Promises and Challenges of Next-Generation â€œBeyon and Grid Decarbonization

Chemical Reviews

121, 1623-1669

DOI: 10.1021/acs.chemrev.0c00767

Citation Report

#	Article	IF	Citations
1	Computational and experimental search for potential polyanionic K-ion cathode materials. Journal of Materials Chemistry A, 2021, 9, 18564-18575.	5.2	15
2	K_{1.5}VOPO₄F_{0.5}: a novel high-power and high-voltage cathode for rechargeable K-ion batteries. Journal of Materials Chemistry A, 2021, 9, 11802-11811.	5.2	8
3	Investigation of alkali and alkaline earth solvation structures in tetraglyme solvent. Physical Chemistry Chemical Physics, 2021, 23, 26120-26129.	1.3	7
4	Balancing Stability and Li-ion Conductivity of Li10SiP2O12 for Solid-State Electrolytes with Assistance of body-centered cubic oxygen framework. Journal of Materials Chemistry A, 0, , .	5.2	2
5	Yolk@Shell Structured MnS@Nitrogen-Doped Carbon as a Sulfur Host and Polysulfide Conversion Booster for Lithium/Sodium Sulfur Batteries. ACS Applied Energy Materials, 2021, 4, 3487-3494.	2.5	16
6	Recent advances of vanadium-based cathode materials for zinc-ion batteries. Chinese Chemical Letters, 2021, 32, 3753-3761.	4.8	27
7	Operando x-ray absorption spectroscopy on battery materials: a review of recent developments. JPhys Energy, 2021, 3, 032006.	2.3	21
8	Demystifying the Lattice Oxygen Redox in Layered Oxide Cathode Materials of Lithium-Ion Batteries. ACS Nano, 2021, 15, 6061-6104.	7.3	77
9	Probing the Dynamics of Non-Faradaic Processes in Ionic Liquids at Extended Time and Length Scales Using XPS with AC Modulation. Journal of Physical Chemistry C, 2021, 125, 9453-9460.	1.5	8
10	Self-Templated Formation of Fluffy Graphene-Wrapped Ni₅P₄ Hollow Spheres for Li-Ion Battery Anodes with High Cycling Stability. ACS Applied Materials & Interfaces, 2021, 13, 23714-23723.	4.0	17
11	Insights into Layered Oxide Cathodes for Rechargeable Batteries. Molecules, 2021, 26, 3173.	1.7	16
12	The applications of semiconductor materials in air batteries. Chinese Chemical Letters, 2021, 32, 3277-3287.	4.8	29
13	Local Structures of Soft Carbon and Electrochemical Performance of Potassium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 28261-28269.	4.0	17
14	Advancing Electrolyte Solution Chemistry and Interfacial Electrochemistry of Divalent Metal Batteries. ChemElectroChem, 2021, 8, 3013-3029.	1.7	13
15	Searching Ternary Oxides and Chalcogenides as Positive Electrodes for Calcium Batteries. Chemistry of Materials, 2021, 33, 5809-5821.	3.2	8
16	Simultaneous Regulation on Solvation Shell and Electrode Interface for Dendriteâ€Free Zn Ion Batteries Achieved by a Lowâ€Cost Glucose Additive. Angewandte Chemie - International Edition, 2021, 60, 18247-18255.	7.2	529
17	Dendriteâ€Suppressing Polymer Materials for Safe Rechargeable Metal Battery Applications: From the Electroâ€Chemoâ€Mechanical Viewpoint of Macromolecular Design. Macromolecular Rapid Communications, 2021, 42, e2100279.	2.0	11
18	Simultaneous Regulation on Solvation Shell and Electrode Interface for Dendriteâ€Free Zn Ion Batteries Achieved by a Lowâ€Cost Glucose Additive. Angewandte Chemie, 2021, 133, 18395-18403.	1.6	97

#	Article	IF	Citations
19	Antiperovskite K₃OI for K-Ion Solid State Electrolyte. Journal of Physical Chemistry Letters, 2021, 12, 7120-7126.	2.1	33
20	Covalent Fixing of MoS₂ Nanosheets with SnS Nanoparticles Anchored on g-C₃N₄/Graphene Boosting Fast Charge/Ion Transport for Sodium-Ion Hybrid Capacitors. ACS Applied Materials & Interfaces, 2021, 13, 34238-34247.	4.0	28
21	Lifeâ€Cycle Assessment Considerations for Batteries and Battery Materials. Advanced Energy Materials, 2021, 11, 2100771.	10.2	96
22	Discovery of novel Li SSE and anode coatings using interpretable machine learning and high-throughput multi-property screening. Scientific Reports, 2021, 11, 16484.	1.6	16
23	Insights into Spontaneous Solid Electrolyte Interphase Formation at Magnesium Metal Anode Surface from Ab Initio Molecular Dynamics Simulations. ACS Applied Materials & Interfaces, 2021, 13, 38816-38825.	4.0	20
24	Efficient stress alleviation and interface regulation in Cu4SiP8-CNT hybrid for ultra-durable Li and Na storage. Nano Energy, 2021, 86, 106134.	8.2	14
25	Review on Interface and Interphase Issues in Sulfide Solid-State Electrolytes for All-Solid-State Li-Metal Batteries. Electrochem, 2021, 2, 452-471.	1.7	32
26	Mg₃Si₃(MoO₆)₂ as a High-Performance Cathode Active Material for Magnesium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 47749-47755.	4.0	6
27	Comparative Operando XPS and SEM Spatiotemporal Potential Mapping of Ionic Liquid Polarization in a Coplanar Electrochemical Device. Analytical Chemistry, 2021, 93, 13268-13273.	3.2	10
28	High Energy Density Solid State Lithium Metal Batteries Enabled by Subâ€5 Âµm Solid Polymer Electrolytes. Advanced Materials, 2021, 33, e2105329.	11.1	123
29	Ironâ€Based NASICONâ€Type Na₄Fe₃(PO₄)₂(P₂O₇) Cathode for Zincâ€Ion Battery: Zn²⁺/Na⁺ Coâ€Intercalation Enabling High Capacity. ChemSusChem, 2021, 14, 5424-5433.	3.6	15
30	Poly(2-aminoazulene) Fillerâ€“Improved PEO-Based Electrolyte for Highly Stable Solid-State Li-Metal Batteries. Journal of the Electrochemical Society, 2021, 168, 090545.	1.3	3
31	Understanding Lithium-Mediated Oxygen Reactions at the Au | DMSO interface: Are We There?. Journal of Physical Chemistry C, 2021, 125, 20762-20771.	1.5	7
32	Electrode materials for aqueous multivalent metal-ion batteries: Current status and future prospect. Journal of Energy Chemistry, 2022, 67, 563-584.	7.1	36
33	Synthetic accessibility and stability rules of NASICONs. Nature Communications, 2021, 12, 5752.	5.8	47
34	Recent advances of metal phosphates-based electrodes for high-performance metal ion batteries. Energy Storage Materials, 2021, 41, 842-882.	9.5	49
35	Computation-guided discovery of coating materials to stabilize the interface between lithium garnet solid electrolyte and high-energy cathodes for all-solid-state lithium batteries. Energy Storage Materials, 2021, 41, 571-580.	9.5	31
36	The mystery and promise of multivalent metal-ion batteries. Current Opinion in Electrochemistry, 2021, 29, 100819.	2.5	17

#	Article	IF	Citations
37	Recent progress of cathode materials for aqueous zinc-ion capacitors: Carbon-based materials and beyond. Carbon, 2021, 185, 126-151.	5.4	71
38	Si modified by Zn and Fe as anodes in Si-air batteries with ameliorative properties. Journal of Alloys and Compounds, 2021, 883, 160902.	2.8	10
39	Manipulating free-standing, flexible and scalable microfiber carbon papers unlocking ultra-high initial Coulombic efficiency and storage sodium behavior. Chemical Engineering Journal, 2021, 425, 131656.	6.6	22
40	Techniques enabling inorganic materials into wearable fiber/yarn and flexible lithium-ion batteries. Energy Storage Materials, 2021, 43, 62-84.	9.5	25
41	Cathode pre-lithiation/sodiation for next-generation batteries. Current Opinion in Electrochemistry, 2022, 31, 100827.	2.5	18
42	Reduced Graphene-Oxide-Encapsulated MoS2/Carbon Nanofiber Composite Electrode for High-Performance Na-Ion Batteries. Nanomaterials, 2021, 11, 2691.	1.9	10
43	Hierarchical MnMoO4@nitrogen-doped carbon core-shell microspheres for lithium/potassium-ion batteries. Journal of Alloys and Compounds, 2022, 893, 162336.	2.8	8
44	Grapheneâ€Supported Atomically Dispersed Metals as Bifunctional Catalysts for Nextâ€Generation Batteries Based on Conversion Reactions. Advanced Materials, 2022, 34, e2105812.	11.1	106
45	Fluorine-induced dual defects in NiP2 anode with robust sodium storage performance. Nano Research, 2022, 15, 2147-2156.	5.8	16
46	Stable Cycling of Allâ€Solidâ€State Batteries with Sacrificial Cathode and Lithiumâ€Free Indium Layer. Advanced Functional Materials, 2022, 32, 2108203.	7.8	21
47	Robust Solid Electrolyte Interphases in Localized High Concentration Electrolytes Boosting Black Phosphorus Anode for Potassium-Ion Batteries. ACS Nano, 2021, 15, 16851-16860.	7.3	41
48	Mass Balancing of Hybrid Ion Capacitor Electrodes: A Simple and Generalized Semiempirical Approach. ACS Applied Materials & Interfaces, 2021, 13, 52610-52619.	4.0	11
49	Realizing continuous cation order-to-disorder tuning in a class of high-energy spinel-type Li-ion cathodes. Matter, 2021, 4, 3897-3916.	5.0	32
50	Metal hydroborates: From hydrogen stores to solid electrolytes. Journal of Alloys and Compounds, 2022, 895, 162659.	2.8	14
51	A novel Fe-defect induced pure-phase Na4Fe2.91(PO4)2P2O7 cathode material with high capacity and ultra-long lifetime for low-cost sodium-ion batteries. Nano Energy, 2022, 91, 106680.	8.2	67
52	Hierarchically Porous Silica Membrane as Separator for Highâ€Performance Lithiumâ€Ion Batteries. Advanced Materials, 2022, 34, e2107957.	11.1	59
53	Recent progress in quantum dots based nanocomposite electrodes for rechargeable monovalent metal-ion and lithium metal batteries. Journal of Materials Chemistry A, 2022, 10, 508-553.	5.2	12
54	Recent advances in Mg-Li and Mg-Na hybrid batteries. Energy Storage Materials, 2022, 45, 142-181.	9.5	29

#	Article	IF	Citations
55	Theoretical study of SnS2 encapsulated in Graphene as a promising anode material for Kâ˜ion batteries. Journal of Physics Condensed Matter, 2021, , .	0.7	0
56	Defectâ€Selectivity and â€œOrderâ€inâ€Disorderâ€•Engineering in Carbon for Durable and Fast Potassium Storage. Advanced Materials, 2022, 34, e2108621.	11.1	96
57	Li migration, nucleation and growth behavior regulated by a lithiophilic cobalt phosphide-doped carbon nanofibers derived ion/electron conductive framework. Energy Storage Materials, 2022, 45, 1109-1119.	9.5	30
58	Facile approach to prepare FeP2/P/C nanofiber heterostructure via electrospinning as highly performance self-supporting anode for Li/Na ion batteries. Electrochimica Acta, 2022, 403, 139682.	2.6	10
59	Rapid Microwaveâ€Assisted Synthesis and Electrode Optimization of Organic Anode Materials in Sodiumâ€ion Batteries. Small Methods, 2021, 5, e2101016.	4.6	7
60	Carbon Nanotube-Encapsulated Bi₂S₃ Nanorods as Electrodes for Lithium-Ion Batteries and Lithiumâ€“Sulfur Batteries. ACS Sustainable Chemistry and Engineering, 2021, 9, 15830-15838.	3.2	4
61	Dynamic interphaseâ€“mediated assembly for deep cycling metal batteries. Science Advances, 2021, 7, eabl3752.	4.7	81
62	3D Printed Multilayer Graphite@SiO Structural Anode for Highâ€Loading Lithiumâ€ion Battery. Batteries and Supercaps, 2022, 5, .	2.4	5
63	A Novel Temperature-Dependent Electrochemical System for Electrode Materials for Time Resolved X-Ray Diffraction. SSRN Electronic Journal, 0, , .	0.4	0
64	Computational Screening of Anode Coatings for Garnetâ€type Solidâ€State Batteries. Batteries and Supercaps, 0, , .	2.4	2
65	Semi-solid reactive interfaces based on ZnO@C core-shell materials for zinc-iron flow batteries. Chemical Engineering Science, 2022, 250, 117402.	1.9	4
66	Low-crystallinity tungsten disulfide construction by in-situ confinement effect enables ultrastable sodium-ion storage. Journal of Alloys and Compounds, 2022, 900, 163518.	2.8	3
67	Catalytic polysulfides immobilization within a S/C-Co-N hollow cathode obtained by nonthermal imprison route. Journal of Colloid and Interface Science, 2022, 612, 323-331.	5.0	6
68	Redox Hyperactive MOF for Li+, Na+ and Mg2+ Storage. Molecules, 2022, 27, 586.	1.7	2
69	Localized X-ray photoelectron impedance spectroscopy (LoXPIS) for capturing charge dynamics of an ionic liquid electrolyte within an energy storage device. Faraday Discussions, 2022, 236, 86-102.	1.6	1
70	Efficient Anion Fluoride-Doping Strategy to Enhance the Performance in Garnet-Type Solid Electrolyte Li₇La₃Zr₂O₁₂. ACS Applied Materials & Interfaces, 2022, 14, 2939-2948.	4.0	10
71	Realization of Sn2P2S6-carbon nanotube anode with high K+/Na+ storage performance via rational interface manipulationâ€“induced shuttle-effect inhibition and self-healing. Chemical Engineering Journal, 2022, 435, 134965.	6.6	19
72	Controlled Synthesis of Highly Active Nonstoichiometric Tin Phosphide/Carbon Composites for Electrocatalysis and Electrochemical Energy Storage Applications. ACS Sustainable Chemistry and Engineering, 2022, 10, 1482-1498.	3.2	15

#	Article	IF	Citations
73	A High-Voltage Organic Framework for High-Performance Na- and K-Ion Batteries. ACS Energy Letters, 2022, 7, 668-674.	8.8	34
74	Sodiated Nafion membranes for sodium metal aprotic batteries. Electrochimica Acta, 2022, 410, 139936.	2.6	14
75	Coupling of 3D Porous Hosts for Li Metal Battery Anodes with Viscous Polymer Electrolytes. Journal of the Electrochemical Society, 2022, 169, 010511.	1.3	2
76	Hydrated eutectic electrolytes for high-performance Mg-ion batteries. Energy and Environmental Science, 2022, 15, 1282-1292.	15.6	56
77	Aluminum-copper alloy anode materials for high-energy aqueous aluminum batteries. Nature Communications, 2022, 13, 576.	5.8	61
78	Diffusion-Induced Stress in Commercial Graphite Electrodes during Multiple Cycles Measured by an In Situ Method. Micromachines, 2022, 13, 142.	1.4	7
79	Solvation, Rational Design, and Interfaces: Development of Divalent Electrolytes. Frontiers in Energy Research, 2022, 9, .	1.2	2
80	Regulated Synthesis of Î±-NaVOPO₄ with an Enhanced Conductive Network as a High-Performance Cathode for Aqueous Na-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 6841-6851.	4.0	12
81	An Advanced Highâ€Entropy Fluorophosphate Cathode for Sodiumâ€Ion Batteries with Increased Working Voltage and Energy Density. Advanced Materials, 2022, 34, e2110108.	11.1	125
82	Understanding of electrochemical K+/Na+ exchange mechanisms in layered oxides. Energy Storage Materials, 2022, 47, 105-112.	9.5	8
83	A novel temperature-dependent electrochemical system for electrode materials for time resolved X-ray Diffraction. Scripta Materialia, 2022, 211, 114529.	2.6	9
84	Challenges, interface engineering, and processing strategies toward practical <scp>sulfideâ€based allâ€solidâ€state</scp> lithium batteries. InformaÄnÃ-MateriÃ¡ly, 2022, 4, .	8.5	92
85	In-Situ Construction of Cu-Co ₄N@CC Hierarchical Binder-Free Cathode for Advanced and Flexible Li -CO ₂ Batteries: Electron Structure and Mass Transfer Modulation. SSRN Electronic Journal, 0, , .	0.4	0
86	Highly Reversible Mg Metal Anodes Enabled by Interfacial Liquid Metal Engineering for High-Energy Mg-S Batteries. SSRN Electronic Journal, 0, , .	0.4	0
87	Ion transport in composite polymer electrolytes. Materials Advances, 2022, 3, 3809-3819.	2.6	22
88	Synthesis of Nani0.5mn0.5o2 Cathode Materials for Sodium-Ion Batteries Via Spray Pyrolysis Method. SSRN Electronic Journal, 0, , .	0.4	0
89	Structure, composition and electrochemical performance analysis of fluorophosphates from different synthetic methods: is really Na₃V₂(PO₄)₂F₃ synthesized?. Journal of Materials Chemistry A, 2022, 10, 8877-8886.	5.2	13
90	New Insight into Ti Doping for Stabilizing the Na2/3fe1/3mn2/3o2 Cathode in Sodium Ion Battery. SSRN Electronic Journal, 0, , .	0.4	0

#	Article	IF	Citations
91	Electrolyte Modification for Longâ€Life Zn Ion Batteries: Achieved by Methanol Additive. ChemElectroChem, 2022, 9, .	1.7	13
92	Beyond Li-ion batteries: performance, materials diversification, and sustainability. One Earth, 2022, 5, 207-211.	3.6	17
93	Hierarchical Nanocapsules of Cu-Doped MoS₂@H-Substituted Graphdiyne for Magnesium Storage. ACS Nano, 2022, 16, 3955-3964.	7.3	28
94	Hydrophobization Engineering of the Airâ€“Cathode Catalyst for Improved Oxygen Diffusion towards Efficient Zincâ€“Air Batteries. Angewandte Chemie - International Edition, 2022, 61, .	7.2	72
95	Longâ€Life Zn Anode Enabled by Low Volume Concentration of a Benign Electrolyte Additive. Advanced Functional Materials, 2022, 32, .	7.8	60
96	Stabilizing SEI by cyclic ethers toward enhanced K+ storage in graphite. Journal of Energy Chemistry, 2022, 71, 344-350.	7.1	9
97	Manganeseâ€based materials as cathode for rechargeable aqueous zincâ€ion batteries. , 2022, 1, .		33
98	Hydrophobization Engineering of the Airâ€“Cathode Catalyst for Improved Oxygen Diffusion towards Efficient Zincâ€“Air Batteries. Angewandte Chemie, 2022, 134, .	1.6	12
99	Multiphase layered transition metal oxide positive electrodes for sodium ion batteries. Energy Science and Engineering, 2022, 10, 1672-1705.	1.9	20
100	Interface engineering of MoS2-based ternary hybrids towards reversible conversion of sodium storage. Materials Today Energy, 2022, 26, 100993.	2.5	5
101	Supramolecular Thixotropic Ionogel Electrolyte for Sodium Batteries. Gels, 2022, 8, 193.	2.1	1
102	Solid-state lithium battery cathodes operating at low pressures. Joule, 2022, 6, 636-646.	11.7	42
103	Benefits of vanadium doping in Na3MnTi(PO4)3/C as a potential candidate for sodium-ion batteries. Materials Chemistry and Physics, 2022, 282, 125938.	2.0	10
104	Smart interfaces in Li-ion batteries: Near-future key challenges. Electrochimica Acta, 2022, 415, 140258.	2.6	8
105	Highly reversible Mg metal anodes enabled by interfacial liquid metal engineering for high-energy Mg-S batteries. Energy Storage Materials, 2022, 48, 447-457.	9.5	46
106	Mitigating irreversible capacity loss for higher-energy lithium batteries. Energy Storage Materials, 2022, 48, 44-73.	9.5	25
107	Practicality of methyl acetate as a co-solvent for fast charging Na-ion battery electrolytes. Electrochimica Acta, 2022, 416, 140217.	2.6	7
108	Tailoring of hierarchical MnMoO4/C nanocauliflowers for high-performance lithium/sodium ion half/full batteries. Journal of Alloys and Compounds, 2022, 906, 164394.	2.8	11

#	Article	IF	Citations
109	Ultrafast sodium-ion storage in an interconnected Ni/Ni3S2 nanocomposite with long-term cycling performance. Journal of Alloys and Compounds, 2022, 909, 164705.	2.8	5
110	Ultrathin salt-free polymer-in-ceramic electrolyte for solid-state sodium batteries. EScience, 2021, 1, 194-202.	25.0	47
111	Puffing Up Hollow Carbon Nanofibers with Highâ€Energy Metalâ€Organic Frameworks for Capacitiveâ€Dominated Potassiumâ€Ion Storage. Small, 2022, 18, e2105767.	5.2	13
112	Solid-State Calcium-Ion Diffusion in Ca_{1.5}Ba_{0.5}Si₅O₃N₆. Chemistry of Materials, 2022, 34, 128-139.	3.2	7
113	Hydroxyl-Rich Single-Ion Conductors Enable Solid Hybrid Polymer Electrolytes with Excellent Compatibility for Dendrite-Free Lithium Metal Batteries. SSRN Electronic Journal, 0, , .	0.4	0
114	Hybridization of 2D Nanomaterials with 3D Graphene Architectures for Electrochemical Energy Storage and Conversion. Advanced Functional Materials, 2022, 32, .	7.8	26
115	Confined Lithium Deposition Triggered by an Integrated Gradient Scaffold for a Lithium-Metal Anode. ACS Applied Materials & Interfaces, 2022, 14, 17539-17546.	4.0	15
116	3D Flower-like Tin Monosulfide/Carbon Nanocomposite Anodes for Sodium-Ion Batteries. Nanomaterials, 2022, 12, 1351.	1.9	0
117	Surface optimized P2-Na2/3Ni1/3Mn2/3O2 cathode material via conductive Al-doped ZnO for boosting sodium storage. Electrochimica Acta, 2022, 419, 140394.	2.6	7
118	In-situ construction of Cuâ€“Co4N@CC hierarchical binder-free cathode for advanced and flexible Liâ€“CO2 batteries: Electron structure and mass transfer modulation. Journal of Power Sources, 2022, 535, 231446.	4.0	9
119	Freestanding Metalâ€“Organic Frameworks and Their Derivatives: An Emerging Platform for Electrochemical Energy Storage and Conversion. Chemical Reviews, 2022, 122, 10087-10125.	23.0	126
120	Effect of chelator content on the structural and electrochemical performance of Na₃V₂(PO₄)₂F₃ by solâ€“gel preparation. CrystEngComm, 2022, 24, 4519-4526.	1.3	6
121	A mini-review focusing on ambient-pressure chemical vapor deposition (AP-CVD) based synthesis of layered transition metal selenides for energy storage applications. Materials Advances, 2022, 3, 4471-4488.	2.6	14
122	Boosting the Zn-ion energy storage capability of graphene sandwiched nanoporous VO_x derived from MXene. Nanoscale, 2022, 14, 8640-8648.	2.8	9
124	A Polymerizedâ€Ionicâ€Liquidâ€Based Polymer Electrolyte with High Oxidative Stability for 4 and 5ÂV Class Solidâ€State Lithium Metal Batteries. Advanced Energy Materials, 2022, 12, .	10.2	34
125	Understanding the Role of Topotactic Anion Exchange in the Robust Cu Ion Storage of CuS_{1â€“x}Se_x. ACS Energy Letters, 2022, 7, 1835-1841.	8.8	13
126	The Importance of Stacking and Coordination for Li, Na, and Mg Diffusion and Intercalation in Ti₃C₂T₂ MXene. Advanced Materials Interfaces, 2022, 9, .	1.9	5
127	Rationally Designed Sodium Chromium Vanadium Phosphate Cathodes with Multiâ€Electron Reaction for Fastâ€Charging Sodiumâ€Ion Batteries. Advanced Energy Materials, 2022, 12, .	10.2	71

#	Article	IF	Citations
128	Natural sphalerite photocatalyst for treatment of oily wastewater produced by solvent extraction from spent lithium-ion battery recycling. Applied Catalysis B: Environmental, 2022, 313, 121460.	10.8	18
129	Understanding the Formation of a Cubic Mn0.6Fe0.4S Solid-solution Anode and its High Performance for Rechargeable Lithium-ion Batteries. Journal of Alloys and Compounds, 2022, , 165396.	2.8	2
130	Predominant intercalation of H+ enables ultrahigh rate capability of oxygen deficient MoO3 for aqueous Al-ion batteries. Energy Storage Materials, 2022, 50, 152-160.	9.5	23
131	Improving LiNiO₂ cathode performance through particle design and optimization. Journal of Materials Chemistry A, 2022, 10, 12890-12899.	5.2	16
132	Water-stable high lithium-ion conducting Li1.4Al0.4Ge0.2Ti1.4(PO4)3-TiO2-LiClâ€¢H2Oâ€“epoxy resin composite film with high mechanical strength as separator for Li-air batteries. Journal of Solid State Electrochemistry, 0, , 1.	1.2	1
133	Research Development on Aqueous Ammoniumâ€ion Batteries. Advanced Functional Materials, 2022, 32, .	7.8	58
134	In Situ Electrochemical Impedance Measurements of Î±-Fe2O3 Nanofibers: Unravelling the Li-Ion Conduction Mechanism in Li-Ion Batteries. Batteries, 2022, 8, 44.	2.1	5
135	Simultaneously suppressing the dendritic lithium growth and polysulfides migration by a polyethyleneimine grafted bacterial cellulose membrane in lithium-sulfur batteries. Applied Surface Science, 2022, , 153683.	3.1	9
136	Tunable multi-doped carbon nanofiber air cathodes based on a poly(ionic liquid) for sodium oxygen batteries with diglyme/ionic liquid-based hybrid electrolytes. Journal of Materials Chemistry A, 2022, 10, 11742-11754.	5.2	6
137	Key materials and future perspective for aqueous rechargeable lithium-ion batteries. Materials Reports Energy, 2022, 2, 100096.	1.7	6
138	Dendrite-free alkali metal electrodeposition from contact-ion-pair state induced by mixing alkaline earth cation. Cell Reports Physical Science, 2022, 3, 100907.	2.8	4
139	Synergetic Effect of Alkaliâ€Site Substitution and Oxygen Vacancy Boosting Vanadate Cathode for Superâ€Stable Potassium and Zinc Storage. Advanced Functional Materials, 2022, 32, .	7.8	28
140	MXene-based Zn-ion hybrid supercapacitors: Effects of anion carriers and MXene surface coatings on the capacities and life span. Journal of Energy Storage, 2022, 52, 104823.	3.9	12
141	Microstructure and Surface Engineering Through Indium Modification on Ni-Rich Layered Cathode Materials for Enhanced Electrochemical Performance of Lithium-Ion Batteries. SSRN Electronic Journal, 0, , .	0.4	0
142	In Situ Confined Synthesis of Lifepo4/Ti3c2 Composites with High-Rate and Low-Temperature Long Cycling Performance. SSRN Electronic Journal, 0, , .	0.4	0
143	Research on the remaining useful life prediction method of lithiumâ€ion batteries based on aging feature extraction and multiâ€kernel relevance vector machine optimization model. International Journal of Energy Research, 0, , .	2.2	12
144	A Zero-Strain Insertion Cathode Material for Room-Temperature Fluoride-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 24518-24525.	4.0	3
145	Halogen Storage Electrode Materials for Rechargeable Batteries. Energy and Environmental Materials, 2022, 5, 1155-1179.	7.3	19

#	Article	IF	Citations
146	An Exploration of Sulfur Redox in Lithium Battery Cathodes. Journal of the American Chemical Society, 2022, 144, 10119-10132.	6.6	14
147	Achieving Dendriteâ€“free lithium Plating/Stripping from mixed Ion/Electronâ€“Conducting scaffold Li2S@Ni NWs-NF for stable lithium metal anodes. Chemical Engineering Journal, 2022, 447, 137401.	6.6	18
148	Stable Solid Electrolyte Interphase In Situ Formed on Magnesiumâ€Metal Anode by using a Perfluorinated Alkoxideâ€Based Allâ€Magnesium Salt Electrolyte. Advanced Materials, 2022, 34, .	11.1	41
149	Hydroxyl-rich single-ion conductors enable solid hybrid polymer electrolytes with excellent compatibility for dendrite-free lithium metal batteries. Journal of Membrane Science, 2022, 657, 120666.	4.1	19
150	Surface Reactivity of Lithium (Poly)sulfides in a Polarizable Environment from First Principles. Topics in Catalysis, 2022, 65, 966-978.	1.3	1
151	Free-standing and binder-free porous monolithic electrodes prepared via solâ€“gel processes. Journal of Sol-Gel Science and Technology, 2022, 103, 637-679.	1.1	5
152	Constructing Extended Ï€-Conjugated Molecules with o-Quinone Groups as High-Energy Organic Cathode Materials. ACS Applied Materials & Interfaces, 2022, 14, 27994-28003.	4.0	20
153	Epitaxial Electrocrystallization of Magnesium via Synergy of Magnesiophilic Interface, Lattice Matching, and Electrostatic Confinement. ACS Nano, 2022, 16, 9894-9907.	7.3	26
154	Two-dimensional polymers made of carbonyl-bridged heterotriangulenes are promising anode materials for Li-ion batteries. 2D Materials, 2022, 9, 034003.	2.0	6
155	Enhanced interphasial stability of hard carbon for sodium-ion battery via film-forming electrolyte additive. Nano Research, 2023, 16, 3823-3831.	5.8	10
156	Deciphering the Interplay between Binders and Electrolytes on the Performance of Li4Ti5O12 Electrodes for Li-Ion Batteries. Energies, 2022, 15, 4182.	1.6	2
157	Nitrogen and phosphorus co-doped carbon for improving capacity and rate performances of potassium ion batteries. FlatChem, 2022, , 100398.	2.8	7
158	Solid-State Lithium-Air Batteries. ACS Symposium Series, 0, , 249-265.	0.5	0
159	State of charge, remaining useful life and knee point estimation based on artificial intelligence and Machine learning in lithium-ion EV batteries: A comprehensive review. Renewable Energy Focus, 2022, 42, 146-164.	2.2	20
160	Surface-Alloyed Nanoporous Zinc as Reversible and Stable Anodes for High-Performance Aqueous Zinc-Ion Battery. Nano-Micro Letters, 2022, 14, .	14.4	65
161	Insights into Ti doping for stabilizing the Na2/3Fe1/3Mn2/3O2 cathode in sodium ion battery. Journal of Energy Chemistry, 2022, 73, 542-548.	7.1	32
162	Hydroborate-Based Solid Electrolytes for All-Solid-State Batteries. ACS Symposium Series, 0, , 353-393.	0.5	4
163	Intercalation-deposition mechanism induced by aligned carbon fiber toward dendrite-free metallic potassium batteries. Energy Storage Materials, 2022, 51, 122-129.	9.5	17

#	Article	IF	Citations
164	Consecutive hybrid mechanism boosting Na+ storage performance of dual-confined SnSe2 in N, Se-doping double-walled hollow carbon spheres. Journal of Energy Chemistry, 2022, 74, 8-17.	7.1	20
165	Towards a Pseudocapacitive Battery: Benchmarking the Capabilities of Quantized Capacitance for Energy Storage. , 2022, 1, .		3
166	High area-capacity Mg batteries enabled by sulfur/copper integrated cathode design. Journal of Energy Chemistry, 2022, 72, 370-378.	7.1	9
167	Composite cathode materials for next-generation lithium fluorinated carbon primary batteries. Journal of Power Sources, 2022, 541, 231716.	4.0	18
168	Strong ion pairing at the origin of modified Li-cation solvation and improved performances of dual-salt electrolytes. Journal of Power Sources, 2022, 541, 231644.	4.0	5
169	Flash Sintering with Concurrent Crystallization of Li _{1.5}Al _{0.5}Ge _{1.5}(PO ₄) ₃ Glass. SSRN Electronic Journal, 0, , .	0.4	0
170	Ionicâ€“electronic dual-conductive polymer modified LiCoO₂ cathodes for solid lithium batteries. Chemical Communications, 2022, 58, 8638-8641.	2.2	16
171	Charge storage mechanisms of a Ï€â€“d conjugated polymer for advanced alkali-ion battery anodes. Chemical Science, 2022, 13, 8161-8170.	3.7	7
172	In-Situ Construction of High-Temperature-Resistant 3d Composite Polymer Electrolyte Membranes Towards High-Performance All-Solid-State Lithium Metal Batteries. SSRN Electronic Journal, 0, , .	0.4	0
173	Thioâ€LISICON and LGPSâ€Type Solid Electrolytes for Allâ€Solidâ€State Lithiumâ€Ion Batteries. Advanced Functional Materials, 2022, 32, .	7.8	35
174	Galliumâ€based liquid metals for lithiumâ€ion batteries. , 2022, 1, 354-372.		39
175	Modification of a Cu Mesh with Nanowires and Magnesiophilic Ag Sites to Induce Uniform Magnesium Deposition. ACS Applied Materials & Interfaces, 2022, 14, 31148-31159.	4.0	8
176	MXenes for advanced separator in rechargeable batteries. Materials Today, 2022, 57, 146-179.	8.3	38
177	Calcium-tin alloys as anodes for rechargeable non-aqueous calcium-ion batteries at room temperature. Nature Communications, 2022, 13, .	5.8	32
178	Recent advances in modulation engineering-enabled metal compounds for potassium-ion storage. Energy Storage Materials, 2022, 51, 815-839.	9.5	25
179	Covalent organic frameworks: a new platform for next-generation batteries of Na-, K- and Zn-ions. Science Bulletin, 2022, , .	4.3	7
180	Stabilization of Multicationic Redox Chemistry in Polyanionic Cathode by Increasing Entropy. Advanced Science, 2022, 9, .	5.6	23
181	Synergistic inhibition effect on lithium-ion batteries during thermal runaway by N2-twin-fluid liquid mist. Case Studies in Thermal Engineering, 2022, 37, 102269.	2.8	4

#	Article	IF	Citations
182	Synthesis of NaNi0.5Mn0.5O2 cathode materials for sodium-ion batteries via spray pyrolysis method. Journal of Alloys and Compounds, 2022, 922, 166283.	2.8	3
183	Electronic Tuning of Coreâ€“Shell CoNi Nanoalloy/N-Doped Few-Layer Graphene for Efficient Oxygen Electrocatalysis in Rechargeable Zincâ€“Air Batteries. Journal of Physical Chemistry Letters, 2022, 13, 6743-6748.	2.1	9
184	Advances in studying interfacial reactions in rechargeable batteries by photoelectron spectroscopy. Journal of Materials Chemistry A, 2022, 10, 19466-19505.	5.2	17
185	Investigating the abnormal conductivity behaviour of divalent cations in low dielectric constant tetraglyme-based electrolytes. Physical Chemistry Chemical Physics, 2022, 24, 21601-21611.	1.3	5
186	Realizing high-performance all-solid-state batteries with sulfide solid electrolyte and silicon anode: A review. Nano Research, 2023, 16, 3741-3765.	5.8	16
187	How the Sodium Cations in Anode Affect the Performance of a Lithium-ion Battery. Batteries, 2022, 8, 78.	2.1	1
188	Antimony Nanoparticles Encapsulated in Self-Supported Organic Carbon with a Polymer Network for High-Performance Lithium-Ion Batteries Anode. Nanomaterials, 2022, 12, 2322.	1.9	3
189	Carbon/Lithium Composite Anode for Advanced Lithium Metal Batteries: Design, Progress, In Situ Characterization, and Perspectives. Advanced Energy Materials, 2022, 12, .	10.2	40
190	Artificial Intelligence-Aided Mapping of the Structureâ€“Compositionâ€“Conductivity Relationships of Glassâ€“Ceramic Lithium Thiophosphate Electrolytes. Chemistry of Materials, 2022, 34, 6702-6712.	3.2	12
191	Highâ€Wettability Composite Separator Embedded with inâ€‰Situ Grown TiO ₂ Nanoparticles for Advanced Sodiumâ€ion Batteries. Energy Technology, 0, , 2200409.	1.8	7
192	Oxidative Molecular Layer Deposition of Amine-Containing Conjugated Polymer Thin Films. ACS Applied Polymer Materials, 2022, 4, 6156-6168.	2.0	5
193	Air/Water Stability Problems and Solutions for Lithium Batteries. Energy Material Advances, 2022, 2022, .	4.7	18
194	Lithium-ion conductive glass-ceramic electrolytes enable safe and practical Li batteries. Materials Today Energy, 2022, 29, 101118.	2.5	8
195	A High-Filled Li₇La₃Zr₂O₁₂/Polypropylene Oxide Composite Solid Electrolyte with Improved Lithium-Ion Transport and Safety Performances for High-Voltage Li Batteries. ACS Applied Energy Materials, 2022, 5, 10786-10793.	2.5	7
196	<scp>P2</scp> â€type <scp> Na _x TmO ₂ </scp> oxides as cathodes for <scp>nonâ€aqueous</scp> sodiumâ€ion batteriesâ€”Structural evolution and commercial prospects. International Journal of Energy Research, 2022, 46, 21894-21927.	2.2	5
197	Origin of Excellent Charge Storage Properties of Defective Tin Disulphide in Magnesium/Lithium-Ion Hybrid Batteries. Nano-Micro Letters, 2022, 14, .	14.4	6
198	In Situ Catalytic Polymerization of a Highly Homogeneous PDOL Composite Electrolyte for Longâ€Cycle Highâ€Voltage Solidâ€State Lithium Batteries. Advanced Energy Materials, 2022, 12, .	10.2	52
199	Ultrathin Pdâ€based Perforated Nanosheets for Fuel Cells Electrocatalysis. ChemElectroChem, 0, , .	1.7	5

#	Article	IF	Citations
200	Toward Optimization of the Chemical/Electrochemical Compatibility of Halide Solid Electrolytes in All-Solid-State Batteries. ACS Energy Letters, 2022, 7, 2979-2987.	8.8	26
201	Applicationâ€Based Prospects for Dualâ€Ion Batteries. ChemSusChem, 2023, 16, .	3.6	4
202	High-Energy-Density and Long-Lifetime Lithium-Ion Battery Enabled by a Stabilized Li₂O₂ Cathode Prelithiation Additive. ACS Applied Materials & Interfaces, 2022, 14, 38706-38716.	4.0	5
203	Efficient Control of the Shuttle Effect in Sodiumâ€“Sulfur Batteries with Functionalized Nanoporous Graphenes. ACS Applied Nano Materials, 0, , .	2.4	5
204	Phase Transformations and Phase Segregation during Potassiation of Sn_xP_y Anodes. Chemistry of Materials, 2022, 34, 7460-7467.	3.2	4
205	Molecular self-assembly derived hollow mesoporous carbon nanospheres with different pore and wall structure as ultra-stable anode for sodium-ion batteries. Electrochimica Acta, 2022, 430, 141080.	2.6	3
206	A Hybrid Approach for State-of-Charge Forecasting in Battery-Powered Electric Vehicles. Sustainability, 2022, 14, 9993.	1.6	1
207	Enhanced Air and Electrochemical Stability of Li₇P_{2.9}Ge_{0.05}S_{10.75}O_{0.1} Electrolytes with High Ionic Conductivity for Thiophosphate-Based All-Solid-State Batteries. ACS Applied Materials & Interfaces, 2022, 14, 39985-39995.	4.0	6
208	Towards better Mg metal anodes in rechargeable Mg batteries: Challenges, strategies, and perspectives. Energy Storage Materials, 2022, 52, 299-319.	9.5	43
209	Electrode reaction-driven orientation regrowth of Fe2O3 crystals from novel dendritic architecture in anode of lithium-ion batteries. Journal of Alloys and Compounds, 2022, 925, 166681.	2.8	4
210	Boosting lifespan of conversion-reaction anodes for full/half potassium-ion batteries via multi-dimensional carbon nano-architectures confinement effect. Journal of Energy Chemistry, 2022, 75, 55-65.	7.1	8
211	A novel integrated control framework of AFS, ASS, and DYC based on ideal roll angle to improve vehicle stability. Advanced Engineering Informatics, 2022, 54, 101764.	4.0	4
212	Corrosion suppression of aluminium current collectors within Li-ion cells using 3-methoxypropionitrile-based electrolytes. Electrochimica Acta, 2022, 431, 141105.	2.6	4
213	Fiber metal laminated structural batteries with multifunctional solid polymer electrolytes. Composites Science and Technology, 2022, 230, 109731.	3.8	6
214	Polymer nanocomposites based on Graphite Nanoplatelets and amphiphilic graphene platelets. Composites Part B: Engineering, 2022, 246, 110223.	5.9	18
215	The electrochemical properties of bismuth-antimony-tin alloy anodes for magnesium ion batteries. Journal of Power Sources, 2022, 548, 232076.	4.0	14
216	In-situ construction of high-temperature-resistant 3D composite polymer electrolyte membranes towards high-performance all-solid-state lithium metal batteries. Journal of Power Sources, 2022, 548, 232052.	4.0	11
217	Ionic liquid electrolyte additive regulates the multi-species-insertion titanium sulfide cathode for magnesium batteries. Energy Storage Materials, 2022, 53, 435-443.	9.5	6

#	Article	IF	Citations
218	Decoupling reaction rate and diffusion limitation to fast-charging electrodes by extended modeling of cyclic voltammetry data. Energy Storage Materials, 2022, 53, 381-390.	9.5	8
219	Enhancing the electrochemical performance of a micron-sized Ge anode through in situ surface composite flower-like Zn₂GeO₄ for Li-ion batteries. Sustainable Energy and Fuels, 2022, 6, 4520-4527.	2.5	1
220	Monolayer H-MoS₂ with high ion mobility as a promising anode for rubidium (cesium)-ion batteries. Nanoscale Advances, 2022, 4, 3756-3763.	2.2	3
221	Rational engineering of VS₄ nanorod array on rose-shaped VS₂ nanosheets for high-performance aluminium-ion batteries. Chemical Communications, 2022, 58, 11677-11680.	2.2	10
222	Bioinspired redox-coupled conversion reaction in FeOOH-acetate hybrid nanoplatelets for Na ion battery. Journal of Materials Chemistry A, 2022, 10, 17740-17751.	5.2	4
223	A two-dimensional metallic SnB monolayer as an anode material for non-lithium-ion batteries. Physical Chemistry Chemical Physics, 2022, 24, 23737-23748.	1.3	6
224	A fluorinated SEI layer induced by a fire-retardant gel polymer electrolyte boosting lateral dendrite growth. Journal of Materials Chemistry A, 2022, 10, 21905-21911.	5.2	9
225	Point defects and their impact on electrochemical performance in Na_{0.44}MnO₂ for sodium-ion battery cathode application. Physical Chemistry Chemical Physics, 2022, 24, 22736-22745.	1.3	11
226	Na superionic conductor-type LiZr₂(PO₄)₃ as a promising solid electrolyte for use in all-solid-state Li metal batteries. Chemical Communications, 2022, 58, 9328-9340.	2.2	5
227	Metalâ€“organic frameworks and their derivatives for metal-ion (Li, Na, K and Zn) hybrid capacitors. Chemical Science, 2022, 13, 11981-12015.	3.7	31
228	Investigating the role of structural water on the electrochemical properties of Î±-V₂O₅ through density functional theory. Physical Chemistry Chemical Physics, 2022, 24, 24271-24280.	1.3	1
229	Achieving stable K-storage performance of carbon sphere-confined Sb via electrolyte regulation. Journal of Energy Chemistry, 2023, 76, 51-58.	7.1	8
230	Nano self-assembly of fluorophosphate cathode induced by surface energy evolution towards high-rate and stable sodium-ion batteries. Nano Research, 2023, 16, 439-448.	5.8	46
231	Ion Conductivity in a Magnesium Borohydride Ammonia Borane Solid-State Electrolyte. Journal of Physical Chemistry C, 2022, 126, 15118-15127.	1.5	6
232	Polycyclic Aromatic Hydrocarbon-Enabled Wet Chemical Prelithiation and Presodiation for Batteries. Batteries, 2022, 8, 99.	2.1	7
233	A Review on Regulating Li⁺Solvation Structures in Carbonate Electrolytes for Lithium Metal Batteries. Advanced Materials, 0, , 2206009.	11.1	39
234	Expanding the Material Search Space for Multivalent Cathodes. ACS Applied Materials & Interfaces, 2022, 14, 44367-44376.	4.0	7
235	Al₂O₃ Fiber-Reinforced Polymer Solid Electrolyte Films with Excellent Lithium-Ion Transport Properties for High-Voltage Solid-State Lithium Batteries. ACS Applied Polymer Materials, 2022, 4, 7144-7151.	2.0	9

#	Article	IF	Citations
236	Grid scale energy storage: The alkali-ion battery systems of choice. Current Opinion in Electrochemistry, 2022, 36, 101130.	2.5	4
237	cideMOD: An Open Source Tool for Battery Cell Inhomogeneous Performance Understanding. Journal of the Electrochemical Society, 2022, 169, 090528.	1.3	3
238	Accelerating Charge/Discharge of Lithium Iron Phosphate by Charge Mediation Reaction of Poly(dimethylfluoflavin-substituted norbornene). Chemistry Letters, 2022, 51, 1040-1043.	0.7	2
239	Biomimetic Dendriteâ€Free Multivalent Metal Batteries. Advanced Materials, 2022, 34, .	11.1	35
240	Selfâ€Healing of Prussian Blue Analogues with Electrochemically Driven Morphological Rejuvenation. Advanced Materials, 2022, 34, .	11.1	20
241	Non-Invasive Detection of Lithium-Metal Battery Degradation. Energies, 2022, 15, 6904.	1.6	1
242	Comparative Analysis of LiMPO4 (M = Fe, Co, Cr, Mn, V) as Cathode Materials for Lithium-Ion Battery Applicationsâ€”A First-Principle-Based Theoretical Approach. Nanomaterials, 2022, 12, 3266.	1.9	14
243	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
244	Selection of Redox Mediators for Reactivating Dead Li in Lithium Metal Batteries. Advanced Energy Materials, 2022, 12, .	10.2	13
245	Magnesium/Lithium Hybrid Batteries Based on SnS ₂ -MoS ₂ with Reversible Conversion Reactions. Energy Material Advances, 2022, 2022, .	4.7	2
246	Stable 4.5 V LiCoO2 cathode material enabled by surface manganese oxides nanoshell. Nano Research, 2023, 16, 2480-2485.	5.8	4
247	Advances and challenges in multiscale characterizations and analyses for battery materials. Journal of Materials Research, 0, , .	1.2	2
248	Edge-oxidation-induced densification towards hybrid bulk carbon for low-voltage, reversible and fast potassium storage. Energy Storage Materials, 2022, 53, 482-491.	9.5	33
249	Battery materials. , 2023, , 308-363.		0
250	Perspectives on Lithium-Based Batteries and Post-Lithium Batteries for Electric Vehicles. , 2022, , .		0
251	A Carboranyl Electrolyte Enabling Highly Reversible Sodium Metal Anodes via a â€œFluorineâ€Freeâ€•SEI. Angewandte Chemie - International Edition, 2022, 61, .	7.2	29
252	Room Temperature Halideâ€Eutectic Solid Electrolytes with Viscous Feature and Ultrahigh Ionic Conductivity. Advanced Science, 2022, 9, .	5.6	14
253	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

#	Article	IF	Citations
254	Lithium Difluoro(Oxalate)Borateâ€Induced Interphase for Highâ€Voltage LiFe _{0.15} Co _{0.85} PO ₄ @C Cathode by Solidâ€State Synthesis. Energy Technology, 0, , 2200988.	1.8	0
255	Na⁺-Activation Engineering in the Na₃V₂(PO₄)₃ Cathode with Boosting Kinetics for Fast-Charging Na-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 47685-47695.	4.0	14
256	Ion transport and structural design of lithium-ion conductive solid polymer electrolytes: a perspective. Materials Futures, 2022, 1, 042103.	3.1	26
257	Hard Carbons as Anodes in Sodium-Ion Batteries: Sodium Storage Mechanism and Optimization Strategies. Molecules, 2022, 27, 6516.	1.7	8
258	Uniformly MXeneâ€Grafted Eutectic Aluminumâ€Cerium Alloys as Flexible and Reversible Anode Materials for Rechargeable Aluminumâ€Ion Battery. Advanced Functional Materials, 2023, 33, .	7.8	28
259	Hydrogen Stabilization and Activation of Dry-Quenched Coke for High-Rate-Performance Lithium-Ion Batteries. Nanomaterials, 2022, 12, 3530.	1.9	0
260	A Carboranyl Electrolyte Enabling Highly Reversible Sodium Metal Anodes via a â€œFluorineâ€Freeâ€•SEI. Angewandte Chemie, 0, , .	1.6	0
261	Catalytic effect of carbon-based electrode materials in energy storage devices. Science China Materials, 2022, 65, 3229-3242.	3.5	5
262	MXene conversion to V2S3 heterostructure in CS2 ambient: A novel approach for sodium-ion battery anodes. Materials Today Energy, 2022, 30, 101184.	2.5	9
263	What About Manganese? Toward Rocking Chair Aqueous Mn-Ion Batteries. ACS Energy Letters, 2022, 7, 4161-4167.	8.8	8
264	Cosolventâ€Assisted Formation of Charged Ionâ€Solvent Clusters and Solid Electrolyte Interphase for Highâ€Performance Magnesium Metal Batteries. Advanced Energy Materials, 2022, 12, .	10.2	18
265	Electrolyte Additive Strategies for Suppression of Zinc Dendrites in Aqueous Zinc-Ion Batteries. Batteries, 2022, 8, 153.	2.1	14
266	Heterogeneous NASICONâ€Type Composite as Lowâ€Cost, Highâ€Performance Cathode for Sodiumâ€Ion Batteries. Advanced Functional Materials, 2022, 32, .	7.8	49
267	Anionenâ€Einlagerungschemie organischer Kathoden fÃ¼r zweiwertige Metallbatterien mit hoher Energie und hoher Leistungsdichte. Angewandte Chemie, 2023, 135, .	1.6	1
268	Recovery of Valuable Metals from Spent LiNi0.8Co0.1Mn0.1O2 Cathode Materials Using Compound Leaching Agents of Sulfuric Acid and Oxalic Acid. Sustainability, 2022, 14, 14169.	1.6	7
269	Anion Storage Chemistry of Organic Cathodes for Highâ€Energy and Highâ€Power Density Divalent Metal Batteries. Angewandte Chemie - International Edition, 2023, 62, .	7.2	17
270	How to Promote the Industrial Application of SiO_x Anode Prelithiation: Capability, Accuracy, Stability, Uniformity, Cost, and Safety. Advanced Energy Materials, 2022, 12, .	10.2	22
271	Engineering Polymeric Nanofluidic Membranes for Efficient Ionic Transport: Biomimetic Design, Material Construction, and Advanced Functionalities. ACS Nano, 2022, 16, 17613-17640.	7.3	15

#	Article	IF	Citations
272	Using Triallyl Phosphate as Electrolyte Additive to Stabilize Electrodeâ€“Electrolyte Interface of LiNi_{0.5}Mn_{1.5}O₄/Graphite High Voltage Lithium Ion Cells. ACS Applied Energy Materials, 2022, 5, 13600-13609.	2.5	3
273	Microstructure and surface engineering through indium modification on Ni-rich layered cathode materials for enhanced electrochemical performance of lithium-ion batteries. Journal of Alloys and Compounds, 2023, 934, 167862.	2.8	6
274	First-principles investigation of phase stability in layered <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Na</mml:mi><mml:mi>x</mml:mi></mml:msub><mml:m Physical Review Materials, 2022, 6, .	3.9	1
275	Advanced electrochemical energy storage and conversion on graphdiyne interface. , 2022, 1, e9120036.		24
276	A novel P2/O3 composite cathode toward synergistic electrochemical optimization for sodium ion batteries. Journal of Power Sources, 2023, 553, 232292.	4.0	11
277	3-(2,2,2-Trifluoroethoxy)propionitrile-based electrolytes for high energy density lithium metal batteries. Nanoscale, 2022, 14, 17237-17246.	2.8	2
278	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
279	From anode to cell: synergistic protection strategies and perspectives for stabilized Zn metal in mild aqueous electrolytes. Energy Storage Materials, 2023, 54, 623-640.	9.5	41
280	Stable lithium storage behavior observed in Mn-doped MgCo2O4 anode materials. Materials Chemistry and Physics, 2023, 294, 127027.	2.0	3
281	Na poti do zares dobrega akumulatorja: Medfazne povrÅ¡ine in druge hudiÄeve reÄi. Alternator, 0, , .	0.0	0
282	In situ confined synthesis of LiFePO4/Ti3C2@C composites with high-rate and low-temperature long cycling performance. Ionics, 2023, 29, 33-41.	1.2	1
283	A general synthesis of inorganic nanotubes as high-rate anode materials of sodium ion batteries. Journal of Energy Chemistry, 2023, 77, 369-375.	7.1	7
284	Mapping and Modeling Physicochemical Fields in Solid-State Batteries. Journal of Physical Chemistry Letters, 2022, 13, 10816-10822.	2.1	3
285	Phase Transitions and Physical Properties of the Mixed Valence Iron Phosphate Fe3(PO3OH)4(H2O)4. Materials, 2022, 15, 8059.	1.3	0
286	Development of design strategies for conjugated polymer binders in lithium-ion batteries. Polymer Journal, 2023, 55, 317-341.	1.3	5
287	Fast Sodium-Ion Conduction in a Novel Conjuncto-Hydroborate of Na₄B₂₀H₁₈. ACS Applied Energy Materials, 2022, 5, 15578-15585.	2.5	4
288	Recent advances in dispersion and alignment of fillers in PVDF-based composites for high-performance dielectric energy storage. Materials Today Energy, 2023, 31, 101208.	2.5	10
289	Fast divalent conduction in MB₁₂H₁₂Â·12H₂O (M = Zn, Mg) complex hydrides: effects of rapid crystal water exchange and application for solid-state electrolytes. Journal of Materials Chemistry A, 2022, 10, 24877-24887.	5.2	6

#	Article	IF	Citations
290	Metalâ€“organic framework-derived advanced oxygen electrocatalysts as air-cathodes for Znâ€“air batteries: recent trends and future perspectives. Materials Horizons, 2023, 10, 745-787.	6.4	24
291	Building a Rigid-Soft Coupling Interphase by Reduction-Oxidation Collaborative Approach with Lithium Difluorobis(oxalato) Phosphate Additives. Journal of Materials Chemistry A, 0, , .	5.2	1
292	Boosting zinc-ion storage in hydrated vanadium oxides via migration regulation. Energy Storage Materials, 2023, 55, 279-288.	9.5	25
293	Flash sintering with concurrent crystallization of Li1.5Al0.5Ge1.5(PO4)3 glass. Acta Materialia, 2023, 244, 118593.	3.8	7
294	Novel Niâ€“Geâ€“P anodes for lithium-ion batteries with enhanced reversibility and reduced redox potential. Inorganic Chemistry Frontiers, 2023, 10, 699-711.	3.0	35
295	Studies on sodium-ion batteries: Searching for the proper combination of the cathode material, the electrolyte and the working voltage. The role of magnesium substitution in layered manganese-rich oxides, and pyrrolidinium ionic liquid. Electrochimica Acta, 2023, 439, 141654.	2.6	2
296	Building Na-ion full cells using homologous Prussian blue and its phosphide derivative. Applied Surface Science, 2023, 612, 155952.	3.1	7
297	High-capacity Sb2SnO5 with controlled Sb/Sn phase modulation as advanced anode material for sodium-ion batteries. Journal of Alloys and Compounds, 2023, 938, 168472.	2.8	10
298	Enhanced cycling stability and storage performance of Na0.67Ni0.33Mn0.67-xTixO1.9F0.1 cathode materials by Mn-rich shells and Ti doping. Journal of Colloid and Interface Science, 2023, 633, 82-91.	5.0	19
299	Reductive Decomposition Kinetics and Thermodynamics That Govern the Design of Fluorinated Alkoxyaluminate/Borate Salts for Mg-Ion and Ca-Ion Batteries. Journal of Physical Chemistry C, 2022, 126, 20773-20785.	1.5	5
300	Vanadium Oxideâ€“Conducting Polymers Composite Cathodes for Aqueous Zinc-Ion Batteries: Interfacial Design and Enhancement of Electrochemical Performance. Energies, 2022, 15, 8966.	1.6	4
301	Lithium nitrate regulated carbonate electrolytes for practical Li-metal batteries: Mechanisms, principles and strategies. Journal of Energy Chemistry, 2023, 77, 581-600.	7.1	25
302	Cathode materials for single-phase solid-solid conversion Li-S batteries. Matter, 2023, 6, 316-343.	5.0	14
303	Analysis of Electrochemical Performance with Dispersion Degree of CNTs in Electrode According to Ultrasonication Process and Slurry Viscosity for Lithium-Ion Battery. Nanomaterials, 2022, 12, 4271.	1.9	2
304	Layer-stacking of chalcogenide-terminated MXenes Ti₂CT₂(T = O, S, Se, Te) and their applications in metal-ion batteries. Nanotechnology, 2023, 34, 105704.	1.3	0
305	High-entropy mechanism to boost ionic conductivity. Science, 2022, 378, 1320-1324.	6.0	103
306	Chemical Preintercalation Synthesis of Versatile Electrode Materials for Electrochemical Energy Storage. Accounts of Chemical Research, 2023, 56, 13-24.	7.6	8
307	3D Carbon Materials for High-Performance Electric Energy Storage Facilities. ACS Applied Energy Materials, 2023, 6, 1-11.	2.5	4

#	Article	IF	Citations
308	Sulfur-doped CMK-5 with expanded lattice for high-performance lithium ion batteries. Chinese Chemical Letters, 2023, 34, 108054.	4.8	1
309	Examining Electrolyte Compatibility on Polymorphic MnO₂ Cathodes for Room-Temperature Rechargeable Magnesium Batteries. ACS Applied Materials & Interfaces, 2022, 14, 56685-56696.	4.0	3
310	Yielding behavior of concentrated lithium-ion battery anode slurry. Physics of Fluids, 2022, 34, .	1.6	6
311	Assessing the Performance of Al₁₂N₁₂ and Al₁₂P₁₂ Nanostructured Materials for Alkali Metal Ion (Li, Na, K) Batteries. ACS Omega, 2022, 7, 46183-46202.	1.6	14
312	Nanostructuring Strategies for Siliconâ€based Anodes in Lithiumâ€ion Batteries: Tuning Areal Silicon Loading, SEI Formation/Irreversible Capacity Loss, Rate Capability Retention and Electrode Durability. Batteries and Supercaps, 2023, 6, .	2.4	2
313	Oxygen-Tuned Na₃V₂(PO₄)₂F_{3â€“2y}O_{2y} (0 â‰¤ y < 1) as High-Rate Cathode Materials for Rechargeable Sodium Batteries. ACS Applied Energy Materials, 2022, 5, 15799-15808.	2.5	9
314	Polysaccharide Modified Cathodes for High-Capacity Rechargeable Nonaqueous Liâ€“O₂ Batteries. Journal of Physical Chemistry Letters, 2023, 14, 437-444.	2.1	0
315	Towards commercialization of fluorinated cation-disordered rock-salt Li-ion cathodes. Frontiers in Chemistry, 0, 11, .	1.8	1
316	Machine learning-assisted materials development and device management in batteries and supercapacitors: performance comparison and challenges. Journal of Materials Chemistry A, 2023, 11, 3904-3936.	5.2	5
317	Deciphering the Thermal Failure Mechanism of Anodeâ€Free Lithium Metal Pouch Batteries. Advanced Energy Materials, 2023, 13, .	10.2	14
318	Discriminating Active Bï¿¿N Sites in Coralloidal B, N Dualâ€Doped Carbon Nanoâ€Bundles for Boosted Znâ€ion Storage Capability. Advanced Functional Materials, 2023, 33, .	7.8	28
319	Manipulation of Ï€-aromatic conjugation in two-dimensional Sn-organic materials for efficient lithium storage. EScience, 2023, 3, 100094.	25.0	16
320	Improved electrochemical performance of aqueous zinc-ion batteries with modified glass fiber separator by Ketjen Black. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 663, 130991.	2.3	3
321	Strengths, weaknesses, opportunities, and threats (SWOT) analysis of supercapacitors: A review. Journal of Energy Chemistry, 2023, 79, 611-638.	7.1	33
322	Explosion Strategy Engineering Oxygen-Functionalized Groups and Enlarged Interlayer Spacing of the Carbon Anode for Enhanced Lithium Storage. ACS Applied Materials & Interfaces, 2023, 15, 4371-4384.	4.0	2
323	Li+ migration and transformation at the interface: A review for stable Li metal anode. Energy Storage Materials, 2023, 55, 782-807.	9.5	12
324	Three-Dimensional Silicene-Based Materials: A Universal Anode for Monovalent and Divalent Ion Batteries. Journal of Physical Chemistry C, 2023, 127, 1198-1208.	1.5	8
325	Terminal Groupâ€Oriented Selfâ€Assembly to Controllably Synthesize a Layerâ€byâ€Layer SnSe₂ and MXene Heterostructure for Ultrastable Lithium Storage. Small, 2023, 19, .	5.2	33

#	Article	IF	Citations
326	Recent Progresses on Vanadium Sulfide Cathodes for Aqueous Zinc-Ion Batteries. Energies, 2023, 16, 917.	1.6	2
327	Li₂Cu_{0.1}Ni_{0.9}O₂ with Copper Substitution: A New Cathode Prelithiation Additive for Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2023, 11, 1044-1053.	3.2	7
328	Controllable engineering of intrinsic defects on carbon nanosheets enables fast and stable potassium storage performance. Carbon, 2023, 204, 507-515.	5.4	6
329	Robust NASICON-type iron-based Na4Fe3(PO4)2(P2O7) cathode for high temperature sodium-ion batteries. Chemical Engineering Journal, 2023, 458, 141385.	6.6	14
330	Surface engineered hollow Ni-Co-P@TiO2- nanopolyhedrons as high performance anode material for sodium storage. Journal of Colloid and Interface Science, 2023, 635, 265-272.	5.0	3
331	Solvent Molecule Design Enables Excellent Charge Transfer Kinetics for a Magnesium Metal Anode. ACS Energy Letters, 2023, 8, 780-789.	8.8	15
332	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
333	Phase Stability and Kinetics of Topotactic Dual Ca²⁺â€“Na⁺ Ion Electrochemistry in NaSICON NaV₂(PO₄)₃. Chemistry of Materials, 2023, 35, 468-481.	3.2	5
334	Cobalt metalâ€“organic framework derived cobaltâ€“nitrogenâ€“carbon material for overall water splitting and supercapacitor. International Journal of Hydrogen Energy, 2023, 48, 9551-9564.	3.8	12
335	Mechanistic Insights into Oxidative Molecular Layer Deposition of Conjugated Polymers. Chemistry of Materials, 2023, 35, 154-162.	3.2	4
336	Rational Design of Electrode Materials for Advanced Supercapacitors: From Lab Research to Commercialization. Advanced Functional Materials, 2023, 33, .	7.8	66
337	Decision making in solid-state battery manufacturing. , 2023, , 263-293.		0
338	Surface-dominated potassium storage enabled by single-atomic sulfur for high-performance K-ion battery anodes. Energy and Environmental Science, 2023, 16, 1540-1547.	15.6	19
339	High-temperature graphitization of coke and lithium storage properties of coke-based graphite. International Journal of Coal Preparation and Utilization, 2024, 44, 19-36.	1.2	1
340	Weak Correlation between the Polyanion Environment and Ionic Conductivity in Amorphous Liâ€“Pâ€“S Superionic Conductors. Chemistry of Materials, 2023, 35, 891-899.	3.2	4
341	Unconventional Designs for Functional Sodiumâ€Sulfur Batteries. Energy and Environmental Materials, 2023, 6, .	7.3	6
342	Anion Storage of MXenes. Small Methods, 2023, 7, .	4.6	9
343	Enabling Highly Reversible Zn Anode by Multifunctional Synergistic Effects of Hybrid Solute Additives. ACS Energy Letters, 2023, 8, 1192-1200.	8.8	45

#	Article	IF	Citations
344	Creating water-in-salt-like environment using coordinating anions in non-concentrated aqueous electrolytes for efficient Zn batteries. Energy and Environmental Science, 2023, 16, 1982-1991.	15.6	15
345	Supercritical carbon dioxide technology in synthesis, modification, and recycling of battery materials. , 2023, 2, 169-185.		2
346	Preferential Pyrolysis Construction of Carbon Anodes with 8400â€…h Lifespan for Highâ€Energyâ€Density Kâ€ion Batteries. Angewandte Chemie, 2023, 135, .	1.6	1
347	Solidâ€state Liâ€“air batteries: Fundamentals, challenges, and strategies. SmartMat, 2023, 4, .	6.4	2
348	Molten lithium metal battery with Li4Ti5O12 cathode and solid electrolyte. ETransportation, 2023, 16, 100235.	6.8	1
349	Recent advances of cathode materials for zinc-ion hybrid capacitors. Nano Energy, 2023, 109, 108290.	8.2	21
350	Phosphate-based gel polymer electrolyte enabling remarkably long cycling stable sodium storage in a wide-operating-temperature. Chemical Engineering Journal, 2023, 465, 142796.	6.6	8
351	Enhanced Na+ diffusion in Na3V2(PO4)2F2O cathodes via Zr4+ doping for high-rate and long-cycling sodium batteries. Journal of Alloys and Compounds, 2023, 945, 169314.	2.8	3
352	Recent advances and future perspectives of rechargeable chloride-based batteries. Nano Energy, 2023, 110, 108364.	8.2	10
353	One-step hydrothermal synthesis of manganese oxide nanosheets with graphene quantum dots for high-performance supercapacitors. Journal of Energy Storage, 2023, 62, 106948.	3.9	8
354	In situ and operando infrared spectroscopy of battery systems: Progress and opportunities. Journal of Energy Chemistry, 2023, 81, 472-491.	7.1	4
355	Multi-step time series forecasting on the temperature of lithium-ion batteries. Journal of Energy Storage, 2023, 64, 107092.	3.9	3
356	Integrated design of multifunctional all-in-one polymer electrolyte membranes with 3D crosslinking networks toward high-performance lithium metal batteries. Journal of Membrane Science, 2023, 677, 121643.	4.1	6
357	Synthesis of high-specific-capacity Prussian blue analogues for sodium-ion batteries boosted by grooved structure. Journal of Alloys and Compounds, 2023, 950, 169928.	2.8	5
358	Porous CoP/P-C nanofilm grown on lightweight carbon cloth as a binder/additive-free lithium-ion anode with high-performance. Journal of Alloys and Compounds, 2023, 948, 169810.	2.8	3
359	Mn pre-intercalated hydrated vanadium pentoxide activated by nitrogen plasma for enhanced zinc ion storage. Journal of Energy Storage, 2023, 63, 106988.	3.9	5
360	Construction of superior performance Na3V2-xCrx(PO4)2F3/C cathode by homovalent doping strategy toward enhanced sodium ion storage. Journal of Power Sources, 2023, 571, 233080.	4.0	7
361	Diglyme-based gel polymer electrolytes for K-ion capacitors. Energy Storage Materials, 2023, 56, 342-350.	9.5	6

#	Article	IF	Citations
362	Inhibition of transition-metal dissolution with advanced electrolytes in batteries with silicon-graphite anodes and high-nickel cathodes. Energy Storage Materials, 2023, 56, 562-571.	9.5	7
363	How Green are Redox Flow Batteries?. ChemSusChem, 2023, 16, .	3.6	6
364	State of the art of lithium-ion battery material potentials: An analytical evaluations, issues and future research directions. Journal of Cleaner Production, 2023, 394, 136246.	4.6	28
365	Designing All-Solid-State Batteries by Theoretical Computation: A Review. Electrochemical Energy Reviews, 2023, 6, .	13.1	17
366	A hexaazatriphenylene-based polymer as high performance anode for Li-/Na-/K-ion batteries. Chemical Engineering Journal, 2023, 460, 141703.	6.6	14
367	Structural, Morphological and Interfacial Investigation of H₂V₃O₈ upon Mg²⁺ Intercalation. Batteries and Supercaps, 2023, 6, .	2.4	1
368	High Entropy Enabling the Reversible Redox Reaction of V⁴⁺/V⁵⁺ Couple in NASICONâ€Type Sodium Ion Cathode. Advanced Energy Materials, 2023, 13, .	10.2	22
369	Validating the reversible redox of alkali-ion disulfonyl-methanide as organic positive electrode materials. Materials Today Chemistry, 2023, 28, 101379.	1.7	2
370	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
371	Effects of cation and anion substitution in KVPO4F for K-ion batteries. Energy Storage Materials, 2023, 57, 81-91.	9.5	5
372	A Fluorinated Covalent Organic Framework with Accelerated Oxygen Transfer Nanochannels for Highâ€Performance Zincâ€“Air Batteries. Advanced Materials, 2023, 35, .	11.1	14
373	A Passivation-Free Solid Electrolyte Interface Regulated by Magnesium Bromide Additive for Highly Reversible Magnesium Batteries. Nano Letters, 2023, 23, 1564-1572.	4.5	13
374	A Comparative Study of Polycrystal/Singleâ€Crystal LiNi_{0.8}Co_{0.1}Mn_{0.1}O₂ in Allâ€Solidâ€State Liâ€Ion Batteries with Halideâ€Based Electrolyte under Low Stacking Pressure. Energy Technology, 2023, 11, .	1.8	0
375	Closing remarks and future directions for batteries and their thermal management. , 2023, , 265-274.		0
376	A Highâ€Energy NASICONâ€Type Na_{3.2}MnTi_{0.8}V_{0.2}(PO₄)₃ Cathode Material with Reversible 3.2â€Electron Redox Reaction for Sodiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2023, 62, .	7.2	18
377	State and future implementation perspectives of porous carbon-based hybridized matrices for lithium sulfur battery. Coordination Chemistry Reviews, 2023, 481, 215055.	9.5	9
378	A Highâ€Energy NASICONâ€Type Na_{3.2}MnTi_{0.8}V_{0.2}(PO₄)₃ Cathode Material with Reversible 3.2â€Electron Redox Reaction for Sodiumâ€Ion Batteries. Angewandte Chemie, 2023, 135, .	1.6	7
379	Electron and Ion Transport in Lithium and Lithium-Ion Battery Negative and Positive Composite Electrodes. Chemical Reviews, 2023, 123, 1327-1363.	23.0	62

#	Article	IF	Citations
380	Current Challenges, Progress and Future Perspectives of Aluminum-Ion Batteries. Applied Solar Energy (English Translation of Geliotekhnika), 2022, 58, 334-354.	0.2	0
381	An intercalation-type Li-free cathode with energy density exceeding 550 Wh kgâ^'1. National Science Review, 2023, 10, .	4.6	0
382	Building Kâ€"C Anode with Ultrahigh Selfâ€Diffusion Coefficient for Solid State Potassium Metal Batteries Operating at â^'20 to 120ÂâC. Advanced Materials, 2023, 35, .	11.1	12
383	Highly Cross-Linked 3D Îµ-Fe₂O₃ Networks Organized by Ultrathin Nanosheets as High-Performance Anode Materials for Lithium-Ion Storage. ACS Applied Nano Materials, 2023, 6, 2356-2365.	2.4	1
384	Oxygen Redox Activation at Initial Cycle to Improve Cycling Stability for the Na_{0.83}Li_{0.12}Ni_{0.22}Mn_{0.66}O₂ System. ACS Applied Materials & Interfaces, 2023, 15, 10709-10717.	4.0	1
385	Multiple Accessible Redox-Active Sites in a Robust Covalent Organic Framework for High-Performance Potassium Storage. Journal of the American Chemical Society, 2023, 145, 5105-5113.	6.6	28
386	Constructing Active Bï£¿N Sites in Carbon Nanosheets for Highâ€Capacity and Fast Charging Toward Potassium Ion Storage. Small, 2023, 19, .	5.2	11
387	Oxygen-Related Defect Engineering of Amorphous Vanadium Pentoxide Cathode for Achieving High-Performance Thin-Film Aqueous Zinc-Ion Batteries. ACS Applied Energy Materials, 2023, 6, 2719-2727.	2.5	4
388	Unveiling a high capacity multi-redox (Nb⁵⁺/Nb⁴⁺/Nb³⁺) NASICON-Nb₂(PO₄)₃ anode for Li- and Na-ion batteries. Journal of Materials Chemistry A, 2023, 11, 8173-8183.	5.2	7
389	Lowâ€Temperature Potassium Batteries Enabled by Electric and Thermal Field Regulation. Angewandte Chemie - International Edition, 2023, 62, .	7.2	25
390	Lowâ€Temperature Potassium Batteries Enabled by Electric and Thermal Field Regulation. Angewandte Chemie, 2023, 135, .	1.6	0
391	Insight into the structural and electrochemical properties of the interface between a Na₆SOI₂ solid electrolyte and a metallic Na anode. Physical Chemistry Chemical Physics, 2023, 25, 8544-8555.	1.3	2
392	Interfacial Challenges and Strategies toward Practical Sulfide-Based Solid-State Lithium Batteries. Energy Material Advances, 2023, 4, .	4.7	12
393	Boosting the Reversible, Highâ€Rate Na⁺ Storage Capability of the Hard Carbon Anode Via the Synergistic Structural Tailoring and Controlled Presodiation. Small, 2023, 19, .	5.2	6
394	Realizing discrepant oxygen-redox chemistry in honeycomb superlattice cathode via manipulating oxygen-stacking sequences. Chemical Engineering Journal, 2023, 462, 141994.	6.6	6
395	Preferential Pyrolysis Construction of Carbon Anodes with 8400â€...h Lifespan for Highâ€Energyâ€Density Kâ€ion Batteries. Angewandte Chemie - International Edition, 2023, 62, .	7.2	24
396	Molten Salt-Assisted Catalytic Preparation of MoS2/Î±-MoO3/Graphene as High-Performance Anode of Li-Ion Battery. Catalysts, 2023, 13, 499.	1.6	3
397	Alternative Energy Carriers: Unique Interfaces for Electrochemical Hydrogenic Transformations. Advanced Energy Materials, 2023, 13, .	10.2	4

#	Article	IF	Citations
398	Highâ€Entropy Solidâ€State Naâ€Ion Conductor for Stable Sodiumâ€Metal Batteries. Chemistry - A European Journal, 2023, 29, .	1.7	1
399	A perspective on silicon-based polymer-derived ceramics materials for beyond lithium-ion batteries. JPhys Materials, 2023, 6, 021001.	1.8	2
400	High-entropy nanoparticle constructed porous honeycomb as a 3D sulfur host for lithium polysulfide adsorption and catalytic conversion in Liâ€“S batteries. Journal of Materials Chemistry A, 2023, 11, 5883-5894.	5.2	15
401	Strategies to increase the stability and energy density of NVPFâ€“ A comprehensive review. Functional Materials Letters, 2023, 16, .	0.7	3
402	A dielectric electrolyte composite with high lithium-ion conductivity for high-voltage solid-state lithium metal batteries. Nature Nanotechnology, 2023, 18, 602-610.	15.6	76
403	Understanding and Engineering Interfacial Adhesion in Solidâ€State Batteries with Metallic Anodes. ChemSusChem, 2023, 16, .	3.6	8
404	Sodium Insertion into Fe[Fe(CN)₆] Framework Prepared by Microwaveâ€Assisted Coâ€Precipitation. ChemElectroChem, 2023, 10, .	1.7	5
405	Progress of transition metal sulfides used as lithium-ion battery anodes. Materials Chemistry Frontiers, 2023, 7, 2779-2808.	3.2	13
406	The Influences of DMF Content in Composite Polymer Electrolytes on Li⁺â€Conductivity and Interfacial Stability with Liâ€Metal. Advanced Functional Materials, 2023, 33, .	7.8	15
407	Boosting sodium-storage properties of hierarchical Na3V2(PO4)3@C micro-flower cathodes by tiny Cr doping: The effect of â€œfour ounces moving a thousand poundsâ€. Nano Research, 2024, 17, 235-244.	5.8	7
408	Revealing the evolution of doping anions and their impact on K-Ion storage: A case study of Se-doped In2S3. Energy Storage Materials, 2023, 58, 165-175.	9.5	9
409	Defect Modulation in Cobalt Manganese Oxide Sheets for Stable and Highâ€Energy Aqueous Aluminumâ€Ion Batteries. Advanced Functional Materials, 2023, 33, .	7.8	11
410	Theory of Cation Solvation and Ionic Association in Nonaqueous Solvent Mixtures. , 2023, 2, .		4
411	One-step electrochemical in-situ Li doping and LiF coating enable ultra-stable cathode for sodium ion batteries. Journal of Energy Chemistry, 2023, 82, 228-238.	7.1	11
413	Cross-Linked Polymer Composite Electrolyte Incorporated with Waste Seashell Based Nanofiller for Lithium Metal Batteries. Energy & Fuels, 2023, 37, 6186-6196.	2.5	4
414	Dynamics of potential screening upon electrification of solid-ionic liquid interfaces probed by XPS. , 2024, , 661-680.		0
415	Bidirectional activation technology towards foam-like carbon nanosheets and its coupling with oxygen-deficient Î±â€MnO2 for ammonium-ion hybrid supercapacitors. Journal of the Taiwan Institute of Chemical Engineers, 2023, 145, 104845.	2.7	3
416	A Novel Model-Based Approach for Evaluating Multi-Speed Transmission Systems for BEVs. , 0, , .		1

#	Article	IF	Citations
417	Challenges and Strategies in the Development of Zincâ€Ion Batteries. Small Methods, 2023, 7, .	4.6	12
418	Wet-chemistry synthesis of two-dimensional Pt- and Pd-based intermetallic electrocatalysts for fuel cells. Nanoscale, 2023, 15, 8508-8531.	2.8	5
419	Revealing alkali metal ions transport mechanism in the atomic channels of Au@Î±-MnO2. Journal of Energy Chemistry, 2023, 82, 350-358.	7.1	2
420	Mitigating Concentration Polarization through Acidâ€“Base Interaction Effects for Long-Cycling Lithium Metal Anodes. Nano Letters, 2023, 23, 3369-3376.	4.5	4
421	Titanium Doping Induced the Suppression of Irreversible Phase Transformation at High Voltage for Vâ€based Phosphate Cathodes of Naâ€Ion Batteries. ChemSusChem, 2023, 16, .	3.6	3
422	Realizing High Capacity and Zero Strain in Layered Oxide Cathodes via Lithium Dual-Site Substitution for Sodium-Ion Batteries. Journal of the American Chemical Society, 2023, 145, 9596-9606.	6.6	25
423	Reaction Kinetics of Carbonation at the Surface of Garnet-Type Li₇La₃Zr₂O₁₂ as Solid Electrolytes for All-Solid-State Li Ion Batteries. Journal of Physical Chemistry C, 0, , .	1.5	2
424	Stannic oxide quantum dots constructed evenly alloyable layer stabilizing lithium metal batteries. Journal of Alloys and Compounds, 2023, 955, 170230.	2.8	2
425	Facile synthesis of Mn2O3/Mn3O4 composites with superior zinc ion storage performance. Materials Research Bulletin, 2023, 165, 112292.	2.7	3
466	State-of-the-Art of Solid-State Electrolytes on the Road Map of Solid-State Lithium Metal Batteries for E-Mobility. ACS Sustainable Chemistry and Engineering, 2023, 11, 7927-7964.	3.2	4
492	Polymer blend nanocomposite electrolytes for advanced energy storage applications. , 2023, , 203-238.		4
514	Sodium-Ion Battery: Can It Compete with Li-Ion?. ACS Materials Au, 2023, 3, 571-575.	2.6	2
536	Ion Migration Mechanism Study of Hydroborate/Carborate Electrolytes for All-Solid-State Batteries. Electrochemical Energy Reviews, 2023, 6, .	13.1	1
540	Halide solid-state electrolytes for all-solid-state batteries: structural design, synthesis, environmental stability, interface optimization and challenges. Chemical Science, 2023, 14, 8693-8722.	3.7	8
573	Exploring the impact of metal oxide coating and metal atom doping on the electrochemical performance of Ni-rich cathode materials. Journal of Materials Chemistry A, 2023, 11, 23223-23227.	5.2	1
579	Self-healing Ga-based liquid metal/alloy anodes for rechargeable batteries. Nano Research, 2024, 17, 1366-1383.	5.8	0
599	Ion-catalyzed synthesis of N/O co-doped carbon nanorods with hierarchical pores for high-rate Na-ion storage. Chemical Communications, 0, , .	2.2	0
604	Unsustainability. , 2024, , 549-570.		0

#	Article	IF	Citations
617	Opportunities for ionic liquid-based electrolytes in rechargeable lithium batteries. Science China Chemistry, 2023, 66, 3443-3466.	4.2	0
626	Recent advances in the utilization of covalent organic frameworks (COFs) as electrode materials for supercapacitors. Chemical Science, 2023, 14, 13601-13628.	3.7	3
673	Advances in Bismuth-Based Anodes for Potassium-Ion Batteries. Journal of Materials Chemistry A, 0, , .	5.2	1
692	Roadmap for rechargeable batteries: present and beyond. Science China Chemistry, 0, , .	4.2	0
698	One-step regeneration and upgrading of spent LiFePO₄ cathodes with phytic acid. Nanoscale, 2024, 16, 3417-3421.	2.8	0
714	Advanced Electrochemical Energy Sources for Electric and Hybrid Vehicles. Green Energy and Technology, 2024, , 195-218.	0.4	0
743	E-Mobility in Electrical Energy Systems for Sustainability. Advances in Mechatronics and Mechanical Engineering, 2024, , 18-41.	1.0	0