

Combined economic and technological evaluation of battery applications

Nature Energy

4, 42-50

DOI: [10.1038/s41560-018-0290-1](https://doi.org/10.1038/s41560-018-0290-1)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Facile fabrication of iron oxide/carbon/rGO superparamagnetic nanocomposites for enhanced electrochemical energy storage performance. <i>Journal of Alloys and Compounds</i> , 2019, 811, 152019.	2.8	6
2	Inhibiting VOPO ₄ ... <i>x</i> /i>H ₂ O Decomposition and Dissolution in Rechargeable Aqueous Zinc Batteries to Promote Voltage and Capacity Stabilities. <i>Angewandte Chemie</i> , 2019, 131, 16203-16207.	1.6	6
3	Realization of GaN-based gain-guided blue laser diodes by helium ion implantation. <i>Semiconductor Science and Technology</i> , 2019, 34, 115007.	1.0	2
4	Inhibiting VOPO ₄ ... <i>x</i> /i>H ₂ O Decomposition and Dissolution in Rechargeable Aqueous Zinc Batteries to Promote Voltage and Capacity Stabilities. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16057-16061.	7.2	125
5	Amorphous Sb ₂ S ₃ Anodes by Reactive Radio Frequency Magnetron Sputtering for High-Performance Lithium-Ion Half/Full Cells. <i>Energy Technology</i> , 2019, 7, 1900928.	1.8	15
6	Formation of Co-Mn mixed oxide double-shelled hollow spheres as advanced electrodes for hybrid supercapacitors. <i>Journal of Materials Chemistry A</i> , 2019, 7, 25247-25253.	5.2	67
7	Design strategies toward catalytic materials and cathode structures for emerging Li-CO ₂ batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 21605-21633.	5.2	75
8	A paradigm of storage batteries. <i>Energy and Environmental Science</i> , 2019, 12, 3203-3224.	15.6	154
9	Engineering 3D Well-Interconnected Na ₄ MnV(PO ₄) ₃ Facilitates Ultrafast and Ultrastable Sodium Storage. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 35746-35754.	4.0	65
10	A hybrid stochastic-robust optimization approach for energy storage arbitrage in day-ahead and real-time markets. <i>Sustainable Cities and Society</i> , 2019, 49, 101600.	5.1	36
11	Exploring competitive features of stationary sodium ion batteries for electrochemical energy storage. <i>Energy and Environmental Science</i> , 2019, 12, 1512-1533.	15.6	402
12	Engineering MoS ₂ Nanosheets Anchored on Metal Organic Frameworks Derived Carbon Polyhedra for Superior Lithium and Potassium Storage. <i>Frontiers in Energy Research</i> , 2019, 7, .	1.2	18
13	Achieving high energy density and high power density with pseudocapacitive materials. <i>Nature Reviews Materials</i> , 2020, 5, 5-19.	23.3	1,138
14	Prussian blue analogs (PBA) derived porous bimetal (Mn, Fe) selenide with carbon nanotubes as anode materials for sodium and potassium ion batteries. <i>Chemical Engineering Journal</i> , 2020, 382, 123050.	6.6	135
15	Preliminary feasibility analysis of a hybrid pumped-hydro energy storage system using abandoned coal mine goafs. <i>Applied Energy</i> , 2020, 258, 114007.	5.1	119
16	Layered Co/Ni-free Mn-rich oxide P2-Na ₂ /3Mn _{0.8} Fe _{0.1} Mg _{0.1} O ₂ as high-performance cathode material for sodium-ion batteries. <i>Ionics</i> , 2020, 26, 735-743.	1.2	22
17	Long-Duration Electricity Storage Applications, Economics, and Technologies. <i>Joule</i> , 2020, 4, 21-32.	11.7	189
18	Oxygen Redox Activity through a Reductive Coupling Mechanism in the P3-Type Nickel-Doped Sodium Manganese Oxide. <i>ACS Applied Energy Materials</i> , 2020, 3, 184-191.	2.5	53

#	ARTICLE	IF	CITATIONS
19	Electroanalytical characterization of electrochemical capacitor systems using step potential electrochemical spectroscopy. <i>Electrochimica Acta</i> , 2020, 332, 135508.	2.6	10
20	Grid-scale energy storage. , 2020, , 119-143.		9
21	Gold-graphene oxide nanohybrids: A review on their chemical catalysis. <i>Journal of Industrial and Engineering Chemistry</i> , 2020, 83, 1-13.	2.9	25
22	Electricity storage system: A Gravity Battery. , 2020, , .		8
23	Review of power system impacts at high PV penetration Part II: Potential solutions and the way forward. <i>Solar Energy</i> , 2020, 210, 202-221.	2.9	50
24	Recent progress in metal-organic framework-based supercapacitor electrode materials. <i>Coordination Chemistry Reviews</i> , 2020, 420, 213438.	9.5	280
25	Economic Potential and Sensitivity Analysis of Energy Storage Applications in the Power Sale Side of China. , 2020, , .		0
26	High-voltage cathode materials by combustion-based preparative approaches for Li-ion batteries application. <i>Journal of Power Sources</i> , 2020, 472, 228368.	4.0	10
27	High-performance bismuth-gallium positive electrode for liquid metal battery. <i>Journal of Power Sources</i> , 2020, 472, 228634.	4.0	22
28	Jackfruit Seed-Derived Nanoporous Carbons as the Electrode Material for Supercapacitors. <i>Journal of Carbon Research</i> , 2020, 6, 73.	1.4	14
29	Grid-Scale Life Cycle Greenhouse Gas Implications of Renewable, Storage, and Carbon Pricing Options. <i>Environmental Science & Technology</i> , 2020, 54, 10435-10445.	4.6	4
30	Oxygen defect chemistry for the reversible transformation of titanates for sizeable potassium storage. <i>Journal of Materials Chemistry A</i> , 2020, 8, 17550-17557.	5.2	5
31	Assessment of Energy Storage Systems for Multiple Grid Service Provision. , 2020, , .		0
32	Estimating revenues from offshore wind-storage systems: The importance of advanced battery models. <i>Applied Energy</i> , 2020, 276, 115417.	5.1	32
33	Fluorophosphates: Next Generation Cathode Materials for Rechargeable Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2001449.	10.2	50
34	From Li-ion Batteries toward Na-ion Chemistries: Challenges and Opportunities. <i>Advanced Energy Materials</i> , 2020, 10, 2001310.	10.2	269
35	Embedding scrapping criterion and degradation model in optimal operation of peak-shaving lithium-ion battery energy storage. <i>Applied Energy</i> , 2020, 278, 115601.	5.1	17
36	<i>In Situ</i> Growth of Mo ₂ C on Cathodes for Efficient Microbial Electrosynthesis of Acetate from CO ₂ . <i>Energy & Fuels</i> , 2020, 34, 11299-11306.	2.5	19

#	ARTICLE	IF	CITATIONS
37	Elastic Na ₂ MoS ₂ -Carbon-BASE Triple Interface Direct Robust Solidâ€“Solid Interface for All-Solid-State Naâ€“S Batteries. Nano Letters, 2020, 20, 6837-6844.	4.5	29
38	Aluminum Metalâ€“Organic Batteries with Integrated 3D Thin Film Anodes. Advanced Functional Materials, 2020, 30, 2004573.	7.8	30
39	A Microporous Polymer with Suspended Cations for Anion Exchange Membrane Fuel Cells. Macromolecules, 2020, 53, 10998-11008.	2.2	43
40	Unlocking the Potential of Battery Storage with the Dynamic Stacking of Multiple Applications. Cell Reports Physical Science, 2020, 1, 100238.	2.8	46
41	Self-templated formation of (NiCo) ₉ S ₈ yolkâ€“shelled spheres for high-performance hybrid supercapacitors. Nanoscale, 2020, 12, 23497-23505.	2.8	18
42	Chalcopyrite based carbon composite electrodes for high performance symmetric supercapacitor. Chemical Engineering Journal, 2020, 399, 125711.	6.6	29
43	Power system decarbonization: Impacts of energy storage duration and interannual renewables variability. Renewable Energy, 2020, 156, 1171-1185.	4.3	58
44	The value of seasonal energy storage technologies for the integration of wind and solar power. Energy and Environmental Science, 2020, 13, 1909-1922.	15.6	126
45	Investigation on the Discharge and Charge Behaviors of Li-CO ₂ Batteries with Carbon Nanotube Electrodes. ACS Sustainable Chemistry and Engineering, 2020, 8, 9742-9750.	3.2	25
46	Perovskite-Based Multifunctional Cathode with Simultaneous Supplementation of Substrates and Electrons for Enhanced Microbial Electrosynthesis of Organics. ACS Applied Materials & Interfaces, 2020, 12, 30449-30456.	4.0	24
47	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
48	Ni-Co selenide nanowires supported on conductive wearable textile as cathode for flexible battery-supercapacitor hybrid devices. Chemical Engineering Journal, 2020, 400, 125955.	6.6	96
49	Sulfonated Microporous Polymer Membranes with Fast and Selective Ion Transport for Electrochemical Energy Conversion and Storage. Angewandte Chemie, 2020, 132, 9651-9660.	1.6	20
50	A Cation and Anion Dual Doping Strategy for the Elevation of Titanium Redox Potential for Highâ€“Power Sodiumâ€“Ion Batteries. Angewandte Chemie, 2020, 132, 12174-12181.	1.6	20
51	Phasor-Based Control for Scalable Integration of Variable Energy Resources. Energies, 2020, 13, 190.	1.6	13
52	Sulfonated Microporous Polymer Membranes with Fast and Selective Ion Transport for Electrochemical Energy Conversion and Storage. Angewandte Chemie - International Edition, 2020, 59, 9564-9573.	7.2	145
53	Wind can reduce storage-induced emissions at grid scales. Applied Energy, 2020, 276, 115420.	5.1	4
54	A Heterostructure Coupling of Bioinspired, Adhesive Polydopamine, and Porous Prussian Blue Nanocubics as Cathode for Highâ€“Performance Sodiumâ€“Ion Battery. Small, 2020, 16, e1906946.	5.2	57

#	ARTICLE	IF	CITATIONS
55	Holey three-dimensional wood-based electrode for vanadium flow batteries. <i>Energy Storage Materials</i> , 2020, 27, 327-332.	9.5	49
56	Ni-Rich/Co-Poor Layered Cathode for Automotive Li-ion Batteries: Promises and Challenges. <i>Advanced Energy Materials</i> , 2020, 10, 1903864.	10.2	242
57	Redox-ambitious route to boost energy and capacity retention of pouch type asymmetric solid-state supercapacitor fabricated with graphene oxide-based battery-type electrodes. <i>Applied Materials Today</i> , 2020, 19, 100563.	2.3	12
58	A comprehensive study on the electrolyte, anode and cathode for developing commercial type non-flammable sodium-ion battery. <i>Energy Storage Materials</i> , 2020, 29, 287-299.	9.5	33
59	A Cation and Anion Dual Doping Strategy for the Elevation of Titanium Redox Potential for High-Power Sodium-ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 12076-12083.	7.2	78
60	Studies on thermal management of Lithium-ion battery pack using water as the cooling fluid. <i>Journal of Energy Storage</i> , 2020, 29, 101377.	3.9	45
61	Agricultural risks from changing snowmelt. <i>Nature Climate Change</i> , 2020, 10, 459-465.	8.1	187
62	Optimization of Variable-Current Charging Strategy Based on SOC Segmentation for Li-ion Battery. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2021, 22, 622-629.	4.7	15
63	Chemically stable anion exchange membranes based on C2-Protected imidazolium cations for vanadium flow battery. <i>Journal of Membrane Science</i> , 2021, 618, 118696.	4.1	48
64	Interlayer material technology of manganese phosphate toward and beyond electrochemical pseudocapacitance over energy storage application. <i>Journal of Materials Science and Technology</i> , 2021, 71, 109-128.	5.6	31
65	Design and synthesis of PbBiVO ₅ electrode by polymorph engineering for rechargeable battery. <i>Journal of Solid State Chemistry</i> , 2021, 293, 121777.	1.4	1
66	Urchin-Type Architecture Assembled by Cobalt Phosphide Nanorods Encapsulated in Graphene Framework as an Advanced Anode for Alkali Metal Ion Batteries. <i>Chemistry - A European Journal</i> , 2021, 27, 1713-1723.	1.7	18
67	Multi-sized nanosheets cobalt-iron layered double hydroxide grown on nickel foam as high performance supercapacitor electrode material. <i>Journal of Energy Storage</i> , 2021, 33, 102088.	3.9	10
68	Utility-Scale Portable Energy Storage Systems. <i>Joule</i> , 2021, 5, 379-392.	11.7	47
69	Performance Evaluation of the LiFePO ₄ OH Cathode for Stationary Storage Applications Using a Reduced-Order Electrochemical Model. <i>ACS Applied Energy Materials</i> , 2021, 4, 1021-1032.	2.5	6
70	Alkaline polymers of intrinsic microporosity: high-conduction and low-loss anhydrous proton exchange membranes for energy conversion. <i>Journal of Materials Chemistry A</i> , 2021, 9, 3925-3930.	5.2	32
71	Recent Advances in Heterostructured Anode Materials with Multiple Anions for Advanced Alkali-ion Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2003058.	10.2	60
72	Interior and Exterior Decoration of Transition Metal Oxide Through Cu ₀ /Cu ⁺ Co-Doping Strategy for High-Performance Supercapacitor. <i>Nano-Micro Letters</i> , 2021, 13, 61.	14.4	52

#	ARTICLE	IF	CITATIONS
73	Semiconductor Properties of Electrodeposited Manganese Dioxide for Electrochemical Capacitors: Mott-Schottky Analysis. <i>Journal of the Electrochemical Society</i> , 2021, 168, 020508.	1.3	10
74	Biobjective Optimization-Based Frequency Regulation of Power Grids with High-Participated Renewable Energy and Energy Storage Systems. <i>Mathematical Problems in Engineering</i> , 2021, 2021, 1-16.	0.6	6
75	Unlocking extra value from grid batteries using advanced models. <i>Journal of Power Sources</i> , 2021, 487, 229355.	4.0	35
76	Combined capacity and operation optimisation of lithium-ion battery energy storage working with a combined heat and power system. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 140, 110731.	8.2	20
77	A novel approach towards evaluation of joint technology performances of battery energy storage system in a fuzzy environment. <i>Journal of Energy Storage</i> , 2021, 36, 102361.	3.9	24
78	Integration of Battery Energy Storage Systems into Natural Gas Combined Cycle Power Plants in Fuzzy Environment. <i>Journal of Energy Storage</i> , 2021, 36, 102376.	3.9	19
79	Pseudocapacitive Anode Materials toward High-Power Sodium-Ion Capacitors. <i>Batteries and Supercaps</i> , 2021, 4, 1567-1587.	2.4	31
80	A Low-Strain Potassium-Rich Prussian Blue Analogue Cathode for High Power Potassium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 13050-13056.	7.2	90
81	A Low-Strain Potassium-Rich Prussian Blue Analogue Cathode for High Power Potassium-Ion Batteries. <i>Angewandte Chemie</i> , 2021, 133, 13160-13166.	1.6	16
82	Aqueous Rechargeable Multivalent Metal-Ion Batteries: Advances and Challenges. <i>Advanced Energy Materials</i> , 2021, 11, 2100608.	10.2	122
83	Metal-organic frameworks as highly efficient electrodes for long cycling stability supercapacitors. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 18179-18206.	3.8	55
84	Life-Cycle Economic Evaluation of Batteries for Electrochemical Energy Storage Systems. <i>Journal of Electrical Engineering and Technology</i> , 2021, 16, 2497.	1.2	4
85	A novel hybrid propulsion system configuration and power distribution strategy for light electric aircraft. <i>Energy Conversion and Management</i> , 2021, 238, 114171.	4.4	22
86	The analysis of innovative design and evaluation of energy storage system based on Internet of Things. <i>Journal of Supercomputing</i> , 2022, 78, 1624-1641.	2.4	3
87	Highly Conductive and Dimensionally Stable Anion Exchange Membranes Based on Poly(dimethoxybenzene- <i>i>co</i>-methyl 4-formylbenzoate) Ionomers. <i>Macromolecules</i>, 2021, 54, 5557-5566.</i>	2.2	24
88	A Novel Strategy of Multi-Element Nanocomposite Synthesis for High Performance ZnO-CoSe ₂ Supercapacitor Material Development. <i>Chinese Journal of Chemistry</i> , 2021, 39, 2441-2450.	2.6	16
89	Preventing Electrolyte Decomposition on a Ca Metal Electrode Interface Using an Artificial Solid-Electrolyte Interphase. <i>Advanced Theory and Simulations</i> , 2021, 4, 2100018.	1.3	7
90	A High-Performance Room-Temperature Li Ga-Sn Liquid Metal Battery for Grid Energy Storage. <i>Energy Technology</i> , 2021, 9, 2100330.	1.8	13

#	ARTICLE	IF	CITATIONS
92	Comparative sustainability efficiency measurement of energy storages under uncertainty: An innovative framework based on interval SBM model. <i>Journal of Energy Storage</i> , 2021, 40, 102808.	3.9	6
93	Comprehensive Survey of Various Energy Storage Technology Used in Hybrid Energy. <i>Electronics (Switzerland)</i> , 2021, 10, 2037.	1.8	2
94	Continuous Random Process Modeling of AGC Signals Based on Stochastic Differential Equations. <i>IEEE Transactions on Power Systems</i> , 2021, 36, 4575-4587.	4.6	9
95	Accessing the $2\text{V}/\text{V}$ redox process of vanadyl phosphate cathode for aqueous batteries. <i>Journal of Power Sources</i> , 2021, 507, 230270.	4.0	5
96	Arbitrage analysis for different energy storage technologies and strategies. <i>Energy Reports</i> , 2021, 7, 8198-8206.	2.5	34
97	Application of step potential electrochemical spectroscopy in pouch cell prototype capacitors. <i>Electrochimica Acta</i> , 2021, 390, 138845.	2.6	3
98	Cationic and transition metal co-substitution strategy of O3-type NaCrO_2 cathode for high-energy sodium-ion batteries. <i>Energy Storage Materials</i> , 2021, 41, 183-195.	9.5	42
99	Role of electrolyte in stabilizing hard carbon as an anode for rechargeable sodium-ion batteries with long cycle life. <i>Energy Storage Materials</i> , 2021, 42, 78-87.	9.5	61
100	Electron structure and reaction pathway regulation on porous cobalt-doped CeO_2 /graphene aerogel: A free-standing cathode for flexible and advanced Li- CO_2 batteries. <i>Energy Storage Materials</i> , 2021, 42, 484-492.	9.5	38
101	Sn-based nanomaterials: From composition and structural design to their electrochemical performances for Li- and Na-ion batteries. <i>Energy Storage Materials</i> , 2021, 43, 430-462.	9.5	57
102	Synthesis of three-dimensional MnO_2/PPy composite for high-performance cathode in zinc-ion batteries. <i>Journal of Alloys and Compounds</i> , 2021, 888, 161619.	2.8	35
103	Electric vehicle multi-use: Optimizing multiple value streams using mobile storage systems in a vehicle-to-grid context. <i>Applied Energy</i> , 2021, 304, 117862.	5.1	44
104	Developing better ester- and ether-based electrolytes for potassium-ion batteries. <i>Chemical Science</i> , 2021, 12, 2345-2356.	3.7	43
105	Electrochemical energy storage devices working in extreme conditions. <i>Energy and Environmental Science</i> , 2021, 14, 3323-3351.	15.6	140
106	Technoeconomic model of second-life batteries for utility-scale solar considering calendar and cycle aging. <i>Applied Energy</i> , 2020, 269, 115127.	5.1	84
107	Business Models and Profitability of Energy Storage. <i>IScience</i> , 2020, 23, 101554.	1.9	30
108	Solar PV-Battery-Electric Grid-Based Energy System for Residential Applications: System Configuration and Viability. <i>Research</i> , 2019, 2019, 3838603.	2.8	33
109	Grid Integration of Large Scale Renewable Energy Sources: Challenges, Issues and Mitigation Technique. , 2021, , .		0

#	ARTICLE	IF	CITATIONS
110	Assessing the societal benefits of energy storage in electricity systems with large shares of renewables. <i>Journal of Renewable and Sustainable Energy</i> , 2021, 13, 054101.	0.8	1
111	Tetrathiafulvaleneâ€Cobalt Metalâ€Organic Frameworks for Lithium-Ion Batteries with Superb Rate Capability. <i>Inorganic Chemistry</i> , 2021, 60, 17074-17082.	1.9	9
112	Activating a Multielectron Reaction of NASICON-Structured Cathodes toward High Energy Density for Sodium-Ion Batteries. <i>Journal of the American Chemical Society</i> , 2021, 143, 18091-18102.	6.6	96
114	Potassium Fluoride and Carbonate Lead to Cell Failure in Potassium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 53841-53849.	4.0	17
115	Network flow calculation based on the directional nodal potential method for meshed heating networks. <i>Energy</i> , 2022, 243, 122729.	4.5	6
116	An Ultrahighâ€Power Mesocarbon Microbeads Na ⁺ â€Diglyme Na ₃ V ₂ (PO ₄) ₃ Sodiumâ€Ion Battery. <i>Advanced Materials</i> , 2022, 34, e2108304.	11.1	50
117	Cathode materials for high-performance potassium-ion batteries. <i>Cell Reports Physical Science</i> , 2021, 2, 100657.	2.8	9
118	Oxygen Vacancy Modulated TiP ₂ O ₇ with Enhanced Highâ€Rate Capabilities and Longâ€Term Cyclability used as Anode Material for Lithiumâ€Ion Batteries. <i>ChemistrySelect</i> , 2021, 6, 12677-12684.	0.7	6
119	Full Life-Cycle Optimal Battery Scheduling for Maximal Lifetime Value Considering Degradation. <i>IEEE Transactions on Energy Conversion</i> , 2022, 37, 1379-1393.	3.7	5
120	Financial Feasibility of Battery Storage based Approach for Renewable Rich Distribution Feeders. , 2020, , .		0
121	Bad Cell Identification of Utility-Scale Battery Energy Storage System through Statistical Analysis of Electrical and Thermal Properties. , 2021, , .		1
122	Low-Temperature and High-Energy-Density Li-Based Liquid Metal Batteries Based on LiClâ€KCl Molten Salt Electrolyte. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 1871-1879.	3.2	15
123	Surface engineering of anode materials for improving sodium-ion storage performance. <i>Journal of Materials Chemistry A</i> , 2022, 10, 3889-3904.	5.2	20
124	Iceâ€Templated, Sustainable Carbon Aerogels with Hierarchically Tailored Channels for Sodiumâ€and Potassiumâ€Ion Batteries. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	67
125	Proton exchange membranes containing densely alkyl sulfide sulfonated side chains for vanadium redox flow battery. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 9319-9330.	3.8	21
126	Ice-Assisted Synthesis of Highly Crystallized Prussian Blue Analogues for All-Climate and Long-Calendar-Life Sodium Ion Batteries. <i>Nano Letters</i> , 2022, 22, 1302-1310.	4.5	68
127	A generalized numerical prediction on ionic conductivity of non-dense solid electrolyte based on finite element modeling. <i>Ionics</i> , 0, , 1.	1.2	1
128	A Pioneering Melamine Foam-Based Electrode Via Facile Synthesis as Prospective Direction for Vanadium Redox Flow Batteries. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0

#	ARTICLE	IF	CITATIONS
129	Lithium-rich sulfide/selenide cathodes for next-generation lithium-ion batteries: challenges and perspectives. <i>Chemical Communications</i> , 2022, 58, 3591-3600.	2.2	12
130	Advances in carbon materials for stable lithium metal batteries. <i>New Carbon Materials</i> , 2022, 37, 1-24.	2.9	31
131	Achieving high-rate and durable aqueous rechargeable Zn-Ion batteries by enhancing the successive electrochemical conversion reactions. <i>Journal of Colloid and Interface Science</i> , 2022, 620, 127-134.	5.0	9
132	The economic competitiveness of flexibility options: A model study of the European energy transition. <i>Journal of Cleaner Production</i> , 2022, 350, 131534.	4.6	17
133	CoP/Cu ₃ P heterostructured nanoplates for high-rate supercapacitor electrodes. <i>Chemical Engineering Journal</i> , 2022, 437, 135352.	6.6	66
134	A pioneering melamine foam-based electrode via facile synthesis as prospective direction for vanadium redox flow batteries. <i>Chemical Engineering Journal</i> , 2022, 439, 135718.	6.6	22
135	Multiobjective optimization of hybrid wind-photovoltaic plants with battery energy storage system: Current situation and possible regulatory changes. <i>Journal of Energy Storage</i> , 2022, 51, 104467.	3.9	21
136	Coupling potential-forced network flow analysis based on potential energy conservation rules and network flow method. <i>Energy Reports</i> , 2021, 7, 1055-1074.	2.5	1
137	Discharging Behavior of Hollandite $\delta\text{-MnO}_2$ in a Hydrated Zinc-Ion Battery. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 59937-59949.	4.0	28
138	Prospects and challenges of renewable energy-based microgrid system in Bangladesh: a comprehensive review. <i>Clean Technologies and Environmental Policy</i> , 2022, 24, 1987-2009.	2.1	19
139	Transition towards carbon-neutral districts based on storage techniques and spatiotemporal energy sharing with electrification and hydrogenation. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 162, 112444.	8.2	61
140	A cost-effective alkaline polysulfide-air redox flow battery enabled by a dual-membrane cell architecture. <i>Nature Communications</i> , 2022, 13, 2388.	5.8	15
141	Unveiling the Complementary Manganese and Oxygen Redox Chemistry for Stabilizing the Sodium-Ion Storage Behaviors of Layered Oxide Cathodes. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	34
142	An elaborate low-temperature electrolyte design towards high-performance liquid metal battery. <i>Journal of Power Sources</i> , 2022, 536, 231527.	4.0	7
143	Core-shell GaSn@rGO nanoparticles as high-performance cathodes for room-temperature liquid metal batteries. <i>Scripta Materialia</i> , 2022, 217, 114792.	2.6	10
144	Nickel-rich and cobalt-free layered oxide cathode materials for lithium ion batteries. <i>Energy Storage Materials</i> , 2022, 50, 274-307.	9.5	72
145	Low-temperature water electrolysis: fundamentals, progress, and new strategies. <i>Materials Advances</i> , 2022, 3, 5598-5644.	2.6	50
146	Nitrogen and phosphorus co-doped carbon for improving capacity and rate performances of potassium ion batteries. <i>FlatChem</i> , 2022, , 100398.	2.8	7

#	ARTICLE	IF	CITATIONS
147	Zeolitic imidazolate framework-8 modified cathode promotes microbial electrosynthesis from carbon dioxide. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 23787-23796.	3.8	6
148	A high-performance pseudocapacitive negatrod for lithium-ion capacitor based on a tetrathiafulvalene-cobalt metal-organic framework. <i>Electrochimica Acta</i> , 2022, 426, 140828.	2.6	3
149	Experimental evaluation of vortex tube and its application in a novel trigenerative compressed air energy storage system. <i>Energy Conversion and Management</i> , 2022, 268, 115972.	4.4	15
150	The nitrogen-doped carbon coated Na ₄ MnV(PO ₄) ₃ as a high electrochemical performance cathode material for sodium-ion batteries. <i>Applied Surface Science</i> , 2022, 601, 154218.	3.1	18
151	A system for recharging Zn-air battery with high reversibility using a water-in-salt electrolyte. <i>Journal of Energy Storage</i> , 2022, 54, 105265.	3.9	1
152	Provision of Ancillary Services by Wind Generators coupled with Energy Storage Systems: a real Italian Case Study. , 2022, , .		0
153	Exploring the interaction between renewables and energy storage for zero-carbon electricity systems. <i>Energy</i> , 2022, 261, 125247.	4.5	13
154	A comprehensive state-of-the-art review of electrochemical battery storage systems for power grids. <i>International Journal of Energy Research</i> , 2022, 46, 17786-17812.	2.2	13
155	Advanced aqueous proton batteries: working mechanism, key materials, challenges and prospects. <i>EnergyChem</i> , 2022, 4, 100092.	10.1	30
156	Achieving high-energy and long-cycling aqueous zinc-metal batteries by highly reversible insertion mechanisms in Ti-substituted Na _{0.44} MnO ₂ cathode. <i>Chemical Engineering Journal</i> , 2023, 451, 139059.	6.6	13
157	A novel ionic liquid-based electrolyte assisting the high performance of low-temperature supercapacitors. <i>Journal of Materials Chemistry A</i> , 2022, 10, 18374-18382.	5.2	17
158	Principles of the Battery Data Genome. <i>Joule</i> , 2022, 6, 2253-2271.	11.7	26
159	Assessment and management of health status in full life cycle of echelon utilization for retired power lithium batteries. <i>Journal of Cleaner Production</i> , 2022, 379, 134583.	4.6	26
160	Role of digitalization in energy storage technological innovation: Evidence from China. <i>Renewable and Sustainable Energy Reviews</i> , 2023, 171, 113014.	8.2	36
161	High Conductive Anion Exchange Membranes from All-Carbon Twisted Intrinsic Microporous Polymers. <i>Macromolecules</i> , 2022, 55, 10713-10722.	2.2	12
162	Sb-Cu alloy cathode with a novel lithiation mechanism of ternary intermetallic formation: Enabling high energy density and superior rate capability of liquid metal battery. <i>Journal of Energy Chemistry</i> , 2023, 78, 393-400.	7.1	4
163	Anode-free Na metal batteries developed by nearly fully reversible Na plating on the Zn surface. <i>Nanoscale</i> , 2023, 15, 3255-3262.	2.8	11
164	Research trends on minimizing the size of noble metal catalysts for Li-CO ₂ batteries: From nanoparticle to single atom. <i>Korean Journal of Chemical Engineering</i> , 2023, 40, 461-472.	1.2	3

#	ARTICLE	IF	CITATIONS
165	Tuning Discharge Behavior of Hollandite MnO_2 in Hydrated Zinc Ion Battery by Transition Metal Substitution. <i>Journal of Physical Chemistry C</i> , 2023, 127, 907-918.	1.5	2
166	Variable load modes and operation characteristics of closed Brayton cycle pumped thermal electricity storage system with liquid-phase storage. <i>Renewable Energy</i> , 2023, 203, 715-730.	4.3	1
167	Impact of uncertainty on optimal battery operation for price arbitrage and peak shaving: From perspectives of analytical solutions and examples. <i>Journal of Energy Storage</i> , 2023, 62, 106909.	3.9	0
168	Determination of the tortuosity and contact resistances in thick graphite anodes via electrochemical impedance spectroscopy. <i>Journal of Power Sources</i> , 2023, 569, 233003.	4.0	1
169	Investigation on the performance of fine iron ore particles for energy storage applications in a novel CLC reactor. <i>Fuel Processing Technology</i> , 2023, 245, 107755.	3.7	0
170	Efficiency characterization of 26 residential photovoltaic battery storage systems. <i>Journal of Energy Storage</i> , 2023, 65, 107299.	3.9	1
171	Recent electrochemical-energy-storage applications of metal-organic frameworks featuring iron-series elements (Fe, Co, and Ni). <i>Journal of Energy Storage</i> , 2023, 65, 107217.	3.9	5
173	Sn promotes formate production to enhance microbial electrosynthesis of acetate via indirect electron transport. <i>Biochemical Engineering Journal</i> , 2023, 192, 108842.	1.8	5
174	A Survey on Energy Storage: Techniques and Challenges. <i>Energies</i> , 2023, 16, 2271.	1.6	12
175	Construction of Three-Dimensional $\text{Co}(\text{PO}_3)_2/\text{Cu}_3\text{P}$ Heterostructure for High-Rate Supercapacitors. <i>ACS Applied Energy Materials</i> , 2023, 6, 2945-2953.	2.5	6
176	Private and External Costs and Benefits of Replacing High-Emitting Peaker Plants with Batteries. <i>Environmental Science & Technology</i> , 2023, 57, 4992-5002.	4.6	1
177	A survey of second-life batteries based on techno-economic perspective and applications-based analysis. , 2023, 2, .		8
179	The economic value of hybrid battery swapping stations with second life of batteries. , 2023, 5, 100066.		3
180	Recent advances in porous carbon nanosheets for high-performance metal-ion capacitors. <i>Chemical Engineering Journal</i> , 2023, 466, 143077.	6.6	18
185	Amorphous Carbon with a Graphitic Pattern Derived from Biomass for Supercapacitor Applications. <i>Green Energy and Technology</i> , 2023, , 179-221.	0.4	0
189	Battery Cross-Operation-Condition Lifetime Prediction via Interpretable Feature Engineering Assisted Adaptive Machine Learning. <i>ACS Energy Letters</i> , 2023, 8, 3269-3279.	8.8	8
190	A new class of pseudocapacitive electrode materials for electrochemical energy storage in rechargeable batteries. , 2023, , 181-224.		0
196	Mn-based cathode materials for rechargeable batteries. <i>Science China Chemistry</i> , 2024, 67, 87-105.	4.2	3

#	ARTICLE	IF	CITATIONS
216	Fabrication of highly effective electrodes for iron chromium redox flow battery. Nano Research, 0, , .	5.8	0
217	Keystones of green smart cityâ€™framework, e-waste, and their impact on the environmentâ€™a review. Ionics, 2024, 30, 1267-1289.	1.2	0
224	Surpassing water-splitting potential in aqueous redox flow batteries: insights from kinetics and thermodynamics. , 2024, 2, 522-544.		0