ion batteries for low temperature environments. ETransportation, 2022, 11, 100145.	6.8	108
1329	3D Printing for Solidâ€State Energy Storage. Small Methods, 2021, 5, e2100877.	4.6	24
1330	Lowering the operating temperature of PEO-based solid-state lithium batteries via inorganic hybridization. Ionics, 2022, 28, 779-788.	1.2	2
1331	Advances and Prospects of Dualâ€Ion Batteries. Advanced Energy Materials, 2021, 11, 2102498.	10.2	73
1333	Nickel-based Cathode for Li-ion Batteries. , 2020, , 204-226.		0
1334	High-Performance Electrolytes for Batteries. , 2020, , 479-506.		0
1335	Unraveling divalent pillar effects for the prolonged cycling of high-energy-density cathodes. Journal of Materials Chemistry A, 2021, 9, 26820-26828.	5.2	5
1336	Nano-spatially stable Si2O composite and its balanced electrochemical performance for Li rechargeable batteries. Journal of Power Sources, 2022, 519, 230777.	4.0	4
1337	Toward stable lithium-ion batteries: Accelerating the transfer and alloying reactions of Sn-based anodes via coordination atom regulation and carbon hybridization. Journal of Power Sources, 2022, 519, 230778.	4.0	16
1338	Recent progress of magnetic field application in lithium-based batteries. Nano Energy, 2022, 92, 106703.	8.2	55
1339	Dimensionality effect of conductive carbon fillers in LiNi1/3Mn1/3Co1/3O2 cathode. Carbon, 2022, 188, 114-125.	5.4	10
1340	Boosting the Electrochemical Performance of a Spinel Cathode with the In Situ Transformed Allogenic Li-Rich Layered Phase. Langmuir, 2021, 37, 13941-13951.	1.6	3
1341	Electrode-to-electrode monolithic integration for high-voltage bipolar solid-state batteries based on plastic-crystal polymer electrolyte. Chemical Engineering Journal, 2022, 433, 133753.	6.6	7

#	Article	IF	Citations
1342	Electrodeâ€“Electrolyte Interactions in an Aqueous Aluminumâ€“Carbon Rechargeable Battery System. Nanomaterials, 2021, 11, 3235.	1.9	4
1343	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
1344	An Adsorptionâ€Insertion Mechanism of Potassium in Soft Carbon. Small, 2022, 18, e2105275.	5.2	14
1345	A 2D covalent organic framework with ultra-large interlayer distance as high-rate anode material for lithium-ion batteries. Nano Research, 2022, 15, 9779-9784.	5.8	27
1346	Easily Obtaining Excellent Performance Highâ€voltage LiCoO₂ via Pr₆O₁₁ Modification. Energy and Environmental Materials, 2023, 6, .	7.3	7
1347	Electrostatic adsorption facilitating dual-layer coating for stabilized cathode-electrolyte interphases and boosted lithium intercalation thereof in LiNi0.8Co0.1Mn0.1O2 cathode. Applied Surface Science, 2022, 577, 151716.	3.1	6
1348	Rapid Microwaveâ€Assisted Synthesis and Electrode Optimization of Organic Anode Materials in Sodiumâ€Ion Batteries. Small Methods, 2021, 5, e2101016.	4.6	7
1349	Cathode materials for high-performance potassium-ion batteries. Cell Reports Physical Science, 2021, 2, 100657.	2.8	9
1350	Rational modulation of emerging MXene materials for zincâ€ion storage. , 2022, 4, 60-76.		46
1351	Modulating electronic structure of metal-organic frameworks derived zinc manganates by oxygen vacancies for superior lithium storage. Chemical Engineering Journal, 2022, 433, 133770.	6.6	15
1352	Unlocking Sustainable Na-Ion Batteries into Industry. ACS Energy Letters, 2021, 6, 4115-4117.	8.8	76
1353	Facile and efficient synthesis of binary FeOOH/Fe2O3 composite as a high-performance anode material for lithium-ion batteries. Journal of Alloys and Compounds, 2022, 896, 163026.	2.8	22
1354	An Environmentally Benign Electrolyte for High Energy Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2021, 13, 58229-58237.	4.0	5
1355	In Situ Visualization of Li-Whisker with Grating-Interferometry-Based Tricontrast X-ray Microtomography. , 2021, 3, 1786-1792.		8
1356	A self-optimized dual zinc/copper-electrolyte anodic interfaces by mechanical rolling toward zinc ion batteries with high capacity and long cycle life. Materials Today Energy, 2022, 23, 100897.	2.5	6
1357	Uncertain Future of American Lithium: A Perspective until 2050. Environmental Science & Technology, 2021, 55, 16184-16194.	4.6	19
1358	Lithiumâ€“Sulfur Batteries Meet Electrospinning: Recent Advances and the Key Parameters for High Gravimetric and Volume Energy Density. Advanced Science, 2022, 9, e2103879.	5.6	98
1359	Advanced cathode for dual-ion batteries: Waste-to-wealth reuse of spent graphite from lithium-ion batteries. EScience, 2022, 2, 95-101.	25.0	64

#	Article	IF	Citations
1360	Rational Design of Tungsten Selenide @ Nâ€Doped Carbon Nanotube for Highâ€Stable Potassiumâ€Ion Batteries. Small, 2022, 18, e2104363.	5.2	20
1361	Bismuth nanorods confined in hollow carbon structures for high performance sodium- and potassium-ion batteries. Journal of Energy Chemistry, 2022, 67, 787-796.	7.1	28
1362	Activating commercial Al pellets by replacing the passivation layer for high-performance half/full Li-ion batteries. Chemical Engineering Journal, 2022, 433, 133572.	6.6	7
1363	Optimizing quasi-solid-state sodium storage performance of Na3V2(PO4)2F2.5O0.5 cathode by structural design plus nitrogen doping. Chemical Engineering Journal, 2022, 433, 133557.	6.6	6
1364	Understanding Solvation Behavior of the Saturated Electrolytes with Small/Wide-Angle X-ray Scattering and Raman Spectroscopy. Energy & Fuels, 2021, 35, 19849-19855.	2.5	17
1365	Recent advances in LiV3O8 as anode material for aqueous lithium-ion batteries: Syntheses, modifications, and perspectives. Journal of Alloys and Compounds, 2022, 897, 163065.	2.8	13
1366	Synthesis and Performance Optimization of Manganeseâ€based Cathode Materials for Zincâ€Ion Batteries. Batteries and Supercaps, 2022, 5, .	2.4	10
1367	Preparation and electrochemical performances of ZnMoO4-ZnFe2O4 composite electrode materials. Ionics, 2022, 28, 1285-1294.	1.2	4
1368	A non-flammable hydrous organic electrolyte for sustainable zinc batteries. Nature Sustainability, 2022, 5, 205-213.	11.5	277
1369	Highly Reversible Cycling of Znâ€MnO‹sub›2‹/sub› Batteries Integrated with Acidâ€Treated Carbon Supportive Layer. Small Methods, 2022, 6, e2101060.	4.6	7
1370	3D Printed Multilayer Graphite@SiO Structural Anode for Highâ€Loading Lithiumâ€Ion Battery. Batteries and Supercaps, 2022, 5, .	2.4	5
1371	Alkali and alkaline-earth metal ionâ€“solvent co-intercalation reactions in nonaqueous rechargeable batteries. Chemical Science, 2021, 12, 15206-15218.	3.7	6
1372	Determinants of lithium-ion battery technology cost decline. Energy and Environmental Science, 2021, 14, 6074-6098.	15.6	46
1373	One-dimensional polymer-derived ceramic nanowires with electrocatalytically active metallic silicide tips as cathode catalysts for Znâ€“air batteries. RSC Advances, 2021, 11, 39707-39717.	1.7	8
1374	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
1375	Surface Spinel-Coated and Polyanion-Doped Co-Free Li-Rich Layered Oxide Cathode for High-Performance Lithium-Ion Batteries. Industrial & Engineering Chemistry Research, 2022, 61, 7464-7473.	1.8	13
1376	Emerging Era of Electrolyte Solvation Structure and Interfacial Model in Batteries. ACS Energy Letters, 2022, 7, 490-513.	8.8	236
1377	Challenge-driven printing strategies toward high-performance solid-state lithium batteries. Journal of Materials Chemistry A, 2022, 10, 2601-2617.	5.2	3

#	Article	IF	Citations
1378	Facile Preparation of Magnetite-Incorporated Polyacrylonitrile-Derived Carbons for Li-Ion Battery Anodes. ACS Applied Energy Materials, 2022, 5, 1262-1270.	2.5	4
1379	Calorimetric study of skutterudite (CoAs2.92) and heazlewoodite (Ni3S2). American Mineralogist, 2022, 107, 2219-2225.	0.9	1
1380	High Nickel and No Cobaltâ”€The Pursuit of Next-Generation Layered Oxide Cathodes. ACS Applied Materials & Interfaces, 2022, 14, 23056-23065.	4.0	30
1381	Efficient recovery and regeneration of waste graphite through microwave stripping from spent batteries anode for high-performance lithium-ion batteries. Journal of Cleaner Production, 2022, 333, 130197.	4.6	32
1383	Preparation of Hollow Coreâ€“Shell Fe3O4/Nitrogen-Doped Carbon Nanocomposites for Lithium-Ion Batteries. Molecules, 2022, 27, 396.	1.7	11
1384	Critical roles of reduced graphene oxide in the electrochemical performance of silicon/reduced graphene oxide hybrids for high rate capable lithium-ion battery anodes. Electrochimica Acta, 2022, 404, 139753.	2.6	4
1385	Tuning interface stability of nickel-rich LiNi0.9Co0.05Mn0.05O2 cathode via a novel bis(vinylsulphonyl)methane additive. Journal of Power Sources, 2022, 521, 230917.	4.0	18
1386	Tailoring a multifunctional, boron and fluoride-enriched solid-electrolyte interphase precursor towards high-rate and stable-cycling silicon anodes. Nano Energy, 2022, 93, 106811.	8.2	33
1387	Correlating the dispersion of Li@Mn6 superstructure units with the oxygen activation in Li-rich layered cathode. Energy Storage Materials, 2022, 45, 422-431.	9.5	23
1388	Pseudocapacitive TiNb2O7/reduced graphene oxide nanocomposite for highâ€“rate lithium ion hybrid capacitors. Journal of Colloid and Interface Science, 2022, 610, 385-394.	5.0	11
1389	Multi-strategy synergistic Li-rich layered oxides with fluorine-doping and surface coating of oxygen vacancy bearing CeO2 to achieve excellent cycling stability. Chemical Engineering Journal, 2022, 431, 133799.	6.6	35
1390	Silk fibroin and sericin polymer blends for sustainable battery separators. Journal of Colloid and Interface Science, 2022, 611, 366-376.	5.0	19
1391	Two-dimentional MoSe2/chitosan-derived nitrogen-doped carbon composite enabling stable sodium/potassium storage. Journal of Physics and Chemistry of Solids, 2022, 163, 110573.	1.9	7
1392	Regulating lithium metal interface using seed-coating layer for high-power batteries. Chemical Engineering Journal, 2022, 433, 134380.	6.6	12
1393	Facile Synthesis of Hollow CuO/MWCNT Composites by InfiltrationReduction-Oxidation Method as High Performance Lithium-ion Battery Anodes. Journal of Electrochemical Science and Technology, 0, , .	0.9	0
1394	Dunaliella Salinas based Snâ€“carbon anode for high-performance Li-ion batteries. RSC Advances, 2021, 11, 38796-38803.	1.7	3
1395	Influence of Crystal Disorder in MoS. Australian Journal of Chemistry, 2021, 74, 819-825.	0.5	2
1396	Electrochemical and thermal characteristics of aging lithium-ion cells after long-term cycling at abusive-temperature environments. Chemical Engineering Research and Design, 2022, 159, 1215-1223.	2.7	23

#	Article	IF	Citations
1397	Bamboo Weaving Inspired Design of a Carbonaceous Electrode with Exceptionally High Volumetric Capacity. Nano Letters, 2022, 22, 954-962.	4.5	0
1398	Sensitive sensors based on bilayer organic field-effect transistors for detecting lithium-ion battery electrolyte leakage. Science China Materials, 2022, 65, 1187-1194.	3.5	9
1399	Potential use of magnesium industrial waste for synthesis of Li and Mg co-doped LiMn2O4 nanoparticles as cathode material for Li-ion batteries: Effect of sintering temperature. Nano Research, 2022, 15, 4500-4516.	5.8	7
1400	Mechanisms and applications of layer/spinel phase transition in Li- and Mn-rich cathodes for lithium-ion batteries. Rare Metals, 2022, 41, 1456-1476.	3.6	41
1401	Si-based polymer-derived ceramics for energy conversion and storage. Journal of Advanced Ceramics, 2022, 11, 197-246.	8.9	55
1402	Evidence of Morphological Change in Sulfur Cathodes upon Irradiation by Synchrotron X-rays. ACS Energy Letters, 2022, 7, 577-582.	8.8	7
1403	Flux upcycling of spent NMC 111 to nickel-rich NMC cathodes in reciprocal ternary molten salts. IScience, 2022, 25, 103801.	1.9	20
1404	Learn from nature: Bioâ€inspired structure design for lithiumâ€ion batteries. EcoMat, 2022, 4, .	6.8	8
1405	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
1406	Exploration of NaLiTi₃O₇ Decorated with Biocarbon as Anode Material for Lithium and Sodium Ion Batteries. Energy & Fuels, 2022, 36, 1081-1090.	2.5	5
1407	Understanding anion-redox reactions in cathode materials of lithium-ion batteries through in situ characterization techniques: a review. Nanotechnology, 2022, 33, 182003.	1.3	11
1408	Achieving Uniform Li Plating/Stripping at Ultrahigh Currents and Capacities by Optimizing 3D Nucleation Sites and Li₂Seâ€Enriched SEI. Advanced Science, 2022, 9, e2104689.	5.6	77
1409	In Situ Polymerized and Imidized Si@Polyimide Microcapsules with Flexible Solidâ€Electrolyte Interphase and Enhanced Electrochemical Activity for Liâ€Storage. ChemElectroChem, 2022, 9, .	1.7	5
1410	Orthoquinoneâ€“Based Covalent Organic Frameworks with Ordered Channel Structures for Ultrahigh Performance Aqueous Zincâ€“Organic Batteries. Angewandte Chemie, 2022, 134, .	1.6	29
1411	Potentials and Prerequisites on the Way to a Circular Economy: A Value Chain Perspective on Batteries and Buildings. Sustainability, 2022, 14, 956.	1.6	4
1412	MXene/Organics Heterostructures Enable Ultrastable and High-Rate Lithium/Sodium Batteries. ACS Applied Materials & Interfaces, 2022, 14, 2979-2988.	4.0	46
1413	Optimization of structural expansion and contraction for TiS₂ by controlling the electrochemical window of intercalation/delithiation. Materials Advances, 2022, 3, 1652-1659.	2.6	2
1414	Suppressing electrolyte-lithium metal reactivity via Li+-desolvation in uniform nano-porous separator. Nature Communications, 2022, 13, 172.	5.8	83

#	Article	IF	Citations
1415	Microstructured nitrogen-doped graphene-Sn composites as a negative electrode for high performance lithium-ion hybrid supercapacitors. Sustainable Energy and Fuels, 2022, 6, 700-710.	2.5	7
1416	Metalâ€“organic-framework derived Co@CN modified horizontally aligned graphene oxide array as free-standing anode for lithium-ion batteries. Journal of Materials Chemistry A, 2022, 10, 699-706.	5.2	17
1417	Photoinduced Rechargeable Lithium-Ion Battery. ACS Applied Materials & Interfaces, 2022, 14, 4071-4078.	4.0	37
1418	Al doped Ni-Co layered double hydroxides with surface-sulphuration for highly stable flexible supercapacitors. Journal of Colloid and Interface Science, 2022, 615, 173-183.	5.0	19
1419	Highly Fluorinated Al-Centered Lithium Salt Boosting the Interfacial Compatibility of Li-Metal Batteries. ACS Energy Letters, 2022, 7, 591-598.	8.8	34
1420	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
1421	PVP-assisted Self-assembling of lacelike TiP2O7 encapsulated in carbon bracket for advanced Lithium-ion storage. Applied Surface Science, 2022, 585, 152514.	3.1	9
1422	3D structural lithium alginate-based gel polymer electrolytes with superior high-rate long cycling performance for high-energy lithium metal batteries. Journal of Materials Chemistry A, 2022, 10, 707-718.	5.2	28
1423	SnSe/Cu₂SnSe₃ Heterojunction Structure with High Initial Coulombic Efficiency for Lithium-Ion Battery Anodes. Key Engineering Materials, 0, 905, 135-141.	0.4	1
1424	A small molecule organic compound applied as an advanced anode material for lithium-ion batteries. Chemical Communications, 2022, 58, 697-700.	2.2	8
1425	POM-based metal organic frameworks with a woven fabric structure for lithium storage. CrystEngComm, 2022, 24, 1279-1284.	1.3	2
1426	MXenes as an emerging class of two-dimensional materials for advanced energy storage devices. Journal of Materials Chemistry A, 2022, 10, 4558-4584.	5.2	33
1427	Nitrogen, Oxygenâ€Codoped Vertical Graphene Arrays Coated 3D Flexible Carbon Nanofibers with High Silicon Content as an Ultrastable Anode for Superior Lithium Storage. Advanced Science, 2022, 9, e2104685.	5.6	42
1428	Adjusting Oxygen Redox Reaction and Structural Stability of Li- and Mn-Rich Cathodes by Zr-Ti Dual-Doping. ACS Applied Materials & Interfaces, 2022, 14, 5308-5317.	4.0	21
1429	Orthoquinoneâ€“Based Covalent Organic Frameworks with Ordered Channel Structures for Ultrahigh Performance Aqueous Zincâ€“Organic Batteries. Angewandte Chemie - International Edition, 2022, 61, .	7.2	124
1430	Toward Practical Highâ€Energy and Highâ€Power Lithium Battery Anodes: Present and Future. Advanced Science, 2022, 9, e2105213.	5.6	84
1431	Beyond Li-Ion Batteries: Future of Sustainable Large Scale Energy Storage System. , 2022, , .		0
1432	Diffusion-Induced Stress in Commercial Graphite Electrodes during Multiple Cycles Measured by an In Situ Method. Micromachines, 2022, 13, 142.	1.4	7

#	Article	IF	Citations
1434	Electrochemical performance of graphite/silicon/pitch anode composite prepared by metal etching process. Korean Journal of Chemical Engineering, 2022, 39, 928-933.	1.2	5
1435	Application and research of current collector for lithium-sulfur battery. Ionics, 2022, 28, 1713-1738.	1.2	6
1436	Lithium-ion batteries under pulsed current operation to stabilize future grids. Cell Reports Physical Science, 2022, 3, 100708.	2.8	19
1437	In situ construction of redox-active covalent organic frameworks/carbon nanotube composites as anodes for lithium-ion batteries. Journal of Materials Chemistry A, 2022, 10, 3989-3995.	5.2	41
1438	New insights on MXene and its advanced hybrid materials for lithium-ion batteries. Sustainable Energy and Fuels, 2022, 6, 971-1013.	2.5	18
1439	Recent Progress on Asymmetric Carbon- and Silica-Based Nanomaterials: From Synthetic Strategies to Their Applications. Nano-Micro Letters, 2022, 14, 45.	14.4	26
1440	Rational Design of Highâ€Performance Nickelâ€Sulfur Nanocomposites by the Electroless Plating Method for Electrochemical Lithiumâ€Sulfur Battery Cathodes. Batteries and Supercaps, 2022, 5, .	2.4	22
1441	High-temperature solid-phase synthesis of lithium iron phosphate using polyethylene glycol grafted carbon nanotubes as the carbon source for rate-type lithium-ion batteries. Journal of Electroanalytical Chemistry, 2022, 907, 116049.	1.9	14
1442	Bimetallic Selenide Decorated Nanoreactor Synergizing Confinement and Electrocatalysis of Se Species for 3D-Printed High-Loading Kâ€“Se Batteries. ACS Nano, 2022, 16, 3373-3382.	7.3	25
1443	Ionically Conductive Tunnels in hâ€WO₃ Enable Highâ€Rate NH₄⁺ Storage. Advanced Science, 2022, 9, e2105158.	5.6	46
1444	Reduced Graphene Oxide Aerogels with Functionalization-Mediated Disordered Stacking for Sodium-Ion Batteries. Batteries, 2022, 8, 12.	2.1	5
1445	Nanoâ€Sized Niobium Tungsten Oxide Anode for Advanced Fastâ€Charge Lithiumâ€Ion Batteries. Small, 2022, 18, e2107365.	5.2	26
1446	Improving the electrochemical performance of silicon materials by SnO2 through structural design and conductivity. Applied Surface Science, 2022, 581, 152230.	3.1	6
1447	Two-dimensional square metal organic framework as promising cathode material for lithium-sulfur battery with high theoretical energy density. Journal of Colloid and Interface Science, 2022, 613, 435-446.	5.0	11
1448	Plating current density distribution of lithium metal anodes in pouch cells. Journal of Energy Chemistry, 2022, 69, 70-75.	7.1	15
1449	é",ç¡«ç"µæ±ç»¼å•æ€§èƒ½åœ¨æ‰‡ç–•¥. Chinese Science Bulletin, 2022, , .	0.4	1
1450	Cubic MnV₂O₄ fabricated through a facile solâ€“gel process as an anode material for lithium-ion batteries: morphology and performance evolution. Dalton Transactions, 2022, 51, 4644-4652.	1.6	3
1451	EDL structure of ionic liquid-MXene-based supercapacitor and hydrogen bond role on the interface: a molecular dynamics simulation investigation. Physical Chemistry Chemical Physics, 2022, 24, 5903-5913.	1.3	15

#	Article	IF	Citations
1452	Transition metal carbonate anodes for Li-ion battery: fundamentals, synthesis and modification. Journal of Energy Chemistry, 2022, 70, 95-120.	7.1	12
1453	Synthetic Methodologies for Siâ€Containing Liâ€Storage Electrode Materials. Advanced Energy and Sustainability Research, 2022, 3, .	2.8	6
1454	Application of Advanced Vibrational Spectroscopy in Revealing Critical Chemical Processes and Phenomena of Electrochemical Energy Storage and Conversion. ACS Applied Materials & Interfaces, 2022, 14, 23033-23055.	4.0	12
1455	Onâ€Chip Batteries for Dustâ€Sized Computers. Advanced Energy Materials, 2022, 12, .	10.2	36
1456	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
1457	Effect of Synthesis Processes on the Microstructure and Electrochemical Properties of LiMnPO4 Cathode Material. Industrial & Engineering Chemistry Research, 0, , .	1.8	4
1458	An MXeneâ€Based Metal Anode with Stepped Sodiophilic Gradient Structure Enables a Large Current Density for Rechargeable Naâ€“O₂ Batteries. Advanced Materials, 2022, 34, e2106565.	11.1	35
1459	Co Fe hydroxyoxalate nanosheets chemically bonded with reduced graphene oxide as High-performance anode for lithium-ion batteries. Applied Surface Science, 2022, 585, 152763.	3.1	11
1460	WO3-x@W2N heterogeneous nanorods cross-linked in carbon nanosheets for electrochemical potassium storage. Chemical Engineering Journal, 2022, 435, 135188.	6.6	10
1461	Accessing the solid electrolyte interphase on silicon anodes for lithium-ion batteries in-situ through transmission soft X-ray absorption spectroscopy. Materials Today Advances, 2022, 14, 100215.	2.5	18
1462	A Reanalysis of the Diverse Sodium Species in Carbon Anodes for Sodium Ion Batteries: A Thermodynamic View. Advanced Energy Materials, 2021, 11, .	10.2	32
1463	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
1464	Design of high-performance antimony/MXene hybrid electrodes for sodium-ion batteries. Journal of Materials Chemistry A, 2022, 10, 10569-10585.	5.2	12
1465	Poly(viologen halide)s: both cationic main-chain and counter anions are active for high-performance organic cathodes. Journal of Materials Chemistry A, 2022, 10, 10026-10032.	5.2	11
1466	Lithium insertion in hard carbon as observed by ⁷Li NMR and XRD. The local and mesoscopic order and their relevance for lithium storage and diffusion. Journal of Materials Chemistry A, 2022, 10, 10069-10082.	5.2	6
1467	A novel cyclopentyl methyl ether electrolyte solvent with a unique solvation structure for subzero (â^'40 Â°C) lithium-ion batteries. Chemical Communications, 2022, 58, 5124-5127.	2.2	11
1468	The presolvation strategy of Li₂S cathodes for lithiumâ€“sulfur batteries: a review. Journal of Materials Chemistry A, 2022, 10, 10326-10341.	5.2	17
1469	Exploring a novel two-dimensional metallic Y₄C₃ sheet applied as an anode material for sodium-ion batteries. Physical Chemistry Chemical Physics, 2022, 24, 8859-8866.	1.3	7

#	Article	IF	Citations
1470	Ion transport in composite polymer electrolytes. Materials Advances, 2022, 3, 3809-3819.	2.6	22
1471	Synthesis of P-doped NiS as an electrode material for supercapacitors with enhanced rate capability and cycling stability. New Journal of Chemistry, 2022, 46, 6461-6469.	1.4	5
1472	Multicoated composites of nano silicon and graphene nanoplatelets as anodes in Li-ion batteries. Materials Advances, 0, , .	2.6	1
1473	Intercalation of organics into layered structures enables superior interface compatibility and fast charge diffusion for dendrite-free Zn anodes. Energy and Environmental Science, 2022, 15, 1682-1693.	15.6	105
1474	Multifunctional integrated VN/V₂O₅ heterostructure sulfur hosts for advanced lithiumâ€“sulfur batteries. Nanoscale, 2022, 14, 4557-4565.	2.8	4
1475	Ultra-stable potassium storage and hybrid mechanism of perovskite fluoride KFeF₃/rGO. Nanoscale, 2022, 14, 5347-5355.	2.8	4
1476	Synergistic Effect of Lithium Salts with Fillers and Solvents in Composite Electrolytes for Superior Room-Temperature Solid-State Lithium Batteries. ACS Applied Energy Materials, 2022, 5, 2484-2494.	2.5	36
1477	Importance of Chemical Distortion on the Hysteretic Oxygen Capacity in Li-Excess Layered Oxides. ACS Applied Materials & Interfaces, 2022, 14, 9057-9065.	4.0	5
1478	CHAIN: unlocking informatics-aided design of Li metal anode from materials to applications. Rare Metals, 2022, 41, 1477-1489.	3.6	42
1479	A Ternary Molten Salt Approach for Direct Regeneration of LiNi_{0.5}Co_{0.2}Mn_{0.3}O₂ Cathode. Small, 2022, 18, e2106719.	5.2	41
1480	MXenes for metal-ion and metal-sulfur batteries: Synthesis, properties, and electrochemistry. Materials Reports Energy, 2022, 2, 100077.	1.7	1
1481	Utilizing Biomass-Based Graphene Oxideâ€“Polyanilineâ€“Ag Electrodes in Microbial Fuel Cells to Boost Energy Generation and Heavy Metal Removal. Polymers, 2022, 14, 845.	2.0	43
1482	Outsideâ€In Nanostructure Fabricated on LiCoO₂ Surface for Highâ€Voltage Lithiumâ€Ion Batteries. Advanced Science, 2022, 9, e2104841.	5.6	51
1483	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
1484	In Operando Neutron Scattering Multipleâ€Scale Studies of Lithiumâ€Ion Batteries. Small, 2022, 18, e2107491.	5.2	11
1485	2D Materials for Allâ€Solidâ€State Lithium Batteries. Advanced Materials, 2022, 34, e2108079.	11.1	45
1487	Stable Twoâ€dimensional Nanoconfined Ionic Liquids with Highly Efficient Ionic Conductivity. Small, 2022, 18, e2108026.	5.2	18
1488	Cobaltâ€Free Cathode Materials: Families and their Prospects. Advanced Energy Materials, 2022, 12, .	10.2	77

#	Article	IF	Citations
1489	Dual Modulated SiO Particles by Graphene Cord and Si/SiO₂ Composite for Highâ€Performance Lithiumâ€Ion Battery Anodes. Advanced Materials Interfaces, 2022, 9, .	1.9	17
1490	Sodium effects on the electronic and structural properties of porous silicon for energy storage. International Journal of Energy Research, 0, , .	2.2	2
1491	N/O Coâ€Doped Hard Carbon Derived from Cocklebur Fruit for Sodiumâ€Ion Storage. ChemElectroChem, 2022, 9, .	1.7	8
1492	Spheres of Graphene and Carbon Nanotubes Embedding Silicon as Mechanically Resilient Anodes for Lithium-Ion Batteries. Nano Letters, 2022, 22, 3054-3061.	4.5	42
1493	Machine learning in energy storage materials. , 2022, 1, 175-195.		45
1494	A Stable Coreâ€“Shell Si@SiOx/C Anode Produced via the Spray and Pyrolysis Method for Lithium-Ion Batteries. Frontiers in Chemistry, 2022, 10, 857036.	1.8	1
1495	Anomalous Thermal Decomposition Behavior of Polycrystalline LiNi_{0.8}Mn_{0.1}Co_{0.1}O₂ in PEOâ€Based Solid Polymer Electrolyte. Advanced Functional Materials, 2022, 32, .	7.8	19
1496	Biomineralization of lithium nanoparticles by Li-resistant Pseudomonas rodhesiae isolated from the Atacama salt flat. Biological Research, 2022, 55, 12.	1.5	6
1497	Lattice Engineering to Refine Particles and Strengthen Bonds of the LiNi_{0.9}Co_{0.05}Mn_{0.05}O₂ Cathode toward Efficient Lithium Ion Storage. ACS Sustainable Chemistry and Engineering, 2022, 10, 3532-3545.	3.2	21
1498	Rationally Designed Ternary Deep Eutectic Solvent Enabling Higher Performance for Non-Aqueous Redox Flow Batteries. Processes, 2022, 10, 649.	1.3	3
1499	A General Multiâ€Interface Strategy toward Densified Carbon Materials with Enhanced Comprehensive Electrochemical Performance for Li/Naâ€Ion Batteries. Small, 2022, 18, e2105738.	5.2	21
1501	A Comprehensive Understanding of Interlayer Engineering in Layered Manganese and Vanadium Cathodes for Aqueous Znâ€Ion Batteries. Chemistry - an Asian Journal, 2022, 17, .	1.7	8
1502	Polyparaphenylene as a high-voltage organic cathode for potassium dual-ion batteries. Journal of Electroanalytical Chemistry, 2022, 909, 116155.	1.9	8
1503	Borosilicate Glass-Enabled Antifracture NASICON Solid Electrolytes for Lithium-Metal Batteries. ACS Applied Energy Materials, 2022, 5, 3734-3740.	2.5	8
1504	Highly Crystalline Flower-Like Covalent-Organic Frameworks Enable Highly Stable Zinc Metal Anodes. ACS Applied Energy Materials, 2022, 5, 3715-3723.	2.5	29
1505	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
1506	Advances of Metal Oxide Composite Cathodes for Aqueous Zincâ€Ion Batteries. Advanced Energy and Sustainability Research, 2022, 3, .	2.8	4
1507	Chitosan-grafted-Gallic Acid as a Nature-Inspired Multifunctional Binder for High-Performance Silicon Anodes in Lithium-Ion Batteries. ACS Applied Energy Materials, 2022, 5, 3166-3178.	2.5	16

#	Article	IF	Citations
1508	Advancing to 4.6ÂV Review and Prospect in Developing Highâ€Energyâ€Density LiCoO₂ Cathode for Lithiumâ€Ion Batteries. Small Methods, 2022, 6, e2200148.	4.6	41
1509	Mesoporous Singleâ€Crystal Lithium Titanate Enabling Fastâ€Charging Liâ€Ion Batteries. Advanced Materials, 2022, 34, e2109356.	11.1	30
1510	Critical Role of Structural Water for Enhanced Li⁺ Insertion Kinetics in Crystalline Tungsten Oxides. Journal of the Electrochemical Society, 2022, 169, 030534.	1.3	7
1511	Quantum battery based on quantum discord at room temperature. Quantum Science and Technology, 2022, 7, 025020.	2.6	19
1512	Direct upcycling of mixed Ni-lean polycrystals to single-crystal Ni-rich cathode materials. CheM, 2022, 8, 1944-1955.	5.8	28
1513	Monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mrow><mml:mi mathvariant="normal">C</mml:mi></mml:mrow></mml:mrow><mml:mn>5</mml:mn></mml:msub><mml:mrow><mml:mrow><mml:mi mathvariant="normal">N</mml:mi></mml:mrow></mml:mrow></mml:math> : A Promising Building Block for the Anode of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mrow><mml:mrow><mml:mi mathvariant="normal">K</mml:mi></mml:mrow></mml:mrow></mml:math>	1.5	5
1514	Enhancing Capacity and Stability of Anionic MOFs as Electrode Material by Cation Exchange. Frontiers in Chemistry, 2022, 10, 836325.	1.8	1
1515	Multiâ€Functionalized Polymers as Organic Cathodes for Sustainable Sodium/Potassiumâ€Ion Batteries. Batteries and Supercaps, 2022, 5, .	2.4	9
1516	Fast Charging Anode Materials for Lithiumâ€Ion Batteries: Current Status and Perspectives. Advanced Functional Materials, 2022, 32, .	7.8	185
1517	Modulating the Voltage Decay and Cationic Redox Kinetics of Liâ€Rich Cathodes via Controlling the Local Electronic Structure. Advanced Functional Materials, 2022, 32, .	7.8	14
1518	Thermal dynamics of P2-Na0.67Ni0.33Mn0.67O2 cathode materials for sodium ion batteries studied by in situ analysis. Journal of Materials Research, 2022, 37, 1156-1163.	1.2	1
1519	Anionâ€“Diluent Pairing for Stable High-Energy Li Metal Batteries. ACS Energy Letters, 2022, 7, 1338-1347.	8.8	108
1520	Interface engineering of MoS2-based ternary hybrids towards reversible conversion of sodium storage. Materials Today Energy, 2022, 26, 100993.	2.5	5
1521	Correlation Between Changes in Environmental Temperature and Performance of High-Discharge Lithium-Polymer Batteries. Frontiers in Energy Research, 2022, 10, .	1.2	4
1522	Co-Inlaid Carbon-Encapsulated SiO_x Anodes via a Self-Assembly Strategy for Highly Stable Lithium Storage. ACS Applied Materials & Interfaces, 2022, 14, 15122-15132.	4.0	15
1523	Supramolecular Thixotropic Ionogel Electrolyte for Sodium Batteries. Gels, 2022, 8, 193.	2.1	1
1524	Anion Exchange Membranes for Fuel Cell Application: A Review. Polymers, 2022, 14, 1197.	2.0	55
1525	Polysiloxaneâ€Based Singleâ€Ion Conducting Polymer Blend Electrolyte Comprising Smallâ€Molecule Organic Carbonates for Highâ€Energy and Highâ€Power Lithiumâ€Metal Batteries. Advanced Energy Materials, 2022, 12, .	10.2	53

#	Article	IF	Citations
1526	Selfâ€Supported CuO Inâ€Situâ€Grown on Copper Foil as Binderâ€Free Anode for Lithiumâ€Ion Batteries. ChemistrySelect, 2022, 7, .	0.7	3
1527	Impact of Morphology and Transition Metal Doping of Vanadate Nanowires without Surface Modification on the Performance of Aqueous Zinc-Ion Batteries. Bulletin of the Chemical Society of Japan, 2022, 95, 728-734.	2.0	7
1528	Revealing the unconventional lithium storage mechanism of ordered mesoporous NiO for lithium-ion batteries. Journal of Power Sources, 2022, 526, 231135.	4.0	9
1529	Challenges and Perspectives of Organic Multivalent Metalâ€Ion Batteries. Advanced Materials, 2022, 34, e2200662.	11.1	46
1530	Regulation of Surface Defect Chemistry toward Stable Niâ€Rich Cathodes. Advanced Materials, 2022, 34, e2200744.	11.1	41
1532	An annular porous column (5) aromatics as anode material for lithium-ion batteries. Journal of Solid State Electrochemistry, 0, , 1.	1.2	0
1533	Interlayer-expanded VS2 nanosheet: Fast ion transport, dynamic mechanism and application in Zn2+ and Mg2+/Li+ hybrid batteries systems. Journal of Colloid and Interface Science, 2022, 620, 119-126.	5.0	55
1535	Designing Hybrid Artificial Interphases with Dilithium Vinylphosphonate for Lithium Batteries with Siâ€“Graphite Anodes. ACS Applied Energy Materials, 2022, 5, 4673-4683.	2.5	2
1536	<scp>Highâ€Voltage</scp> â€driven Li/Mnâ€rich Li _{1.} <scp> ₂ Mn ₀ </scp> _. <scp> ₆ Ni ₀ </scp> _. <scp> ₁ Co ₀ </scp> _. <scp>. Energy Storage, 0, , .	2.3	1
1537	Achieving ultra-long lifespan Zn metal anodes by manipulating desolvation effect and Zn deposition orientation in a multiple cross-linked hydrogel electrolyte. Energy Storage Materials, 2022, 49, 172-180.	9.5	77
1538	A comparative study on safety and electrochemical characteristics of cylindrical lithium-ion cells with various formats. Chemical Engineering Research and Design, 2022, 161, 126-135.	2.7	6
1539	Superior cycling stability of saturated graphitic carbon nitride in hydrogel reduced graphene oxide anode for Sodium-ion battery. FlatChem, 2022, 33, 100351.	2.8	9
1540	Natural quinone molecules as effective cathode materials for nonaqueous lithium-ion batteries. Journal of Power Sources, 2022, 531, 231291.	4.0	15
1541	Natural protein as novel additive of a commercial electrolyte for Long-Cycling lithium metal batteries. Chemical Engineering Journal, 2022, 437, 135283.	6.6	7
1542	Large-scale preparation of cobalt niobate/reduced graphene oxide composite materials for high-performance lithium-ion battery anodes. Journal of Alloys and Compounds, 2022, 908, 164542.	2.8	4
1543	Morphologically and chemically regulated 3D carbon for Dendrite-free lithium metal anodes by a plasma processing. Journal of Colloid and Interface Science, 2022, 619, 198-206.	5.0	7
1544	Electroconductive cellulose nanocrystals â€" Synthesis, properties and applications: A review. Carbohydrate Polymers, 2022, 289, 119419.	5.1	19
1545	Realizing Hybrid Ion Storage of NASICON-Structured Na₃V₂(PO₄)₃ Prepared by Microwave Irradiation Route. Integrated Ferroelectrics, 2021, 221, 114-124.	0.3	0

#	Article	IF	Citations
1546	Hierarchically porous membranes for lithium rechargeable batteries: Recent progress and opportunities. EcoMat, 2022, 4, .	6.8	24
1547	Exploring new battery knowledge by advanced characterizing technologies. Exploration, 2021, 1, .	5.4	25
1548	Fullâ€Range Redox Mediation on Sulfur Redox Kinetics for Highâ€Performance Lithiumâ€Sulfur Batteries. Batteries and Supercaps, 2022, 5, .	2.4	41
1549	Dimensionally Stable Polyimide Frameworks Enabling Long-Life Electrochemical Alkali-Ion Storage. ACS Applied Materials & Interfaces, 2022, 14, 826-833.	4.0	4
1550	In Situ Electrochemically Activated Vanadium Oxide Cathode for Advanced Aqueous Zn-Ion Batteries. Nano Letters, 2022, 22, 119-127.	4.5	113
1551	A Toolbox of Reference Electrodes for Lithium Batteries. Advanced Functional Materials, 2022, 32, .	7.8	27
1552	Long-Life and High-Rate-Charging Lithium Metal Batteries Enabled by a Flexible Active Solid Electrolyte Interphase Layer. ACS Applied Materials & Interfaces, 2021, 13, 60678-60688.	4.0	9
1553	Nitrogen and Oxygen Coâ€Doped Porous Hard Carbon Nanospheres with Coreâ€Shell Architecture as Anode Materials for Superior Potassiumâ€Ion Storage. Small, 2022, 18, e2104296.	5.2	33
1554	Module-Designed Carbon-Coated Separators for High-Loading, High-Sulfur-Utilization Cathodes in Lithiumâ€“Sulfur Batteries. Molecules, 2022, 27, 228.	1.7	16
1555	Short-Process Multiscale Coreâ€“Shell Structure Buffer Control of a Ni/N Codoped Si@C Composite Using Waste Silicon Powder for Lithium-Ion Batteries. ACS Applied Energy Materials, 2022, 5, 178-185.	2.5	5
1556	Preactivation Strategy for a Wide Temperature Range In Situ Gel Electrolyte-Based LiNi_{0.5}Co_{0.2}Mn_{0.3}O₂â¯Siâ€“Graphite Battery. ACS Applied Materials & Interfaces, 2021, 13, 59843-59854.	4.0	10
1557	Mathematical Models for the Performance Degradation of Lithium-Ion Batteries with Different Status of Charge (SOC) in Long-Term High Temperature Storage. Journal of the Electrochemical Society, 2021, 168, 120554.	1.3	0
1558	Graphene Acid for Lithiumâ€Ion Batteriesâ€”Carboxylation Boosts Storage Capacity in Graphene. Advanced Energy Materials, 2022, 12, .	10.2	25
1559	Solvent-Free Approach for Interweaving Freestanding and Ultrathin Inorganic Solid Electrolyte Membranes. ACS Energy Letters, 2022, 7, 410-416.	8.8	91
1560	Lithium Tracer Diffusion in Sub-Stoichiometric Layered Lithium-Metal-Oxide Compounds. Defect and Diffusion Forum, 0, 413, 125-135.	0.4	1
1561	Anthraquinone-Enriched Conjugated Microporous Polymers as Organic Cathode Materials for High-Performance Lithium-Ion Batteries. ACS Applied Energy Materials, 2021, 4, 14628-14639.	2.5	41
1562	Harmonious Dual-Riveting Interface Induced from Niobium Oxides Coating Toward Superior Stability of Li-Rich Mn-Based Cathode. ACS Applied Materials & Interfaces, 2021, 13, 61248-61257.	4.0	11
1563	Improved Cycling Stability of LiNi_{0.8}Co_{0.1}Mn_{0.1}O₂ Cathode Material via Variable Temperature Atomic Surface Reduction with Diethyl Zinc. Small, 2022, 18, e2104625.	5.2	10

#	Article	IF	Citations
1564	Unveiling the recycling characteristics and trends of spent lithium-ion battery: a scientometric study. Environmental Science and Pollution Research, 2022, 29, 9448-9461.	2.7	13
1565	Advances in <scp>host selection</scp> and <scp>interface regulation</scp> of polymer electrolytes. Journal of Polymer Science, 2022, 60, 743-765.	2.0	8
1566	Experimental and Theoretical Study on the Substitution Patterns in Lithium Germanides: The Case of Li₁₅Ge₄vs Li₁₄ZnGe₄. European Journal of Inorganic Chemistry, 2022, 2022, .	1.0	2
1567	Rechargeable Batteries: Regulating Electronic and Ionic Transports for High Electrochemical Performance. Advanced Materials Technologies, 2022, 7, .	3.0	8
1568	High-Performance Li-Metal-Free Sulfur Battery Employing a Lithiated Anatase TiO₂ Anode and a Freestanding Li₂Sâ€“Carbon Aerogel Cathode. ACS Sustainable Chemistry and Engineering, 2022, 10, 410-420.	3.2	6
1569	Stable Liâ€“Metal Batteries Enabled by in Situ Gelation of an Electrolyte and In-Built Fluorinated Solid Electrolyte Interface. ACS Applied Materials & Interfaces, 2021, 13, 60054-60062.	4.0	21
1570	Lityum iyon pilleri ayÄ±rÄ±cÄ±larÄ±nda Hekzagonal Bor NitrÃ¼r kullanÄ±mÄ± ve GeliÅŸmeler. Journal of Boron, 0, 0.	0.0	0
1571	Insights into interfacial chemistry of Ni-rich cathodes and sulphide-based electrolytes in all-solid-state lithium batteries. Chemical Communications, 2022, , .	2.2	8
1572	Tailoring Disordered/Ordered Phases to Revisit the Degradation Mechanism of Highâ€Voltage LiNi_{0.5}Mn_{1.5}O₄ Spinel Cathode Materials. Advanced Functional Materials, 2022, 32, .	7.8	13
1573	Freestanding <scp> V ₅ O ₁₂ ÂÂ·Â6H ₂ Oâ€CNTs </scp> composite films as cathode for foldable aqueous zincâ€ion batteries. International Journal of Energy Research, 0, , .	2.2	3
1574	Random Vibration Analysis for a Battery Enclosure of Electric Vehicle. , 0, , .		0
1575	Atomistic modeling of Li- and post-Li-ion batteries. Physical Review Materials, 2022, 6, .	0.9	17
1576	Sodium Borates: Expanding the Electrolyte Selection for Sodiumâ€ion Batteries. Angewandte Chemie - International Edition, 2022, 61, .	7.2	15
1577	Delicately Tailored Ternary Phosphate Electrolyte Promotes Ultrastable Cycling of Na₃V₂(PO₄)₂F₃-Based Sodium Metal Batteries. ACS Applied Materials & Interfaces, 2022, 14, 17444-17453.	4.0	20
1578	Hybridization of 2D Nanomaterials with 3D Graphene Architectures for Electrochemical Energy Storage and Conversion. Advanced Functional Materials, 2022, 32, .	7.8	26
1579	Zeolitic Imidazolate Framework 67-Derived Ce-Doped CoP@N-Doped Carbon Hollow Polyhedron as High-Performance Anodes for Lithium-Ion Batteries. Crystals, 2022, 12, 533.	1.0	7
1580	Carbon-confined Mo3Nb2O14 porous microspheres for high-performance lithium storage. Ionics, 2022, 28, 3197-3205.	1.2	2
1581	Tailoring the Solvation Sheath of Cations by Constructing Electrode Frontâ€Faces for Rechargeable Batteries. Advanced Materials, 2022, 34, e2201339.	11.1	66

#	Article	IF	Citations
1582	Direct ink writing of conductive materials for emerging energy storage systems. Nano Research, 2022, 15, 6091-6111.	5.8	11
1583	Crossâ€Linked Polymer Binder via Phthalic Acid for Stabilizing SiO _x Anodes. Macromolecular Chemistry and Physics, 0, , 2200068.	1.1	6
1584	Molecularâ€Scale Hydrophobic Modification of Niâ€Rich Cathode Materials Toward Superior Critical Endurability and Environmental Stability. Advanced Sustainable Systems, 2022, 6, .	2.7	5
1585	Storage of Garnet Solid Electrolytes: Insights into Air Stability and Surface Chemistry. ACS Applied Energy Materials, 2022, 5, 5108-5116.	2.5	10
1586	Sodium Borates: Expanding the Electrolyte Selection for Sodiumâ€Ion Batteries. Angewandte Chemie, 2022, 134, .	1.6	6
1587	Storing Mg Ions in Polymers: A Perspective. Macromolecular Rapid Communications, 2022, 43, e2200198.	2.0	2
1588	Heavy 2D VSi2N4: High capacity and full battery open-circuit voltage as Li/Na-ion batteries anode. Applied Surface Science, 2022, 593, 153354.	3.1	12
1589	Improved electrochemical performance of silicon monoxide anode materials prompted by macroporous carbon. Journal of Porous Materials, 2022, 29, 1191-1198.	1.3	4
1590	Polyethylene glycol-grafted cellulose-based gel polymer electrolyte for long-life Li-ion batteries. Applied Surface Science, 2022, 593, 153411.	3.1	20
1591	Electrolyte chemistry for lithium metal batteries. Science China Chemistry, 2022, 65, 840-857.	4.2	25
1592	In-situ formation of Li0.5Mn0.5O coating layer through defect controlling for high performance Li-rich manganese-based cathode material. Journal of Energy Chemistry, 2022, 71, 384-391.	7.1	14
1593	Effects of a Solid Solution Outer Layer of TiO₂ on the Surface and Electrochemical Properties of LiNi_{0.6}Co_{0.2}Mn_{0.2}O₂ Cathodes for Lithium-Ion Batteries through the Use of Thin-Film Electrodes. ACS Applied Energy Materials, 0, , .	2.5	6
1594	Transition towards carbon-neutral districts based on storage techniques and spatiotemporal energy sharing with electrification and hydrogenation. Renewable and Sustainable Energy Reviews, 2022, 162, 112444.	8.2	61
1597	Molybdenum Carbide Electrocatalyst In Situ Embedded in Porous Nitrogenâ€Rich Carbon Nanotubes Promotes Rapid Kinetics in Sodiumâ€Metalâ€“Sulfur Batteries. Advanced Materials, 2022, 34, e2106572.	11.1	33
1598	Design of nanostructured sulfur cathodes for high-performance lithiumâ€“sulfur batteries. , 2022, , 425-452.		0
1599	Recent Advances in Layered Metalâ€Oxide Cathodes for Application in Potassiumâ€Ion Batteries. Advanced Science, 2022, 9, e2105882.	5.6	35
1600	Perspectives on Iron Oxide-Based Materials with Carbon as Anodes for Li- and K-Ion Batteries. Nanomaterials, 2022, 12, 1436.	1.9	17
1601	Spinel LiMn2O4 integrated with coating and doping by Sn self-segregation. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 909-916.	2.4	4

#	Article	IF	Citations
1602	SiO2-Based Lithium-Ion Battery Anode Materials: A Brief Review. Journal of Electronic Materials, 2022, 51, 3379-3390.	1.0	6
1603	Synergistic Structural Engineering of Tunnelâ€Type Polyantimonic Acid Enables Dualâ€Boosted Volumetric and Areal Lithium Energy Storage. Advanced Energy Materials, 0, , 2200653.	10.2	6
1604	Metalâ€“Organic Framework Derived Copper Chalcogenidesâ€Carbon Composites as Highâ€Rate and Stable Storage Materials for Na Ions. Advanced Sustainable Systems, 2022, 6, .	2.7	14
1605	Sustainable Production of Lithium Acetate by Bipolar Membrane Electrodialysis Metathesis. ACS Sustainable Chemistry and Engineering, 2022, 10, 6045-6056.	3.2	6
1606	Constructing a composite lithium anode for high-performance solid-state lithiumâ€“metal batteries via in-situ alloying reaction. Functional Materials Letters, 2022, 15, .	0.7	4
1607	Mechano-electrochemical perspectives on flexible lithium-ion batteries. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 1019-1036.	2.4	14
1608	Assessing rechargeable batteries with 3D X-ray microscopy, computed tomography, and nanotomography. Nondestructive Testing and Evaluation, 2022, 37, 519-535.	1.1	7
1609	Regulating the Molecular Interactions in Polymer Binder for High-Performance Lithiumâ€“Sulfur Batteries. ACS Nano, 2022, 16, 8449-8460.	7.3	52
1610	Effect of electrolyte components, salt concentration, and electrolyte additive, on electrolyte distribution over a charging LiMO2 electrode. Journal of Solid State Electrochemistry, 0, , 1.	1.2	1
1611	Sulfur confined MXene hosts enabling the use of carbonate-based electrolytes in alkali metal (Li/Na/K)-sulfur batteries. Materials Today Energy, 2022, 27, 101000.	2.5	9
1612	Achieving enhanced densification and superior ionic conductivity of garnet electrolytes via a co-doping strategy coupled with pressureless sintering. Journal of the European Ceramic Society, 2022, 42, 5023-5028.	2.8	14
1613	Redox-homogeneous, gel electrolyte-embedded high-mass-loading cathodes for high-energy lithium metal batteries. Nature Communications, 2022, 13, 2541.	5.8	22
1614	Tailoring Electrolytes to Enable Low-Temperature Cycling of Ni-Rich NCM Cathode Materials for Li-Ion Batteries. ACS Applied Energy Materials, 2022, 5, 5867-5874.	2.5	4
1615	Sandwich structured PVDF-HFP-based composite solid electrolytes for solid-state lithium metal batteries. Ionics, 2022, 28, 3243-3253.	1.2	5
1616	Improving the Performance of Aqueous Zincâ€ion Batteries by Inhibiting Zinc Dendrite Growth: Recent Progress. Chemistry - an Asian Journal, 2022, 17, .	1.7	9
1617	Unravelling the Nature of the Intrinsic Complex Structure of Binaryâ€Phase Naâ€Layered Oxides. Advanced Materials, 2022, 34, e2202137.	11.1	21
1618	Revisit the Progress of Binders for a Silicon-Based Anode from the Perspective of Designed Binder Structure and Special Sized Silicon Nanoparticles. Industrial & Engineering Chemistry Research, 2022, 61, 6246-6268.	1.8	13
1619	Constructing Hydrophobic Interface with Closeâ€Packed Coordination Supramolecular Network for Longâ€Cycling and Dendriteâ€Free Znâ€Metal Batteries. Small, 2022, 18, e2107971.	5.2	21

#	Article	IF	Citations
1620	Quantification of charge compensation in lithium- and manganese-rich Li-ion cathode materials by x-ray spectroscopies. Materials Today Physics, 2022, 24, 100687.	2.9	2
1621	A Facile and Efficient Chemical Prelithiation of Graphite for Full Capacity Utilization of Liâ€ion Batteries. Energy Technology, 2022, 10, .	1.8	3
1622	Rational-design heteroatom-doped cathode and ion modulation layer modified Zn anode for ultrafast zinc-ion hybrid capacitors with simultaneous high power and energy densities. Journal of Power Sources, 2022, 536, 231484.	4.0	17
1623	Evaporation-induced hydrated graphene/polyaniline/carbon cloth integration towards high mass loading supercapacitor electrodes. Chemical Engineering Journal, 2022, 445, 136727.	6.6	33
1624	Less energy-intensive synthesis of mesoporous multi-oriented graphite microspheres with low defect concentration for advanced potassium-ion battery anodes. Chemical Engineering Journal, 2022, 443, 136545.	6.6	10
1625	A self-purifying electrolyte enables high energy Li ion batteries. Energy and Environmental Science, 2022, 15, 3331-3342.	15.6	40
1626	Rheological behavior of gel polymer electrolytes: yield stress and viscoelasticity. Rheologica Acta, 2022, 61, 401-413.	1.1	6
1627	Achieving SEI preformed graphite in flow cell to mitigate initial lithium loss. Carbon, 2022, 196, 589-595.	5.4	18
1628	Unveiling the relationship between the multilayer structure of metallic MoS₂ and the cycling performance for lithium ion batteries. Nanoscale, 2022, 14, 8621-8627.	2.8	9
1629	Saltâ€“solvent synchro-constructed robust electrolyteâ€“electrode interphase for high-voltage lithium metal batteries. Journal of Materials Chemistry A, 2022, 10, 19903-19913.	5.2	10
1630	Comparable Investigation of Phosphorus-Based Flame Retardant Electrolytes on LiFePO₄ Cathodes. Journal of the Electrochemical Society, 2022, 169, 050532.	1.3	4
1631	Mechanics-Driven Anode Material Failure in Battery Safety and Capacity Deterioration Issues: A Review. Applied Mechanics Reviews, 2022, 74, .	4.5	16
1632	Nanoemulsion-Coated Niâ€“Fe Hydroxide Self-Supported Electrode as an Air-Breathing Cathode for High-Performance Zincâ€“Air Batteries. Nano Letters, 2022, 22, 4535-4543.	4.5	16
1633	Titanium Carboxylate Molecular Layer Deposited Hybrid Films as Protective Coatings for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 24908-24918.	4.0	4
1634	Production of a hybrid capacitive storage device via hydrogen gas and carbon electrodes coupling. Nature Communications, 2022, 13, 2805.	5.8	26
1635	Similarity between the redox potentials of 3d transition-metal ions in polyanionic insertion materials and aqueous solutions. Physical Chemistry Chemical Physics, 2022, , .	1.3	1
1636	Kinetic square scheme in oxygen-redox battery electrodes. Energy and Environmental Science, 2022, 15, 2591-2600.	15.6	21
1637	Intermolecular/intramolecular interactions for high-performance organic batteries. Scientia Sinica Chimica, 2022, 52, 1883-1895.	0.2	1

#	Article	IF	Citations
1638	Natureâ€inspired materials and designs for flexible lithiumâ€ion batteries. , 2022, 4, 878-900.		25
1639	Preferential Extraction of Lithium from Spent Cathodes and the Regeneration of Layered Oxides for Li/Na-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 24255-24264.	4.0	7
1640	Surface-reinforced NCM811 with enhanced electrochemical performance for Li-ion batteries. Journal of Alloys and Compounds, 2022, 918, 165488.	2.8	7
1641	Molecular engineering regulation redoxâ€dualâ€activeâ€center covalent organic frameworksâ€based anode for highâ€performance Li storage. EcoMat, 2022, 4, .	6.8	24
1642	Quasi-Solid-State Polymer Electrolyte Based on Highly Concentrated LiTFSI Complexing DMF for Ambient-Temperature Rechargeable Lithium Batteries. Industrial & Engineering Chemistry Research, 2022, 61, 7971-7981.	1.8	6
1643	Realizing highly reversible and deeply rechargeable Zn anode by porous zeolite layer. Journal of Power Sources, 2022, 540, 231659.	4.0	5
1644	Low-cost and high-rate porous carbon anode material for potassium-ion batteries. Solid State Ionics, 2022, 381, 115944.	1.3	5
1645	An Î±-MnSe nanorod as anode for superior potassium-ion storage via synergistic effects of physical encapsulation and chemical bonding. Chemical Engineering Journal, 2022, 446, 137152.	6.6	20
1646	Facile Preparation of V6o13 Nanoribbons Grown on Graphene Composites for Superior Lithium Storage. SSRN Electronic Journal, 0, , .	0.4	0
1647	Coupling coreâ€“shell Bi@Void@TiO₂ 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
1648	Integration of Carbon Nanotubes and Azo-Coupled Redox-Active Polymers into Core-Shell Structured Cathodes with Favorable Lithium Storage. Materials Advances, 0, , .	2.6	0
1649	Study on Fabrications and Storage Capacity of Coal Tar Pitch Based V₂O₃@C Composite Materials. Electrochemistry, 2022, 90, 077002-077002.	0.6	1
1650	An Overview on Medium Voltage Grid Integration of Ultra-Fast Charging Stations: Current Status and Future Trends. IEEE Open Journal of the Industrial Electronics Society, 2022, 3, 420-447.	4.8	48
1651	Tuning the structure and electrochemical performance of pinecone-derived porous carbon for potassium-ion battery anodes using molten ZnCl2. Ionics, 2022, 28, 3799-3816.	1.2	3
1652	High-performance, three-dimensional and porous K3V2(PO4)3/C cathode material for potassium-ion batteries. Ionics, 2022, 28, 3817-3831.	1.2	6
1653	Interface Engineering to Improve the Rate Performance and Stability of the Mn-Cathode Electrode for Aqueous Zinc-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 24386-24395.	4.0	11
1654	<scp>Anionâ€Regulated Weakly Solvating</scp> Electrolytes for <scp>Highâ€Voltage</scp> Lithium Metal Batteries. Energy and Environmental Materials, 2023, 6, .	7.3	17
1655	Rational Engineering of Anode Current Collector for Dendrite-Free Lithium Deposition: Strategy, Application, and Perspective. Frontiers in Chemistry, 2022, 10, .	1.8	5

#	Article	IF	Citations
1656	Ultralong Lifespan for High-Voltage LiCoO₂ Enabled by In Situ Reconstruction of an Atomic Layer Deposition Coating Layer. ACS Applied Materials & Interfaces, 2022, 14, 25524-25533.	4.0	7
1657	Conjugated ladder-type polymers with multielectron reactions as high-capacity organic anode materials for lithium-ion batteries. Science China Materials, 2022, 65, 2354-2362.	3.5	15
1658	Halideâ€type Liâ€ion conductors: Future options for highâ€voltage allâ€solidâ€state batteries. Journal of the Chinese Chemical Society, 2022, 69, 1233-1241.	0.8	2
1659	Monoclinic Bimetallic Prussian Blue Analog Cathode with High Capacity and Long Life for Advanced Sodium Storage. ACS Applied Materials & Interfaces, 2022, 14, 24332-24340.	4.0	11
1660	Advances and perspectives on one-dimensional nanostructure electrode materials for potassium-ion batteries. Materials Today, 2022, 56, 114-134.	8.3	26
1661	Halogen Storage Electrode Materials for Rechargeable Batteries. Energy and Environmental Materials, 2022, 5, 1155-1179.	7.3	19
1662	Cross-Linked Naphthalene Diimide-Based Polymer as a Cathode Material for High-Performance Organic Batteries. ACS Applied Energy Materials, 0, , .	2.5	7
1663	Janus Electrolyte with Modified Li⁺ Solvation for Highâ€Performance Solidâ€State Lithium Batteries. Advanced Functional Materials, 2022, 32, .	7.8	30
1664	Anion Ï€â€“Ï€ Stacking for Improved Lithium Transport in Polymer Electrolytes. Journal of the American Chemical Society, 2022, 144, 9806-9816.	6.6	28
1665	Unfolding the structural features of NASICON materials for sodiumâ€ion full cells. , 2022, 4, 776-819.		39
1666	Highly Enforced Rate Capability of a Graphite Anode via Interphase Chemistry Tailoring Based on an Electrolyte Additive. Journal of Physical Chemistry Letters, 2022, 13, 5151-5159.	2.1	11
1667	In Situ TEM Studies of the Oxidation of Li Dendrites at High Temperatures. Advanced Functional Materials, 2022, 32, .	7.8	13
1668	A Highâ€Performance Alginate Hydrogel Binder for Aqueous Znâ^'Ion Batteries. ChemPhysChem, 2022, 23, .	1.0	7
1669	A novelty strategy induced pinning effect and defect structure in Ni-rich layered cathodes towards boosting its electrochemical performance. Journal of Energy Chemistry, 2022, 72, 570-580.	7.1	18
1670	Comprehensive Approach to Investigate the Deâ€Lithiation Mechanism of Feâ€Doped SnO₂ as Lithiumâ€ion Anode Material. Advanced Sustainable Systems, 2022, 6, .	2.7	9
1671	Environmentally friendly method for efficiently recycling LiMn₂O₄ cathode materials. New Journal of Chemistry, 2022, 46, 13122-13128.	1.4	4
1672	Towards the practical application of Zn metal anodes for mild aqueous rechargeable Zn batteries. Chemical Science, 2022, 13, 8243-8252.	3.7	63
1673	A study of the synergetic effect between graphene oxide and transition metal oxides for energy storage. Sustainable Energy and Fuels, 0, , .	2.5	1

#	Article	IF	Citations
1674	Bio-derived 4-electron-accepting carbonyl-N-methylpyridinium species for high-performance lithium-organic batteries. Cell Reports Physical Science, 2022, 3, 100951.	2.8	7
1675	TFSI Anion Grafted Polymer as an Ion-Conducting Protective Layer on Magnesium Metal for Rechargeable Magnesium Batteries. Energy Storage Materials, 2022, 51, 108-121.	9.5	17
1676	Phenanthraquinone-based polymer organic cathodes for highly efficient Na-ion batteries. Chemical Engineering Journal, 2022, 449, 137745.	6.6	12
1677	Prelithiation Bridges the Gap for Developing Nextâ€Generation Lithiumâ€Ion Batteries/Capacitors. Small Methods, 2022, 6, .	4.6	23
1678	Current Insight into 3D Printing in Solidâ€State Lithiumâ€Ion Batteries: A Perspective. Batteries and Supercaps, 2022, 5, .	2.4	19
1679	Progress, Key Issues, and Future Prospects for Liâ€Ion Battery Recycling. Global Challenges, 2022, 6, .	1.8	56
1680	Mesoporous Carbon as Conductive Additive to Improve the Highâ€Rate Charge/Discharge Capacity of Lithiumâ€Ion Batteries. Energy Technology, 2022, 10, .	1.8	2
1681	Graphite Recycling from Endâ€ofâ€Life Lithiumâ€Ion Batteries: Processes and Applications. Advanced Materials Technologies, 2023, 8, .	3.0	36
1682	Toward High Rate Performance Solidâ€State Batteries. Advanced Energy Materials, 2022, 12, .	10.2	24
1683	Defect character distribution regulation of alloy foil anode for high volumetric energy density lithium ion battery. Acta Materialia, 2022, 236, 118113.	3.8	5
1684	Conjugated Polymer/Graphene composite as conductive Agent-Free electrode materials towards High-Performance lithium ion storage. Journal of Colloid and Interface Science, 2022, 626, 710-718.	5.0	3
1685	Sodiophilic skeleton based on the packing of hard carbon microspheres for stable sodium metal anode without dead sodium. Journal of Energy Chemistry, 2022, 73, 400-406.	7.1	11
1686	Designing Anion-Derived Solid Electrolyte Interphase in a Siloxane-Based Electrolyte for Lithium-Metal Batteries. ACS Applied Materials & Interfaces, 2022, 14, 27873-27881.	4.0	23
1687	Interface engineering of Zn meal anodes using electrochemically inert Al2O3 protective nanocoatings. Nano Research, 2022, 15, 7227-7233.	5.8	17
1688	High-Performance Cathode Materials for Lithiumâ€“Sulfur Batteries Based on Sulfurated Poly(norbornadiene) and Sulfurated Poly(dicyclopentadiene). ACS Applied Energy Materials, 2022, 5, 7642-7650.	2.5	2
1689	Boosting sulfur redox kinetics by a pentacenetetrone redox mediator for high-energy-density lithium-sulfur batteries. Nano Research, 2023, 16, 8253-8259.	5.8	32
1690	Nucleationâ€“Oxidation coupled technology for High-Nickel ternary cathode recycling of spent Lithium-ion batteries. Separation and Purification Technology, 2022, 298, 121569.	3.9	5
1691	Accurate Prediction of Voltage of Battery Electrode Materials Using Attention-Based Graph Neural Networks. ACS Applied Materials & Interfaces, 2022, 14, 26587-26594.	4.0	13

#	Article	IF	Citations
1692	In Situ Construction of a LiF-Enriched Interfacial Modification Layer for Stable All-Solid-State Batteries. ACS Applied Materials & Interfaces, 2022, 14, 29878-29885.	4.0	5
1693	An integrated dendrite-free zinc metal electrode for corrosion inhibition in aqueous system. Korean Journal of Chemical Engineering, 2022, 39, 2353-2360.	1.2	5
1694	Recent advances in lithium-ion battery materials for improved electrochemical performance: A review. Results in Engineering, 2022, 15, 100472.	2.2	51
1695	Modification of Cu current collectors for lithium metal batteries â€“ A review. Progress in Materials Science, 2022, 130, 100996.	16.0	56
1696	Li-CO2/O2 battery operating at ultra-low overpotential and low O2 content on Pt/CNT catalyst. Chemical Engineering Journal, 2022, 448, 137541.	6.6	18
1697	Polyaniline intercalation induced great enhancement of electrochemical properties in ammonium vanadate nanosheets as an advanced cathode for high-performance aqueous zinc-ion batteries. Chemical Engineering Journal, 2022, 448, 137681.	6.6	30
1698	One-step synthesis of uniformly distributed SiO_xâ€“C composites as stable anodes for lithium-ion batteries. Dalton Transactions, 2022, 51, 11909-11915.	1.6	3
1699	MBenes: progress, challenges and future. Journal of Materials Chemistry A, 2022, 10, 15865-15880.	5.2	44
1700	N-doped pinecone-based carbon with a hierarchical porous pie-like structure: a long-cycle-life anode material for potassium-ion batteries. RSC Advances, 2022, 12, 20305-20318.	1.7	5
1701	Synchrotron radiation based X-ray techniques for analysis of cathodes in Li rechargeable batteries. RSC Advances, 2022, 12, 20360-20378.	1.7	5
1702	Sb-Doped metallic 1T-MoS₂ nanosheets embedded in N-doped carbon as high-performance anode materials for half/full sodium/potassium-ion batteries. Dalton Transactions, 2022, 51, 11685-11692.	1.6	14
1703	Recent advances of non-lithium metal anode materials for solid-state lithium-ion batteries. Journal of Materials Chemistry A, 2022, 10, 16761-16778.	5.2	23
1704	Multifunctional Surface Construction for Longâ€Term Cycling Stability of Liâ€Rich Mnâ€Based Layered Oxide Cathode for Liâ€Ion Batteries. Small, 2022, 18, .	5.2	10
1705	Graphene-Wine Waste Derived Carbon Composites for Advanced Supercapacitors. ChemEngineering, 2022, 6, 49.	1.0	2
1706	Effect of charging protocols on electrochemical performance and failure mechanism of commercial level Ni-rich NMC811 thick electrode. Electrochemistry Communications, 2022, 139, 107309.	2.3	7
1707	Ionic Conductivity, Na Platingâ€“Stripping, and Battery Performance of Solid Polymer Na Ion Electrolyte Based on Poly(vinylidene fluoride) and Poly(vinyl pyrrolidone). ACS Applied Energy Materials, 2022, 5, 8812-8822.	2.5	4
1708	Understanding of the Electrochemical Behavior of Lithium at Bilayer-Patched Epitaxial Graphene/4H-SiC. Nanomaterials, 2022, 12, 2229.	1.9	3
1709	<scp>Highâ€Energy</scp> Lithiumâ€Ion Batteries: Recent Progress and a Promising Future in Applications. Energy and Environmental Materials, 2023, 6, .	7.3	77

#	Article	IF	Citations
1710	Natural Halloysite Nanotubes Coated Commercial Paper or Waste Newspaper as Highlyâ€Thermalâ€Stable Separator for Lithiumâ€Ion Batteries. Advanced Materials Technologies, 2022, 7, .	3.0	5
1711	Conversion reaction-based transition metal oxides as anode materials for lithium ion batteries: recent progress and future prospects. Ceramist, 2022, 25, 218-246.	0.0	0
1712	Emerging Organic Surface Chemistry for Si Anodes in Lithiumâ€Ion Batteries: Advances, Prospects, and Beyond. Advanced Energy Materials, 2022, 12, .	10.2	60
1713	MOF-derived CoFe2O4/FeO/Fe nanocomposites as anode materials for high-performance lithium-ion batteries. Journal of Alloys and Compounds, 2022, 923, 166316.	2.8	11
1714	Free-standing Na2C6O6/MXene composite paper for high-performance organic sodium-ion batteries. Nano Research, 2023, 16, 458-465.	5.8	17
1715	Exploration of two-dimensional molybdenum-borides and potential applications. Npj 2D Materials and Applications, 2022, 6, .	3.9	2
1716	Spiro-Twisted Benzoxazine Derivatives Bearing Nitrile Group for All-Solid-State Polymer Electrolytes in Lithium Batteries. Polymers, 2022, 14, 2869.	2.0	1
1717	Integrated Photovoltaic Charging and Energy Storage Systems: Mechanism, Optimization, and Future. Small, 2022, 18, .	5.2	16
1718	A numerical study of mechanical degradation of Carbon-Coated Graphite Active Particles in Li-ion battery anodes. Journal of the Electrochemical Society, 0, , .	1.3	1
1719	Challenges of Electric Vehicles and Their Prospects in Malaysia: A Comprehensive Review. Sustainability, 2022, 14, 8320.	1.6	26
1720	Formation of NaFâ€Rich Solid Electrolyte Interphase on Na Anode through Additiveâ€Induced Anionâ€Enriched Structure of Na⁺Solvation. Angewandte Chemie - International Edition, 2022, 61, .	7.2	35
1721	Formation of NaFâ€Rich Solid Electrolyte Interphase on Na Anode through Additiveâ€Induced Anionâ€Enriched Structure of Na⁺Solvation. Angewandte Chemie, 2022, 134, .	1.6	17
1722	Wet-slurry fabrication using PVdF-HFP binder with sulfide electrolytes via synergetic cosolvent approach for all-solid-state batteries. Chemical Engineering Journal, 2022, 450, 138047.	6.6	13
1723	Progress and perspective of high-voltage lithium cobalt oxide in lithium-ion batteries. Journal of Energy Chemistry, 2022, 74, 283-308.	7.1	33
1725	Constructing melamine coating convertible into solid electrolytes to enhance the electrochemical performance of Li2ZnTi3O8 anode. Materials Today Sustainability, 2022, 19, 100192.	1.9	4
1726	In situ visualization of multicomponents coevolution in a battery pouch cell. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	6
1727	Active Sulfur-Host Material VS₄ with Surface Defect Engineering: Intercalation-Conversion Hybrid Cathode Boosting Electrochemical Performance of Liâ€“S Batteries. ACS Applied Materials & Interfaces, 2022, 14, 32474-32485.	4.0	18
1728	A Low-Cost Liquid-Phase Method of Synthesizing High-Performance Li₆PS₅Cl Solid-Electrolyte. ACS Applied Materials & Interfaces, 2022, 14, 30824-30838.	4.0	11

#	Article	IF	Citations
1729	Enhanced structure and surface stability of high-nickel cathode materials by AlPO4 modification. Ionics, 0, , .	1.2	0
1730	Electrosynthesis of Vertically Aligned Zinc Oxide Nanoflakes on 3D Porous Cu Foam Enables Dendrite-Free Li-Metal Anode. ACS Applied Materials & Interfaces, 2022, 14, 33400-33409.	4.0	13
1731	Synthesis, structural and conductive properties of Nd doped garnet-type Li7La3Zr2O12 Li-ion conductor. Current Applied Physics, 2022, 41, 1-6.	1.1	4
1732	Preliminary study of new electrolytes based on [MPPyr][TFSI] for lithium ion batteries. Journal of Molecular Liquids, 2022, 363, 119758.	2.3	4
1733	Conductive coordination nanosheets: Sailing to electronics, energy storage, and catalysis. Coordination Chemistry Reviews, 2022, 470, 214693.	9.5	18
1734	Enhancing role of structurally integrated V2C MXene nanosheets on silicon anode for lithium storage. Journal of Alloys and Compounds, 2022, 922, 166213.	2.8	21
1735	Effective adsorption and acceleration redox conversion towards lithium polysulfide by nanorod-like Sb-doped SnO2 nanofibers for high-performance lithium-sulfur battery. Journal of Alloys and Compounds, 2022, 922, 166234.	2.8	3
1736	A Dual-Salt PEO-based polymer electrolyte with Cross-Linked polymer network for High-Voltage lithium metal batteries. Chemical Engineering Journal, 2022, 450, 137776.	6.6	31
1737	Identifying Redox Orbitals and Defects in Lithium-Ion Cathodes with Compton Scattering and Positron Annihilation Spectroscopies: A Review. Condensed Matter, 2022, 7, 47.	0.8	3
1738	Preparation of Onion-like Synthetic Graphite with a Hierarchical Pore Structure from Anthracite and Its Electrochemical Properties as the Anode Material of Lithium-Ion Batteries. Energy & Fuels, 2022, 36, 8256-8266.	2.5	11
1739	Boronâ€“Based Electrolytes for Rechargeable Magnesium Batteries: Biography and Perspective. Batteries and Supercaps, 2022, 5, .	2.4	5
1740	Low-Dimensional Nanomaterial Systems Formed by IVA Group Elements Allow Energy Conversion Materials to Flourish. Nanomaterials, 2022, 12, 2521.	1.9	1
1741	Simple preparation of Si/CNTs/C composite derived from photovoltaic waste silicon powder as high-performance anode material for Li-ion batteries. Powder Technology, 2022, 408, 117744.	2.1	14
1742	Metal-organic frameworks (MOFs) and their derivative as electrode materials for lithium-ion batteries. Coordination Chemistry Reviews, 2022, 470, 214715.	9.5	50
1743	Progress in the development of solid-state electrolytes for reversible room-temperature sodiumâ€“sulfur batteries. Materials Advances, 2022, 3, 6415-6440.	2.6	26
1744	A ranking method for the selection of ship energy storage systems based on batteries. , 2022, , .		2
1745	Advances in Intelligent Regeneration of Cathode Materials for Sustainable Lithiumâ€Ion Batteries. Advanced Energy Materials, 2022, 12, .	10.2	34
1746	Defect Engineering via Copper Doping on Oxygenâ€Deficient Manganese Oxide for Durable Aqueous Zincâ€Ion Battery. Energy Technology, 2022, 10, .	1.8	7

#	Article	IF	Citations
1747	N,N-dimethyl fluorosulfonamide for suppressed aluminum corrosion in lithium bis(trifluoromethanesulfonyl)imide-based electrolytes. Nano Research, 2023, 16, 8269-8280.	5.8	7
1748	Cuprous Chloride as a New Cathode Material for Room Temperature Chloride Ion Batteries. ChemElectroChem, 2022, 9, .	1.7	5
1749	Direct Observation of the SEI Layer Formation Process on the Graphite Anode by in situ TEM. Microscopy and Microanalysis, 2022, 28, 2298-2299.	0.2	1
1750	The Synthesis of Manganese Hydroxide Nanowire Arrays for a High-Performance Zinc-Ion Battery. Nanomaterials, 2022, 12, 2514.	1.9	4
1751	Strengthen Synergistic Effect of Soft Carbon and Hard Carbon Toward High-Performance Anode for K-Ion Battery. ACS Applied Materials & Interfaces, 2022, 14, 31879-31888.	4.0	3
1752	Preset Lithium Source Electrolyte Boosts SiO Anode Performance for Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2022, 10, 10351-10360.	3.2	7
1753	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
1754	Enabling Highâ€Voltage â€œSuperconcentrated Ionogelâ€inâ€Ceramicâ€•Hybrid Electrolyte with Ultrahigh Ionic Conductivity and Single Li⁺â€Ion Transference Number. Advanced Materials, 2022, 34, .	11.1	50
1755	Temperature-dependent compatibility study on halide solid-state electrolytes in solid-state batteries. Frontiers in Chemistry, 0, 10, .	1.8	1
1756	Defect Engineered Ternary Spinel: An Efficient Cathode for an Aqueous Rechargeable Zinc-Ion Battery of Long-Term Cyclability. ACS Applied Materials & Interfaces, 2022, 14, 37577-37586.	4.0	12
1757	Functional MXeneâ€Based Materials for Nextâ€Generation Rechargeable Batteries. Advanced Materials, 2022, 34, .	11.1	42
1758	Advances in Microfluidic Technologies for Energy Storage and Release Systems. Advanced Energy and Sustainability Research, 2022, 3, .	2.8	2
1759	First-Principles Study on the Effect of Lithiation in Spinel LixMn2O4 (0 â‰ x â‰ 1) Structure: Calibration of CASTEP and ONETEP Simulation Codes. Materials, 2022, 15, 5678.	1.3	4
1760	Bioinspired Freezeâ€Tolerant Soft Materials: Design, Properties, and Applications. Small, 2022, 18, .	5.2	29
1761	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
1762	Facile synthesis of nanosized Mn3O4 powder anodes for high capacity Lithium-Ion battery via flame spray pyrolysis. Frontiers in Chemistry, 0, 10, .	1.8	2
1763	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
1764	Two Birds with One Stone: Prelithiated Two-Dimensional Nanohybrids as High-Performance Anode Materials for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 35673-35681.	4.0	6

#	Article	IF	Citations
1765	Inhomogeneous Aging in Lithiumâ€Ion Batteries Caused by Temperature Effects. Energy Technology, 2022, 10, .	1.8	7
1766	A Diluted Electrolyte for Long-Life Sulfurized Polyacrylonitrile-Based Anode-Free Li-S Batteries. Polymers, 2022, 14, 3312.	2.0	4
1767	Crosslinked Nanofiberâ€Reinforced Solidâ€State Electrolytes with Polysulfide Fixation Effect Towards High Safety Flexible Lithiumâ€“Sulfur Batteries. Advanced Functional Materials, 2022, 32, .	7.8	42
1768	Boosting Reversibility and Stability of Zn Anodes via Manipulation of Electrolyte Structure and Interface with Addition of Trace Organic Molecules. Advanced Energy Materials, 2022, 12, .	10.2	33
1769	Quantifying the life-cycle health impacts of a cobalt-containing lithium-ion battery. International Journal of Life Cycle Assessment, 2022, 27, 1106-1118.	2.2	12
1770	First AIE probe for lithium-metal anodes. Matter, 2022, 5, 3530-3540.	5.0	8
1771	Impact of Electrode Defects on Battery Cell Performance: A Review. Batteries and Supercaps, 2022, 5, .	2.4	7
1772	Theoretical Progress of 2D Sixâ€Memberedâ€Ring Inorganic Materials as Anodes for Nonâ€Lithiumâ€Ion Batteries. Small, 2022, 18, .	5.2	6
1773	Restraining the escape of lattice oxygen enables superior cyclic performance towards high-voltage Ni-rich cathodes. National Science Review, 2023, 10, .	4.6	37
1774	Rechargeable Iodine Batteries: Fundamentals, Advances, and Perspectives. ACS Nano, 2022, 16, 13554-13572.	7.3	26
1775	Solventâ€Free Manufacturing of Lithiumâ€Ion Battery Electrodes via Cold Plasma. Energy and Environmental Materials, 2024, 7, .	7.3	2
1776	Direct-Chemical Vapor Deposition-Enabled Graphene for Emerging Energy Storage: Versatility, Essentiality, and Possibility. ACS Nano, 2022, 16, 11646-11675.	7.3	16
1777	Advances on Defect Engineering of Vanadiumâ€Based Compounds for Highâ€Energy Aqueous Zincâ€“Ion Batteries. Advanced Energy Materials, 2022, 12, .	10.2	70
1778	Efficient Control of the Shuttle Effect in Sodiumâ€“Sulfur Batteries with Functionalized Nanoporous Graphenes. ACS Applied Nano Materials, 0, , .	2.4	5
1779	Microstructural Modeling and Simulation of a Carbon Black-Based Conductive Polymerâ”€A Template for the Virtual Design of a Composite Material. ACS Omega, 2022, 7, 28820-28830.	1.6	4
1780	Simply Prepared Magnesium Vanadium Oxides as Cathode Materials for Rechargeable Aqueous Magnesium Ion Batteries. Nanomaterials, 2022, 12, 2767.	1.9	2
1781	In Situ Conformal Carbon Coating for Constructing Hierarchical Mesoporous Titania/Carbon Spheres as High-Rate Lithium-Ion Battery Anodes. ACS Sustainable Chemistry and Engineering, 2022, 10, 10955-10965.	3.2	6
1782	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
1783	Multi-functional yolk-shell structured materials and their applications for high-performance lithium ion battery and lithium sulfur battery. Energy Storage Materials, 2022, 53, 684-743.	9.5	28
1784	Inhibiting intercrystalline reactions of anode with electrolytes for long-cycling lithium batteries. Science Advances, 2022, 8, .	4.7	40
1785	A surface modification layer with cobalt aluminate inhibits 4.6ÂV high-voltage phase transition of LiCoO2. Electrochimica Acta, 2022, 428, 140911.	2.6	5
1786	Decoration of carbon encapsulated nitrogen-rich Mo N with few-layered MoSe2 nanosheets for high-performance sodium-ion storage. Journal of Energy Chemistry, 2022, 74, 332-340.	7.1	13
1787	Oxygen-deficient Nb2O5-x decorated MCMB anode with much enhanced rate and cycle performances for Li-ion batteries. Applied Surface Science, 2022, 604, 154564.	3.1	4
1788	Multidimensional antimony nanomaterials tailored by electrochemical engineering for advanced sodium-ion and potassium-ion batteries. Journal of Colloid and Interface Science, 2022, 628, 41-52.	5.0	7
1789	Synergistic modification of Ni-rich full concentration gradient materials with enhanced thermal stability. Chemical Engineering Journal, 2023, 451, 138518.	6.6	2
1790	Introducing low-tortuosity channels in thick electrode for high-areal-capacity solid polymer battery. Chemical Engineering Journal, 2023, 451, 138651.	6.6	4
1791	Cu₃Si-Modified Silicon Nanoparticles Encapsulated within SiO_x and Hollow Carbon for Lithium-Ion Battery Anodes. ACS Applied Nano Materials, 2022, 5, 14275-14284.	2.4	1
1792	Moâ€Incorporated Magnetite Fe₃O₄ Featuring Cationic Vacancies Enabling Fast Lithium Intercalation for Batteries. Small, 2022, 18, .	5.2	7
1793	Brominated Porous Nitrogen-Doped Carbon Materials for Sodium-Ion Storage. Batteries, 2022, 8, 114.	2.1	8
1794	Lithiumâ€Ion Battery Testing Capable of Simulating â€œUltralowâ€•Lunar Temperatures. Energy Technology, 2022, 10, .	1.8	2
1795	The sulfolane-based liquid electrolyte with LiClO4 additive for the wide-temperature operating high nickel ternary cathode. Nano Research, 2023, 16, 3855-3863.	5.8	8
1796	Sandwich-like SnO2/Cu@Carbon composites with long-term cycling stability as lithium-ion battery anodes. Journal of Electroanalytical Chemistry, 2022, 923, 116794.	1.9	5
1797	Chemical-free pressure washing system as pretreatment to harvest cathode materials. Waste Management, 2022, 153, 121-128.	3.7	3
1798	Integrating transition metal into silicon/carbon anodes towards enhanced lithium storage. Journal of Alloys and Compounds, 2022, 927, 167085.	2.8	4
1799	One-step construction of oxygen vacancies and coating to improve lithium storage performance of Li-rich layered oxides. Applied Surface Science, 2022, 605, 154819.	3.1	8
1800	Engineering nano-NiS2 embedded in graphitized carbon skeleton in hollow spherical structure as stable anode material for reversible Li+ storage. Applied Surface Science, 2022, 605, 154758.	3.1	7

#	Article	IF	Citations
1801	3D electronic channels wrapped Large-Sized SnSe as flexible electrode for Sodium-Ion batteries. Applied Surface Science, 2022, 606, 154955.	3.1	2
1802	Anthraquinone porous polymers with different linking patterns for high performance Zinc-Organic battery. Journal of Colloid and Interface Science, 2023, 629, 434-444.	5.0	12
1803	On spot detection of nickel and cobalt from exhausted batteries by a smart electrochemical sensor. Talanta, 2023, 253, 123918.	2.9	3
1804	Physical and electrochemical properties of new structurally flexible imidazolium phosphate ionic liquids. Physical Chemistry Chemical Physics, 2022, 24, 23289-23300.	1.3	5
1805	Sea-urchin-like iron-cobalt phosphide as an advanced anode material for lithium ion batteries. Materials Advances, 2022, 3, 7235-7240.	2.6	4
1806	Evolving aprotic Liâ€“air batteries. Chemical Society Reviews, 2022, 51, 8045-8101.	18.7	37
1807	An intercalationâ€“conversion hybrid mechanism enables covalent organic frameworks with superior Li-ion storage. Journal of Materials Chemistry A, 2022, 10, 20866-20873.	5.2	6
1808	Comparison of Positive Electrode Separation by Electrical Pulsed Discharge in Underwater and Air Environments. IEEE Transactions on Plasma Science, 2022, 50, 3625-3634.	0.6	2
1809	Mechanics-based design of lithium-ion batteries: a perspective. Physical Chemistry Chemical Physics, 2022, 24, 29279-29297.	1.3	5
1810	Tape-cast Ce-substituted Li₇La₃Zr₂O₁₂ electrolyte for improving electrochemical performance of solid-state lithium batteries. Journal of Materials Chemistry A, 2022, 10, 22512-22522.	5.2	4
1811	A strategy for anode modification for future zinc-based battery application. Materials Horizons, 2022, 9, 2722-2751.	6.4	38
1812	Direct recovery of scrapped LiFePO₄ by a green and low-cost electrochemical re-lithiation method. Green Chemistry, 2022, 24, 6278-6286.	4.6	30
1813	Preparation of Cotton Straw Based Multi-pore Biomass Charcoal, Characterization and Electrochemical Properties. Lecture Notes in Electrical Engineering, 2022, , 139-155.	0.3	0
1814	Separation and recovery of graphite from spent lithiumâ€“ion batteries for synthesizing micro-expanded sorbents. New Journal of Chemistry, 2022, 46, 20250-20259.	1.4	2
1815	Capacity-enhanced and kinetic-expedited zinc-ion storage ability in a Zn₃V₃O₈/VO₂cathode enabled by heterostructural design. Dalton Transactions, 2022, 51, 15436-15445.	1.6	4
1816	The origin of high Na⁺ ion conductivity in Na_{1+x}Zr₂Si_xP_{3â^'x}O₁₂ NASICON materials. Physical Chemistry Chemical Physics, 2022, 24, 22154-22167.	1.3	6
1817	Two-dimensional covalent organic frameworks with p- and bipolar-type redox-active centers for organic high-performance Li-ion battery cathodes. Journal of Materials Chemistry A, 2022, 10, 16595-16601.	5.2	20
1818	Molecular structure design of planar zwitterionic polymer electrode materials for all-organic symmetric batteries. Chemical Science, 2022, 13, 11614-11622.	3.7	6

#	Article	IF	Citations
1819	A brief history of zincâ€“air batteries: 140 years of epic adventures. Energy and Environmental Science, 2022, 15, 4542-4553.	15.6	65
1820	Vanadium-free NASICON-type electrode materials for sodium-ion batteries. Journal of Materials Chemistry A, 2022, 10, 21816-21837.	5.2	12
1821	LiMn₂O₄ cathodes with F anion doping for superior performance of lithium-ion batteries. Physical Chemistry Chemical Physics, 2022, 24, 21638-21644.	1.3	3
1822	Advanced layered oxide cathodes for sodium/potassium-ion batteries: Development, challenges and prospects. Chemical Engineering Journal, 2023, 452, 139438.	6.6	57
1823	Enabling high-capacity Li metal battery with PVDF sandwiched type polymer electrolyte. Journal of Colloid and Interface Science, 2023, 629, 980-988.	5.0	12
1824	Ultrafast microwave-induced synthesis of lithiophilic oxides modified 3D porous mesh skeleton for high-stability Li-metal anode. Chemical Engineering Journal, 2023, 452, 139407.	6.6	8
1825	Electrochemical investigation of MoSeTe as an anode for sodium-ion batteries. Proceedings of the Indian National Science Academy, 2022, 88, 430-438.	0.5	4
1826	Stabilizing Zn Anode Interface by Simultaneously Manipulating the Thermodynamics of Zn Nucleation and Overpotential of Hydrogen Evolution. Advanced Functional Materials, 2022, 32, .	7.8	43
1827	Assembly: A Key Enabler for the Construction of Superior Siliconâ€Based Anodes. Advanced Science, 2022, 9, .	5.6	48
1828	Polycyclic Aromatic Hydrocarbon-Enabled Wet Chemical Prelithiation and Presodiation for Batteries. Batteries, 2022, 8, 99.	2.1	7
1829	Regulating surface electron structure of PtNi nanoalloy via boron doping for highâ€currentâ€density Liâ€O₂ batteries with low overpotential and longâ€life cyclability. SmartMat, 2024, 5, .	6.4	2
1830	Emerging carbon-based flexible anodes for potassium-ion batteries: Progress and opportunities. Frontiers in Chemistry, 0, 10, .	1.8	1
1831	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
1832	Carbon nanofibers derived from carbonization of electrospinning polyacrylonitrile (PAN) as high performance anode material for lithium ion batteries. Journal of Porous Materials, 0, , .	1.3	4
1833	Synthetic Control of Electronic Property and Porosity in Anthraquinone-Based Conjugated Polymer Cathodes for High-Rate and Long-Cycle-Life Naâ€“Organic Batteries. ACS Nano, 2022, 16, 14590-14599.	7.3	15
1834	Regulation of Outer Solvation Shell Toward Superior Lowâ€Temperature Aqueous Zincâ€Ion Batteries. Advanced Materials, 2022, 34, .	11.1	65
1835	Elucidating the charge-transfer and Li-ion-migration mechanisms in commercial lithium-ion batteries with advanced electron microscopy. , 2022, 1, e9120031.		50
1836	Integrated Modification Strategy Enables Remarkable Cyclability and Thermal Stability of Ni-Rich Cathode Materials for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 43085-43094.	4.0	4

#	Article	IF	Citations
1837	A Magnesium/Lithium Hybrid-Ion Battery with Modified All-Phenyl-Complex-Based Electrolyte Displaying Ultralong Cycle Life and Ultrahigh Energy Density. ACS Nano, 2022, 16, 15369-15381.	7.3	6
1838	Alleviating Anisotropic Volume Variation at Comparable Li Utilization during Cycling of Ni-Rich, Co-Free Layered Oxide Cathode Materials. Journal of Physical Chemistry C, 2022, 126, 16952-16964.	1.5	10
1839	Vertically assembled nanosheet networks for high-density thick battery electrodes. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	16
1840	Toward Highâ€Arealâ€Capacity Electrodes for Lithium and Sodium Ion Batteries. Advanced Energy Materials, 2022, 12, .	10.2	28
1841	Battery Management, Key Technologies, Methods, Issues, and Future Trends of Electric Vehicles: A Pathway toward Achieving Sustainable Development Goals. Batteries, 2022, 8, 119.	2.1	34
1842	Biomimetic Dendriteâ€Free Multivalent Metal Batteries. Advanced Materials, 2022, 34, .	11.1	35
1843	Heterogeneous Interfacial Layers Derived from the In Situ Reaction of CoF₂ Nanoparticles with Sodium Metal for Dendriteâ€Free Na Metal Anodes. Advanced Energy Materials, 2022, 12, .	10.2	27
1844	DFT Modelling of Li6SiO4Cl2 Electrolyte Material for Li-Ion Batteries. Batteries, 2022, 8, 137.	2.1	1
1845	Response surface methodology of nickel and cobalt recovery from battery using acid as leaching agent. International Journal of Energy and Environmental Engineering, 0, , .	1.3	0
1846	A Review of Nonaqueous Electrolytes, Binders, and Separators for Lithium-Ion Batteries. Electrochemical Energy Reviews, 2022, 5, .	13.1	33
1847	Realizing high energy-density lithium-ion batteries: High Ni-content or high cut-off voltage of single-crystal layered cathodes?. Journal of Electroanalytical Chemistry, 2022, 924, 116847.	1.9	4
1848	Texture Control of Commercial Zn Foils Prolongs Their Reversibility as Aqueous Battery Anodes. ACS Energy Letters, 2022, 7, 3564-3571.	8.8	54
1849	Germanium Nanowires via Molten-Salt Electrolysis for Lithium Battery Anode. ACS Nano, 2022, 16, 14402-14411.	7.3	10
1850	How stable is LiNi0.8Co0.15Al0.05O2 under high-temperature hydrocarbon ceramic fuel cell conditions?. Ceramics International, 2023, 49, 3049-3057.	2.3	4
1851	Charge Carriers for Aqueous Dualâ€Ion Batteries. ChemSusChem, 2023, 16, .	3.6	4
1852	Rechargeable Batteries for Grid Scale Energy Storage. Chemical Reviews, 2022, 122, 16610-16751.	23.0	340
1853	Degradation of a Li_{1.5}Al_{0.5}Ge_{1.5}(PO₄)₃-Based Solid-State Li-Metal Battery: Corrosion of Li_{1.5}Al_{0.5}Ge_{1.5}(PO₄)₃ against the Li-Metal Anode. ACS Applied Energy Materials, 2022, 5, 11694-11704.	2.5	2
1854	Highly Reversible Lithium Host Materials for Highâ€Energyâ€Density Anodeâ€Free Lithium Metal Batteries. Advanced Functional Materials, 2022, 32, .	7.8	23

#	Article	IF	Citations
1855	Insight mechanism of nano iron difluoride cathode material for high-energy lithium-ion batteries: a review. Journal of Solid State Electrochemistry, 2022, 26, 2601-2626.	1.2	2
1856	Stable Dendrite-Free High-Voltage Lithium Metal Batteries Enabled by Localized High Concentration Fluoroethylene Carbonate Based Electrolytes. ACS Applied Energy Materials, 2022, 5, 12553-12560.	2.5	5
1857	Molybdenum-Doped Li/Mn-Rich Layered Transition Metal Oxide Cathode Material Li_{1.2}Mn_{0.6}Ni_{0.1}Co_{0.1}O₂ with High Specific Capacity and Improved Cyclic Stability for Rechargeable Li-Batteries. ACS Applied Energy Materials, 2022, 5, 12183-12195.	2.5	4
1858	Role of Interfaces in Solidâ€State Batteries. Advanced Materials, 2023, 35, .	11.1	29
1859	Characterizing battery materials and electrodes via in situ/operando transmission electron microscopy. Chemical Physics Reviews, 2022, 3, .	2.6	9
1860	Columnar liquid-crystalline triazine-based dendrimer with carbon nanotube filler for efficient organic lithium-ion batteries. Electrochimica Acta, 2022, 434, 141306.	2.6	4
1861	Unraveling the Atomicâ€Level Manipulation Mechanism of Li₂S Redox Kinetics via Electronâ€Donor Doping for Designing Highâ€Volumetricâ€Energyâ€Density, Leanâ€Electrolyte Lithiumâ€“Sulfur Batteries. Advanced Science, 2022, 9, .	5.6	24
1862	Metal-organic framework (MOF)-incorporated polymeric electrolyte realizing fast lithium-ion transportation with high Li+ transference number for solid-state batteries. Frontiers in Chemistry, 0, 10, .	1.8	6
1863	Ex-situ EPR approach to explore the electrochemical behaviour of Arylboron-Linked conjugated microporous polymer cathode. Chemical Engineering Journal, 2023, 452, 139576.	6.6	5
1864	The Influence of Calendering on the Fast Charging Performance and Lithium Plating of Hard Carbon Blend Anodes. Energy Technology, 0, , 2200865.	1.8	1
1865	Modeling Contact Behavior of Multiparticles and Particleâ€“Current Collector Contact in Porous Electrode. Energy Technology, 2022, 10, .	1.8	3
1866	Interfacial high-concentration electrolyte for stable lithium metal anode: Theory, design, and demonstration. Nano Research, 2023, 16, 8321-8328.	5.8	2
1867	Predicting Capacity Fading Behaviors of Lithium Ion Batteries: An Electrochemical Protocol-Integrated Digital-Twin Solution. Journal of the Electrochemical Society, 2022, 169, 100504.	1.3	2
1868	Flameâ€Retardant Crosslinked Polymer Stabilizes Graphiteâ€“Silicon Composite Anode for Selfâ€Extinguishing Lithiumâ€Ion Batteries. Advanced Energy Materials, 2022, 12, .	10.2	6
1869	Improved Electrochemical Performance of NTs-WS₂@C Nanocomposites for Lithium-Ion and Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 46386-46400.	4.0	11
1870	Insights into architecture, design and manufacture of electrodes for lithium-ion batteries. Materials and Design, 2022, 223, 111208.	3.3	20
1871	CaMoO4 Persimmon/MCMB composites with highly exposed (103) active facets and enhanced properties for reversible lithium storage. Composites Part B: Engineering, 2022, 247, 110301.	5.9	1
1872	Rationally designing a Ti₃C₂T_x/CNTs-Co₉S₈ heterostructure as a sulfur host with multi-functionality for high-performance lithiumâ€“sulfur batteries. Nanoscale, 2022, 14, 16139-16147.	2.8	11

#	Article	IF	Citations
1873	Covalent surface modification of bifunctional two-dimensional metal carbide MXenes as sulfur hosts for sodiumâ€“sulfur batteries. Nanoscale, 2022, 14, 17027-17035.	2.8	8
1874	Effect of vinylene carbonate on SEI formation on LiMn₂O₄ in carbonate-based electrolytes. Physical Chemistry Chemical Physics, 2022, 24, 25611-25619.	1.3	1
1875	Towards the Intercalation and Lithium Plating Mechanism for High Safety and Fast-Charging Lithium-ion Batteries: A Review. , 0, 1, .		1
1876	2D Nb2O5@2D Metallic RuO2 Heterostructures as Highly Reversible Anode Materials for Lithium-ion Batteries. , 0, 1, .		0
1877	Ether-/Ester-/Fluorine-Rich Binding Emulsion Formula for Lithium-Ion Batteries. Engineering, 2022, 19, 199-206.	3.2	0
1878	Functional Separators for Long-Life and Safe Li Metal Batteries: A Minireview. Polymers, 2022, 14, 4546.	2.0	1
1879	Exploring 2D Energy Storage Materials: Advances in Structure, Synthesis, Optimization Strategies, and Applications for Monovalent and Multivalent Metalâ€Ion Hybrid Capacitors. Small, 2022, 18, .	5.2	29
1880	Reclaiming Neglected Compounds as Promising Solid State Electrolytes by Predicting Electrochemical Stability Window with Dynamically Determined Decomposition Pathway. Advanced Energy Materials, 2022, 12, .	10.2	5
1881	Integrated Design from Microstructural Engineering to Binder Optimization Enabling a Practical Carbon Anode with Ultrahigh ICE and Efficient Potassium Storage. ACS Applied Materials & Interfaces, 2022, 14, 48715-48726.	4.0	4
1882	A PEGylated Chitosan as Gel Polymer Electrolyte for Lithium Ion Batteries. Polymers, 2022, 14, 4552.	2.0	7
1883	Organic Electrolyte Design for Rechargeable Batteries: From Lithium to Magnesium. Angewandte Chemie - International Edition, 2022, 61, .	7.2	26
1884	Storage of Lithium-Ion by Phase Engineered MoO3 Homojunctions. Nanomaterials, 2022, 12, 3762.	1.9	0
1885	Mechanochemical Synthesis of N and S Dual-Doped Carbonaceous Anodes for Lithium-/Sodium-Ion Batteries. ACS Applied Energy Materials, 2022, 5, 13336-13345.	2.5	2
1886	The Anionic Chemistry in Regulating the Reductive Stability of Electrolytes for Lithium Metal Batteries. Angewandte Chemie - International Edition, 2022, 61, .	7.2	28
1887	The Anionic Chemistry in Regulating the Reductive Stability of Electrolytes for Lithium Metal Batteries. Angewandte Chemie, 0, , .	1.6	0
1888	Electrochemical performance of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>KTiOAsO</mml:mi><mml:mn>4</mml:mn></mml:msub> (KTA) in potassium-ion batteries from density-functional theory. Physical Review Materials, 2022, 6, .	0.9	2
1889	Long-Life Aqueous Zinc-Ion Batteries of Organic Iminodianthraquinone/rGO Cathode Assisted by Zn²⁺Binding with Adjacent Molecules. ACS Applied Materials & Interfaces, 2022, 14, 49746-49754.	4.0	9
1890	Self-Healing Polymers for Electronics and Energy Devices. Chemical Reviews, 2023, 123, 558-612.	23.0	48

#	Article	IF	Citations
1891	Thermally Stable Polymerâ€Rich Solid Electrolyte Interphase for Safe Lithium Metal Pouch Cells. Angewandte Chemie - International Edition, 2022, 61, .	7.2	51
1892	Halogen Hybrid Flow Batteries Advances for Stationary Chemical Power Sources Technologies. Energies, 2022, 15, 7397.	1.6	7
1893	Thermally Stable Polymerâ€Rich Solid Electrolyte Interphase for Safe Lithium Metal Pouch Cells. Angewandte Chemie, 2022, 134, .	1.6	4
1894	Iron Electrodes Based on Sulfur-Modified Iron Oxides with Enhanced Stability for Ironâ€“Air Batteries. ACS Applied Energy Materials, 2022, 5, 13439-13451.	2.5	2
1896	Nanoparticulate FeF₂@C as a Li Battery Conversion Cathode. ACS Applied Energy Materials, 2022, 5, 13346-13355.	2.5	2
1897	Interstitial Li⁺ and Li⁺ Migrations in the Li_{2+x}C_{1â€“x}B_xO₃ Solid Electrolyte. Journal of Physical Chemistry C, 2022, 126, 18466-18474.	1.5	0
1898	Tailoring electrolyte enables high-voltage Ni-rich NCM cathode against aggressive cathode chemistries for Li-ion batteries. Science Bulletin, 2022, 67, 2225-2234.	4.3	24
1899	Advanced Covalent Organic Frameworks for Multiâ€Valent Metal Ion Batteries. Chemistry - A European Journal, 2023, 29, .	1.7	6
1900	Organic Electrolyte Design for Rechargeable Batteries: From Lithium to Magnesium. Angewandte Chemie, 0, , .	1.6	0
1901	Enhancing battery performance by glucose addition to form spherical Li₄Ti₅O₁₂ as an anode material. Ferroelectrics, 2022, 598, 197-203.	0.3	0
1902	Defectâ€Induced Dense Amorphous/Crystalline Heterophase Enables Highâ€Rate and Ultrastable Sodium Storage. Advanced Science, 2022, 9, .	5.6	21
1903	Multiphase Transformation of NaFeF₃During Desodiation and Sodiation. ACS Applied Energy Materials, 2022, 5, 14361-14371.	2.5	5
1904	Production of Ta-Doped Li₇La₃Zr₂O₁₂ Solid Electrolyte with High Critical Current Density. ACS Applied Energy Materials, 2022, 5, 13817-13828.	2.5	16
1905	Size controllable single-crystalline Ni-rich cathodes for high-energy lithium-ion batteries. National Science Review, 2023, 10, .	4.6	26
1906	In Situ Growth of CoP Nanosheet Arrays on Carbon Cloth as Binderâ€Free Electrode for Highâ€Performance Flexible Lithiumâ€Ion Batteries. Small, 2022, 18, .	5.2	15
1907	In Situ Construction of Composite Artificial Solid Electrolyte Interphase for High-Performance Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2022, 14, 50982-50991.	4.0	8
1908	Advanced Material Engineering to Tailor Nucleation and Growth towards Uniform Deposition for Anodeâ€Less Lithium Metal Batteries. Small, 2022, 18, .	5.2	9
1909	Mechanism of mixed conductivity in crystalline and amorphous lithium lanthanum titanate. Solid State Ionics, 2022, 386, 116029.	1.3	1

#	Article	IF	Citations
1910	Rational design of advanced oxygen electrocatalysts for high-performance zinc-air batteries. Chem Catalysis, 2022, 2, 3357-3394.	2.9	7
1911	Strain-retardant coherent perovskite phase stabilized Ni-rich cathode. Nature, 2022, 611, 61-67.	13.7	123
1912	Design of X-ray energy detector. Energy Reports, 2022, 8, 456-460.	2.5	1
1913	The effects of PVB additives in MOFs-based solid composite electrolytes for all-solid-state lithium metal batteries. Journal of Electroanalytical Chemistry, 2022, 926, 116935.	1.9	16
1914	Metal-organic framework-based catalysts for lithium-sulfur batteries. Coordination Chemistry Reviews, 2023, 475, 214879.	9.5	32
1915	Electronic structure modulation of Ru/W20O58 catalyst via interfacial Ruâ€“Oâ€“W bridging bond for high-performance Liâ€“O2 batteries. Applied Surface Science, 2023, 609, 155453.	3.1	9
1916	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
1917	Encapsulating yolk-shelled Si@Co9S8 particles in carbon fibers to construct a free-standing anode for lithium-ion batteries. Applied Surface Science, 2023, 610, 155491.	3.1	14
1918	In situ formation of a lithiophilic surface on 3D current collectors to regulate lithium nucleation and growth for dendrite-free lithium metal anodes. Chemical Engineering Journal, 2023, 453, 139903.	6.6	18
1919	Electrochemical energy storage part I: development, basic principle and conventional systems. , 2023, , 151-188.		3
1920	Ultra-long cycle life organic-sodium batteries enabled by thiophene-based porphyrin in-situ electropolymerization. Chemical Engineering Journal, 2023, 453, 139951.	6.6	5
1921	Synergistic engineering of structural and electronic regulation of In2Se3 for ultrastable LiÂâ^'Âion battery. Chemical Engineering Journal, 2023, 453, 139841.	6.6	30
1922	Remaining useful life prediction of the lithium-ion battery based on CNN-LSTM fusion model and grey relational analysis. Electronic Research Archive, 2023, 31, 633-655.	0.4	7
1923	A glutamate anion boosted zinc anode for deep cycling aqueous zinc ion batteries. Journal of Materials Chemistry A, 2022, 10, 25029-25038.	5.2	19
1924	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
1925	Online electrochemical mass spectrometry on large-format Li-ion cells. Journal of Power Sources, 2023, 554, 232318.	4.0	16
1926	ç"µè§£æ¶²è°fæŽ§å®žçŽ°é«˜ç"µåŽ‹é•¿å‰ªåŽ¿ç¨³å®š. Chinese Science Bulletin, 2022, , .	0.4	0
1927	Recent Advances of ZnCo₂O₄â€based Anode Materials for Liâ€ion Batteries. Chemistry - an Asian Journal, 2023, 18, .	1.7	1

#	Article	IF	Citations
1928	Integration strategy for facile fabrication of porous carbon coated Fe3O4 nanospindles with enhanced lithium storage. Journal of Alloys and Compounds, 2023, 935, 168105.	2.8	4
1929	Molecular and Morphological Engineering of Organic Electrode Materials for Electrochemical Energy Storage. Electrochemical Energy Reviews, 2022, 5, .	13.1	22
1930	Recent Advances in the Multifunctional Natural Gum-Based Binders for High-Performance Rechargeable Batteries. Energies, 2022, 15, 8552.	1.6	5
1931	Overview and perspectives of solid electrolytes for sodium batteries. International Journal of Applied Ceramic Technology, 2023, 20, 563-584.	1.1	7
1932	Nanostructure-Dependent Electrochemical Properties of Nb₂O₅ for Long-Life Li-Ion Batteries. , 2023, 1, 469-476.		5
1933	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
1934	Enhanced electrochemical properties of d-Ti₃C₂T_x anode by h-BN addition for lithium-ion rechargeable battery. Nano, 0, , .	0.5	0
1935	In-liquid plasma discharge for one-step synthesis of MXene embedded TiO₂ thin film on Ti foil as lithium-ion battery anode. Applied Physics Letters, 2022, 121, 191602.	1.5	1
1936	Building Polymeric Framework Layer for Stable Solid Electrolyte Interphase on Natural Graphite Anode. Molecules, 2022, 27, 7827.	1.7	1
1937	Costâ€Effective Vat Orange 3â€Derived Organic Cathodes for Electrochemical Energy Storage. Batteries and Supercaps, 0, , .	2.4	2
1938	Entropy Stabilization Strategy for Enhancing the Local Structural Adaptability of Liâ€Rich Cathode Materials. Advanced Materials, 2023, 35, .	11.1	28
1939	Hollow Microscale and Nanoscale Structures as Anode Materials for Lithium-Ion Batteries. Chemistry of Materials, 2022, 34, 9803-9822.	3.2	3
1940	Predictive Molecular Models for Charged Materials Systems: From Energy Materials to Biomacromolecules. Advanced Materials, 2023, 35, .	11.1	2
1941	Global material flow analysis of end-of-life of lithium nickel manganese cobalt oxide batteries from battery electric vehicles. Waste Management and Research, 2023, 41, 376-388.	2.2	11
1942	Mg/Ti doping co-promoted high-performance P2-Na0.67Ni0.28Mg0.05Mn0.62Ti0.05O2 for sodium-ion batteries. Applied Physics Letters, 2022, 121, .	1.5	3
1943	Long-life lithium-metal batteries with dendrite-free anodes enabled by Zn(TFSI)2 additive. Journal of Alloys and Compounds, 2023, 936, 168108.	2.8	3
1944	Synthesis and electrochemical properties of Mn-doped porous Mg0.9Zn0.1Fe2â^'xMnxO4 (0Ââ‰ xÂâ‰Â1.25) spinel oxides as anode materials for lithium-ion batteries. Journal of Alloys and Compounds, 2023, 935, 167997.	2.8	9
1945	TiO2/Cu2O heterostructure enabling selective and uniform lithium deposition towards stable lithium metal anodes. Nano Research, 2023, 16, 4917-4925.	5.8	6

#	Article	IF	Citations
1946	Recent advances in solidâ€state metalâ€“air batteries. , 2023, 5, .		14
1947	Ultrafast Nonâ€Equilibrium Synthesis of Cathode Materials for Liâ€Ion Batteries. Advanced Materials, 2023, 35, .	11.1	32
1948	Li₄Ti₅O₁₂â€Based Battery Energy Storage System with Dualâ€Phase Cathode. Energy Technology, 2023, 11, .	1.8	1
1949	Chemical modification of graphene for atomic-scale catalyst supports. Nano Express, 2022, 3, 042001.	1.2	1
1950	Direct calculation of the ionic mobility in superionic conductors. Scientific Reports, 2022, 12, .	1.6	5
1951	A Review of the Application of Carbon Materials for Lithium Metal Batteries. Batteries, 2022, 8, 246.	2.1	9
1952	Assessing the impact of transport and kinetic mechanisms during the analysis of a LiFePO4 cathode: A different perspective during the operation and modeling of a battery cell. Chemical Engineering Journal, 2023, 455, 139720.	6.6	1
1953	Accommodation of Two-Dimensional SiO_x in a Point-to-Plane Conductive Network Composed of Graphene and Nitrogen-Doped Carbon for Robust Lithium Storage. ACS Applied Materials & Interfaces, 2022, 14, 53658-53666.	4.0	9
1954	Flexible, Stretchable, Waterâ€/Fireâ€Proof Fiberâ€Shaped Liâ€CO₂ Batteries with High Energy Density. Advanced Energy Materials, 2023, 13, .	10.2	16
1955	The effects of C2-methylation of imidazolium-based ionic liquid electrolytes on the lithium-ion transport. Journal of Molecular Liquids, 2023, 369, 120815.	2.3	2
1956	Strategic management of patents on electrochemical conversion fuel cells and batteries in Latin America as a mechanism for moving towards energy sustainability. Journal of Applied Electrochemistry, 0, , .	1.5	0
1957	Improved electrochemical performance of SBA-15 based SiO2 anodes with N-doping porous carbon. Journal of Electroanalytical Chemistry, 2023, 928, 117019.	1.9	3
1958	Bulk oxygen release inducing cyclic strain domains in Ni-rich ternary cathode materials. Energy Storage Materials, 2023, 55, 691-697.	9.5	3
1959	First principles investigation on Na-ion storage in two-dimensional boron-rich B₂N, B₃N, and B₅N. Physical Chemistry Chemical Physics, 2023, 25, 1123-1132.	1.3	3
1960	Direct reuse of aluminium and copper current collectors from spent lithium-ion batteries. Green Chemistry, 2023, 25, 3503-3514.	4.6	6
1961	Modified lithium metal anodeviaanion-planting protection mechanisms for dendrite-free long-life lithium metal batteries. Journal of Materials Chemistry A, 2023, 11, 2754-2768.	5.2	7
1962	Interlayer engineering in V₆O₁₃ nanobelts toward superior Mg-ion storage. Inorganic Chemistry Frontiers, 2023, 10, 544-551.	3.0	2
1963	Battery capacity estimation using 10-second relaxation voltage and a convolutional neural network. Applied Energy, 2023, 330, 120308.	5.1	15

#	Article	IF	Citations
1964	Structure regulation induced high capacity and ultra-stable cycling of conjugated organic cathodes for Li-ion batteries. Journal of Materials Chemistry A, 2022, 11, 77-83.	5.2	5
1965	Uracil-based additives for enabling robust interphases of high-voltage Li-ion batteries at elevated temperature by substituent effects. Materials Chemistry Frontiers, 2023, 7, 249-258.	3.2	2
1966	Emerging dual carbon fiber batteries. Electrochimica Acta, 2023, 439, 141597.	2.6	2
1967	Micron SiOx encapsulated into amorphous B, N Co-doped carbon nanotube network for high-capacity and long-durable Li-ion half/full batteries. Chemical Engineering Journal, 2023, 455, 140820.	6.6	5
1968	Hierarchical nickel cobalt sulfide nanoparticles encapsulated in rose-shaped carbon spheres as high-performance anode materials for lithium-ion batteries. Solid State Ionics, 2023, 389, 116097.	1.3	1
1969	CoMoO4 nanorods coated separator for high-performance lithium sulfur batteries. Materials Chemistry and Physics, 2023, 295, 127182.	2.0	3
1970	Lithium slag-based geopolymer synthesized with hybrid solid activators. Construction and Building Materials, 2023, 365, 130070.	3.2	12
1971	On the design of multisine signals for maintaining stability condition in impedance spectroscopy measurements of batteries. Journal of Energy Storage, 2023, 58, 106267.	3.9	8
1972	Carbon nanotubes intertwined porous vanadium oxide heterostructured microfibers as high-performance cathodes for aqueous zinc-ion batteries. Applied Surface Science, 2023, 612, 155791.	3.1	4
1973	Analysis for the Usage of Li-ion Battery in Electric Aircraft. , 2022, , .		2
1974	Electrolyte Additive-Controlled Interfacial Models Enabling Stable Antimony Anodes for Lithium-Ion Batteries. Journal of Physical Chemistry C, 2022, 126, 20302-20313.	1.5	6
1975	A Versatile Li_{0.5}FePO₄ Reference Electrode for Nonaqueous Electrochemical Conversion Technologies. ACS Energy Letters, 2023, 8, 230-235.	8.8	6
1976	In Situ Formation of LiF-Rich Carbon Interphase on Silicon Particles for Cycle-Stable Battery Anodes. Transactions of Tianjin University, 2023, 29, 101-109.	3.3	3
1977	High Adsorption Graphene Oxide Prepared by Graphite Anode from Spent Lithium-Ion Batteries for Methylene Blue Removal. Batteries, 2022, 8, 249.	2.1	0
1978	Sulfurâ€doped hard carbon hybrid anodes with dual lithiumâ€ion/metal storage bifunctionality for highâ€energyâ€density lithiumâ€ion batteries. , 2023, 5, .		5
1979	Probing Distinctive Redox Mechanism in Niâ€Rich Cathode Via Realâ€Time Quick Xâ€Ray Absorption Spectroscopy. Small Methods, 2023, 7, .	4.6	4
1980	Manganese Molybdate Cathodes with Dual-Redox Centers for Aqueous Zinc-Ion Batteries: Impact of Electrolyte on Electrochemistry. ACS Sustainable Chemistry and Engineering, 2022, 10, 16197-16213.	3.2	1
1981	Strain Regulating and Kinetics Accelerating of Microâ€Sized Silicon Anodes via Dualâ€Size Hollow Graphitic Carbons Conductive Additives. Small, 2023, 19, .	5.2	1

#	Article	IF	Citations
1982	Atomic Layer Deposition for Electrochemical Energy: from Design to Industrialization. Electrochemical Energy Reviews, 2022, 5, .	13.1	21
1983	Effect of homojunction structure in boosting sodium-ion storage: The case of MoO2. Journal of Energy Chemistry, 2023, 78, 115-122.	7.1	6
1984	Application of P2-Na_{2/3}Ni_{1/3}Mn_{2/3}O₂ Electrode to All-Solid-State 3 V Sodium(-Ion) Polymer Batteries. Journal of Physical Chemistry C, 2022, 126, 20226-20234.	1.5	5
1985	Spinel phase MnIn2S4 enfolded with reduced graphene oxide as composite anode material for lithium-ion storage. Materials Today Sustainability, 2023, 21, 100278.	1.9	5
1986	Atomically bonding Na anodes with metallized ceramic electrolytes by ultrasound welding for highâ€energy/power solidâ€state sodium metal batteries. , 2023, 5, .		7
1987	Electrochemical performance improvement of LiFePO4/C composite cathode materials by using sodium ligninsulfonate as carbon source and surfactant for lithium-ion batteries. Ionics, 0, , .	1.2	0
1988	Bulk Oxygen Stabilization via Electrodeâ€Electrolyte Interphase Tailored Surface Activities of Liâ€Rich Cathodes. Advanced Energy Materials, 2023, 13, .	10.2	14
1989	Progress and prospect on the recycling of spent lithiumâ€ion batteries: Ending is beginning. , 2022, 1, 247-266.		18
1990	Self-crimping of multichain polymers into carbon nanotubes. Surface Innovations, 2024, 12, 23-29.	1.4	1
1991	Influence of Electrode Corrugation after Calendering on the Geometry of Single Electrode Sheets in Battery Cell Production. Energy Technology, 2023, 11, .	1.8	3
1992	Constructing Mechanical Shuttles in a Threeâ€dimensional (3D) Porous Architecture for Selective Transport of Lithium Ions. Angewandte Chemie, 2023, 135, .	1.6	2
1993	Imidazolium-Type Poly(ionic liquid) Endows the Composite Polymer Electrolyte Membrane with Excellent Interface Compatibility for All-Solid-State Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2022, 14, 55664-55673.	4.0	6
1994	Emerging Lithiated Organic Cathode Materials for Lithiumâ€ion Full Batteries. Angewandte Chemie, 2023, 135, .	1.6	3
1995	Embedding the high entropy alloy nanoparticles into carbon matrix toward high performance Li-ion batteries. Journal of Alloys and Compounds, 2023, 938, 168610.	2.8	6
1996	Emerging Lithiated Organic Cathode Materials for Lithiumâ€ion Full Batteries. Angewandte Chemie - International Edition, 2023, 62, .	7.2	12
1997	Zero-Strain Cathodes for Lithium-Based Rechargeable Batteries: A Comprehensive Review. ACS Applied Energy Materials, 2023, 6, 12-30.	2.5	2
1998	Quenchingâ€Induced Defects Liberate the Latent Reversible Capacity of Lithium Titanate Anode. Advanced Materials, 2023, 35, .	11.1	7
1999	Interlayer Modulation of Layered Transition Metal Compounds for Energy Storage. ACS Applied Materials & Interfaces, 2022, 14, 54369-54388.	4.0	4

#	Article	IF	Citations
2000	Insights into the Enhanced Reversibility of Graphite Anode Upon Fast Charging Through Li Reservoir. ACS Nano, 2022, 16, 20197-20205.	7.3	7
2001	Advanced Nb2O5 Anode towards Fast Pseudocapacitive Sodium Storage. Coatings, 2022, 12, 1873.	1.2	1
2002	Towards extreme fast charging of 4.6ÂV LiCoO2 via mitigating high-voltage kinetic hindrance. Journal of Energy Chemistry, 2023, 78, 13-20.	7.1	6
2003	Facile synthesis of hairbrush like FeVO4@C/CC anode material with enhanced electrochemical performance for alkaline ion batteries. Journal of Applied Electrochemistry, 2023, 53, 991-1002.	1.5	1
2004	Constructing Mechanical Shuttles in a Threeâ€dimensional (3D) Porous Architecture for Selective Transport of Lithium Ions. Angewandte Chemie - International Edition, 2023, 62, .	7.2	14
2005	Exploring Trimethyl-Phosphate-Based Electrolytes without a Carbonyl Group for Li-Rich Layered Oxide Positive Electrodes in Lithium-Ion Batteries. Journal of Physical Chemistry Letters, 2022, 13, 11307-11316.	2.1	2
2006	Annealingâ€Free Thioantimonate Argyrodites with High Liâ€Ion Conductivity and Low Elastic Modulus. Advanced Functional Materials, 2023, 33, .	7.8	4
2007	In Situ Surface Coating and Oxygen Vacancy Dual Strategy Endowing a Li-Rich Li_{1.2}Mn_{0.55}Ni_{0.11}Co_{0.14}O₂ Cathode with Superior Lithium Storage Performance. ACS Applied Energy Materials, 2023, 6, 387-396.	2.5	11
2008	Chemical Preintercalation Synthesis of Versatile Electrode Materials for Electrochemical Energy Storage. Accounts of Chemical Research, 2023, 56, 13-24.	7.6	8
2009	Conversion of Lithium Chloride into Lithium Hydroxide by Solvent Extraction. Journal of Sustainable Metallurgy, 2023, 9, 107-122.	1.1	4
2010	Elementary Decomposition Mechanisms of Lithium Hexafluorophosphate in Battery Electrolytes and Interphases. ACS Energy Letters, 2023, 8, 347-355.	8.8	27
2011	An Improved Experiment for Measuring Lithium Concentration-Dependent Material Properties of Graphite Composite Electrodes. Nanomaterials, 2022, 12, 4448.	1.9	0
2012	Triple Stimuliâ€Responsive Flexible Shape Memory Foams with Superâ€Amphiphilicity. Small, 2023, 19, .	5.2	4
2013	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
2014	Electrochemical and spectroscopic studies on carbonâ€coated and iodineâ€doped <scp>LiFeBO₃</scp> as a cathode material for lithiumâ€ion batteries. Bulletin of the Korean Chemical Society, 2023, 44, 298-303.	1.0	2
2015	Revisiting the Relation Between the Stability of the LUMO of the Electrolytes and the Kinetics of Solid Electrolyte Interface Formation in Li and Postâ€Li ion Batteries. Batteries and Supercaps, 0, , .	2.4	0
2016	Self-supporting Biomass Liâ€“S Cathodes Decorated with Metal Phosphidesâ€“Higher Sulfur Loading, Better Stability, and Longer Cycle Life. ACS Applied Energy Materials, 2022, 5, 15401-15411.	2.5	1
2017	Heterostructured and Mesoporous Nb₂O₅@TiO₂ Core-Shell Spheres as the Negative Electrode in Li-Ion Batteries. ACS Applied Materials & Interfaces, 2023, 15, 795-805.	4.0	4

#	Article	IF	Citations
2018	Suppress Loss of Polysulfides in Lithiumâ€“Sulfur Battery by Regulating the Rate-Determining Step via 1T MoS₂â€“MnO₂ Covering Layer. ACS Applied Materials & Interfaces, 2023, 15, 1175-1183.	4.0	4
2019	3D Carbon Materials for High-Performance Electric Energy Storage Facilities. ACS Applied Energy Materials, 2023, 6, 1-11.	2.5	4
2020	Flash Recycling of Graphite Anodes. Advanced Materials, 2023, 35, .	11.1	26
2021	Unstructured Self-Assembled Molecular Lamella Induces Ultrafast Thermal Transfer through a Cathode/Separator Interphase in Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 56268-56279.	4.0	0
2022	Solvation and Interfacial Engineering Enable â¯40ÂÂ°C Operation of Graphite/NCM Batteries at Energy Density over 270 WhÂkg^{â¯1}. Advanced Materials, 2023, 35, .	11.1	20
2023	Systematic Modification of MoO₃â€Based Cathode by the Intercalation Engineering for Highâ€Performance Aqueous Zincâ€Ion Batteries. Advanced Functional Materials, 2023, 33, .	7.8	12
2024	Mechanism, quantitative characterization, and inhibition of corrosion in lithium batteries. , 2023, 2, e9120046.		22
2025	Alternate Synthesis Method for Highâ€Performance Manganese Rich Cation Disordered Rocksalt Cathodes. Advanced Energy Materials, 2023, 13, .	10.2	8
2026	Hydrogen Bond Networks Stabilized Highâ€Capacity Organic Cathode for Lithiumâ€Ion Batteries. Angewandte Chemie, 2023, 135, .	1.6	4
2027	Propanediol Cyclic Sulfate as An Electrolyte Additive to Improve the Cyclic Performance of LiNi_{0.6}Co_{0.1}Mn_{0.3}O₂/Graphite Pouchâ€Cell at High Voltage. ChemElectroChem, 2023, 10, .	1.7	3
2028	Synthetic hureaulite as anode material for lithium-ion batteries. Journal of Applied Electrochemistry, 2023, 53, 1015-1022.	1.5	2
2029	Review of the Li-Ion Battery, Thermal Management, and AI-Based Battery Management System for EV Application. Energies, 2023, 16, 185.	1.6	19
2030	Machine learning-assisted multi-objective optimization of battery manufacturing from synthetic data generated by physics-based simulations. Energy Storage Materials, 2023, 56, 50-61.	9.5	16
2031	Structural batteries: Advances, challenges and perspectives. Materials Today, 2023, 62, 151-167.	8.3	19
2032	Recent Progress of MXene-Based Materials as Anodes in Sodium-Ion Batteries. Journal of Electronic Materials, 2023, 52, 847-863.	1.0	4
2033	Hydrogen Bond Networks Stabilized Highâ€Capacity Organic Cathode for Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2023, 62, .	7.2	17
2034	Combinatorial study of the Li-La-Zr-O system. Solid State Ionics, 2022, 388, 116087.	1.3	6
2035	Advanced Composite Lithium Metal Anodes with 3D Frameworks: Preloading Strategies, Interfacial Optimization, and Perspectives. Small, 2023, 19, .	5.2	10

#	Article	IF	Citations
2036	Dimensionally Stable Composite Li Electrode with Cu Skeleton and Lithophilic Liâ€“Mg Alloy Microstructure. ACS Applied Materials & Interfaces, 2022, 14, 56801-56807.	4.0	1
2037	Explicit and Hybrid Solvent Models for Estimates of Parameters Relevant to the Reduction Potential of Ethylene Carbonate. International Journal of Molecular Sciences, 2022, 23, 15590.	1.8	2
2038	Recent Advances on Challenges and Strategies of Manganese Dioxide Cathodes for Aqueous Zincâ€Ion Batteries. Energy and Environmental Materials, 2023, 6, .	7.3	28
2039	Î²â€Ketoenamineâ€Linked Covalent Organic Framework with Co Intercalation: Improved Lithiumâ€Storage Properties and Mechanism for Highâ€Performance Lithiumâ€Organic Batteries. Batteries and Supercaps, 2023, 6, .	2.4	39
2040	Amino-Acid-Substituted Perylene Diimide as the Organic Cathode Materials for Lithium-Ion Batteries. Materials, 2023, 16, 839.	1.3	3
2041	Synergistic Effect of Cathode and Electrolyte Additives on Stabilizing the Anodic Interface for Sodium-based Dual-carbon Batteries. Journal of Alloys and Compounds, 2023, , 168863.	2.8	0
2042	Single-source realization of Na-doped and carbon-coated LiMnPO4 nanocomposite for enhanced performance of Li-ion batteries. Journal of Solid State Electrochemistry, 2023, 27, 1055-1060.	1.2	3
2043	Inâ€Situ Constructing A Heterogeneous Layer on Lithium Metal Anodes for Dendriteâ€Free Lithium Deposition and High Liâ€Ion Flux. Angewandte Chemie, 0, , .	1.6	2
2044	Overdischarge-induced evolution of Cu dendrites and degradation of mechanical properties in lithium-ion batteries. Journal of Energy Chemistry, 2023, 78, 497-506.	7.1	8
2046	UV-cured Polymer Solid Electrolyte Reinforced using a Ceramic-Polymer Composite Layer for Stable Solid-State Li Metal Batteries. Journal of Electrochemical Science and Technology, 2023, 14, 85-95.	0.9	2
2047	Advance of Prussian Blueâ€Derived Nanohybrids in Energy Storage: Current Status and Perspective. Small, 2023, 19, .	5.2	8
2048	Tracking lithiation with transmission electron microscopy. Science China Chemistry, 2024, 67, 291-311.	4.2	4
2049	Inâ€Situ Constructing A Heterogeneous Layer on Lithium Metal Anodes for Dendriteâ€Free Lithium Deposition and High Liâ€Ion Flux. Angewandte Chemie - International Edition, 2023, 62, .	7.2	18
2050	Reduced graphene oxide-wrapped copper cobalt selenide composites as anode materials for high-performance lithium-ion batteries. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 663, 130979.	2.3	7
2051	<scp>3D</scp> Grid of Carbon Tubes with <scp>Mn₃O₄â€NPs</scp>/<scp>CNTs</scp> Filled in their Inner Cavity as Ultrahighâ€Rate and Stable Lithium Anode. Energy and Environmental Materials, 2023, 6, .	7.3	4
2052	From amorphous to crystalline: a universal strategy for structure regulation of high-entropy transition metal oxides. Chemical Science, 2023, 14, 1787-1796.	3.7	5
2053	Longâ€Term Cycling Stability of Porphyrin Electrode for Li/Na Charge Storage at High Temperature. ChemSusChem, 2023, 16, .	3.6	0
2054	Interface Engineering of Zinc Electrode for Rechargeable Alkaline Zincâ€Based Batteries. Small Methods, 2023, 7, .	4.6	13

#	Article	IF	Citations
2055	Facilitating ionic conductivity and interfacial stability via oxygen vacancies-enriched TiO2 microrods for composite polymer electrolytes. Chemical Engineering Journal, 2023, 460, 141329.	6.6	18
2056	From atomistic modeling to materials design: computation-driven material development in lithium-ion batteries. Science China Chemistry, 2024, 67, 276-290.	4.2	2
2057	Selfâ€Healing and Recyclable Polymer Electrolyte Enabled with Boronic Ester Transesterification for Stabilizing Ion Deposition. Advanced Functional Materials, 2023, 33, .	7.8	25
2058	Selecting the Optimal Fluorinated Ether Co-Solvent for Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2023, 15, 2804-2811.	4.0	8
2059	Cathode Choices for Rechargeable Aluminium Batteries: The Past Decade and Future. , 0, 2, .		0
2060	Pt Nanoparticles Confined in a 3D Porous FeNC Matrix as Efficient Catalysts for Rechargeable Li-CO₂/O₂ Batteries. ACS Applied Materials & Interfaces, 2023, 15, 2940-2950.	4.0	7
2061	Defect-rich WS₂â€“SPAN nanofibers for sodium/potassium-ion batteries: ultralong lifespans and wide-temperature workability. Inorganic Chemistry Frontiers, 2023, 10, 1187-1196.	3.0	11
2062	Novel Preoxidation-Assisted Mechanism to Preciously Form and Disperse Bi₂O₃ Nanodots in Carbon Nanofibers for Ultralong-Life and High-Rate Sodium Storage. ACS Applied Materials & Interfaces, 2023, 15, 1891-1902.	4.0	4
2063	Basics of the scanning electrochemical microscope and its application in the characterization of lithium-ion batteries: a brief review. Materials Chemistry Frontiers, 2023, 7, 662-678.	3.2	3
2064	Micropore engineering on hollow nanospheres for ultra-stable sodium-selenium batteries. Journal of Energy Chemistry, 2023, 80, 99-109.	7.1	5
2065	Enabling interfacial stability of LiCoO₂ batteries at an ultrahigh cutoff voltage â‰¥ 4.65 V via a synergetic electrolyte strategy. Journal of Materials Chemistry A, 2023, 11, 3703-3716.	5.2	7
2066	A 3D multifunctional host anode from commercial carbon cloth for lithium metal batteries. Journal of Materials Chemistry A, 2023, 11, 4205-4219.	5.2	10
2067	Recycling of graphite anode from spent lithiumâ€ion batteries: Advances and perspectives. EcoMat, 2023, 5, .	6.8	20
2068	Realizing Scalable Nano-SiO2-Aerogel-Reinforced Composite Polymer Electrolytes with High Ionic Conductivity via Rheology-Tuning UV Polymerization. Molecules, 2023, 28, 756.	1.7	1
2069	Aromatic heterocyclic anion based ionic liquids and electrolytes. Physical Chemistry Chemical Physics, 2023, 25, 3502-3512.	1.3	7
2070	An artificial Î²-PVDF nanofiber layer for dendrite-free zinc anode in rechargeable aqueous batteries. Journal of Materials Science, 2023, 58, 1708-1720.	1.7	3
2071	Facile Hydrothermal Fabrication of an Î±-Ni(OH)₂/N-Doped Reduced Graphene Oxide Nanohybrid as a High-Performance Anode Material for Lithium-Ion Batteries. Energy & Fuels, 2023, 37, 2368-2378.	2.5	5
2072	A review on lithium-sulfur batteries: Challenge, development, and perspective. Nano Research, 2023, 16, 8097-8138.	5.8	36

#	Article	IF	Citations
2073	Design of Phosphide Anodes Harvesting Superior Sodium Storage: Progress, Challenges, and Perspectives. Advanced Functional Materials, 2023, 33, .	7.8	30
2074	Activating zinc-ion storage in MXene through Mn⁴⁺ loading on surface terminations. New Journal of Chemistry, 0, , .	1.4	0
2075	Accessing the Primary Solidâ€“Electrolyte Interphase on Lithium Metal: A Method for Lowâ€Concentration Compound Analysis. ChemSusChem, 2023, 16, .	3.6	2
2076	Stabilizing lattice oxygen and interface chemistry of Ni-rich and Co-poor cathodes for high-energy lithium-ion batteries. Journal of Materials Chemistry A, 2023, 11, 2979-2984.	5.2	9
2077	Multifunctional lithium compensation agent based on carbon edges catalysis and its application in anode-free lithium batteries. Chemical Engineering Journal, 2023, 458, 141411.	6.6	8
2078	Adjusting coherence length of expanded graphite by self-activation and its electrochemical implication in potassium ion battery. Carbon, 2023, 204, 315-324.	5.4	14
2079	Design and synthesis of high-silicon silicon suboxide nanowires by radio-frequency thermal plasma for high-performance lithiumâ€ion battery anodes. Applied Surface Science, 2023, 614, 156235.	3.1	12
2080	Structure-Performance relationship guided design and strategic synthesis of lithiated oxa-graphene for high lithium storage. Journal of Colloid and Interface Science, 2023, 635, 543-551.	5.0	2
2081	A novel zinc ion supercapacitor with ultrahigh capacity and ultralong cycling lives enhanced by redox electrolyte. Journal of Energy Storage, 2023, 60, 106597.	3.9	2
2082	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
2083	Symmetric Cells as an Analytical Tool for Battery Research: Assembly, Operation, and Data Analysis Strategies. Journal of the Electrochemical Society, 2023, 170, 020521.	1.3	6
2084	Establish TiNb2O7@C as Fast-Charging Anode for Lithium-Ion Batteries. Materials, 2023, 16, 333.	1.3	0
2085	A Facile Cationâ€Exchange Strategy for ZnSâ€SnSâ€Sb₂S₃@C Submicron Box as Advanced Anode for Liâ€ion Batteries. ChemNanoMat, 2023, 9, .	1.5	1
2086	Biomass Alginate Derived Oxygen-Enriched Carbonaceous Materials with Partially Graphitic Nanolayers for High Performance Anodes in Lithium-Ion Batteries. Nanomaterials, 2023, 13, 82.	1.9	8
2087	Solvothermal Polymerization and Electrochemical Behavior of Conjugated Polyimide with High Electronic Conductivity and Low Solubility. ChemElectroChem, 0, , .	1.7	0
2088	Rational Design of Electrode Materials for Advanced Supercapacitors: From Lab Research to Commercialization. Advanced Functional Materials, 2023, 33, .	7.8	66
2089	Selfâ€Standing 3D Hollow Nanoporous SnO₂â€Modified Cu_xO Nanotubes with Nanolamellar Metallic Cu Inwalls: A Facile In Situ Synthesis Protocol toward Enhanced Li Storage Properties. Advanced Functional Materials, 2023, 33, .	7.8	10
2090	The Snâ€“red Pâ€“Feâ€“based alloy materials for efficient Liâ€“ion battery anodes. Journal of Industrial and Engineering Chemistry, 2023, 121, 299-311.	2.9	10

#	Article	IF	Citations
2091	Structureâ€“transport correlations in Na11Sn2SbSe12 and its sulfide solid solutions. APL Materials, 2023, 11, .	2.2	1
2092	Entropyâ€Driven Ultrafast Ion Conduction Via Confining Organic Plastic Crystals in Ordered Nanochannels of Covalent Organic Frameworks. Small, 2023, 19, .	5.2	2
2093	What is ESG? Rethinking the â€œEâ€•pillar. Business Strategy and the Environment, 2023, 32, 4382-4391.	8.5	5
2094	Engineering green and sustainable solvents for scalable wet synthesis of sulfide electrolytes in high-energy-density all-solid-state batteries. Green Chemistry, 2023, 25, 1473-1487.	4.6	7
2096	A fabrication of stable lithium metal anodes using HF scavenging films. Chemical Communications, 2023, 59, 2819-2822.	2.2	1
2097	â€œPoreâ€Hoppingâ€•Ion Transport in Celluloseâ€Based Separator Towards Highâ€Performance Sodiumâ€Ion Batteries. Angewandte Chemie, 2023, 135, .	1.6	2
2098	Ionic liquids: environmentally sustainable materials for energy conversion and storage applications. Environmental Science and Pollution Research, 2024, 31, 10296-10316.	2.7	6
2099	Thermal Management Techniques for Lithium-Ion Batteries Based on Phase Change Materials: A Systematic Review and Prospective Recommendations. Energies, 2023, 16, 876.	1.6	5
2100	On the Road to Stable Electrochemical Metal Deposition in Multivalent Batteries. ACS Sustainable Chemistry and Engineering, 2023, 11, 2014-2032.	3.2	7
2101	Application of 2D MXene in Organic Electrode Materials for Rechargeable Batteries: Recent Progress and Perspectives. Advanced Functional Materials, 2023, 33, .	7.8	13
2102	Improved Cycling of Li||NMC811 Batteries under Practical Conditions by a Localized Highâ€Concentration Electrolyte. Small, 2023, 19, .	5.2	2
2103	Tape-Casting Method of Hybrid Solid Electrolytes with a Residual Active Solvent of Tetraethylene Glycol Dimethyl Ether. ACS Applied Energy Materials, 2023, 6, 2031-2038.	2.5	3
2104	Naturally-derived thermal barrier based on fiber-reinforced hydrogel for the prevention of thermal runaway propagation in high-energetic lithium-ion battery packs. Journal of Energy Storage, 2023, 61, 106841.	3.9	6
2105	Comprehensive evaluation of energy storage systems for inertia emulation and frequency regulation improvement. Energy Reports, 2023, 9, 2566-2576.	2.5	12
2106	Thermal Runaway State in Lithium Ion Batteries of Electric Vehicles: An Overview. , 2022, , .		0
2107	Advances and strategies of electrolyte regulation in Zn-ion batteries. Materials Chemistry Frontiers, 2023, 7, 3232-3258.	3.2	11
2108	Electro-Chemo-Mechanical Challenges and Perspective in Lithium Metal Batteries. Applied Mechanics Reviews, 2023, 75, .	4.5	10
2109	A comprehensive review of cathode materials for Naâ€“air batteries. Energy Advances, 2023, 2, 465-502.	1.4	1

#	Article	IF	Citations
2110	A stepwise oxidation strategy for the synthesis of amorphous V₂O₅@V₂CT_xnanohybrid cathodes toward high-performance aqueous Zn-ion batteries. Journal of Materials Chemistry A, 2023, 11, 8224-8234.	5.2	8
2111	Fabrication of carboxylated tubular carbon nanofibers as anode electrodes for high-performance lithiumâ€ion batteries. , 2023, , 183-210.		0
2112	Pore confined time-of-flight secondary ion electrochemical mass spectrometry. Chemical Society Reviews, 2023, 52, 2596-2616.	18.7	5
2113	Dilute Aqueous Hybrid Electrolyte with Regulated Coreâ€Shellâ€Solvation Structure Endows Safe and Lowâ€Cost Potassiumâ€ion Energy Storage Devices. Advanced Functional Materials, 2023, 33, .	7.8	12
2114	Superconducting transmon qubit-resonator quantum battery. Physical Review A, 2023, 107, .	1.0	9
2115	Safety Issues of Layered Nickel-Based Cathode Materials for Lithium-Ion Batteries: Origin, Strategies and Prospects. Batteries, 2023, 9, 156.	2.1	3
2116	Stable Operation of Lithium Metal Batteries with Aggressive Cathode Chemistries at 4.9â€…V. Angewandte Chemie - International Edition, 2023, 62, .	7.2	17
2117	Na3V2(PO4)3-decorated separator as an improved catalysis ceramic layer for high-performance lithium sulfur batteries. Ionics, 2023, 29, 2271-2285.	1.2	2
2118	Lithium-ion battery state-of-charge estimation strategy for industrial applications. Proceedings of Institution of Civil Engineers: Energy, 2024, 177, 14-21.	0.5	1
2119	Anionâ€Dependent Redox Chemistry of pâ€Type Poly(vinyldimethylphenazine) Cathode Materials. Angewandte Chemie - International Edition, 2023, 62, .	7.2	9
2120	Data-Driven State of Health Estimation for Lithium-Ion Batteries Based on Universal Feature Selection. Journal of the Electrochemical Society, 2023, 170, 040507.	1.3	3
2121	A 2.6 V Flexible Supercapacitor Based on Al-MnO₂-Na₂SO₄//AC-KOH with High Specific Energy. ACS Energy Letters, 2023, 8, 2033-2041.	8.8	14
2122	Unconstrained Machine Learning Screening for New Liâ€ion Cathode Materials Enhanced by Class Balancing. Advanced Theory and Simulations, 0, , .	1.3	1
2123	Elastic Interfacial Layer Enabled the Highâ€Temperature Performance of Lithiumâ€ion Batteries via Utilization of Synthetic Fluorosulfate Additive. Advanced Functional Materials, 2023, 33, .	7.8	4
2124	Probing inhomogeneity of electrical-thermal distribution on electrode during fast charging for lithium-ion batteries. Applied Energy, 2023, 336, 120868.	5.1	3
2125	Unraveling the superior anodic lithium storage behavior in the redox-active porphyrinic triazine frameworks. Chemical Engineering Journal, 2023, 463, 142434.	6.6	6
2126	Engineering hollow core-shell hetero-structure box to induce interfacial charge modulation for promoting bidirectional sulfur conversion in lithium-sulfur batteries. Journal of Energy Chemistry, 2023, 80, 128-139.	7.1	10
2127	CO-induced thermal decomposition of LiNi0.8Co0.15Al0.05O2. Physics Letters, Section A: General, Atomic and Solid State Physics, 2023, 470, 128774.	0.9	1

#	Article	IF	Citations
2128	Encapsulating ZnO/Ni3ZnC0.7 into N-doped carbon nanofibers as anode materials for lithium-ion batteries. Materials Letters, 2023, 339, 134136.	1.3	0
2129	Boosting the lithium storage property of nickel-zinc layered double hydroxides by intercalation with dodecyl sulfate anions. Applied Surface Science, 2023, 620, 156850.	3.1	8
2130	Engineering electronic structure of graphene to boost Lithium-Storage performances. Journal of Colloid and Interface Science, 2023, 640, 383-390.	5.0	1
2131	Enhanced microstructure stability of LiNi0.8Co0.1Mn0.1O2 cathode with negative thermal expansion shell for long-life battery. Journal of Colloid and Interface Science, 2023, 640, 1005-1014.	5.0	4
2132	Facile preparation of Fe3O4/ZnFe2O4/ZnS/C composite from the leaching liquor of jarosite residue as a high-performance anode material for Li-ion batteries. Journal of Alloys and Compounds, 2023, 952, 169993.	2.8	3
2133	High-rate and excellent-cycle performance Li4Ti5O12 electrodes with 3D porous copper foils as current collectors fabricated using a femtosecond laser processing strategy. Journal of Energy Storage, 2023, 62, 106915.	3.9	1
2134	xLi2MnO3Â·(1-x)LiMeO2 and Li4Ti5O12 cell chemistry for Behind-the-Meter Storage applications. Journal of Energy Storage, 2023, 64, 107226.	3.9	1
2135	Molecular Design of Asymmetric Cyclophosphamide as Electrolyte Additive for High-Voltage Lithium-Ion Batteries. ACS Energy Letters, 2023, 8, 2241-2251.	8.8	6
2136	Simultaneous realization of high sulfur utilization and lithium dendrite-free via dual-effect kinetic regulation strategy toward lithium-sulfur batteries. Journal of Energy Chemistry, 2023, 81, 260-271.	7.1	10
2137	Structure defects engineering in Prussian blue cathode materials for high-performance sodium-ion batteries. Journal of Alloys and Compounds, 2023, 950, 169903.	2.8	7
2138	Regulating the solvation chemistry of non-flammable high voltage electrolyte through salt-solvent ratio modulation. Journal of Colloid and Interface Science, 2023, 642, 820-828.	5.0	1
2139	Green and sustainable recycling of MnCo2O4/Mn3O4/Li(Mn0.75Ni0.25)2O4 mixed oxide from of spent Li-ion and Znâ€“MnO2 batteries and evaluation of its photocatalytic properties. Sustainable Materials and Technologies, 2023, 36, e00624.	1.7	0
2140	Synthesis of expanded graphite-based materials for application in lithium-based batteries. Journal of Energy Storage, 2023, 60, 106678.	3.9	13
2141	Electrolytes for Batteries. , 2022, , 1-24.		0
2142	Life cycle thinking and safe-and-sustainable-by-design approaches for the battery innovation landscape. IScience, 2023, 26, 106060.	1.9	1
2143	â€œPoreâ€Hoppingâ€•Ion Transport in Celluloseâ€Based Separator Towards Highâ€Performance Sodiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2023, 62, .	7.2	7
2144	Dynamically Interfacial pHâ€Buffering Effect Enabled by N â€Methylimidazole Molecules as Spontaneous Proton Pumps toward Highly Reversible Zincâ€Metal Anodes. Advanced Materials, 0, , 2208630.	11.1	37
2145	Carbon nanofibers with hybrid crystalline-amorphous silicon nanoparticles: high-rate capable lithium-ion battery. Journal of Materials Science: Materials in Electronics, 2023, 34, .	1.1	0

#	Article	IF	Citations
2146	An Ultrathin Asymmetric Solid Polymer Electrolyte with Intensified Ion Transport Regulated by Biomimetic Channels Enabling Wideâ€Temperature Highâ€Voltage Lithiumâ€Metal Battery. Advanced Energy Materials, 2023, 13, .	10.2	31
2147	Carbon anode of intercalation capacitive coupling mechanism enabling long term potassium ion capacitors at low temperature. Journal of Electroanalytical Chemistry, 2023, 932, 117241.	1.9	0
2148	A Fluorinated Covalent Organic Framework with Accelerated Oxygen Transfer Nanochannels for Highâ€Performance Zincâ€“Air Batteries. Advanced Materials, 2023, 35, .	11.1	14
2149	A double-layer covered architecture with spinel phase induced by LiPP for Co-free Li-rich cathode with high-rate performance and long lifespan. Nano Research, 2023, 16, 6805-6814.	5.8	2
2150	Recent Progress of Energy-Storage-Device-Integrated Sensing Systems. Nanomaterials, 2023, 13, 645.	1.9	6
2151	Cyclen-linked benzoquinone based carbonyl network polymer for high-performance lithium organic battery. Journal of Electroanalytical Chemistry, 2023, 932, 117251.	1.9	0
2152	Effect of Initial Structure on Performance of High-Entropy Oxide Anodes for Li-Ion Batteries. Batteries, 2023, 9, 115.	2.1	4
2153	Recent Progress in Biomass-Derived Carbon Materials for Li-Ion and Na-Ion Batteriesâ€”A Review. Batteries, 2023, 9, 116.	2.1	17
2154	Covalent organic frameworks as electrode materials for rechargeable metalâ€ion batteries. , 2023, 2, 231-259.		14
2155	Recent Achievements on the Liquid Electrolytes for Fastâ€Charging Lithium Metal Batteries. Energy Technology, 2023, 11, .	1.8	5
2156	Intercalation Pseudocapacitance of Cation-Exchanged Molybdenum-Based Polyoxometalate for the Fast and Stable Zinc-Ion Storage. ACS Applied Materials & Interfaces, 2023, 15, 9350-9361.	4.0	4
2157	Surface Modification of Polyethylene Separator for Li-Ion Batteries via Imine Formation. International Journal of Energy Research, 2023, 2023, 1-9.	2.2	2
2158	Electrospinning Preparation and Electrochemical Properties of BiFeO3 and GdFeO3 Nanofibers for their Potential Lithium-Ion Battery Applications. Journal of Electronic Materials, 2023, 52, 3008-3017.	1.0	2
2159	Designing Bidirectionally Functional Polymer Electrolytes for Stable Solid Lithium Metal Batteries. Advanced Energy Materials, 2023, 13, .	10.2	14
2160	Important factors for the reliable and reproducible preparation of non-aqueous electrolyte solutions for lithium batteries. Communications Materials, 2023, 4, .	2.9	1
2161	Recent progress in electrolyte design for advanced lithium metal batteries. SmartMat, 2023, 4, .	6.4	13
2162	Recent Advances in the Structural Design of Silicon/Carbon Anodes for Lithium Ion Batteries: A Review. Coatings, 2023, 13, 436.	1.2	5
2163	Stable Operation of Lithium Metal Batteries with Aggressive Cathode Chemistries at 4.9â€…V. Angewandte Chemie, 2023, 135, .	1.6	0

#	Article	IF	Citations
2164	Current Status and Future Perspective on Lithium Metal Anode Production Methods. Advanced Energy Materials, 2023, 13, .	10.2	38
2165	Electrochemical Formation of Li-M-(MÊ¹)-Si Phases Using Multivalent Electrolyte Salt Additives. Journal of the Electrochemical Society, 2023, 170, 030501.	1.3	0
2166	Understanding the Configurational Entropy Evolution in Metalâ€Phosphorus Solid Solution for Highly Reversible Liâ€Ion Batteries. Advanced Science, 2023, 10, .	5.6	7
2167	Recent Advances in Potassiumâ€Ion Batteries: From Material Design to Electrolyte Engineering. Advanced Materials Technologies, 2023, 8, .	3.0	9
2168	Guest Ionâ€Dependent Reaction Mechanisms of New Pseudocapacitive Mg₃V₄(PO₄)₆/Carbon Composite as Negative Electrode for Monovalentâ€Ion Batteries. Advanced Science, 2023, 10, .	5.6	3
2169	Graphene Oxide-Wrapped Porous Hollow Co₃O₄ Microspheres with Enhanced Lithium Storage Performance. Langmuir, 2023, 39, 3094-3101.	1.6	1
2170	Recent developments, challenges and future prospects of magnetic field effects in supercapacitors. Journal of Materials Chemistry A, 2023, 11, 5495-5519.	5.2	18
2171	Weak Solventâ€“Solvent Interaction Enables High Stability of Battery Electrolyte. ACS Energy Letters, 2023, 8, 1477-1484.	8.8	29
2172	Morphology modulation and electrochemical performance properties of Mn-decorated (NH₄)₂V₁₀O₂₅Â·8H₂O as a cathode material for aqueous zinc-ion batteries. Reaction Chemistry and Engineering, 2023, 8, 1185-1191.	1.9	2
2173	Enhanced Cycling Stability of Lithiumâ€Rich Cathode Materials Achieved by inâ€situ Formation of LiErO₂ Coating. Batteries and Supercaps, 2023, 6, .	2.4	1
2174	Transition Metal Vacancy in Layered Cathode Materials for Sodiumâ€Ion Batteries. Chemistry - A European Journal, 2023, 29, .	1.7	2
2175	A Review of Li-Ion Battery's Thermal Runaway Mitigation Strategies with an Eye towards a Smarter BTMS. , 2022, , .		2
2176	Lowâ€Temperature Potassium Batteries Enabled by Electric and Thermal Field Regulation. Angewandte Chemie - International Edition, 2023, 62, .	7.2	25
2177	Lowâ€Temperature Potassium Batteries Enabled by Electric and Thermal Field Regulation. Angewandte Chemie, 2023, 135, .	1.6	0
2178	Pyrolyzed Organic Pigment as Efficient Surface-Dominated Alkali-Ion Storage Anodes. ACS Applied Materials & Interfaces, 2023, 15, 11652-11661.	4.0	0
2179	Ion Kinetics and Capacity Tailoring in Stacked Graphdiyne by Functionalization. ACS Omega, 2023, 8, 8441-8447.	1.6	4
2180	Improvement on the Use of Se@C in Batteries by Synergistic Effect of Nano-Confinement and C-Se Bond. Batteries, 2023, 9, 143.	2.1	1
2181	Synthesis, Crystal Structure, and Conductivity of a Weakly Coordinating Anion/Cation Salt for Electrolyte Application in Next-Generation Batteries. Accounts of Chemical Research, 2023, 56, 1263-1270.	7.6	3

#	Article	IF	Citations
2182	1,3,2-Dioxathiolane 2,2-Dioxide as a Bifunctional Electrolyte Additive to Enhance the Stability of Lithium Metal Anodes. ACS Sustainable Chemistry and Engineering, 2023, 11, 3760-3768.	3.2	6
2183	Sn-doped induced stable 1T-WSe2 nanosheets entrenched on N-doped carbon with extraordinary half/full sodium/potassium storage performance. Rare Metals, 2023, 42, 1557-1569.	3.6	15
2184	Controllable assembly of nitrogen-doped mesoporous carbon with different pore structures onto CNTs for excellent lithium storage. Nano Research, 2023, 16, 3879-3887.	5.8	6
2185	Recent progress in COF-based electrode materials for rechargeable metal-ion batteries. Nano Research, 2023, 16, 6753-6770.	5.8	18
2186	Solid-state lithium-ion batteries for grid energy storage: opportunities and challenges. Science China Chemistry, 2024, 67, 43-66.	4.2	15
2187	Stability of solid electrolyte interphases and calendar life of lithium metal batteries. Energy and Environmental Science, 2023, 16, 1548-1559.	15.6	11
2188	Operando study of mechanical integrity of high-volume expansion Li-ion battery anode materials coated by Al₂O₃. Nanotechnology, 2023, 34, 235705.	1.3	1
2189	Electronic Modulation and Structural Engineering of Carbon-Based Anodes for Low-Temperature Lithium-Ion Batteries: A Review. Molecules, 2023, 28, 2108.	1.7	22
2190	Challenges and Opportunities to Mitigate the Catastrophic Thermal Runaway of Highâ€Energy Batteries. Advanced Energy Materials, 2023, 13, .	10.2	22
2191	Light-assist electrochemical lithiation to silicon semiconductor. Electrochemistry Communications, 2023, 149, 107459.	2.3	0
2192	Reconstructing the Anode Interface and Solvation Shell for Reversible Zinc Anodes. ACS Applied Materials & Interfaces, 2023, 15, 11940-11948.	4.0	20
2193	Self-Healing Polymer Electrolytes for Next-Generation Lithium Batteries. Polymers, 2023, 15, 1145.	2.0	10
2194	Review on Recent Developments, Challenges, and Perspectives of Mn-Based Oxide Cathode Materials for Aqueous Zinc-Ion Batteries and the Status of Mn Resources in China. Energy & Fuels, 2023, 37, 4198-4221.	2.5	5
2195	Facile synthesis of TiO1.77(OH)0.46Â·0.2 H2O and TiO2 and their applications for aqueous ammonium-ion battery. Ionics, 2023, 29, 1479-1486.	1.2	1
2196	Constructing an Inhomogeneous Surface to Suppress the Capacity Decay of Li-Rich Layered Cathode Materials. Energy & Fuels, 2023, 37, 4682-4691.	2.5	0
2197	High-Temperature Thermal Reactivity and Interface Evolution of the NMC-LATP-Carbon Composite Cathode. ACS Applied Materials & Interfaces, 2023, 15, 13689-13699.	4.0	2
2198	Challenges of Stable Ion Pathways in Cathode Electrode for Allâ€Solidâ€State Lithium Batteries: A Review. Advanced Energy Materials, 2023, 13, .	10.2	22
2199	Partial Modification Strategies of NASICON-Type Na₃V₂(PO₄)₃ Materials for Cathodes of Sodium-Ion Batteries: Progress and Perspectives. ACS Applied Energy Materials, 2023, 6, 2657-2679.	2.5	6

#	Article	IF	Citations
2200	Direct observation of the ultrafast formation of cation-disordered rocksalt oxides as regenerable cathodes for lithium-ion batteries. Chemical Engineering Journal, 2023, 462, 142180.	6.6	2
2201	Salicylic acid treated Li₇La₃Zr₂O₁₂ achieves dual functions for a PEO-based solid polymer electrolyte in lithium metal batteries. Sustainable Energy and Fuels, 2023, 7, 1645-1655.	2.5	3
2202	Interfacial oxygen coordination environment regulation towards high-performance Li-rich layered oxide cathode. Chemical Engineering Journal, 2023, 462, 142194.	6.6	1
2203	Electrode/Electrolyte Interfacial Chemistry Modulated by Chelating Effect for Highâ€Performance Zinc Anode. Energy and Environmental Materials, 0, , .	7.3	12
2204	Electrolyte Modulation Strategies for High Performance Zinc Batteries. Batteries and Supercaps, 2023, 6, .	2.4	3
2205	Quantum Energy Storage in 2D Heterointerfaces. Advanced Materials Interfaces, 2023, 10, .	1.9	4
2206	From Waste Biomass to Hard Carbon Anodes: Predicting the Relationship between Biomass Processing Parameters and Performance of Hard Carbons in Sodium-Ion Batteries. Processes, 2023, 11, 764.	1.3	3
2207	Exploring the Ultrafast Charge-Transfer and Redox Dynamics in Layered Transition Metal Oxides. Condensed Matter, 2023, 8, 25.	0.8	0
2208	Li[Ni_{0.6}Mn_{0.2}Co_{0.2}]O₂ Made From Crystalline Rock Salt Oxide Precursors. Journal of the Electrochemical Society, 2023, 170, 030531.	1.3	3
2209	Ammonium Ion Batteries: Material, Electrochemistry and Strategy. Angewandte Chemie - International Edition, 2023, 62, .	7.2	32
2210	Ammonium Ion Batteries: Material, Electrochemistry and Strategy. Angewandte Chemie, 2023, 135, .	1.6	2
2211	Nanoscale control and tri-element co-doping of 4.6 V LiCoO₂ with excellent rate capability and long-cycling stability for lithium-ion batteries. Dalton Transactions, 2023, 52, 3981-3989.	1.6	5
2212	Elucidation of Side Reactions in Lithium-ion Batteries with Electrolyte Decomposition Products via Overdischarge for Li[Li_{1/3}Ti_{5/3}]O₄/Li[Li_{0.1}Al_{0.1}Ni_{0.45}Co_{0.45}]O₂ Cells with an Imbalanced State-of-Charge. Electrochemistry, 2023, 91, 047001-047001.	0.6	0
2213	Twoâ€Step Redox in Polyimide: Witness by In Situ Electron Paramagnetic Resonance in Lithiumâ€ion Batteries. Angewandte Chemie, 2023, 135, .	1.6	0
2214	Twoâ€Step Redox in Polyimide: Witness by In Situ Electron Paramagnetic Resonance in Lithiumâ€ion Batteries. Angewandte Chemie - International Edition, 2023, 62, .	7.2	6
2215	A ZnO decorated 3D copper foam as a lithiophilic host to construct composite lithium metal anodes for Liâ€“O2 batteries. Rare Metals, 2023, 42, 1969-1982.	3.6	2
2216	Ultralow diffusion barrier induced by intercalation in layered N-based cathode materials for sodium-ion batteries. RSC Advances, 2023, 13, 8182-8189.	1.7	1
2217	Polycyclic Aromatic Hydrocarbons as Anode Materials in Lithium-Ion Batteries: A DFT Study. Journal of Physical Chemistry A, 2023, 127, 2511-2522.	1.1	2

#	Article	IF	Citations
2218	Highâ€Energyâ€Density Lithium Metal Batteries with Impressive Li⁺ Transport Dynamic and Wideâ€Temperature Performance from â˜’60 to 60ÂÂ°C. Small, 2023, 19, .	5.2	3
2219	Inâ€‰Situ TEM Studies on Electrochemical Mechanisms of Rechargeable Ion Battery Cathodes. Small Structures, 2023, 4, .	6.9	5
2220	Oneâ€Dimensional Covalent Organic Framework as Highâ€Performance Cathode Materials for Lithiumâ€Ion Batteries. Small, 2023, 19, .	5.2	18
2221	Recent Advances and Perspectives of Lewis Acidic Etching Route: An Emerging Preparation Strategy for MXenes. Nano-Micro Letters, 2023, 15, .	14.4	24
2222	Confined Bismuthâ€“Organic Framework Anode for Highâ€Energy Potassiumâ€Ion Batteries. Small Methods, 2023, 7, .	4.6	10
2223	Metal Oxide Nanosheet: Synthesis Approaches and Applications in Energy Storage Devices (Batteries,) Tj ETQq1 1 0.784314 rgBT /Ov	1.9	8
2224	batP2dFoam: An Efficient Segregated Solver for the Pseudo-2-Dimensional (P2D) Model of Li-Ion Batteries. Journal of the Electrochemical Society, 2023, 170, 030521.	1.3	2
2225	Online Real-Time Detection of the Degradation Products of Lithium Oxygen Batteries. ACS Energy Letters, 2023, 8, 1811-1817.	8.8	5
2226	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
2227	State-of-art progress and perspectives on alloy-type anode materials for potassium-ion batteries. Materials Chemistry Frontiers, 2023, 7, 3011-3036.	3.2	9
2228	Salt-thermal methods for recycling and regenerating spent lithium-ion batteries: a review. Green Chemistry, 2023, 25, 2992-3015.	4.6	21
2230	Spent lithium manganate batteries for sustainable recycling: A review. Frontiers in Materials, 0, 10, .	1.2	3
2231	Inhibition of side reactions and dendrite growth using a low-cost and non-flammable eutectic electrolyte for high-voltage and super-stable zinc hybrid batteries. Journal of Materials Chemistry A, 2023, 11, 8368-8379.	5.2	6
2232	Challenges and strategies of formulating lowâ€temperature electrolytes in lithiumâ€ion batteries. , 2023, 2, 308-336.		14
2233	Stacking Faults Inducing Oxygen Anion Activities in Li₂MnO₃. Advanced Materials, 2023, 35, .	11.1	11
2234	A Model-Based Approach for Temperature Estimation of a Lithium-ion Battery Pack. , 2022, , .		4
2235	Comprehensive Review of Recent Advancements in Battery Technology, Propulsion, Power Interfaces, and Vehicle Network Systems for Intelligent Autonomous and Connected Electric Vehicles. Energies, 2023, 16, 2925.	1.6	4
2236	Moâ€“F Co-Doping LiNi_{0.83}Co_{0.11}Mn_{0.06}O₂ Stabilizes the Structure and Induces Compact Primary Particle To Improve the Electrochemical Performance. ACS Applied Energy Materials, 2023, 6, 3834-3843.	2.5	1

#	Article	IF	Citations
2237	High Lithium-Ion Conductivity, Halide-Coated, Ni-Rich NCM Improves Cycling Stability in Sulfide All-Solid-State Batteries. ACS Applied Energy Materials, 2023, 6, 3671-3681.	2.5	5
2238	Chemical-state distributions in charged LiCoO2 cathode particles visualized by soft X-ray spectromicroscopy. Scientific Reports, 2023, 13, .	1.6	0
2239	Low-Cost and Large-Scale Preparation of H₂O and Mg²⁺ Co-Preintercalated Vanadium Oxide with High-Performance Aqueous Zn-Ion Batteries. Energy & Fuels, 2023, 37, 5530-5539.	2.5	1
2240	Integrated high-sulfur-loading polysulfide/carbon cathode in lean-electrolyte cell toward high-energy-density lithiumâ€“sulfur cells with stable cyclability. Journal of Materials Chemistry A, 2023, 11, 9455-9463.	5.2	5
2241	Integrated Photo - rechargeable Batteries: Photoactive Nanomaterials and Opportunities. E3S Web of Conferences, 2023, 375, 02010.	0.2	0
2242	Tuning Fluorination of Carbonates for Lithium-Ion Batteries: A Theoretical Study. Journal of Physical Chemistry B, 2023, 127, 3026-3040.	1.2	1
2243	A Functional Prelithiation Separator Promises Sustainable Highâ€Energy Lithiumâ€Ion Batteries. Advanced Energy Materials, 2023, 13, .	10.2	17
2244	Metallic Glassâ€Fiber Fabrics: A New Type of Flexible, Superâ€Lightweight, and 3D Current Collector for Lithium Batteries. Advanced Materials, 2023, 35, .	11.1	16
2245	Rational Design of High-Performance PEO/Ceramic Composite Solid Electrolytes for Lithium Metal Batteries. Nano-Micro Letters, 2023, 15, .	14.4	22
2246	Metal Chelation Enables High-Performance Tea Polyphenol Electrodes for Lithium-Ion Batteries. Inorganics, 2023, 11, 148.	1.2	0
2247	Chemicalâ€Mechanical Robustness of Singleâ€Crystalline Niâ€Rich Cathode Enabled by Surface Atomic Arrangement Control. Angewandte Chemie, 0, , .	1.6	0
2248	Chemicalâ€Mechanical Robustness of Singleâ€Crystalline Niâ€Rich Cathode Enabled by Surface Atomic Arrangement Control. Angewandte Chemie - International Edition, 2023, 62, .	7.2	19
2249	Voltage Hysteresis in Transition Metal Oxide Cathodes for Li/Naâ€Ion Batteries. Advanced Functional Materials, 2023, 33, .	7.8	4
2250	Ultrasensitive Detection for Lithium-Ion Battery Electrolyte Leakage by Rare-Earth Nd-Doped SnO₂ Nanofibers. ACS Sensors, 2023, 8, 1700-1709.	4.0	7
2251	Rechargeable Battery State Estimation Based on Adaptive-Rate Processing and Machine Learning. , 2023, , .		0
2252	Solvation Structure Modulation of Highâ€Voltage Electrolyte for Highâ€Performance Kâ€Based Dualâ€Graphite Battery. Advanced Materials, 2023, 35, .	11.1	27
2253	Choosing Carbon Conductive Additives for NMC-LATP Composite Cathodes: Impact on Thermal Stability. Journal of the Electrochemical Society, 2023, 170, 040523.	1.3	2
2254	Emerging characterization techniques for delving polyanion-type cathode materials of sodium-ion batteries. Materials Today, 2023, 66, 221-244.	8.3	15

#	Article	IF	Citations
2255	Diviologen-Functionalized Poly(arylene ether ketone)s with Improved Stability and Rate Performance for Polymer Batteries. ACS Applied Energy Materials, 2023, 6, 4475-4486.	2.5	1
2256	Interface Engineering by Hydrophilic and Zincophilic Aluminum Hydroxide Fluoride for Anodeâ€Free Zinc Metal Batteries at Low Temperature. Advanced Energy Materials, 2023, 13, .	10.2	18
2257	Rational Design of Fluorinated Electrolytes for Low Temperature Lithiumâ€Ion Batteries. Advanced Energy Materials, 2023, 13, .	10.2	17
2258	Advances in Strategic Inhibition of Polysulfide Shuttle in Room-Temperature Sodium-Sulfur Batteries via Electrode and Interface Engineering. Batteries, 2023, 9, 223.	2.1	3
2259	Solid Polymer Electrolyte Based on an Ionically Conducting Unique Organic Polymer Framework for All-Solid-State Lithium Batteries. ACS Applied Energy Materials, 2023, 6, 4390-4403.	2.5	4
2260	Water-coupled monovalent and divalent ion transport in polyviologen networks. Journal of Materials Chemistry A, 0, , .	5.2	0
2261	Lithium-Ion Diffusion in Near-Stoichiometric Polycrystalline and Monocrystalline LiCoO₂. Chemistry of Materials, 2023, 35, 3307-3315.	3.2	5
2262	Anionâ€Dependent Redox Chemistry of pâ€Type Poly(vinyldimethylphenazine) Cathode Materials. Angewandte Chemie, 2023, 135, .	1.6	0
2263	Recent advancements in 3D porous graphene-based electrode materials for electrochemical energy storage applications. Materials Advances, 2023, 4, 2524-2543.	2.6	5
2264	Layered double hydroxides as electrode materials for flexible energy storage devices. Journal of Semiconductors, 2023, 44, 041601.	2.0	26
2265	T3C2Tx boost SnSbS composited carbon fibers achieved fast and stable free-standing quasi-solid sodium full-battery. Chemical Engineering Journal, 2023, 465, 142934.	6.6	3
2266	From metal to cathode material: in situ formation of LiCoO₂ with enhanced cycling performance and suppressed phase transition. Journal of Materials Chemistry A, 2023, 11, 9913-9921.	5.2	2
2267	Li₂S-Based Composite Cathode with in Situ-Generated Li₃PS₄ Electrolyte on Li₂S for Advanced All-Solid-State Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2023, 15, 20191-20199.	4.0	4
2268	Reversible cationic-anionic redox in disordered rocksalt cathodes enabled by fluorination-induced integrated structure design. Journal of Energy Chemistry, 2023, 82, 158-169.	7.1	6
2269	Materials Towards the Development of Li Rechargeable Thin Film Battery. , 2023, 2, 26-40.		3
2270	High performance lithium ion battery cathode based reduced holey graphene oxides from spent lithium ion batteries. Carbon, 2023, 210, 118038.	5.4	3
2271	Different Dimensionalities, Morphological Advancements and Engineering of gâ€C₃N₄â€Based Nanomaterials for Energy Conversion and Storage. Chemical Record, 2023, 23, .	2.9	12
2272	In Situ Raman Spectroscopy of Li⁺ and Na⁺ Storage in Anodic TiO₂ Nanotubes: Implications for Battery Design. ACS Applied Nano Materials, 2023, 6, 6528-6537.	2.4	4

#	Article	IF	Citations
2273	Combinatorial Investigation of the Impact of Systematic Al Substitution into LiNi_{1â€“xâ€“y}Mn_xCo_yO₂ Materials. ACS Applied Energy Materials, 2023, 6, 4593-4603.	2.5	3
2274	Vanadium Redox Flow Batteries for Large-Scale Energy Storage. Clean Energy Production Technologies, 2023, , 79-109.	0.3	0
2276	Multifunctional fullerene protective layer for dendrite-free Zn metal anode. Chemical Engineering Journal, 2023, 466, 143054.	6.6	11
2277	Advanced characterization guiding rational design of regeneration protocol for spent-LiCoO2. Nano Energy, 2023, 112, 108465.	8.2	5
2278	In-situ formed hybrid phosphates coating layer enabling co-free Li-rich layered oxides with stable cycle performance. Materials Today Energy, 2023, 34, 101314.	2.5	1
2279	Organics-free aqueous hybrid electrolyte for high-performance zinc ion hybrid capacitors operating at low temperature. Journal of Power Sources, 2023, 571, 233061.	4.0	0
2280	Effects of Li+ conduction on the capacity utilization of cathodes in all-solid-state lithium batteries. Frontiers in Chemistry, 0, 11, .	1.8	0
2281	Population effects driving active material degradation in intercalation electrodes. Physical Review E, 2023, 107, .	0.8	0
2282	Improving performances of Lithium-Sulfur cells via regulating of VSe2 functional mediator with Doping-Defect engineering and Electrode-Separator integration strategy. Journal of Colloid and Interface Science, 2023, 644, 42-52.	5.0	5
2283	Implanting CuS Quantum Dots into Carbon Nanorods for Efficient Magnesiumâ€Ion Batteries. Small, 2023, 19, .	5.2	16
2284	An Ultrahighâ€Massâ€Loading Integrated Freeâ€Standing Functional Allâ€Carbon Positive Electrode Prepared using an Architecture Tailoring Strategy for Highâ€Energyâ€Density Dualâ€Ion Batteries. Advanced Materials, 2023, 35, .	11.1	30
2285	Metalâ€“organic frameworks for solid-state electrolytes: A mini review. Electrochemistry Communications, 2023, 150, 107491.	2.3	18
2286	Tuning nickel cobalt sulfides embedded in hierarchical porous carbon nanosheets/carbon nanotubes interpenetrating frameworks by in situ bimetallic MOF-derived engineering towards exceptional lithium storage. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 669, 131500.	2.3	1
2302	Sodium systems â€“ Low temperature (LIB equivalent) | Sodium Systems | Low Temperature: Overview. , 2023, , .		2
2306	Recent advances of Na3V2(PO4)3 as cathode for rechargeable zinc-based batteries. Carbon Letters, 2023, 33, 989-1012.	3.3	2
2312	Organic materials as charge hosts for pseudocapacitive energy storage. Sustainable Energy and Fuels, 2023, 7, 2802-2818.	2.5	1
2330	Advances in modification methods and the future prospects of high-voltage spinel LiNi_{0.5}Mn_{1.5}O₄â€” a review. Journal of Materials Chemistry A, 2023, 11, 13889-13915.	5.2	6
2332	AI for Nanomaterials Development in Clean Energy and Carbon Capture, Utilization and Storage (CCUS). ACS Nano, 2023, 17, 9763-9792.	7.3	5

#	Article	IF	Citations
2347	Building Better Full Manganese-Based Cathode Materials for Next-Generation Lithium-Ion Batteries. Electrochemical Energy Reviews, 2023, 6, .	13.1	10
2367	Molecular dynamics simulation of the mechanical and thermal properties of phagraphene nanosheets and nanotubes: a review. Journal of Materials Science, 2023, 58, 10222-10260.	1.7	0
2368	Recycling Hazardous and Valuable Electrolyte in Spent Lithium-Ion Batteries: Urgency, Progress, Challenge, and Viable Approach. Chemical Reviews, 2023, 123, 8718-8735.	23.0	12
2384	The use of superoxide ions in electrochemistry. , 2024, , 344-358.		0
2389	Ultrahigh Energy Storage in 2D High-Î¤ Perovskites. Nano Letters, 2023, 23, 3788-3795.	4.5	4
2392	Enhancing the cycle-life of initial-anode-free lithium-metal batteries by pre-lithiation in Mn-based Li-rich spinel cathodes. Journal of Materials Chemistry A, 2023, 11, 11119-11125.	5.2	0
2395	Molecular-scale synchrotron X-ray investigations of solid-liquid interfaces in lithium-ion batteries. , 2023, , .		0
2405	Li-ion batteries as energy storage for solar power plant. AIP Conference Proceedings, 2023, , .	0.3	0
2419	Ionic Transport through the Solid Electrolyte Interphase in Lithium-Ion Batteries: A Review from First-Principles Perspectives. ACS Applied Energy Materials, 2023, 6, 5628-5645.	2.5	1
2440	MXene-Based Sodium-Ion Batteries. , 2023, , 127-135.		0
2479	3D printing of hierarchically micro/nanostructured electrodes for high-performance rechargeable batteries. Nanoscale, 0, , .	2.8	1
2497	Scalable engineering of hierarchical layered micro-sized silicon/graphene hybrids via direct foaming for lithium storage. Nanoscale, 2023, 15, 14338-14345.	2.8	2
2530	State-of-Charge of Individual Active Material Particles in Lithium Ion Batteries: A Perspective of Analytical Techniques and their Capabilities. Physical Chemistry Chemical Physics, 0, , .	1.3	0
2541	The genesis and control of microcracks in nickel-rich cathode materials for lithium-ion batteries. Sustainable Energy and Fuels, 2023, 7, 4805-4824.	2.5	2
2547	Controllable fabrication of vanadium selenium nanosheets for a high-performance Na-ion battery anode. Chemical Communications, 2023, 59, 11365-11368.	2.2	1
2548	Sustainable stretchable batteries for next-generation wearables. Journal of Materials Chemistry A, 0, , .	5.2	0
2550	Single-atom site catalysis in Liâ€“S batteries. Physical Chemistry Chemical Physics, 2023, 25, 25942-25960.	1.3	1
2552	Oxygen vacancy enriched Na_{1.19}V₈O₂₀Â·4.42H₂O nanosheets for fast and stable Zn-ion batteries. Chemical Communications, 2023, 59, 11668-11671.	2.2	5

#	Article	IF	Citations
2568	On Energy Storage Chemistry of Aqueous Zn-Ion Batteries: From Cathode to Anode. Electrochemical Energy Reviews, 2023, 6, .	13.1	7
2577	Recent Advances in Multifunctional Reticular Framework Nanoparticles: A Paradigm Shift in Materials Science Road to a Structured Future. Nano-Micro Letters, 2023, 15, .	14.4	3
2591	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
2601	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
2611	Utilization of 2D materials in aqueous zinc ion batteries for safe energy storage devices. Nanoscale, 2023, 15, 17270-17312.	2.8	1
2624	Metal-ion battery. , 2024, , 237-242.		0
2670	A long-term stable zinc metal anode enabled by a mannitol additive. Journal of Materials Chemistry A, 2023, 11, 23779-23786.	5.2	1
2681	A review of solid-state lithium metal batteries through in-situ solidification. Science China Chemistry, 0, , .	4.2	1
2687	Fundamentals, status and challenges of direct recycling technologies for lithium ion batteries. Chemical Society Reviews, 2023, 52, 8194-8244.	18.7	8
2711	Interfacial engineering of lithium metal anodes: what is left to uncover?. Energy Advances, 0, , .	1.4	0
2716	3D-hosted lithium metal anodes. Chemical Society Reviews, 0, , .	18.7	1
2719	Advanced engineering strategies for Li₂S cathodes in lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2023, 11, 26318-26339.	5.2	0
2721	Electrolyte Strategies Toward Optimizing Zn Anode for Zinc-Ion Batteries. Transactions of Tianjin University, 2023, 29, 407-431.	3.3	1
2731	Investigation of Capacity Fading Mechanism on Nanocrystalline LiNi0.5Mn0.5O2 Synthesized by Autocombustion Technique. Chemistry Africa, 0, , .	1.2	0
2732	Electrodes for Li-ion batteries: From high-voltage LiCoO2 to Co-reduced/Co-free layered oxides with potential anodes. Nano Research, 0, , .	5.8	0
2734	3D nitrogen-doped carbon frameworks with hierarchical pores and graphitic carbon channels for high-performance hybrid energy storages. Materials Horizons, 0, , .	6.4	1
2743	Pseudocapacitive Materials-Based Metal-Air Batteries. Engineering Materials, 2024, , 375-387.	0.3	0
2752	A perspective on the building blocks of a solid-state battery: from solid electrolytes to quantum power harvesting and storage. Journal of Materials Chemistry A, 0, , .	5.2	0

#	Article	IF	Citations
2756	Machine Learning Assistive State of Charge Estimation of Li-Ion Battery. , 2023, , .		0
2771	Engineering hosts for Zn anodes in aqueous Zn-ion batteries. Energy and Environmental Science, 2024, 17, 369-385.	15.6	1
2863	MXenes for Pseudocapacitors. Engineering Materials, 2024, , 177-193.	0.3	0
2864	Research progress of Prussian blue and its analogues for cathodes of aqueous zinc ion batteries. Journal of Materials Chemistry A, 2024, 12, 2647-2672.	5.2	1
2919	Electrode Conditions of Lithium-Ion Cell for Achieving High Energy Density. Korean Journal of Chemical Engineering, 2024, 41, 43-52.	1.2	0
2944	Recent advances in electrolyte molecular design for alkali metal batteries. Chemical Science, 2024, 15, 4238-4274.	3.7	0
2959	Strategies to enable microsized alloy anodes for high-energy and long-life alkali-ion batteries. , 0, , .		0
2976	Na-Rich Layered Oxide Cathode Materials for High-Capacity Na-Ion Batteries: A Review. Advances in Sustainability Science and Technology, 2024, , 3-14.	0.4	0
2977	Synthesis of TiNb₂O₇ by mechanical alloying and subsequent heat treatment as an anode material for Li-ion batteries. , 2023, , .		0
2993	Ionic Liquid-based Electrolytes for Rechargeable Batteries. , 2024, , 200-232.		0
2994	Polymer Electrolytes for Rechargeable Batteries. , 2024, , 233-292.		0
2999	Electronic and Electrochemical Properties of Novel Cathode Material NaFeSO4OH by First-Principle Calculations. Lecture Notes in Mechanical Engineering, 2024, , 285-298.	0.3	0