

Aqueous zinc ion batteries: focus on zinc metal anodes

Chemical Science

11, 2028-2044

DOI: 10.1039/d0sc00022a

Citation Report

#	ARTICLE	IF	CITATIONS
1	Scalable Synthesis of Manganese-Doped Hydrated Vanadium Oxide as a Cathode Material for Aqueous Zinc-Metal Battery. ACS Applied Materials & Interfaces, 2020, 12, 48542-48552.	4.0	21
2	Energy Storage Chemistry in Aqueous Zinc Metal Batteries. ACS Energy Letters, 2020, 5, 3569-3590.	8.8	163
3	Understanding the Design Principles of Advanced Aqueous Zinc-Ion Battery Cathodes: From Transport Kinetics to Structural Engineering, and Future Perspectives. Advanced Energy Materials, 2020, 10, 2002354.	10.2	193
4	Quantitative temporally and spatially resolved X-ray fluorescence microprobe characterization of the manganese dissolution-deposition mechanism in aqueous Zn/±-MnO ₂ batteries. Energy and Environmental Science, 2020, 13, 4322-4333.	15.6	72
5	Flexible quasi-solid-state aqueous Zn-based batteries: rational electrode designs for high-performance and mechanical flexibility. Materials Today Energy, 2020, 18, 100523.	2.5	42
6	A single-ion conducting covalent organic framework for aqueous rechargeable Zn-ion batteries. Chemical Science, 2020, 11, 11692-11698.	3.7	51
7	Real-time visualization of Zn metal plating/stripping in aqueous batteries with high areal capacities. Journal of Power Sources, 2020, 472, 228334.	4.0	27
8	Recent progress in metal-organic framework-based supercapacitor electrode materials. Coordination Chemistry Reviews, 2020, 420, 213438.	9.5	280
9	Effects of Zn ²⁺ and H ⁺ Association with Naphthalene Diimide Electrodes for Aqueous Zn-Ion Batteries. Chemistry of Materials, 2020, 32, 6990-6997.	3.2	80
10	Functionalized Zn@ZnO Hexagonal Pyramid Array for Dendrite-Free and Ultrastable Zinc Metal Anodes. Advanced Functional Materials, 2020, 30, 2004210.	7.8	148
11	Tetrapropylammonium Hydroxide as a Zinc Dendrite Growth Suppressor for Rechargeable Aqueous Battery. Frontiers in Energy Research, 2020, 8, .	1.2	10
12	A Review of the Use of GPEs in Zinc-Based Batteries. A Step Closer to Wearable Electronic Gadgets and Smart Textiles. Polymers, 2020, 12, 2812.	2.0	33
13	Covalent Organic Frameworks for Next-Generation Batteries. ChemElectroChem, 2020, 7, 3905-3926.	1.7	41
14	Pathways towards high energy aqueous rechargeable batteries. Coordination Chemistry Reviews, 2020, 424, 213521.	9.5	50
15	Defect Engineering in Manganese-Based Oxides for Aqueous Rechargeable Zinc-Ion Batteries: A Review. Advanced Energy Materials, 2020, 10, 2001769.	10.2	249
16	A Metal-Organic Framework as a Multifunctional Ionic Sieve Membrane for Long-Life Aqueous Zinc-Iodide Batteries. Advanced Materials, 2020, 32, e2004240.	11.1	222
17	New Insight on Open-Structured Sodium Vanadium Oxide as High-Capacity and Long Life Cathode for Zn-Ion Storage: Structure, Electrochemistry, and First-Principles Calculation. Advanced Energy Materials, 2020, 10, 2001595.	10.2	54
18	A dendrite-free zinc anode for rechargeable aqueous batteries. Journal of Materials Chemistry A, 2020, 8, 20175-20184.	5.2	79

#	ARTICLE	IF	CITATIONS
19	Stable Hydrogel Electrolytes for Flexible and Submarine-Use Zn-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 46005-46014.	4.0	87
20	Challenges in the material and structural design of zinc anode towards high-performance aqueous zinc-ion batteries. Energy and Environmental Science, 2020, 13, 3330-3360.	15.6	576
21	Recent Advances of Emerging 2D MXene for Stable and Dendrite-Free Metal Anodes. Advanced Functional Materials, 2020, 30, 2004613.	7.8	140
22	Polydopamine-based nanoreactors: synthesis and applications in bioscience and energy materials. Chemical Science, 2020, 11, 12269-12281.	3.7	44
23	3D confined zinc plating/stripping with high discharge depth and excellent high-rate reversibility. Journal of Materials Chemistry A, 2020, 8, 11719-11727.	5.2	111
24	Opportunities and Reality of Aqueous Rechargeable Batteries. Advanced Energy Materials, 2020, 10, 2001386.	10.2	92
25	Rechargeable alkaline zinc batteries: Progress and challenges. Energy Storage Materials, 2020, 31, 44-57.	9.5	139
26	Manganese and Vanadium Oxide Cathodes for Aqueous Rechargeable Zinc-Ion Batteries: A Focused View on Performance, Mechanism, and Developments. ACS Energy Letters, 2020, 5, 2376-2400.	8.8	303
27	A New Scalable Preparation of Metal Nanosheets: Potential Applications for Aqueous Zn-Ion Batteries Anode. Advanced Functional Materials, 2020, 30, 2003187.	7.8	46
28	Scientific Challenges for the Implementation of Zn-Ion Batteries. Joule, 2020, 4, 771-799.	11.7	1,164
29	Stabilization Perspective on Metal Anodes for Aqueous Batteries. Advanced Energy Materials, 2021, 11, 2000962.	10.2	106
30	Redirected Zn Electrodeposition by an Anti-Corrosion Elastic Constraint for Highly Reversible Zn Anodes. Advanced Functional Materials, 2021, 31, 2001867.	7.8	216
31	From aqueous Zn-ion battery to Zn-MnO ₂ flow battery: A brief story. Journal of Energy Chemistry, 2021, 54, 194-201.	7.1	171
32	Hyper oxidized V ₆ O ₁₃ +nH ₂ O layered cathode for aqueous rechargeable Zn battery: Effect on dual carriers transportation and parasitic reactions. Energy Storage Materials, 2021, 35, 47-61.	9.5	38
33	Aluminium pre-intercalated orthorhombic V ₂ O ₅ as high-performance cathode material for aqueous zinc-ion batteries. Applied Surface Science, 2021, 538, 148043.	3.1	63
34	Wide interlayer spacing ammonium vanadate (NH ₄) _{0.37} V ₂ O ₅ ·0.15(H ₂ O) cathode for rechargeable aqueous zinc-ion batteries. Journal of Industrial and Engineering Chemistry, 2021, 93, 176-185.	2.9	22
35	Carbon materials for high-performance potassium-ion energy-storage devices. Chemical Engineering Journal, 2021, 407, 126991.	6.6	26
36	Development of the electrochemical performance of zinc via alloying with indium as anode for alkaline batteries application. Journal of Alloys and Compounds, 2021, 854, 157285.	2.8	25

#	ARTICLE	IF	CITATIONS
37	Ultra-stable and highly reversible aqueous zinc metal anodes with high preferred orientation deposition achieved by a polyanionic hydrogel electrolyte. <i>Energy Storage Materials</i> , 2021, 35, 586-594.	9.5	127
38	The strategies of boosting the performance of highly reversible zinc anodes in zinc-ion batteries: recent progress and future perspectives. <i>Sustainable Energy and Fuels</i> , 2021, 5, 332-350.	2.5	29
39	Highly reversible and dendrite-free Zn electrodeposition enabled by a thin metallic interfacial layer in aqueous batteries. <i>Chemical Engineering Journal</i> , 2021, 416, 128062.	6.6	75
40	Boosting zinc-ion intercalation in hydrated MoS ₂ nanosheets toward substantially improved performance. <i>Energy Storage Materials</i> , 2021, 35, 731-738.	9.5	106
41	Green and low-cost acetate-based electrolytes for the highly reversible zinc anode. <i>Journal of Power Sources</i> , 2021, 485, 229329.	4.0	37
42	Adjusting the Valence State of Vanadium in VO ₂ (B) by Extracting Oxygen Anions for High-Performance Aqueous Zinc-ion Batteries. <i>ChemSusChem</i> , 2021, 14, 971-978.	3.6	63
43	The effect of Ti ₃ AlC ₂ MAX phase synthetic history on the structure and electrochemical properties of resultant Ti ₃ C ₂ MXenes. <i>Materials and Design</i> , 2021, 199, 109403.	3.3	42
44	Strategies towards the challenges of zinc metal anode in rechargeable aqueous zinc ion batteries. <i>Energy Storage Materials</i> , 2021, 35, 19-46.	9.5	212
45	Latest Advances in High-Voltage and High-Energy-Density Aqueous Rechargeable Batteries. <i>Electrochemical Energy Reviews</i> , 2021, 4, 1-34.	13.1	120
46	S-doped 3D porous carbons derived from potassium thioacetate activation strategy for zinc-ion hybrid supercapacitor applications. <i>International Journal of Energy Research</i> , 2021, 45, 2498-2510.	2.2	41
47	Challenges and strategies of zinc anode for aqueous zinc-ion batteries. <i>Materials Chemistry Frontiers</i> , 2021, 5, 2201-2217.	3.2	50
48	Grafted MXene/polymer electrolyte for high performance solid zinc batteries with enhanced shelf life at low/high temperatures. <i>Energy and Environmental Science</i> , 2021, 14, 3492-3501.	15.6	152
49	Naphthalene dianhydride organic anode for a "rocking-chair" zinc-proton hybrid ion battery. <i>Dalton Transactions</i> , 2021, 50, 4237-4243.	1.6	12
50	Electrochemical formation and dissolution of an iodine-halide coordination solid complex in a nano-confined space. <i>Journal of Materials Chemistry A</i> , 2021, 9, 17955-17966.	5.2	7
51	Vanadium oxide bronzes as cathode active materials for non-lithium-based batteries. <i>CrystEngComm</i> , 2021, 23, 5267-5283.	1.3	6
52	Unraveling the critical role of Zn-phyllomanganates in zinc ion batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 13950-13957.	5.2	14
53	Liquid Alloy Interlayer for Aqueous Zinc-Ion Battery. <i>ACS Energy Letters</i> , 2021, 6, 675-683.	8.8	135
54	Mechanism for Zincophilic Sites on Zinc-Metal Anode Hosts in Aqueous Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2003419.	10.2	233

#	ARTICLE	IF	CITATIONS
55	Recent Progress in Extending the Cycle Life of Secondary Zn-Air Batteries. ChemNanoMat, 2021, 7, 354-367.	1.5	37
56	Anion Texturing Towards Dendrite-Free Zn Anode for Aqueous Rechargeable Batteries. Angewandte Chemie, 2021, 133, 7289-7295.	1.6	59
57	Inorganic Colloidal Electrolyte for Highly Robust Zinc-Ion Batteries. Nano-Micro Letters, 2021, 13, 69.	14.4	152
58	Comprehensive Analyses of Aqueous Zn Metal Batteries: Characterization Methods, Simulations, and Theoretical Calculations. Advanced Energy Materials, 2021, 11, 2003823.	10.2	66
59	Synergistic Manipulation of Zn ²⁺ Ion Flux and Desolvation Effect Enabled by Anodic Growth of a 3D ZnF ₂ Matrix for Long-Life Span and Dendrite-Free Zn Metal Anodes. Advanced Materials, 2021, 33, e2007388.	11.1	359
60	Anion Texturing Towards Dendrite-Free Zn Anode for Aqueous Rechargeable Batteries. Angewandte Chemie - International Edition, 2021, 60, 7213-7219.	7.2	209
61	A Replacement Reaction Enabled Interdigitated Metal/Solid Electrolyte Architecture for Battery Cycling at 20 mA cm ⁻² and 20 mAh cm ⁻² . Journal of the American Chemical Society, 2021, 143, 3143-3152.	6.6	132
62	Achieving Stable Molybdenum Oxide Cathodes for Aqueous Zinc-Ion Batteries in Water-in-Salt Electrolyte. Advanced Materials Interfaces, 2021, 8, 2002080.	1.9	33
63	An Artificial Polyacrylonitrile Coating Layer Confining Zinc Dendrite Growth for Highly Reversible Aqueous Zinc-Based Batteries. Advanced Science, 2021, 8, e2100309.	5.6	232
64	Toward a High-Performance Aqueous Zinc Ion Battery: Potassium Vanadate Nanobelts and Carbon Enhanced Zinc Foil. Nano Letters, 2021, 21, 2738-2744.	4.5	77
65	The rising zinc anodes for high-energy aqueous batteries. EnergyChem, 2021, 3, 100052.	10.1	74
66	Fourier analysis of an electrochemical phase formation model enables the rationalization of zinc-anode battery dynamics. Applications in Engineering Science, 2021, 5, 100033.	0.5	0
67	3D Hierarchical Carbon-Rich Micro-/Nanomaterials for Energy Storage and Catalysis. Electrochemical Energy Reviews, 2021, 4, 269-335.	13.1	108
68	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
69	A Review on Electrolytes for Aqueous Zinc-Ion Batteries. Ceramist, 2021, 24, 35-53.	0.0	1
70	Uniform Zn Deposition Achieved by Ag Coating for Improved Aqueous Zinc-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 16869-16875.	4.0	129
71	Micronanostructured Design of Dendrite-Free Zinc Anodes and Their Applications in Aqueous Zinc-Based Rechargeable Batteries. Small Structures, 2021, 2, 2000128.	6.9	79
72	Reaction kinetics in rechargeable zinc-ion batteries. Journal of Power Sources, 2021, 492, 229655.	4.0	48

#	ARTICLE	IF	CITATIONS
73	Eliminating Zn dendrites by commercial cyanoacrylate adhesive for zinc ion battery. <i>Energy Storage Materials</i> , 2021, 36, 132-138.	9.5	202
74	Recent Progress in Layered Manganese and Vanadium Oxide Cathodes for Zn-ion Batteries. <i>Energy Technology</i> , 2021, 9, 2100011.	1.8	22
75	Polymorph Evolution Mechanisms and Regulation Strategies of Lithium Metal Anode under Multiphysical Fields. <i>Chemical Reviews</i> , 2021, 121, 5986-6056.	23.0	165
76	Electrochemical Zinc Ion Capacitors: Fundamentals, Materials, and Systems. <i>Advanced Energy Materials</i> , 2021, 11, 2100201.	10.2	156
77	Aqueous Rechargeable Zn-ion Batteries: Strategies for Improving the Energy Storage Performance. <i>ChemSusChem</i> , 2021, 14, 1987-2022.	3.6	59
78	Detrimental Effects of Surface Imperfections and Unpolished Edges on the Cycling Stability of a Zinc Foil Anode. <i>ACS Energy Letters</i> , 2021, 6, 1990-1995.	8.8	89
79	Amine-Functionalized Carbon Cloth Host for Dendrite-Free Zn Metal Anodes. <i>ACS Applied Energy Materials</i> , 2021, 4, 4482-4488.	2.5	22
80	Zn anode with flexible $\text{P}^2\text{-PVDF}$ coating for aqueous Zn-ion batteries with long cycle life. <i>Chemical Engineering Journal</i> , 2021, 411, 128584.	6.6	157
81	High-Voltage and Super-Stable Aqueous Sodium-Zinc Hybrid Ion Batteries Enabled by Double Solvation Structures in Concentrated Electrolyte. <i>Small Methods</i> , 2021, 5, e2100418.	4.6	22
82	Aqueous Rechargeable Multivalent Metal-ion Batteries: Advances and Challenges. <i>Advanced Energy Materials</i> , 2021, 11, 2100608.	10.2	122
83	Recent advances in rechargeable Zn-based batteries. <i>Journal of Power Sources</i> , 2021, 493, 229677.	4.0	41
84	Synthesis, Characterization and Electrochemical Evaluation of Layered Vanadium Phosphates as Cathode Material for Aqueous Rechargeable Zn-ion Batteries. <i>Frontiers in Materials</i> , 2021, 8, .	1.2	8
85	In-situ constructing polyacrylamide interphase enables dendrite-free zinc anode in aqueous batteries. <i>Electrochimica Acta</i> , 2021, 378, 138106.	2.6	40
86	Covalent Organic Frameworks for Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 2100505.	7.8	154
87	Advances and Perspectives of Cathode Storage Chemistry in Aqueous Zinc-Ion Batteries. <i>ACS Nano</i> , 2021, 15, 9244-9272.	7.3	272
88	Water-Repellent Ionic Liquid Skinny Gels Customized for Aqueous Zn-ion Battery Anodes. <i>Advanced Functional Materials</i> , 2021, 31, 2103850.	7.8	63
89	Topotactic and Self-Templated Fabrication of Zn _{1-x} Cd _x Se Porous Nanobelt-ZnO Nanorod for Photoelectrochemical Hydrogen Production. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 29450-29460.	4.0	10
90	The Emerging of Aqueous Zinc-Based Dual Electrolytic Batteries. <i>Small</i> , 2021, 17, e2008043.	5.2	23

#	ARTICLE	IF	CITATIONS
91	Single-Ion Conducting Double-Network Hydrogel Electrolytes for Long Cycling Zinc-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 30594-30602.	4.0	61
92	<i>In Situ</i> Construction of a Multifunctional Quasi-Gel Layer for Long-Life Aqueous Zinc Metal Anodes. ACS Applied Materials & Interfaces, 2021, 13, 29746-29754.	4.0	31
93	Self-Assembling Films of Covalent Organic Frameworks Enable Long-Term, Efficient Cycling of Zinc-Ion Batteries. Advanced Materials, 2021, 33, e2101726.	11.1	114
94	Anode for Zinc-Based Batteries: Challenges, Strategies, and Prospects. ACS Energy Letters, 2021, 6, 2765-2785.	8.8	159
95	Vanadium-Containing Layered Materials as High-Performance Cathodes for Aqueous Zinc-Ion Batteries. Advanced Materials Technologies, 2022, 7, 2100505.	3.0	23
96	Current Advances on Zn Anodes for Aqueous Zinc-Ion Batteries. ChemNanoMat, 2021, 7, 1162-1176.	1.5	14
97	Stabilizing Zinc Anodes by Regulating the Electrical Double Layer with Saccharin Anions. Advanced Materials, 2021, 33, e2100445.	11.1	351
98	The Role of Oxygen in the Voltaic Pile. Journal of Chemical Education, 2021, 98, 2927-2936.	1.1	7
99	Insight into the Critical Role of Surface Hydrophilicity for Dendrite-Free Zinc Metal Anodes. ACS Energy Letters, 2021, 6, 3078-3085.	8.8	121
100	A high-capacity of oxygen induced SrTiO ₃ cathode material for rechargeable Alkaline Zinc battery. Materials Science in Semiconductor Processing, 2021, 130, 105802.	1.9	10
101	Analysis of Electrochemical Impedance Spectroscopy on Zinc-Air Batteries Using the Distribution of Relaxation Times. Batteries, 2021, 7, 56.	2.1	8
102	Self-healable hydrogel electrolyte for dendrite-free and self-healable zinc-based aqueous batteries. Materials Today Physics, 2021, 20, 100458.	2.9	33
103	A review of zinc-based battery from alkaline to acid. Materials Today Advances, 2021, 11, 100149.	2.5	64
104	Highly stable rechargeable zinc-ion battery using dimethyl sulfoxide electrolyte. Materials Today Energy, 2021, 21, 100738.	2.5	43
105	Highly Reversible, Grain-Directed Zinc Deposition in Aqueous Zinc Ion Batteries. Advanced Energy Materials, 2021, 11, 2100676.	10.2	95
106	Electrolyte Study with in Operando pH Tracking Providing Insight into the Reaction Mechanism of Aqueous Acidic Zn/MnO ₂ Batteries. ChemElectroChem, 2021, 8, 3553-3566.	1.7	26
107	Issues and rational design of aqueous electrolyte for Zn-ion batteries. SusMat, 2021, 1, 432-447.	7.8	62
108	An interfacial coating with high corrosion resistance based on halloysite nanotubes for anode protection of zinc-ion batteries. Journal of Colloid and Interface Science, 2021, 602, 859-867.	5.0	29

#	ARTICLE	IF	CITATIONS
109	Realizing wide-temperature Zn metal anodes through concurrent interface stability regulation and solvation structure modulation. <i>Energy Storage Materials</i> , 2021, 42, 517-525.	9.5	47
110	Stabilizing zinc deposition with sodium lignosulfonate as an electrolyte additive to improve the life span of aqueous zinc-ion batteries. <i>Journal of Colloid and Interface Science</i> , 2021, 601, 486-494.	5.0	38
111	Self-doped 2D-V ₂ O ₅ nanoflakes “A high electrochemical performance cathode in rechargeable zinc ion batteries. <i>Ceramics International</i> , 2021, 47, 29832-29839.	2.3	11
112	Synergetic effect of water-in-bisalt electrolyte and hydrogen-bond rich additive improving the performance of aqueous batteries. <i>Journal of Power Sources</i> , 2021, 511, 230413.	4.0	19
113	Engineering interfacial layers to enable Zn metal anodes for aqueous zinc-ion batteries. <i>Energy Storage Materials</i> , 2021, 43, 317-336.	9.5	154
114	Zinc anode stabilized by an organic-inorganic hybrid solid electrolyte interphase. <i>Energy Storage Materials</i> , 2021, 43, 375-382.	9.5	149
115	A hierarchical porous tin host for dendrite-free, highly reversible zinc anodes. <i>Chemical Engineering Journal</i> , 2021, 425, 130643.	6.6	57
116	Different surface modification methods and coating materials of zinc metal anode. <i>Journal of Energy Chemistry</i> , 2022, 66, 397-412.	7.1	110
117	Interfacial parasitic reactions of zinc anodes in zinc ion batteries: Underestimated corrosion and hydrogen evolution reactions and their suppression strategies. <i>Journal of Energy Chemistry</i> , 2022, 64, 246-262.	7.1	128
118	Zinc/selenium conversion battery: a system highly compatible with both organic and aqueous electrolytes. <i>Energy and Environmental Science</i> , 2021, 14, 2441-2450.	15.6	93
119	Non-concentrated aqueous electrolytes with organic solvent additives for stable zinc batteries. <i>Chemical Science</i> , 2021, 12, 5843-5852.	3.7	273
120	Structure engineering of van der Waals layered transition metal-containing compounds for aqueous energy storage. <i>Materials Chemistry Frontiers</i> , 2021, 5, 2996-3020.	3.2	4
121	Interface-Engineered Dendrite-Free Anode and Ultraconductive Cathode for Durable and High-Rate Fiber Zn Dual-Ion Microbattery. <i>Advanced Functional Materials</i> , 2021, 31, 2008894.	7.8	35
122	Environmental Impacts of Aqueous Zinc Ion Batteries Based on Life Cycle Assessment. <i>Advanced Sustainable Systems</i> , 2022, 6, 2100308.	2.7	27
123	Conversion-Type Nonmetal Elemental Tellurium Anode with High Utilization for Mild/Alkaline Zinc Batteries. <i>Advanced Materials</i> , 2021, 33, e2105426.	11.1	48
124	Encapsulation of Metallic Zn in a Hybrid MXene/Graphene Aerogel as a Stable Zn Anode for Foldable Zn-Ion Batteries. <i>Advanced Materials</i> , 2022, 34, e2106897.	11.1	153
125	Zn Metal Anodes for Zn-Ion Batteries in Mild Aqueous Electrolytes: Challenges and Strategies. <i>Nanomaterials</i> , 2021, 11, 2746.	1.9	31
126	Molybdenum Disulfide “Zinc Oxide Photocathodes for Photo-Rechargeable Zinc-Ion Batteries. <i>ACS Nano</i> , 2021, 15, 16616-16624.	7.3	70

#	ARTICLE	IF	CITATIONS
127	Metal-organic frameworks and their derivatives in stable Zn metal anodes for aqueous Zn-ion batteries. <i>ChemPhysMater</i> , 2022, 1, 252-263.	1.4	25
128	Electrochemical performance of manganese hexacyanoferrate cathode material in aqueous Zn-ion battery. <i>Electrochimica Acta</i> , 2021, 400, 139414.	2.6	17
129	High-concentration dual-complex electrolyte enabled a neutral aqueous zinc-manganese electrolytic battery with superior stability. <i>Chemical Engineering Journal</i> , 2022, 430, 133058.	6.6	17
130	Aqueous Zn-MnO ₂ battery: Approaching the energy storage limit with deep Zn ²⁺ pre-intercalation and revealing the ions insertion/extraction mechanisms. <i>Journal of Energy Chemistry</i> , 2022, 67, 225-232.	7.1	31
131	Zinc-air batteries in neutral/near-neutral electrolytes. <i>Functional Materials Letters</i> , 2021, 14, .	0.7	4
132	Enhanced reversibility of vanadium oxide cathode by diminished surface precipitation in Zn(TFSI) ₂ aqueous electrolyte. <i>Electrochimica Acta</i> , 2021, 399, 139432.	2.6	16
133	New approach for fabrication of vertically oriented ZnO based field emitter derived from waste primary batteries. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2021, 274, 115480.	1.7	2
134	Flexible Wide-Temperature Zinc-Ion Battery Enabled by an Ethylene Glycol-Based Organohydrogel Electrolyte. <i>ACS Applied Energy Materials</i> , 2021, 4, 12718-12727.	2.5	45
135	Rechargeable aqueous Zn-based energy storage devices. <i>Joule</i> , 2021, 5, 2845-2903.	11.7	201
136	Potential-Dependent Passivation of Zinc Metal in a Sulfate-Based Aqueous Electrolyte. <i>Langmuir</i> , 2021, 37, 13218-13224.	1.6	5
137	Flexible one-dimensional Zn-based electrochemical energy storage devices: recent progress and future perspectives. <i>Journal of Materials Chemistry A</i> , 2021, 9, 26573-26602.	5.2	7
138	Revealing the Two-Dimensional Surface Diffusion Mechanism for Zinc Dendrite Formation on Zinc Anode. <i>Small</i> , 2022, 18, e2104148.	5.2	66
139	Vanadium oxides obtained by chimie douce reactions: The influences of transition metal species on crystal structures and electrochemical behaviors in zinc-ion batteries. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 3121-3129.	5.0	13
140	Stabilizing Interface pH by Na-Modified Graphdiyne for Dendrite-Free and High-Rate Aqueous Zn-Ion Batteries. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	24
141	Dendrite-free and anti-corrosion Zn metal anode enabled by an artificial layer for high-performance Zn ion capacitor. <i>Chinese Chemical Letters</i> , 2022, 33, 3936-3940.	4.8	27
142	Turning the Byproduct Zn ₄ (OH) ₆ SO ₄ ·xH ₂ O into a Uniform Solid Electrolyte Interphase to Stabilize Aqueous Zn Anode. , 2021, 3, 1819-1825.		50
143	Stabilizing Interface pH by Na-Modified Graphdiyne for Dendrite-Free and High-Rate Aqueous Zn-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	124
144	A facile pyrolysis method to prepare vanadium oxides for high performance aqueous Zn-ion battery. <i>Current Applied Physics</i> , 2022, 34, 85-94.	1.1	6

#	ARTICLE	IF	CITATIONS
145	Highly Reversible Cycling of Zn-MnO ₂ Batteries Integrated with Acid-Treated Carbon Supportive Layer. <i>Small Methods</i> , 2022, 6, e2101060.	4.6	7
146	Artificial interphase engineering to stabilize aqueous zinc metal anodes. <i>Nanoscale</i> , 2021, 13, 19828-19839.	2.8	23
147	Chaotropic anion based "water-in-salt" electrolyte realizes a high voltage Zn-graphite dual-ion battery. <i>Journal of Materials Chemistry A</i> , 2022, 10, 2064-2074.	5.2	28
148	Two-dimensional MXenes for electrochemical energy storage applications. <i>Journal of Materials Chemistry A</i> , 2022, 10, 1105-1149.	5.2	63
149	In-situ construction of a hydroxide-based solid electrolyte interphase for robust zinc anodes. <i>Chemical Engineering Journal</i> , 2022, 431, 134076.	6.6	55
150	An integrated electrode strengthened by dense layer for aqueous zinc ion batteries with long lifespan. <i>Journal of Alloys and Compounds</i> , 2022, 896, 162948.	2.8	10
151	Enable commercial Zinc powders for dendrite-free Zinc anode with improved utilization rate by pristine graphene hybridization. <i>Energy Storage Materials</i> , 2022, 45, 465-473.	9.5	76
152	A Self-Regulated Interface toward Highly Reversible Aqueous Zinc Batteries. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	164
153	Stable Zn Metal Anodes with Limited Zn-Doping in MgF ₂ Interphase for Fast and Uniformly Ionic Flux. <i>Nano-Micro Letters</i> , 2022, 14, 46.	14.4	23
154	Efficient Zn Metal Anode Enabled by O,N-Codoped Carbon Microflowers. <i>Nano Letters</i> , 2022, 22, 1350-1357.	4.5	63
155	High strength hydrogels enable dendrite-free Zn metal anodes and high-capacity Zn-MnO ₂ batteries via a modified mechanical suppression effect. <i>Journal of Materials Chemistry A</i> , 2022, 10, 3122-3133.	5.2	17
156	Insight on Organic Molecules in Aqueous Zn-ion Batteries with an Emphasis on the Zn Anode Regulation. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	208
157	Ultrafast Metal Electrodeposition Revealed by In Situ Optical Imaging and Theoretical Modeling towards Fast-Charging Zn Battery Chemistry. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	13
158	Ultrafast Metal Electrodeposition Revealed by In Situ Optical Imaging and Theoretical Modeling towards Fast-Charging Zn Battery Chemistry. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	82
159	Highly Efficient, Dendrite-Free Zinc Electrodeposition in Mild Aqueous Zn-ion Batteries through Indium-Based Substrates. <i>Batteries and Supercaps</i> , 2022, 5, .	2.4	13
160	Uniform zinc electrodeposition directed by interfacial cation reservoir for stable Zn-12 battery. <i>Journal of Power Sources</i> , 2022, 523, 231036.	4.0	13
161	A low-cost and non-corrosive electropolishing strategy for long-life zinc metal anode in rechargeable aqueous battery. <i>Energy Storage Materials</i> , 2022, 46, 223-232.	9.5	12
162	Manganese hexacyanoferrate anchoring MnO ₂ with enhanced stability for aqueous zinc-ion batteries. <i>Journal of Alloys and Compounds</i> , 2022, 903, 163833.	2.8	10

#	ARTICLE	IF	CITATIONS
163	Reshaping the electrolyte structure and interface chemistry for stable aqueous zinc batteries. <i>Energy Storage Materials</i> , 2022, 47, 203-210.	9.5	166
164	Open challenges and good experimental practices in the research field of aqueous Zn-ion batteries. <i>Nature Communications</i> , 2022, 13, 687.	5.8	200
165	Recent Advances of Aqueous Rechargeable Zinc-Iodine Batteries: Challenges, Solutions, and Prospects. <i>Advanced Materials</i> , 2022, 34, e2108856.	11.1	119
166	Revisiting recent and traditional strategies for surface protection of Zn metal anode. <i>Journal of Power Sources</i> , 2022, 525, 231122.	4.0	41
167	X-ray imaging and micro-spectroscopy unravel the role of zincate and zinc oxide in the cycling of zinc anodes in mildly acidic aqueous electrolytes. <i>Journal of Power Sources</i> , 2022, 524, 231063.	4.0	5
168	Manipulating Zn-ion flux by two-dimensional porous g-C ₃ N ₄ nanosheets for dendrite-free zinc metal anode. <i>Chemical Engineering Journal</i> , 2022, 433, 134077.	6.6	35
169	Novel electrolyte additive of graphene oxide for prolonging the lifespan of zinc-ion batteries. <i>Nanotechnology</i> , 2022, 33, 125401.	1.3	10
170	Uniform Zinc Electrodeposition Directed by Interfacial Cation Reservoir for Stable Zn-Ion Battery. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
171	Hierarchical porous carbon-incorporated metal-based nanocomposites for secondary metal-ion batteries. , 2022, , 179-216.		1
172	Simultaneous Pre-Intercalation of Caesium and Sodium Ions into Vanadium Oxide Bronze Nanowires for High-Performance Aqueous Zinc-Ion Batteries. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
173	High cycle stability of Zn anodes boosted by an artificial electronic-ionic mixed conductor coating layer. <i>Journal of Materials Chemistry A</i> , 2022, 10, 7645-7652.	5.2	21
174	EQCM Study on Electrochemical Zinc Deposition-Dissolution in Water-In-Salt Electrolyte. <i>Electrochemistry</i> , 2022, , .	0.6	1
175	An efficient and versatile biopolishing strategy to construct high performance zinc anode. <i>Nano Research</i> , 2022, 15, 5081-5088.	5.8	5
176	Highly Crystalline Flower-Like Covalent-Organic Frameworks Enable Highly Stable Zinc Metal Anodes. <i>ACS Applied Energy Materials</i> , 2022, 5, 3715-3723.	2.5	29
177	Surface and Interface Engineering of Zn Anodes in Aqueous Rechargeable Zn-Ion Batteries. <i>Small</i> , 2022, 18, e2200006.	5.2	105
178	Long-Life Zn Anode Enabled by Low Volume Concentration of a Benign Electrolyte Additive. <i>Advanced Functional Materials</i> , 2022, 32, , .	7.8	60
179	Establishing Thermal Infusion Method for Stable Zinc Metal Anodes in Aqueous Zinc-Ion Batteries. <i>Advanced Materials</i> , 2022, 34, e2200782.	11.1	85
180	Building Ultra-Stable and Low-Polarization Composite Zn Anode Interface via Hydrated Polyzwitterionic Electrolyte Construction. <i>Nano-Micro Letters</i> , 2022, 14, 93.	14.4	46

#	ARTICLE	IF	CITATIONS
181	The 3D nano-trench interface to manipulate the stripping/plating behavior for stable Zn anode. <i>Journal of Power Sources</i> , 2022, 528, 231215.	4.0	7
182	Aqueous zinc batteries: Design principles toward organic cathodes for grid applications. <i>IScience</i> , 2022, 25, 104204.	1.9	20
183	Achieving ultra-long lifespan Zn metal anodes by manipulating desolvation effect and Zn deposition orientation in a multiple cross-linked hydrogel electrolyte. <i>Energy Storage Materials</i> , 2022, 49, 172-180.	9.5	77
184	Controllable C-N site assisting observable potential difference for homogeneous copper deposition in aqueous Cu-S batteries. <i>Energy Storage Materials</i> , 2022, 48, 74-81.	9.5	28
185	CO ₂ -induced dissolution of ZnO into ionic liquids and its catalytic application for the hydration of propargylic alcohols. <i>Applied Catalysis B: Environmental</i> , 2022, 310, 121270.	10.8	8
186	Stable anode enabled by an embossed and punched structure for a high-rate performance Zn-ion hybrid capacitor. <i>International Journal of Energy Research</i> , 2022, 46, 7175-7185.	2.2	8
187	Manipulating the Zinc Deposition Behavior in Hexagonal Patterns at the Preferential Zn (100) Crystal Plane to Construct Surficial Dendrite-Free Zinc Metal Anode. <i>Small</i> , 2022, 18, e2105978.	5.2	61
188	Hydrophobic Molecule Monolayer Brush-Tethered Zinc Anodes for Aqueous Zinc Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 60092-60098.	4.0	18
189	Regulating Interfacial Desolvation and Deposition Kinetics Enables Durable Zn Anodes with Ultrahigh Utilization of 80%. <i>Small</i> , 2022, 18, e2106441.	5.2	51
190	Ultrastable Zinc Anode by Simultaneously Manipulating Solvation Sheath and Inducing Oriented Deposition with PEG Stability Promoter. <i>Small</i> , 2022, 18, e2103345.	5.2	39
191	Tailoring the Solvation Sheath of Cations by Constructing Electrode Front-Faces for Rechargeable Batteries. <i>Advanced Materials</i> , 2022, 34, e2201339.	11.1	66
192	Recent Progress and Prospects on Dendrite-Free Engineerings for Aqueous Zinc Metal Anodes. <i>Energy and Environmental Materials</i> , 2023, 6, .	7.3	15
193	Elastomer-Alginate Interface for High-Power and High-Energy Zn Metal Anodes. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	51
194	Dual-anion-coordinated solvation sheath for stable aqueous zinc batteries. <i>Journal of Power Sources</i> , 2022, 535, 231452.	4.0	15
195	The in-system growth of highly-reversible hierarchical Zn for seawater-based energy storage with self-regulation interface. <i>Chemical Engineering Journal</i> , 2022, 442, 136327.	6.6	3
197	Advanced Buffering Acidic Aqueous Electrolytes for Ultra-Long Life Aqueous Zinc-Ion Batteries. <i>Small</i> , 2022, 18, e2200742.	5.2	49
198	Two for one: propylene carbonate co-solvent for high performance aqueous zinc-ion batteries – remedies for persistent issues at both electrodes. <i>Journal of Materials Chemistry A</i> , 2022, 10, 12597-12607.	5.2	11
199	Stimulating Cu-Zn alloying for compact Zn metal growth towards high energy aqueous batteries and hybrid supercapacitors. <i>Energy and Environmental Science</i> , 2022, 15, 2889-2899.	15.6	63

#	ARTICLE	IF	CITATIONS
200	Battery energy storage systems and SWOT (strengths, weakness, opportunities, and threats) analysis of batteries in power transmission. <i>Energy</i> , 2022, 254, 123987.	4.5	74
201	High-yield Carbon Dots Interlayer for Ultra-Stable Zinc Batteries. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	90
202	An in-depth understanding of improvement strategies and corresponding characterizations towards Zn anode in aqueous Zn-ions batteries. <i>Green Energy and Environment</i> , 2023, 8, 1006-1042.	4.7	15
203	Constructing Hydrophobic Interface with Close-Packed Coordination Supramolecular Network for Long-Cycling and Dendrite-Free Zn-Metal Batteries. <i>Small</i> , 2022, 18, e2107971.	5.2	21
204	Achieving Ultrahigh-Rate Planar and Dendrite-Free Zinc Electroplating for Aqueous Zinc Battery Anodes. <i>Advanced Materials</i> , 2022, 34, e2202552.	11.1	88
205	Enamel-like Layer of Nanohydroxyapatite Stabilizes Zn Metal Anodes by Ion Exchange Adsorption and Electrolyte pH Regulation. <i>ACS Nano</i> , 2022, 16, 9461-9471.	7.3	41
206	Designing of Birnessite/Polyaniline Composite for Improving Cyclability as Cathode Material for Zinc Ion Batteries Based on Insights into the Reaction Mechanism. <i>ChemistrySelect</i> , 2022, 7, .	0.7	1
207	Stabilized Zn Anode Based on SO ₄ ²⁻ Trapping Ability and High Hydrogen Evolution Barrier. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	33
208	Review of room-temperature liquid metals for advanced metal anodes in rechargeable batteries. <i>Energy Storage Materials</i> , 2022, 50, 473-494.	9.5	35
209	Simultaneous pre-intercalation of caesium and sodium ions into vanadium oxide bronze nanowires for high-performance aqueous zinc-ion batteries. <i>Materials Chemistry Frontiers</i> , 2022, 6, 1920-1928.	3.2	6
210	Cholinium Cations Enable Highly Compact and Dendrite-Free Zn Metal Anodes in Aqueous Electrolytes. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	91
211	Iodine redox reactions in single-wall carbon nanotube hollow cores for rechargeable iodine cathode-based energy storage. , 2022, 1, 89-93.		0
212	Towards the practical application of Zn metal anodes for mild aqueous rechargeable Zn batteries. <i>Chemical Science</i> , 2022, 13, 8243-8252.	3.7	63
213	Improvement in the Performance of an Fe/Fe ^{II} Electrode in an All-Iron Redox Flow Battery by the addition of Zn ^{II} ions. <i>ChemistrySelect</i> , 2022, 7, .	0.7	7
214	What Happens to MnO ₂ When It Comes in Contact with Zn ²⁺ ? An Electrochemical Study in Aid of Zn/MnO ₂ -Based Rechargeable Batteries. <i>Energy Technology</i> , 2022, 10, .	1.8	8
215	Recent Progress and Challenges of Flexible Zn-Based Batteries with Polymer Electrolyte. <i>Batteries</i> , 2022, 8, 59.	2.1	11
216	Controlling Horizontal Growth of Zinc Platelet by OP-10 Additive for Dendrite-Free Aqueous Zinc-Ion Batteries. <i>Batteries and Supercaps</i> , 2022, 5, .	2.4	9
217	Ultrasonic guided wave monitoring of dendrite formation at electrode-electrolyte interface in aqueous zinc ion batteries. <i>Journal of Power Sources</i> , 2022, 542, 231730.	4.0	11

#	ARTICLE	IF	CITATIONS
218	Dendrite-Free and Long-Standing Aqueous Zinc Metal Battery Achieved by In-Situ Grown Hydrophilic Coordination Supramolecular Networks. SSRN Electronic Journal, 0, , .	0.4	0
219	Vanadium Oxide with Elevated Interlayers for Durable Aqueous Hybrid Li ⁺ /Zn ²⁺ Batteries. ACS Applied Energy Materials, 2022, 5, 9070-9078.	2.5	10
220	Challenges and Perspectives for Doping Strategy for Manganese-Based Zinc-ion Battery Cathode. Energies, 2022, 15, 4698.	1.6	11
221	Realizing high-voltage aqueous zinc-ion batteries with expanded electrolyte electrochemical stability window. Chinese Chemical Letters, 2023, 34, 107629.	4.8	16
222	Anti-catalytic and zincophilic layers integrated zinc anode towards efficient aqueous batteries for ultra-long cycling stability. Nano Research, 2022, 15, 8076-8082.	5.8	28
223	An ultrahigh rate dendrite-free Zn metal deposition/stripping enabled by silver nanowire aerogel with optimal atomic affinity with Zn. Energy Storage Materials, 2022, 51, 453-464.	9.5	22
224	Designing a Bimodal BaTiO ₃ Artificial Layer to Boost the Dielectric Effect toward Highly Reversible Dendrite-Free Zn Metal Anodes. ACS Applied Materials & Interfaces, 2022, 14, 35613-35622.	4.0	12
225	Critical factors to inhibit water-splitting side reaction in carbon-based electrode materials for zinc metal anodes. , 2022, 4, 1080-1092.		7
226	Regulating Dendrite-Free Zn Deposition by a Self-Assembled OH-Terminated SiO ₂ Nanosphere Layer toward a Zn Metal Anode. ACS Applied Materials & Interfaces, 2022, 14, 37759-37770.	4.0	12
227	Electrochemical Property of Solid-State MnO ₂ -Zn Battery with the Combination of Improved Cathode and Solid Electrolyte. Journal of the Electrochemical Society, 2022, 169, 080527.	1.3	6
228	Effect of ionotropic gelation of COOH-functionalized polymeric binders in multivalent ion batteries. Journal of Solid State Electrochemistry, 2022, 26, 1969-1980.	1.2	0
229	Activating ZnV ₂ O ₄ by an Electrochemical Oxidation Strategy for Enhanced Energy Storage in Zinc-Ion Batteries. ACS Applied Energy Materials, 2022, 5, 10196-10206.	2.5	10
230	Advances in Zinc and Magnesium Battery Polymer Cathode Materials. ACS Applied Energy Materials, 2022, 5, 10331-10358.	2.5	3
231	Interfacial engineering on metal anodes in rechargeable batteries. EnergyChem, 2022, 4, 100089.	10.1	12
232	Uniform and oriented zinc deposition induced by artificial Nb ₂ O ₅ Layer for highly reversible Zn anode in aqueous zinc ion batteries. Energy Storage Materials, 2022, 52, 40-51.	9.5	56
233	Electrocrystallization orientation regulation of zinc metal anodes: strategies and challenges. Energy Storage Materials, 2022, 52, 329-354.	9.5	64
234	Dendrite-Free and Long-Standing Aqueous Zinc Metal Battery Achieved by In-Situ Grown Hydrophilic Coordination Supramolecular Networks. SSRN Electronic Journal, 0, , .	0.4	0
235	Non-flammable, dilute, and hydrous organic electrolytes for reversible Zn batteries. Chemical Science, 2022, 13, 11320-11329.	3.7	43

#	ARTICLE	IF	CITATIONS
236	Local structure and ion storage properties of vanadate cathode materials regulated by the pre-alkalization. <i>Journal of Materials Chemistry A</i> , 2022, 10, 20552-20558.	5.2	2
237	Zincophilic Polymer Semiconductor as Multifunctional Protective Layer Enables Dendrite-Free Zinc Metal Anodes. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
238	Zincophilic polymer semiconductor as multifunctional protective layer enables Dendrite-Free zinc metal anodes. <i>Chemical Engineering Journal</i> , 2023, 452, 139335.	6.6	20
239	Ni-Containing Electrolytes for Superior Zinc-Ion Aqueous Batteries with Zinc Hexacyanoferrate Cathodes. <i>ACS Omega</i> , 2022, 7, 33942-33948.	1.6	3
240	Regulation and Stabilization of the Zinc Metal Anode Interface by Electroless Plating of a Multifunctionalized Polydopamine Layer. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 43215-43225.	4.0	11
241	Unveiling Charge Transport and Degradation Mechanisms of Aqueous $Zn Li^+MoO_3$ Batteries in Conventional Concentration and Water-in-Salt Electrolytes: A Multi-Modal In Situ and Operando Study. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	6
242	Insight on the Double-Edged Sword Role of Water Molecules in the Anode of Aqueous Zinc-Ion Batteries. <i>Small Structures</i> , 2022, 3, .	6.9	33
243	Engineering techniques to dendrite free Zinc-based rechargeable batteries. <i>Frontiers in Chemistry</i> , 0, 10, .	1.8	10
244	Highly reversible aqueous zinc-ion battery using the chelating agent triethanolamine as an electrolyte additive. <i>CrystEngComm</i> , 2022, 24, 7950-7961.	1.3	3
245	Eutectic Electrolytes with Doubly-Bound Water for High-Stability Zinc Anodes. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	42
246	Three Birds with One Stone: Tetramethylurea as Electrolyte Additive for Highly Reversible Zn-Metal Anode. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	62
247	Molecular-Level Zn-Ion Transfer Pump Specifically Functioning on (002) Facets Enables Durable Zn Anodes. <i>Small</i> , 2022, 18, .	5.2	19
248	Hierarchically Porous Ferroelectric Layer with the Aligned Dipole Moment for a High-Performance Aqueous Zn Metal Battery. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 48570-48581.	4.0	5
249	Synergetic control of hydrogen evolution and ion-transport kinetics enabling Zn anodes with high-areal-capacity. <i>Nano Energy</i> , 2022, 104, 107903.	8.2	24
250	Zn metal anodes stabilized by an intrinsically safe, dilute, and hydrous organic electrolyte. <i>Energy Storage Materials</i> , 2023, 54, 276-283.	9.5	47
251	Dendrite-free and long-standing aqueous zinc metal battery achieved by in-situ grown hydrophilic Coordination Supramolecular Networks. <i>Journal of Power Sources</i> , 2023, 555, 232370.	4.0	0
252	Employing cationic kraft lignin as electrolyte additive to enhance the electrochemical performance of rechargeable aqueous zinc-ion battery. <i>Fuel</i> , 2023, 333, 126450.	3.4	5
253	Assisting Zn storage in layered vanadyl phosphate cathode by interactions with oligoaniline pillars for rechargeable aqueous zinc batteries. <i>Chemical Engineering Journal</i> , 2023, 454, 140323.	6.6	5

#	ARTICLE	IF	CITATIONS
254	Importance of Continuous and Simultaneous Monitoring of Both Electrode Voltages during Discharge/Charge Battery Tests: Application to Zn-Based Batteries. <i>Batteries</i> , 2022, 8, 221.	2.1	1
255	Molecular deciphering of hydrophobic, Zinc-philic and robust Amino-functionalized Polysilane for Dendrite-free Zn Anode. <i>Energy Storage Materials</i> , 2023, 54, 875-884.	9.5	38
256	Alkali Adatom-amplified Schottky contact and built-in voltage for stable Zn-metal anodes. <i>Energy Storage Materials</i> , 2023, 54, 863-874.	9.5	7
257	In Situ Polymerization of Ionic Liquid with Tunable Phase Separation for Highly Reversible and Ultralong Cycle Life Zn-Ion Battery. <i>Nano Letters</i> , 2022, 22, 9062-9070.	4.5	19
258	Electrochemical assessment of highly reversible SnO ₂ -coated Zn metal anodes prepared via atomic layer deposition for aqueous Zn-ion batteries. <i>Applied Surface Science</i> , 2023, 611, 155633.	3.1	13
259	Apple Pectin-Based Hydrogel Electrolyte for Energy Storage Applications. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 15802-15812.	3.2	5
260	Secondary Zinc-Air Batteries: A View on Rechargeability Aspects. <i>Batteries</i> , 2022, 8, 244.	2.1	12
261	Stimulating Zn ²⁺ permselectivity for prominent zinc anode reversibility by designing a self-assembled artificial layer. <i>Chemical Engineering Journal</i> , 2023, 455, 140827.	6.6	3
262	An ion exchange membrane-free, ultrastable zinc-iodine battery enabled by functionalized graphene electrodes. <i>Energy Storage Materials</i> , 2023, 55, 680-690.	9.5	27
263	Targeted leveling of the undercoordinated high field density sites renders effective zinc dendrite inhibition. <i>Energy Storage Materials</i> , 2023, 55, 117-129.	9.5	15
264	Comprehensive review on latest advances on rechargeable batteries. <i>Journal of Energy Storage</i> , 2023, 57, 106204.	3.9	16
265	Ultra-Stable Zn Anode Enabled by Fiber-Directed Ion Migration Using Mass-Produced Separator. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	30
266	A review on system and materials for aqueous flexible metal-air batteries. , 2023, 5, .		8
267	Manganese Molybdate Cathodes with Dual-Redox Centers for Aqueous Zinc-Ion Batteries: Impact of Electrolyte on Electrochemistry. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 16197-16213.	3.2	1
268	Zincophilic Electrode Interphase with Appended Proton Reservoir Ability Stabilizes Zn Metal Anodes. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	75
269	Zincophilic Electrode Interphase with Appended Proton Reservoir Ability Stabilizes Zn Metal Anodes. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	11
270	Polyethylene glycol coating on zinc powder surface: Applications in dendrite-free zinc anodes with enhanced utilization rate. <i>Applied Surface Science</i> , 2023, 614, 156209.	3.1	10
271	Cauliflower-like nanostructured ZnV ₂ S ₄ as a potential cathode material to boost-up high capacity and durability of the aqueous zinc-ion battery. <i>Chinese Chemical Letters</i> , 2023, 34, 108076.	4.8	2

#	ARTICLE	IF	CITATIONS
272	A lean zinc anode battery based on metal-organic framework-derived carbon. , 2023, 5, .		13
273	Recent Progress on the Performance of Zn-Ion Battery Using Various Electrolyte Salt and Solvent Concentrations. ACS Applied Electronic Materials, 2023, 5, 100-116.	2.0	6
274	Investigation of reduced lithium titanate spinel as insertion host for rechargeable batteries. Korean Journal of Chemical Engineering, 0, , .	1.2	0
275	A New Zinc Salt Chemistry for Aqueous Zinc-Metal Batteries. Advanced Materials, 2023, 35, .	11.1	11
276	Alleviating Zn Dendrites by Growth of Ultrafine ZnO Nanowire Arrays through Horizontal Anodizing for High-Capacity, Long-Life Zn Ion Capacitors. ACS Applied Materials & Interfaces, 2023, 15, 4071-4080.	4.0	7
277	Realizing Textured Zinc Metal Anodes through Regulating Electrodeposition Current for Aqueous Zinc Batteries. Angewandte Chemie, 2023, 135, .	1.6	7
278	Tailored ZnF ₂ /ZnS-rich interphase for reversible aqueous Zn batteries. Nano Research, 2023, 16, 4996-5005.	5.8	15
279	Anode corrosion in aqueous Zn metal batteries. EScience, 2023, 3, 100093.	25.0	68
280	Aqueous transition-metal ion batteries: Materials and electrochemistry. EnergyChem, 2023, 5, 100097.	10.1	6
281	Manganese ion batteries: LiV ₃ O ₈ nanorods as a robust and long-life cathode module. Journal of Power Sources, 2023, 558, 232542.	4.0	1
282	Realizing Textured Zinc Metal Anodes through Regulating Electrodeposition Current for Aqueous Zinc Batteries. Angewandte Chemie - International Edition, 2023, 62, .	7.2	61
283	Porous rigid-flexible polymer membrane interface towards high-rate and stable zinc-ion battery. Journal of Power Sources, 2023, 560, 232685.	4.0	7
284	Zincophilic polyurethane-based porous film enables dendrite-free zinc anode for reversible aqueous zinc-based batteries. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 661, 130960.	2.3	5
285	Boehmite/PAN nanocomposite fibrous separators with superior wettability and thermal properties for sodium-ion batteries with high electrochemical performances. Journal of Alloys and Compounds, 2023, 940, 168864.	2.8	3
286	Suppressing interfacial side reactions of zinc metal anode via isolation effect toward high-performance aqueous zinc-ion batteries. Nano Research, 2023, 16, 6789-6797.	5.8	13
287	Electrolyte Solvation Structure Design for High Voltage Zinc-Based Hybrid Batteries. Energy and Environmental Materials, 2023, 6, .	7.3	4
288	Rational Design of Flexible Zn-Based Batteries for Wearable Electronic Devices. ACS Nano, 2023, 17, 1764-1802.	7.3	50
289	Viable defect engineering with templates into metal oxides. , 2023, , 355-385.		0

#	ARTICLE	IF	CITATIONS
290	Insights on Artificial Interphases of Zn and Electrolyte: Protection Mechanisms, Constructing Techniques, Applicability, and Prospective. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	53
291	Zn ₃ (PO ₄) ₂ ; Protective Layer on Zn Anode for Improved Electrochemical Properties in Aqueous Zn-ion Batteries. <i>Journal of Electrochemical Science and Technology</i> , 0, , .	0.9	0
292	Engineering Chemo-Mechanical Properties of Zn Surfaces via Alucone Coating. <i>Journal of Physical Chemistry C</i> , 2023, 127, 2481-2492.	1.5	0
293	Graphene-based nanocomposites as electrode materials for Zn-air batteries. , 2023, , 395-412.		0
294	Influence of the Thermal Treatment on the Structure and Cycle Life of Copper Hexacyanoferrate for Aqueous Zinc-Ion Batteries. <i>Batteries</i> , 2023, 9, 170.	2.1	1
295	Challenges and perspectives of hydrogen evolution-free aqueous Zn-Ion batteries. <i>Energy Storage Materials</i> , 2023, 59, 102767.	9.5	22
296	Fundamentals, recent developments and prospects of lithium and non-lithium electrochemical rechargeable battery systems. <i>Journal of Energy Chemistry</i> , 2023, 81, 221-259.	7.1	27
297	A three-dimensional zincophilic nano-copper host enables dendrite-free and anode-free Zn batteries. <i>Materials Today Energy</i> , 2023, 34, 101284.	2.5	12
298	Ti ₃ C ₂ T-TiSe ₂ analogous heterostructure for flexible zinc ion battery. <i>Journal of Materials Science and Technology</i> , 2023, 150, 225-232.	5.6	4
299	Modifying the Zn Anode with Nano-Silica: A Strategy to Realize Dendrite-Free Zinc-Ion Hybrid Supercapacitors. <i>Journal of the Electrochemical Society</i> , 2023, 170, 020508.	1.3	0
300	Dynamically Interfacial pH-Buffering Effect Enabled by N-Methylimidazole Molecules as Spontaneous Proton Pumps toward Highly Reversible Zinc-Metal Anodes. <i>Advanced Materials</i> , 0, , 2208630.	11.1	37
301	Zn glutarate protective layers in situ form on Zn anodes for Zn redox flow batteries. <i>Energy Storage Materials</i> , 2023, 57, 195-204.	9.5	9
302	Towards the commercialization of rechargeable aqueous zinc ion batteries: The challenge of the zinc electrodeposition at the anode. <i>Current Opinion in Electrochemistry</i> , 2023, 38, 101230.	2.5	2
303	Polyphosphazene Based Inorganic-Organic Hybrid Cathode Containing Pyrene Tetraone Sides for Aqueous Zinc-Ion Batteries. <i>Batteries and Supercaps</i> , 2023, 6, .	2.4	1
304	Hybrid Acid/alkali All Covalent Organic Frameworks Battery. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	11
305	Hybrid Acid/alkali All Covalent Organic Frameworks Battery. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	0
306	Progress in 3D-MXene Electrodes for Lithium/Sodium/Potassium/Magnesium/Zinc/Aluminum-Ion Batteries. <i>Electrochemical Energy Reviews</i> , 2023, 6, .	13.1	32
307	Recent progress of dendrite-free stable zinc anodes for advanced zinc-based rechargeable batteries: Fundamentals, challenges, and perspectives. <i>SusMat</i> , 2023, 3, 180-206.	7.8	15

#	ARTICLE	IF	CITATIONS
308	Regulation of Ionic Distribution and Desolvation Activation Energy Enabled by In Situ Zinc Phosphate Protective Layer toward Highly Reversible Zinc Metal Anodes. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	23
309	Application of Biomass Materials in Zinc-Ion Batteries. <i>Molecules</i> , 2023, 28, 2436.	1.7	5
310	Dual-function electrolyte additive enabling simultaneous electrode interface and coordination environment regulation for zinc-ion batteries. <i>Energy Storage Materials</i> , 2023, 58, 20-29.	9.5	32
311	Promoting Zn ²⁺ migration through polar perovskite dielectric layer on Zn metal anode for the enhanced aqueous Zn-ion batteries. <i>Chemical Engineering Journal</i> , 2023, 462, 142308.	6.6	10
312	Materials and structural design for preferable Zn deposition behavior toward stable Zn anodes. <i>SmartMat</i> , 2024, 5, .	6.4	7
313	Observation of Zn Dendrite Growth via Operando Digital Microscopy and Time-Lapse Tomography. <i>ACS Applied Materials & Interfaces</i> , 0, , .	4.0	1
314	Insight into the development of electrolytes for aqueous zinc metal batteries from alkaline to neutral. <i>Chinese Chemical Letters</i> , 2024, 35, 108337.	4.8	5
315	±-NiO/Ni(OH) ₂ /AgNP/F-Graphene Composite for Energy Storage Application. <i>ACS Omega</i> , 2023, 8, 10906-10918.	1.6	1
316	Agar-based hydrogel polymer electrolyte for high-performance zinc-ion batteries at all climatic temperatures. <i>IScience</i> , 2023, 26, 106437.	1.9	5
317	Recent advances in two-dimensional MXenes for zinc-ion batteries. <i>Materials Chemistry Frontiers</i> , 2023, 7, 2373-2404.	3.2	5
318	Zn Microbatteries Explore Ways for Integrations in Intelligent Systems. <i>Small</i> , 2023, 19, .	5.2	7
319	Metal/covalent organic frameworks for aqueous rechargeable zinc-ion batteries. <i>Science China Chemistry</i> , 2024, 67, 247-259.	4.2	9
320	Water Confinement by a Zn ²⁺ -Conductive Aqueous/Inorganic Hybrid Electrolyte for High-Voltage Zinc-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2023, 6, 3705-3713.	2.5	2
321	Spectroscopic and Surface Analysis Data for Corrosion of Zinc in Sulfamic Acid—Electrochemical Approach. <i>Surface Engineering and Applied Electrochemistry</i> , 2023, 59, 96-106.	0.3	0
322	Advanced separator engineering strategies for reversible electrochemical zinc storage. <i>Journal of Solid State Electrochemistry</i> , 2023, 27, 1329-1344.	1.2	5
323	In Situ Selenization of Ti ₃ C ₂ T _x Assisted by Cu ²⁺ with Superior Performance for Aluminum Ion Batteries. <i>Energy & Fuels</i> , 2023, 37, 6220-6229.	2.5	1
324	Challenges and Strategies in the Development of Zinc-Ion Batteries. <i>Small Methods</i> , 2023, 7, .	4.6	12
325	Carboxymethyl cellulose as an artificial solid electrolyte interphase for stable zinc-based anodes in aqueous electrolytes. <i>Materials Science for Energy Technologies</i> , 2023, 6, 417-428.	1.0	5

#	ARTICLE	IF	CITATIONS
326	Recent advances and challenges of anodes for aqueous alkaline batteries. <i>EnergyChem</i> , 2023, 5, 100102.	10.1	2
327	Synthesis of Zn Intercalated Zn@V@Mo Nanorods-based Cathodes for Prolonged Cyclic Stability of Rechargeable Aqueous Zinc-Ion Batteries. <i>ACS Applied Nano Materials</i> , 2023, 6, 7745-7753.	2.4	2
328	Unveiling the role of water in enhancing the performance of zinc-ion batteries using dimethyl sulfoxide electrolyte and the manganese dioxide cathode. <i>Journal of Materials Chemistry A</i> , 2023, 11, 10584-10595.	5.2	5
355	One-Nanometer-Thick Interfaces of Titania Nanosheets for Reversible Zn-Metal Electrodes. , 2023, 5, 2156-2163.		2
363	Recent Advances in Structural Optimization and Surface Modification on Current Collectors for High-Performance Zinc Anode: Principles, Strategies, and Challenges. <i>Nano-Micro Letters</i> , 2023, 15, .	14.4	10
370	On Energy Storage Chemistry of Aqueous Zn-Ion Batteries: From Cathode to Anode. <i>Electrochemical Energy Reviews</i> , 2023, 6, .	13.1	7
388	Trend of Developing Aqueous Liquid and Gel Electrolytes for Sustainable, Safe, and High-Performance Li-Ion Batteries. <i>Nano-Micro Letters</i> , 2024, 16, .	14.4	0
398	Engineering hosts for Zn anodes in aqueous Zn-ion batteries. <i>Energy and Environmental Science</i> , 2024, 17, 369-385.	15.6	1
420	Recent progress of high-performance in-plane zinc ion hybrid micro-supercapacitors: design, achievements, and challenges. <i>Nanoscale</i> , 2024, 16, 4542-4562.	2.8	1
431	Advancements in Vanadium Disulphide (VS ₂) Nanomaterials for Enhanced Energy Storage Synthesis Techniques, Electrochemical Properties, and Prospective Outcomes. <i>Advances in Chemical and Materials Engineering Book Series</i> , 2024, , 49-93.	0.2	0
432	High-concentration Electrolytes for Rechargeable Batteries. , 2024, , 293-328.		0