

The path towards sustainable energy

Nature Materials

16, 16-22

DOI: [10.1038/nmat4834](https://doi.org/10.1038/nmat4834)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Impacts of interfacial charge transfer on nanoparticle electrocatalytic activity towards oxygen reduction. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 9336-9348.	1.3	49
2	Bismuth chalcogenide compounds $\text{Bi}_2\text{X}-3$ (X=O, S, Se): Applications in electrochemical energy storage. <i>Nano Energy</i> , 2017, 34, 356-366.	8.2	179
3	Tailoring Anisotropic Li-Ion Transport Tunnels on Orthogonally Arranged Li-Rich Layered Oxide Nanoplates Toward High-Performance Li-Ion Batteries. <i>Nano Letters</i> , 2017, 17, 1670-1677.	4.5	128
4	Electrokinetic Energy Conversion in Self-Assembled 2D Nanofluidic Channels with Janus Nanobuilding Blocks. <i>Advanced Materials</i> , 2017, 29, 1700177.	11.1	170
5	Anionic Regulated NiFe (Oxy)Sulfide Electrocatalysts for Water Oxidation. <i>Small</i> , 2017, 13, 1700610.	5.2	150
6	Freestanding Gold/Graphene-Oxide/Manganese Oxide Microsupercapacitor Displaying High Areal Energy Density. <i>ChemSusChem</i> , 2017, 10, 2736-2741.	3.6	14
7	Photovoltaic Monocrystalline Silicon Waste-Derived Hierarchical Silicon/Flake Graphite/Carbon Composite as Low-Cost and High-Capacity Anode for Lithium-Ion Batteries. <i>ChemistrySelect</i> , 2017, 2, 3479-3489.	0.7	22
8	Graphene oxide templated nitrogen-doped carbon nanosheets with superior rate capability for sodium ion batteries. <i>Carbon</i> , 2017, 122, 82-91.	5.4	43
9	Nanoscale perspective: Materials designs and understandings in lithium metal anodes. <i>Nano Research</i> , 2017, 10, 4003-4026.	5.8	130
10	A Z-scheme magnetic recyclable $\text{Ag}/\text{AgBr}@\text{CoFe}_2\text{O}_4$ photocatalyst with enhanced photocatalytic performance for pollutant and bacterial elimination. <i>RSC Advances</i> , 2017, 7, 30845-30854.	1.7	40
11	Promotion of Electrocatalytic Hydrogen Evolution Reaction on Nitrogen-Doped Carbon Nanosheets with Secondary Heteroatoms. <i>ACS Nano</i> , 2017, 11, 7293-7300.	7.3	357
12	Anti-Perovskite Li-Battery Cathode Materials. <i>Journal of the American Chemical Society</i> , 2017, 139, 9645-9649.	6.6	48
13	Development of non-oxide semiconductors as light harvesting materials in photocatalytic and photoelectrochemical water splitting. <i>Dalton Transactions</i> , 2017, 46, 10529-10544.	1.6	62
14	Design Strategies toward Advanced MOF-Derived Electrocatalysts for Energy Conversion Reactions. <i>Advanced Energy Materials</i> , 2017, 7, 1700518.	10.2	539
15	Statistical mechanical modeling of the transition Stage II to Stage I of Li-ion storage in graphite. A priori vs induced heterogeneity. <i>Electrochimica Acta</i> , 2017, 245, 569-574.	2.6	16
16	Single-Site Active Cobalt-Based Photocatalyst with a Long Carrier Lifetime for Spontaneous Overall Water Splitting. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 9312-9317.	7.2	393
17	Li Electrochemical Tuning of Metal Oxide for Highly Selective CO_2 Reduction. <i>ACS Nano</i> , 2017, 11, 6451-6458.	7.3	123
18	Alternating Voltage Introduced [001]-Oriented $\text{Li}_x\text{-MoO}_3$ Microrods for High-Performance Sodium-ion Batteries. <i>Electrochimica Acta</i> , 2017, 245, 949-956.	2.6	22

#	ARTICLE	IF	CITATIONS
19	Introduction of Carbonyl Groups: An Approach to Enhance Electrochemical Performance of Conjugated Dicarboxylate for Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2017, 164, A1720-A1725.	1.3	13
20	Single-Site Active Cobalt-Based Photocatalyst with a Long Carrier Lifetime for Spontaneous Overall Water Splitting. <i>Angewandte Chemie</i> , 2017, 129, 9440-9445.	1.6	95
21	A Toolbox for Lithium-Sulfur Battery Research: Methods and Protocols. <i>Small Methods</i> , 2017, 1, 1700134.	4.6	230
22	Molybdenum Disulfide-Black Phosphorus Hybrid Nanosheets as a Superior Catalyst for Electrochemical Hydrogen Evolution. <i>Nano Letters</i> , 2017, 17, 4311-4316.	4.5	211
23	Three-Dimensional Binder-Free Nanoarchitectures for Advanced Pseudocapacitors. <i>Advanced Materials</i> , 2017, 29, .	11.1	97
24	Facile preparation and promising lithium storage ability of LiFeO_2 /porous carbon nanocomposite. <i>Journal of Alloys and Compounds</i> , 2017, 711, 8-14.	2.8	13
25	Pyridine-decorated carbon nanotubes as a metal-free heterogeneous catalyst for mild CO_2 reduction to methanol with hydroboranes. <i>Catalysis Science and Technology</i> , 2017, 7, 5833-5837.	2.1	15
26	A Novel Strategy to Functionalize Covalent Organic Frameworks for High-Energy Rechargeable Lithium Organic Batteries via Graft Polymerization in Nano-Channels. <i>Bulletin of the Chemical Society of Japan</i> , 2017, 90, 1382-1387.	2.0	32
27	Quantitative analysis of the PtO structure during photocatalytic water splitting by operando XAFS. <i>Journal of Materials Chemistry A</i> , 2017, 5, 20631-20634.	5.2	30
28	Electrochemical Reduction of CO_2 on $\text{Ir}_x\text{Ru}(1-x)\text{O}_2(110)$ Surfaces. <i>ACS Catalysis</i> , 2017, 7, 8502-8513.	5.5	16
29	Accelerating ion diffusion with unique three-dimensionally interconnected nanopores for self-membrane high-performance pseudocapacitors. <i>Nanoscale</i> , 2017, 9, 18311-18317.	2.8	12
30	Reviving Vibration Energy Harvesting and Self-Powered Sensing by a Triboelectric Nanogenerator. <i>Joule</i> , 2017, 1, 480-521.	11.7	748
31	Core-Shell Au@Metal-Oxide Nanoparticle Electrocatalysts for Enhanced Oxygen Evolution. <i>Nano Letters</i> , 2017, 17, 6040-6046.	4.5	135
32	Rational design of carbon-based oxygen electrocatalysts for zinc-air batteries. <i>Current Opinion in Electrochemistry</i> , 2017, 4, 45-59.	2.5	38
33	Atomic-Scale Monitoring of Electrode Materials in Lithium-Ion Batteries using In Situ Transmission Electron Microscopy. <i>Advanced Energy Materials</i> , 2017, 7, 1700709.	10.2	53
34	Regulating p-block metals in perovskite nanodots for efficient electrocatalytic water oxidation. <i>Nature Communications</i> , 2017, 8, 934.	5.8	102
35	Hierarchical Porous NC@CuCo Nitride Nanosheet Networks: Highly Efficient Bifunctional Electrocatalyst for Overall Water Splitting and Selective Electrooxidation of Benzyl Alcohol. <i>Advanced Functional Materials</i> , 2017, 27, 1704169.	7.8	267
36	In Situ Wrapping Si Nanoparticles with 2D Carbon Nanosheets as High-Areal-Capacity Anode for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 38159-38164.	4.0	83

#	ARTICLE	IF	CITATIONS
37	Nanostructured Electrode Materials for High-Energy Rechargeable Li, Na and Zn Batteries. <i>Chemistry of Materials</i> , 2017, 29, 9589-9604.	3.2	80
38	Scalable, λ -Dependent Dry-Fabrication of a Wide-Angle Plasmonic Selective Absorber for High-Efficiency Solar-Thermal Energy Conversion. <i>Advanced Materials</i> , 2017, 29, 1702156.	11.1	119
39	Interconnected binary carbon hybrids for supercapacitor electrode. <i>Electrochimica Acta</i> , 2017, 251, 293-300.	2.6	9
40	Nanostructuring Noble Metals as Unsupported Electrocatalysts for Polymer Electrolyte Fuel Cells. <i>Advanced Energy Materials</i> , 2017, 7, 1700548.	10.2	76
41	Controlling the Compositional Chemistry in Single Nanoparticles for Functional Hollow Carbon Nanospheres. <i>Journal of the American Chemical Society</i> , 2017, 139, 13492-13498.	6.6	264
42	Efficient solar-driven electrochemical CO ₂ reduction to hydrocarbons and oxygenates. <i>Energy and Environmental Science</i> , 2017, 10, 2222-2230.	15.6	145
43	A new strategy to effectively alleviate volume expansion and enhance the conductivity of hierarchical MnO@C nanocomposites for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 21699-21708.	5.2	74
44	Identifying the electrocatalytic sites of nickel disulfide in alkaline hydrogen evolution reaction. <i>Nano Energy</i> , 2017, 41, 148-153.	8.2	168
45	Metallic Transition Metal Selenide Holey Nanosheets for Efficient Oxygen Evolution Electrocatalysis. <i>ACS Nano</i> , 2017, 11, 9550-9557.	7.3	273
46	Ultrahigh-current density anodes with interconnected Li metal reservoir through overlithiation of mesoporous AlF ₃ framework. <i>Science Advances</i> , 2017, 3, e1701301.	4.7	199
47	Cornlike Ordered Mesoporous Silicon Particles Modified by Nitrogen-Doped Carbon Layer for the Application of Li-Ion Battery. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 32829-32839.	4.0	62
48	Magnetic Wood as an Effective Induction Heating Material: Magnetocaloric Effect and Thermal Insulation. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700777.	1.9	16
49	High purity Mn ₅ O ₈ nanoparticles with a high overpotential to gas evolution reactions for high voltage aqueous sodium-ion electrochemical storage. <i>Frontiers in Energy</i> , 2017, 11, 383-400.	1.2	19
50	Silver Nanoparticles with Surface-Bonded Oxygen for Highly Selective CO ₂ Reduction. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 8529-8534.	3.2	58
51	Columnar Lithium Metal Anodes. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 14207-14211.	7.2	199
52	Columnar Lithium Metal Anodes. <i>Angewandte Chemie</i> , 2017, 129, 14395-14399.	1.6	51
53	Hierarchically Structured Lithium-Rich Layered Oxide with Exposed Active {010} Planes as High-Rate-Capability Cathode for Lithium-Ion Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 8970-8981.	3.2	44
54	Reactivation of dead sulfide species in lithium polysulfide flow battery for grid scale energy storage. <i>Nature Communications</i> , 2017, 8, 462.	5.8	48

#	ARTICLE	IF	CITATIONS
55	Stabilizing the Performance of High-Capacity Sulfur Composite Electrodes by a New Gel Polymer Electrolyte Configuration. <i>ChemSusChem</i> , 2017, 10, 3490-3496.	3.6	20
56	Highly stable aromatic poly (ether sulfone) composite ion exchange membrane for vanadium flow battery. <i>Journal of Membrane Science</i> , 2017, 541, 465-473.	4.1	50
57	Hierarchical VS ₂ Nanosheet Assemblies: A Universal Host Material for the Reversible Storage of Alkali Metal Ions. <i>Advanced Materials</i> , 2017, 29, 1702061.	11.1	320
58	Confined Sulfur in 3D MXene/Reduced Graphene Oxide Hybrid Nanosheets for Lithium-Sulfur Battery. <i>Chemistry - A European Journal</i> , 2017, 23, 12613-12619.	1.7	167
59	Facile synthesis of micro-sized MnO/C composites with high tap density as high performance anodes for Li-ion batteries. <i>Chemical Engineering Journal</i> , 2017, 328, 591-598.	6.6	118
60	3D Self-Supported Fe-Doped Ni ₂ P Nanosheet Arrays as Bifunctional Catalysts for Overall Water Splitting. <i>Advanced Functional Materials</i> , 2017, 27, 1702513.	7.8	454
61	Modelling pH and potential in dynamic structures of the water/Pt(111) interface on the atomic scale. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 23505-23514.	1.3	48
62	Solar-driven simultaneous steam production and electricity generation from salinity. <i>Energy and Environmental Science</i> , 2017, 10, 1923-1927.	15.6	380
63	Integration of inverse nanocone array based bismuth vanadate photoanodes and bandgap-tunable perovskite solar cells for efficient self-powered solar water splitting. <i>Journal of Materials Chemistry A</i> , 2017, 5, 19091-19097.	5.2	55
64	Self-Cleaning Catalyst Electrodes for Stabilized CO ₂ Reduction to Hydrocarbons. <i>Angewandte Chemie</i> , 2017, 129, 13315-13319.	1.6	38
65	Air-Stable Porous Fe ₂ N Encapsulated in Carbon Microboxes with High Volumetric Lithium Storage Capacity and a Long Cycle Life. <i>Nano Letters</i> , 2017, 17, 5740-5746.	4.5	132
66	Ultrathin Manganese-Based Metal-Organic Framework Nanosheets: Low-Cost and Energy-Dense Lithium Storage Anodes with the Coexistence of Metal and Ligand Redox Activities. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 29829-29838.	4.0	131
67	A novel coronene//Na ₂ Ti ₃ O ₇ dual-ion battery. <i>Nano Energy</i> , 2017, 40, 233-239.	8.2	103
68	Self-Cleaning Catalyst Electrodes for Stabilized CO ₂ Reduction to Hydrocarbons. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 13135-13139.	7.2	126
69	Review-Promises and Challenges of In Situ Transmission Electron Microscopy Electrochemical Techniques in the Studies of Lithium Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2017, 164, A2110-A2123.	1.3	34
70	Nonstoichiometric Cu _x In _y S Quantum Dots for Efficient Photocatalytic Hydrogen Evolution. <i>ChemSusChem</i> , 2017, 10, 4833-4838.	3.6	45
71	Novel Ni(S _{0.49} Se _{0.51}) ₂ porous flakes array on carbon fiber cloth for efficient hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 30119-30125.	3.8	22
72	Synthesis of Hierarchical Sisal-Like V ₂ O ₅ with Exposed Stable {001} Facets as Long Life Cathode Materials for Advanced Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 43681-43687.	4.0	42

#	ARTICLE	IF	CITATIONS
73	An Ideal Molecular Sieve for Acetylene Removal from Ethylene with Record Selectivity and Productivity. <i>Advanced Materials</i> , 2017, 29, 1704210.	11.1	310
74	General Oriented Synthesis of Precise Carbon-Confined Nanostructures by Low-Pressure Vapor Superassembly and Controlled Pyrolysis. <i>Nano Letters</i> , 2017, 17, 7773-7781.	4.5	53
75	Balancing activity, stability and conductivity of nanoporous core-shell iridium/iridium oxide oxygen evolution catalysts. <i>Nature Communications</i> , 2017, 8, 1449.	5.8	250
76	A high performance supercapacitor based on decoration of MoS ₂ /reduced graphene oxide with NiO nanoparticles. <i>RSC Advances</i> , 2017, 7, 52772-52781.	1.7	65
77	Spinel/Layered Heterostructured Lithium-Rich Oxide Nanowires as Cathode Material for High-Energy Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 41210-41223.	4.0	69
78	Recent progress in conversion reaction metal oxide anodes for Li-ion batteries. <i>Materials Chemistry Frontiers</i> , 2017, 1, 2213-2242.	3.2	262
79	Lithium Iron Orthosilicate Cathode: Progress and Perspectives. <i>ACS Energy Letters</i> , 2017, 2, 1771-1781.	8.8	57
80	Prawn Shell Derived Chitin Nanofiber Membranes as Advanced Sustainable Separators for Li/Na-Ion Batteries. <i>Nano Letters</i> , 2017, 17, 4894-4901.	4.5	96
81	Benchmarking Pt and Pt-lanthanide sputtered thin films for oxygen electroreduction: fabrication and rotating disk electrode measurements. <i>Electrochimica Acta</i> , 2017, 247, 708-721.	2.6	39
82	A self-cleaning Li-S battery enabled by a bifunctional redox mediator. <i>Journal of Power Sources</i> , 2017, 361, 203-210.	4.0	46
83	Controlled Synthesis of Unique Porous FeSe ₂ Nanomesh Arrays towards Efficient Hydrogen Evolution Reaction. <i>Electrochimica Acta</i> , 2017, 247, 435-442.	2.6	24
84	Efficient Activation of Li ₂ S by Transition Metal Phosphides Nanoparticles for Highly Stable Lithium-Sulfur Batteries. <i>ACS Energy Letters</i> , 2017, 2, 1711-1719.	8.8	252
85	Tunable Cu Enrichment Enables Designer Syngas Electrosynthesis from CO ₂ . <i>Journal of the American Chemical Society</i> , 2017, 139, 9359-9363.	6.6	260
87	Use machine learning to find energy materials. <i>Nature</i> , 2017, 552, 23-27.	13.7	85
88	Track batteries degrading in real time. <i>Nature</i> , 2017, 546, 469-470.	13.7	98
89	Graphene hybridization for energy storage applications. <i>Chemical Society Reviews</i> , 2018, 47, 3189-3216.	18.7	297
90	Progress of the Interface Design in All-Solid-State Li-S Batteries. <i>Advanced Functional Materials</i> , 2018, 28, 1707533.	7.8	182
91	A Metal-Organic Framework with Optimized Porosity and Functional Sites for High Gravimetric and Volumetric Methane Storage Working Capacities. <i>Advanced Materials</i> , 2018, 30, e1704792.	11.1	109

#	ARTICLE	IF	CITATIONS
92	Coralloid Carbon Fiber-Based Composite Lithium Anode for Robust Lithium Metal Batteries. <i>Joule</i> , 2018, 2, 764-777.	11.7	609
93	Polydopamine-Derived, In Situ Doped 3D Mesoporous Carbons for Highly Efficient Oxygen Reduction. <i>ChemNanoMat</i> , 2018, 4, 417-422.	1.5	19
94	Nickel Cobalt Sulfide Double-Shelled Hollow Nanospheres as Superior Bifunctional Electrocatalysts for Photovoltaics and Alkaline Hydrogen Evolution. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 9379-9389.	4.0	80
95	Facile synthesis of porous dendritic Pt ₆₈ Ag ₃₂ nanodandelions for greatly boosting electrocatalytic activity towards oxygen reduction and hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 6096-6106.	3.8	9
96	High-rate, long cycle-life Li-ion battery anodes enabled by ultrasmall tin-based nanoparticles encapsulation. <i>Energy Storage Materials</i> , 2018, 14, 169-178.	9.5	47
97	Novel Deep-Eutectic-Solvent-Infused Carbon Nanofiber Networks as High Power Density Green Battery Cathodes. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 15742-15750.	4.0	28
98	Solar Charging Batteries: Advances, Challenges, and Opportunities. <i>Joule</i> , 2018, 2, 1217-1230.	11.7	229
99	3D Graphene Network Encapsulating Mesoporous ZnS Nanospheres as High-Performance Anode Material in Sodium-Ion Batteries. <i>ChemElectroChem</i> , 2018, 5, 1552-1558.	1.7	23
100	Observation of oxo-bridged yttrium in TiO ₂ nanostructures and their enhanced photocatalytic hydrogen generation under UV/Visible light irradiations. <i>Materials Research Bulletin</i> , 2018, 104, 212-219.	2.7	20
101	Self-assembled inorganic clusters of semiconducting quantum dots for effective solar hydrogen evolution. <i>Chemical Communications</i> , 2018, 54, 4858-4861.	2.2	14
102	Theoretical Design of the Absorber for Intermediate Band Solar Cells from Group-IV (Si, Ge, and Tl) ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.7	8
103	A new polyoxovanadate-based metal-organic framework: synthesis, structure and photo/electro-catalytic properties. <i>New Journal of Chemistry</i> , 2018, 42, 7247-7253.	1.4	26
104	DNA metallization: principles, methods, structures, and applications. <i>Chemical Society Reviews</i> , 2018, 47, 4017-4072.	18.7	156
105	Chemical-to-Electricity Carbon: Water Device. <i>Advanced Materials</i> , 2018, 30, e1707635.	11.1	45
106	Precursor-Based Synthesis of Porous Colloidal Particles towards Highly Efficient Catalysts. <i>Chemistry - A European Journal</i> , 2018, 24, 10280-10290.	1.7	9
107	A covalent heterostructure of monodisperse Ni ₂ P immobilized on N, P-co-doped carbon nanosheets for high performance sodium/lithium storage. <i>Nano Energy</i> , 2018, 48, 510-517.	8.2	139
108	Triaxial Nanocables of Conducting Polypyrrole@SnS ₂ @Carbon Nanofiber Enabling Significantly Enhanced Li-Ion Storage. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 13581-13587.	4.0	49
109	Controlled synthesis of nanoplate, nanoprism and nanopyramid-shaped CdSe decorated on porous TiO ₂ photocatalysts for visible-light-driven hydrogen evolution. <i>Ceramics International</i> , 2018, 44, 12555-12563.	2.3	26

#	ARTICLE	IF	CITATIONS
110	Toward an Effective Control of the H ₂ to CO Ratio of Syngas through CO ₂ Electroreduction over Immobilized Gold Nanoparticles on Layered Titanate Nanosheets. ACS Catalysis, 2018, 8, 4364-4374.	5.5	69
111	Ferromagnetic Nanoparticle-Assisted Polysulfide Trapping for Enhanced Lithium-Sulfur Batteries. Advanced Functional Materials, 2018, 28, 1800563.	7.8	109
112	Performance modulation of contact electrification nanogenerators by controlling the doping concentration of fluorine-doped tin oxide. Ceramics International, 2018, 44, 12477-12482.	2.3	7
113	Toward a Low-Cost Alkaline Zinc-Iron Flow Battery with a Polybenzimidazole Custom Membrane for Stationary Energy Storage. IScience, 2018, 3, 40-49.	1.9	119
114	Consistency in the development of performance assessment methods in the maritime domain. WMU Journal of Maritime Affairs, 2018, 17, 71-90.	1.4	10
115	WO ₃ /g-C ₃ N ₄ two-dimensional composites for visible-light driven photocatalytic hydrogen production. International Journal of Hydrogen Energy, 2018, 43, 4845-4855.	3.8	96
116	Solid-State Sodium Batteries. Advanced Energy Materials, 2018, 8, 1703012.	10.2	478
117	Visualizing Battery Reactions and Processes by Using In Situ and In Operando Microscopies. Chem, 2018, 4, 438-465.	5.8	108
118	Novel Co(OH) ₂ with cotton-like structure as anode material for alkaline secondary batteries. IOP Conference Series: Materials Science and Engineering, 2018, 292, 012037.	0.3	0
119	Recent Advances in Layered Ti ₃ C ₂ T _x MXene for Electrochemical Energy Storage. Small, 2018, 14, e1703419.	5.2	729
120	Understanding Catalytic Activity Trends in the Oxygen Reduction Reaction. Chemical Reviews, 2018, 118, 2302-2312.	23.0	1,666
121	Carbon shelled porous SnO ₂ -r nanosheet arrays as advanced anodes for lithium-ion batteries. Energy Storage Materials, 2018, 13, 303-311.	9.5	108
122	Nitroxide radical polymers a versatile material class for high-tech applications. Polymer Chemistry, 2018, 9, 1479-1516.	1.9	123
123	Porphyrin-Based Symmetric Redox-Flow Batteries towards Cold-Climate Energy Storage. Angewandte Chemie, 2018, 130, 3212-3216.	1.6	32
124	Conversion-Based Cathode Materials for Rechargeable Sodium Batteries. Advanced Energy Materials, 2018, 8, 1702646.	10.2	62
125	Recent Progress on Multimetal Oxide Catalysts for the Oxygen Evolution Reaction. Advanced Energy Materials, 2018, 8, 1702774.	10.2	615
126	Advanced Phosphorus-Based Materials for Lithium/Sodium-Ion Batteries: Recent Developments and Future Perspectives. Advanced Energy Materials, 2018, 8, 1703058.	10.2	197
127	Three-dimensional supramolecular phosphomolybdate architecture-derived Mo-based electrocatalytic system for overall water splitting. Inorganic Chemistry Frontiers, 2018, 5, 819-826.	3.0	20

#	ARTICLE	IF	CITATIONS
128	Molecular Modeling Analysis of CO ₂ Absorption by Glymes. Journal of Physical Chemistry B, 2018, 122, 1948-1957.	1.2	4
129	Isolated Ni single atoms in graphene nanosheets for high-performance CO ₂ reduction. Energy and Environmental Science, 2018, 11, 893-903.	15.6	811
130	Ion Solvation and Dynamics at Solid Electrolyte Interphases: A Long Way from Bulk?. Journal of Physical Chemistry C, 2018, 122, 3219-3232.	1.5	21
131	A Type of 1 nm Molybdenum Carbide Confined within Carbon Nanomesh as Highly Efficient Bifunctional Electrocatalyst. Advanced Functional Materials, 2018, 28, 1705967.	7.8	78
132	Hydrogen Evolution at the Buried Interface between Pt Thin Films and Silicon Oxide Nanomembranes. ACS Catalysis, 2018, 8, 1767-1778.	5.5	48
133	Comprehensive Understanding of the Spatial Configurations of CeO ₂ in NiO for the Electrocatalytic Oxygen Evolution Reaction: Embedded or Surface-Loaded. Advanced Functional Materials, 2018, 28, 1706056.	7.8	141
134	A crystalline and 3D periodically ordered mesoporous quaternary semiconductor for photocatalytic hydrogen generation. Nanoscale, 2018, 10, 3225-3234.	2.8	25
135	Manipulating the Redox Kinetics of Li-S Chemistry by Tellurium Doping for Improved Li-S Batteries. ACS Energy Letters, 2018, 3, 420-427.	8.8	146
136	Advances in Manganese-Based Oxides Cathodic Electrocatalysts for Li-Air Batteries. Advanced Functional Materials, 2018, 28, 1704973.	7.8	120
137	Hybrid electrolyte with robust garnet-ceramic electrolyte for lithium anode protection in lithium-oxygen batteries. Nano Research, 2018, 11, 3434-3441.	5.8	49
138	A collaborative strategy for stable lithium metal anodes by using three-dimensional nitrogen-doped graphene foams. Nanoscale, 2018, 10, 4675-4679.	2.8	36
139	Gold-Copper Aerogels with Intriguing Surface Electronic Modulation as Highly Active and Stable Electrocatalysts for Oxygen Reduction and Borohydride Oxidation. ChemSusChem, 2018, 11, 1354-1364.	3.6	31
140	Defining a Materials Database for the Design of Copper Binary Alloy Catalysts for Electrochemical CO ₂ Conversion. Advanced Materials, 2018, 30, e1704717.	11.1	150
141	Porphyrin-Based Symmetric Redox-Flow Batteries towards Cold-Climate Energy Storage. Angewandte Chemie - International Edition, 2018, 57, 3158-3162.	7.2	96
142	Kern-Schale-Strukturierung rein metallischer Aerogele für eine hocheffiziente Nutzung von Platin für die Sauerstoffreduktion. Angewandte Chemie, 2018, 130, 3014-3018.	1.6	7
143	Expanding pore sizes of ZIF-8-derived nitrogen-doped microporous carbon <i>in situ</i> C ₆₀ embedding: toward improved anode performance for the lithium-ion battery. Nanoscale, 2018, 10, 2473-2480.	2.8	40
144	Amine-Modulated/Engineered Interfaces of NiMo Electrocatalysts for Improved Hydrogen Evolution Reaction in Alkaline Solutions. ACS Applied Materials & Interfaces, 2018, 10, 1728-1733.	4.0	65
145	Generalization of Porous Electrode Theory for Noninteger Dimensional Space. Journal of Physical Chemistry C, 2018, 122, 557-565.	1.5	12

#	ARTICLE	IF	CITATIONS
146	Nitrogen/sulfur co-doped hollow carbon nanofiber anode obtained from polypyrrole with enhanced electrochemical performance for Na-ion batteries. <i>Science Bulletin</i> , 2018, 63, 126-132.	4.3	26
147	Protic pyrazolium ionic liquids for efficient chemical fixation of CO ₂ : design, synthesis, and catalysis. <i>Molecular Systems Design and Engineering</i> , 2018, 3, 348-356.	1.7	16
148	Core-Shell Structuring of Pure Metallic Aerogels towards Highly Efficient Platinum Utilization for the Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 2963-2966.	7.2	154
149	Microwave-Irradiation-Assisted Combustion toward Modified Graphite as Lithium Ion Battery Anode. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 909-914.	4.0	53
150	Visualizing ion diffusion in battery systems by fluorescence microscopy: A case study on the dissolution of LiMn ₂ O ₄ . <i>Nano Energy</i> , 2018, 45, 68-74.	8.2	25
151	Sodium Naphthalene Dicarboxylate Anode Material for Inorganic-Organic Hybrid Rechargeable Sodium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2018, 165, A175-A180.	1.3	24
152	Metal ion cycling of Cu foil for selective C-C coupling in electrochemical CO ₂ reduction. <i>Nature Catalysis</i> , 2018, 1, 111-119.	16.1	600
153	High-Purity Lithium Metal Films from Aqueous Mineral Solutions. <i>ACS Omega</i> , 2018, 3, 181-187.	1.6	24
154	Graphene aerogels for efficient energy storage and conversion. <i>Energy and Environmental Science</i> , 2018, 11, 772-799.	15.6	435
155	Multifunctional NiTiO ₃ nanocoating fabrication based on the dual-Kirkendall effect enabling a stable cathode/electrolyte interface for nickel-rich layered oxides. <i>Journal of Materials Chemistry A</i> , 2018, 6, 2643-2652.	5.2	16
156	Fabrication of a Single-Atom Platinum Catalyst for the Hydrogen Evolution Reaction: A New Protocol by Utilization of H ₂ /MoO ₃ with Plasmon Resonance. <i>ChemCatChem</i> , 2018, 10, 946-950.	1.8	43
157	Splitting Water by Electrochemistry and Artificial Photosynthesis: Excellent Science but a Nightmare of Translation?. <i>Chemical Record</i> , 2018, 18, 969-972.	2.9	14
158	Gallic acid-assisted synthesis of Pd uniformly anchored on porous N-rGO as efficient electrocatalyst for microbial fuel cells. <i>Dalton Transactions</i> , 2018, 47, 1442-1450.	1.6	28
159	Oxygen vacancy rich Cu ₂ O based composite material with nitrogen doped carbon as matrix for photocatalytic H ₂ production and organic pollutant removal. <i>Dalton Transactions</i> , 2018, 47, 2031-2038.	1.6	46
160	Strategies for Enhancing the Electrocatalytic Activity of M-N/C Catalysts for the Oxygen Reduction Reaction. <i>Topics in Catalysis</i> , 2018, 61, 1077-1100.	1.3	27
161	Electrocatalytic and photocatalytic hydrogen evolution integrated with organic oxidation. <i>Chemical Communications</i> , 2018, 54, 5943-5955.	2.2	142
162	A porous nickel cyclotetraphosphate nanosheet as a new acid-stable electrocatalyst for efficient hydrogen evolution. <i>Nanoscale</i> , 2018, 10, 9856-9861.	2.8	29
163	Enhancing Catalyzed Decomposition of Na ₂ CO ₃ with Co ₂ MnO ₄ Nanowire-Decorated Carbon Fibers for Advanced Na-CO ₂ Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 17240-17248.	4.0	49

#	ARTICLE	IF	CITATIONS
164	Fabrication and theoretical investigation of MoS ₂ -Co ₃ S ₄ hybrid hollow structure as electrode material for lithium-ion batteries and supercapacitors. <i>Chemical Engineering Journal</i> , 2018, 347, 607-617.	6.6	81
165	A review of fractional-order techniques applied to lithium-ion batteries, lead-acid batteries, and supercapacitors. <i>Journal of Power Sources</i> , 2018, 390, 286-296.	4.0	367
166	A manganese-based hydrogen battery with potential for grid-scale energy storage. <i>Nature Energy</i> , 2018, 3, 428-435.	19.8	325
167	Effects of Nanofiber Architecture and Antimony Doping on the Performance of Lithium-Rich Layered Oxides: Enhancing Lithium Diffusivity and Lattice Oxygen Stability. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 16561-16571.	4.0	71
168	What Should We Make with CO ₂ and How Can We Make It?. <i>Joule</i> , 2018, 2, 825-832.	11.7	975
169	Rationally designed sea snake structure based triboelectric nanogenerators for effectively and efficiently harvesting ocean wave energy with minimized water screening effect. <i>Nano Energy</i> , 2018, 48, 421-429.	8.2	195
170	Highly selective charged porous membranes with improved ion conductivity. <i>Nano Energy</i> , 2018, 48, 353-360.	8.2	43
171	Dual Tuning of Ni-Co-A (A = P, Se, O) Nanosheets by Anion Substitution and Holey Engineering for Efficient Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2018, 140, 5241-5247.	6.6	461
172	Recent progress in hydrogen production from formic acid decomposition. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 7055-7071.	3.8	155
173	Preparation of electrocatalysts using a thiol-amine solution processing method. <i>Dalton Transactions</i> , 2018, 47, 5137-5143.	1.6	5
174	Toward Escherichia coli bacteria machine for water oxidation. <i>Photosynthesis Research</i> , 2018, 136, 257-267.	1.6	2
175	Studying about applied force and the output performance of sliding-mode triboelectric nanogenerators. <i>Nano Energy</i> , 2018, 48, 292-300.	8.2	60
176	Hollow PdCo alloy nanospheres with mesoporous shells as high-performance catalysts for methanol oxidation. <i>Journal of Colloid and Interface Science</i> , 2018, 522, 264-271.	5.0	61
177	A rational microstructure design of SnS ₂ -carbon composites for superior sodium storage performance. <i>Nanoscale</i> , 2018, 10, 7999-8008.	2.8	35
178	Self-assembled superstructure of carbon-wrapped, single-crystalline Cu ₃ P porous nanosheets: One-step synthesis and enhanced Li-ion battery anode performance. <i>Energy Storage Materials</i> , 2018, 15, 75-81.	9.5	75
179	Recent advances in functionalized micro and mesoporous carbon materials: synthesis and applications. <i>Chemical Society Reviews</i> , 2018, 47, 2680-2721.	18.7	737
180	Facile template-free synthesis of uniform carbon-confined V ₂ O ₃ hollow spheres for stable and fast lithium storage. <i>Journal of Materials Chemistry A</i> , 2018, 6, 6220-6224.	5.2	47
181	Enabling real-time detection of electrochemical desorption phenomena with sub-monolayer sensitivity. <i>Electrochimica Acta</i> , 2018, 268, 520-530.	2.6	53

#	ARTICLE	IF	CITATIONS
182	A functional design and synthesization for electrocatalytic hydrogen evolution material on MoS ₂ /Co ₃ S ₄ hybrid hollow nanostructure. <i>Electrochimica Acta</i> , 2018, 269, 262-273.	2.6	42
183	Understanding Selective Reduction of CO ₂ to CO on Modified Carbon Electrocatalysts. <i>ChemElectroChem</i> , 2018, 5, 1615-1621.	1.7	16
184	Exfoliated MoS ₂ with porous graphene nanosheets for enhanced electrochemical hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 13946-13952.	3.8	37
185	Hybrid Aqueous/Non-aqueous Electrolyte for Safe and High-Energy Li-Ion Batteries. <i>Joule</i> , 2018, 2, 927-937.	11.7	303
186	Fine-tuning of nano-traps in a stable metal-organic framework for highly efficient removal of propyne from propylene. <i>Journal of Materials Chemistry A</i> , 2018, 6, 6931-6937.	5.2	74
187	Importance of Surface IrO ₂ in Stabilizing RuO ₂ for Oxygen Evolution. <i>Journal of Physical Chemistry B</i> , 2018, 122, 947-955.	1.2	95
188	Cactus-like iron diphosphide@carbon nanotubes composites as advanced anode materials for lithium-ion batteries. <i>Electrochimica Acta</i> , 2018, 259, 321-328.	2.6	23
189	Nitrogen and sulfur co-doped porous carbon derived from bio-waste as a promising electrocatalyst for zinc-air battery. <i>Energy</i> , 2018, 143, 43-55.	4.5	98
190	Recent development in lithium metal anodes of liquid-state rechargeable batteries. <i>Journal of Alloys and Compounds</i> , 2018, 730, 135-149.	2.8	44
191	A strategy to deposit nano metals in multi-layer graphene for scalable synthesis of high performance anode materials in lithium ion battery. <i>Journal of Alloys and Compounds</i> , 2018, 731, 739-744.	2.8	3
192	Advances and challenges to the commercialization of organic-inorganic halide perovskite solar cell technology. <i>Materials Today Energy</i> , 2018, 7, 169-189.	2.5	231
193	Hierarchical Cu ₂ O foam/g-C ₃ N ₄ photocathode for photoelectrochemical hydrogen production. <i>Applied Surface Science</i> , 2018, 427, 907-916.	3.1	98
194	Light-Induced Surface Reactions at the Bismuth Vanadate/Potassium Phosphate Interface. <i>Journal of Physical Chemistry B</i> , 2018, 122, 801-809.	1.2	29
195	Hierarchically Porous, Ultrathick, "Breathable"-Wood-Derived Cathode for Lithium-Oxygen Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1701203.	10.2	161
196	Colloidal paradigm in supercapattery electrode systems. <i>Nanotechnology</i> , 2018, 29, 024003.	1.3	29
197	Phosphorus-Doped MoS ₂ Nanosheets Supported on Carbon Cloths as Efficient Hydrogen-Generation Electrocatalysts. <i>ChemCatChem</i> , 2018, 10, 1571-1577.	1.8	55
198	Litchi-like porous Fe/N/C spheres with atomically dispersed Fe _x promoted by sulfur as highly efficient oxygen electrocatalysts for Zn-air batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 4605-4610.	5.2	54
199	Li ₂ CO ₃ : Die Achillesferse von Lithium-Luft-Batterien. <i>Angewandte Chemie</i> , 2018, 130, 3936-3949.	1.6	20

#	ARTICLE	IF	CITATIONS
200	Achillesâ€™ Heel of Lithiumâ€™ Air Batteries: Lithium Carbonate. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 3874-3886.	7.2	186
201	3D TiC/C Core/Shell Nanowire Skeleton for Dendriteâ€™ Free and Longâ€™ Life Lithium Metal Anode. <i>Advanced Energy Materials</i> , 2018, 8, 1702322.	10.2	237
202	Green and Facile Preparation of Carbonâ€™ Coated TiO ₂ Nanosheets for Highâ€™ Performance Sodiumâ€™ Ion Batteries. <i>Energy Technology</i> , 2018, 6, 759-765.	1.8	5
203	Aerosolâ€™ Spray Pyrolysis toward Preparation of Nanostructured Materials for Batteries and Supercapacitors. <i>Small Methods</i> , 2018, 2, 1700272.	4.6	48
204	Boronâ€™ and Ironâ€™ Incorporated Irâ€™ Co(OH) ₂ Ultrathin Nanosheets as an Efficient Oxygen Evolution Catalyst. <i>ChemElectroChem</i> , 2018, 5, 593-597.	1.7	21
205	Facile Oneâ€™ Pot Synthesis of Activated Porous Biocarbons with a High Nitrogen Content for CO ₂ Capture. <i>ChemNanoMat</i> , 2018, 4, 281-290.	1.5	40
206	Pseudocapacitive anthraquinone modified with reduced graphene oxide for flexible symmetric all-solid-state supercapacitors. <i>Carbon</i> , 2018, 127, 459-468.	5.4	123
207	Reverse manipulation of intrinsic point defects in ZnO-based varistor ceramics through Zr-stabilized high ionic conducting Irâ€™ III-Bi ₂ O ₃ intergranular phase. <i>Journal of the European Ceramic Society</i> , 2018, 38, 1614-1620.	2.8	22
208	Regulations of silver halide nanostructure and composites on photocatalysis. <i>Advanced Composites and Hybrid Materials</i> , 2018, 1, 269-299.	9.9	27
209	Hierarchical CoMoO ₄ nanoneedle electrodes for advanced supercapacitors and electrocatalytic oxygen evolution. <i>Electrochimica Acta</i> , 2018, 259, 552-558.	2.6	80
210	Constructing magnetic catalysts with in-situ solid-liquid interfacial photo-Fenton-like reaction over Ag ₃ PO ₄ @NiFe ₂ O ₄ composites. <i>Applied Catalysis B: Environmental</i> , 2018, 225, 40-50.	10.8	175
211	In situ nano-sized spinel Li ₄ Ti ₅ O ₁₂ powder fabricated by a one-step roasting process in molten salts. <i>Journal of Alloys and Compounds</i> , 2018, 732, 784-791.	2.8	20
212	Maximum Power Point Tracking for Hybrid Wind-Solar Energy System Using Optimum Controllers Techniques. , 2018, , .		1
213	Structural Elucidation of Covalent Organic Polymers (COP) and Their Linker Effect on Gas Adsorption Performance via Density Functional Theory Approach. <i>ChemistrySelect</i> , 2018, 3, 8294-8305.	0.7	6
214	Photo-Assisted Hydrogen Evolution with Reduced Graphene Oxide Catalyst on Silicon Nanowire Photocathode. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 2046.	1.3	20
215	Enhancing Sustainability and Energy Efficiency in Smart Factories: A Review. <i>Sustainability</i> , 2018, 10, 4779.	1.6	90
216	Modeling, Simulation and Construction of a Wind Turbine with Chain Multiplication System9 Destined to Rural Areas of the Canton Cuenca-Ecuador. , 2018, , .		1
217	A deeply rechargeable zinc anode with pomegranate-inspired nanostructure for high-energy aqueous batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 21933-21940.	5.2	61

#	ARTICLE	IF	CITATIONS
218	Omnidirectional and effective salt-rejecting absorber with rationally designed nanoarchitecture for efficient and durable solar vapour generation. <i>Journal of Materials Chemistry A</i> , 2018, 6, 22976-22986.	5.2	48
219	Using CSP to boost liquid production in a biomass to liquid process. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	2
220	Effect of substrate temperature on the properties of plasma deposited silicon oxide thin films. <i>Journal of Physics: Conference Series</i> , 2018, 1124, 022034.	0.3	2
221	Investigation of short-term stability in high efficiency polymer : nonfullerene solar cells via quick current-voltage cycling method. <i>Korean Journal of Chemical Engineering</i> , 2018, 35, 2496-2503.	1.2	5
222	Be part of the chain. <i>Nature Materials</i> , 2018, 17, 1049-1049.	13.3	0
223	Dynamic Workflows for Routine Materials Discovery in Surface Science. <i>Journal of Chemical Information and Modeling</i> , 2018, 58, 2392-2400.	2.5	39
224	A Step toward Economically Viable Solar Fuel Production. <i>CheM</i> , 2018, 4, 2490-2492.	5.8	1
225	Perovskite Photovoltaic Modules: Life Cycle Assessment of Pre-industrial Production Process. <i>IScience</i> , 2018, 9, 542-551.	1.9	51
226	Economic Analysis for Residential Solar PV Systems Based on Different Demand Charge Tariffs. <i>Energies</i> , 2018, 11, 3271.	1.6	21
227	Upconversion of low-energy photons in semiconductor nanostructures for solar energy harvesting. <i>MRS Energy & Sustainability</i> , 2018, 5, 1.	1.3	16
228	Purification of Lithium Carbonate from Sulphate Solutions through Hydrogenation Using the Dowex G26 Resin. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 2252.	1.3	11
229	Status, promises, and challenges of nanocomposite solid-state electrolytes for safe and high performance lithium batteries. <i>Materials Today Nano</i> , 2018, 4, 1-16.	2.3	201
230	Electrochemical Reduction of CO ₂ over Heterogeneous Catalysts in Aqueous Solution: Recent Progress and Perspectives. <i>Small Methods</i> , 2019, 3, 1800369.	4.6	168
231	An Automated Algorithm for Quantifying Cracks in Photovoltaic Backsheets Under Accelerated and Real-World Exposures. , 2018, , .		0
232	Sulfur-Doped Dicobalt Phosphide Outperforming Precious Metals as a Bifunctional Electrocatalyst for Alkaline Water Electrolysis. <i>Chemistry of Materials</i> , 2018, 30, 8861-8870.	3.2	71
233	Spore Carbon from <i>Aspergillus Oryzae</i> for Advanced Electrochemical Energy Storage. <i>Advanced Materials</i> , 2018, 30, e1805165.	11.1	122
234	A Coordination Strategy for Ti _x Sn _{1-x} O ₂ Solid Solution Nanocubes Wrapped by Reduced Graphene Oxide as a Candidate for Lithium-ion Battery Anodes. <i>ChemElectroChem</i> , 2018, 5, 3961-3967.	1.7	9
235	Enabling Stable Lithium Metal Anode via 3D Inorganic Skeleton with Superlithiophilic Interphase. <i>Advanced Energy Materials</i> , 2018, 8, 1802350.	10.2	147

#	ARTICLE	IF	CITATIONS
236	Synthesis of transition metal sulfide and reduced graphene oxide hybrids as efficient electrocatalysts for oxygen evolution reactions. <i>Royal Society Open Science</i> , 2018, 5, 180927.	1.1	14
237	A Metal-Organic Framework with Suitable Pore Size and Specific Functional Sites for the Removal of Trace Propyne from Propylene. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 15183-15188.	7.2	124
238	Ultrathin Manganese Dioxide Nanosheets Grown on Mesoporous Carbon Hollow Spheres for High Performance Asymmetrical Supercapacitors. <i>ACS Applied Energy Materials</i> , 0, , .	2.5	5
239	Oxidation behavior of Ni/Al ₂ O ₃ catalyst in nonthermal plasma-enabled catalysis. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 445205.	1.3	19
240	A Hierarchical Silver-Nanowire-Graphene Host Enabling Ultrahigh Rates and Superior Long-Term Cycling of Lithium-Metal Composite Anodes. <i>Advanced Materials</i> , 2018, 30, e1804165.	11.1	221
241	A Metal-Organic Framework with Suitable Pore Size and Specific Functional Sites for the Removal of Trace Propyne from Propylene. <i>Angewandte Chemie</i> , 2018, 130, 15403-15408.	1.6	98
242	Size effects of micro-pattern on lithium metal surface on the electrochemical performance of lithium metal secondary batteries. <i>Journal of Power Sources</i> , 2018, 408, 136-142.	4.0	20
243	Efficient photocatalytic hydrogen evolution with ligand engineered all-inorganic InP and InP/ZnS colloidal quantum dots. <i>Nature Communications</i> , 2018, 9, 4009.	5.8	179
244	Efficient thermal management of Li-ion batteries with a passive interfacial thermal regulator based on a shape memory alloy. <i>Nature Energy</i> , 2018, 3, 899-906.	19.8	154
245	A Facile Microfluidic Hydrogen Peroxide Fuel Cell with High Performance: Electrode Interface and Power-Generation Properties. <i>ACS Applied Energy Materials</i> , 2018, , .	2.5	8
246	Synergistic effect of silane and graphene oxide for enhancing the photoelectrochemical water oxidation performance of WO ₃ /NS arrays. <i>Electrochimica Acta</i> , 2018, 292, 322-330.	2.6	12
247	Hexagonal Boron Nitride/Blue Phosphorene Heterostructure as a Promising Anode Material for Li/Na-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2018, 122, 23329-23335.	1.5	52
248	Structure-Property of Lithium-Sulfur Nanoparticles via Molecular Dynamics Simulation. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 37575-37585.	4.0	15
249	Enhanced Solar Energy Harvest and Electron Transfer through Intra- and Intermolecular Dual Channels in Chlorosome-Mimicking Supramolecular Self-Assemblies. <i>ACS Catalysis</i> , 2018, 8, 10732-10745.	5.5	26
250	A Li ₂ S-Based Sacrificial Layer for Stable Operation of Lithium-Sulfur Batteries. <i>Energy Technology</i> , 2018, 6, 2210-2219.	1.8	4
252	Carrier Transport and Molecular Displacement Modulated dc Electrical Breakdown of Polypropylene Nanocomposites. <i>Polymers</i> , 2018, 10, 1207.	2.0	26
253	Crumpled Ir Nanosheets Fully Covered on Porous Carbon Nanofibers for Long-Life Rechargeable Lithium-CO ₂ Batteries. <i>Advanced Materials</i> , 2018, 30, e1803124.	11.1	144
254	Solar-driven interfacial evaporation. <i>Nature Energy</i> , 2018, 3, 1031-1041.	19.8	1,347

#	ARTICLE	IF	CITATIONS
255	Molecular sieving of ethylene from ethane using a rigid metal-organic framework. <i>Nature Materials</i> , 2018, 17, 1128-1133.	13.3	532
256	A review of structural properties and synthesis methods of solid electrolyte materials in the Li ₂ S-P2S ₅ binary system. <i>Journal of Power Sources</i> , 2018, 407, 31-43.	4.0	140
257	Ethane/ethylene separation in a metal-organic framework with iron-peroxo sites. <i>Science</i> , 2018, 362, 443-446.	6.0	763
258	Synergistic stabilizing lithium sulfur battery via nanocoating polypyrrole on cobalt sulfide nanobox. <i>Journal of Power Sources</i> , 2018, 405, 51-60.	4.0	45
259	A Lasagna-Inspired Nanoscale ZnO Anode Design for High-Energy Rechargeable Aqueous Batteries. <i>ACS Applied Energy Materials</i> , 2018, 1, 6345-6351.	2.5	46
260	From Nature to Energy Storage: A Novel Sustainable 3D Cross-Linked Chitosan-PEGGE-Based Gel Polymer Electrolyte with Excellent Lithium-Ion Transport Properties for Lithium Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 38526-38537.	4.0	77
261	Self-Assembly-Induced Mosslike Fe ₂ O ₃ and FeP on Electro-oxidized Carbon Paper for Low-Voltage-Driven Hydrogen Production Plus Hydrazine Degradation. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 15727-15736.	3.2	28
262	Trimetallic Sulfide Mesoporous Nanospheres as Superior Electrocatalysts for Rechargeable Zn-Air Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1801839.	10.2	101
263	Stabilizing and Activating Metastable Nickel Nanocrystals for Highly Efficient Hydrogen Evolution Electrocatalysis. <i>ACS Nano</i> , 2018, 12, 11625-11631.	7.3	55
264	Extended Chemical Flexibility of Cubic Anti-Perovskite Lithium Battery Cathode Materials. <i>Inorganic Chemistry</i> , 2018, 57, 13296-13299.	1.9	11
265	Nickel-hydrogen batteries for large-scale energy storage. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 11694-11699.	3.3	77
266	Ion-Sieving Carbon Nanoshells for Deeply Rechargeable Zn-Based Aqueous Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1802470.	10.2	139
267	Construction of hierarchical porous NiCo ₂ S ₄ nanoarchitecture supported on nickel foam for high-performance aqueous hybrid supercapacitors. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 21109-21118.	1.1	4
268	High-Rate and Ultralong Cycle-Life Potassium Ion Batteries Enabled by In Situ Engineering of Yolk-Shell FeS ₂ @C Structure on Graphene Matrix. <i>Advanced Energy Materials</i> , 2018, 8, 1802565.	10.2	207
269	Sealing ZnO nanorods for deeply rechargeable high-energy aqueous battery anodes. <i>Nano Energy</i> , 2018, 53, 666-674.	8.2	112
270	Role of structural hydroxyl groups in enhancing performance of electrochemically-synthesized bilayer V ₂ O ₅ . <i>Nano Energy</i> , 2018, 53, 449-457.	8.2	21
271	Process and Energy Analysis of Pelletizing Agricultural and Woody Biomass Blends. <i>Sustainability</i> , 2018, 10, 1770.	1.6	19
272	Electrocatalysis at Electrodes for Vanadium Redox Flow Batteries. <i>Batteries</i> , 2018, 4, 47.	2.1	37

#	ARTICLE	IF	CITATIONS
273	Exploring Indium-Based Ternary Thiospinel as Conceivable High-Potential Air-Cathode for Rechargeable Zn-Air Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1802263.	10.2	248
274	A facile annealing strategy for achieving <i>in situ</i> controllable Cu ₂ O nanoparticle decorated copper foil as a current collector for stable lithium metal anodes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 18444-18448.	5.2	70
275	Ti-Substituted Keggin-Type Polyoxotungstate as Proton and Electron Reservoir Encaged into Metal-Organic Framework for Carbon Dioxide Photoreduction. <i>Advanced Materials Interfaces</i> , 2018, 5, 1801062.	1.9	62
276	Carbon clusters decorated hard carbon nanofibers as high-rate anode material for lithium-ion batteries. <i>Fuel Processing Technology</i> , 2018, 180, 173-179.	3.7	38
277	Hierarchical Nanosheet-Built CoNi ₂ S ₄ Nanotubes Coupled with Carbon-Encapsulated Carbon Nanotubes@Fe ₂ O ₃ Composites toward High-Performance Aqueous Hybrid Supercapacitor Devices. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 34254-34264.	4.0	46
278	Construction of 3D architectures with Ni(HCO ₃) ₂ nanocubes wrapped by reduced graphene oxide for LIBs: ultrahigh capacity, ultrafast rate capability and ultralong cycle stability. <i>Chemical Science</i> , 2018, 9, 8682-8691.	3.7	34
279	Active daytime radiative cooling using spectrally selective surfaces for air conditioning and refrigeration systems. <i>Solar Energy</i> , 2018, 174, 16-23.	2.9	23
280	Crystalline TiO ₂ protective layer with graded oxygen defects for efficient and stable silicon-based photocathode. <i>Nature Communications</i> , 2018, 9, 3572.	5.8	159
281	Bifunctional sulfur-doped cobalt phosphide electrocatalyst outperforms all-noble-metal electrocatalysts in alkaline electrolyzer for overall water splitting. <i>Nano Energy</i> , 2018, 53, 286-295.	8.2	184
282	Free-Standing 3D-Sponged Nanofiber Electrodes for Ultrahigh-Rate Energy-Storage Devices. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 34140-34146.	4.0	18
283	Iridium-Tungsten Alloy Nanodendrites as pH-Universal Water-Splitting Electrocatalysts. <i>ACS Central Science</i> , 2018, 4, 1244-1252.	5.3	196
284	General and precise carbon confinement of functional nanostructures derived from assembled metal-phenolic networks for enhanced lithium storage. <i>Journal of Materials Chemistry A</i> , 2018, 6, 18605-18614.	5.2	11
285	Towards the establishment of renewable energy technologies' market: An assessment of public acceptance and use in Pakistan. <i>Journal of Renewable and Sustainable Energy</i> , 2018, 10, .	0.8	34
286	Preferential Cation Vacancies in Perovskite Hydroxide for the Oxygen Evolution Reaction. <i>Angewandte Chemie</i> , 2018, 130, 8827-8832.	1.6	37
287	Preferential Cation Vacancies in Perovskite Hydroxide for the Oxygen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 8691-8696.	7.2	337
288	Multiscale Interfacial Strategy to Engineer Mixed Metal-Oxide Anodes toward Enhanced Cycling Efficiency. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 20095-20105.	4.0	5
289	MXene encapsulated titanium oxide nanospheres for ultra-stable and fast sodium storage. <i>Energy Storage Materials</i> , 2018, 14, 306-313.	9.5	119
290	Positioning cyanamide defects in g-C ₃ N ₄ : Engineering energy levels and active sites for superior photocatalytic hydrogen evolution. <i>Applied Catalysis B: Environmental</i> , 2018, 237, 24-31.	10.8	207

#	ARTICLE	IF	CITATIONS
291	Appearance of Lithium-Ion Conduction in a La ²⁺ Li ⁺ Co ⁴⁺ O Band Insulator: Possible Route to Oxide Electrolyte. ACS Applied Energy Materials, 2018, 1, 2546-2554.	2.5	8
292	Automated, robotic dry-cleaning of solar panels in Thuwal, Saudi Arabia using a silicone rubber brush. Solar Energy, 2018, 171, 526-533.	2.9	73
293	An intermediate temperature garnet-type solid electrolyte-based molten lithium battery for grid energy storage. Nature Energy, 2018, 3, 732-738.	19.8	170
294	Reducing CO ₂ with Stable Covalent Organic Frameworks. Joule, 2018, 2, 1030-1032.	11.7	26
295	Electrochemical Valorization of Furfural to Maleic Acid. ACS Sustainable Chemistry and Engineering, 2018, 6, 9596-9600.	3.2	69
296	Novel spherical cobalt/nickel mixed-vanadates as high-capacity anodes in lithium ion batteries. Journal of Alloys and Compounds, 2018, 766, 442-449.	2.8	33
297	Tunable Quasi-One-Dimensional Ribbon Enhanced Light Absorption in Sb ₂ Se ₃ Thin-film Solar Cells Grown by Close-Space Sublimation. Solar Rrl, 2018, 2, 1800128.	3.1	64
298	From synthesis to applications: Metal-organic frameworks for an environmentally sustainable future. Current Opinion in Green and Sustainable Chemistry, 2018, 12, 47-56.	3.2	33
299	Using big data for insights into sustainable energy consumption in industrial and mining sectors. Journal of Cleaner Production, 2018, 197, 1352-1364.	4.6	29
300	Active-Phase Formation and Stability of Gd/Pt(111) Electrocatalysts for Oxygen Reduction: An In Situ Grazing Incidence X-Ray Diffraction Study. Chemistry - A European Journal, 2018, 24, 12280-12290.	1.7	17
301	Functionalized polyimide separators enable high performance lithium sulfur batteries at elevated temperature. Journal of Power Sources, 2018, 396, 542-550.	4.0	42
302	Graphene and its derivatives in lithium-sulfur batteries. Materials Today Energy, 2018, 9, 319-335.	2.5	138
303	Polyoxometalate as a Nature-Inspired Bifunctional Catalyst for Lithium-Oxygen Batteries. ACS Catalysis, 2018, 8, 7213-7221.	5.5	35
304	Hydrogen to the rescue. Nature Materials, 2018, 17, 565-565.	13.3	23
305	Reversible lithium storage in a porphyrin-based MOF (PCN-600) with exceptionally high capacity and stability. Dalton Transactions, 2018, 47, 9989-9993.	1.6	33
306	Carbon coated MoS ₂ nanosheets vertically grown on carbon cloth as efficient anode for high-performance sodium ion hybrid capacitors. Electrochimica Acta, 2018, 283, 36-44.	2.6	50
307	Two-dimensional defective tungsten oxide nanosheets as high performance photo-absorbers for efficient solar steam generation. Solar Energy Materials and Solar Cells, 2018, 185, 333-341.	3.0	75
308	Systematic design of superaerophobic nanotube-array electrode comprised of transition-metal sulfides for overall water splitting. Nature Communications, 2018, 9, 2452.	5.8	431

#	ARTICLE	IF	CITATIONS
309	Materials for lithium-ion battery safety. <i>Science Advances</i> , 2018, 4, eaas9820.	4.7	958
310	Boron- and Nitrogen-Codoped Molybdenum Carbide Nanoparticles Imbedded in a BCN Network as a Bifunctional Electrocatalyst for Hydrogen and Oxygen Evolution Reactions. <i>ACS Catalysis</i> , 2018, 8, 8296-8305.	5.5	126
311	Nanostructured Anode Materials for Non-aqueous Lithium Ion Hybrid Capacitors. <i>Energy and Environmental Materials</i> , 2018, 1, 75-87.	7.3	97
312	Recycling of lithium-ion batteries: Recent advances and perspectives. <i>Journal of Power Sources</i> , 2018, 399, 274-286.	4.0	587
313	Improved electrochemical performance of Li ₂ FeSiO ₄ /CNF/rGO nanocomposites for lithium ion batteries. <i>Solid State Ionics</i> , 2018, 325, 43-47.	1.3	16
314	Direct synthesis of sulfide capped CdS and CdS/ZnS colloidal nanocrystals for efficient hydrogen evolution under visible light irradiation. <i>Journal of Materials Chemistry A</i> , 2018, 6, 16328-16332.	5.2	29
315	Minimizing the Electrolyte Volume in Li-S Batteries: A Step Forward to High Gravimetric Energy Density. <i>Advanced Energy Materials</i> , 2018, 8, 1801560.	10.2	68
316	Scale-up production of high-tap-density carbon/MnOx/carbon nanotube microcomposites for Li-ion batteries with ultrahigh volumetric capacity. <i>Chemical Engineering Journal</i> , 2018, 354, 220-227.	6.6	40
317	Enlarged working potential window for MnO ₂ supercapacitors with neutral aqueous electrolytes. <i>Applied Surface Science</i> , 2018, 459, 430-437.	3.1	57
318	Strategies for optimizing the thermoelectricity of PbTe alloys. <i>Chinese Physics B</i> , 2018, 27, 047306.	0.7	18
319	N, P (S) Co-doped Mo ₂ C/C hybrid electrocatalysts for improved hydrogen generation. <i>Carbon</i> , 2018, 139, 845-852.	5.4	97
320	Green applications of metal-organic frameworks. <i>CrystEngComm</i> , 2018, 20, 5899-5912.	1.3	54
321	K ₆ Nb ₁₀ O ₃₀ groove nanobelts as high performance lithium-ion battery anode towards long-life energy storage. <i>Nano Energy</i> , 2018, 52, 192-202.	8.2	57
322	A novel litchi-like LiFePO ₄ sphere/reduced graphene oxide composite Li-ion battery cathode with high capacity, good rate-performance and low-temperature property. <i>Applied Surface Science</i> , 2018, 459, 233-241.	3.1	30
323	Engineering Materials for Progressive All-Solid-State Na Batteries. <i>ACS Energy Letters</i> , 2018, 3, 2181-2198.	8.8	116
324	Rotating magnetocaloric effect in textured polycrystalline Tb ₃ NiGe ₂ compound with successive magnetic transitions. <i>Intermetallics</i> , 2018, 100, 175-180.	1.8	11
325	Mechanically Robust Magnetic Fe ₃ O ₄ Nanoparticle/Polyvinylidene Fluoride Composite Nanofiber and Its Application in a Triboelectric Nanogenerator. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 25660-25665.	4.0	72
326	Sequential catalysis controls selectivity in electrochemical CO ₂ reduction on Cu. <i>Energy and Environmental Science</i> , 2018, 11, 2935-2944.	15.6	165

#	ARTICLE	IF	CITATIONS
327	Right Heterogeneous Microstructure for Achieving Excellent Thermoelectric Performance in $\text{Ca}_{0.9}\text{R}_{0.1}\text{MnO}_{3\delta}$ (R = Dy, Yb) Ceramics. <i>Inorganic Chemistry</i> , 2018, 57, 9133-9141.	1.9	13
328	Electrochemical CO Reduction Builds Solvent Water into Oxygenate Products. <i>Journal of the American Chemical Society</i> , 2018, 140, 9337-9340.	6.6	170
329	Porous polymer derived ceramic (PDC)-montmorillonite-H3PMo12O40/SiO2 composite membranes for microbial fuel cell (MFC) application. <i>Ceramics International</i> , 2018, 44, 19191-19199.	2.3	35
330	A high-performance, all-textile and spirally wound asymmetric supercapacitors based on core-shell structured MnO2 nanoribbons and cotton-derived carbon cloth. <i>Electrochimica Acta</i> , 2018, 285, 262-271.	2.6	63
331	Photoelectrocatalytic Reduction of CO2 to Chemicals via ZnO@Nickel Foam: Controlling C-C Coupling by Ligand or Morphology. <i>Topics in Catalysis</i> , 2018, 61, 1563-1573.	1.3	9
332	Physico-chemical oxidative cleavage strategy facilitates the degradation of recalcitrant crystalline cellulose by cellulases hydrolysis. <i>Biotechnology for Biofuels</i> , 2018, 11, 16.	6.2	9
333	Nitrogen-doped flexible carbon cloth for durable metal free electrocatalyst for overall water splitting. <i>Surface and Coatings Technology</i> , 2018, 347, 407-413.	2.2	29
334	Layer-to-layer distance determines the performance of 3D bio-electrochemical lamellar anodes in microbial energy transduction processes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 10019-10027.	5.2	13
335	A non-destructive method for crack quantification in photovoltaic backsheets under accelerated and real-world exposures. <i>Polymer Degradation and Stability</i> , 2018, 153, 244-254.	2.7	14
336	Bi2Se3/C Nanocomposite as a New Sodium-Ion Battery Anode Material. <i>Nano-Micro Letters</i> , 2018, 10, 50.	14.4	65
337	Surface, Bulk, and Interface: Rational Design of Hematite Architecture toward Efficient Photoelectrochemical Water Splitting. <i>Advanced Materials</i> , 2018, 30, e1707502.	11.1	248
338	Solution synthesis of VSe2 nanosheets and their alkali metal ion storage performance. <i>Nano Energy</i> , 2018, 53, 11-16.	8.2	108
339	Toward sustainable and systematic recycling of spent rechargeable batteries. <i>Chemical Society Reviews</i> , 2018, 47, 7239-7302.	18.7	624
340	Understanding the apparent fractional charge of protons in the aqueous electrochemical double layer. <i>Nature Communications</i> , 2018, 9, 3202.	5.8	47
341	Electrochemically growth-controlled honeycomb-like NiMoO4 nanoporous network on nickel foam and its applications in all-solid-state asymmetric supercapacitors. <i>New Journal of Chemistry</i> , 2018, 42, 14805-14816.	1.4	26
342	Formation of Mn-Cr mixed oxide nanosheets with enhanced lithium storage properties. <i>RSC Advances</i> , 2018, 8, 29670-29677.	1.7	12
343	High-power lithium-ion hybrid supercapacitor enabled by holey carbon nanolayers with targeted porosity. <i>Journal of Power Sources</i> , 2018, 400, 468-477.	4.0	93
344	High-power and long-life lithium-ion capacitors constructed from N-doped hierarchical carbon nanolayer cathode and mesoporous graphene anode. <i>Carbon</i> , 2018, 140, 237-248.	5.4	102

#	ARTICLE	IF	CITATIONS
345	In-built thermo-mechanical cooperative feedback mechanism for self-propelled multimodal locomotion and electricity generation. <i>Nature Communications</i> , 2018, 9, 3438.	5.8	117
346	Effects of Polymer Coatings on Electrodeposited Lithium Metal. <i>Journal of the American Chemical Society</i> , 2018, 140, 11735-11744.	6.6	307
347	Recent developments in metal phosphide and sulfide electrocatalysts for oxygen evolution reaction. <i>Chinese Journal of Catalysis</i> , 2018, 39, 1575-1593.	6.9	205
348	Advances in Cathode Materials for High-Performance Lithium-Sulfur Batteries. <i>IScience</i> , 2018, 6, 151-198.	1.9	85
349	A Review of Precious-Metal-Free Bifunctional Oxygen Electrocatalysts: Rational Design and Applications in Zn-Air Batteries. <i>Advanced Functional Materials</i> , 2018, 28, 1803329.	7.8	524
350	2D Metal Oxyhalide-Derived Catalysts for Efficient CO ₂ Electroreduction. <i>Advanced Materials</i> , 2018, 30, e1802858.	11.1	200
351	Recent advancements in supercapacitor technology. <i>Nano Energy</i> , 2018, 52, 441-473.	8.2	1,228
352	Transient Nonlinear Response of Dynamically Decoupled Ionic Conductors. <i>Physical Review Letters</i> , 2018, 121, 064503.	2.9	13
353	Ultrahigh Malleability of the Lithiation-Induced Li _x Si Phase. <i>ACS Applied Energy Materials</i> , 2018, 1, 4211-4220.	2.5	16
354	Recent Advances in Electrochemical CO ₂ to CO Conversion on Heterogeneous Catalysts. <i>Advanced Materials</i> , 2018, 30, e1802066.	11.1	397
355	Tailoring the Structure of Carbon Nanomaterials toward High-End Energy Applications. <i>Advanced Materials</i> , 2018, 30, e1802104.	11.1	92
356	Excellent photocatalytic degradation and disinfection performance of a novel bifunctional Ag@AgSCN nanostructure with exposed {112} facets. <i>New Journal of Chemistry</i> , 2018, 42, 11811-11818.	1.4	7
357	Phase-Controlled Synthesis of Nickel Phosphide Nanocrystals and Their Electrocatalytic Performance for the Hydrogen Evolution Reaction. <i>Chemistry - A European Journal</i> , 2018, 24, 11748-11754.	1.7	55
358	An Ultrastrong Double-Layer Nanodiamond Interface for Stable Lithium Metal Anodes. <i>Joule</i> , 2018, 2, 1595-1609.	11.7	155
359	Ultrathin porous nanosheet-assembled hollow cobalt nickel oxide microspheres with optimized compositions for efficient oxygen evolution reaction. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 1886-1893.	3.0	21
360	Rational Design of Low Cost and High Energy Lithium Batteries through Tailored Fluorine-free Electrolyte and Nanostructured S/C Composite. <i>ChemSusChem</i> , 2018, 11, 2981-2986.	3.6	20
361	30 Years of Lithium-Ion Batteries. <i>Advanced Materials</i> , 2018, 30, e1800561.	11.1	3,039
362	Partially Oxidized Bimetallic Nanocrystals as Efficient Non-Noble Metal Alcohol Electrooxidation Catalysts. <i>ChemCatChem</i> , 2018, 10, 3647-3652.	1.8	3

#	ARTICLE	IF	CITATIONS
363	Flowerlike NiCo ₂ S ₄ Hollow Sub-Microspheres with Mesoporous Nanoshells Support Pd Nanoparticles for Enhanced Hydrogen Evolution Reaction Electrocatalysis in Both Acidic and Alkaline Conditions. ACS Applied Materials & Interfaces, 2018, 10, 22248-22256.	4.0	52
364	Co ₂ SiO ₄ /SiO ₂ /RGO nanosheets: Boosting the lithium storage capability of tetravalent Si by using highly-dispersed Co element. Electrochimica Acta, 2018, 282, 609-617.	2.6	41
365	Advances in Understanding Materials for Rechargeable Lithium Batteries by Atomic Force Microscopy. Energy and Environmental Materials, 2018, 1, 28-40.	7.3	80
366	Facile synthesized Cu-SnO ₂ anode materials with three-dimensional metal cluster conducting architecture for high performance lithium-ion batteries. Chinese Chemical Letters, 2018, 29, 1656-1660.	4.8	15
367	A review on morphology engineering for highly efficient and stable hybrid perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 12842-12875.	5.2	168
368	Molecular Insights into Benzimidazole-Linked Polymer Interactions with Carbon Dioxide and Nitrogen. ChemistrySelect, 2018, 3, 3691-3701.	0.7	10
369	3.11 Chemical Energy Production. , 2018, , 470-520.		1
370	Remedies of capacity fading in room-temperature sodium-sulfur batteries. Journal of Power Sources, 2018, 396, 304-313.	4.0	45
371	Regulating Li deposition by constructing LiF-rich host for dendrite-free lithium metal anode. Energy Storage Materials, 2019, 16, 411-418.	9.5	247
372	Exploration of Advanced Electrode Materials for Rechargeable Sodium-Ion Batteries. Advanced Energy Materials, 2019, 9, 1800212.	10.2	204
373	Fe-doped Co ₃ O ₄ @C nanoparticles derived from layered double hydroxide used as efficient electrocatalyst for oxygen evolution reaction. Journal of Energy Chemistry, 2019, 32, 63-70.	7.1	47
374	Sustainable treatment of dye wastewater for high-performance rechargeable battery cathodes. Energy Storage Materials, 2019, 17, 334-340.	9.5	13
375	Rational design of multi-walled carbon nanotube@hollow Fe ₃ O ₄ @C coaxial nanotubes as long-cycle-life lithium ion battery anodes. Nanotechnology, 2019, 30, 465402.	1.3	12
376	Methylamine-induced defect-healing and cationic substitution: a new method for low-defect perovskite thin films and solar cells. Journal of Materials Chemistry C, 2019, 7, 10724-10742.	2.7	49
377	Fast Energy Storage in Two-Dimensional MoO ₂ Enabled by Uniform Oriented Tunnels. ACS Nano, 2019, 13, 9091-9099.	7.3	59
378	Hypercrosslinked polymers enabled micropore-dominant N, S Co-Doped porous carbon for ultrafast electron/ion transport supercapacitors. Nano Energy, 2019, 65, 103993.	8.2	204
379	Morphological and Electronic Tuning of Ni ₂ P through Iron Doping toward Highly Efficient Water Splitting. ACS Catalysis, 2019, 9, 8882-8892.	5.5	227
380	In-Operando Visualization of the Electrochemical Formation of Liquid Polybromide Microdroplets. Angewandte Chemie - International Edition, 2019, 58, 15228-15234.	7.2	27

#	ARTICLE	IF	CITATIONS
381	Harmonizing the Electronic Structures of the Adsorbate and Catalysts for Efficient CO ₂ Reduction. <i>Nano Letters</i> , 2019, 19, 6547-6553.	4.5	88
382	The Role of Non-Metallic and Metalloid Elements on the Electrocatalytic Activity of Cobalt and Nickel Catalysts for the Oxygen Evolution Reaction. <i>ChemCatChem</i> , 2019, 11, 5842-5854.	1.8	85
383	A Novel Hierarchically Porous Polypyrrole Sphere Modified Separator for Lithium-Sulfur Batteries. <i>Polymers</i> , 2019, 11, 1344.	2.0	9
384	Sulfiphilic Few-Layered MoSe ₂ Nanoflakes Decorated rGO as a Highly Efficient Sulfur Host for Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1901896.	10.2	147
385	In-Operando Visualization of the Electrochemical Formation of Liquid Polybromide Microdroplets. <i>Angewandte Chemie</i> , 2019, 131, 15372-15378.	1.6	5
386	Recovery and regeneration of LiCoO ₂ -based spent lithium-ion batteries by a carbothermic reduction vacuum pyrolysis approach: Controlling the recovery of CoO or Co. <i>Waste Management</i> , 2019, 97, 140-148.	3.7	119
387	Continuous Network of Phase-Tuned Nickel Sulfide Nanostructures for Electrocatalytic Water Splitting. <i>ACS Applied Nano Materials</i> , 2019, 2, 5061-5070.	2.4	48
388	Electrocatalytic Production of H ₂ O ₂ by Selective Oxygen Reduction Using Earth-Abundant Cobalt Pyrite (CoS ₂). <i>ACS Catalysis</i> , 2019, 9, 8433-8442.	5.5	167
389	Revealing the Chemical and Structural Evolution of V ₂ O ₅ Nanoribbons in Lithium-Ion Batteries Using in Situ Transmission Electron Microscopy. <i>Analytical Chemistry</i> , 2019, 91, 11055-11062.	3.2	18
390	Recent Progress in Covalent Organic Frameworks as Solid-State Ion Conductors. , 2019, 1, 327-335.		68
391	A wood-derived hierarchically porous monolithic carbon matrix embedded with Co nanoparticles as an advanced electrocatalyst for water splitting. <i>Sustainable Energy and Fuels</i> , 2019, 3, 2753-2762.	2.5	25
392	Temperature-Dependent Electrical Transport Properties of Individual NiCo ₂ O ₄ Nanowire. <i>Nanoscale Research Letters</i> , 2019, 14, 10.	3.1	12
393	Top-Down Li Deposition Pathway Enabled by an Asymmetric Design for Li Composite Electrode. <i>Advanced Energy Materials</i> , 2019, 9, 1901491.	10.2	43
394	Boron Nitride Membranes with a Distinct Nanoconfinement Effect for Efficient Ethylene/Ethane Separation. <i>Angewandte Chemie</i> , 2019, 131, 14107-14113.	1.6	29
395	Hollow and hierarchical Li _{1.2} Mn _{0.54} Ni _{0.13} Co _{0.13} O ₂ micro-cubes as promising cathode materials for lithium ion battery. <i>Journal of Alloys and Compounds</i> , 2019, 807, 151686.	2.8	15
396	Converting eggs to flexible, all-solid supercapacitors. <i>Nano Energy</i> , 2019, 65, 104045.	8.2	60
397	Organometal Halide Perovskites Thin Film and Their Impact on the Efficiency of Perovskite Solar Cells. , 0, , .		0
398	Anode-Free Sodium Metal Batteries Based on Nanohybrid Core-Shell Templates. <i>Small</i> , 2019, 15, e1901274.	5.2	34

#	ARTICLE	IF	CITATIONS
399	Enhanced structural stability and overall conductivity of Li-rich layered oxide materials achieved by a dual electron/lithium-conducting coating strategy for high-performance lithium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 23964-23972.	5.2	25
400	Defect engineering of cobalt microspheres by S doping and electrochemical oxidation as efficient bifunctional and durable electrocatalysts for water splitting at high current densities. Journal of Power Sources, 2019, 436, 226887.	4.0	48
401	A facile and large-scale synthesis of NiCo-LDHs@rGO composite for high performance asymmetric supercapacitors. Journal of Alloys and Compounds, 2019, 805, 1096-1105.	2.8	48
402	Hollow multi-shelled structures for energy conversion and storage applications. Inorganic Chemistry Frontiers, 2019, 6, 2239-2259.	3.0	26
403	Enhanced Electrochemical Performance of Sb ₂ O ₃ as an Anode for Lithium-Ion Batteries by a Stable Cross-Linked Binder. Applied Sciences (Switzerland), 2019, 9, 2677.	1.3	59
404	Polypropylene Carbonate-Based Adaptive Buffer Layer for Stable Interfaces of Solid Polymer Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2019, 11, 27906-27912.	4.0	24
405	The stereo-microstructure of ZnO affects the lithium storage capacity of Li ₂ ZnTi ₃ O ₈ anode materials. Dalton Transactions, 2019, 48, 12303-12314.	1.6	5
406	Self-Catalyzed Growth of Co, N-Codoped CNTs on Carbon-Encased CoS _x Surface: A Noble-Metal-Free Bifunctional Oxygen Electrocatalyst for Flexible Solid Zn-Air Batteries. Advanced Functional Materials, 2019, 29, 1904481.	7.8	217
407	Interfacial engineering of oxygenated chemical bath-deposited CdS window layer for highly efficient Sb ₂ Se ₃ thin-film solar cells. Materials Today Physics, 2019, 10, 100125.	2.9	22
408	Multi-functional PEDOT-engineered sodium titanate nanowires for sodium-ion batteries with synchronous improvements in rate capability and structural stability. Journal of Materials Chemistry A, 2019, 7, 19241-19247.	5.2	28
409	Design and Implementation of A Building Control System in Real-Time Devs. , 2019, , .		3
410	Simultaneous production of fresh water and electricity via multistage solar photovoltaic membrane distillation. Nature Communications, 2019, 10, 3012.	5.8	233
411	Converting Lignocellulosic Pentosan-Derived Yeast Single Cell Oil into Aromatics: Biomass to Bio-BTX. ACS Sustainable Chemistry and Engineering, 2019, 7, 13437-13445.	3.2	19
412	Improving the efficiencies of small molecule solar cells by solvent vapor annealing to enhance J-aggregation. Journal of Materials Chemistry C, 2019, 7, 9618-9624.	2.7	15
413	Fabrication of Photothermal Silver Nanocube/ZIF-8 Composites for Visible-Light-Regulated Release of Propylene. ACS Applied Materials & Interfaces, 2019, 11, 29298-29304.	4.0	16
414	The dual-function sacrificing template directed formation of MoS ₂ /C hybrid nanotubes enabling highly stable and ultrafast sodium storage. Journal of Materials Chemistry A, 2019, 7, 18828-18834.	5.2	47
415	Designing a Safe Electrolyte Enabling Long-Life Li/S Batteries. ChemSusChem, 2019, 12, 4176-4184.	3.6	26
416	Special atmosphere annealed Co ₃ O ₄ porous nanoclusters with oxygen defects and high proportion of Co ²⁺ for oxygen evolution reaction. Journal of Alloys and Compounds, 2019, 806, 163-169.	2.8	24

#	ARTICLE	IF	CITATIONS
417	Effect of Sn Addition on Epitaxial GaAs Nanowire Grown at Different Temperatures in Metal-Organic Chemical Vapor Deposition. <i>Crystal Growth and Design</i> , 2019, 19, 5314-5319.	1.4	4
418	Ru-Coated metal-organic framework-derived Co-based particles embedded in porous N-doped carbon nanocubes as a catalytic cathode for a Li-O ₂ battery. <i>Chemical Communications</i> , 2019, 55, 10092-10095.	2.2	15
419	Multi-stage constant-current charging protocol for a high-energy-density pouch cell based on a 622NCM/graphite system. <i>RSC Advances</i> , 2019, 9, 21498-21506.	1.7	20
420	In Situ Templating Approach To Fabricate Small-Mesopore-Dominant S-Doped Porous Carbon Electrodes for Supercapacitors and Li-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2019, 2, 5591-5599.	2.5	24
421	Interfacing Manganese Oxide and Cobalt in Porous Graphitic Carbon Polyhedrons Boosts Oxygen Electrocatalysis for Zn-Air Batteries. <i>Advanced Materials</i> , 2019, 31, e1902339.	11.1	363
422	High energy K-ion batteries based on P3-Type K ⁺ 0.5MnO ₂ hollow submicrosphere cathode. <i>Journal of Power Sources</i> , 2019, 437, 226913.	4.0	58
423	Highly active nanostructured CoS ₂ /CoS heterojunction electrocatalysts for aqueous polysulfide/iodide redox flow batteries. <i>Nature Communications</i> , 2019, 10, 3367.	5.8	212
424	Boron Nitride Membranes with a Distinct Nanoconfinement Effect for Efficient Ethylene/Ethane Separation. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 13969-13975.	7.2	64
425	Boosting the high-capacity with multi-active centers: A first-principles investigation of NiPS ₃ monolayer as an anode material. <i>Applied Surface Science</i> , 2019, 495, 143534.	3.1	15
426	Electrochemical CO ₂ Reduction: Classifying Cu Facets. <i>ACS Catalysis</i> , 2019, 9, 7894-7899.	5.5	170
427	Direct Deposition of Amorphous Cobalt-Vanadium Mixed Oxide Films for Electrocatalytic Water Oxidation. <i>ACS Omega</i> , 2019, 4, 12671-12679.	1.6	25
428	Electrodeposited Stable Binder-Free Organic Ni(OH) ₂ Flexible Nanohybrid Electrodes for High-Performance Supercapacitors. <i>Energy Technology</i> , 2019, 7, 1900546.	1.8	5
429	Extraction of Co and Li ₂ CO ₃ from cathode materials of spent lithium-ion batteries through a combined acid-leaching and electro-deoxidation approach. <i>Journal of Hazardous Materials</i> , 2019, 379, 120817.	6.5	60
430	Recent progress and perspectives on dual-ion batteries. <i>EnergyChem</i> , 2019, 1, 100004.	10.1	93
431	Hybrid energy systems for off-grid power supply and hydrogen production based on renewable energy: A techno-economic analysis. <i>Energy Conversion and Management</i> , 2019, 196, 1068-1079.	4.4	206
432	Surface-Based Li ⁺ Complex Enables Uniform Lithium Deposition for Stable Lithium Metal Anodes. <i>ACS Applied Energy Materials</i> , 2019, 2, 4602-4608.	2.5	32
433	Designing materials for electrochemical carbon dioxide recycling. <i>Nature Catalysis</i> , 2019, 2, 648-658.	16.1	838
434	Porous metal-organic frameworks for gas storage and separation: Status and challenges. <i>EnergyChem</i> , 2019, 1, 100006.	10.1	434

#	ARTICLE	IF	CITATIONS
435	Green Process for Extraction of Lignin by the Microwave-Assisted Ionic Liquid Approach: Toward Biomass Biorefinery and Lignin Characterization. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 13062-13072.	3.2	68
436	Factors determining synergism in plasma catalysis of biogas at reduced pressure. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 414002.	1.3	16
437	Molybdenum, Cobalt Sulfide-Modified N, S-Doped Graphene from Low-Temperature Molecular Pyrolysis: Mutual Activation Effect for Hydrogen Evolution. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 19442-19452.	3.2	9
438	Encapsulating $V_{2}O_{3}$ Nanoparticles in Carbon Nanofibers with Internal Void Spaces for a Self-Supported Anode Material in Superior Lithium-Ion Capacitors. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 19483-19495.	3.2	41
439	PdAg bimetallic electrocatalyst for highly selective reduction of CO ₂ with low COOH* formation energy and facile CO desorption. <i>Nano Research</i> , 2019, 12, 2866-2871.	5.8	61
440	Advanced Materials for Zinc-Based Flow Battery: Development and Challenge. <i>Advanced Materials</i> , 2019, 31, e1902025.	11.1	160
441	Dendrite-Free Lithium Deposition via a Superfilling Mechanism for High-Performance Li-Metal Batteries. <i>Advanced Materials</i> , 2019, 31, e1903248.	11.1	106
442	Carbon-Based Nanocages: A New Platform for Advanced Energy Storage and Conversion. <i>Advanced Materials</i> , 2020, 32, e1904177.	11.1	84
443	Platinum Porous Nanosheets with High Surface Distortion and Pt Utilization for Enhanced Oxygen Reduction Catalysis. <i>Advanced Functional Materials</i> , 2019, 29, 1904429.	7.8	96
444	Anisotropically Electrochemical-Mechanical Evolution in Solid-State Batteries and Interfacial Tailored Strategy. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 18647-18653.	7.2	43
445	MoS ₂ confined on graphene by triethanolamine for enhancing electrocatalytic hydrogen evolution performance. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 28151-28162.	3.8	33
446	Elucidation of Anionic and Cationic Redox Reactions in a Prototype Sodium-Layered Oxide Cathode. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 41304-41312.	4.0	43
447	Direct electrosynthesis of pure aqueous H ₂ O ₂ solutions up to 20% by weight using a solid electrolyte. <i>Science</i> , 2019, 366, 226-231.	6.0	573
448	Inserting Amide into NOTT-101 to Sharply Enhance Volumetric and Gravimetric Methane Storage Working Capacity. <i>Inorganic Chemistry</i> , 2019, 58, 13782-13787.	1.9	10
449	Thermal Engineering of Metal-Organic Frameworks for Adsorption Applications: A Molecular Simulation Perspective. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 38697-38707.	4.0	56
450	Wrapping Multiwalled Carbon Nanotubes with Anatase Titanium Oxide for the Electrosynthesis of Glycolic Acid. <i>ACS Applied Nano Materials</i> , 2019, 2, 6360-6367.	2.4	5
451	Anisotropically Electrochemical-Mechanical Evolution in Solid-State Batteries and Interfacial Tailored Strategy. <i>Angewandte Chemie</i> , 2019, 131, 18820-18826.	1.6	12
452	Strengthening dendrite suppression in lithium metal anode by in-situ construction of Li-Zn alloy layer. <i>Electrochemistry Communications</i> , 2019, 108, 106565.	2.3	27

#	ARTICLE	IF	CITATIONS
453	Confined Fe ₂ VO ₄ , Nitrogen-Doped Carbon Nanowires with Internal Void Space for High-Rate and Ultrastable Potassium-Ion Storage. <i>Advanced Energy Materials</i> , 2019, 9, 1902674.	10.2	81
454	Dynamic Structure and Chemistry of the Silicon Solid-Electrolyte Interphase Visualized by Cryogenic Electron Microscopy. <i>Matter</i> , 2019, 1, 1232-1245.	5.0	107
455	Dendrite-Free Li Metal Plating/Stripping Onto Three-Dimensional Vertical-Graphene@Carbon-Cloth Host. <i>Frontiers in Chemistry</i> , 2019, 7, 714.	1.8	24
456	Enhancing Energy Storage Devices with Biomacromolecules in Hybrid Electrodes. <i>Biotechnology Journal</i> , 2019, 14, e1900062.	1.8	21
457	A Nacre-Inspired Separator Coating for Impact-Tolerant Lithium Batteries. <i>Advanced Materials</i> , 2019, 31, e1905711.	11.1	71
458	Solid-State Conversion Synthesis of Advanced Electrocatalysts for Water Splitting. <i>Chemistry - A European Journal</i> , 2020, 26, 3961-3972.	1.7	8
460	Interlayer Photoelectron Transfer Boosted by Bridged Ru ^{IV} Atoms in GaS Nanosheets for Efficient Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 45561-45567.	4.0	8
461	Reversible Alloying of Phosphorene with Potassium and Its Stabilization Using Reduced Graphene Oxide Buffer Layers. <i>ACS Nano</i> , 2019, 13, 14094-14106.	7.3	36
462	Oxygen-catalysed sequential singlet fission. <i>Nature Communications</i> , 2019, 10, 5202.	5.8	15
463	Ultrafast, Energy-Efficient Synthesis of Intermetallics; Microwave-Induced Metal Plasma (MIMP) Synthesis of Mg ₂ Sn. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 19686-19698.	3.2	9
464	Optical nanofluids for direct absorption-based solar-thermal energy harvesting at medium-to-high temperatures. <i>Current Opinion in Chemical Engineering</i> , 2019, 25, 51-56.	3.8	18
465	Operando Fourier Transform Infrared Investigation of Cathode Electrolyte Interphase Dynamic Reversible Evolution on Li _{1.2} Ni _{0.2} Mn _{0.6} O ₂ . <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 45108-45117.	4.0	25
466	A Natural Transporter of Silicon and Carbon: Conversion of Rice Husks to Silicon Carbide or Carbon-Silicon Hybrid for Lithium-Ion Battery Anodes via a Molten Salt Electrolysis Approach. <i>Batteries and Supercaps</i> , 2019, 2, 1007-1015.	2.4	27
467	Nanodiamonds for energy. , 2019, 1, 13-18.		116
468	Carbon Dioxide Recycling Makes Waves. <i>Joule</i> , 2019, 3, 1814-1816.	11.7	14
469	Optimization of Molecular Structure and Electrode Architecture of Anthraquinone-Containing Polymer Cathode for High-Performance Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 42305-42312.	4.0	41
470	Bioinspired Graphene Oxide Membranes with Dual Transport Mechanisms for Precise Molecular Separation. <i>Advanced Functional Materials</i> , 2019, 29, 1905229.	7.8	75
471	Self-Unfolding Flexible Microelectrode Arrays Based on Shape Memory Polymers. <i>Advanced Materials Technologies</i> , 2019, 4, 1900566.	3.0	46

#	ARTICLE	IF	CITATIONS
472	Silica Restricting the Sulfur Volatilization of Nickel Sulfide for High-Performance Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1901153.	10.2	94
473	Marginal Magnesium Doping for High-Performance Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1902278.	10.2	47
474	Multidimensional Integrated Chalcogenides Nanoarchitecture Achieves Highly Stable and Ultrafast Potassium-Ion Storage. <i>Small</i> , 2019, 15, e1903720.	5.2	49
475	Facile Synthesis of FeS@C Particles Toward High-Performance Anodes for Lithium-Ion Batteries. <i>Nanomaterials</i> , 2019, 9, 1467.	1.9	5
476	Intercalated Iridium Diselenide Electrocatalysts for Efficient pH-Universal Water Splitting. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 14764-14769.	7.2	126
477	Intercalated Iridium Diselenide Electrocatalysts for Efficient pH-Universal Water Splitting. <i>Angewandte Chemie</i> , 2019, 131, 14906-14911.	1.6	30
478	Thermoelectric Generator Using Space Cold Source. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 33941-33945.	4.0	45
479	Removal of Dust from the Solar Panel Surface using Mechanical Vibrator. <i>Journal of Physics: Conference Series</i> , 2019, 1262, 012021.	0.3	7
480	Materials Design for Rechargeable Metal-Air Batteries. <i>Matter</i> , 2019, 1, 565-595.	5.0	383
481	Molecular Modulation of a Molybdenum-Selenium Cluster by Sulfur Substitution To Enhance the Hydrogen Evolution Reaction. <i>Inorganic Chemistry</i> , 2019, 58, 12415-12421.	1.9	9
482	Nickel nitride-black phosphorus heterostructure nanosheets for boosting the electrocatalytic activity towards the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 22063-22069.	5.2	54
483	Photovoltaic Energy Harvesting System Adapted for Different Environmental Operation Conditions: Analysis, Modeling, Simulation and Selection of Devices. <i>Sensors</i> , 2019, 19, 1578.	2.1	8
484	Data-driven learning from dynamic pricing data - Classification and forecasting. , 2019, , .		4
485	Additively manufactured 316L stainless steel: An efficient electrocatalyst. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 24698-24704.	3.8	21
486	Continuous production of pure liquid fuel solutions via electrocatalytic CO ₂ reduction using solid-electrolyte devices. <i>Nature Energy</i> , 2019, 4, 776-785.	19.8	458
487	Recent advances in graphene-based platinum and palladium electrocatalysts for the methanol oxidation reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 22189-22217.	5.2	100
488	Embedded 3D Li ⁺ channels in a water-in-salt electrolyte to develop flexible supercapacitors and lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 24800-24806.	5.2	51
489	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

#	ARTICLE	IF	CITATIONS
490	Shedding X-ray Light on the Interfacial Electrochemistry of Silicon Anodes for Li-Ion Batteries. <i>Accounts of Chemical Research</i> , 2019, 52, 2673-2683.	7.6	25
491	Electrolyte-Solvent-Modified Alternating Copolymer as a Single-Ion Solid Polymer Electrolyte for High-Performance Lithium Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 35683-35692.	4.0	47
492	Ionomer Cross-Linking Immobilization of Catalyst Nanoparticles for High Performance Alkaline Membrane Fuel Cells. <i>Chemistry of Materials</i> , 2019, 31, 7812-7820.	3.2	57
493	Nonflammable Electrolytes for Lithium Ion Batteries Enabled by Ultraconformal Passivation Interphases. <i>ACS Energy Letters</i> , 2019, 4, 2529-2534.	8.8	112
494	Hydrogen peroxide-assisted synthesis of oxygen-doped carbon nitride nanorods for enhanced photocatalytic hydrogen evolution. <i>RSC Advances</i> , 2019, 9, 28421-28431.	1.7	6
495	A facile solvothermal polymerization approach to thermoplastic polymer-based nanocomposites as alternative anodes for high-performance lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 23019-23027.	5.2	24
496	Nanowires for Electrochemical Energy Storage. <i>Chemical Reviews</i> , 2019, 119, 11042-11109.	23.0	309
497	The Biomass Potential and GHG (Greenhouse Gas) Emissions Mitigation of Straw-Based Biomass Power Plant: A Case Study in Anhui Province, China. <i>Processes</i> , 2019, 7, 608.	1.3	7
498	Recent Advances and Prospective in Ruthenium-Based Materials for Electrochemical Water Splitting. <i>ACS Catalysis</i> , 2019, 9, 9973-10011.	5.5	491
499	Three-dimensional Fe ₃ S ₄ @NiS hollow nanospheres as efficient electrocatalysts for oxygen evolution reaction. <i>Journal of Electroanalytical Chemistry</i> , 2019, 850, 113436.	1.9	16
500	New insight to the role of edges and heteroatoms in nanocarbons for oxygen reduction reaction. <i>Nano Energy</i> , 2019, 66, 104096.	8.2	79
501	Fracture toughness of Li _x Si alloys in lithium ion battery. <i>Extreme Mechanics Letters</i> , 2019, 32, 100555.	2.0	9
502	Ultrastable Sodium Storage in MoO ₃ Nanotube Arrays Enabled by Surface Phosphorylation. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 37761-37767.	4.0	29
503	Low-cost and high safe manganese-based aqueous battery for grid energy storage and conversion. <i>Science Bulletin</i> , 2019, 64, 1780-1787.	4.3	56
504	A self-supported, three-dimensional porous copper film as a current collector for advanced lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 1092-1098.	5.2	77
505	Advances in modelling and simulation of halide perovskites for solar cell applications. <i>JPhys Energy</i> , 2019, 1, 022001.	2.3	53
506	Thermally Conducting Microcellular Carbon Foams as a Superior Host for Wax-Based Phase Change Materials. <i>Advanced Engineering Materials</i> , 2019, 21, 1801139.	1.6	8
507	Highly Efficient Solar-Driven Carbon Dioxide Reduction on Molybdenum Disulfide Catalyst Using Choline Chloride-Based Electrolyte. <i>Advanced Energy Materials</i> , 2019, 9, 1803536.	10.2	34

#	ARTICLE	IF	CITATIONS
508	From CO ₂ methanation to ambitious long-chain hydrocarbons: alternative fuels paving the path to sustainability. <i>Chemical Society Reviews</i> , 2019, 48, 205-259.	18.7	205
509	Arising synergetic and antagonistic effects in the design of Ni- and Ru-based water splitting electrocatalysts. <i>Journal of Materials Chemistry A</i> , 2019, 7, 639-646.	5.2	23
510	One-step construction of core/shell nanoarrays with a holey shell and exposed interfaces for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2019, 7, 1196-1205.	5.2	42
511	Photo-to-electricity generation of aligned carbon nanotubes in water. <i>Journal of Materials Chemistry A</i> , 2019, 7, 1996-2001.	5.2	9
512	Effect of trap states on photocatalytic properties of boron-doped anatase TiO ₂ microspheres studied by time-resolved infrared spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 4349-4358.	1.3	19
513	PCBM nanoparticles as visible-light-driven photocatalysts for photocatalytic decomposition of organic dyes. <i>MRS Communications</i> , 2019, 9, 321-326.	0.8	5
514	N-Doped K ₃ Ti ₅ NbO ₁₄ @TiO ₂ Core-Shell Structure for Enhanced Visible-Light-Driven Photocatalytic Activity in Environmental Remediation. <i>Catalysts</i> , 2019, 9, 106.	1.6	2
515	Bifunctional Oxygen Electrocatalysts for Lithium ⁺ Oxygen Batteries. <i>Batteries and Supercaps</i> , 2019, 2, 311-325.	2.4	22
516	Wrinkled Graphene Cages as Hosts for High-Capacity Li Metal Anodes Shown by Cryogenic Electron Microscopy. <i>Nano Letters</i> , 2019, 19, 1326-1335.	4.5	193
517	Understanding the Different Diffusion Mechanisms of Hydrated Protons and Potassium Ions in Titanium Carbide MXene. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 7087-7095.	4.0	36
518	Three-dimensional carbon material as stable host for dendrite-free lithium metal anodes. <i>Electrochimica Acta</i> , 2019, 301, 251-257.	2.6	32
519	Amorphous FeVO ₄ as a promising anode material for potassium-ion batteries. <i>Energy Storage Materials</i> , 2019, 22, 160-167.	9.5	100
520	Cobalt-phosphate modified Fe-Zn _{0.2} Cd _{0.8} S/CuSbS ₂ heterojunction photoanode with multiple synergistic effect for enhancing photoelectrochemical water splitting. <i>Applied Surface Science</i> , 2019, 476, 716-723.	3.1	19
521	Learning only buys you so much: Practical limits on battery price reduction. <i>Applied Energy</i> , 2019, 239, 218-224.	5.1	115
522	Extraordinary Carrier Diffusion on CdTe Surfaces Uncovered by 4D Electron Microscopy. <i>CheM</i> , 2019, 5, 706-718.	5.8	21
523	Porous Cobalt ²⁺ Nickel Hydroxide Nanosheets with Active Cobalt Ions for Overall Water Splitting. <i>Small</i> , 2019, 15, e1804832.	5.2	46
524	Fe/P dual doping boosts the activity and durability of CoS ₂ polycrystalline nanowires for hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2019, 7, 5195-5200.	5.2	78
525	Dyadic promotion of photocatalytic aerobic oxidation <i>via</i> the Mott ²⁺ Schottky effect enabled by nitrogen-doped carbon from imidazolium-based ionic polymers. <i>Energy and Environmental Science</i> , 2019, 12, 418-426.	15.6	67

#	ARTICLE	IF	CITATIONS
526	Facile synthesis of nanoporous Ni-Fe-P bifunctional catalysts with high performance for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2019, 7, 2518-2523.	5.2	78
527	A metal-organic framework with suitable pore size and dual functionalities for highly efficient post-combustion CO ₂ capture. <i>Journal of Materials Chemistry A</i> , 2019, 7, 3128-3134.	5.2	124
528	NASICON-Structured NaTi ₂ (PO ₄) ₃ for Sustainable Energy Storage. <i>Nano-Micro Letters</i> , 2019, 11, 44.	14.4	100
529	Performance enhancement of triboelectric nanogenerators based on polyvinylidene fluoride/graphene quantum dot composite nanofibers. <i>Journal of Alloys and Compounds</i> , 2019, 797, 945-951.	2.8	44
530	Progress and Perspectives of Electrochemical CO ₂ Reduction on Copper in Aqueous Electrolyte. <i>Chemical Reviews</i> , 2019, 119, 7610-7672.	23.0	2,708
531	Performance evaluation of a metamaterial-based new cool roof using improved Roof Thermal Transfer Value model. <i>Applied Energy</i> , 2019, 248, 589-599.	5.1	69
532	Current Status Investigation and Predicting Carbon Dioxide Emission in Latin American Countries by Connectionist Models. <i>Energies</i> , 2019, 12, 1916.	1.6	23
533	Supercapacitors based on a nitrogen doped hierarchical porous carbon fabricated by self-activation of biomass: excellent rate capability and cycle stability. <i>Carbon Letters</i> , 2019, 29, 585-594.	3.3	16
534	A Robust Route to Co ₂ (OH) ₂ CO ₃ Ultrathin Nanosheets with Superior Lithium Storage Capability Templated by Aspartic Acid-Functionalized Graphene Oxide. <i>Advanced Energy Materials</i> , 2019, 9, 1901093.	10.2	94
535	Nitrogen Engineering on 3D Dandelion-Flower-Like CoS ₂ for High-Performance Overall Water Splitting. <i>Small</i> , 2019, 15, e1901993.	5.2	124
536	Lithiophilic CuO Nanoflowers on Ti-Mesh Inducing Lithium Lateral Plating Enabling Stable Lithium-Metal Anodes with Ultrahigh Rates and Ultralong Cycle Life. <i>Advanced Energy Materials</i> , 2019, 9, 1900853.	10.2	103
537	Review on Carbon/Polyaniline Hybrids: Design and Synthesis for Supercapacitor. <i>Molecules</i> , 2019, 24, 2263.	1.7	98
538	A versatile integrated rechargeable lead dioxide-polyaniline system with energy storage mechanism transformation. <i>Energy</i> , 2019, 183, 358-367.	4.5	10
539	Capillary Encapsulation of Metallic Potassium in Aligned Carbon Nanotubes for Use as Stable Potassium Metal Anodes. <i>Advanced Energy Materials</i> , 2019, 9, 1901427.	10.2	118
540	C ₆₀ -Adsorbed Single-Walled Carbon Nanotubes as Metal-Free, pH-Universal, and Multifunctional Catalysts for Oxygen Reduction, Oxygen Evolution, and Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2019, 141, 11658-11666.	6.6	220
541	Intermetallic SnSb nanodots embedded in carbon nanotubes reinforced nanofabric electrodes with high reversibility and rate capability for flexible Li-ion batteries. <i>Nanoscale</i> , 2019, 11, 13282-13288.	2.8	27
542	Commercialization of Lithium Battery Technologies for Electric Vehicles. <i>Advanced Energy Materials</i> , 2019, 9, 1900161.	10.2	865
543	In Situ Transmission Electron Microscopy for Energy Materials and Devices. <i>Advanced Materials</i> , 2019, 31, e1900608.	11.1	95

#	ARTICLE	IF	CITATIONS
544	Ni-Metalloid (B, Si, P, As, and Te) Alloys as Water Oxidation Electrocatalysts. <i>Advanced Energy Materials</i> , 2019, 9, 1900796.	10.2	93
545	Structure-Sensitivity and Electrolyte Effects in CO ₂ Electroreduction: From Model Studies to Applications. <i>ChemCatChem</i> , 2019, 11, 3626-3645.	1.8	61
546	Air-stable lithium metal anode with sputtered aluminum coating layer for improved performance. <i>Electrochimica Acta</i> , 2019, 317, 120-127.	2.6	53
547	Integrating urban form and distributed energy systems: Assessment of sustainable development scenarios for a Swiss village to 2050. <i>Renewable Energy</i> , 2019, 143, 810-826.	4.3	32
548	Enabling Safe Sodium Metal Batteries by Solid Electrolyte Interphase Engineering: A Review. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 9758-9780.	1.8	88
549	Topological Formation of a Mo-Ni-Based Hollow Structure as a Highly Efficient Electrocatalyst for the Hydrogen Evolution Reaction in Alkaline Solutions. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 21998-22004.	4.0	56
550	Architecture and Performance of the Novel Sulfur Host Material Based on Ti ₂ O ₃ Microspheres for Lithium-Sulfur Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 22439-22448.	4.0	54
551	Joint Charge Storage for High-Rate Aqueous Zinc-Manganese Dioxide Batteries. <i>Advanced Materials</i> , 2019, 31, e1900567.	11.1	299
552	Mechanically robust hydrophobic association hydrogel electrolyte with efficient ionic transport for flexible supercapacitors. <i>Chemical Engineering Journal</i> , 2019, 374, 738-747.	6.6	81
553	Energy and exergy analysis of two novel hybrid solar photovoltaic geothermal energy systems incorporating a building integrated photovoltaic thermal system and an earth air heat exchanger system. <i>Solar Energy</i> , 2019, 188, 83-95.	2.9	56
554	Wood-Derived Materials for Advanced Electrochemical Energy Storage Devices. <i>Advanced Functional Materials</i> , 2019, 29, 1902255.	7.8	157
555	Modification of NFA-Conjugated Bridges with Symmetric Structures for High-Efficiency Non-Fullerene PSCs. <i>Polymers</i> , 2019, 11, 958.	2.0	16
556	A Portable and Efficient Solar-Rechargeable Battery with Ultrafast Photo-Charge/Discharge Rate. <i>Advanced Energy Materials</i> , 2019, 9, 1900872.	10.2	49
557	Holey Ruthenium Nanosheets with Moderate Aluminum Modulation toward Hydrogen Evolution. <i>Inorganic Chemistry</i> , 2019, 58, 8267-8270.	1.9	18
558	MOF derived CoP-decorated nitrogen-doped carbon polyhedrons/reduced graphene oxide composites for high performance supercapacitors. <i>Dalton Transactions</i> , 2019, 48, 10661-10668.	1.6	55
559	Atomically dispersed Fe ³⁺ sites catalyze efficient CO ₂ electroreduction to CO. <i>Science</i> , 2019, 364, 1091-1094.	6.0	1,164
560	Role of ionic liquids in organic-inorganic metal halide perovskite solar cells efficiency and stability. <i>Nano Energy</i> , 2019, 63, 103828.	8.2	124
561	Nitrogen and oxygen co-doped porous carbon nanosheets as high-rate and long-lifetime anode materials for high-performance Li-ion capacitors. <i>Carbon</i> , 2019, 151, 28-35.	5.4	74

#	ARTICLE	IF	CITATIONS
562	The Role of Renewable Energy to Achieve Energy Sustainability in Iran. An Economic and Technical Analysis of the Hybrid Power System. <i>Technology and Economics of Smart Grids and Sustainable Energy</i> , 2019, 4, 1.	1.8	24
563	A novel strategy for 2D/2D NiS/graphene heterostructures as efficient bifunctional electrocatalysts for overall water splitting. <i>Applied Catalysis B: Environmental</i> , 2019, 254, 471-478.	10.8	132
564	Ordered Mesoporous Metastable Ni-MoC_{1-x} with Enhanced Water Dissociation Capability for Boosting Alkaline Hydrogen Evolution Activity. <i>Advanced Functional Materials</i> , 2019, 29, 1901217.	7.8	92
565	Quantum Dots Based Photocatalytic Hydrogen Evolution. <i>Israel Journal of Chemistry</i> , 2019, 59, 762-773.	1.0	27
566	Nitrogen-doped porous carbon from coal for high efficiency CO ₂ electrocatalytic reduction. <i>Carbon</i> , 2019, 151, 46-52.	5.4	87
567	Sub- and super-critical carbon dioxide flow variations in large high-rank coal specimen: An experimental study. <i>Energy</i> , 2019, 181, 148-161.	4.5	11
568	Comb-shaped anion exchange membrane with densely grafted short chains or loosely grafted long chains?. <i>Journal of Membrane Science</i> , 2019, 585, 150-156.	4.1	52
569	Magnetic Field-Assisted Control of Phase Composition and Texture in Photocatalytic Hematite Films. <i>Advanced Engineering Materials</i> , 2019, 21, 1900195.	1.6	4
570	Low-temperature pseudomorphic transformation of polyhedral MIL-88A to lithium ferrite (LiFe ₃ O ₅) in aqueous LiOH medium toward high Li storage. <i>Nanoscale</i> , 2019, 11, 11892-11901.	2.8	5
571	30- μm thin hexamethyl-p-terphenyl poly(benzimidazolium) anion exchange membrane for vanadium redox flow batteries. <i>Electrochemistry Communications</i> , 2019, 102, 37-40.	2.3	24
572	Recent advances on biopolymer fiber based membranes for lithium-ion battery separators. <i>Composites Communications</i> , 2019, 14, 7-14.	3.3	63
573	Monolayer GaS with high ion mobility and capacity as a promising anode battery material. <i>Journal of Materials Chemistry A</i> , 2019, 7, 14042-14050.	5.2	32
574	Zinc ion stabilized MnO ₂ nanospheres for high capacity and long lifespan aqueous zinc-ion batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 13727-13735.	5.2	333
575	Radiation tolerance of perovskite solar cells under gamma ray. <i>Organic Electronics</i> , 2019, 71, 79-84.	1.4	40
576	Biomass-derived aviation fuels: Challenges and perspective. <i>Progress in Energy and Combustion Science</i> , 2019, 74, 31-49.	15.8	166
577	A linear molecule sulfur-rich organic cathode material for high performance lithium-sulfur batteries. <i>Journal of Power Sources</i> , 2019, 430, 210-217.	4.0	31
578	Enhanced electrochemical properties of Cu ₃ Si-embedded three-dimensional porous Si synthesized by one-pot synthesis. <i>Journal of Alloys and Compounds</i> , 2019, 792, 341-347.	2.8	17
579	Fabrication, device performance, and MPPT for flexible dye-sensitized solar panel based on gel-polymer phthaloylchitosan based electrolyte and nanocluster CoS ₂ counter electrode. <i>Materials Science for Energy Technologies</i> , 2019, 2, 319-328.	1.0	9

#	ARTICLE	IF	CITATIONS
580	Fuel cell-based self-powered electrochemical sensors for biochemical detection. <i>Nano Energy</i> , 2019, 61, 173-193.	8.2	121
581	Pore Space Partitioning of Metal-Organic Framework for C_2H_x Separation from Methane. <i>Inorganic Chemistry</i> , 2019, 58, 5410-5413.	1.9	29
582	Sunlight-Fueled, Low-Temperature Ru-Catalyzed Conversion of CO_2 and H_2 to CH_4 with a High Photon-to-Methane Efficiency. <i>ACS Omega</i> , 2019, 4, 7369-7377.	1.6	28
583	Progress in Triboelectric Materials: Toward High Performance and Widespread Applications. <i>Advanced Functional Materials</i> , 2019, 29, 1900098.	7.8	162
584	An overview of Eulerian CFD modeling and simulation of non-spherical biomass particles. <i>Renewable Energy</i> , 2019, 141, 1054-1066.	4.3	28
585	Effectively Increased Efficiency for Electroreduction of Carbon Monoxide Using Supported Polycrystalline Copper Powder Electrocatalysts. <i>ACS Catalysis</i> , 2019, 9, 4709-4718.	5.5	91
586	In Situ TEM of Phosphorus-Dopant-Induced Nanopore Formation in Delithiated Silicon Nanowires. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 17313-17320.	4.0	11
587	Theoretical and experimental investigation of visible light responsive $AgBiS_2$ - TiO_2 heterojunctions for enhanced photocatalytic applications. <i>Applied Catalysis B: Environmental</i> , 2019, 253, 401-418.	10.8	94
588	Three dimensional Mn_3O_4 - CeO_2 /holey-graphene hierarchical architectures from stem for high-performance asymmetric supercapacitors. <i>Inorganic Chemistry Communication</i> , 2019, 104, 8-13.	1.8	23
589	Graphene oxide-modified zinc anode for rechargeable aqueous batteries. <i>Chemical Engineering Science</i> , 2019, 194, 142-147.	1.9	152
590	One-step electrodeposition of cauliflower-like $Co_2Ni_2S_8$ @polypyrrole electrocatalysts on carbon fiber paper for hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 12931-12940.	3.8	12
591	An integrated system for CO_2 capture and water treatment by forward osmosis driven by an amine-based draw solution. <i>Journal of Membrane Science</i> , 2019, 581, 9-17.	4.1	21
592	Fast lithium growth and short circuit induced by localized-temperature hotspots in lithium batteries. <i>Nature Communications</i> , 2019, 10, 2067.	5.8	177
593	The emergence of cost effective battery storage. <i>Nature Communications</i> , 2019, 10, 2038.	5.8	147
594	Greatly enhanced anticorrosion of Al_xO_y nanocermet films with self-passivated Al nanoparticles for enduring solar-thermal energy harvesting. <i>Journal of Materials Chemistry A</i> , 2019, 7, 13080-13089.	5.2	28
595	Efficiency and stability of narrow-gap semiconductor-based photoelectrodes. <i>Energy and Environmental Science</i> , 2019, 12, 2345-2374.	15.6	88
596	Layered vanadium oxide nanofibers as impressive electrocatalyst for hydrogen evolution reaction in acidic medium. <i>Electrochimica Acta</i> , 2019, 312, 89-99.	2.6	34
597	Electrochemical Synthesis of High-Value Chemicals: Detection of Key Reaction Intermediates and Products Combining Gas Chromatography-Mass Spectrometry and <i>in Situ</i> Infrared Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2019, 123, 12762-12772.	1.5	3

#	ARTICLE	IF	CITATIONS
598	Recent Progress in Bifunctional Electrocatalysts for Overall Water Splitting under Acidic Conditions. <i>ChemElectroChem</i> , 2019, 6, 3244-3253.	1.7	79
599	A worldwide cost-based design and optimization of tilted bifacial solar farms. <i>Applied Energy</i> , 2019, 247, 467-479.	5.1	89
600	An Efficient and Chemistry Independent Analysis to Quantify Resistive and Capacitive Loss Contributions to Battery Degradation. <i>Scientific Reports</i> , 2019, 9, 6576.	1.6	8
601	First-principles study of thermal transport properties in the two- and three-dimensional forms of Bi ₂ O ₂ Se. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 10931-10938.	1.3	43
602	Effects of technology parameters on stress in silicon-graphite based multilayer electrodes for lithium ion batteries. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 345501.	1.3	4
603	A High-Performance Self-Regenerating Solar Evaporator for Continuous Water Desalination. <i>Advanced Materials</i> , 2019, 31, e1900498.	11.1	638
604	Thermoelectric Properties of Hexagonal M ₂ C ₃ (M = As, Sb, and Bi) Monolayers from First-Principles Calculations. <i>Nanomaterials</i> , 2019, 9, 597.	1.9	22
605	Material design at nano and atomic scale for electrocatalytic CO ₂ reduction. <i>Nano Materials Science</i> , 2019, 1, 60-69.	3.9	52
606	Radiative sky cooling: Fundamental principles, materials, and applications. <i>Applied Physics Reviews</i> , 2019, 6, .	5.5	442
607	Cobalt phosphide embedded in a graphene nanosheet network as a high-performance anode for Li-ion batteries. <i>Dalton Transactions</i> , 2019, 48, 7778-7785.	1.6	22
608	Electrolyte effects on undoped and Mo-doped BiVO ₄ film for photoelectrochemical water splitting. <i>Journal of Electroanalytical Chemistry</i> , 2019, 842, 41-49.	1.9	15
609	Subnano-Sized Pt-Au Alloyed Clusters as Enhanced Cocatalyst for Photocatalytic Hydrogen Evolution. <i>Chemistry - an Asian Journal</i> , 2019, 14, 2112-2115.	1.7	13
610	In situ engineering bi-metallic phospho-nitride bi-functional electrocatalysts for overall water splitting. <i>Applied Catalysis B: Environmental</i> , 2019, 254, 414-423.	10.8	107
611	Electrospun Co/Co ₃ SnC _{0.7} @N-CNFs as free-standing anode for advanced lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2019, 793, 646-652.	2.8	8
612	Framework-Porphyrin-Derived Single-Atom Bifunctional Oxygen Electrocatalysts and their Applications in Zn-Air Batteries. <i>Advanced Materials</i> , 2019, 31, e1900592.	11.1	256
613	Understanding the Reaction Mechanism of Lithium-Sulfur Batteries by In Situ/Operando X-ray Absorption Spectroscopy. <i>Arabian Journal for Science and Engineering</i> , 2019, 44, 6217-6229.	1.7	6
614	One-pot synthesis of porous 1T-phase MoS ₂ integrated with single-atom Cu doping for enhancing electrocatalytic hydrogen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2019, 251, 87-93.	10.8	160
615	Ionic conductivity behavior by activated hopping conductivity (AHC) of barium aluminoborosilicate glass-ceramic system designed for SOFC sealing. <i>Journal of the European Ceramic Society</i> , 2019, 39, 3103-3111.	2.8	7

#	ARTICLE	IF	CITATIONS
616	Review on micro/nano phase change materials for solar thermal applications. <i>Renewable Energy</i> , 2019, 140, 513-538.	4.3	185
617	Ag-Based nanocomposites: synthesis and applications in catalysis. <i>Nanoscale</i> , 2019, 11, 7062-7096.	2.8	215
618	Photoluminescence properties of Eu ²⁺ -doped microporous zeolite SSZ-39 with color tunable emission. <i>Journal of Luminescence</i> , 2019, 211, 62-68.	1.5	6
619	Hierarchical N/P-Co-Doped Porous Carbon as Host Materials for High-Performance Lithium Sulfur Battery. <i>Journal of the Electrochemical Society</i> , 2019, 166, A880-A885.	1.3	14
620	A versatile and membrane-less electrochemical reactor for the electrolysis of water and brine. <i>Energy and Environmental Science</i> , 2019, 12, 1592-1604.	15.6	80
621	The role of the third component in ternary organic solar cells. <i>Nature Reviews Materials</i> , 2019, 4, 229-242.	23.3	370
622	Improved efficiency and reduced hysteresis in ultra-stable fully printable mesoscopic perovskite solar cells through incorporation of CuSCN into the perovskite layer. <i>Journal of Materials Chemistry A</i> , 2019, 7, 8073-8077.	5.2	42
623	From Microbial Fuel Cells to Biobatteries: Moving toward On-Demand Micropower Generation for Small-Scale Single-Use Applications. <i>Advanced Materials Technologies</i> , 2019, 4, 1900079.	3.0	29
624	The development of 2D materials for electrochemical energy applications: A mechanistic approach. <i>APL Materials</i> , 2019, 7, .	2.2	28
625	Von Sonnenlicht zu Brennstoffen: aktuelle Fortschritte der C ₁ -Solarchemie. <i>Angewandte Chemie</i> , 2019, 131, 17690-17715.	1.6	31
626	Rational design of a sandwiched structure Ni(OH) ₂ nanohybrid sustained by amino-functionalized graphene quantum dots for outstanding capacitance. <i>Applied Surface Science</i> , 2019, 480, 727-737.	3.1	35
627	From Solar Energy to Fuels: Recent Advances in Light-Driven C ₁ Chemistry. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 17528-17551.	7.2	285
628	3D Hierarchical Nanorod@Nanobowl Array Photoanode with a Tunable Light-Trapping Cutoff and Bottom-Selective Field Enhancement for Efficient Solar Water Splitting. <i>Small</i> , 2019, 15, e1804976.	5.2	14
629	Visible-Light-Induced Nanoparticle Assembly for Effective Hydrogen Photogeneration. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 7286-7293.	3.2	12
631	3D Hierarchical Porous Graphene-Based Energy Materials: Synthesis, Functionalization, and Application in Energy Storage and Conversion. <i>Electrochemical Energy Reviews</i> , 2019, 2, 332-371.	13.1	82
632	Effect of co-digestion of milk-whey and potato stem on heat and power generation using biogas as an energy vector: Techno-economic assessment. <i>Applied Energy</i> , 2019, 241, 504-518.	5.1	28
633	Role and Potential of Metal Sulfide Catalysts in Lithium-Sulfur Battery Applications. <i>ChemCatChem</i> , 2019, 11, 2373-2387.	1.8	54
634	Design of Red Phosphorus Nanostructured Electrode for Fast-Charging Lithium-Ion Batteries with High Energy Density. <i>Joule</i> , 2019, 3, 1080-1093.	11.7	168

#	ARTICLE	IF	CITATIONS
636	Deciphering the Reaction Mechanism of Lithium-Sulfur Batteries by In Situ/Operando Synchrotron-Based Characterization Techniques. <i>Advanced Energy Materials</i> , 2019, 9, 1900148.	10.2	96
637	Realizing Ultrafast Oxygen Evolution by Introducing Proton Acceptor into Perovskites. <i>Advanced Energy Materials</i> , 2019, 9, 1900429.	10.2	76
638	Effect of hydroxyl (OH) group position in alcohol on performance, emission and combustion characteristics of SI engine. <i>Energy Conversion and Management</i> , 2019, 189, 195-201.	4.4	46
639	Porous equipotential body with heterogeneous nucleation sites: A novel 3D composite current collector for lithium metal anode. <i>Electrochimica Acta</i> , 2019, 309, 460-468.	2.6	21
640	Organic phase change materials confined in carbon-based materials for thermal properties enhancement: Recent advancement and challenges. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 108, 398-422.	8.2	141
641	One Simple Strategy towards Nitrogen and Oxygen Codoped Carbon Nanotube for Efficient Electrocatalytic Oxygen Reduction and Evolution. <i>Catalysts</i> , 2019, 9, 159.	1.6	9
642	One-Pot Synthesis of Framework Porphyrin Materials and Their Applications in Bifunctional Oxygen Electrocatalysis. <i>Advanced Functional Materials</i> , 2019, 29, 1901301.	7.8	63
643	Inhibition of polysulfide diffusion in lithium-sulfur batteries: mechanism and improvement strategies. <i>Journal of Materials Chemistry A</i> , 2019, 7, 12381-12413.	5.2	147
644	Failure mechanism of Au@Co ₉ S ₈ yolk-shell anode in Li-ion batteries unveiled by <i>in-situ</i> transmission electron microscopy. <i>Applied Physics Letters</i> , 2019, 114, .	1.5	30
645	Copper-Nickel Nitride Nanosheets as Efficient Bifunctional Catalysts for Hydrazine-Assisted Electrolytic Hydrogen Production. <i>Advanced Energy Materials</i> , 2019, 9, 1900390.	10.2	243
646	Hydrogel-Derived Honeycomb Ni ₃ S ₄ /N _P as an Efficient Oxygen Evolution Catalyst. <i>Chemistry - A European Journal</i> , 2019, 25, 7561-7568.	1.7	38
647	Key Aspects of Lithium Metal Anodes for Lithium Metal Batteries. <i>Small</i> , 2019, 15, e1900687.	5.2	253
648	Multi-carbonyl molecules immobilized on high surface area carbon by diazonium chemistry for energy storage applications. <i>Electrochimica Acta</i> , 2019, 308, 99-114.	2.6	19
649	Defect engineering in earth-abundant electrocatalysts for CO ₂ and N ₂ reduction. <i>Energy and Environmental Science</i> , 2019, 12, 1730-1750.	15.6	439
650	Effect of non-stoichiometry of initial reagents on morphological and structural properties of perovskites CH ₃ NH ₃ PbI ₃ . <i>Nanoscale Research Letters</i> , 2019, 14, 4.	3.1	10
651	Nanoscale design of zinc anodes for high-energy aqueous rechargeable batteries. <i>Materials Today Nano</i> , 2019, 6, 100032.	2.3	125
652	Thermoelectric performance of SnTe alloys with In and Sb co-doped near critical solubility limit. <i>Journal of Materials Science</i> , 2019, 54, 9049-9062.	1.7	18
653	First-principles study of Na _x TiO ₂ with trigonal bipyramid structures: an insight into sodium-ion battery anode applications. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 8408-8417.	1.3	10

#	ARTICLE	IF	CITATIONS
654	Hollow TiO ₂ submicrospheres assembled by tiny nanocrystals as superior anode for lithium ion battery. <i>Journal of Materials Chemistry A</i> , 2019, 7, 23733-23738.	5.2	15
655	Ternary metal sulfides for electrocatalytic energy conversion. <i>Journal of Materials Chemistry A</i> , 2019, 7, 9386-9405.	5.2	225
657	High Performance Room Temperature Sodium-Sulfur Battery by Eutectic Acceleration in Tellurium-Doped Sulfurized Polyacrylonitrile. <i>ACS Applied Energy Materials</i> , 2019, 2, 2956-2964.	2.5	73
658	Intermediate band insertion by group-III A elements alloying in a low cost solar cell absorber CuYSe ₂ : A first-principles study. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2019, 383, 1972-1976.	0.9	6
659	Designing polymers for advanced battery chemistries. <i>Nature Reviews Materials</i> , 2019, 4, 312-330.	23.3	579
660	Ethylene glycol-based solar-thermal fluids dispersed with reduced graphene oxide. <i>RSC Advances</i> , 2019, 9, 10282-10288.	1.7	14
661	Encapsulation of SeS ₂ into Nitrogen-Doped Free-Standing Carbon Nanofiber Film Enabling Long Cycle Life and High Energy Density K-SeS ₂ Battery. <i>ACS Nano</i> , 2019, 13, 4695-4704.	7.3	94
662	A safe and fast-charging lithium-ion battery anode using MXene supported Li ₃ VO ₄ . <i>Journal of Materials Chemistry A</i> , 2019, 7, 11250-11256.	5.2	106
664	Hydrogen-based self-sustaining integrated renewable electricity network (HySIREN) using a supply-demand forecasting model and deep-learning algorithms. <i>Energy Conversion and Management</i> , 2019, 185, 353-367.	4.4	52
665	Recent Advances in Rational Electrode Designs for High-Performance Alkaline Rechargeable Batteries. <i>Advanced Functional Materials</i> , 2019, 29, 1807847.	7.8	152
666	Enhancing Electrocatalytic Water Splitting by Strain Engineering. <i>Advanced Materials</i> , 2019, 31, e1807001.	11.1	470
667	Bifunctional cobalt phosphide nanoparticles with convertible surface structure for efficient electrocatalytic water splitting in alkaline solution. <i>Journal of Catalysis</i> , 2019, 371, 262-269.	3.1	45
668	An All-Solid-State Rechargeable Chloride Ion Battery. <i>Advanced Science</i> , 2019, 6, 1802130.	5.6	41
669	A free-standing reduced graphene oxide aerogel as supporting electrode in a fluorine-free Li ₂ S catholyte Li-S battery. <i>Journal of Power Sources</i> , 2019, 416, 111-117.	4.0	45
670	Elucidating the mobility of H ⁺ and Li ⁺ ions in (Li _{0.625} xH _x Al _{0.25})La ₃ Zr ₂ O ₁₂ via ¹ H and ⁷ Li relative neutron and electron spectroscopy. <i>Energy and Environmental Science</i> , 2019, 12, 945-951.	15.4	148
671	Decoupling structure-sensitive deactivation mechanisms of Ir/IrOx electrocatalysts toward oxygen evolution reaction. <i>Journal of Catalysis</i> , 2019, 371, 57-70.	3.1	70
672	Bimetal-Organic Framework-Derived Porous Rodlike Cobalt/Nickel Nitride for All-pH Value Electrochemical Hydrogen Evolution. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 8018-8024.	4.0	99
673	Versatile Protein-Templated TiO ₂ Nanocomposite for Energy Storage and Catalytic Applications. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 5329-5337.	3.2	24

#	ARTICLE	IF	CITATIONS
674	High-Performance Solution-Processable Flexible SnSe Nanosheet Films for Lower Grade Waste Heat Recovery. <i>Advanced Electronic Materials</i> , 2019, 5, 1800774.	2.6	32
675	Optimal Sizing and Performance Evaluation of a Hybrid Renewable Energy System for an Off-Grid Power System in Northern Canada. <i>Technology and Economics of Smart Grids and Sustainable Energy</i> , 2019, 4, 1.	1.8	25
676	Big to Small: Ultrafine Mo ₂ C Particles Derived from Giant Polyoxomolybdate Clusters for Hydrogen Evolution Reaction. <i>Small</i> , 2019, 15, e1900358.	5.2	53
677	Carbon-Nanotube-Cored Cobalt Porphyrin as a 1D Nanohybrid Strategy for High-Performance Lithium-Ion Battery Anodes. <i>Advanced Functional Materials</i> , 2019, 29, 1806937.	7.8	35
678	Empowering Metal Phosphides Anode with Catalytic Attribute toward Superior Cyclability for Lithium-Ion Storage. <i>Advanced Functional Materials</i> , 2019, 29, 1809051.	7.8	52
679	Prussian blue analog-derived 2D ultrathin CoFe ₂ O ₄ nanosheets as high-activity electrocatalysts for the oxygen evolution reaction in alkaline and neutral media. <i>Journal of Materials Chemistry A</i> , 2019, 7, 7328-7332.	5.2	75
680	Chemically stabilised extruded and recast short side chain Aquivion® proton exchange membranes for high current density operation in water electrolysis. <i>Journal of Membrane Science</i> , 2019, 578, 136-148.	4.1	48
681	Prussian White Hierarchical Nanotubes with Surface-Controlled Charge Storage for Sodium-Ion Batteries. <i>Advanced Functional Materials</i> , 2019, 29, 1806405.	7.8	124
682	Revealing sulfuric acid concentration impact on comprehensive performance of vanadium electrolytes and flow batteries. <i>Electrochimica Acta</i> , 2019, 303, 21-31.	2.6	30
683	An open thermo-electrochemical cell enabled by interfacial evaporation. <i>Journal of Materials Chemistry A</i> , 2019, 7, 6514-6521.	5.2	52
684	Influence of the Substrate Porosity on the Electrical Performance of a Hybrid Silicon Photo Voltaic. , 2019, , .		0
685	Understanding electro-catalysis by using density functional theory. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 23782-23802.	1.3	53
686	Silicon: toward eco-friendly reduction techniques for lithium-ion battery applications. <i>Journal of Materials Chemistry A</i> , 2019, 7, 24715-24737.	5.2	61
687	Enhancement of solar vapor generation by a 3D hierarchical heat trapping structure. <i>Journal of Materials Chemistry A</i> , 2019, 7, 26496-26503.	5.2	28
688	Intramolecular electronic coupling in porous iron cobalt (oxy)phosphide nanoboxes enhances the electrocatalytic activity for oxygen evolution. <i>Energy and Environmental Science</i> , 2019, 12, 3348-3355.	15.6	234
689	Monolayer SnP ₃ : an excellent p-type thermoelectric material. <i>Nanoscale</i> , 2019, 11, 19923-19932.	2.8	119
690	Mechanism of densification in low-temperature FLASH sintered lead free potassium sodium niobate (KNN) piezoelectrics. <i>Journal of Materials Chemistry C</i> , 2019, 7, 14334-14341.	2.7	27
691	Oscillating Hydrogen Bubbles at Pt Microelectrodes. <i>Physical Review Letters</i> , 2019, 123, 214503.	2.9	45

#	ARTICLE	IF	CITATIONS
692	Facile Synthesis of Antimony Tungstate Nanosheets as Anodes for Lithium-Ion Batteries. <i>Nanomaterials</i> , 2019, 9, 1689.	1.9	28
693	2020 roadmap on pore materials for energy and environmental applications. <i>Chinese Chemical Letters</i> , 2019, 30, 2110-2122.	4.8	75
694	Co-feeding copper catalysts couple carbon. <i>Nature Nanotechnology</i> , 2019, 14, 1002-1003.	15.6	5
695	Intrinsic poorly-crystallized Fe ₅ O ₇ (OH)·4H ₂ O: a highly efficient oxygen evolution reaction electrocatalyst under alkaline conditions. <i>RSC Advances</i> , 2019, 9, 42470-42473.	1.7	3
696	Ultralow lattice thermal conductivity and high thermoelectric performance of monolayer KCuTe: a first principles study. <i>RSC Advances</i> , 2019, 9, 36301-36307.	1.7	27
697	Oxidative steam reforming of ethanol over MxLa ₂ xCe _{1.8} Ru _{0.2} O ₇ (M = Mg, Ca) catalysts: effect of alkaline earth metal substitution and support on stability and activity. <i>RSC Advances</i> , 2019, 9, 39932-39944.	1.7	8
698	Selective acid leaching: a simple way to engineer cobalt oxide nanostructures for the electrochemical oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 23130-23139.	5.2	29
699	Reflecting trends in the academic landscape of sustainable energy using probabilistic topic modeling. <i>Energy, Sustainability and Society</i> , 2019, 9, .	1.7	17
700	Recent Progress in Graphene-Based Noble Metal Nanocomposites for Electrocatalytic Applications. <i>Advanced Materials</i> , 2019, 31, e1800696.	11.1	219
701	Harnessing the unique properties of 2D materials for advanced lithium-sulfur batteries. <i>Nanoscale Horizons</i> , 2019, 4, 77-98.	4.1	79
702	Ultrathin Fe-Nanoparticles Coordinated Fe-Doped CoNi Alloy Nanoparticles for Electrochemical Water Splitting. <i>Particle and Particle Systems Characterization</i> , 2019, 36, 1800252.	1.2	21
703	Flexible NiO micro-rods/nanoporous Ni/metallic glass electrode with sandwich structure for high performance supercapacitors. <i>Electrochimica Acta</i> , 2019, 297, 767-777.	2.6	64
704	Rechargeable Seawater Batteries—From Concept to Applications. <i>Advanced Materials</i> , 2019, 31, e1804936.	11.1	73
705	Binder-free multilayered SnO ₂ /graphene on Ni foam as a high-performance lithium ion batteries anode. <i>Ceramics International</i> , 2019, 45, 6931-6936.	2.3	23
706	Hexagonal arrays of Pt nanocylinders on the top surface of PAA membranes using low vacuum sputter coating technique. <i>Vacuum</i> , 2019, 161, 259-267.	1.6	4
707	Sustainable and Atomically Dispersed Iron Electrocatalysts Derived from Nitrogen- and Phosphorus-Modified Woody Biomass for Efficient Oxygen Reduction. <i>Advanced Materials Interfaces</i> , 2019, 6, 1801623.	1.9	22
708	An Interconnected Channel-Like Framework as Host for Lithium Metal Composite Anodes. <i>Advanced Energy Materials</i> , 2019, 9, 1802720.	10.2	83
709	Sulfurized poly(acrylonitrile) wrapped carbon sulfur composite cathode material for high performance rechargeable lithium sulfur batteries. <i>Journal of Power Sources</i> , 2019, 412, 670-676.	4.0	38

#	ARTICLE	IF	CITATIONS
710	A highly efficient electrocatalyst for oxygen reduction reaction: Three-dimensionally ordered macroporous perovskite LaMnO ₃ . <i>Journal of Power Sources</i> , 2019, 412, 701-709.	4.0	53
711	Evidence for product-specific active sites on oxide-derived Cu catalysts for electrochemical CO ₂ reduction. <i>Nature Catalysis</i> , 2019, 2, 86-93.	16.1	212
712	Regulating Lithium Nucleation via CNTs Modifying Carbon Cloth Film for Stable Li Metal Anode. <i>Small</i> , 2019, 15, e1803734.	5.2	108
713	Alveolate porous carbon aerogels supported Co ₉ S ₈ derived from a novel hybrid hydrogel for bifunctional oxygen electrocatalysis. <i>Carbon</i> , 2019, 144, 557-566.	5.4	177
714	Onion-like nanospheres organized by carbon encapsulated few-layer MoS ₂ nanosheets with enhanced lithium storage performance. <i>Journal of Power Sources</i> , 2019, 413, 327-333.	4.0	104
715	Large-Scale, Low-Cost, and High-Efficiency Water-Splitting System for Clean H ₂ Generation. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 3971-3977.	4.0	46
716	Boosting the Efficient Energy Output of Electret Nanogenerators by Suppressing Air Breakdown under Ambient Conditions. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 3984-3989.	4.0	20
717	Benchmarking the Activity, Stability, and Inherent Electrochemistry of Amorphous Molybdenum Sulfide for Hydrogen Production. <i>Advanced Energy Materials</i> , 2019, 9, 1802614.	10.2	85
718	Photo-thermal conversion structure by infiltration of paraffin in three dimensionally interconnected porous polystyrene-carbon nanotubes (PS-CNT) polyHIPE foam. <i>Solar Energy Materials and Solar Cells</i> , 2019, 191, 266-274.	3.0	77
719	Textile-Based Triboelectric Nanogenerators for Self-Powered Wearable Electronics. <i>Advanced Functional Materials</i> , 2019, 29, 1804533.	7.8	148
720	Chemical, Structural, and Electronic Characterization of the (010) Surface of Single Crystalline Bismuth Vanadate. <i>Journal of Physical Chemistry C</i> , 2019, 123, 8347-8359.	1.5	28
721	In situ quantification of interphasial chemistry in Li-ion battery. <i>Nature Nanotechnology</i> , 2019, 14, 50-56.	15.6	373
722	Boosting the Photocatalytic Ability of Cu ₂ O Nanowires for CO ₂ Conversion by MXene Quantum Dots. <i>Advanced Functional Materials</i> , 2019, 29, 1806500.	7.8	354
723	Chemical and morphological characterization of photoactive SiO _x films electrodeposited on Pt substrate. <i>Journal of Electroanalytical Chemistry</i> , 2019, 832, 311-320.	1.9	1
724	Large-Scale and Highly Selective CO ₂ Electrocatalytic Reduction on Nickel Single-Atom Catalyst. <i>Joule</i> , 2019, 3, 265-278.	11.7	663
725	Nanodiamonds: Emerging face of future nanotechnology. <i>Carbon</i> , 2019, 143, 678-699.	5.4	105
726	MnO ₂ Nanostructures Deposited on Graphene-Like Porous Carbon Nanosheets for High-Rate Performance and High-Energy Density Asymmetric Supercapacitors. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 3101-3110.	3.2	66
727	Recent progress of graphene-based materials in lithium-ion capacitors. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 143001.	1.3	36

#	ARTICLE	IF	CITATIONS
728	Flammability reduction in a pressurised water electrolyser based on a thin polymer electrolyte membrane through a Pt-alloy catalytic approach. <i>Applied Catalysis B: Environmental</i> , 2019, 246, 254-265.	10.8	30
729	B ⁺ -Doped Fe/N/C Porous Catalyst for High-Performance Oxygen Reduction in Anion-Exchange Membrane Fuel Cells. <i>ChemElectroChem</i> , 2019, 6, 1754-1760.	1.7	18
730	Enhanced Solar Conversion of CO ₂ to CO Using Mn-Doped TiO ₂ Based on Photo-thermochemical Cycle. <i>ChemistrySelect</i> , 2019, 4, 236-244.	0.7	7
731	Electrochemical CO Reduction: A Property of the Electrochemical Interface. <i>Journal of the American Chemical Society</i> , 2019, 141, 1506-1514.	6.6	121
732	Solid Electrolyte Interphase on Native Oxide-Terminated Silicon Anodes for Li-Ion Batteries. <i>Joule</i> , 2019, 3, 762-781.	11.7	185
733	Quantifying Photocurrent Loss of a Single Particle-Particle Interface in Nanostructured Photoelectrodes. <i>Nano Letters</i> , 2019, 19, 958-962.	4.5	13
734	Multilayer-graphene-stabilized lithium deposition for anode-free lithium-metal batteries. <i>Nanoscale</i> , 2019, 11, 2710-2720.	2.8	118
735	Improved rate and cycling performance of FeF ₂ -rGO hybrid cathode with poly (acrylic acid) binder for sodium ion batteries. <i>Journal of Power Sources</i> , 2019, 413, 449-458.	4.0	25
736	Pyroprotein-Derived Hard Carbon Fibers Exhibiting Exceptionally High Plateau Capacities for Sodium Ion Batteries. <i>ACS Applied Energy Materials</i> , 2019, 2, 1185-1191.	2.5	38
737	Graphene Regulated Ceramic Electrolyte for Solid-State Sodium Metal Battery with Superior Electrochemical Stability. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 5064-5072.	4.0	77
738	Two new control strategies: For hydrogen fuel saving and extend the life cycle in the hydrogen fuel cell vehicles. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 18967-18980.	3.8	64
739	Rational design of intertwined carbon nanotubes threaded porous CoP@carbon nanocubes as anode with superior lithium storage. <i>Carbon</i> , 2019, 142, 269-277.	5.4	58
740	Unveiling the Intrinsic Cycle Reversibility of a LiCoO ₂ Electrode at 4.8-V Cutoff Voltage through Subtractive Surface Modification for Lithium-Ion Batteries. <i>Nano Letters</i> , 2019, 19, 29-37.	4.5	78
741	Electrocatalytic Rate Alignment Enhances Syngas Generation. <i>Joule</i> , 2019, 3, 257-264.	11.7	62
742	Conjugated Cobalt Polyphthalocyanine as the Elastic and Reprocessable Catalyst for Flexible Li ⁺ -CO ₂ Batteries. <i>Advanced Materials</i> , 2019, 31, e1805484.	11.1	112
743	Green hybrid power system based on triboelectric nanogenerator for wearable/portable electronics. <i>Nano Energy</i> , 2019, 55, 151-163.	8.2	129
744	Rational design of novel nanostructured arrays based on porous AAO templates for electrochemical energy storage and conversion. <i>Nano Energy</i> , 2019, 55, 234-259.	8.2	71
745	Iron/carbon composite microfiber catalyst derived from hemoglobin blood protein for lithium-oxygen batteries. <i>Applied Surface Science</i> , 2019, 466, 562-567.	3.1	17

#	ARTICLE	IF	CITATIONS
746	Unexplored Pathways To Charge Storage in Supercapacitors. <i>Journal of Physical Chemistry C</i> , 2019, 123, 195-204.	1.5	14
747	Dandelion Derived Nitrogen-Doped Hollow Carbon Host for Encapsulating Sulfur in Lithium Sulfur Battery. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 3042-3051.	3.2	71
748	Practical use of polymer brushes in sustainable energy applications: interfacial nanoarchitectonics for high-efficiency devices. <i>Chemical Society Reviews</i> , 2019, 48, 814-849.	18.7	122
749	Rechargeable aluminium organic batteries. <i>Nature Energy</i> , 2019, 4, 51-59.	19.8	283
750	Enabling High and Stable Electrocatalytic Activity of Iron-Based Perovskite Oxides for Water Splitting by Combined Bulk Doping and Morphology Designing. <i>Advanced Materials Interfaces</i> , 2019, 6, 1801317.	1.9	87
751	A general approach for fabricating 3D MFe ₂ O ₄ (M=Mn, Ni, Cu, Co)/graphitic carbon nitride covalently functionalized nitrogen-doped graphene nanocomposites as advanced anodes for lithium-ion batteries. <i>Nano Energy</i> , 2019, 57, 48-56.	8.2	75
752	High-performance lithium-ion battery anodes based on Mn ₃ O ₄ /nitrogen-doped porous carbon hybrid structures. <i>Journal of Alloys and Compounds</i> , 2019, 775, 51-58.	2.8	31
753	Atomic Modulation and Structure Design of Carbons for Bifunctional Electrocatalysis in Metal-Air Batteries. <i>Advanced Materials</i> , 2019, 31, e1803800.	11.1	208
754	Modulierung der elektronischen Strukturen anorganischer Nanomaterialien für eine effiziente elektrokatalytische Wasserspaltung. <i>Angewandte Chemie</i> , 2019, 131, 4532-4551.	1.6	34
755	Modulating Electronic Structures of Inorganic Nanomaterials for Efficient Electrocatalytic Water Splitting. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 4484-4502.	7.2	340
756	Non-porous carbonaceous materials derived from coffee waste grounds as highly sustainable anodes for lithium-ion batteries. <i>Journal of Cleaner Production</i> , 2019, 207, 411-417.	4.6	85
757	Rechargeable batteries based on anion intercalation graphite cathodes. <i>Energy Storage Materials</i> , 2019, 16, 65-84.	9.5	183
758	Long-life lithium-O ₂ battery achieved by integrating quasi-solid electrolyte and highly active Pt ₃ Co nanowires catalyst. <i>Energy Storage Materials</i> , 2020, 24, 707-713.	9.5	28
759	Dictating High-Capacity Lithium-Sulfur Batteries through Redox-Mediated Lithium Sulfide Growth. <i>Small Methods</i> , 2020, 4, 1900344.	4.6	99
760	Serpentine Co _x Ni _{3-x} Ge ₂ O ₅ (OH) ₄ nanosheets with tuned electronic energy bands for highly efficient oxygen evolution reaction in alkaline and neutral electrolytes. <i>Applied Catalysis B: Environmental</i> , 2020, 260, 118184.	10.8	28
761	Recent advances in carbon-based renewable adsorbent for selective carbon dioxide capture and separation-A review. <i>Journal of Cleaner Production</i> , 2020, 242, 118409.	4.6	194
762	Cobalt sulfides nanoparticles encapsulated in N, S co-doped carbon substrate for highly efficient oxygen reduction. <i>Journal of Alloys and Compounds</i> , 2020, 815, 152457.	2.8	25
763	Ultrahigh areal capacity of self-combusted nanoporous NiCuMn/Cu flexible anode for Li-ion battery. <i>Chemical Engineering Journal</i> , 2020, 383, 123097.	6.6	17

#	ARTICLE	IF	CITATIONS
764	Binder-free flexible Li ₂ ZnTi ₃ O ₈ @MWCNTs stereoscopic network as lightweight and superior rate performance anode for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2020, 816, 152580.	2.8	12
765	High-Energy-Density Solid-Electrolyte-Based Liquid Li-S and Li-Se Batteries. <i>Joule</i> , 2020, 4, 262-274.	11.7	109
766	Active Sulfur Sites in Semimetallic Titanium Disulfide Enable CO ₂ Electroreduction. <i>ACS Catalysis</i> , 2020, 10, 66-72.	5.5	25
767	Multifunctional Transition Metal-Based Phosphides in Energy-Related Electrocatalysis. <i>Advanced Energy Materials</i> , 2020, 10, 1902104.	10.2	322
768	Solid electrolyte interphase manipulation towards highly stable hard carbon anodes for sodium ion batteries. <i>Energy Storage Materials</i> , 2020, 25, 324-333.	9.5	92
769	Preparation for honeycombed Li ₃ V ₂ (PO ₄) ₃ /C composites via vacuum-assisted immersion method and their high-rates performance in lithium-ion batteries. <i>Vacuum</i> , 2020, 172, 108926.	1.6	8
770	Facile one-step synthesis of porous hybrid material fabricated by 2D nanosheets of molybdenum disulfide and reduced graphene oxide for efficient electrocatalytic hydrogen evolution. <i>Journal of Porous Materials</i> , 2020, 27, 123-131.	1.3	4
771	A molten battery consisting of Li metal anode, AlCl ₃ -LiCl cathode and solid electrolyte. <i>Energy Storage Materials</i> , 2020, 24, 412-416.	9.5	19
772	Halogenbasierte Materialien und Chemie für wiederaufladbare Batterien. <i>Angewandte Chemie</i> , 2020, 132, 5954-6004.	1.6	14
773	Halide-Based Materials and Chemistry for Rechargeable Batteries. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 5902-5949.	7.2	142
774	Rational design on separators and liquid electrolytes for safer lithium-ion batteries. <i>Journal of Energy Chemistry</i> , 2020, 43, 58-70.	7.1	170
775	Perspectives in emerging bismuth electrochemistry. <i>Chemical Engineering Journal</i> , 2020, 381, 122558.	6.6	103
776	Stannites – A New Promising Class of Durable Electrocatalysts for Efficient Water Oxidation. <i>ChemCatChem</i> , 2020, 12, 1161-1168.	1.8	18
777	Resource recovery from waste streams in a water-energy-food nexus perspective: Toward more sustainable food processing. <i>Food and Bioproducts Processing</i> , 2020, 119, 133-147.	1.8	47
778	Kolbe Electrolysis of Biomass-Derived Fatty Acids Over Pt Nanocrystals in an Electrochemical Cell. <i>ChemCatChem</i> , 2020, 12, 642-648.	1.8	13
779	Heat-regulating effects of inert salts on magnesiothermic reduction preparation of silicon nanopowder for lithium storage. <i>Ionics</i> , 2020, 26, 1249-1259.	1.2	6
780	Electrochemical Performance Optimization of Layered P2-Type Na _{0.67} MnO ₂ through Simultaneous Mn Site Doping and Nanostructure Engineering. <i>Batteries and Supercaps</i> , 2020, 3, 147-154.	2.4	27
781	Preparation and characterization of a novel piezoelectric nanogenerator based on soluble and meltable copolyimide for harvesting mechanical energy. <i>Nano Energy</i> , 2020, 67, 104220.	8.2	24

#	ARTICLE	IF	CITATIONS
782	Surface Ni-rich engineering towards highly stable Li _{1.2} Mn _{0.54} Ni _{0.13} Co _{0.13} O ₂ cathode materials. <i>Energy Storage Materials</i> , 2020, 25, 76-85.	9.5	47
783	Crystallization-induced ultrafast Na-ion diffusion in nickel hexacyanoferrate for high-performance sodium-ion batteries. <i>Nano Energy</i> , 2020, 67, 104250.	8.2	52
784	Advanced Antiscalting Interfacial Materials toward Highly Efficient Heat Energy Transfer. <i>Advanced Functional Materials</i> , 2020, 30, 1904796.	7.8	33
785	Jeffamine-Based Polymers for Rechargeable Batteries. <i>Batteries and Supercaps</i> , 2020, 3, 30-46.	2.4	27
786	Vanadium-Based Nanomaterials: A Promising Family for Emerging Metal-Ion Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 1904398.	7.8	262
787	Efficient Optimization of Electron/Oxygen Pathway by Constructing Ceria/Hydroxide Interface for Highly Active Oxygen Evolution Reaction. <i>Advanced Functional Materials</i> , 2020, 30, 1908367.	7.8	120
788	Synergistic Tandem Solar Electricity-Water Generators. <i>Joule</i> , 2020, 4, 347-358.	11.7	91
789	3D flower-Like Co _{1-x} S/MoS ₂ composite for long-life and high-rate lithium storage. <i>Journal of Energy Storage</i> , 2020, 27, 101135.	3.9	13
790	Efficient electroreduction of CO ₂ to CO by Ag-decorated S-doped g-C ₃ N ₄ /CNT nanocomposites at industrial scale current density. <i>Materials Today Physics</i> , 2020, 12, 100176.	2.9	39
791	Double layer charging driven carbon dioxide adsorption limits the rate of electrochemical carbon dioxide reduction on Gold. <i>Nature Communications</i> , 2020, 11, 33.	5.8	188
792	High-capacity thermochemical CO ₂ dissociation using iron-poor ferrites. <i>Energy and Environmental Science</i> , 2020, 13, 592-600.	15.6	23
793	A one-step synthesis of hierarchical porous CoFe-layered double hydroxide nanosheets with optimized composition for enhanced oxygen evolution electrocatalysis. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 737-745.	3.0	35
794	NbO _x nano-nail with a Pt head embedded in carbon as a highly active and durable oxygen reduction catalyst. <i>Nano Energy</i> , 2020, 69, 104455.	8.2	37
795	Nitrogen Self-Doped Porous Carbon for High-Performance Supercapacitors. <i>ACS Applied Energy Materials</i> , 2020, 3, 1585-1592.	2.5	109
796	Ce dopant significantly promotes the catalytic activity of Ni foam-supported Ni ₃ S ₂ electrocatalyst for alkaline oxygen evolution reaction. <i>Journal of Power Sources</i> , 2020, 450, 227654.	4.0	51
797	Fast prediction of oxygen reduction reaction activity on carbon nanotubes with a localized geometric descriptor. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 890-895.	1.3	24
798	Theoretical insights into the effect of the overpotential on CO electroreduction mechanisms on Cu(111): regulation and application of electrode potentials from a CO coverage-dependent electrochemical model. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 62-73.	1.3	3
799	Superlithiophilic graphene-silver enabling ultra-stable hosts for lithium metal anodes. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 897-904.	3.0	7

#	ARTICLE	IF	CITATIONS
800	Highly uniform nitrogen-doped carbon decorated MoO ₂ nanoparticles as anode for high-performance lithium/sodium-ion storage. <i>Journal of Colloid and Interface Science</i> , 2020, 563, 318-327.	5.0	36
801	Biomass mediated multi layered Na _x Co _{1-x} O ₂ (x=0.4) and Fe ₂ O ₃ nanoparticles for aqueous sodium ion battery. <i>Journal of Electroanalytical Chemistry</i> , 2020, 858, 113809.	1.9	12
802	Highly reversible water splitting cell building from hierarchical 3D nickel manganese oxyphosphide nanosheets. <i>Nano Energy</i> , 2020, 69, 104432.	8.2	74
803	Ultrafast lithium diffusion in bilayer buckled graphene: A comparative study of Li and Na. <i>Scripta Materialia</i> , 2020, 178, 139-143.	2.6	7
804	Broadband antireflective coatings for high efficiency InGaP/GaAs/InGaAsP/InGaAs multi-junction solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2020, 207, 110359.	3.0	24
805	Effect of Frustrated Rotations on the Pre-Exponential Factor for Unimolecular Reactions on Surfaces: A Case Study of Alkoxy Dehydrogenation. <i>Journal of Physical Chemistry C</i> , 2020, 124, 1429-1437.	1.5	10
806	Understanding the Ion-Sorption Dynamics in Functionalized Porous Carbons for Enhanced Capacitive Energy Storage. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 2773-2782.	4.0	17
807	Ternary Metal Chalcogenide Heterostructure (AgInS ₂ @TiO ₂) Nanocomposites for Visible Light Photocatalytic Applications. <i>ACS Omega</i> , 2020, 5, 406-421.	1.6	36
808	High Curvature Transition Metal Chalcogenide Nanostructures with a Pronounced Proximity Effect Enable Fast and Selective CO ₂ Electroreduction. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 8706-8712.	7.2	145
809	MXene-Based Anodes for Metal-Ion Batteries. <i>Batteries and Supercaps</i> , 2020, 3, 214-235.	2.4	75
810	Combining N,S-Codoped C and CeO ₂ : A Unique Hinge-like Structure for Efficient Photocatalytic Hydrogen Evolution. <i>Inorganic Chemistry</i> , 2020, 59, 937-942.	1.9	33
811	Anatase TiO ₂ Confined in Carbon Nanopores for High Energy Li-Ion Hybrid Supercapacitors Operating at High Rates and Subzero Temperatures. <i>Advanced Energy Materials</i> , 2020, 10, 1902993.	10.2	39
812	Benzoquinone and Naphthoquinone Bearing Polymers Synthesized by Ring Opening Metathesis Polymerization as Cathode Materials for Lithium-Ion Batteries. <i>ChemSusChem</i> , 2020, 13, 334-340.	3.6	27
813	Microporous Metal-Organic Framework Materials for Gas Separation. <i>Chem</i> , 2020, 6, 337-363.	5.8	528
814	Boosting the alkaline hydrogen evolution of Ru nanoclusters anchored on B/N-doped graphene by accelerating water dissociation. <i>Nano Energy</i> , 2020, 68, 104301.	8.2	138
815	Understanding the roles of amorphous domains and oxygen-containing groups of nitrogen-doped carbon in oxygen reduction catalysis: toward superior activity. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 177-185.	3.0	19
816	The contributions of socioeconomic indicators to global PM _{2.5} based on the hybrid method of spatial econometric model and geographical and temporal weighted regression. <i>Science of the Total Environment</i> , 2020, 703, 135481.	3.9	44
817	Low-cost carbon foam as a practical support for organic phase change materials in thermal management. <i>Applied Energy</i> , 2020, 258, 114108.	5.1	55

#	ARTICLE	IF	CITATIONS
818	Beyond Artificial Photosynthesis: Prospects on Photobiorefinery. <i>ChemCatChem</i> , 2020, 12, 1873-1890.	1.8	42
819	Electrochemical reduction of carbon dioxide on precise number of Fe atoms anchored graphdiyne. <i>Journal of CO2 Utilization</i> , 2020, 37, 272-277.	3.3	76
820	Chitosan and chitosan oligosaccharide: Advanced carbon sources are used for preparation of N-doped carbon-coated Li ₂ ZnTi ₃ O ₈ anode material. <i>Journal of Electroanalytical Chemistry</i> , 2020, 858, 113789.	1.9	12
821	Synergistic enhancement of electrocatalytic CO ₂ reduction to C ₂ oxygenates at nitrogen-doped nanodiamonds/Cu interface. <i>Nature Nanotechnology</i> , 2020, 15, 131-137.	15.6	169
822	Well-defined CoSe ₂ @MoSe ₂ hollow heterostructured nanocubes with enhanced dissociation kinetics for overall water splitting. <i>Nanoscale</i> , 2020, 12, 326-335.	2.8	71
823	Photocorrosion inhibition of CdS-based catalysts for photocatalytic overall water splitting. <i>Nanoscale</i> , 2020, 12, 1213-1223.	2.8	265
824	Temperature-regulated reversible transformation of spinel-to-oxyhydroxide active species for electrocatalytic water oxidation. <i>Journal of Materials Chemistry A</i> , 2020, 8, 1631-1635.	5.2	33
825	Confine growth of NiCo ₂ S ₄ nanoneedles in graphene framework toward high-performance asymmetric capacitor. <i>Journal of Alloys and Compounds</i> , 2020, 822, 153645.	2.8	34
826	Tuning OH binding energy enables selective electrochemical oxidation of ethylene to ethylene glycol. <i>Nature Catalysis</i> , 2020, 3, 14-22.	16.1	120
827	Zirconium nitride catalysts surpass platinum for oxygen reduction. <i>Nature Materials</i> , 2020, 19, 282-286.	13.3	293
828	A metal-free battery working at ~80°C. <i>Energy Storage Materials</i> , 2020, 26, 585-592.	9.5	35
829	Exploring interface confined water flow and evaporation enables solar-thermal-electro integration towards clean water and electricity harvest via asymmetric functionalization strategy. <i>Nano Energy</i> , 2020, 68, 104385.	8.2	113
830	Controlled Atomic Solubility in Mn-Rich Composite Material to Achieve Superior Electrochemical Performance for Li-Ion Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 1902231.	10.2	17
831	Promises of Main Group Metal-Based Nanostructured Materials for Electrochemical CO ₂ Reduction to Formate. <i>Advanced Energy Materials</i> , 2020, 10, 1902338.	10.2	384
832	Efficient and stable hydrogen evolution based on earth-abundant SnSe nanocrystals. <i>Applied Catalysis B: Environmental</i> , 2020, 264, 118526.	10.8	16
833	Eco-friendly xonotlite nanowires/wood pulp fibers ceramic hybrid separators through a simple papermaking process for lithium ion battery. <i>Journal of Membrane Science</i> , 2020, 597, 117725.	4.1	17
834	Surface Engineering for Advanced Aqueous Supercapacitors: A Review. <i>ChemElectroChem</i> , 2020, 7, 586-593.	1.7	20
835	Designing Highly Conductive Functional Groups Improving Guest-Host Interactions in Li/S Batteries. <i>Small</i> , 2020, 16, e1905585.	5.2	28

#	ARTICLE	IF	CITATIONS
836	Polypyrrole-derived nitrogen-doped carbon coated hierarchical MnO porous microspheres for highly reversible lithium storage. <i>Journal of Electroanalytical Chemistry</i> , 2020, 856, 113733.	1.9	10
837	Selective Ethane/Ethylene Separation in a Robust Microporous Hydrogen-Bonded Organic Framework. <i>Journal of the American Chemical Society</i> , 2020, 142, 633-640.	6.6	183
838	An Insoluble Anthraquinone Dimer with Near-Plane Structure as a Cathode Material for Lithium-Ion Batteries. <i>ChemSusChem</i> , 2020, 13, 2436-2442.	3.6	26
839	Hierarchical architecture derived from two-dimensional zeolitic imidazolate frameworks as an efficient metal-based bifunctional oxygen electrocatalyst for rechargeable Zn-air batteries. <i>Electrochimica Acta</i> , 2020, 331, 135394.	2.6	43
840	Synthesis of Iridium Nanocatalysts for Water Oxidation in Acid: Effect of the Surfactant. <i>ChemCatChem</i> , 2020, 12, 1282-1287.	1.8	31
841	Layered Metal Hydroxides and Their Derivatives: Controllable Synthesis, Chemical Exfoliation, and Electrocatalytic Applications. <i>Advanced Energy Materials</i> , 2020, 10, 1902535.	10.2	90
842	Addressing the Interfacial Properties for CO Electroreduction on Cu with Cyclic Voltammetry. <i>ACS Energy Letters</i> , 2020, 5, 130-135.	8.8	19
843	Self-Supported Iridium Oxide Nanostructures for Electrocatalytic Water Oxidation in Acidic Media. <i>Journal of Physical Chemistry C</i> , 2020, 124, 2-8.	1.5	24
844	Hydrogenation of CO ₂ to Methanol by Pt Nanoparticles Encapsulated in UiO-67: Deciphering the Role of the Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2020, 142, 999-1009.	6.6	141
845	Uniform yolk-shell Fe ₇ S ₈ @C nanoboxes as a general host material for the efficient storage of alkali metal ions. <i>Journal of Alloys and Compounds</i> , 2020, 817, 152732.	2.8	73
846	C ₃ N/blue phosphorene heterostructure as a high rate-capacity and stable anode material for lithium ion batteries: Insight from first principles calculations. <i>Applied Surface Science</i> , 2020, 505, 144518.	3.1	44
847	Temperature-dependent gas accumulation in polymer electrolyte membrane electrolyzer porous transport layers. <i>Journal of Power Sources</i> , 2020, 446, 227312.	4.0	49
848	A binder-free high silicon content flexible anode for Li-ion batteries. <i>Energy and Environmental Science</i> , 2020, 13, 848-858.	15.6	245
849	Oxygen Doping Induced by Nitrogen Vacancies in Nb ₄ N ₅ Enables Highly Selective CO ₂ Reduction. <i>Small</i> , 2020, 16, e1905825.	5.2	38
850	Internal failure of anode materials for lithium batteries – A critical review. <i>Green Energy and Environment</i> , 2020, 5, 22-36.	4.7	67
851	Graphene-like C ₃ N/blue phosphorene heterostructure as a potential anode material for Li/Na-ion batteries: A first principles study. <i>Solid State Ionics</i> , 2020, 345, 115160.	1.3	19
852	Boosting Ethylene/Ethane Separation within Copper(I)-Chelated Metal-Organic Frameworks through Tailor-Made Aperture and Specific I-Complexation. <i>Advanced Science</i> , 2020, 7, 1901918.	5.6	86
853	Recent advances and challenges for solar-driven water evaporation system toward applications. <i>Nano Energy</i> , 2020, 68, 104324.	8.2	268

#	ARTICLE	IF	CITATIONS
854	High-Curvature Transition-Metal Chalcogenide Nanostructures with a Pronounced Proximity Effect Enable Fast and Selective CO ₂ Electroreduction. <i>Angewandte Chemie</i> , 2020, 132, 8784-8790.	1.6	37
855	Poly(4-styrene sulfonic acid)/bacterial cellulose membranes: Electrochemical performance in a single-chamber microbial fuel cell. <i>Bioresource Technology Reports</i> , 2020, 9, 100376.	1.5	20
856	Mini Wind Harvester and a Low Power Three-Phase AC/DC Converter to Power IoT Devices: Analysis, Simulation, Test and Design. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 6347.	1.3	7
857	Redox-active phthalocyanine-decorated graphene aerogels for high-performance supercapacitors based on ionic liquid electrolyte. <i>Journal of Materials Chemistry A</i> , 2020, 8, 21789-21796.	5.2	26
858	Microclusters of Kinked Silicon Nanowires Synthesized by a Recyclable Iodide Process for High-Performance Lithium-Ion Battery Anodes. <i>Advanced Energy Materials</i> , 2020, 10, 2002108.	10.2	57
859	High-Energy W-Doped Li[Ni _{0.95} Co _{0.04} Al _{0.01}]O ₂ Cathodes for Next-Generation Electric Vehicles. <i>Energy Storage Materials</i> , 2020, 33, 399-407.	9.5	88
860	Thermocells Driven by Phase Transition of Hydrogel Nanoparticles. <i>Journal of the American Chemical Society</i> , 2020, 142, 17318-17322.	6.6	54
861	Molten Lithium-Brass/Zinc Chloride System as High-Performance and Low-Cost Battery. <i>Matter</i> , 2020, 3, 1714-1724.	5.0	17
862	Synergetic Structural Transformation of Pt Electrocatalyst into Advanced 3D Architectures for Hydrogen Fuel Cells. <i>Advanced Materials</i> , 2020, 32, e2002210.	11.1	33
863	Electrochemical Conversion of Biomass Derived Products into High-Value Chemicals. <i>Matter</i> , 2020, 3, 1162-1177.	5.0	63
864	Rapid hybrid chemical vapor deposition for efficient and hysteresis-free perovskite solar modules with an operation lifetime exceeding 800 hours. <i>Journal of Materials Chemistry A</i> , 2020, 8, 23404-23412.	5.2	34
865	Current and novel approaches to downstream processing of microalgae: A review. <i>Biotechnology Advances</i> , 2020, 45, 107650.	6.0	62
866	A Review of Technical Advances, Barriers, and Solutions in the Power to Hydrogen (P2H) Roadmap. <i>Engineering</i> , 2020, 6, 1364-1380.	3.2	63
867	High-Capacity, Dendrite-Free, and Ultrahigh-Rate Lithium-Metal Anodes Based on Monodisperse N-Doped Hollow Carbon Nanospheres. <i>Small</i> , 2020, 16, e2004770.	5.2	27
868	A novel layered birnessite-type sodium molybdate as dual-ion electrodes for high capacity battery. <i>Electrochimica Acta</i> , 2020, 363, 137229.	2.6	10
869	Self-assembled materials for electrochemical energy storage. <i>MRS Bulletin</i> , 2020, 45, 815-822.	1.7	7
870	Revealing and Elucidating ALD-Derived Control of Lithium Plating Microstructure. <i>Advanced Energy Materials</i> , 2020, 10, 2002736.	10.2	37
871	Sustainability Performance Index for Ranking Energy Storage Technologies using Multi-Criteria Decision-Making Model and Hybrid Computational Method. <i>Journal of Energy Storage</i> , 2020, 32, 101820.	3.9	25

#	ARTICLE	IF	CITATIONS
872	<i>In-Situ</i> Surface Reconstruction of InN Nanosheets for Efficient CO ₂ Electroreduction into Formate. <i>Nano Letters</i> , 2020, 20, 8229-8235.	4.5	55
873	Millimeter Silicon-Derived Secondary Submicron Materials as High-Initial Coulombic Efficiency Anode for Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2020, 3, 10255-10260.	2.5	14
874	Photoinduced homogeneous RuO ₂ nanoparticles on TiO ₂ nanowire arrays: A high-performance cathode toward flexible Li- ⁺ CO ₂ batteries. <i>Journal of Power Sources</i> , 2020, 475, 228703.	4.0	31
875	A novel expanded metal-organic framework for balancing volumetric and gravimetric methane storage working capacities. <i>Chemical Communications</i> , 2020, 56, 13117-13120.	2.2	9
876	Rational design of hierarchical FeSe ₂ encapsulated with bifunctional carbon cuboids as an advanced anode for sodium-ion batteries. <i>Nanoscale</i> , 2020, 12, 22210-22216.	2.8	26
877	An inverse vulcanized conductive polymer for Li- ⁺ S battery cathodes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 21711-21720.	5.2	23
878	Electrochemical CO ₂ reduction to high-concentration pure formic acid solutions in an all-solid-state reactor. <i>Nature Communications</i> , 2020, 11, 3633.	5.8	294
879	Facile preparation of a stable 3D host for lithium metal anodes. <i>Chemical Communications</i> , 2020, 56, 9898-9900.	2.2	17
880	A novel design of an electrolyser using a trifunctional (HER/OER/ORR) electrocatalyst for decoupled H ₂ /O ₂ generation and solar to hydrogen conversion. <i>Journal of Materials Chemistry A</i> , 2020, 8, 16609-16615.	5.2	27
881	Bicontinuous transition metal phosphides/rGO binder-free electrodes: generalized synthesis and excellent cycling stability for sodium storage. <i>Nanoscale</i> , 2020, 12, 16716-16723.	2.8	15
882	Controlling Residual Lithium in High-Nickel (>90%) Lithium Layered Oxides for Cathodes in Lithium-Ion Batteries. <i>Angewandte Chemie</i> , 2020, 132, 18821-18828.	1.6	2
883	Facile formulation and fabrication of the cathode using a self-lithiated carbon for all-solid-state batteries. <i>Scientific Reports</i> , 2020, 10, 11813.	1.6	5
884	Waste to energy and circular economy: the case of anaerobic digestion. <i>Journal of Enterprise Information Management</i> , 2020, 33, 817-838.	4.4	40
885	Defects in complex oxide thin films for electronics and energy applications: challenges and opportunities. <i>Materials Horizons</i> , 2020, 7, 2832-2859.	6.4	83
886	Design of compressible and elastic N-doped porous carbon nanofiber aerogels as binder-free supercapacitor electrodes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 17257-17265.	5.2	61
887	Controlling Residual Lithium in High-Nickel (>90%) Lithium Layered Oxides for Cathodes in Lithium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 18662-18669.	7.2	81
888	Electroreduction of Carbon Dioxide in Metallic Nanopores through a Pincer Mechanism. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 19297-19303.	7.2	33
889	KAgX (X = S, Se): High-Performance Layered Thermoelectric Materials for Medium-Temperature Applications. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 36102-36109.	4.0	68

#	ARTICLE	IF	CITATIONS
890	Solid-phase synthesis and photoactivity of Ru-polypyridyl visible light chromophores bonded through carbon to semiconductor surfaces. <i>Dalton Transactions</i> , 2020, 49, 10173-10184.	1.6	4
891	Mesoporous cobalt-iron based materials as highly efficient electrocatalysts for oxygen evolution reaction. <i>Journal of Electroanalytical Chemistry</i> , 2020, 873, 114443.	1.9	4
892	Multifunctional metal-free rechargeable polymer composite nanoparticles boosted by CO ₂ . <i>Materials Today Sustainability</i> , 2020, 10, 100048.	1.9	0
893	Trimetallic MOF-74 Films Grown on Ni Foam as Bifunctional Electrocatalysts for Overall Water Splitting. <i>ChemSusChem</i> , 2020, 13, 5647-5653.	3.6	56
894	Microstructural Changes of Prussian Blue Derivatives during Cycling in Zinc-Containing Electrolytes. <i>ChemElectroChem</i> , 2020, 7, 3301-3310.	1.7	17
895	Superfine MnO ₂ Nanowires with Rich Defects Toward Boosted Zinc Ion Storage Performance. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 34949-34958.	4.0	156
896	pH-regulated thermo-driven nanofluidics for nanoconfined mass transport and energy conversion. <i>Nanoscale Advances</i> , 2020, 2, 4070-4076.	2.2	6
897	Nickel cobalt oxide nanowires with iron incorporation realizing a promising electrocatalytic oxygen evolution reaction. <i>Nanotechnology</i> , 2020, 31, 435707.	1.3	11
898	Temperature-dependent energy gain of bifacial PV farms: A global perspective. <i>Applied Energy</i> , 2020, 276, 115405.	5.1	38
899	Fully Exploited Oxygen Redox Reaction by the Interdiffused Cations in Co-Free Li-Rich Materials for High Performance Li-Ion Batteries. <i>Advanced Science</i> , 2020, 7, 2001658.	5.6	17
900	Electroreduction of Carbon Dioxide in Metallic Nanopores through a Pincer Mechanism. <i>Angewandte Chemie</i> , 2020, 132, 19459-19465.	1.6	6
901	Two-dimensional Noble Metal Nanomaterials for Electrocatalysis. <i>Chemical Research in Chinese Universities</i> , 2020, 36, 597-610.	1.3	11
902	Tailored self-assembled photocatalytic nanofibres for visible-light-driven hydrogen production. <i>Nature Chemistry</i> , 2020, 12, 1150-1156.	6.6	98
903	Effects of Carbon-Based Electrode Materials for Excess Sodium Metal Anode Engineered Rechargeable Sodium Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 17697-17706.	3.2	10
904	A paired electrolysis approach for recycling spent lithium iron phosphate batteries in an undivided molten salt cell. <i>Green Chemistry</i> , 2020, 22, 8633-8641.	4.6	38
905	Phenazine anodes for ultralongcycle-life aqueous rechargeable batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 26013-26022.	5.2	21
906	Dopant-Assisted Control of the Crystallite Domain Size in Hollow Ternary Iridium Alloy Octahedral Nanocages toward the Oxygen Evolution Reaction. <i>Cell Reports Physical Science</i> , 2020, 1, 100260.	2.8	14
907	Hybrid Architecture of a Porous Polypyrrole Scaffold Loaded with Metal-Organic Frameworks for Flexible Solid-State Supercapacitors. <i>ACS Applied Energy Materials</i> , 2020, 3, 11920-11928.	2.5	31

#	ARTICLE	IF	CITATIONS
908	Topotactically Transformed Polygonal Mesopores on Ternary Layered Double Hydroxides Exposing Under- π -Coordinated Metal Centers for Accelerated Water Dissociation. <i>Advanced Materials</i> , 2020, 32, e2006784.	11.1	186
909	Topology- π -Controlled Hydration of Polymer Network in Hydrogels for Solar- π -Driven Wastewater Treatment. <i>Advanced Materials</i> , 2020, 32, e2007012.	11.1	225
910	A low temperature aqueous formate fuel cell using cobalt hexacyanoferrate as a non-noble metal oxidation catalyst. <i>Sustainable Energy and Fuels</i> , 2020, 4, 6227-6233.	2.5	8
911	Facile Synthesis of Hierarchical CuS and CuCo_2S_4 Structures from an Ionic Liquid Precursor for Electrocatalysis Applications. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 52560-52570.	4.0	20
912	Microregulation of Pore Channels in Covalent-Organic Frameworks Used for the Selective and Efficient Separation of Ethane. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 52819-52825.	4.0	35
913	Enhanced Electrochemical Performance by In Situ Phase Transition from SnS_2 Nanoparticles to SnS Nanorods in N-Doped Hierarchical Porous Carbon as Anodes for Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2020, 3, 11318-11325.	2.5	15
914	Analysis of Acid-Stable and Active Oxides for the Oxygen Evolution Reaction. <i>ACS Energy Letters</i> , 2020, 5, 3778-3787.	8.8	89
915	Moisture-Enabled Electricity Generation: From Physics and Materials to Self-Powered Applications. <i>Advanced Materials</i> , 2020, 32, e2003722.	11.1	175
916	Two-dimensional semiconducting covalent organic frameworks for photocatalytic solar fuel production. <i>Materials Today</i> , 2020, 40, 160-172.	8.3	56
917	Membrane-Based Olefin/Paraffin Separations. <i>Advanced Science</i> , 2020, 7, 2001398.	5.6	105
918	Metallic VS_2 /blue phosphorene heterostructures as promising anode materials for high-performance lithium ion batteries: A first principles study. <i>Applied Surface Science</i> , 2020, 533, 147478.	3.1	37
919	Issues and solutions toward zinc anode in aqueous zinc-ion batteries: A mini review. , 2020, 2, 540-560.		225
920	Recent Advances in Atomic-scale Storage Mechanism Studies of Two-dimensional Nanomaterials for Rechargeable Batteries Beyond Li-ion. <i>Chemical Research in Chinese Universities</i> , 2020, 36, 560-583.	1.3	14
921	Direct growth of MnO_2 on highly porous nitrogen-doped carbon nanowires for asymmetric supercapacitors. <i>Diamond and Related Materials</i> , 2020, 108, 107988.	1.8	19
922	Efficient Dissolution of Lithium-Ion Batteries Cathode LiCoO_2 by Polyethylene Glycol-Based Deep Eutectic Solvents at Mild Temperature. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 11713-11720.	3.2	91
923	A comprehensive assessment of low-temperature preheating process in natural gas pressure reduction stations to better benefit from solar energy. <i>Energy</i> , 2020, 209, 118430.	4.5	16
924	Autotrophic metabolism considered to extend the applicability of the carbon balances model for assessing biodegradation in petroleum-hydrocarbon-contaminated aquifers with abnormally low dissolved inorganic carbon. <i>Journal of Cleaner Production</i> , 2020, 261, 120738.	4.6	4
925	Tuning of Trifunctional NiCu Bimetallic Nanoparticles Confined in a Porous Carbon Network with Surface Composition and Local Structural Distortions for the Electrocatalytic Oxygen Reduction, Oxygen and Hydrogen Evolution Reactions. <i>Journal of the American Chemical Society</i> , 2020, 142, 14688-14701.	6.6	231

#	ARTICLE	IF	CITATIONS
926	Two-dimensional forms of robust CO ₂ reduction photocatalysts. <i>Npj 2D Materials and Applications</i> , 2020, 4, .	3.9	20
927	Multi-dimensional hybrid heterostructure MoS ₂ @C nanocomposite as a highly reversible anode for high-energy lithium-ion capacitors. <i>Applied Surface Science</i> , 2020, 531, 147222.	3.1	27
928	Defect-enriched carbon nanofibers encapsulating NiCo oxide for efficient oxygen electrocatalysis and rechargeable Zn-air batteries. <i>Journal of Power Sources</i> , 2020, 473, 228604.	4.0	25
929	Rational design of sustainable transition metal-based bifunctional electrocatalysts for oxygen reduction and evolution reactions. <i>Sustainable Materials and Technologies</i> , 2020, 25, e00204.	1.7	17
930	Enhancing the Cycling Stability by Tuning the Chemical Bonding between Phosphorus and Carbon Nanotubes for Potassium-Ion Battery Anodes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 37275-37284.	4.0	41
931	In Situ Observation of Interface Evolution on a Graphite Anode by Scanning Electrochemical Microscopy. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 37047-37053.	4.0	30
932	Surface Reconstruction of Ultrathin Palladium Nanosheets during Electrocatalytic CO ₂ Reduction. <i>Angewandte Chemie</i> , 2020, 132, 21677-21682.	1.6	37
933	Revealing Nanoscale Chemical Heterogeneities in Polycrystalline Mo ₄ VO ₄ Thin Films. <i>Small</i> , 2020, 16, e2001600.	5.2	12
934	Space-confined catalyst design toward ultrafine Pt nanoparticles with enhanced oxygen reduction activity and durability. <i>Journal of Power Sources</i> , 2020, 473, 228607.	4.0	23
935	Solvent-Free Mechanochemical Synthesis of Ultrasmall Nickel Phosphide Nanoparticles and Their Application as a Catalyst for the Hydrogen Evolution Reaction (HER). <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 12014-12024.	3.2	34
936	Alkaline thermal treatment of seaweed for high-purity hydrogen production with carbon capture and storage potential. <i>Nature Communications</i> , 2020, 11, 3783.	5.8	33
937	Regulation of intrinsic physicochemical properties of metal oxide nanomaterials for energy conversion and environmental detection applications. <i>Journal of Materials Chemistry A</i> , 2020, 8, 17326-17359.	5.2	33
938	Origin of the extra capacity in nitrogen-doped porous carbon nanofibers for high-performance potassium ion batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 18079-18086.	5.2	40
939	Bi-Based Metal-Organic Framework Derived Leafy Bismuth Nanosheets for Carbon Dioxide Electroreduction. <i>Advanced Energy Materials</i> , 2020, 10, 2001709.	10.2	210
940	Fundamentals of Electrochemical CO ₂ Reduction on Single-Metal-Atom Catalysts. <i>ACS Catalysis</i> , 2020, 10, 10068-10095.	5.5	161
941	Surface Reconstruction of Ultrathin Palladium Nanosheets during Electrocatalytic CO ₂ Reduction. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 21493-21498.	7.2	97
942	From terpenes to sustainable and functional polymers. <i>Polymer Chemistry</i> , 2020, 11, 5109-5127.	1.9	117
943	Rational Modulation of Carbon Fibers for High-Performance Zinc-Iodine Batteries. <i>Advanced Sustainable Systems</i> , 2020, 4, 2000138.	2.7	30

#	ARTICLE	IF	CITATIONS
944	An artificial photosynthetic system with CO ₂ -reducing solar-to-fuel efficiency exceeding 20%. <i>Journal of Materials Chemistry A</i> , 2020, 8, 18310-18317.	5.2	31
945	Multiphoton Absorption Stimulated Metal Chalcogenide Quantum Dot Solar Cells under Ambient and Concentrated Irradiance. <i>Advanced Functional Materials</i> , 2020, 30, 2004563.	7.8	40
946	Metal Silicidation in Conjunction with Dopant Segregation: A Promising Strategy for Fabricating High-Performance Silicon-Based Photoanodes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 39092-39097.	4.0	10
947	Stable and selective electrosynthesis of hydrogen peroxide and the electro-Fenton process on CoSe ₂ polymorph catalysts. <i>Energy and Environmental Science</i> , 2020, 13, 4189-4203.	15.6	134
948	Near-Zero-Energy Smart Battery Thermal Management Enabled by Sorption Energy Harvesting from Air. <i>ACS Central Science</i> , 2020, 6, 1542-1554.	5.3	81
949	Pathway toward market entry of perovskite solar cells: A detailed study on the research trends and collaboration networks through bibliometrics. <i>Energy Reports</i> , 2020, 6, 2075-2085.	2.5	14
950	Electrodeposition of nanostructured cobalt films from a deep eutectic solvent: Influence of the substrate and deposition potential range. <i>Electrochimica Acta</i> , 2020, 359, 136928.	2.6	18
951	Interface construction of P-Substituted MoS ₂ as efficient and robust electrocatalyst for alkaline hydrogen evolution reaction. <i>Nano Energy</i> , 2020, 78, 105253.	8.2	80
952	Low-Cost Titanium-Bromine Flow Battery with Ultrahigh Cycle Stability for Grid-Scale Energy Storage. <i>Advanced Materials</i> , 2020, 32, e2005036.	11.1	28
953	Free-Standing, Foldable V ₂ O ₃ /Multichannel Carbon Nanofibers Electrode for Flexible Li-Ion Batteries with Ultralong Lifespan. <i>Small</i> , 2020, 16, e2005302.	5.2	54
954	Pulsed potential electrochemical CO ₂ reduction for enhanced stability and catalyst reactivation of copper electrodes. <i>Electrochemistry Communications</i> , 2020, 121, 106861.	2.3	30
955	Laser induced graphene with biopolymer electrolyte for supercapacitor applications. <i>Materials Today: Proceedings</i> , 2022, 48, 365-370.	0.9	7
956	Ultrahigh-Areal-Capacity Battery Anodes Enabled by Free-Standing Vanadium Nitride@N-Doped Carbon/Graphene Architecture. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 49607-49616.	4.0	24
957	A molten calcium carbonate mediator for the electrochemical conversion and absorption of carbon dioxide. <i>Green Chemistry</i> , 2020, 22, 7946-7954.	4.6	26
958	Development of advanced materials for cleaner energy generation through fuel cells. <i>New Journal of Chemistry</i> , 2020, 44, 19977-19995.	1.4	9
959	Photoinduction of Cu Single Atoms Decorated on UiO-66-NH ₂ for Enhanced Photocatalytic Reduction of CO ₂ to Liquid Fuels. <i>Journal of the American Chemical Society</i> , 2020, 142, 19339-19345.	6.6	373
960	Dynamic structure evolution of free-standing S-doped porous Co-Fe microspheres with enhanced oxygen evolution electrocatalysis in alkaline media. <i>Electrochimica Acta</i> , 2020, 361, 137038.	2.6	14
961	Unveiling Electrode-Electrolyte Design-Based NO Reduction for NH ₃ Synthesis. <i>ACS Energy Letters</i> , 2020, 5, 3647-3656.	8.8	97

#	ARTICLE	IF	CITATIONS
962	Excellent thermoelectric properties of monolayer RbAgM (M = Se and Te): first-principles calculations. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 26364-26371.	1.3	13
963	Facile Synthesis of N-Doped WS ₂ Nanosheets as an Efficient and Stable Electrocatalyst for Hydrogen Evolution Reaction in Acidic Media. <i>Catalysts</i> , 2020, 10, 1238.	1.6	13
964	Origin of High Nonradiative Recombination and Relevant Optoelectronic Properties of Ba ₂ Bi _{1+x} Nb _{1-x} O ₆ : Candidate for Photo(electro)catalysis and Photovoltaic Applications?. <i>Advanced Optical Materials</i> , 2020, 8, 2000901.	3.6	3
965	Carbon foams: 3D porous carbon materials holding immense potential. <i>Journal of Materials Chemistry A</i> , 2020, 8, 23699-23723.	5.2	86
966	Hf ₂ B ₂ Ir ₅ : A Self-Optimizing Catalyst for the Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2020, 3, 11042-11052.	2.5	13
967	Nanoporous Ta ₃ N ₅ <i>via</i> electrochemical anodization followed by nitridation for solar water oxidation. <i>Dalton Transactions</i> , 2020, 49, 15023-15033.	1.6	4
968	Carbon dioxide conversion into the reaction intermediate sodium formate for the synthesis of formic acid. <i>Research on Chemical Intermediates</i> , 2020, 46, 5165-5180.	1.3	20
969	Spent tea leaves templated synthesis of highly active and durable cobalt-based trifunctional versatile electrocatalysts for hydrogen and oxygen evolution and oxygen reduction reactions. <i>Green Chemistry</i> , 2020, 22, 6967-6980.	4.6	38
970	Understanding the formation of bulk- and surface-active layered (oxy)hydroxides for water oxidation starting from a cobalt selenite precursor. <i>Energy and Environmental Science</i> , 2020, 13, 3607-3619.	15.6	77
971	Bifunctional water-electrolysis-catalysts meeting band-diagram analysis: case study of α -FeP α -electrodes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 20021-20029.	5.2	25
972	The lightest solid meets the lightest gas: an overview of carbon aerogels and their composites for hydrogen related applications. <i>Nanoscale</i> , 2020, 12, 19536-19556.	2.8	41
973	An Ultramicroporous Metal-Organic Framework for Sieving Separation of Carbon Dioxide from Methane. <i>Small Structures</i> , 2020, 1, 2000022.	6.9	33
974	Two-dimensional graphitic carbon nitride nanosheets: a novel platform for flexible, robust and optically active triboelectric nanogenerators. <i>Nanoscale</i> , 2020, 12, 21334-21343.	2.8	29
975	Promoting C ₂₊ Production from Electrochemical CO ₂ Reduction on Shape-Controlled Cuprous Oxide Nanocrystals with High-Index Facets. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 15223-15229.	3.2	51
976	Antisolvents in Perovskite Solar Cells: Importance, Issues, and Alternatives. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000950.	1.9	94
977	Hierarchically structured porous materials: synthesis strategies and applications in energy storage. <i>National Science Review</i> , 2020, 7, 1667-1701.	4.6	164
978	A Low-Cost Preparation of Si@C Composite Anode from Si Photovoltaic Waste. <i>International Journal of Electrochemical Science</i> , 2020, 15, 6582-6595.	0.5	4
979	Integrating conductivity and active sites: Fe/Fe ₃ C@GNC as an trapping-catalyst interlayer and dendrite-free lithium host for the lithium-sulfur cell with outstanding rate performance. <i>Journal of Materials Chemistry A</i> , 2020, 8, 18987-19000.	5.2	54

#	ARTICLE	IF	CITATIONS
980	Electrocatalysis of sulfur and polysulfides in Li-S batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 19704-19728.	5.2	83
981	Highly Stable Lithium-Sulfur Batteries Achieved by a SnS/Porous Carbon Nanosheet Architecture Modified Celgard Separator. <i>Advanced Functional Materials</i> , 2020, 30, 2006297.	7.8	50
982	Hollow Mesoporous Carbon Sphere Loaded Ni ₄ Single-Atom: Support Structure Study for CO ₂ Electrochemical Reduction Catalyst. <i>Small</i> , 2020, 16, e2003943.	5.2	82
983	Tunable Syngas Synthesis from Photocatalytic CO ₂ Reduction Under Visible-Light Irradiation by Interfacial Engineering. <i>Transactions of Tianjin University</i> , 2020, 26, 352-361.	3.3	33
984	Intrinsic self-healing polymers for advanced lithium-based batteries: Advances and strategies. <i>Applied Physics Reviews</i> , 2020, 7, .	5.5	58
985	Mapping scholarly publications related to the Sustainable Development Goals: Do independent bibliometric approaches get the same results?. <i>Quantitative Science Studies</i> , 2020, 1, 1092-1108.	1.6	32
986	Wood nanotechnology: a more promising solution toward energy issues: a mini-review. <i>Cellulose</i> , 2020, 27, 8513-8526.	2.4	14
987	Toward understanding the real mechanical robustness of composite electrode impregnated with a liquid electrolyte. <i>Applied Materials Today</i> , 2020, 21, 100809.	2.3	7
988	Flexible Transparent Heat Mirror for Thermal Applications. <i>Nanomaterials</i> , 2020, 10, 2479.	1.9	4
989	Efficient sunlight driven CO ₂ reduction on Graphene-wrapped Cu-Pt/rTiO ₂ @ SiO ₂ . <i>Materials Science for Energy Technologies</i> , 2020, 3, 734-741.	1.0	3
990	Manipulating metal-oxygen local atomic structures in single-junctional p-Si/WO ₃ photocathodes for efficient solar hydrogen generation. <i>Nano Research</i> , 2021, 14, 2285.	5.8	14
991	Construction of nitrogen-sulfur co-doped porous carbon to boost, integrate Li/Na/K ion storage. <i>Solid State Ionics</i> , 2020, 356, 115451.	1.3	7
992	Preparation of Ni ₃ Fe ₂ @NC/CC Integrated Electrode and Its Application in Zinc-Air Battery. <i>Frontiers in Chemistry</i> , 2020, 8, 575288.	1.8	4
993	Recent Advancements of N-Doped Graphene for Rechargeable Batteries: A Review. <i>Crystals</i> , 2020, 10, 1080.	1.0	21
994	Resolving Nanoscale Heterogeneity in Battery Interphases with Cryo-EM. <i>Microscopy and Microanalysis</i> , 2020, 26, 2786-2788.	0.2	0
995	Pore engineering of metal-organic frameworks for ethylene purification. <i>Dalton Transactions</i> , 2020, 49, 17093-17105.	1.6	7
996	Metal-Organic Framework-Derived Anode and Polyaniline Chain Networked Cathode with Mesoporous and Conductive Pathways for High Energy Density, Ultrafast Rechargeable, and Long-Life Hybrid Capacitors. <i>Advanced Energy Materials</i> , 2020, 10, 2001851.	10.2	32
997	Coupled effects of electronic and nuclear energy deposition on damage accumulation in ion-irradiated SiC. <i>Acta Materialia</i> , 2020, 199, 96-106.	3.8	26

#	ARTICLE	IF	CITATIONS
998	Side by Side Battery Technologies with Lithium-Ion Based Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2000089.	10.2	127
999	High-Voltage-Driven Surface Structuring and Electrochemical Stabilization of Ni-Rich Layered Cathode Materials for Li Rechargeable Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2000521.	10.2	90
1000	Quantifying the cost effectiveness of non-aqueous potassium-ion batteries. <i>Journal of Power Sources</i> , 2020, 464, 228228.	4.0	25
1001	Rational Design of Spinel Oxide Nanocomposites with Tailored Electrochemical Oxygen Evolution and Reduction Reactions for Zinc-Air Batteries. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 3165.	1.3	35
1002	<i>In Situ</i> Hydrothermal Conversion of Silica Gel Precursors to Binderless Zeolite X Pellets for Enhanced Olefin Adsorption. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 9997-10009.	1.8	8
1003	Stretchable Nanolayered Thermoelectric Energy Harvester on Complex and Dynamic Surfaces. <i>Nano Letters</i> , 2020, 20, 4445-4453.	4.5	106
1004	Thiometallate precursors for the synthesis of supported Pt and PtNi nanoparticle electrocatalysts: Size-focusing by S capping. <i>Nanoscale</i> , 2020, 12, 10498-10504.	2.8	5
1005	Light/Electricity Energy Conversion and Storage for a Hierarchical Porous In ₂ S ₃ @CNT/SS Cathode towards a Flexible LiCO ₂ Battery. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 19518-19524.	7.2	94
1006	Enhanced electrochemical properties of ZnO encapsulated in carbon nanofibers as anode material for lithium-ion batteries. <i>Ionics</i> , 2020, 26, 4351-4361.	1.2	6
1007	Role of active sites in N-coordinated Fe-Co dual-metal doped graphene for oxygen reduction and evolution reactions: A theoretical insight. <i>Applied Surface Science</i> , 2020, 525, 146588.	3.1	75
1008	Recent Progress in Low Pt Content Electrocatalysts for Hydrogen Evolution Reaction. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000396.	1.9	84
1009	Light/Electricity Energy Conversion and Storage for a Hierarchical Porous In ₂ S ₃ @CNT/SS Cathode towards a Flexible LiCO ₂ Battery. <i>Angewandte Chemie</i> , 2020, 132, 19686-19692.	1.6	13
1010	Direct growth of ordered N-doped carbon nanotube arrays on carbon fiber cloth as a free-standing and binder-free air electrode for flexible quasi-solid-state rechargeable Zn-Air batteries. , 2020, 2, 461-471.		64
1011	High areal capacitance of manganese oxide electrodes with cerium as rare earth modification. <i>Nanotechnology</i> , 2020, 31, 354004.	1.3	2
1012	Hollow-Structured Electrode Materials: Self-Templated Synthesis and Their Potential in Secondary Batteries. <i>ChemNanoMat</i> , 2020, 6, 1298-1314.	1.5	6
1013	Metal-organic framework-derived Ni ₂ P/nitrogen-doped carbon porous spheres for enhanced lithium storage. <i>Science China Materials</i> , 2020, 63, 1672-1682.	3.5	18
1014	Novel 3D Nanoporous Zn-Cu Alloy as Long-Life Anode toward High-Voltage Double Electrolyte Aqueous Zinc-Ion Batteries. <i>Small</i> , 2020, 16, e2001323.	5.2	136
1015	Opportunities and critical factors of porous metal-organic frameworks for industrial light olefins separation. <i>Materials Chemistry Frontiers</i> , 2020, 4, 1954-1984.	3.2	48

#	ARTICLE	IF	CITATIONS
1016	First-row transition metal porphyrins for electrocatalytic hydrogen evolution – a SPP/JPP Young Investigator Award paper. <i>Journal of Porphyrins and Phthalocyanines</i> , 2020, 24, 1361-1371.	0.4	28
1017	Selective NMR observation of the SEI–metal interface by dynamic nuclear polarisation from lithium metal. <i>Nature Communications</i> , 2020, 11, 2224.	5.8	91
1018	Insight into sulfur-rich selenium sulfide/pyrolyzed polyacrylonitrile cathodes for Li–S batteries. <i>Sustainable Energy and Fuels</i> , 2020, 4, 3588-3596.	2.5	12
1019	Exceeding the volcano relationship in oxygen reduction/evolution reactions using single-atom-based catalysts with dual-active-sites. <i>Journal of Materials Chemistry A</i> , 2020, 8, 10193-10198.	5.2	33
1020	Water splitting by a pentanuclear iron complex. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 17434-17443.	3.8	48
1021	Dual-active-site hierarchical architecture containing NiFe-LDH and ZIF-derived carbon-based framework composite as efficient bifunctional oxygen electrocatalysts for durable rechargeable Zn-air batteries. <i>Chemical Engineering Journal</i> , 2020, 399, 125718.	6.6	84
1022	Synergistic Dual–Additive Electrolyte Enables Practical Lithium–Metal Batteries. <i>Angewandte Chemie</i> , 2020, 132, 15045-15051.	1.6	26
1023	Synergistic Dual–Additive Electrolyte Enables Practical Lithium–Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 14935-14941.	7.2	210
1024	In-situ growth of hierarchical N-doped CNTs/Ni Foam scaffold for dendrite-free lithium metal anode. <i>Energy Storage Materials</i> , 2020, 29, 332-340.	9.5	80
1025	A Stirred Self-Stratified Battery for Large-Scale Energy Storage. <i>Joule</i> , 2020, 4, 953-966.	11.7	41
1026	Sandwiched Cu ₇ S ₄ @graphite felt electrode for high performance aqueous polysulfide/iodide redox flow batteries: Enhanced cycling stability and electrocatalytic dynamics of polysulfides. <i>Materials Chemistry and Physics</i> , 2020, 250, 123143.	2.0	24
1027	High-performance three-dimensional nanoporous gold based electrodes for flexible all-solid-state supercapacitors. <i>Journal of Porous Materials</i> , 2020, 27, 1309-1317.	1.3	3
1028	Deeply Rechargeable and Hydrogen-Evolution-Suppressing Zinc Anode in Alkaline Aqueous Electrolyte. <i>Nano Letters</i> , 2020, 20, 4700-4707.	4.5	89
1029	Simultaneous power generation and CO ₂ valorization by aqueous Al–CO ₂ batteries using nanostructured Bi ₂ S ₃ as the cathode electrocatalyst. <i>Journal of Materials Chemistry A</i> , 2020, 8, 12385-12390.	5.2	27
1030	Plasma-assisted nitrogen doping in Ni–Co–P hollow nanocubes for efficient hydrogen evolution electrocatalysis. <i>Nanoscale</i> , 2020, 12, 13708-13718.	2.8	28
1031	A Dendrite-Resistant Zinc-Air Battery. <i>IScience</i> , 2020, 23, 101169.	1.9	17
1032	Micrometer-sized ferrosilicon composites wrapped with multi-layered carbon nanosheets as industrialized anodes for high energy lithium-ion batteries. <i>Journal of Energy Chemistry</i> , 2020, 50, 286-295.	7.1	15
1033	Multifunctional ternary deep eutectic solvent-based membranes for the cost-effective ethylene/ethane separation. <i>Journal of Membrane Science</i> , 2020, 610, 118243.	4.1	29

#	ARTICLE	IF	CITATIONS
1034	Combining Single Crystal Experiments and Microkinetic Modeling in Disentangling Thermodynamic, Kinetic, and Double-Layer Factors Influencing Oxygen Reduction. <i>Journal of Physical Chemistry C</i> , 2020, 124, 13672-13678.	1.5	14
1035	Chloride-mediated selective electrosynthesis of ethylene and propylene oxides at high current density. <i>Science</i> , 2020, 368, 1228-1233.	6.0	196
1036	3D macroscopic graphene oxide/MXene architectures for multifunctional water purification. <i>Carbon</i> , 2020, 167, 285-295.	5.4	135
1037	Mesoporous PdAg Nanospheres for Stable Electrochemical CO ₂ Reduction to Formate. <i>Advanced Materials</i> , 2020, 32, e2000992.	11.1	153
1038	3D Nanostructures for the Next Generation of High-Performance Nanodevices for Electrochemical Energy Conversion and Storage. <i>Advanced Energy Materials</i> , 2020, 10, 2001460.	10.2	106
1039	p-n Heterojunction of BiO ₁ /ZnO nanorod arrays for piezo-photocatalytic degradation of bisphenol A in water. <i>Journal of Hazardous Materials</i> , 2020, 399, 123109.	6.5	147
1040	Engineering unsymmetrically coordinated Cu-SiN ₃ single atom sites with enhanced oxygen reduction activity. <i>Nature Communications</i> , 2020, 11, 3049.	5.8	537
1041	Synthesis and electrochemical properties of CeVO ₄ /Fe ₃ O ₄ as a novel anode material for lithium-ion batteries. <i>Ionics</i> , 2020, 26, 4859-4867.	1.2	12
1042	CO ₂ -Mediated catalytic pyrolysis of rice straw for syngas production and power generation. <i>Energy Conversion and Management</i> , 2020, 220, 113057.	4.4	25
1043	Power generation using rice husk derived fuels from CO ₂ -assisted catalytic pyrolysis over Co/Al ₂ O ₃ . <i>Energy</i> , 2020, 206, 118143.	4.5	10
1044	Highly selective and scalable CO ₂ to CO - Electrolysis using coral-nanostructured Ag catalysts in zero-gap configuration. <i>Nano Energy</i> , 2020, 76, 105030.	8.2	73
1045	Cu Nanoclusters/FeN ₄ Amorphous Composites with Dual Active Sites in N-Doped Graphene for High-Performance Zn-Air Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 31340-31350.	4.0	71
1046	A Garnet-Type Solid-Electrolyte-Based Molten Lithium-Molybdenum-Iron(II) Chloride Battery with Advanced Reaction Mechanism. <i>Advanced Materials</i> , 2020, 32, e2000960.	11.1	14
1047	Understanding the role of Sn substitution and Pb- β in enhancing the optical properties and solar cell efficiency of CH(NH ₂) ₂ Pb _{1-x} Sn _x Br ₃ . <i>Journal of Materials Chemistry C</i> , 2020, 8, 10362-10368.	2.7	13
1048	Metal-Nitrogen-Doped Carbon Materials as Highly Efficient Catalysts: Progress and Rational Design. <i>Advanced Science</i> , 2020, 7, 2001069.	5.6	228
1049	Recent Progress in Single-Atom Catalysts for Photocatalytic Water Splitting. <i>Solar Rrl</i> , 2020, 4, 2000283.	3.1	59
1050	High Conductivity, Lithium Ion Conducting Polymer Electrolyte Based on Hydrocarbon Backbone with Pendent Carbonate. <i>Journal of the Electrochemical Society</i> , 2020, 167, 100517.	1.3	10
1051	A γ -FeOOH/MXene sandwich for high-performance anodes in lithium-ion batteries. <i>Dalton Transactions</i> , 2020, 49, 9268-9273.	1.6	16

#	ARTICLE	IF	CITATIONS
1052	Investigating 2D WS ₂ supercapacitor electrode performance by Kelvin probe force microscopy. <i>Journal of Materials Chemistry A</i> , 2020, 8, 12699-12704.	5.2	29
1053	Synergies between electronic and geometric effects of Mo-doped Au nanoparticles for effective CO ₂ electrochemical reduction. <i>Journal of Materials Chemistry A</i> , 2020, 8, 12291-12295.	5.2	21
1054	Atomic Sulfur Passivation Improves the Photoelectrochemical Performance of ZnSe Nanorods. <i>Nanomaterials</i> , 2020, 10, 1081.	1.9	5
1055	Effect of high-temperature oxidation on Si ₃ N ₄ containing Ti ₃ AlC ₂ . <i>Ceramics International</i> , 2020, 46, 14697-14705.	2.3	10
1056	Metal-Organic Frameworks-Derived Porous Yolk-Shell MoP/Cu ₃ P@carbon Microcages as High-Performance Anodes for Sodium-Ion Batteries. <i>Energy and Environmental Materials</i> , 2020, 3, 529-534.	7.3	30
1057	Partial Dehydration in Hydrated Tungsten Oxide Nanoplates Leads to Excellent and Robust Bifunctional Oxygen Reduction and Hydrogen Evolution Reactions in Acidic Media. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 9507-9518.	3.2	23
1058	Atomically dispersed catalysts for hydrogen/oxygen evolution reactions and overall water splitting. <i>Journal of Power Sources</i> , 2020, 471, 228446.	4.0	74
1059	Mn ₃ O ₄ nanoparticle-decorated hollow mesoporous carbon spheres as an efficient catalyst for oxygen reduction reaction in Zn-air batteries. <i>Nanoscale Advances</i> , 2020, 2, 3367-3374.	2.2	12
1060	Modeling and Simulation of Flow Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2000758.	10.2	66
1061	Confined red phosphorus in N-doped hierarchically porous carbon for lithium ion batteries with enhanced rate capability and cycle stability. <i>Microporous and Mesoporous Materials</i> , 2020, 305, 110365.	2.2	12
1062	A Sodium-Ion Battery Separator with Reversible Voltage Response Based on Water-Soluble Cellulose Derivatives. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 29264-29274.	4.0	16
1063	Electroactivation-induced IrNi nanoparticles under different pH conditions for neutral water oxidation. <i>Nanoscale</i> , 2020, 12, 14903-14910.	2.8	14
1064	Synthesis of Ionic Ultramicroporous Polymers for Selective Separation of Acetylene from Ethylene. <i>Advanced Materials</i> , 2020, 32, e1907601.	11.1	54
1065	Plasmon-induced photocatalytic transformations. , 2020, , 249-275.		0
1066	Atomically dispersed materials for rechargeable batteries. <i>Nano Energy</i> , 2020, 76, 105085.	8.2	18
1067	Resolving Nanoscopic and Mesoscopic Heterogeneity of Fluorinated Species in Battery Solid-Electrolyte Interphases by Cryogenic Electron Microscopy. <i>ACS Energy Letters</i> , 2020, 5, 1128-1135.	8.8	199
1068	Unraveling the Rapid Redox Behavior of Li-Excess 3d-Transition Metal Oxides for High Rate Capability. <i>Advanced Energy Materials</i> , 2020, 10, 1904092.	10.2	14
1069	Plasmonic Electrons-Driven Solar-Driven Hydrocarbon Conversion over Au NR@ZnO Core-Shell Nanostructures. <i>ChemCatChem</i> , 2020, 12, 2989-2994.	1.8	12

#	ARTICLE	IF	CITATIONS
1070	Vertical Growth of Porous Perovskite Nanoarrays on Nickel Foam for Efficient Oxygen Evolution Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 4863-4870.	3.2	38
1071	Cu ₂ CoGeS ₄ nanocrystals for high performance aqueous polysulfide/iodide redox flow batteries: enhanced selectively towards the electrocatalytic conversion of polysulfides. <i>Sustainable Energy and Fuels</i> , 2020, 4, 2892-2899.	2.5	18
1072	Polyoxomolybdate-derived MoS ₂ /nitrogen-doped reduced graphene oxide hybrids for efficient hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 12318-12330.	3.8	15
1073	Molecular engineering of nanostructures and activities on bifunctional oxygen electrocatalysts for Zinc-air batteries. <i>Applied Catalysis B: Environmental</i> , 2020, 270, 118869.	10.8	34
1074	Boosting Sodium Storage in Two-Dimensional Phosphorene/Ti ₃ C ₂ T _x MXene Nanoarchitectures with Stable Fluorinated Interphase. <i>ACS Nano</i> , 2020, 14, 3651-3659.	7.3	155
1075	Materials for solar-powered water evaporation. <i>Nature Reviews Materials</i> , 2020, 5, 388-401.	23.3	784
1076	Photocatalytic CO ₂ reduction over metal-organic framework-based materials. <i>Coordination Chemistry Reviews</i> , 2020, 412, 213262.	9.5	401
1077	Direct Functionalization of the Open Metal Sites in Rare Earth-Based Metal-Organic Frameworks Used for the Efficient Separation of Ethylene. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 6123-6129.	1.8	17
1078	Hybrid Effect of Micropatterned Lithium Metal and Three Dimensionally Ordered Macroporous Polyimide Separator on the Cycle Performance of Lithium Metal Batteries. <i>ACS Applied Energy Materials</i> , 2020, 3, 3721-3727.	2.5	14
1079	Pore structure dependent activity and durability of mesoporous rhodium nanoparticles towards the methanol oxidation reaction. <i>Chemical Communications</i> , 2020, 56, 4448-4451.	2.2	19
1080	Amine- and Amide-Functionalized Mesoporous Carbons: A Strategy for Improving Sulfur/Host Interactions in Li-S Batteries. <i>Batteries and Supercaps</i> , 2020, 3, 757-765.	2.4	10
1081	A simple strategy for tridoped porous carbon nanosheet as superior electrocatalyst for bifunctional oxygen reduction and hydrogen evolution reactions. <i>Carbon</i> , 2020, 162, 586-594.	5.4	55
1082	A NiFe layered double hydroxide-decorated N-doped entangled-graphene framework: a robust water oxidation electrocatalyst. <i>Nanoscale Advances</i> , 2020, 2, 1709-1717.	2.2	21
1083	Decentralized Co-Generation of Fresh Water and Electricity at Point of Consumption. <i>Advanced Sustainable Systems</i> , 2020, 4, 2000005.	2.7	8
1084	Graphdiyne: A Rising Star of Electrocatalyst Support for Energy Conversion. <i>Advanced Energy Materials</i> , 2020, 10, 2000177.	10.2	100
1085	Li-LiAl alloy composite with memory effect as high-performance lithium metal anode. <i>Journal of Power Sources</i> , 2020, 455, 227977.	4.0	30
1086	p-Type Ultrawide-Band-Gap Spinel ZnGa ₂ O ₄ : New Perspectives for Energy Electronics. <i>Crystal Growth and Design</i> , 2020, 20, 2535-2546.	1.4	68
1087	3D printing of cellular materials for advanced electrochemical energy storage and conversion. <i>Nanoscale</i> , 2020, 12, 7416-7432.	2.8	56

#	ARTICLE	IF	CITATIONS
1088	Catalyzing zinc-ion intercalation in hydrated vanadates for aqueous zinc-ion batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 7713-7723.	5.2	84
1089	Three-dimensional graphene-supported nickel disulfide nanoparticles promise stable and fast potassium storage. <i>Nanoscale</i> , 2020, 12, 8255-8261.	2.8	35
1090	Functional Blocking Layer of Twisted Tungsten Oxide Nanorod Grown by Electrochemical Anodization for Photoelectrochemical Water Splitting. <i>Journal of the Electrochemical Society</i> , 2020, 167, 066501.	1.3	7
1091	Spinel Zinc Cobalt Oxide (ZnCo ₂ O ₄) Porous Nanorods as a Cathode Material for Highly Durable Li ⁺ /CO ₂ Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 17353-17363.	4.0	37
1092	Promoting Formation of Oxygen Vacancies in Two-Dimensional Cobalt-Doped Ceria Nanosheets for Efficient Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2020, 142, 6461-6466.	6.6	168
1093	Acid-Base Interaction Enhancing Oxygen Tolerance in Electrocatalytic Carbon Dioxide Reduction. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 10918-10923.	7.2	40
1094	Smart Textiles for Electricity Generation. <i>Chemical Reviews</i> , 2020, 120, 3668-3720.	23.0	644
1095	Design and Preparation of Fe ^{N5} Catalytic Sites in Single-Atom Catalysts for Enhancing the Oxygen Reduction Reaction in Fuel Cells. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 17334-17342.	4.0	76
1096	Acid-Base Interaction Enhancing Oxygen Tolerance in Electrocatalytic Carbon Dioxide Reduction. <i>Angewandte Chemie</i> , 2020, 132, 11010-11015.	1.6	6
1097	One-step potentiostatic electrodeposition of cross-linked bimetallic sulfide nanosheet thin film for supercapacitors. <i>Ionics</i> , 2020, 26, 4095-4102.	1.2	9
1098	Supramolecular Metal-Organic Framework for CO ₂ /CH ₄ and CO ₂ /N ₂ Separation. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 7866-7874.	1.8	42
1099	Facet-Dependent Selectivity of Cu Catalysts in Electrochemical CO ₂ Reduction at Commercially Viable Current Densities. <i>ACS Catalysis</i> , 2020, 10, 4854-4862.	5.5	331
1100	Confined growth of pyridinic N-Mo ₂ C sites on MXenes for hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2020, 8, 7109-7116.	5.2	148
1101	Dielectric Polarization in Inverse Spinel-Structured Mg ₂ TiO ₄ Coating to Suppress Oxygen Evolution of Li ⁺ -Rich Cathode Materials. <i>Advanced Materials</i> , 2020, 32, e2000496.	11.1	134
1102	A Scalable Interfacial Engineering Strategy for a Finely Tunable, Homogeneous MoS ₂ /rGO-Based HER Catalytic Structure. <i>Advanced Materials Interfaces</i> , 2020, 7, 1902022.	1.9	18
1103	Churros-like Polyvinylidene Fluoride Nanofibers for Enhancing Output Performance of Triboelectric Nanogenerators. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 17824-17832.	4.0	43
1104	Lithium ion storage in 1D and 2D redox active metal-organic frameworks. <i>Electrochimica Acta</i> , 2020, 341, 136063.	2.6	6
1105	Is energy transition promoting the decoupling economic growth from emission growth? Evidence from the 186 countries. <i>Journal of Cleaner Production</i> , 2020, 260, 120768.	4.6	64

#	ARTICLE	IF	CITATIONS
1106	Titanium nitride halides monolayers: promising 2D anisotropic thermoelectric materials. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 205503.	0.7	19
1107	Photoelectrochemical solar fuels from carbon dioxide, water and sunlight. <i>Catalysis Science and Technology</i> , 2020, 10, 1967-1974.	2.1	28
1108	Dispersed MoS ₂ nanosheets in core shell Co ₃ O ₄ @C nanocubes for superior potassium ion storage. <i>Applied Surface Science</i> , 2020, 514, 145946.	3.1	32
1109	Implementation of Na diffusion layer at Cu ₂ ZnSnSe ₄ /Mo interface for flexible thin film solar cell fabricated on Ti foil by solid state selenization. <i>Current Applied Physics</i> , 2020, 20, 967-972.	1.1	2
1110	Germanate glass layer containing Eu ³⁺ ions and gold nanoparticles for enhanced silicon solar cell performance. <i>Journal of Luminescence</i> , 2020, 226, 117497.	1.5	14
1111	Nanospace Confinement Synthesis: Designing High Energy Anode Materials toward Ultrastable Lithium Ion Batteries. <i>Small</i> , 2020, 16, e2002351.	5.2	13
1112	Air-processed active-layer of organic solar cells investigated by conducting AFM for precise defect detection. <i>RSC Advances</i> , 2020, 10, 24882-24892.	1.7	14
1113	Iron vacancies and surface modulation of iron disulfide nanoflowers as a high power/energy density cathode for ultralong-life stable Li storage. <i>Journal of Materials Chemistry A</i> , 2020, 8, 14769-14777.	5.2	23
1114	Silicon Based Self Assemblies for High Volumetric Capacity Li Ion Batteries via Effective Stress Management. <i>Advanced Functional Materials</i> , 2020, 30, 2002980.	7.8	76
1115	Heterogeneous Single Atom Catalysts for Electrochemical CO ₂ Reduction Reaction. <i>Advanced Materials</i> , 2020, 32, e2001848.	11.1	366
1116	Metal-organic framework-derived heterostructured ZnCo ₂ O ₄ @FeOOH hollow polyhedrons for oxygen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2020, 832, 155067.	2.8	16
1117	Advanced Ni-Nx-C single-site catalysts for CO ₂ electroreduction to CO based on hierarchical carbon nanocages and S-doping. <i>Nano Research</i> , 2020, 13, 2777-2783.	5.8	46
1118	Detection of Micro-Scale Li Dendrite via H ₂ Gas Capture for Early Safety Warning. <i>Joule</i> , 2020, 4, 1714-1729.	11.7	105
1119	Facilitating Interfacial Stability Via Bilayer Heterostructure Solid Electrolyte Toward High Energy, Safe and Adaptable Lithium Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2000709.	10.2	79
1120	Oxygen-Vacancy-Induced CeO ₂ /Co ₄ N heterostructures toward enhanced pH-Universal hydrogen evolution reactions. <i>Applied Catalysis B: Environmental</i> , 2020, 277, 119282.	10.8	166
1121	NiS nanoparticles assembled on biological cell walls-derived porous hollow carbon spheres as a novel battery-type electrode for hybrid supercapacitor. <i>Journal of Materials Science</i> , 2020, 55, 14431-14446.	1.7	56
1122	Revealing the dependence of active site configuration of N doped and N, S-co-doped carbon nanospheres on six-membered heterocyclic precursors for oxygen reduction reaction. <i>Journal of Catalysis</i> , 2020, 389, 677-689.	3.1	33
1123	Selenium or Tellurium as Eutectic Accelerators for High-Performance Lithium/Sodium Sulfur Batteries. <i>Electrochemical Energy Reviews</i> , 2020, 3, 613-642.	13.1	75

#	ARTICLE	IF	CITATIONS
1124	Rich atomic interfaces between sub-1 nm RuO _x clusters and porous Co ₃ O ₄ nanosheets boost oxygen electrocatalysis bifunctionality for advanced Zn-air batteries. <i>Energy Storage Materials</i> , 2020, 32, 20-29.	9.5	84
1125	Enabling electrochemical N ₂ reduction to NH ₃ in the low overpotential region using non-noble metal Bi electrodes via surface composition modification. <i>Journal of Materials Chemistry A</i> , 2020, 8, 13842-13851.	5.2	16
1126	Recent advances in electrospun nanofibers for supercapacitors. <i>Journal of Materials Chemistry A</i> , 2020, 8, 16747-16789.	5.2	166
1127	Low Pt-Content Ternary PtNiCu Nanoparticles with Hollow Interiors and Accessible Surfaces as Enhanced Multifunctional Electrocatalysts. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 9600-9608.	4.0	54
1128	Combining Photocatalysis and Optical Fiber Technology toward Improved Microreactor Design for Hydrogen Generation with Metallic Nanoparticles. <i>ACS Photonics</i> , 2020, 7, 714-722.	3.2	13
1129	Ni-based catalysts supported on Mg-Al hydrotalcites with different morphologies for CO ₂ methanation: exploring the effect of metal-support interaction. <i>Catalysis Science and Technology</i> , 2020, 10, 1902-1913.	2.1	51
1130	Toward quantifying capacity losses due to solid electrolyte interphase evolution in silicon thin film batteries. <i>Journal of Chemical Physics</i> , 2020, 152, 084702.	1.2	25
1131	Insights into the Formation, Chemical Stability, and Activity of Transient Ni _y P@NiO _x Core-Shell Heterostructures for the Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2020, 3, 2304-2309.	2.5	20
1132	Unveiling the Active Structure of Single Nickel Atom Catalysis: Critical Roles of Charge Capacity and Hydrogen Bonding. <i>Journal of the American Chemical Society</i> , 2020, 142, 5773-5777.	6.6	199
1133	High-purity electrolytic lithium obtained from low-purity sources using solid electrolyte. <i>Nature Sustainability</i> , 2020, 3, 386-390.	11.5	54
1134	Hierarchical Nanostructured Benzoic Naphthalene Tetracarboxylic Diimide Organic Cathode for Lithium Ion Battery. <i>ChemistrySelect</i> , 2020, 5, 2157-2163.	0.7	5
1135	Petaloid-shaped ZnO coated carbon felt as a controllable host to construct hierarchical Li composite anode. <i>Nano Energy</i> , 2020, 71, 104614.	8.2	44
1136	Integrated Photorechargeable Energy Storage System: Next-Generation Power Source Driving the Future. <i>Advanced Energy Materials</i> , 2020, 10, 1903930.	10.2	128
1137	Use of steel slag as a catalyst in CO ₂ -cofeeding pyrolysis of pine sawdust. <i>Journal of Hazardous Materials</i> , 2020, 392, 122275.	6.5	14
1138	Trimetallic Mo-Ni-Co selenides nanorod electrocatalysts for highly-efficient and ultra-stable hydrogen evolution. <i>Nano Energy</i> , 2020, 71, 104637.	8.2	100
1139	Plasma-Induced Exfoliation Provides Onion-Like Graphene-Surrounded MoS ₂ Nanosheets for a Highly Efficient Hydrogen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 11533-11542.	4.0	49
1140	Synthesis of cobalt-doped V ₂ O ₃ with a hierarchical yolk-shell structure for high-performance lithium-ion batteries. <i>CrystEngComm</i> , 2020, 22, 1705-1711.	1.3	19
1141	Hierarchical and scalable integration of nanostructures for energy and environmental applications: a review of processing, devices, and economic analyses. <i>Nano Futures</i> , 2020, 4, 012002.	1.0	12

#	ARTICLE	IF	CITATIONS
1142	Strategies in catalysts and electrolyzer design for electrochemical CO ₂ reduction toward C ₂₊ products. <i>Science Advances</i> , 2020, 6, eaay3111.	4.7	477
1143	Manufacturing routes toward flexible and smart energy harvesters and sensors based on functional nanomaterials. , 2020, , 381-437.		2
1144	Multi-ion Modulated Single-Step Synthesis of a Nanocarbon Embedded with a Defect-Rich Nanoparticle Catalyst for a High Loading Sulfur Cathode. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 12727-12735.	4.0	27
1145	A Boron Nitride Nanosheets Composite Membrane for a Long-Life Zinc-Based Flow Battery. <i>Angewandte Chemie</i> , 2020, 132, 6781-6785.	1.6	4
1146	A novel battery scheme: Coupling nanostructured phosphorus anodes with lithium sulfide cathodes. <i>Nano Research</i> , 2020, 13, 1383-1388.	5.8	13
1147	Tetra-carboxylic acid based metal-organic framework as a high-performance bifunctional electrocatalyst for HER and OER. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 11077-11088.	3.8	46
1148	Determination of resource curse hypothesis in mediation of financial development and clean energy sources: Go-for-green resource policies. <i>Resources Policy</i> , 2020, 66, 101640.	4.2	58
1149	Elucidating the Extraordinary Rate and Cycling Performance of Phenanthrenequinone in Aluminum-Complex-Ion Batteries. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 2384-2392.	2.1	25
1150	Synergistic effects of catalytic co-pyrolysis of macroalgae with waste plastics. <i>Chemical Engineering Research and Design</i> , 2020, 137, 34-48.	2.7	146
1151	Single-phase ZnCo ₂ O ₄ derived ZnO@CoO mesoporous microspheres encapsulated by nitrogen-doped carbon shell as anode for high-performance lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2020, 825, 153951.	2.8	17
1152	Promotion of electrocatalytic nitrogen reduction reaction on N-doped porous carbon with secondary heteroatoms. <i>Applied Catalysis B: Environmental</i> , 2020, 266, 118633.	10.8	103
1153	A small-strain niobium nitride anode with ordered mesopores for ultra-stable potassium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 3119-3127.	5.2	36
1154	Novel fluorinated long linear segment hyperbranched polyimides bearing various pendant substituents for applications as optical materials. <i>Polymer</i> , 2020, 190, 122216.	1.8	18
1155	Oxygen Functionalized Copper Nanoparticles for Solar-Driven Conversion of Carbon Dioxide to Methane. <i>ACS Nano</i> , 2020, 14, 2099-2108.	7.3	21
1156	Promoting the hydrogen evolution performance of 1T-MoSe ₂ -Se: Optimizing the two-dimensional structure of MoSe ₂ by layered double hydroxide limited growth. <i>Applied Surface Science</i> , 2020, 509, 145364.	3.1	26
1157	High-stability monoclinic nickel hexacyanoferrate cathode materials for ultrafast aqueous sodium ion battery. <i>Chemical Engineering Journal</i> , 2020, 388, 124228.	6.6	91
1158	Vitamin B12 functionalized N-Doped graphene: A promising electro-catalyst for hydrogen evolution and electro-oxidative sensing of H ₂ O ₂ . <i>Electrochimica Acta</i> , 2020, 337, 135730.	2.6	19
1159	High-Performance Lithium-Rich Layered Oxide Material: Effects of Preparation Methods on Microstructure and Electrochemical Properties. <i>Materials</i> , 2020, 13, 334.	1.3	20

#	ARTICLE	IF	CITATIONS
1160	Microbial electrosynthesis from CO ₂ : Challenges, opportunities and perspectives in the context of circular bioeconomy. <i>Bioresource Technology</i> , 2020, 302, 122863.	4.8	188
1161	Controlled release of H ₂ S and NO gases through CO ₂ -stimulated anion exchange. <i>Nature Communications</i> , 2020, 11, 453.	5.8	8
1162	Covalent triazine frameworks – a sustainable perspective. <i>Green Chemistry</i> , 2020, 22, 1038-1071.	4.6	138
1163	One-step electrodeposition of Ni _x Fe _{3x} O ₄ /Ni hybrid nanosheet arrays as highly active and robust electrocatalysts for the oxygen evolution reaction. <i>Green Chemistry</i> , 2020, 22, 1710-1719.	4.6	33
1164	Cu ₂ O Nanoparticles with Both {100} and {111} Facets for Enhancing the Selectivity and Activity of CO ₂ Electroreduction to Ethylene. <i>Advanced Science</i> , 2020, 7, 1902820.	5.6	196
1165	Poorly Soluble 2,6-Dimethoxy-9,10-anthraquinone Cathode for Lithium-Ion Batteries: The Role of Electrolyte Concentration. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 7179-7185.	4.0	36
1166	Multi-electron reactions of vanadium-based nanomaterials for high-capacity lithium batteries: challenges and opportunities. <i>Materials Today Nano</i> , 2020, 10, 100073.	2.3	30
1167	Synthesis of monolithic shape-stabilized phase change materials with high mechanical stability <i>via</i> a porogen-assisted <i>in situ</i> sol-gel process. <i>RSC Advances</i> , 2020, 10, 3072-3083.	1.7	21
1168	Degradation Cost Analysis of Li-Ion Batteries in the Capacity Market with Different Degradation Models. <i>Electronics (Switzerland)</i> , 2020, 9, 90.	1.8	20
1169	The controlled fabrication of hierarchical CoS ₂ @NiS ₂ core-shell nanocubes by utilizing prussian blue analogue for enhanced capacitive energy storage performance. <i>Journal of Power Sources</i> , 2020, 450, 227712.	4.0	59
1170	Transient Voltammetry with Ultramicroelectrodes Reveals the Electron Transfer Kinetics of Lithium Metal Anodes. <i>ACS Energy Letters</i> , 2020, 5, 701-709.	8.8	91
1171	Recent Advances on Water-Splitting Electrocatalysis Mediated by Noble-Metal-Based Nanostructured Materials. <i>Advanced Energy Materials</i> , 2020, 10, 1903120.	10.2	560
1172	Solubility-Dependent Protective Effects of Binary Alloys for Lithium Anode. <i>ACS Applied Energy Materials</i> , 2020, 3, 2278-2284.	2.5	16
1173	Gadolinium-Induced Valence Structure Engineering for Enhanced Oxygen Electrocatalysis. <i>Advanced Energy Materials</i> , 2020, 10, 1903833.	10.2	114
1174	A Boron Nitride Nanosheets Composite Membrane for a Long-Life Zinc-Based Flow Battery. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 6715-6719.	7.2	67
1175	Annihilating the Formation of Silicon Carbide: Molten Salt Electrolysis of Carbon-Silica Composite to Prepare the Carbon-Silicon Hybrid for Lithium-Ion Battery Anode. <i>Energy and Environmental Materials</i> , 2020, 3, 166-176.	7.3	29
1176	Biochar for electrochemical applications. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2020, 23, 25-30.	3.2	36
1177	Will income inequality influence the abatement effect of renewable energy technological innovation on carbon dioxide emissions?. <i>Journal of Environmental Management</i> , 2020, 264, 110482.	3.8	166

#	ARTICLE	IF	CITATIONS
1178	Self-adaptive FeP@C nanocages for reversible and long-term lithium-ion batteries. <i>Chemical Engineering Journal</i> , 2020, 395, 125124.	6.6	19
1179	Carbon-based single-atom catalysts for CO ₂ electroreduction: progress and optimization strategies. <i>Journal of Materials Chemistry A</i> , 2020, 8, 10695-10708.	5.2	86
1180	Biomass-derived self-supported porous carbon membrane embedded with Co nanoparticles as an advanced electrocatalyst for efficient and robust hydrogen evolution reaction. <i>Renewable Energy</i> , 2020, 155, 447-455.	4.3	26
1181	500 nm induced tunable syngas synthesis from CO ₂ photoreduction by controlling heterojunction concentration. <i>Chemical Communications</i> , 2020, 56, 5354-5357.	2.2	40
1182	A Safe Polyzwitterionic Hydrogel Electrolyte for Long-Life Quasi-Solid State Zinc Metal Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 2001317.	7.8	188
1183	Analyzing Energy Materials by Cryogenic Electron Microscopy. <i>Advanced Materials</i> , 2020, 32, e1908293.	11.1	61
1184	Composition and Architecture Design of Double-Shelled Co _{0.85} Se ₁ @Carbon/Graphene Hollow Polyhedron with Superior Alkali (Li, Na, K) Ion Storage. <i>Small</i> , 2020, 16, e1905853.	5.2	44
1185	Nanoscale materials with different dimensions for advanced electrocatalysts. , 2020, , 193-218.		0
1186	Phase-dependent hydrogen evolution activity of nickel phosphide nanosheet arrays in alkaline electrolytes. <i>Electrochimica Acta</i> , 2020, 344, 136116.	2.6	12
1187	An artificial metal-alloy interphase for high-rate and long-life sodium-sulfur batteries. <i>Energy Storage Materials</i> , 2020, 29, 1-8.	9.5	91
1188	Molecule design of effective C ₂ H ₄ /C ₂ H ₆ separation membranes: From 2D nanoporous graphene to 3D AHT zeolite. <i>Journal of Membrane Science</i> , 2020, 604, 118033.	4.1	6
1189	Integrated 3D electrodes based on metal-nitrogen-doped graphitic ordered mesoporous carbon and carbon paper for high-loading lithium-sulfur batteries. <i>Nano Energy</i> , 2020, 73, 104763.	8.2	44
1190	Homogeneous Electrochemical Reduction of CO ₂ to CO by a Cobalt Pyridine Thiolate Complex. <i>Inorganic Chemistry</i> , 2020, 59, 5292-5302.	1.9	30
1191	Combinatorial Design and Computational Screening of Two-Dimensional Transition Metal Trichalcogenide Monolayers: Toward Efficient Catalysts for Hydrogen Evolution Reaction. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 3192-3197.	2.1	26
1192	Ultrafine-Grained Porous Ir-Based Catalysts for High-Performance Overall Water Splitting in Acidic Media. <i>ACS Applied Energy Materials</i> , 2020, 3, 3736-3744.	2.5	26
1193	Integrated design for electrocatalytic carbon dioxide reduction. <i>Catalysis Science and Technology</i> , 2020, 10, 2711-2720.	2.1	92
1194	Fast cation exchange of layered sodium transition metal oxides for boosting oxygen evolution activity and enhancing durability. <i>Journal of Materials Chemistry A</i> , 2020, 8, 8075-8083.	5.2	9
1195	Sodium Biphenyl as Anolyte for Sodium-Seawater Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 2001249.	7.8	24

#	ARTICLE	IF	CITATIONS
1196	Construction of Bimetallic Selenides Encapsulated in Nitrogen/Sulfur Co-Doped Hollow Carbon Nanospheres for High-Performance Sodium/Potassium-Ion Half/Full Batteries. <i>Small</i> , 2020, 16, e1907670.	5.2	74
1197	Self-Catalyzed Growth of Co-N-C Nanobrushes for Efficient Rechargeable Zn-Air Batteries. <i>Small</i> , 2020, 16, e2001171.	5.2	84
1198	Mesostructured carbon-based nanocages: an advanced platform for energy chemistry. <i>Science China Chemistry</i> , 2020, 63, 665-681.	4.2	48
1199	Self-Supported CoP Nanoparticle-Embedded Wood-Derived Porous Carbon Membrane for Efficient H ₂ Evolution in Both Acidic and Basic Solutions. <i>ChemCatChem</i> , 2020, 12, 3929-3936.	1.8	17
1200	Mille-Cr ³⁺ -like Metal Phosphide Nanocrystals/Carbon Nanotube Film Composites as High-Capacitance Negative Electrodes in Asymmetric Supercapacitors. <i>ACS Applied Energy Materials</i> , 2020, 3, 4580-4588.	2.5	19
1201	A Chemically Polished Zinc Metal Electrode with a Ridge-like Structure for Cycle-Stable Aqueous Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 23028-23034.	4.0	65
1202	First-Principles Design and Investigation of Siligraphene as a Potential Anode Material for Na-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2020, 124, 11293-11300.	1.5	25
1203	Laser-induced photothermal generation of flexible and salt-resistant monolithic bilayer membranes for efficient solar desalination. <i>Carbon</i> , 2020, 164, 349-356.	5.4	51
1204	Hydration structure and water exchange kinetics at xenotime-water interfaces: implications for rare earth minerals separation. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 7719-7727.	1.3	10
1205	Material-Microbe Interfaces for Solar-Driven CO ₂ Bioelectrosynthesis. <i>Trends in Biotechnology</i> , 2020, 38, 1245-1261.	4.9	70
1206	Rapid metal-free synthesis of pyridyl-functionalized conjugated microporous polymers for visible-light-driven water splitting. <i>Polymer Chemistry</i> , 2020, 11, 3393-3397.	1.9	31
1207	Simultaneous enhancement of thermoelectric and mechanical performance for SnTe by nano SiC compositing. <i>Journal of Materials Chemistry C</i> , 2020, 8, 7393-7400.	2.7	35
1208	Fabrication and Applications of 3D Nanoarchitectures for Advanced Electrocatalysts and Sensors. <i>Advanced Materials</i> , 2020, 32, e1907500.	11.1	17
1209	Advanced Electrolytes for Fast-Charging High-Voltage Lithium-Ion Batteries in Wide-Temperature Range. <i>Advanced Energy Materials</i> , 2020, 10, 2000368.	10.2	159
1210	Fabrication of Crystalline Microporous Membrane from 2D MOF Nanosheets for Gas Separation. <i>Chemistry - an Asian Journal</i> , 2020, 15, 2371-2378.	1.7	24
1211	Confining ultrafine Li ₃ P nanoclusters in porous carbon for high-performance lithium-ion battery anode. <i>Nano Research</i> , 2020, 13, 1122-1126.	5.8	19
1212	CuCo ₂ S ₄ integrated multiwalled carbon nanotube as high-performance electrocatalyst for electroreduction of nitrogen to ammonia. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 14640-14647.	3.8	17
1213	A High-Rate Lithium Manganese Oxide-Hydrogen Battery. <i>Nano Letters</i> , 2020, 20, 3278-3283.	4.5	30

#	ARTICLE	IF	CITATIONS
1214	Long-lifespan lithium-metal batteries obtained using a perovskite intercalation layer to stabilize the lithium electrode. <i>Journal of Materials Chemistry A</i> , 2020, 8, 9137-9145.	5.2	4
1215	<i>In situ</i> conversion of metal (Ni, Co or Fe) foams into metal sulfide (Ni ₃ S ₂ , Co ₉ S ₈ or FeS) foams with surface grown N-doped carbon nanotube arrays as efficient superaerophobic electrocatalysts for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2020, 8, 9239-9247.	5.2	83
1216	The influence of consumers' intention factors on willingness to pay for renewable energy: a structural equation modeling approach. <i>Environmental Science and Pollution Research</i> , 2020, 27, 21747-21761.	2.7	92
1217	Sn4P3@Porous carbon nanofiber as a self-supported anode for sodium-ion batteries. <i>Journal of Power Sources</i> , 2020, 461, 228116.	4.0	55
1218	On-chip electrocatalytic microdevice: an emerging platform for expanding the insight into electrochemical processes. <i>Chemical Society Reviews</i> , 2020, 49, 2916-2936.	18.7	68
1219	A robust soc-MOF platform exhibiting high gravimetric uptake and volumetric deliverable capacity for on-board methane storage. <i>Nano Research</i> , 2021, 14, 512-517.	5.8	40
1220	Recent advances in carbon nanostructures prepared from carbon dioxide for high-performance supercapacitors. <i>Journal of Energy Chemistry</i> , 2021, 54, 352-367.	7.1	97
1221	Synthesis of carbon nitride in moist environments: A defect engineering strategy toward superior photocatalytic hydrogen evolution reaction. <i>Journal of Energy Chemistry</i> , 2021, 54, 403-413.	7.1	21
1222	Constructing a uniform lithium iodide layer for stabilizing lithium metal anode. <i>Journal of Energy Chemistry</i> , 2021, 55, 129-135.	7.1	44
1223	In-situ surface decoration of RuO ₂ nanoparticles by laser ablation for improved oxygen evolution reaction activity in both acid and alkali solutions. <i>Journal of Energy Chemistry</i> , 2021, 54, 510-518.	7.1	105
1224	Selection of energy matrix sources in Chile using a fuzzy logic decision approach. <i>Energy Systems</i> , 2021, 12, 411-429.	1.8	4
1225	Can domestic wastes-evolved Fe ₂ N@Carbon hybrids serve as competitive anodes for sustainable Li/Na storage applications?. <i>Materials Research Bulletin</i> , 2021, 134, 111088.	2.7	8
1226	Interface engineering in transition metal-based heterostructures for oxygen electrocatalysis. <i>Materials Chemistry Frontiers</i> , 2021, 5, 1033-1059.	3.2	64
1227	Understanding all solid-state lithium batteries through in situ transmission electron microscopy. <i>Materials Today</i> , 2021, 42, 137-161.	8.3	64
1228	Oxygen Vacancy Engineering in Titanium Dioxide for Sodium Storage. <i>Chemistry - an Asian Journal</i> , 2021, 16, 3-19.	1.7	27
1229	Insights into the Capacity and Rate Performance of Transition-Metal Coordination Compounds for Reversible Lithium Storage. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 4142-4149.	7.2	35
1230	Electrochemistry: Retrospect and Prospects. <i>Israel Journal of Chemistry</i> , 2021, 61, 120-151.	1.0	2
1231	Regulation of carbon distribution to construct high-sulfur-content cathode in lithium-sulfur batteries. <i>Journal of Energy Chemistry</i> , 2021, 56, 203-208.	7.1	89

#	ARTICLE	IF	CITATIONS
1232	Efficient photocatalytic production of hydrogen by exploiting the polydopamine-semiconductor interface. <i>Applied Catalysis B: Environmental</i> , 2021, 280, 119423.	10.8	77
1233	Consumers'™ intention-based influence factors of renewable energy adoption in Pakistan: a structural equation modeling approach. <i>Environmental Science and Pollution Research</i> , 2021, 28, 432-445.	2.7	107
1234	Designing Ceramic/Polymer Composite as Highly Ionic Conductive Solid-State Electrolytes. <i>Batteries and Supercaps</i> , 2021, 4, 39-59.	2.4	49
1235	Destabilizing Alkaline Water with 3d-Metal (Oxy)(Hydr)Oxides for Improved Hydrogen Evolution. <i>Chemistry - A European Journal</i> , 2021, 27, 553-564.	1.7	17
1236	Perovskite nanoparticles@N-doped carbon nanofibers as robust and efficient oxygen electrocatalysts for Zn-air batteries. <i>Journal of Colloid and Interface Science</i> , 2021, 581, 374-384.	5.0	42
1237	Understanding the High-Performance Anode Material of $\text{CoC}_{20}\text{O}_{40} \cdot 2\text{H}_2\text{O}$ Microrods Wrapped by Reduced Graphene Oxide for Lithium-Ion and Sodium-Ion Batteries. <i>Chemistry - A European Journal</i> , 2021, 27, 993-1001.		16
1238	A highly stable membrane with hierarchical structure for wide pH range flow batteries. <i>Journal of Energy Chemistry</i> , 2021, 56, 80-86.	7.1	22
1239	Scalable fabrication and active site identification of MOF shell-derived nitrogen-doped carbon hollow frameworks for oxygen reduction. <i>Journal of Materials Science and Technology</i> , 2021, 66, 186-192.	5.6	23
1240	Operation characteristics and methods of the hydraulic power take-off system. <i>Transactions of the Institute of Measurement and Control</i> , 2021, 43, 137-150.	1.1	3
1241	Graphene-nickel nitride hybrids supporting palladium nanoparticles for enhanced ethanol electrooxidation. <i>Journal of Energy Chemistry</i> , 2021, 55, 48-54.	7.1	34
1242	In-situ construction of lithiophilic interphase in vertical micro-channels of 3D copper current collector for high performance lithium-metal batteries. <i>Energy Storage Materials</i> , 2021, 34, 22-27.	9.5	35
1243	Recent advances in vanadium-based cathode materials for rechargeable zinc ion batteries. <i>Materials Chemistry Frontiers</i> , 2021, 5, 744-762.	3.2	49
1244	BiVO_4 nanocoral superstructures and their excellent electrical/optical dual-functions. <i>Journal of Alloys and Compounds</i> , 2021, 852, 157035.	2.8	19
1245	Freestanding nanosheets of 1T-2H hybrid MoS_2 as electrodes for efficient sodium storage. <i>Journal of Materials Science and Technology</i> , 2021, 67, 237-242.	5.6	26
1246	Thermally-assisted photocatalytic CO_2 reduction to fuels. <i>Chemical Engineering Journal</i> , 2021, 408, 127280.	6.6	90
1247	Recent progress and prospects of Li- CO_2 batteries: Mechanisms, catalysts and electrolytes. <i>Energy Storage Materials</i> , 2021, 34, 148-170.	9.5	88
1248	Hierarchical Composite-Solid-Electrolyte with High Electrochemical Stability and Interfacial Regulation for Boosting Ultra-Stable Lithium Batteries. <i>Advanced Functional Materials</i> , 2021, 31, .	7.8	57
1249	Polyarylimide and porphyrin based polymer microspheres for zinc ion hybrid capacitors. <i>Chemical Engineering Journal</i> , 2021, 405, 127038.	6.6	76

#	ARTICLE	IF	CITATIONS
1250	Revealing property-performance relationships for efficient CO ₂ hydrogenation to higher hydrocarbons over Fe-based catalysts: Statistical analysis of literature data and its experimental validation. <i>Applied Catalysis B: Environmental</i> , 2021, 282, 119554.	10.8	51
1251	Cobalt-embedded few-layered carbon nanosheets toward enhanced hydrogen evolution: Rational design and insight into structure-performance correlation. <i>Journal of Energy Chemistry</i> , 2021, 58, 156-161.	7.1	1
1252	Curvature-induced Zn 3d Electron Return on Zn ⁴⁺ Single-Atom Carbon Nanofibers for Boosting Electroreduction of CO ₂ . <i>ChemCatChem</i> , 2021, 13, 603-609.	1.8	29
1253	Advanced electrolyte design for stable lithium metal anode: From liquid to solid. <i>Nano Energy</i> , 2021, 80, 105516.	8.2	111
1254	Gel-polymer electrolytes plasticized with pyrrolidinium-based ionanofluid for lithium battery applications. <i>Ionics</i> , 2021, 27, 123-136.	1.2	21
1255	Self-assembled CuCo ₂ S ₄ nanosheets with rich surface Co ³⁺ as efficient electrocatalysts for oxygen evolution reaction. <i>Applied Surface Science</i> , 2021, 536, 147826.	3.1	36
1256	Growing ordered CuO nanorods on 2D Cu/g-C ₃ N ₄ nanosheets as stable freestanding anode for outstanding lithium storage. <i>Chemical Engineering Journal</i> , 2021, 407, 126941.	6.6	33
1257	Rare earth insitu-doped ZIF-67 derived N doped C encapsulated Sm ₂ O ₃ /Co nanoparticles as excellent oxygen reduction reaction catalyst for Al-air batteries. <i>Journal of Power Sources</i> , 2021, 482, 229052.	4.0	21
1258	Epitaxial growth of prussian blue analogue derived NiFeP thin film for efficient electrocatalytic hydrogen evolution reaction. <i>Journal of Solid State Chemistry</i> , 2021, 293, 121779.	1.4	14
1259	Janus MoSSe/graphene heterostructures: Potential anodes for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2021, 854, 157215.	2.8	41
1260	Strategies for the Stabilization of Zn Metal Anodes for Zn-Ion Batteries. <i>Advanced Energy Materials</i> , 2021, 11, .	10.2	431
1261	Eu ₂ O ₃ @Cu/NC nanocomposite catalyst with improved oxygen reduction reaction activity for Zn-air batteries. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 3974-3983.	3.8	11
1262	DNA as template and P-source for synthesis of Co ₂ P/Co ₂ N core-shell nanostructure embedded in N-doped carbon nanofiber derived from electrospun precursor for oxygen evolution reaction. <i>Electrochimica Acta</i> , 2021, 367, 137562.	2.6	12
1263	Advances in designing heterojunction photocatalytic materials. <i>Chinese Journal of Catalysis</i> , 2021, 42, 710-730.	6.9	182
1264	Dual-Manipulation on P ₂ -Na _{0.67} Ni _{0.33} Mn _{0.67} O ₂ Layered Cathode toward Sodium-Ion Full Cell with Record Operating Voltage Beyond 3.5 V. <i>Energy Storage Materials</i> , 2021, 35, 620-629.	9.5	79
1265	The lab-to-fab journey of copper-based electrocatalysts for multi-carbon production: Advances, challenges, and opportunities. <i>Nano Today</i> , 2021, 36, 101028.	6.2	25
1266	Cu ₂ O/Ti ₃ C ₂ MXene heterojunction photocatalysts for improved CO ₂ photocatalytic reduction performance. <i>Applied Surface Science</i> , 2021, 542, 148685.	3.1	45
1267	Insights into the Capacity and Rate Performance of Transition-Metal Coordination Compounds for Reversible Lithium Storage. <i>Angewandte Chemie</i> , 2021, 133, 4188-4195.	1.6	2

#	ARTICLE	IF	CITATIONS
1268	Metal-organic framework-derived porous carbon templates for catalysis. , 2021, , 73-121.		0
1269	Recent breakthroughs and perspectives of high-energy layered oxide cathode materials for lithium ion batteries. <i>Materials Today</i> , 2021, 43, 132-165.	8.3	174
1270	Perovskite oxides as supercapacitive electrode: Properties, design and recent advances. <i>Coordination Chemistry Reviews</i> , 2021, 431, 213680.	9.5	42
1271	Inserting an intermediate band in Cu- and Ag-based Kesterite compounds by Sb doping: A first-principles study. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2021, 264, 114937.	1.7	9
1272	Towards large-scale electrochemical energy storage in the marine environment with a highly-extensible "paper-like" seawater supercapacitor device. <i>Journal of Materials Chemistry A</i> , 2021, 9, 622-631.	5.2	16
1273	Manganese Oxide as an Inorganic Catalyst for the Oxygen Evolution Reaction Studied by X-Ray Photoelectron and Operando Raman Spectroscopy. <i>ChemCatChem</i> , 2021, 13, 1175-1185.	1.8	34
1274	Carbon-coated ultrathin metallic V ₅ Se ₈ nanosheet for high-energy-density and robust potassium storage. <i>Energy Storage Materials</i> , 2021, 35, 1-11.	9.5	35
1275	Analogous Mixed Matrix Membranes with Self-Assembled Interface Pathways. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 5864-5870.	7.2	29
1276	Engineering heterointerfaces coupled with oxygen vacancies in lanthanum-based hollow microspheres for synergistically enhanced oxygen electrocatalysis. <i>Journal of Energy Chemistry</i> , 2021, 60, 503-511.	7.1	27
1277	Modular Electrochemical Synthesis Using a Redox Reservoir Paired with Independent Half-Reactions. <i>Joule</i> , 2021, 5, 149-165.	11.7	37
1278	A high-performance aqueous iron-hydrogen gas battery. <i>Materials Today Energy</i> , 2021, 19, 100603.	2.5	13
1279	Shape-Induced Kinetics Enhancement in Layered P ₂ Na _{0.67} Ni _{0.33} Mn _{0.67} O ₂ Porous Microcuboids Enables High Energy/Power Sodium-Ion Full Battery. <i>Batteries and Supercaps</i> , 2021, 4, 456-463.	2.4	19
1280	Chickpea derived Co nanocrystal encapsulated in 3D nitrogen-doped mesoporous carbon: Pressure cooking synthetic strategy and its application in lithium-sulfur batteries. <i>Journal of Colloid and Interface Science</i> , 2021, 585, 328-336.	5.0	29
1281	Modulated FeCo nanoparticle in situ growth on the carbon matrix for high-performance oxygen catalysts. <i>Materials Today Energy</i> , 2021, 19, 100610.	2.5	17
1282	Lithium-film ceramics for solid-state lithionic devices. <i>Nature Reviews Materials</i> , 2021, 6, 313-331.	23.3	80
1283	Designing perovskite catalysts for controlled active-site exsolution in the microwave dry reforming of methane. <i>Applied Catalysis B: Environmental</i> , 2021, 284, 119711.	10.8	37
1284	Bifunctional Perovskite-BiVO ₄ Tandem Devices for Uninterrupted Solar and Electrocatalytic Water Splitting Cycles. <i>Advanced Functional Materials</i> , 2021, 31, 2008182.	7.8	36
1285	Titanium-doped hydroxyapatites photoanodes for Dye-Sensitized Solar Cells. <i>Ceramics International</i> , 2021, 47, 9701-9710.	2.3	4

#	ARTICLE	IF	CITATIONS
1286	Metamaterial and Helmholtz coupled resonator for high-density acoustic energy harvesting. <i>Nano Energy</i> , 2021, 82, 105693.	8.2	56
1287	Theoretical insight on PTB7:PC71BM, PTB7-th:PC71BM and Si-PCPDTBT:PC71BM interactions governing blend nanoscale morphology for efficient solar cells. <i>Nano Energy</i> , 2021, 82, 105708.	8.2	7
1288	Nighttime Radiative Cooling for Water Harvesting from Solar Panels. <i>ACS Photonics</i> , 2021, 8, 269-275.	3.2	41
1289	Analogous Mixed Matrix Membranes with Self-Assembled Interface Pathways. <i>Angewandte Chemie</i> , 2021, 133, 5928-5934.	1.6	3
1290	Opportunities of Aqueous Manganese-Based Batteries with Deposition and Stripping Chemistry. <i>Advanced Energy Materials</i> , 2021, 11, 2002904.	10.2	107
1291	Visible-Light Responsive TiO ₂ -Based Materials for Efficient Solar Energy Utilization. <i>Advanced Energy Materials</i> , 2021, 11, 2003303.	10.2	118
1292	Three-dimensional heterostructures of Co@Cu _x S core-shell nanowire arrays as efficient bifunctional electrocatalysts for overall water splitting. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 611, 125779.	2.3	8
1293	Understanding the reaction mechanism and performances of 3d transition metal cathodes for all-solid-state fluoride ion batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 406-412.	5.2	33
1294	CoMoP ₂ nanoparticles anchored on N, P doped carbon nanosheets for high-performance lithium-oxygen batteries. <i>FlatChem</i> , 2021, 25, 100221.	2.8	14
1295	High-performance all-organic aqueous batteries based on a poly(imide) anode and poly(catechol) cathode. <i>Journal of Materials Chemistry A</i> , 2021, 9, 505-514.	5.2	35
1296	Reconstructed Water Oxidation Electrocatalysts: The Impact of Surface Dynamics on Intrinsic Activities. <i>Advanced Functional Materials</i> , 2021, 31, 2008190.	7.8	161
1297	Mass production of high-performance single atomic FeNC electrocatalysts via sequenced ultrasonic atomization and pyrolysis process. <i>Science China Materials</i> , 2021, 64, 631-641.	3.5	14
1298	An unconventional full dual-cation battery. <i>Nano Energy</i> , 2021, 81, 105539.	8.2	13
1299	Interface Engineering of CoS/CoO@N-Doped Graphene Nanocomposite for High-Performance Rechargeable Zn-Air Batteries. <i>Nano-Micro Letters</i> , 2021, 13, 3.	14.4	95
1300	The free-standing nanoporous palladium for hydrogen isotope storage. <i>Journal of Alloys and Compounds</i> , 2021, 854, 157062.	2.8	11
1301	Electronic Structure Tuning of 2D Metal (Hydr)oxides Nanosheets for Electrocatalysis. <i>Small</i> , 2021, 17, e2002240.	5.2	90
1302	Recent Progress on the Alloy-Based Anode for Sodium-Ion Batteries and Potassium-Ion Batteries. <i>Small</i> , 2021, 17, e1903194.	5.2	284
1303	Design and game-Theoretic analysis of community-Based market mechanisms in heat and electricity systems. <i>Omega</i> , 2021, 99, 102177.	3.6	23

#	ARTICLE	IF	CITATIONS
1305	Reduced graphene oxide-based calcium alginate hydrogel as highly efficient solar steam generation membrane for desalination. <i>Frontiers of Materials Science</i> , 2021, 15, 138-146.	1.1	13
1306	Comprehensive understanding of the roles of water molecules in aqueous Zn-ion batteries: from electrolytes to electrode materials. <i>Energy and Environmental Science</i> , 2021, 14, 3796-3839.	15.6	257
1307	Non-stoichiometric molybdenum sulfide clusters and their reactions with the hydrogen molecule. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 347-355.	1.3	11
1308	<i>Ab initio</i> characterization of N doped T-graphene and its application as an anode material for Na ion rechargeable batteries. <i>Sustainable Energy and Fuels</i> , 2021, 5, 4060-4068.	2.5	9
1309	Electrolytes and Interphases in Potassium Ion Batteries. <i>Advanced Materials</i> , 2021, 33, e2003741.	11.1	181
1310	Facile synthesis of Fe-doped CoP nanosheet arrays wrapped by graphene for overall water splitting. <i>Dalton Transactions</i> , 2021, 50, 12168-12178.	1.6	20
1311	Integration of adsorption and catalytic active sites in cobalt iron oxide nanorods for an excellent performance Li-S battery with a wide temperature range. <i>Sustainable Energy and Fuels</i> , 2021, 5, 4284-4288.	2.5	7
1312	Refractory materials and plasmonics based perfect absorbers. <i>Nanotechnology</i> , 2021, 32, 132002.	1.3	16
1313	Ultrafine tuning of the pore size in zeolite A for efficient propyne removal from propylene. <i>Chinese Journal of Chemical Engineering</i> , 2021, 37, 217-221.	1.7	5
1314	Long-life Na-rich nickel hexacyanoferrate capable of working under stringent conditions. <i>Journal of Materials Chemistry A</i> , 2021, 9, 21228-21240.	5.2	21
1315	Electrochemical oxidation of 5-hydroxymethylfurfural on ternary metal-organic framework nanoarrays: enhancement from electronic structure modulation. <i>Journal of Materials Chemistry A</i> , 2021, 9, 14270-14275.	5.2	48
1316	Near-infrared heavy-metal-free SnSe/ZnSe quantum dots for efficient photoelectrochemical hydrogen generation. <i>Nanoscale</i> , 2021, 13, 3519-3527.	2.8	14
1317	Research progress in transition metal chalcogenide based anodes for K-ion hybrid capacitor applications: a mini-review. <i>RSC Advances</i> , 2021, 11, 25450-25460.	1.7	37
1318	Universal strategy using environment-friendly inorganic compounds for the preparation of porous carbon nitride for efficient photocatalytic hydrogen production and environmental remediation. <i>New Journal of Chemistry</i> , 2021, 45, 4303-4310.	1.4	1
1319	Modified metal-organic frameworks as photocatalysts. , 2021, , 231-270.		3
1320	Theoretical insights into the promotion effect of alkali metal cations on the electroreduction mechanism of CO ₂ into C ₁ products at the Cu(111)/H ₂ O interface. <i>New Journal of Chemistry</i> , 2021, 45, 15582-15593.	1.4	2
1321	Unveiling the Origin of Alloy-Seeded and Nondendritic Growth of Zn for Rechargeable Aqueous Zn Batteries. <i>ACS Energy Letters</i> , 2021, 6, 404-412.	8.8	148
1322	Rapid wet-chemical oxidative activation of graphite felt electrodes for vanadium redox flow batteries. <i>RSC Advances</i> , 2021, 11, 32095-32105.	1.7	8

#	ARTICLE	IF	CITATIONS
1323	Organic-inorganic hybrid and inorganic halide perovskites: structural and chemical engineering, interfaces and optoelectronic properties. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 133002.	1.3	27
1324	Low-cost and multi-level structured NiFeMn alloy@NiFeMn oxyhydroxide electrocatalysts for highly efficient overall water splitting. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 2713-2724.	3.0	5
1325	Highly stable titanium-manganese single flow batteries for stationary energy storage. <i>Journal of Materials Chemistry A</i> , 2021, 9, 12606-12611.	5.2	18
1326	Heterostructures of titanium-based MXenes in energy conversion and storage devices. <i>Journal of Materials Chemistry C</i> , 2021, 9, 8395-8465.	2.7	30
1327	Controlled synthesis of ultrasmall RuP2 particles on N,P-codoped carbon as superior pH-wide electrocatalyst for hydrogen evolution. <i>Rare Metals</i> , 2021, 40, 1040-1047.	3.6	59
1328	Ultrafast heating to boost the electrocatalytic activity of iridium towards oxygen evolution reaction. <i>Chemical Communications</i> , 2021, 57, 7830-7833.	2.2	3
1329	Phase change material-integrated latent heat storage systems for sustainable energy solutions. <i>Energy and Environmental Science</i> , 2021, 14, 4268-4291.	15.6	193
1330	Electrodeposited Ni-Fe-P-FeMnO3/Fe multi-stage nanostructured electrocatalyst with superior catalytic performance for water splitting. <i>Journal of Materials Chemistry A</i> , 2021, 9, 21101-21110.	5.2	5
1331	Recent advances of noble-metal-free bifunctional oxygen reduction and evolution electrocatalysts. <i>Chemical Society Reviews</i> , 2021, 50, 7745-7778.	18.7	385
1332	A highly reversible zinc deposition for flow batteries regulated by critical concentration induced nucleation. <i>Energy and Environmental Science</i> , 2021, 14, 4077-4084.	15.6	58
1333	Regulating the carbon distribution of anode materials in lithium-ion batteries. <i>Nanoscale</i> , 2021, 13, 3937-3947.	2.8	21
1334	Graphene-Based Materials with Tailored Nanostructures for Lithium-Ion Batteries. , 2021, , 473-490.		0
1335	Characterization of lithium zinc titanate doped with metal ions as anode materials for lithium ion batteries. <i>Dalton Transactions</i> , 2021, 50, 3356-3368.	1.6	8
1336	Batteries. , 2021, , 79-141.		0
1337	Kinetic analysis and alloy designs for metal/metal fluorides toward high rate capability for all-solid-state fluoride-ion batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 7018-7024.	5.2	16
1338	Energy Generation: Sources, Challenges, and Solutions. <i>Encyclopedia of the UN Sustainable Development Goals</i> , 2021, , 402-412.	0.0	0
1339	Polyethylenimine-modified bimetallic Au@Rh core-shell mesoporous nanospheres surpass Pt for pH-universal hydrogen evolution electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2021, 9, 13080-13086.	5.2	29
1340	Progress and Perspective: MXene and MXene-Based Nanomaterials for High-Performance Energy Storage Devices. <i>Advanced Electronic Materials</i> , 2021, 7, 2000967.	2.6	122

#	ARTICLE	IF	CITATIONS
1341	Perovskite solar cells as modern nano tools and devices in solar power energy. , 2021, , 377-427.		5
1342	Hybrid Energy-Harvesting Systems Based on Triboelectric Nanogenerators. Matter, 2021, 4, 116-143.	5.0	94
1343	Self-Supported Nickel Phosphide Electrode for Efficient Alkaline Water-to-Hydrogen Conversion via Urea Electrolysis. Industrial & Engineering Chemistry Research, 2021, 60, 1185-1193.	1.8	36
1344	Nanofluidic osmotic power generators “ advanced nanoporous membranes and nanochannels for blue energy harvesting. Chemical Science, 2021, 12, 12874-12910.	3.7	60
1345	In situ surface-enhanced Raman spectroelectrochemistry reveals the molecular conformation of electrolyte additives in Li-ion batteries. Journal of Materials Chemistry A, 2021, 9, 20024-20031.	5.2	7
1346	Concentrated dual-cation electrolyte strategy for aqueous zinc-ion batteries. Energy and Environmental Science, 2021, 14, 4463-4473.	15.6	203
1347	Electrochemical oxidation of biomass derived 5-hydroxymethylfurfural (HMF): pathway, mechanism, catalysts and coupling reactions. Green Chemistry, 2021, 23, 4228-4254.	4.6	191
1348	A highly stable CoMo ₂ S ₄ /Ni ₃ S ₂ heterojunction electrocatalyst for efficient hydrogen evolution. Chemical Communications, 2021, 57, 785-788.	2.2	20
1349	IOT Based Energy Monitoring of PV Plants - An Overview. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2021, , 57-64.	0.2	2
1350	Nanocarbon-based-ZnO nanocomposites for supercapacitor application. , 2021, , 553-573.		6
1351	A bioinspired solar evaporator for continuous and efficient desalination by salt dilution and secretion. Journal of Materials Chemistry A, 2021, 9, 17985-17993.	5.2	11
1352	Recent Advances in Heterostructured Anode Materials with Multiple Anions for Advanced Alkali-Ion Batteries. Advanced Energy Materials, 2021, 11, 2003058.	10.2	60
1353	Organic and Organic-Inorganic Composite Solid Electrolytes. New Developments in NMR, 2021, , 323-363.	0.1	0
1354	Theoretical and experimental study on the O(3P) + 2,5-dimethylfuran reaction in the gas phase. Physical Chemistry Chemical Physics, 2021, 23, 19424-19434.	1.3	0
1355	Silver nanomaterials: synthesis and (electro/photo) catalytic applications. Chemical Society Reviews, 2021, 50, 11293-11380.	18.7	79
1356	Advanced manufacturing for electrosynthesis of fuels and chemicals from CO ₂ . Energy and Environmental Science, 2021, 14, 3064-3074.	15.6	50
1357	Reactivity-guided formulation of composite solid polymer electrolytes for superior sodium metal batteries. Journal of Materials Chemistry A, 2021, 9, 18632-18643.	5.2	24
1358	Design and application of covalent organic frameworks for ionic conduction. Polymer Chemistry, 2021, 12, 4874-4894.	1.9	27

#	ARTICLE	IF	CITATIONS
1359	High-Performance Organometallic Catalyst Based on Nickel Porphyrin/Carbon Fibre for the Oxygen Reduction Reaction. <i>Journal of the Electrochemical Society</i> , 2021, 168, 016510.	1.3	12
1360	High-entropy energy materials: challenges and new opportunities. <i>Energy and Environmental Science</i> , 2021, 14, 2883-2905.	15.6	282
1361	N-doped porous carbon spheres as metal-free electrocatalyst for oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2021, 9, 5751-5758.	5.2	46
1362	Highly Crystallized Prussian Blue with Enhanced Kinetics for Highly Efficient Sodium Storage. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 3999-4007.	4.0	98
1363	Synthesis of Novel NiFe ₂ O ₄ /Fe ₃ O ₄ Nanotube arrays as flexible negative electrodes for Supercapacitor Applications. <i>IOP Conference Series: Earth and Environmental Science</i> , 0, 639, 012029.	0.2	0
1364	Self-supported hierarchical nanoporous Cu/Mo@MoO _x hybrid electrodes as robust nonprecious electrocatalysts for high-efficiency hydrogen evolution. <i>Current Nanoscience</i> , 2021, 16, .	0.7	0
1365	Reevesite with Ordered Intralayer Atomic Arrangement as an Optimized Nickel-Iron Oxygen Evolution Electrocatalyst. <i>ChemElectroChem</i> , 2021, 8, 558-562.	1.7	4
1366	Investigation into the properties of a ruthenium(polypyridyl)-NHC compound. <i>Canadian Journal of Chemistry</i> , 2021, 99, 230-235.	0.6	0
1367	Impedance spectroscopic study of charge transport and relaxation mechanism in MnCr ₂ O ₄ ceramic chromite. <i>Journal of Alloys and Compounds</i> , 2021, 854, 156996.	2.8	27
1368	Diagnosing the SEI Layer in a Potassium Ion Battery Using Distribution of Relaxation Time. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 2064-2071.	2.1	33
1369	Recent advances on electrocatalytic and photocatalytic seawater splitting for hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 9087-9100.	3.8	85
1370	Operando Investigation of Ag-Decorated Cu ₂ O Nanocube Catalysts with Enhanced CO ₂ Electroreduction toward Liquid Products. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 7426-7435.	7.2	160
1371	Synergistic Lithium Storage in Silica-Tin Composites Enables a Cycle-Stable and High-Capacity Anode for Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2021, 4, 2741-2750.	2.5	18
1372	High Performance Biomass-Based Polyimides for Flexible Electronic Applications. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 3278-3288.	3.2	34
1373	Two-Dimensional Hexagonal Boron Nitride for Building Next-Generation Energy-Efficient Devices. <i>ACS Energy Letters</i> , 2021, 6, 985-996.	8.8	37
1374	Ionic liquid-based electrolytes for CO ₂ electroreduction and CO ₂ electroorganic transformation. <i>National Science Review</i> , 2022, 9, nwab022.	4.6	58
1375	Development of Metal and Metal-Based Composites Anode Materials for Potassium-Ion Batteries. <i>Transactions of Tianjin University</i> , 2021, 27, 248-268.	3.3	13
1376	In situ selenylation of molybdate ion intercalated Co-Al layered double hydroxide for high-performance electrocatalytic oxygen evolution reaction. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2021, 119, 166-176.	2.7	19

#	ARTICLE	IF	CITATIONS
1377	The Role of Simulation and Serious Games in Teaching Concepts on Circular Economy and Sustainable Energy. <i>Energies</i> , 2021, 14, 1138.	1.6	34
1378	Recent progress and perspective of electrochemical CO ₂ reduction towards C ₂ -C ₅ products over non-precious metal heterogeneous electrocatalysts. <i>Nano Research</i> , 2021, 14, 3188-3207.	5.8	57
1379	Efficient Lithium Metal Cycling over a Wide Range of Pressures from an Anion-Derived Solid-Electrolyte Interphase Framework. <i>ACS Energy Letters</i> , 2021, 6, 816-825.	8.8	46
1380	Interfacial and Confinement-Mediated Organization of Gas Hydrates, Water, Organic Fluids, and Nanoparticles for the Utilization of Subsurface Energy and Geological Resources. <i>Energy & Fuels</i> , 2021, 35, 4687-4710.	2.5	13
1381	From Fiber to Fabric: Progress Towards Photovoltaic Energy Textile. <i>Advanced Fiber Materials</i> , 2021, 3, 76-106.	7.9	36
1382	NASICON-Type Na ₃ Zr ₂ Si ₂ PO ₁₂ Solid-State Electrolytes for Sodium Batteries**. <i>ChemElectroChem</i> , 2021, 8, 1035-1047.	1.7	68
1383	A MOF-based Ultra-Strong Acetylene Nano-Trap for Highly Efficient C ₂ H ₂ /CO ₂ Separation. <i>Angewandte Chemie</i> , 2021, 133, 5343-5348.	1.6	49
1384	Highly Stable Plating/Stripping Behavior of Zinc Metal Anodes in Aqueous Zinc Batteries Regulated by Quaternary Ammonium Cationic Salts. <i>ChemElectroChem</i> , 2021, 8, 858-865.	1.7	13
1385	Quasi-periodic selective multilayer emitter for sub-ambient daytime radiative cooling. <i>AIP Advances</i> , 2021, 11, .	0.6	7
1386	Development of inexpensive, simple and environment-friendly solar selective absorber using copper nanoparticle. <i>International Journal of Chemical Reactor Engineering</i> , 2021, 19, 727-737.	0.6	4
1387	<i>Operando</i> Electrochemical Kinetics in Particulate Porous Electrodes by Quantifying the Mesoscale Spatiotemporal Heterogeneities. <i>Advanced Energy Materials</i> , 2021, 11, 2003344.	10.2	11
1388	Carbon nanotube-supported MoSe ₂ nanoflakes as an interlayer for lithium-sulfur batteries. <i>New Carbon Materials</i> , 2021, 36, 219-226.	2.9	17
1389	Operando-Untersuchung von Ag-dekorierten Cu ₂ O-Nanowire-fel-Katalysatoren mit verbesserter CO ₂ -Elektroreduktion zu Flüssigprodukten. <i>Angewandte Chemie</i> , 2021, 133, 7502-7511.	1.6	9
1390	The albedo-climate penalty of hydropower reservoirs. <i>Nature Energy</i> , 2021, 6, 372-377.	19.8	27
1391	Ultrafine MoP Nanoparticle Splotched Nitrogen-Doped Carbon Nanosheets Enabling High-Performance 3D-Printed Potassium-Ion Hybrid Capacitors. <i>Advanced Science</i> , 2021, 8, 2004142.	5.6	109
1392	Metal-Organic Frameworks Derived Functional Materials for Electrochemical Energy Storage and Conversion: A Mini Review. <i>Nano Letters</i> , 2021, 21, 1555-1565.	4.5	351
1393	Recent progress in in situ/operando analysis tools for oxygen electrocatalysis. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 173001.	1.3	11
1394	A MOF-based Ultra-Strong Acetylene Nano-Trap for Highly Efficient C ₂ H ₂ /CO ₂ Separation. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 5283-5288.	7.2	172

#	ARTICLE	IF	CITATIONS
1395	One-Step Ethylene Purification from an Acetylene/Ethylene/Ethane Ternary Mixture by Cyclopentadiene Cobalt-Functionalized Metal-Organic Frameworks. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 11350-11358.	7.2	118
1396	Exploration of materials electrochemistry in rechargeable batteries using advanced in situ/operando x-ray absorption spectroscopy. <i>Electronic Structure</i> , 2021, 3, 013001.	1.0	4
1397	Abuse-Tolerant Electrolytes for Lithium-Ion Batteries. <i>Advanced Science</i> , 2021, 8, e2003694.	5.6	16
1398	Progress and challenges of ceramics for supercapacitors. <i>Journal of Materiomics</i> , 2021, 7, 1198-1224.	2.8	15
1399	Ethylenediamine-assisted phase engineering of 1T/2H-MoS ₂ /graphene for efficient and stable electrocatalytic hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 11688-11700.	3.8	21
1400	Resin-silica composite nanoparticle grafted polyethylene membranes for lithium ion batteries. <i>Journal of Applied Polymer Science</i> , 2021, 138, 50713.	1.3	3
1401	Interfacial engineering of heterogeneous catalysts for electrocatalysis. <i>Materials Today</i> , 2021, 48, 115-134.	8.3	96
1402	Synergetic Enhancement of Triboelectric Nanogenerators' Performance Based on Patterned Membranes Fabricated by Phase-Inversion Process. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021, 218, 2000829.	0.8	5
1404	Preparation and Carbonization of Metal Organic Framework Zn(bdc)(ted) _{0.5} for Enhancing Moisture Resistance and Methane Storage Capacity. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 3809-3818.	1.8	12
1405	Synergistic benefits for hydrogen production through CO ₂ -cofeeding catalytic pyrolysis of cellulosic biomass waste. <i>Cellulose</i> , 2021, 28, 4781-4792.	2.4	6
1406	A carboxymethyl vegetable gum as a robust water soluble binder for silicon anodes in lithium-ion batteries. <i>Journal of Power Sources</i> , 2021, 489, 229530.	4.0	31
1407	The rising zinc anodes for high-energy aqueous batteries. <i>EnergyChem</i> , 2021, 3, 100052.	10.1	74
1408	Electrocatalytic Refinery for Sustainable Production of Fuels and Chemicals. <i>Angewandte Chemie</i> , 2021, 133, 19724-19742.	1.6	30
1409	Electrocatalytic Refinery for Sustainable Production of Fuels and Chemicals. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 19572-19590.	7.2	341
1410	Dramatic HER Suppression on Ag Electrodes via Molecular Films for Highly Selective CO ₂ to CO Reduction. <i>ACS Catalysis</i> , 2021, 11, 4530-4537.	5.5	61
1411	Modulating Metal-Organic Frameworks as Advanced Oxygen Electrocatalysts. <i>Advanced Energy Materials</i> , 2021, 11, 2003291.	10.2	105
1412	A Complexing Agent to Enable a Wide-Temperature Range Bromine-Based Flow Battery for Stationary Energy Storage. <i>Advanced Functional Materials</i> , 2021, 31, 2100133.	7.8	21
1413	Construction of CoMoO ₄ @Ni ₃ S ₂ core-shell heterostructures nanorod arrays for high-performance supercapacitors. <i>Journal of Energy Storage</i> , 2021, 35, 102319.	3.9	44

#	ARTICLE	IF	CITATIONS
1415	Smart Adaptronic Thermal Management System Designs for The Li-ion Battery Packs. , 2021, , .		3
1416	Polymerized Ionic Networks Solid Electrolyte with High Ionic Conductivity for Lithium Batteries. Industrial & Engineering Chemistry Research, 2021, 60, 4630-4638.	1.8	9
1417	Active Energy Management Based on Meta-Heuristic Algorithms of Fuel Cell/Battery/Supercapacitor Energy Storage System for Aircraft. Aerospace, 2021, 8, 85.	1.1	18
1418	3D Hierarchical Carbon-Rich Micro-/Nanomaterials for Energy Storage and Catalysis. Electrochemical Energy Reviews, 2021, 4, 269-335.	13.1	108
1419	Nanospace Engineering of Metal-Organic Frameworks through Dynamic Spacer Installation of Multifunctionalities for Efficient Separation of Ethane from Ethane/Ethylene Mixtures. Angewandte Chemie, 2021, 133, 9766-9771.	1.6	9
1420	One-Step Ethylene Purification from an Acetylene/Ethylene/Ethane Ternary Mixture by Cyclopentadiene Cobalt-Functionalized Metal-Organic Frameworks. Angewandte Chemie, 2021, 133, 11451-11459.	1.6	21
1421	Electrochemical reduction of acetonitrile to ethylamine. Nature Communications, 2021, 12, 1949.	5.8	47
1422	Sustainable Conversion of Renewable Energy Sources. Sustainability, 2021, 13, 2940.	1.6	33
1423	Nanospace Engineering of Metal-Organic Frameworks through Dynamic Spacer Installation of Multifunctionalities for Efficient Separation of Ethane from Ethane/Ethylene Mixtures. Angewandte Chemie - International Edition, 2021, 60, 9680-9685.	7.2	89
1424	Noble metal-free electrocatalytic materials for water splitting in alkaline electrolyte. EnergyChem, 2021, 3, 100053.	10.1	68
1425	Thiazole-Linked Covalent Organic Framework Promoting Fast Two-Electron Transfer for Lithium-Organic Batteries. Advanced Energy Materials, 2021, 11, 2003735.	10.2	78
1426	Ion Association and Electrolyte Structure at Surface Films in Lithium-Ion Batteries. Journal of Physical Chemistry C, 2021, 125, 7054-7066.	1.5	4
1427	Surface-tuning nanoporous AuCu ₃ engineering syngas proportion by electrochemical conversion of CO ₂ . Nano Research, 2021, 14, 3907-3912.	5.8	15
1428	Scallion-Inspired Graphene Scaffold Enabled High Rate Lithium Metal Battery. Nano Letters, 2021, 21, 2347-2355.	4.5	20
1429	Linking Circular Economy and Sustainable Energy Technology through Quintuple Helix Perspective. Journal of Governance Risk Management Compliance and Sustainability, 2021, 1, 7-25.	0.1	1
1430	Techno-economic optimization of a zero emission energy system for a coastal community in Newfoundland, Canada. Energy, 2021, 220, 119709.	4.5	39
1431	Nanofluidic Membranes to Address the Challenges of Salinity Gradient Power Harvesting. ACS Nano, 2021, 15, 5838-5860.	7.3	97
1432	Biomass-Derived Activated Carbon Sheets with Tunable Oxygen Functional Groups and Pore Volume for High-Performance Oxygen Reduction and Zn-Air Batteries. ACS Applied Energy Materials, 2021, 4, 5230-5236.	2.5	19

#	ARTICLE	IF	CITATIONS
1433	Mixed ionic-electronic transport in the high-entropy (Co,Cu,Mg,Ni,Zn)1-Li O oxides. Acta Materialia, 2021, 208, 116735.	3.8	25
1434	Cu2O-Ag Tandem Catalysts for Selective Electrochemical Reduction of CO2 to C2 Products. Molecules, 2021, 26, 2175.	1.7	19
1435	Solar Evaporation-Based Energy Harvesting Using a Leaf-Inspired Energy-Harvesting Foam. ACS Sustainable Chemistry and Engineering, 2021, 9, 5027-5037.	3.2	33
1436	Electrolyzer and Catalysts Design from Carbon Dioxide to Carbon Monoxide Electrochemical Reduction. Electrochemical Energy Reviews, 2021, 4, 680-717.	13.1	26
1437	Recent Development in Defects Engineered Photocatalysts: An Overview of the Experimental and Theoretical Strategies. Energy and Environmental Materials, 2022, 5, 68-114.	7.3	81
1438	Defect-engineered three-dimensional vanadium diselenide microflowers/nanosheets on carbon cloth by chemical vapor deposition for high-performance hydrogen evolution reaction. Nanotechnology, 2021, 32, 265402.	1.3	10
1439	Enhanced Electrochemical Behavior of Peanut-Shell Activated Carbon/Molybdenum Oxide/Molybdenum Carbide Ternary Composites. Nanomaterials, 2021, 11, 1056.	1.9	12
1440	Li2(BH4)(NH2) Nanoconfined in SBA-15 as Solid-State Electrolyte for Lithium Batteries. Nanomaterials, 2021, 11, 946.	1.9	5
1441	A Triple-Mode Midinfrared Modulator for Radiative Heat Management of Objects with Various Emissivity. Nano Letters, 2021, 21, 4106-4114.	4.5	36
1442	One-step construction of sulfide heterostructures with P doping for efficient hydrogen evolution. Journal of Solid State Chemistry, 2021, 296, 122004.	1.4	4
1443	Ultra-broadband solar light wave trapping by gradient cavity-thin-film metasurface. Journal Physics D: Applied Physics, 0, , .	1.3	7
1444	Effects of a Thermally Electrochemically Activated β -PVDF Fiber on Suppression of Li Dendrite Growth for Anode-Free Batteries. ACS Applied Energy Materials, 2021, 4, 3240-3248.	2.5	16
1445	Neutral Zn-Air Battery Assembled with Single-Atom Iridium Catalysts for Sensitive Self-Powered Sensing System. Advanced Functional Materials, 2021, 31, 2101193.	7.8	52
1446	Mo-Co-N Hybrid Nanosheets Oriented on Hierarchical Nanoporous Cu as Versatile Electrocatalysts for Efficient Water Splitting. Advanced Functional Materials, 2021, 31, 2102285.	7.8	41
1447	Bio-Metabolism-Driven Crystalline Engineering of CdS Quantum Dots for Highly Active Photocatalytic H ₂ Evolution. ChemistrySelect, 2021, 6, 3702-3706.	0.7	4
1448	High-Performance Lithium Sulfur Batteries Based on Multidimensional Graphene-CNT-Nanosulfur Hybrid Cathodes. Batteries, 2021, 7, 26.	2.1	10
1449	On the Importance of Li Metal Morphology on the Cycling of Lithium Metal Polymer Cells. Journal of the Electrochemical Society, 2021, 168, 040505.	1.3	12
1450	Cu-Pb Nanocomposite Cathode Material toward Room-Temperature Cycling for All-Solid-State Fluoride-Ion Batteries. ACS Applied Energy Materials, 2021, 4, 3352-3357.	2.5	18

#	ARTICLE	IF	CITATIONS
1451	Graphene-Based Nanomaterials as the Cathode for Lithium-Sulfur Batteries. <i>Molecules</i> , 2021, 26, 2507.	1.7	18
1452	Capture and Reuse of Carbon Dioxide (CO ₂) for a Plastics Circular Economy: A Review. <i>Processes</i> , 2021, 9, 759.	1.3	41
1453	Electret Nanogenerators for Self-Powered, Flexible Electronic Planos. <i>Sustainability</i> , 2021, 13, 4142.	1.6	1
1454	Oxygen vacancy enhancing CO ₂ electrochemical reduction to CO on Ce-doped ZnO catalysts. <i>Surfaces and Interfaces</i> , 2021, 23, 100923.	1.5	22
1456	Technical Challenges and Perspectives for the Commercialization of Solution-Processable Solar Cells. <i>Advanced Materials Technologies</i> , 2021, 6, .	3.0	60
1457	Dopants in the Design of Noble Metal Nanoparticle Electrocatalysts and their Effect on Surface Energy and Coordination Chemistry at the Nanocrystal Surface. <i>Advanced Energy Materials</i> , 2021, 11, 2100265.	10.2	25
1458	Ultrasonic-assisted hydrothermal synthesis of cobalt oxide/nitrogen-doped graphene oxide hybrid as oxygen reduction reaction catalyst for Al-air battery. <i>Ultrasonics Sonochemistry</i> , 2021, 72, 105457.	3.8	15
1459	A Tröger's Base-Derived Covalent Organic Polymer Containing Carbazole Units as a High-Performance Supercapacitor. <i>Polymers</i> , 2021, 13, 1385.	2.0	32
1460	Enhancing the Surface Reactivity of Black Phosphorus on Hydrogen Evolution by Covalent Chemistry. <i>Journal of Physical Chemistry C</i> , 2021, 125, 7581-7589.	1.5	14
1461	Advances in Carbon Nanostructures and Nanocellulose as Additives for Efficient Drilling Fluids: Trends and Future Perspective—A Review. <i>Energy & Fuels</i> , 2021, 35, 7319-7339.	2.5	28
1462	Challenges and future perspectives on sodium and potassium ion batteries for grid-scale energy storage. <i>Materials Today</i> , 2021, 50, 400-417.	8.3	161
1463	2D and Layered Ti-based Materials for Supercapacitors and Rechargeable Batteries: Synthesis, Properties, and Applications. <i>Current Applied Materials</i> , 2022, 1, .	0.4	4
1464	Mechanical Metamaterials Gyro-Structure Piezoelectric Nanogenerators for Energy Harvesting under Quasi-Static Excitations in Ocean Engineering. <i>ACS Omega</i> , 2021, 6, 15348-15360.	1.6	21
1465	Layered Intercalation Materials. <i>Advanced Materials</i> , 2021, 33, e2004557.	11.1	92
1466	The critical role of inorganic nanofillers in solid polymer composite electrolyte for Li ⁺ transportation. , 2021, 3, 482-508.		68
1467	Effect of Gd content on the discharge and electrochemical behaviors of the magnesium alloy AZ31 as an anode for Mg-air battery. <i>Journal of Materials Science</i> , 2021, 56, 12789-12802.	1.7	15
1468	A Novel Method to Prepare Flexible 3D NiO Nanosheets Electrodes for Alkaline Rechargeable Ni ²⁺ /Zn Batteries. <i>ChemElectroChem</i> , 2021, 8, 2214-2220.	1.7	10
1469	Pressure-Driven and Creep-Enabled Interface Evolution in Sodium Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 26533-26541.	4.0	12

#	ARTICLE	IF	CITATIONS
1470	Regulation of Perovskite Surface Stability on the Electrocatalysis of Oxygen Evolution Reaction. , 2021, 3, 721-737.		61
1471	V-doped Ni ₃ N/Ni heterostructure with engineered interfaces as a bifunctional hydrogen electrocatalyst in alkaline solution: Simultaneously improving water dissociation and hydrogen adsorption. Nano Research, 2021, 14, 3489-3496.	5.8	39
1472	An Ultrahigh Performance Zinc-Organic Battery using Poly(catechol) Cathode in Zn(TFSI) ₂ -Based Concentrated Aqueous Electrolytes. Advanced Energy Materials, 2021, 11, 2100939.	10.2	93
1473	Heterostructured CoP/MoO ₂ as high efficient electrocatalysts for hydrogen evolution reaction over all pH values. International Journal of Hydrogen Energy, 2021, 46, 18353-18363.	3.8	15
1474	Predicting energy harvesting performance of a random nonlinear dielectric elastomer pendulum. Applied Energy, 2021, 289, 116696.	5.1	15
1475	Minireview on the Commonly Applied Copper-Based Electrocatalysts for Electrochemical CO ₂ Reduction. Energy & Fuels, 2021, 35, 8585-8601.	2.5	20
1476	Act in contravention: a non-planar coupled electrode design utilizing "tip effect" for ultra-high areal capacity, long cycle life zinc-based batteries. Science Bulletin, 2021, 66, 889-896.	4.3	37
1477	Analysis of Catalytic Activity of Au@Pd Core-shell Nanodendrites for Highly Efficient Ethanol Electrooxidation. Chinese Journal of Analytical Chemistry, 2021, 49, e21087-e21095.	0.9	6
1478	Perovskite oxide and polyazulene-based heterostructure for high-performance supercapacitors. Journal of Applied Polymer Science, 2021, 138, 51198.	1.3	11
1479	In Situ Carbon Insertion in Laminated Molybdenum Dioxide by Interlayer Engineering Toward Ultrastable "Rocking Chair"-Zinc-Ion Batteries. Advanced Functional Materials, 2021, 31, 2102827.	7.8	64
1480	Revealing the Superiority of Fast Ion Conductor in Composite Electrolyte for Dendrite-Free Lithium-Metal Batteries. ACS Applied Materials & Interfaces, 2021, 13, 22978-22986.	4.0	18
1481	Manganese-Based Materials for Rechargeable Batteries beyond Lithium-Ion. Advanced Energy Materials, 2021, 11, 2100867.	10.2	95
1482	Layer spacing gradient (NaLi)1-xCoO ₂ for electrochemical Li extraction. Matter, 2021, 4, 1611-1624.	5.0	13
1483	<i>In-Situ</i> Generated High-Valent Iron Single-Atom Catalyst for Efficient Oxygen Evolution. Nano Letters, 2021, 21, 4795-4801.	4.5	47
1484	Syntheses, characterizations and water-electrolysis properties of 2D 1±- and 1²-PdSeO ₃ bulk and nanosheet semiconductors. Journal of Solid State Chemistry, 2021, 297, 122018.	1.4	1
1485	Benefits of Fast Battery Formation in a Model System. Journal of the Electrochemical Society, 2021, 168, 050543.	1.3	8
1486	Electrochemical Catalysts for Green Hydrogen Energy. Advanced Energy and Sustainability Research, 2021, 2, 2100019.	2.8	4
1487	Tetrahedral Cu(I) complexes as electrocatalysts for the reduction of protons to dihydrogen gas. European Journal of Inorganic Chemistry, 2021, 2021, 2499-2504.	1.0	0

#	ARTICLE	IF	CITATIONS
1488	Electrostatic Interactions Leading to Hierarchical Interpenetrating Electroconductive Networks in Silicon Anodes for Fast Lithium Storage. <i>Chemistry - A European Journal</i> , 2021, 27, 9320-9327.	1.7	6
1489	Axial Ligand Coordination Tuning of the Electrocatalytic Activity of Iron Porphyrin Electrografted onto Carbon Nanotubes for the Oxygen Reduction Reaction. <i>Chemistry - A European Journal</i> , 2021, 27, 9898-9904.	1.7	24
1490	Electrospun Materials for Batteries Moving Beyond Lithium-Ion Technologies. <i>Electrochemical Energy Reviews</i> , 2022, 5, 211-241.	13.1	44
1491	Graphene-Based Electrodes in a Vanadium Redox Flow Battery Produced by Rapid Low-Pressure Combined Gas Plasma Treatments. <i>Chemistry of Materials</i> , 2021, 33, 4106-4121.	3.2	35
1492	One-Step Template/Solvent-Free Pyrolysis for In Situ Immobilization of CoP Nanoparticles onto N and P Co-Doped Carbon Porous Nanosheets towards High-Efficiency Electrocatalytic Hydrogen Evolution. <i>Chemistry - A European Journal</i> , 2021, 27, 9850-9857.	1.7	3
1493	Highly Surface-Distorted Pt Superstructures for Multifunctional Electrocatalysis. <i>Nano Letters</i> , 2021, 21, 5075-5082.	4.5	31
1494	Techno-Economic Analysis of Hybrid PV/Wind/Fuel-Cell System for EVCS. , 2021, , .		3
1495	The role of micro-nano pores in interfacial solar evaporation systems – A review. <i>Applied Energy</i> , 2021, 292, 116871.	5.1	44
1496	Nitrogen Doped Carbon Coated Bi Microspheres as High-Performance Anode for Half and Full Sodium Ion Batteries. <i>Chemistry - an Asian Journal</i> , 2021, 16, 2314-2320.	1.7	19
1497	Advances in Lithium-Sulfur Batteries: From Academic Research to Commercial Viability. <i>Advanced Materials</i> , 2021, 33, e2003666.	11.1	357
1498	Fe and P Doped 1T-Phase Enriched WS ₂ -Dendritic Nanostructures for Efficient Overall Water Splitting. <i>Applied Catalysis B: Environmental</i> , 2021, 286, 119897.	10.8	88
1499	PPy film anchored on ZnCo ₂ O ₄ nanowires facilitating efficient bifunctional electrocatalysis. <i>Materials Today Energy</i> , 2021, 20, 100637.	2.5	23
1500	Oxygen defect enriched (NH ₄) ₂ V ₁₀ O ₂₅ ·8H ₂ O nanosheets for superior aqueous zinc-ion batteries. <i>Nano Energy</i> , 2021, 84, 105876.	8.2	172
1501	An ethane-favored metal-organic framework with tailored pore environment used for efficient ethylene separation. <i>Microporous and Mesoporous Materials</i> , 2021, 320, 111096.	2.2	16
1502	Synthetic disposable material derived-carbon supported NiO: Efficient hybrid electrocatalyst for water oxidation process. <i>Fuel</i> , 2021, 294, 120558.	3.4	16
1503	Synthesis and functionalization of 2D nanomaterials for application in lithium-based energy storage systems. <i>Energy Storage Materials</i> , 2021, 38, 200-230.	9.5	29
1504	Preparation and application of Co ₃ O ₄ -Ni-MOF/MWCNTs hybrid for supercapacitor. <i>Ionics</i> , 2021, 27, 3543-3551.	1.2	16
1505	An Ultrastable Aqueous Iodine-Hydrogen Gas Battery. <i>Advanced Functional Materials</i> , 2021, 31, 2101024.	7.8	20

#	ARTICLE	IF	CITATIONS
1506	Scalable Room-Temperature Synthesis of Highly Robust Ethane-Selective Metal-Organic Frameworks for Efficient Ethylene Purification. <i>Journal of the American Chemical Society</i> , 2021, 143, 8654-8660.	6.6	124
1507	New Battery with Borides as Both Anode and Cathode Materials. <i>Energy & Fuels</i> , 2021, 35, 10315-10321.	2.5	6
1508	Progress on graphitic carbon materials for potassium-based energy storage. <i>New Carbon Materials</i> , 2021, 36, 435-448.	2.9	14
1509	Origin of Selective Production of Hydrogen Peroxide by Electrochemical Oxygen Reduction. <i>Journal of the American Chemical Society</i> , 2021, 143, 9423-9428.	6.6	169
1510	Scalable combustion synthesis of graphene-welded activated carbon for high-performance supercapacitors. <i>Chemical Engineering Journal</i> , 2021, 414, 128781.	6.6	134
1511	Electrolyte Structure of Lithium Polysulfides with Anti-Reductive Solvent Shells for Practical Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 15503-15509.	7.2	108
1512	Electrolyte Structure of Lithium Polysulfides with Anti-Reductive Solvent Shells for Practical Lithium-Sulfur Batteries. <i>Angewandte Chemie</i> , 2021, 133, 15631-15637.	1.6	8
1513	Strategies to improve cobalt-based electrocatalysts for electrochemical water splitting. <i>Journal of Catalysis</i> , 2021, 398, 54-66.	3.1	58
1514	Superior Rate Capability and Cycling Stability in Partially Cation-Disordered Co-Free Li-Rich Layered Materials Enabled by an Initial Activation Process. <i>Chemistry of Materials</i> , 2021, 33, 5115-5126.	3.2	5
1515	Implanting nickel and cobalt phosphide into well-defined carbon nanocages: A synergistic adsorption-electrocatalysis separator mediator for durable high-power Li-S batteries. <i>Energy Storage Materials</i> , 2021, 38, 381-388.	9.5	143
1516	Novel single-ion conducting electrolytes based on vinylidene fluoride copolymer for lithium metal batteries. <i>Journal of Power Sources</i> , 2021, 498, 229920.	4.0	21
1517	Machine-learning-accelerated discovery of single-atom catalysts based on bidirectional activation mechanism. <i>Chem Catalysis</i> , 2021, 1, 183-195.	2.9	50
1518	Soybean roots-derived N, P Co-doped mesoporous hard carbon for boosting sodium and potassium-ion batteries. <i>Carbon</i> , 2021, 178, 233-242.	5.4	61
1519	Proton transfer reactivity of molybdenum oxysulfide dianions [Mo ₂ O ₂ S ₆] ²⁻ and [Mo ₂ O ₂ S ₅] ²⁻ : The role of Coulomb barriers. <i>International Journal of Mass Spectrometry</i> , 2021, 464, 116558.	0.7	4
1520	Quasi-graphitic carbon shell-induced Cu confinement promotes electrocatalytic CO ₂ reduction toward C ₂ ⁺ products. <i>Nature Communications</i> , 2021, 12, 3765.	5.8	99
1521	Mg Anode Passivation Caused by the Reaction of Dissolved Sulfur in Mg-S Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 29461-29470.	4.0	12
1522	A simple general descriptor for rational design of graphyne-based bifunctional electrocatalysts toward hydrogen evolution and oxygen reduction reactions. <i>Journal of Colloid and Interface Science</i> , 2021, 592, 440-447.	5.0	22
1523	Hybrid Electrolyte Engineering Enables Safe and Wide-Temperature Redox Flow Batteries. <i>Angewandte Chemie</i> , 2021, 133, 15155-15162.	1.6	3

#	ARTICLE	IF	CITATIONS
1524	Hybrid Electrolyte Engineering Enables Safe and Wide-Temperature Redox Flow Batteries. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 15028-15035.	7.2	32
1525	Rate-Determining Process at Electrode/Electrolyte Interfaces for All-Solid-State Fluoride-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 30198-30204.	4.0	14
1526	Guanidinium Organic Salts as Phase-Change Materials for Renewable Energy Storage. <i>ChemSusChem</i> , 2021, 14, 2757-2762.	3.6	14
1527	CO ₂ Electroreduction to Formate at a Partial Current Density up to 590 mA mg ⁻¹ s ⁻¹ via Micrometer-Scale Lateral Structuring of Bismuth Nanosheets. <i>Small</i> , 2021, 17, e2100602.	5.2	25
1528	Atomically Structural Regulations of Carbon-Based Single-Atom Catalysts for Electrochemical CO ₂ Reduction. <i>Small Methods</i> , 2021, 5, e2100102.	4.6	61
1529	Unveiling Trifunctional Active Sites of a Heteronanosheet Electrocatalyst for Integrated Cascade Battery/Electrolyzer Systems. <i>ACS Energy Letters</i> , 2021, 6, 2460-2468.	8.8	42
1530	Nitrogen and Phosphate Co-Doped Graphene as Efficient Bifunctional Electrocatalysts by Precursor Modulation Strategy for Oxygen Reduction and Evolution Reactions. <i>ChemElectroChem</i> , 2021, 8, 3262-3272.	1.7	9
1531	Carbon-based anode materials for potassium-ion batteries: From material, mechanism to performance. <i>SmartMat</i> , 2021, 2, 176-201.	6.4	45
1532	High-performance Si/nano-Cu/CNTs/C anode derived from photovoltaic silicon waste: A potential photovoltaic-energy storage strategy. <i>Materials Today Energy</i> , 2021, 20, 100671.	2.5	17
1533	Emission Mitigation and Energy Security Trade-Off: Role of Natural Gas in the Indian Power Sector. <i>Energies</i> , 2021, 14, 3787.	1.6	2
1535	Electrokinetic and in situ spectroscopic investigations of CO electrochemical reduction on copper. <i>Nature Communications</i> , 2021, 12, 3264.	5.8	80
1536	N-self-doped graphitic carbon aerogels derived from metal-organic frameworks as supercapacitor electrode materials with high-performance. <i>Electrochimica Acta</i> , 2021, 380, 138237.	2.6	78
1537	In-Sn alloy core-shell nanoparticles: In-doped SnOx shell enables high stability and activity towards selective formate production from electrochemical reduction of CO ₂ . <i>Applied Catalysis B: Environmental</i> , 2021, 288, 119979.	10.8	65
1538	Integrating life cycle assessment and electrochemical modeling to study the effects of cell design and operating conditions on the environmental impacts of lithium-ion batteries. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 144, 111004.	8.2	28
1539	Cross-Investigation on Copper Nitroprusside: Combining XRD and XAS for In-Depth Structural Insights. <i>Condensed Matter</i> , 2021, 6, 27.	0.8	5
1540	Production of dual functional carbon material from biomass treated with NaOH for supercapacitor and catalyst. <i>Energy Storage</i> , 2021, 3, e257.	2.3	16
1541	Surface-enriched Pd/C electrocatalysts with a low load of Pt prepared by surface redox reactions for the oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 26005-26018.	3.8	5
1542	Critical Role of Ti ⁴⁺ in Stabilizing High-Voltage Redox Reactions in Li-Rich Layered Material. <i>Small</i> , 2021, 17, e2100840.	5.2	13

#	ARTICLE	IF	CITATIONS
1543	Highly Efficient Oxygen Evolution Reaction Enabled by Phosphorus Doping of the Fe Electronic Structure in Iron–Nickel Selenide Nanosheets. <i>Advanced Science</i> , 2021, 8, e2101775.	5.6	109
1544	Large-Area Vertically Aligned Bismuthene Nanosheet Arrays from Galvanic Replacement Reaction for Efficient Electrochemical CO ₂ Conversion. <i>Advanced Materials</i> , 2021, 33, e2100910.	11.1	81
1545	Process modeling, techno-economic assessment, and life cycle assessment of the electrochemical reduction of CO ₂ : a review. <i>IScience</i> , 2021, 24, 102813.	1.9	59
1546	The Isostructural Substitution-Induced Growth Mechanism of Rutile TiO ₂ Electron Transport Layer and the Dominant Distribution for Efficient Carbon-Based Perovskite Solar Cells. <i>Solar Rrl</i> , 2021, 5, 2100307.	3.1	3
1547	Heterostructured SnSe ₂ -CoSe ₂ microspheres embedded in reduced graphene oxides as an anode material with high sodium storage. <i>Ionics</i> , 2021, 27, 3811-3820.	1.2	3
1548	Improving Photoelectrochemical Activity of ZnO/TiO ₂ Core–Shell Nanostructure through Ag Nanoparticle Integration. <i>Catalysts</i> , 2021, 11, 911.	1.6	6
1549	Gel-based thermocells for low-grade heat harvesting. <i>Europhysics Letters</i> , 2021, 135, 26001.	0.7	10
1550	Rational Design of Thermocells Driven by the Volume Phase Transition of Hydrogel Nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 32184-32192.	4.0	11
1551	Advanced Inorganic Nitride Nanomaterials for Renewable Energy: A Mini Review of Synthesis Methods. <i>Frontiers in Chemistry</i> , 2021, 9, 638216.	1.8	10
1552	<i>In Situ</i> Coupling of MnO and Co@N-Doped Graphite Carbon Derived from Prussian Blue Analogous Achieves High-Performance Reversible Oxygen Electrocatalysis for Zn–Air Batteries. <i>Inorganic Chemistry</i> , 2021, 60, 10340-10349.	1.9	16
1553	Metal carbides as alternative electrocatalysts for energy conversion reactions. <i>Journal of Catalysis</i> , 2021, 404, 911-924.	3.1	20
1554	Comprehensive Mechanism of CO ₂ Electroreduction toward Ethylene and Ethanol: The Solvent Effect from Explicit Water–Cu(100) Interface Models. <i>ACS Catalysis</i> , 2021, 11, 9688-9701.	5.5	65
1555	Low-cost and scalable preparation of nano-Si from photovoltaic waste silicon for high-performance Li-ion battery anode. <i>Functional Materials Letters</i> , 2021, 14, 2151033.	0.7	8
1556	The Electronic Metal–Support Interaction Directing the Design of Single Atomic Site Catalysts: Achieving High Efficiency Towards Hydrogen Evolution. <i>Angewandte Chemie</i> , 2021, 133, 19233-19239.	1.6	149
1557	Identification of the different contributions of pseudocapacitance and quantum capacitance and their electronic-structure-based intrinsic transport kinetics in electrode materials. <i>Chemical Physics Letters</i> , 2021, 775, 138666.	1.2	29
1558	Synthesis and Electrochemical Behavior of Na ⁺ and Zr ⁴⁺ Doped LiMnPO ₄ /C as Potential Cathode Material for Li-ion Batteries. <i>International Journal of Electrochemical Science</i> , 2021, 16, 210739.	0.5	4
1559	Cryogenic Electron Microscopy for Energy Materials. <i>Accounts of Chemical Research</i> , 2021, 54, 3505-3517.	7.6	19
1560	Ethylene/ethane separation in a stable hydrogen-bonded organic framework through a gating mechanism. <i>Nature Chemistry</i> , 2021, 13, 933-939.	6.6	235

#	ARTICLE	IF	CITATIONS
1561	Promises and Challenges of the Practical Implementation of Prelithiation in Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2101565.	10.2	112
1562	Electrochemically Deposited Amorphous Cobalt-Nickel-Doped Copper Oxide as an Efficient Electrocatalyst toward Water Oxidation Reaction. <i>ACS Omega</i> , 2021, 6, 19419-19426.	1.6	14
1563	Regulating the Self-Discharge of Flexible All-Solid-State Supercapacitors by a Heterogeneous Polymer Electrolyte. <i>Small</i> , 2021, 17, e2102054.	5.2	21
1564	An Enhanced Electrode via Coupling with a Conducting Molecule to Extend Interfacial Reactions. <i>Advanced Energy Materials</i> , 2021, 11, 2101156.	10.2	11
1565	A computational model of a liquid e-fuel cell. <i>Journal of Power Sources</i> , 2021, 501, 230023.	4.0	8
1566	Polymer Electrolyte Membranes for Vanadium Redox Flow Batteries: Fundamentals and Applications. <i>Progress in Energy and Combustion Science</i> , 2021, 85, 100926.	15.8	61
1567	High-throughput screening of carbon-supported single metal atom catalysts for oxygen reduction reaction. <i>Nano Research</i> , 2022, 15, 1054-1060.	5.8	34
1568	Ion-solvent chemistry in lithium battery electrolytes: From mono-solvent to multi-solvent complexes. <i>Fundamental Research</i> , 2021, 1, 393-398.	1.6	50
1569	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
1570	A Highly Efficient Oxygen Evolution Electrocatalyst Derived from a Metal-Organic Framework and Ketjenblack Carbon Material. <i>ChemPlusChem</i> , 2021, 86, 1106-1115.	1.3	10
1571	The Electronic Metal-Support Interaction Directing the Design of Single Atomic Site Catalysts: Achieving High Efficiency Towards Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 19085-19091.	7.2	189
1572	Tuning the Intrinsic Activity and Electrochemical Surface Area of MoS ₂ via Tiny Zn Doping: Toward an Efficient Hydrogen Evolution Reaction (HER) Catalyst. <i>Chemistry - A European Journal</i> , 2021, 27, 15992-15999.	1.7	19
1573	Current Advances on Zn Anodes for Aqueous Zinc-Ion Batteries. <i>ChemNanoMat</i> , 2021, 7, 1162-1176.	1.5	14
1574	Regulation of oxygen vacancy within oxide pyrochlores by F-doping to boost oxygen-evolution activity. <i>Journal of Power Sources</i> , 2021, 502, 229903.	4.0	22
1575	Selective Se doping of NiFe ₂ O ₄ on an active NiOOH scaffold for efficient and robust water oxidation. <i>Chinese Journal of Catalysis</i> , 2021, 42, 1395-1403.	6.9	51
1577	Stabilization and activation of Pd nanoparticles for efficient CO ₂ -reduction: Importance of their generation within supramolecular network of tridentate Schiff-base ligands with N,N coordination sites. <i>Electrochimica Acta</i> , 2021, 388, 138550.	2.6	5
1578	NbSe ₂ Meets C ₂ N: A 2D Heterostructure Catalysts as Multifunctional Polysulfide Mediator in Ultra-Long-Life Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2101250.	10.2	89
1579	Experimental investigation into energy harvesting of NaCl droplet flow over graphene supported by silicon dioxide. <i>Energy</i> , 2021, 229, 120715.	4.5	7

#	ARTICLE	IF	CITATIONS
1580	La _{0.14} V ₂ O ₅ /Reduced Graphene Oxide Composite for Aqueous Zinc-Ion Batteries with Long Cycle Life. <i>Journal of the Electrochemical Society</i> , 2021, 168, 080527.	1.3	10
1581	Hierarchical Co ₃ Se ₄ Nanoparticles Encapsulated in a Nitrogen-Doped Carbon Framework Intertwined with Carbon Nanotubes as Anode of Li-Ion Batteries. <i>Energy Technology</i> , 2021, 9, 2100462.	1.8	6
1582	Embroidering a Light and Foldable Photovoltaic Gauze Kerchiefs. <i>Energy Technology</i> , 2021, 9, 2100285.	1.8	2
1583	A New Germanium-Based Anode Material with High Stability for Lithium-Ion Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 11883-11890.	3.2	12
1584	NiS _{1.03} @NiMoS ₄ nanocrystals encapsulated into the mesoporous carbon microspheres for high performance lithium ion batteries. <i>Journal of Electroanalytical Chemistry</i> , 2021, 895, 115502.	1.9	13
1585	Honeycomb LaMnO ₃ Perovskite Synthesized by a Carbon Sphere as a Self-Sacrificing Template for Supercapacitors. <i>Energy & Fuels</i> , 2021, 35, 13457-13465.	2.5	16
1586	Machine Learning for Sustainable Energy Systems. <i>Annual Review of Environment and Resources</i> , 2021, 46, 719-747.	5.6	32
1587	Interface engineering: PSS-PPy wrapping amorphous Ni-Co-P for enhancing neutral-pH hydrogen evolution reaction performance. <i>Chemical Engineering Journal</i> , 2021, 417, 129232.	6.6	82
1588	Heterogeneous Fe-Ni-P nanosheet arrays as a potential anode for sodium ion batteries. <i>Journal of Electroanalytical Chemistry</i> , 2021, 895, 115420.	1.9	10
1589	Structural Regulation and Light Hydrocarbon Adsorption/Separation of Three Zirconium-Organic Frameworks Based on Different V-Shaped Ligands. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 41680-41687.	4.0	25
1590	Exchange of Li and AgNO ₃ Enabling Stable 3D Lithium Metal Anodes with Embedded Lithophilic Nanoparticles and a Solid Electrolyte Interphase Inducer. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 38425-38431.	4.0	10
1591	Operando toolbox for heterogeneous interface in electrocatalysis. <i>Chem Catalysis</i> , 2021, 1, 509-522.	2.9	27
1592	High-efficiency solar heat storage enabled by adaptive radiation management. <i>Cell Reports Physical Science</i> , 2021, 2, 100533.	2.8	15
1593	Dynamic Mixing Behaviors of Ionically Tethered Polymer Canopy of Nanoscale Hybrid Materials in Fluids of Varying Physical and Chemical Properties. <i>Journal of Physical Chemistry B</i> , 2021, 125, 9223-9234.	1.2	9
1594	Stable titanium metal-organic framework with strong binding affinity for ethane removal. <i>Chinese Journal of Chemical Engineering</i> , 2022, 42, 35-41.	1.7	3
1595	Metal-free carbon-based nanomaterials for electrochemical nitrogen and carbon dioxide reductions. <i>Materials Research Bulletin</i> , 2021, 140, 111294.	2.7	10
1596	Rational Design of a High Performance and Robust Solar Evaporator via 3D-Printing Technology. <i>Advanced Materials</i> , 2021, 33, e2102649.	11.1	43
1597	Key Performance Indicators for an Energy Community Based on Sustainable Technologies. <i>Sustainability</i> , 2021, 13, 8789.	1.6	16

#	ARTICLE	IF	CITATIONS
1598	Modeling and parametric study on DE-based vibro-impact energy harvesters for performance improvement. <i>Energy Conversion and Management</i> , 2021, 242, 114321.	4.4	9
1599	Scalable Synthesis of the Na ₂ FePO ₄ F Cathode Through an Economical and Reliable Approach for Sodium-Ion Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 11798-11806.	3.2	17
1600	Review of the I ² /I ³ redox chemistry in Zn-iodine redox flow batteries. <i>Materials Research Bulletin</i> , 2021, 141, 111347.	2.7	24
1601	Quantitative kinetic analysis on oxygen reduction reaction: A perspective. <i>Nano Materials Science</i> , 2021, 3, 313-318.	3.9	64
1602	Donor-Acceptor Type Organic Small Molecule Based Solar Energy Absorbing Material for Highly Efficient Water Evaporation and Thermoelectric Power Generation. <i>Advanced Functional Materials</i> , 2021, 31, 2106247.	7.8	46
1603	Dopamine-modified carboxymethyl cellulose as an improved aqueous binder for silicon anodes in lithium-ion batteries. <i>Electrochimica Acta</i> , 2021, 389, 138806.	2.6	23
1604	Emerging Carbonyl Polymers as Sustainable Electrode Materials for Lithium-Free Metal-Ion Batteries. <i>Energy and Environmental Materials</i> , 2022, 5, 1037-1059.	7.3	18
1605	^{sc} RuNi Alloy Nanoparticles Encapsulated in ^{sc} Oxygen-Doped Carbon as Bifunctional Catalyst towards Hydrogen Electrocatalysis. <i>Chinese Journal of Chemistry</i> , 2021, 39, 3455-3461.	2.6	19
1606	Influence of cobalt dopant in NiFe _{2-x} CoxO ₄ (0 ≤ x ≤ 2) on electrochemical catalytic properties. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 38191-38197.	3.8	5
1607	Tuning electronic structure of ultrathin V ₆ O ₁₃ nanobelts via nickel doping for aqueous zinc-ion battery cathodes. <i>Chemical Engineering Journal</i> , 2022, 428, 132538.	6.6	41
1608	Two-Dimensional Graphdiyne-Confined Platinum Catalyst for Hydrogen Evolution and Oxygen Reduction Reactions. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 47541-47548.	4.0	15
1609	Computational Studies on Carbon Dots Electrocatalysis: A Review. <i>Advanced Functional Materials</i> , 2021, 31, 2107196.	7.8	46
1610	Electrochemical Performance of Orthorhombic CsPbI ₃ Perovskite in Li-Ion Batteries. <i>Materials</i> , 2021, 14, 5718.	1.3	4
1611	Electrochemical reduction of CO ₂ to CH ₄ over transition metal atom embedded antimonene: First-principles study. <i>Journal of CO₂ Utilization</i> , 2021, 51, 101645.	3.3	13
1612	Rational design of free-standing 3D Cu-doped NiS@Ni ₂ P/NF nanosheet arrays for hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 33078-33086.	3.8	10
1613	Enhanced cycling performance of Li ion batteries based on Ni-rich cathode materials with LaPO ₄ /Li ₃ PO ₄ co-modification. <i>Ceramics International</i> , 2021, 47, 34585-34594.	2.3	8
1614	Phase change materials confined into sunlight capturer sponge towards thermal energy harvesting and storage. <i>Solar Energy</i> , 2021, 226, 147-153.	2.9	6
1615	An integrated bioelectrochemical system coupled CO ₂ electroreduction device based on atomically dispersed iron electrocatalysts. <i>Nano Energy</i> , 2021, 87, 106187.	8.2	23

#	ARTICLE	IF	CITATIONS
1616	Tuning Lithiophilicity and Stability of 3D Conductive Scaffold via Covalent Ag-SS Bond for High-Performance Lithium Metal Anode. <i>Energy and Environmental Materials</i> , 2023, 6, .	7.3	8
1617	Plasma-assisted synthesis of nickel-cobalt nitride-oxide hybrids for high-efficiency electrochemical hydrogen evolution. <i>Materials Today Energy</i> , 2021, 21, 100784.	2.5	16
1618	Co-free high entropy spinel oxide anode with controlled morphology and crystallinity for outstanding charge/discharge performance in Lithium-ion batteries. <i>Chemical Engineering Journal</i> , 2022, 430, 132658.	6.6	49
1619	N-doped ZrO ₂ nanoparticles embedded in a N-doped carbon matrix as a highly active and durable electrocatalyst for oxygen reduction. <i>Fundamental Research</i> , 2022, 2, 604-610.	1.6	5
1620	Self-supported amorphous iridium oxide catalysts for highly efficient and durable oxygen evolution reaction in acidic media. <i>Electrochimica Acta</i> , 2021, 391, 138955.	2.6	19
1621	Carbon Nanotube Network-Based Solar-Thermal Water Evaporator and Thermoelectric Module for Electricity Generation. <i>ACS Applied Nano Materials</i> , 2021, 4, 8906-8912.	2.4	18
1622	A Template-Engaged, Self-Doped Strategy to N-Doped Hollow Carbon Nanoboxes for Zinc-Ion Hybrid Supercapacitors. <i>ChemElectroChem</i> , 2021, 8, 4096-4107.	1.7	9
1623	Bimetallic Cu-Co-Se Nanotube Arrays Assembled on 3D Framework: an Efficient Bifunctional Electrocatalyst for Overall Water Splitting. <i>ChemSusChem</i> , 2021, 14, 5065-5074.	3.6	13
1624	Self-sacrificial template synthesis of Fe, N co-doped porous carbon as efficient oxygen reduction electrocatalysts towards Zn-air battery application. <i>Chinese Chemical Letters</i> , 2022, 33, 2171-2177.	4.8	26
1625	Nitrogen Vacancy Induced Coordinative Reconstruction of Single-Atom Ni Catalyst for Efficient Electrochemical CO ₂ Reduction. <i>Advanced Functional Materials</i> , 2021, 31, 2107072.	7.8	89
1626	Charge storage mechanisms of cathode materials in rechargeable aluminum batteries. <i>Science China Chemistry</i> , 2021, 64, 1888-1907.	4.2	17
1627	Graphene Quantum Dots Improved "Caterpillar"-like TiO ₂ for Highly Efficient Photocatalytic Hydrogen Production. <i>Materials</i> , 2021, 14, 5354.	1.3	6
1628	Evaluating the stability and activity of dilute Cu-based alloys for electrochemical CO ₂ reduction. <i>Journal of Chemical Physics</i> , 2021, 155, 114702.	1.2	11
1629	Scalable carbon black deposited fabric/hydrogel composites for affordable solar-driven water purification. <i>Journal of Materials Science and Technology</i> , 2022, 106, 10-18.	5.6	22
1630	Metal-Free Triazine-Based 2D Covalent Organic Framework for Efficient H ₂ Evolution by Electrochemical Water Splitting. <i>ChemSusChem</i> , 2021, 14, 5057-5064.	3.6	42
1631	Conjugated Cobalt Phthalocyanine as Durable Electrode Materials for Lithium-Ion Storage. <i>Journal of the Electrochemical Society</i> , 2021, 168, 100513.	1.3	4
1632	Sulfur-Dopant-Promoted Electroreduction of CO ₂ over Coordinatively Unsaturated Ni ₂ Moieties. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 23342-23348.	7.2	98
1633	Charge Separated One-Dimensional Hybrid Cobalt/Nickel Phosphonate Frameworks: A Facile Approach to Design Bifunctional Electrocatalyst for Oxygen Evolution and Hydrogen Evolution Reactions. <i>Inorganic Chemistry</i> , 2021, 60, 15106-15111.	1.9	21

#	ARTICLE	IF	CITATIONS
1634	MXene-Derived Quantum Dots for Energy Conversion and Storage Applications. <i>Energy & Fuels</i> , 2021, 35, 14304-14324.	2.5	41
1635	Ethylene Glycol Electrochemical Reforming Using Ruthenium Nanoparticle-Decorated Nickel Phosphide Ultrathin Nanosheets. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 42763-42772.	4.0	15
1636	Amorphous CoS _{1.4} ultrathin nanosheets/amorphous N-doped carbon nanobox: A dual-amorphous confined structure for superior potassium storage. <i>Journal of Power Sources</i> , 2021, 506, 230117.	4.0	11
1637	Metal-Nitrogen-doped carbon single-atom electrocatalysts for CO ₂ electroreduction. <i>Composites Part B: Engineering</i> , 2021, 220, 108986.	5.9	35
1638	Binder-free metal-organic frameworks-derived CoP/Mo-doped NiCoP nanoplates for high-performance quasi-solid-state supercapacitors. <i>Electrochimica Acta</i> , 2021, 390, 138840.	2.6	17
1639	Pseudocapacitance enhanced by N-defects in Na ₃ MnTi(PO ₄) ₃ /N-doped carbon composite for symmetric full sodium-ion batteries. <i>Materials Today Energy</i> , 2021, 21, 100754.	2.5	23
1640	Biomimetic Wood-Inspired Batteries: Fabrication, Electrochemical Performance, and Sustainability within a Circular Perspective. <i>Advanced Sustainable Systems</i> , 2021, 5, 2100236.	2.7	8
1641	In-situ TEM observation of fast and stable reaction of lithium polysulfide infiltrated carbon composite and its application as a lithium sulfur battery electrode for improved cycle lifetime. <i>Journal of Power Sources</i> , 2021, 506, 230175.	4.0	13
1642	Comparing electrocatalytic hydrogen and oxygen evolution activities of first-row transition metal complexes with similar coordination environments. <i>Journal of Energy Chemistry</i> , 2021, 63, 659-666.	7.1	40
1643	Metal-organic frameworks-derived CoMOF-D@Si@C core-shell structure for high-performance lithium-ion battery anode. <i>Electrochimica Acta</i> , 2021, 390, 138814.	2.6	19
1644	Preparation and application of three-dimensional filler network towards organic phase change materials with high performance and multi-functions. <i>Chemical Engineering Journal</i> , 2021, 419, 129620.	6.6	56
1645	Compressive Strain in N-Doped Palladium/Amorphous Cobalt (II) Interface Facilitates Alkaline Hydrogen Evolution. <i>Small</i> , 2021, 17, e2103798.	5.2	15
1646	Efficient CO ₂ Electroreduction via Au-Complex Derived Carbon Nanotube Supported Au Nanoclusters. <i>ChemSusChem</i> , 2021, 14, 4929-4935.	3.6	9
1647	An Integrated Device of a Lithium-Ion Battery Combined with Silicon Solar Cells. <i>Energies</i> , 2021, 14, 6010.	1.6	3
1648	Doping modification, defects construction, and surface engineering: Design of cost-effective high-performance electrocatalysts and their application in alkaline seawater splitting. <i>Nano Energy</i> , 2021, 87, 106160.	8.2	57
1649	Magnesiothermic sequestration of CO ₂ into carbon nanomaterials for electrochemical energy storage: A mini review. <i>Electrochemistry Communications</i> , 2021, 130, 107109.	2.3	5
1650	PCDTBT ₈ -Doped PffBT ₄ T ₂ OD-Based Ternary Solar Cells with Enhanced Open-Circuit Voltage, Fill Factor, and Charge Separation Efficiency. <i>Solar Rrl</i> , 2021, 5, 2100670.	3.1	16
1651	Highly dispersed cobalt nanoparticles onto nitrogen-doped carbon nanosheets for efficient hydrogen generation via catalytic hydrolysis of sodium borohydride. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 32403-32412.	3.8	13

#	ARTICLE	IF	CITATIONS
1652	A Polysulfidesâ€‘Confined Allâ€‘inâ€‘One Porous Microcapsule Lithiumâ€‘Sulfur Battery Cathode. <i>Small</i> , 2021, 17, e2103051.	5.2	21
1653	Laserâ€‘Irradiated Holey Grapheneâ€‘Supported Singleâ€‘Atom Catalyst towards Hydrogen Evolution and Oxygen Reduction. <i>Advanced Energy Materials</i> , 2021, 11, 2101619.	10.2	43
1654	In Situ Construction of Aramid Nanofiber Membrane on Li Anode as Artificial SEI Layer Achieving Ultraâ€‘High Stability. <i>Small</i> , 2021, 17, e2102347.	5.2	28
1655	The Role of Surface Curvature in Electrocatalysts. <i>Chemistry - A European Journal</i> , 2022, 28, .	1.7	9
1656	Intrinsically zincophobic protective layer for dendrite-free zinc metal anode. <i>Chinese Chemical Letters</i> , 2022, 33, 2653-2657.	4.8	22
1657	Sulfurâ€‘Dopantâ€‘Promoted Electroreduction of CO 2 over Coordinatively Unsaturated Niâ€‘N 2 Moieties. <i>Angewandte Chemie</i> , 0, , .	1.6	9
1658	Engineering highly active Ag/Nb2O5@Nb2CT (MXene) photocatalysts via steering charge kinetics strategy. <i>Chemical Engineering Journal</i> , 2021, 421, 128766.	6.6	73
1659	Photothermochemical Nanoassembly of 3D Porous Graphene and Palladium Nanoparticles for High-Performance Hydrogen Detection. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 49128-49136.	4.0	6
1660	Regulating Water Reduction Kinetics on MoP Electrocatalysts Through Se Doping for Accelerated Alkaline Hydrogen Production. <i>Frontiers in Chemistry</i> , 2021, 9, 737495.	1.8	6
1661	The rate-determining term of electrocatalytic reactions with first-order kinetics. <i>Electrochimica Acta</i> , 2021, 393, 139019.	2.6	25
1662	Recent progress of energy harvesting and conversion coupled with atmospheric water gathering. <i>Energy Conversion and Management</i> , 2021, 246, 114668.	4.4	29
1663	Nano-engineering of Ru-based hierarchical porous nanoreactors for highly efficient pH-universal overall water splitting. <i>Applied Catalysis B: Environmental</i> , 2021, 294, 120230.	10.8	49
1664	Ultrathin 2D catalysts with N-coordinated single Co atom outside Co cluster for highly efficient Zn-air battery. <i>Chemical Engineering Journal</i> , 2021, 421, 129719.	6.6	38
1665	Rechargeable metal (Li, Na, Mg, Al)-sulfur batteries: Materials and advances. <i>Journal of Energy Chemistry</i> , 2021, 61, 104-134.	7.1	80
1666	A self-healing neutral aqueous rechargeable Zn/MnO2 battery based on modified carbon nanotubes substrate cathode. <i>Journal of Colloid and Interface Science</i> , 2021, 600, 83-89.	5.0	29
1667	Air-stable synthesis of near-infrared AgInSe2 quantum dots for sensitized solar cells. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 626, 127071.	2.3	4
1668	Bimetallic PdAg nanoparticles for enhanced electrocatalysis of ethanol oxidation reaction. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 629, 127404.	2.3	13
1669	Tailoring the vanadium/proton ratio of electrolytes to boost efficiency and stability of vanadium flow batteries over a wide temperature range. <i>Applied Energy</i> , 2021, 301, 117454.	5.1	54

#	ARTICLE	IF	CITATIONS
1670	Conversion of CO ₂ to formic acid by integrated all-solar-driven artificial photosynthetic system. <i>Journal of Power Sources</i> , 2021, 512, 230532.	4.0	21
1671	Computational design of microarchitected porous electrodes for redox flow batteries. <i>Journal of Power Sources</i> , 2021, 512, 230453.	4.0	23
1672	Silk Protein-Derived carbon fabric as an electrode with high Electro-Catalytic activity for All-Vanadium redox flow batteries. <i>Applied Surface Science</i> , 2021, 567, 150810.	3.1	13
1673	In-situ growth of CoFeS ₂ on metal-organic frameworks-derived Co-NC polyhedron enables high-performance oxygen electrocatalysis for rechargeable zinc-air batteries. <i>Journal of Power Sources</i> , 2021, 512, 230430.	4.0	25
1674	Rational design of a carbonate-glyme hybrid electrolyte for practical anode-free lithium metal batteries. <i>Energy Storage Materials</i> , 2021, 42, 295-306.	9.5	16
1675	Two-dimensional flower-like cobalt-porphyrin MOF/rGO composite anodes for high-performance Li-ion batteries. <i>Journal of Alloys and Compounds</i> , 2021, 881, 160531.	2.8	63
1676	The emerging covalent organic frameworks (COFs) for solar-driven fuels production. <i>Coordination Chemistry Reviews</i> , 2021, 446, 214117.	9.5	79
1677	High performance aqueous Prussian blue analogue-hydrogen gas hybrid batteries. <i>Energy Storage Materials</i> , 2021, 42, 464-469.	9.5	18
1678	Recent progress on heterostructure materials for next-generation sodium/potassium ion batteries. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 151, 111640.	8.2	46
1679	Highly efficient and stable g-C ₃ N ₄ decorated Ta ₃ N ₅ nanotube on n-Si substrate for solar water oxidation. <i>Applied Surface Science</i> , 2021, 565, 150456.	3.1	8
1680	Synthesis of CeVO ₄ -V ₂ O ₅ nanowires by cation-exchange method for high-performance lithium-ion battery electrode. <i>Journal of Alloys and Compounds</i> , 2021, 887, 161237.	2.8	7
1681	Recent advances on heterojunction-based photocatalysts for the degradation of persistent organic pollutants. <i>Chemical Engineering Journal</i> , 2021, 426, 130617.	6.6	53
1682	Selective separation of acetylene from ethylene with branched ionic ultramicroporous polymer. <i>Separation and Purification Technology</i> , 2021, 279, 119728.	3.9	2
1683	Construction of saturated coordination titanium-based metal-organic framework for one-step C ₂ H ₂ /C ₂ H ₆ /C ₂ H ₄ separation. <i>Separation and Purification Technology</i> , 2021, 276, 119284.	3.9	28
1684	Fully exposed edge/corner active sites in Fe substituted-Ni(OH) ₂ tube-in-tube arrays for efficient electrocatalytic oxygen evolution. <i>Applied Catalysis B: Environmental</i> , 2021, 298, 120558.	10.8	26
1685	Amidoximated cellulose microspheres synthesized via homogenous reactions for High-Performance extraction of uranium from seawater. <i>Chemical Engineering Journal</i> , 2021, 426, 131378.	6.6	47
1686	Unravelling the electrocatalytic activity of bismuth nanosheets towards carbon dioxide reduction: Edge plane versus basal plane. <i>Applied Catalysis B: Environmental</i> , 2021, 299, 120693.	10.8	21
1687	Customized facilitated transport membranes by mixed strategy for ethylene/ethane separation. <i>Separation and Purification Technology</i> , 2021, 277, 119484.	3.9	9

#	ARTICLE	IF	CITATIONS
1688	Self-crosslinked herringbone dihydrophenazine derivatives for high performance organic batteries. Composites Communications, 2021, 28, 100947.	3.3	12
1689	Highly efficient textile supercapacitors fabricated with graphene/NiO:Yb electrodes printed on cotton fabric. Journal of Alloys and Compounds, 2021, 886, 161219.	2.8	7
1690	Precisely engineering the electronic structure of active sites boosts the activity of iron-nickel selenide on nickel foam for highly efficient and stable overall water splitting. Applied Catalysis B: Environmental, 2021, 299, 120678.	10.8	61
1691	Sn-based nanomaterials: From composition and structural design to their electrochemical performances for Li- and Na-ion batteries. Energy Storage Materials, 2021, 43, 430-462.	9.5	57
1692	Synthesis of flower-like cobalt, nickel phosphates grown on the surface of porous high entropy alloy for efficient oxygen evolution. Journal of Alloys and Compounds, 2021, 885, 160995.	2.8	23
1693	Robust coal matrix intensifies electron/substrate interaction of nickel-nitrogen (Ni-N) active sites for efficient CO ₂ electroreduction at industrial current density. Applied Catalysis B: Environmental, 2021, 299, 120661.	10.8	25
1694	High-performance flexible supercapacitor enabled by Polypyrrole-coated NiCoP@CNT electrode for wearable devices. Journal of Colloid and Interface Science, 2022, 606, 135-147.	5.0	48
1695	Natural DNA-derived highly-graphitic N, P, S-tridoped carbon nanosheets for multiple electrocatalytic applications. Chemical Engineering Journal, 2022, 429, 132102.	6.6	22
1696	The influence of water in electrodes on the solid electrolyte interphase film of micro lithium-ion batteries for the wireless headphone. Journal of Colloid and Interface Science, 2022, 606, 1729-1736.	5.0	3
1697	Polyaniline-coated mesoporous Rh films for nonacidic hydrogen evolution reaction. Chemical Engineering Journal, 2022, 428, 132646.	6.6	34
1698	Self-induced matrix with Li-ion storage activity in ultrathin CuMnO ₂ nanosheets electrode. Journal of Colloid and Interface Science, 2022, 606, 1101-1110.	5.0	24
1699	Single-atom catalysts for biomass-derived drop-in chemicals. , 2022, , 63-100.		4
1700	Status and challenges facing representative anode materials for rechargeable lithium batteries. Journal of Energy Chemistry, 2022, 66, 260-294.	7.1	149
1701	Robust carbazole-based covalent triazine frameworks with defective ultramicropore structure for efficient ethane-selective ethane-ethylene separation. Chemical Engineering Journal, 2022, 427, 131726.	6.6	15
1702	A chainmail effect of ultrathin N-doped carbon shell on Ni ₂ P nanorod arrays for efficient hydrogen evolution reaction catalysis. Journal of Colloid and Interface Science, 2022, 607, 281-289.	5.0	37
1703	A safe, low-cost and high-efficiency presodiation strategy for pouch-type sodium-ion capacitors with high energy density. Journal of Energy Chemistry, 2022, 64, 442-450.	7.1	24
1704	Woven microsphere architected by carbon nanotubes as high-performance potassium ion batteries anodes. Chemical Engineering Journal, 2022, 429, 132272.	6.6	13
1705	A synopsis of progressive transition in precursor inks development for metal halide perovskites-based photovoltaic technology. Journal of Materials Chemistry A, 2021, 9, 26650-26668.	5.2	6

#	ARTICLE	IF	CITATIONS
1706	A branch-leaf-like hierarchical self-supporting electrode as a highly efficient catalyst for hydrogen evolution. <i>New Journal of Chemistry</i> , 2021, 45, 10890-10896.	1.4	5
1707	Computational study on the reactivity of imidazolium-functionalized manganese bipyridyl tricarbonyl electrocatalysts $[Mn[bpyMe(Im-R)](CO)_3Br]^+$ ($R = Me, Me_2$ and Tj) <i>ETQq1</i> 1.0.784314 rgBT / Qv <i>Chemistry Chemical Physics</i> , 2021, 23, 14940-14951.	1.3	6
1708	The difference in the CO_2 adsorption capacities of different functionalized pillar-layered metal-organic frameworks (MOFs). <i>Dalton Transactions</i> , 2021, 50, 9310-9316.	1.6	9
1709	Zincothermic reduction of silica to silicon: make the impossible possible. <i>Journal of Materials Chemistry A</i> , 2021, 9, 21323-21331.	5.2	9
1710	A novel eutectic solvent precursor for efficiently preparing N-doped hierarchically porous carbon nanosheets with unique surface functional groups and micropores towards dual-carbon lithium-ion capacitors. <i>Journal of Materials Chemistry A</i> , 2021, 9, 13631-13641.	5.2	22
1711	Rational catalyst design for oxygen evolution under acidic conditions: strategies toward enhanced electrocatalytic performance. <i>Journal of Materials Chemistry A</i> , 2021, 9, 5890-5914.	5.2	65
1712	Tailoring oxygen evolution reaction activity of metal-oxide spinel nanoparticles <i>via</i> judiciously regulating surface-capping polymers. <i>Journal of Materials Chemistry A</i> , 2021, 9, 20375-20384.	5.2	14
1713	Nanoscale electrocatalyst design for alkaline hydrogen evolution reaction through activity descriptor identification. <i>Materials Chemistry Frontiers</i> , 2021, 5, 4042-4058.	3.2	17
1714	Research Progress of Key Materials for Sodium-selenium Batteries. <i>Acta Chimica Sinica</i> , 2021, 79, 641.	0.5	0
1715	Reaction mechanism on Ni- C_2 -NS single-atom catalysis for the efficient CO_2 reduction reaction. <i>Journal of Experimental Nanoscience</i> , 2021, 16, 255-264.	1.3	10
1716	Sustainability Index of Solar Power Plants in Remote Areas in Indonesia. <i>Technology and Economics of Smart Grids and Sustainable Energy</i> , 2021, 6, 1.	1.8	4
1717	Progress in blade-coating method for perovskite solar cells toward commercialization. <i>Journal of Renewable and Sustainable Energy</i> , 2021, 13, .	0.8	17
1718	A mechanistic study of electrode materials for rechargeable batteries beyond lithium ions by <i>in situ</i> transmission electron microscopy. <i>Energy and Environmental Science</i> , 2021, 14, 2670-2707.	15.6	42
1719	Manganese phosphoxide/ Ni_5P_4 hybrids as an anode material for high energy density and rate potassium-ion storage. <i>Journal of Materials Chemistry A</i> , 2021, 9, 13936-13949.	5.2	5
1720	Nanostructured Black Aluminum Prepared by Laser Direct Writing as a High-Performance Plasmonic Absorber for Photothermal/Electric Conversion. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 4305-4315.	4.0	29
1721	Nanofiber fabric based ion-gradient-enhanced moist-electric generator with a sustained voltage output of 1.1 volts. <i>Materials Horizons</i> , 2021, 8, 2303-2309.	6.4	59
1722	Well-defined Fe-Cu diatomic sites for efficient catalysis of CO_2 electroreduction. <i>Journal of Materials Chemistry A</i> , 2021, 9, 23817-23827.	5.2	77
1723	Active Basal Plane Catalytic Activity via Interfacial Engineering for a Finely Tunable Conducting Polymer/ MoS_2 Hydrogen Evolution Reaction Multilayer Structure. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 734-744.	4.0	17

#	ARTICLE	IF	CITATIONS
1724	An anthraquinone-decorated graphene hydrogel based on carbonized cotton fibers for flexible and high performance supercapacitors. <i>Sustainable Energy and Fuels</i> , 2021, 5, 862-873.	2.5	12
1725	Can sustainable ammonia synthesis pathways compete with fossil-fuel based Haber-Bosch processes?. <i>Energy and Environmental Science</i> , 2021, 14, 2535-2548.	15.6	162
1726	N-Bridged Co-Ni: new bimetallic sites for promoting electrochemical CO ₂ reduction. <i>Energy and Environmental Science</i> , 2021, 14, 3019-3028.	15.6	128
1727	High Voltage LiNi _{0.45} Cr _{0.1} Mn _{1.45} O ₄ Cathode with Superlong Cycle Performance for Wide Temperature Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2018, 28, 1704808.	7.8	91
1728	General One-Pot Synthesis of Transition-Metal Phosphide/Nitrogen-Doped Carbon Hybrid Nanosheets as Ultrastable Anodes for Sodium-Ion Batteries. <i>Chemistry - A European Journal</i> , 2018, 24, 1253-1258.	1.7	26
1729	Crystal engineering of porous coordination networks for C3 hydrocarbon separation. <i>SmartMat</i> , 2021, 2, 38-55.	6.4	44
1730	Interface Chemistry of Platinum-Based Materials for Electrocatalytic Hydrogen Evolution in Alkaline Conditions. , 2020, , 453-473.		3
1731	Pyrometallurgical Routes for the Recycling of Spent Lithium-Ion Batteries. , 2019, , 57-83.		12
1732	Revisiting the causal nexus between coal energy consumption, economic growth, and pollutant emission: sorting out the causality. <i>Environmental Science and Pollution Research</i> , 2020, 27, 30265-30274.	2.7	10
1733	Carbon dot-modified silicon nanoparticles for lithium-ion batteries. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2021, 28, 1603-1610.	2.4	11
1734	Anodic tantalum oxide: synthesis and energy-related applications. , 2020, , 305-319.		3
1735	Rationally designed nitrogen-doped yolk-shell Fe ₇ Se ₈ /Carbon nanoboxes with enhanced sodium storage in half/full cells. <i>Carbon</i> , 2020, 166, 175-182.	5.4	39
1736	Atomically ordered and epitaxially grown surface structure in core-shell NCA/NiAl ₂ O ₄ enabling high voltage cyclic stability for cathode application. <i>Electrochimica Acta</i> , 2019, 300, 437-444.	2.6	10
1737	Graphene induced growth of Sb ₂ WO ₆ nanosheets for high-performance pseudocapacitive lithium-ion storage. <i>Journal of Alloys and Compounds</i> , 2020, 839, 155614.	2.8	23
1738	Hierarchical Co ₂ VO ₄ yolk-shell microspheres confined by N-doped carbon layer as anode for high-rate lithium-ion batteries. <i>Journal of Electroanalytical Chemistry</i> , 2021, 882, 115027.	1.9	11
1739	A 24-hour thermoelectric generator simultaneous using solar heat energy and space cold energy. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2020, 251, 107038.	1.1	11
1740	Ultraviolet light-assisted electrokinetic conversion based on TiO ₂ electrodes. <i>Materials Today Energy</i> , 2020, 18, 100517.	2.5	3
1741	A deep learning-based forecasting model for renewable energy scenarios to guide sustainable energy policy: A case study of Korea. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 122, 109725.	8.2	132

#	ARTICLE	IF	CITATIONS
1742	Electrocatalytic Oxidation of Glycerol to Formic Acid by CuCo_2O_4 Spinel Oxide Nanostructure Catalysts. <i>ACS Catalysis</i> , 2020, 10, 6741-6752.	5.5	221
1743	An Ultramicroporous Metal-Organic Framework for High Sieving Separation of Propylene from Propane. <i>Journal of the American Chemical Society</i> , 2020, 142, 17795-17801.	6.6	186
1744	Pd-Modified ZnO -Au Enabling Alkoxy Intermediates Formation and Dehydrogenation for Photocatalytic Conversion of Methane to Ethylene. <i>Journal of the American Chemical Society</i> , 2021, 143, 269-278.	6.6	151
1745	Ultrafast cation insertion-selected zinc hexacyanoferrate for 1.9 V Zn hybrid aqueous batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 6631-6637.	5.2	66
1746	Significant enhancement of the thermoelectric properties of CaP_3 through reducing the dimensionality. <i>Materials Advances</i> , 2020, 1, 3322-3332.	2.6	14
1747	Rational prediction of multifunctional bilayer single atom catalysts for the hydrogen evolution, oxygen evolution and oxygen reduction reactions. <i>Nanoscale</i> , 2020, 12, 20413-20424.	2.8	17
1748	Scalable architecture of DC microgrid implemented with multi-input multi-output converter. <i>IET Power Electronics</i> , 2020, 13, 4480-4489.	1.5	4
1749	Direct and continuous generation of pure acetic acid solutions via electrocatalytic carbon monoxide reduction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	93
1750	Temporal evolution of electron energy distribution function and its correlation with hydrogen radical generation in atmospheric-pressure methane needle-plane discharge plasmas. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 095202.	1.3	12
1751	Self-powered flexible photodetectors based on Ag nanoparticle-loaded $\text{g-C}_3\text{N}_4$ nanosheets and PVDF hybrids: role of plasmonic and piezoelectric effects. <i>Nanotechnology</i> , 2020, 31, 365401.	1.3	32
1752	I/P interface modification for stable and efficient perovskite solar cells. <i>Journal of Semiconductors</i> , 2020, 41, 052202.	2.0	5
1753	Activated carbon derived from custard apple shell for efficient supercapacitor. <i>Advances in Natural Sciences: Nanoscience and Nanotechnology</i> , 2020, 11, 035013.	0.7	2
1754	Self-recording and manipulation of fast long-range hydrogen diffusion in quasifree magnesium. <i>Physical Review Materials</i> , 2018, 2, .	0.9	17
1755	High-performance ternary alkali nitrides for renewable energy applications. <i>Physical Review Materials</i> , 2019, 3, .	0.9	7
1756	Editors' Choice Review Conductive Forms of MoS_2 and Their Applications in Energy Storage and Conversion. <i>Journal of the Electrochemical Society</i> , 2020, 167, 126517.	1.3	46
1757	Editors' Choice Review Impedance Response of Porous Electrodes: Theoretical Framework, Physical Models and Applications. <i>Journal of the Electrochemical Society</i> , 2020, 167, 166503.	1.3	107
1758	Favorable Lithium Nucleation on Lithiophilic Framework Porphyrin for Dendrite-Free Lithium Metal Anodes. <i>Research</i> , 2019, 2019, 1-11.	2.8	33
1759	Maximal nighttime electrical power generation via optimal radiative cooling. <i>Optics Express</i> , 2020, 28, 25460.	1.7	47

#	ARTICLE	IF	CITATIONS
1760	Multi-resonant refractory prismoid for full-spectrum solar energy perfect absorbers. Optics Express, 2020, 28, 31763.	1.7	15
1761	Electrochemical flow systems enable renewable energy industrial chain of CO ₂ reduction. Pure and Applied Chemistry, 2020, 92, 1937-1951.	0.9	8
1762	Thermal-effect of the upper Yangtze reservoirs and countermeasures. Hupo Kexue/Journal of Lake Sciences, 2019, 31, 1-17.	0.3	11
1764	Accurate Model for Temperature Dependence of Solar Cell Performance According to Phonon Energy Correction. Latvian Journal of Physics and Technical Sciences, 2018, 55, 15-25.	0.4	8
1765	Polysulfide Electrocatalysis on Framework Porphyrin in High-Capacity and High-Stable Lithium-Sulfur Batteries. CCS Chemistry, 0, , 128-137.	4.6	131
1766	Favorable Lithium Nucleation on Lithiophilic Framework Porphyrin for Dendrite-Free Lithium Metal Anodes. Research, 2019, 2019, 4608940.	2.8	29
1767	Synergistic Effects of Salt Concentration and Working Temperature towards Dendrite-Free Lithium Deposition. Research, 2019, 2019, 7481319.	2.8	10
1768	A Corner-Cube-Cell Solar Array for Improved Capture of Optical Power and Increased Generation of Electrical Power. IEEE Journal of Photovoltaics, 2022, 12, 344-352.	1.5	1
1769	Ultrathin p-type Cu ₂ O/CuCoCr-layered double hydroxide heterojunction nanosheets for photo-assisted aqueous Zn-CO ₂ batteries. Journal of Materials Chemistry A, 2021, 9, 26061-26068.	5.2	21
1770	A self-healing catalyst for electrocatalytic and photoelectrochemical oxygen evolution in highly alkaline conditions. Nature Communications, 2021, 12, 5980.	5.8	88
1771	Suppression of self-discharge in a non-flowing bromine battery via in situ generation of countercharged groups. Cell Reports Physical Science, 2021, 2, 100620.	2.8	2
1772	Bismuth Nanoparticles Anchored on Ti ₃ C ₂ T _x MXene Nanosheets for High-Performance Sodium-Ion Batteries. Chemistry - an Asian Journal, 2021, 16, 3774-3780.	1.7	17
1773	Catalytic co-pyrolysis of macroalgal components with lignocellulosic biomass for enhanced biofuels and high-valued chemicals. International Journal of Energy Research, 2022, 46, 2674-2697.	2.2	12
1774	Structural Regulation of Pd-Based Nanoalloys for Advanced Electrocatalysis. Small Science, 2021, 1, 2100061.	5.8	48
1775	Phase engineering of transition metal compounds for boosting lithium/sodium storage. APL Materials, 2021, 9, .	2.2	3
1776	Electrostatic Attraction-Driven Assembly of a Metal-Organic Framework with a Photosensitizer Boosts Photocatalytic CO ₂ Reduction to CO. Journal of the American Chemical Society, 2021, 143, 17424-17430.	6.6	127
1777	Between saying and doing, in the end there is the cost of capital: Evidence from the energy sector. Business Strategy and the Environment, 2022, 31, 390-402.	8.5	15
1778	Surface-coordinated metal-organic framework thin films (SURMOFs): From fabrication to energy applications. EnergyChem, 2021, 3, 100065.	10.1	25

#	ARTICLE	IF	CITATIONS
1779	Advances of entropy-stabilized homologous compounds for electrochemical energy storage. Journal of Energy Chemistry, 2022, 67, 276-289.	7.1	22
1780	Organophosphorus Hybrid Solid Electrolyte Interphase Layer Based on Li_xPO_4 Enables Uniform Lithium Deposition for High-Performance Lithium Metal Batteries. Advanced Functional Materials, 2022, 32, 2107923.	7.8	27
1781	Predicting New MXene-like Two-Dimensional Materials Pb_2CO_2 and Sn_2CO_2 as Potential Hydrogen Evolution Reaction Catalysts. Journal of Physical Chemistry C, 2021, 125, 22562-22569.	1.5	5
1782	2D materials inks toward smart flexible electronics. Materials Today, 2021, 50, 116-148.	8.3	57
1783	Factors Influencing the Performance of Copper-Bearing Catalysts in the CO_2 Reduction System. ACS Energy Letters, 2021, 6, 3992-4022.	8.8	58
1784	Solar-Driven Water Splitting at 13.8% Solar-to-Hydrogen Efficiency by an Earth-Abundant Electrolyzer. ACS Sustainable Chemistry and Engineering, 2021, 9, 14070-14078.	3.2	15
1785	Tailoring Competitive Adsorption Sites by Oxygen Vacancy on Cobalt Oxides to Enhance the Electrooxidation of Biomass. Advanced Materials, 2022, 34, e2107185.	11.1	162
1786	Hybrid Electrolyte with Dual Anion Aggregated Solvation Sheath for Stabilizing High-Voltage Lithium-Metal Batteries. Advanced Materials, 2021, 33, e2007945.	11.1	130
1787	Construction of two-dimensional CoPS_3 @defective N-doped carbon composites for enhanced oxygen evolution reaction. International Journal of Hydrogen Energy, 2021, , .	3.8	10
1788	A Quinone-Based Cathode Material for High-Performance Organic Lithium and Sodium Batteries. ACS Applied Energy Materials, 2021, 4, 12084-12090.	2.5	9
1789	Voltage cycling process for the electroconversion of biomass-derived polyols. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	14
1790	Reversible and Fast (De)fluorination of High-Capacity Cu_2O Cathode: One Step Toward Practically Applicable All-Solid-State Fluoride-Ion Battery. Advanced Energy Materials, 2021, 11, 2102285.	10.2	23
1791	Quantifying and Suppressing Proton Intercalation to Enable High-Voltage Zn-Ion Batteries. Advanced Energy Materials, 2021, 11, 2102016.	10.2	48
1792	A product service system design for energy provision. International Journal of Management and Enterprise Development, 2018, 17, 244.	0.1	1
1793	A smart solar energy collecting device. , 2018, , .		0
1794	Digital industrial furnaces: Challenges for energy efficiency under VULKANO project. Journal of Energy Systems, 0, , 204-223.	0.8	2
1795	Advanced Coupling of Energy Storage and Photovoltaics. , 2019, , 317-350.		0
1796	Preparation of Laminated Assembled Nickel Vanadate Tetragonal Prisms and Their Electrochemical Property. Hans Journal of Chemical Engineering and Technology, 2019, 09, 368-373.	0.0	0

#	ARTICLE	IF	CITATIONS
1797	Enhanced Multi-layer Lens-Let Array for Extreme Angle Solar Collection. , 2019, , .		0
1798	High Value-Added Products From Recycling of Spent Lithium-Ion Batteries. , 2019, , 141-159.		0
1799	Intercalation of na atoms in SnS ₂ films: calculations from the first principles. Journal of Physical Studies, 2019, 23, .	0.2	1
1800	High-Energy All-Solid-State Lithium-Metal Batteries by Nanomaterial Designs. , 2019, , 205-262.		0
1801	Potential Utilization of Nanofluids for Concentrating Solar Power (CSP). , 2019, , 363-387.		0
1803	Recent Development in Performance Enhancement of PVDF-Nanopowder Composite-based Energy Harvesting Devices. Journal of Korean Powder Metallurgy Institute, 2020, 27, 247-255.	0.2	0
1804	Synthesis and Design of a Highly Stable Platinum Nickel Electrocatalyst for the Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2021, 13, 52681-52687.	4.0	14
1805	A novel Chinese parasol leaf biochar fuelled direct carbon solid oxide fuel cell for high performance electricity generation. International Journal of Hydrogen Energy, 2022, 47, 1172-1182.	3.8	16
1806	Recent advances in adsorptive separation of ethane and ethylene by C ₂ H ₆ -selective MOFs and other adsorbents. Chemical Engineering Journal, 2022, 431, 133208.	6.6	58
1807	Understanding the Failure Mechanism of Rechargeable Aluminum Batteries: Metal Anode Perspective Through X-ray Tomography. Advanced Energy and Sustainability Research, 0, , 2100164.	2.8	2
1808	Sn-containing Si ₃ N ₄ -based composites for adaptive excellent friction and wear in a wide temperature range. Journal of the European Ceramic Society, 2022, 42, 913-920.	2.8	10
1809	<i>In Situ</i> Electrochemical Infrared Spectroscopy for Dynamic Reactions. Journal of Physical Chemistry C, 2021, 125, 24289-24300.	1.5	23
1810	Technologies and perspectives for achieving carbon neutrality. Innovation(China), 2021, 2, 100180.	5.2	306
1811	Lignin-based carbon nanofibers: Morphologies, properties, and features as substrates for pseudocapacitor electrodes. International Journal of Biological Macromolecules, 2021, 193, 519-527.	3.6	8
1812	Solar to fuel: Recent developments in conversion of sunlight into high value chemicals. APL Materials, 2020, 8, .	2.2	2
1813	Predictive Models of Accidents at Work in the Steel Sector as a Framework for Sustainable Safety. Energies, 2021, 14, 129.	1.6	5
1814	Use of Receiver Operating Characteristic Curve to Evaluate a Street Lighting Control System. IEEE Access, 2021, 9, 144660-144675.	2.6	6
1815	Advanced cobalt-free cathode materials for sodium-ion batteries. Chemical Society Reviews, 2021, 50, 13189-13235.	18.7	109

#	ARTICLE	IF	CITATIONS
1816	Natural DNA-assisted ultrafine FeP embedded in N, P-codoped carbons for efficient oxygen reduction, hydrogen evolution and rechargeable zinc-air battery. <i>Carbon</i> , 2022, 186, 171-179.	5.4	28
1817	Insights into the local structure, microstructure and ionic conductivity of silicon doped NASICON-type solid electrolyte Li _{1.3} Al _{0.3} Ti _{1.7} P ₃ O ₁₂ . <i>Energy Storage Materials</i> , 2022, 44, 190-196.	9.5	30
1818	Graphene electrode functionalization for high performance hybrid energy storage with vanadyl sulfate redox electrolytes. <i>Journal of Power Sources</i> , 2022, 517, 230712.	4.0	12
1819	Strategic factors to design the next generation of molecular water oxidation catalysts: Lesson learned from ruthenium complexes. <i>Coordination Chemistry Reviews</i> , 2022, 450, 214256.	9.5	16
1820	Bifunctional composite separator with redistributor and anion absorber for dendrites-free and fast-charging lithium metal batteries. <i>Chemical Engineering Journal</i> , 2022, 430, 132971.	6.6	17
1821	Structurally engineered vitamin B12 on graphene as a bioinspired metal–N–C-based electrocatalyst for effective overall water splitting in alkaline media. <i>Applied Surface Science</i> , 2022, 575, 151729.	3.1	9
1822	CO ₂ reduction mechanism on the Nb ₂ CO ₂ MXene surface: Effect of nonmetal and metal modification. <i>Computational Materials Science</i> , 2022, 202, 110971.	1.4	16
1823	Designing conductive networks of hybrid carbon enables stable and long-lifespan cotton-fiber-based lithium–sulfur batteries. <i>RSC Advances</i> , 2021, 11, 34955-34962.	1.7	6
1824	CuCo ₂ O ₄ nanoparticles wrapped in a rGO aerogel composite as an anode for a fast and stable Li-ion capacitor with ultra-high specific energy. <i>New Journal of Chemistry</i> , 2021, 45, 20751-20764.	1.4	18
1825	Promising thermoelectric candidate based on a CaAs ₃ monolayer: A first principles study. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 24039-24046.	1.3	2
1826	Improvement of Electric Heater Design for Household Cooking Application in Developing Countries. <i>Smart Innovation, Systems and Technologies</i> , 2020, , 33-41.	0.5	0
1827	Energy Generation: Sources, Challenges and Solutions. <i>Encyclopedia of the UN Sustainable Development Goals</i> , 2020, , 1-10.	0.0	0
1828	Intermetallic Cu ₅ Zr Clusters Anchored on Hierarchical Nanoporous Copper as Efficient Catalysts for Hydrogen Evolution Reaction. <i>Research</i> , 2020, 2020, 2987234.	2.8	21
1829	A Molecular Compound for Highly Selective Purification of Ethylene. <i>Angewandte Chemie</i> , 2021, 133, 27390-27394.	1.6	4
1830	A Molecular Compound for Highly Selective Purification of Ethylene. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 27184-27188.	7.2	18
1831	Ultralow lattice thermal conductivity and high thermoelectric performance of penta-Sb ₂ C monolayer: A first principles study. <i>Journal of Applied Physics</i> , 2021, 130, 185104.	1.1	7
1832	Coordination environment dependent selectivity of single-site-Cu enriched crystalline porous catalysts in CO ₂ reduction to CH ₄ . <i>Nature Communications</i> , 2021, 12, 6390.	5.8	117
1833	High-Entropy Alloys for Electrocatalysis: Design, Characterization, and Applications. <i>Small</i> , 2022, 18, e2104339.	5.2	82

#	ARTICLE	IF	CITATIONS
1834	Thermosetting High-Rate and High-Safety Polymer/Inorganic Composite Separator for Lithium-Ion Battery through a Fast Scalable Photo Cross-Linking Process. <i>Energy & Fuels</i> , 2021, 35, 18746-18755.	2.5	4
1835	Efficient Separation of Propylene from Propane in an Ultramicroporous Cyanide-Based Compound with Open Metal Sites. <i>Small Structures</i> , 2022, 3, 2100125.	6.9	17
1836	One-pot synthesis of N and P Co-doped carbon layer stabilized cobalt-doped MoP 3D porous structure for enhanced overall water splitting. <i>Journal of Alloys and Compounds</i> , 2022, 895, 162595.	2.8	22
1837	Excellent thermoelectric performances of the SiSe ₂ monolayer and layered bulk. <i>Applied Surface Science</i> , 2022, 575, 151799.	3.1	16
1838	Polymers in Lithium-Sulfur Batteries. <i>Advanced Science</i> , 2022, 9, e2103798.	5.6	56
1839	Liquid-phase methane bubble plasma discharge for heavy oil processing: Insights into free radicals-induced hydrogenation. <i>Energy Conversion and Management</i> , 2021, 250, 114896.	4.4	18
1840	Indium-Free Alternative Transparent Conducting Electrodes: An Overview and Recent Developments. <i>Environmental Chemistry for A Sustainable World</i> , 2021, , 149-183.	0.3	3
1842	Metal halide perovskites for photocatalysis applications. <i>Journal of Materials Chemistry A</i> , 2022, 10, 407-429.	5.2	61
1843	Past, present, and future of electrochemical energy storage: A brief perspective. <i>Frontiers of Nanoscience</i> , 2021, , 1-28.	0.3	2
1844	Mechanistic understanding and design of non-noble metal-based single-atom catalysts supported on two-dimensional materials for CO ₂ electroreduction. <i>Journal of Materials Chemistry A</i> , 2022, 10, 5813-5834.	5.2	28
1845	Residual iodine on in-situ transformed bismuth nanosheets induced activity difference in CO ₂ electroreduction. <i>Journal of CO₂ Utilization</i> , 2022, 55, 101802.	3.3	12
1846	Improvement of the efficiency of volumetric solar steam generation by enhanced solar harvesting and energy management. <i>Renewable Energy</i> , 2022, 183, 820-829.	4.3	14
1847	A new cyclic carbonate enables high power/ low temperature lithium-ion batteries. <i>Energy Storage Materials</i> , 2022, 45, 14-23.	9.5	27
1849	DeLorean Energy: The potential of Asynchronous V2G Fleets as Peak Shaving Units. , 2021, , .		0
1850	Tin-Based Anode Materials for Stable Sodium Storage: Progress and Perspective. <i>Advanced Materials</i> , 2022, 34, e2106895.	11.1	68
1851	Double-functional 3D cross-linking carbon fiber with Sn particle coating layer for improving interfacial performance of Na- ¹² Al ₂ O ₃ batteries. <i>Chemical Engineering Journal</i> , 2022, 433, 133545.	6.6	8
1852	Electrochemical CO ₂ Conversion. <i>Advances in Science, Technology and Innovation</i> , 2022, , 113-136.	0.2	2
1853	Additive Manufacturing of Miniaturized Peak Temperature Monitors for In-Pile Applications. <i>Sensors</i> , 2021, 21, 7688.	2.1	2

#	ARTICLE	IF	CITATIONS
1854	An overview on advances in design and development of materials for electrochemical generation of hydrogen and oxygen. <i>Materials Today Energy</i> , 2022, 23, 100902.	2.5	33
1855	Multifunctional Nickel–Cobalt Phosphates for High-Performance Hydrogen Gas Batteries and Self-Powered Water Splitting. <i>ACS Applied Energy Materials</i> , 2021, 4, 12927-12934.	2.5	12
1856	Scalable Carbon Black Enhanced Nanofiber Network Films for High-Efficiency Solar Steam Generation. <i>Advanced Materials Interfaces</i> , 2021, 8, 2101160.	1.9	14
1857	Highly Mesoporous Cobalt-Hybridized 2D Cu ₃ P Nanosheet Arrays as Boosting Janus Electrocatalysts for Water Splitting. <i>Inorganic Chemistry</i> , 2021, 60, 18325-18336.	1.9	8
1858	Direct Regeneration of Spent Li-Ion Battery Cathodes via Chemical Relithiation Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 16384-16393.	3.2	42
1859	Poly(benzobisthiazole-dione) Frameworks for Highly Reversible Sodium- and Potassium-Ion Storage. <i>Energy & Fuels</i> , 2021, 35, 20367-20373.	2.5	5
1860	Enhancing the photocatalytic activity of Ruddlesden-Popper Sr ₂ TiO ₄ for hydrogen evolution through synergistic silver doping and moderate reducing pretreatment. <i>Materials Today Energy</i> , 2022, 23, 100899.	2.5	29
1861	Effect of Thermal Stabilization on PAN-Derived Electrospun Carbon Nanofibers for CO ₂ Capture. <i>Polymers</i> , 2021, 13, 4197.	2.0	5
1862	Tecnologia de Hidrato de G _A s: Modelagem Computacional para a Etapa de Crescimento do Hidrato. <i>Vetor</i> , 2021, 31, 23-42.	0.0	0
1863	Core–Shell Co ₂ VO ₄ /Carbon Composite Anode for Highly Stable and Fast-Charging Sodium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 55020-55028.	4.0	65
1864	Lithiophilic Carbon Nanofiber/Graphene Nanosheet Composite Scaffold Prepared by a Scalable and Controllable Biofabrication Method for Ultrastable Dendrite-Free Lithium–Metal Anodes. <i>Small</i> , 2022, 18, e2104735.	5.2	10
1865	Recent Advances in Flexible Zn–Air Batteries: Materials for Electrodes and Electrolytes. <i>Small Methods</i> , 2022, 6, e2101116.	4.6	21
1866	Enhanced Ionic Conductivity and Durability of Novel Solid Oxide Fuel Cells by Constructing a Heterojunction Based on Transition and Rare Earth Metal Co-doped Ceria. <i>ACS Applied Energy Materials</i> , 2021, 4, 13492-13503.	2.5	11
1867	Organic Electrolytes for pH-Neutral Aqueous Organic Redox Flow Batteries. <i>Advanced Functional Materials</i> , 2022, 32, 2108777.	7.8	43
1868	From structural ceramics to 2D materials with multi-applications: A review on the development from MAX phases to MXenes. <i>Journal of Advanced Ceramics</i> , 2021, 10, 1194-1242.	8.9	122
1869	Silver/Polypyrrole-Functionalized Polyurethane Foam Embedded Phase Change Materials for Thermal Energy Harvesting. <i>Nanomaterials</i> , 2021, 11, 3011.	1.9	7
1870	An integrated approach to configure rGO/VS ₄ /S composites with improved catalysis of polysulfides for advanced lithium–sulfur batteries. <i>Chinese Chemical Letters</i> , 2022, 33, 3909-3915.	4.8	22
1871	Cloud- and Fog-Integrated Smart Grid Model for Efficient Resource Utilisation. <i>Sensors</i> , 2021, 21, 7846.	2.1	12

#	ARTICLE	IF	CITATIONS
1872	In-situ phosphating Co@Nitrogen-doping graphene boosts overall water splitting under alkaline condition. <i>Journal of Electroanalytical Chemistry</i> , 2022, 904, 115882.	1.9	9
1873	Optimizing the Molecular Weight of Poly(vinylidene fluoride) for Competitive Perfluorosulfonic Acid Membranes. <i>Physica Status Solidi - Rapid Research Letters</i> , 0, , .	1.2	1
1874	Hydrothermal synthesis of Co ₃ O ₄ nanoparticles decorated three dimensional MoS ₂ nanoflower for exceptionally stable supercapacitor electrode with improved capacitive performance. <i>Journal of Energy Storage</i> , 2022, 47, 103551.	3.9	18
1875	Mn ²⁺ Dopant Differentiating the Ru and Ir Oxidation States in Catalytic Oxides Toward Durable Oxygen Evolution Reaction in Acidic Electrolyte. <i>Small Methods</i> , 2022, 6, e2101236.	4.6	31
1876	Low-temperature solid-state synthesis of interlayer engineered VS ₄ for high-capacity and ultrafast sodium-ion storage. <i>Chemical Engineering Journal</i> , 2022, 433, 133765.	6.6	12
1878	Synthesis and Performance Optimization of Manganese ²⁺ -based Cathode Materials for Zinc ²⁺ -ion Batteries. <i>Batteries and Supercaps</i> , 2022, 5, .	2.4	10
1879	Nanoconfinement Engineering over Hollow Multi ²⁺ -Shell Structured Copper towards Efficient Electrocatalytic C ²⁺ -C coupling. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	57
1880	Role of Water in the Lyotropic Liquid Crystalline Mesophase of Lithium Salts and Non-ionic Surfactants. <i>Langmuir</i> , 2021, 37, 14443-14453.	1.6	7
1881	Nanoconfinement Engineering over Hollow Multi ²⁺ -Shell Structured Copper towards Efficient Electrocatalytic C ²⁺ -C coupling. <i>Angewandte Chemie</i> , 2022, 134, e202113498.	1.6	4
1882	Self-supporting CoP-C nanosheet arrays derived from a metal ²⁺ -organic framework as synergistic catalysts for efficient water splitting. <i>Dalton Transactions</i> , 2021, 50, 17549-17558.	1.6	8
1883	Metal- and Nonmetal-Incorporated Vitamin B ₁₂ on Graphene as a Bioderived Electrocatalyst for High-Performance Oxygen Reduction Reaction in Acidic Media. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1884	Novel heterostructure Cu ₂ S/Ni ₃ S ₂ coral-like nanoarrays on Ni foam to enhance hydrogen evolution reaction in alkaline media. <i>RSC Advances</i> , 2021, 11, 39493-39502.	1.7	7
1885	Wrinkle facilitated hydrogen evolution reaction of vacancy-defected transition metal dichalcogenide monolayers. <i>Nanoscale</i> , 2021, 13, 20576-20582.	2.8	7
1886	Global Structural Change and Economic Dynamics Under a Green Growth Strategy: An Energy-Constrained Supermultiplier Approach. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1887	Robust direct Z-scheme exciton transfer dynamics by architecting 3D BiOI MF-supported non-stoichiometric Cu _{0.75} In _{0.25} S NC nanocomposite for co-catalyst-free photocatalytic hydrogen evolution. <i>RSC Advances</i> , 2022, 12, 1265-1277.	1.7	19
1888	MoO _x S _y /Ni ₃ S ₂ Microspheres on Ni Foam as Highly Efficient, Durable Electrocatalysts for Hydrogen Evolution Reaction. <i>Chemistry of Materials</i> , 2022, 34, 798-808.	3.2	26
1889	Thermodynamic guiding principles of high-capacity phase transformation materials for splitting H ₂ O and CO ₂ by thermochemical looping. <i>Journal of Materials Chemistry A</i> , 2022, 10, 3552-3561.	5.2	2
1890	Efficient oxygen evolution reaction on RuO ₂ nanoparticles decorated onion-like carbon (OLC). <i>Nanotechnology</i> , 2022, 33, 135710.	1.3	1

#	ARTICLE	IF	CITATIONS
1891	Identifying TM-N4 active sites for selective CO ₂ -to-CH ₄ conversion: A computational study. <i>Applied Surface Science</i> , 2022, 582, 152470.	3.1	16
1892	Synchronous construction of oxygen vacancies with suitable concentrations and carbon coating on the surface of Li-rich layered oxide cathode materials by spray drying for Li-ion batteries. <i>Electrochimica Acta</i> , 2022, 405, 139798.	2.6	8
1893	Synthesis of V-doped urchin-like NiCo ₂ O ₄ with rich oxygen vacancies for electrocatalytic oxygen evolution reactions. <i>Electrochimica Acta</i> , 2022, 406, 139800.	2.6	25
1894	All-in-one polymer sponge composite 3D evaporators for simultaneous high-flux solar-thermal desalination and electricity generation. <i>Nano Energy</i> , 2022, 93, 106882.	8.2	87
1895	Synergistic modulation of solar and thermal radiation in dynamic energy-efficient windows. <i>Nano Energy</i> , 2022, 93, 106865.	8.2	20
1896	Conceptual design and performance optimization of a nighttime electrochemical system for electric power generation via radiative cooling. <i>Energy</i> , 2022, 242, 123034.	4.5	5
1897	Phonon transport in Zintl Ba ₂ ZnAs ₂ and Ba ₂ ZnSb ₂ : A first-principles study. <i>Materials Science in Semiconductor Processing</i> , 2022, 141, 106446.	1.9	8
1898	Pyrazine-based organic electrode material for high-performance supercapacitor applications. <i>Journal of Energy Storage</i> , 2022, 48, 103953.	3.9	10
1899	Mixed-Linker Metal-Organic frameworks for carbon and hydrocarbons capture under moist conditions. <i>Chemical Engineering Journal</i> , 2022, 433, 134447.	6.6	16
1900	Energetics Systems and artificial intelligence: Applications of industry 4.0. <i>Energy Reports</i> , 2022, 8, 334-361.	2.5	81
1901	Response Guide: Understanding Underwater Electric Transmission Line Dielectric Oil Leaks. <i>International Oil Spill Conference Proceedings</i> , 2021, 2021, .	0.1	0
1902	Safe and Stable Lithium Metal Batteries Enabled by an Amide-Based Electrolyte. <i>Nano-Micro Letters</i> , 2022, 14, 44.	14.4	34
1903	Theoretical exploration of diverse electron-deficient core and terminal groups in A ²⁺ type non-fullerene acceptors for organic solar cells. <i>New Journal of Chemistry</i> , 2022, 46, 3370-3382.	1.4	12
1904	Recent Advances in Organic and Organic-Inorganic Hybrid Materials for Piezoelectric Mechanical Energy Harvesting. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	124
1905	Amyloid-like assembly converting commercial proteins to water-insoluble adsorbents with ultrahigh adsorption capacity and excellent antifouling property for uranium extraction. <i>Journal of Materials Chemistry A</i> , 2022, 10, 2987-2994.	5.2	19
1906	Polysulfide Speciation and Migration in Catholyte Lithium-Sulfur Cells. <i>ChemPhysChem</i> , 2022, 23, .	1.0	4
1907	Overview of microgrids in the modern digital age: an introduction and fundamentals. , 2022, , 27-43.		1
1908	Linker micro-regulation of a Hofmann-based metal-organic framework for efficient propylene/propane separation. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 1082-1090.	3.0	9

#	ARTICLE	IF	CITATIONS
1909	Sizing the Thermal Energy Storage Device Utilizing Phase Change Material (PCM) for Low-Temperature Organic Rankine Cycle Systems Employing Selected Hydrocarbons. <i>Energies</i> , 2022, 15, 956.	1.6	6
1910	Research progress of bio-inspired radiative cooling. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2022, 71, 024401.	0.2	1
1911	Size-dependent selectivity of iron-based electrocatalysts for electrochemical CO ₂ reduction. <i>Sustainable Energy and Fuels</i> , 2022, 6, 736-743.	2.5	5
1912	Rechargeable aqueous Zn-LiMn ₂ O ₄ hybrid batteries with high performance and safety for energy storage. <i>Journal of Energy Storage</i> , 2022, 45, 103744.	3.9	11
1913	Investigations of redox-active polyoxomolybdate embedded polyaniline-based electrode material for energy application. <i>Ionics</i> , 2022, 28, 1295-1310.	1.2	2
1914	Advances of the functionalized carbon nitrides for electrocatalysis. , 2022, 4, 211-236.		33
1915	N-doped M/CoO (M=Ni, Co, and Mn) hybrid grown on nickel foam as efficient electrocatalyst for the chemical-assisted water electrolysis. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 5766-5778.	3.8	14
1916	In-situ growth of hierarchical CuO@Cu ₃ P heterostructures with transferable active centers on copper foam substrates as bifunctional electrocatalysts for overall water splitting in alkaline media. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 9593-9605.	3.8	12
1917	Tuning the electronic structure of Co@Nâ€‘C hybrids <i>via</i> metal-doping for efficient electrocatalytic hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2022, 10, 4981-4991.	5.2	13
1918	Phase reconfiguration of multivalent nickel sulfides in hydrogen evolution. <i>Energy and Environmental Science</i> , 2022, 15, 633-644.	15.6	68
1919	Recent Advances in Seawater Electrolysis. <i>Catalysts</i> , 2022, 12, 123.	1.6	26
1920	Synthesis of Co/CeO ₂ hetero-particles with abundant oxygen-vacancies supported by carbon aerogels for ORR and OER. <i>Nanoscale</i> , 2022, 14, 1997-2003.	2.8	30
1921	Electrospun Carbon Nanofibers Loaded with Atomic FeN _x /Fe ₂ O ₃ Active Sites for Efficient Oxygen Reduction Reaction in Both Acidic and Alkaline Media. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	7
1922	Unraveling Unique Surface Chemistry of Transition Metal Nitrides in Controlling Selective Câ€‘O Bond Scission Pathways of Glycerol. <i>Jacs Au</i> , 2022, 2, 367-379.	3.6	10
1923	MXenes and their composites for lithium- and sodium-ion battery applications. , 2022, , 307-341.		0
1924	Liquid electrolyte: The nexus of practical lithium metal batteries. <i>Joule</i> , 2022, 6, 588-616.	11.7	191
1925	MXenes as an emerging class of two-dimensional materials for advanced energy storage devices. <i>Journal of Materials Chemistry A</i> , 2022, 10, 4558-4584.	5.2	33
1926	Covalent Organic Framework Based Functional Materials: Important Catalysts for Efficient CO ₂ Utilization. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	22

#	ARTICLE	IF	CITATIONS
1927	Co@C,MnO-NAC <i>via</i> selective wrapping for effective oxygen electrocatalysis in rechargeable Zn-air batteries. <i>Sustainable Energy and Fuels</i> , 2022, 6, 791-799.	2.5	2
1928	Covalent Organic Framework Based Functional Materials: Important Catalysts for Efficient CO ₂ Utilization. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	128
1929	Unique BiFeO ₃ /g-C ₃ N ₄ mushroom heterojunction with photocatalytic antibacterial and wound therapeutic activity. <i>Nanoscale</i> , 2022, 14, 2686-2695.	2.8	15
1930	Constructing nickel sulfide heterojunctions by W-doping-induced structural transition for enhanced oxygen evolution. <i>Journal of Materials Chemistry A</i> , 2022, 10, 3341-3345.	5.2	24
1931	Nanostructured membranes for gas and vapor separation. , 2022, , 139-201.		0
1932	Recent Advancement in Pd-Decorated Nanostructures for Its Catalytic and Chemiresistive Gas Sensing Applications: A Review. <i>Topics in Catalysis</i> , 0, , 1.	1.3	7
1933	Understanding and Performance of the Zinc Anode Cycling in Aqueous Zinc-Ion Batteries and a Roadmap for the Future. <i>Batteries and Supercaps</i> , 2022, 5, .	2.4	27
1934	Band structure engineering of W replacement in ReSe ₂ nanosheets for enhancing hydrogen evolution. <i>Chemical Communications</i> , 2022, 58, 2682-2685.	2.2	9
1935	Stable interphase chemistry of textured Zn anode for rechargeable aqueous batteries. <i>Science Bulletin</i> , 2022, 67, 716-724.	4.3	80
1936	Morphology optimizing of polyvinylidene fluoride (PVDF) nanofiber separator for safe lithium-ion battery. <i>Journal of Applied Polymer Science</i> , 2022, 139, .	1.3	12
1937	Immobilization of Lewis Basic Sites into a Stable Ethane-Selective MOF Enabling One-Step Separation of Ethylene from a Ternary Mixture. <i>Journal of the American Chemical Society</i> , 2022, 144, 2614-2623.	6.6	127
1938	Theories for Electrolyte Effects in CO ₂ Electroreduction. <i>Accounts of Chemical Research</i> , 2022, 55, 495-503.	7.6	55
1939	Highly active atomic Cu catalyst anchored on superlattice CoFe layered double hydroxide for efficient oxygen evolution electrocatalysis. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 9876-9894.	3.8	9
1940	Facile synthesis of Cu ²⁺ intercalated MnO ₂ nanoflakes cathode for enhanced energy storage in zinc-ion batteries. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2022, 131, 104172.	2.7	10
1941	Hydrogen bonding assisted OH ⁻ transport under low humidity for rapid start-up in AEMFCs. <i>Journal of Membrane Science</i> , 2022, 647, 120303.	4.1	15
1942	Design Strategies for High-Energy-Density Aqueous Zinc Batteries. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	47
1943	Design Strategies for High-Energy-Density Aqueous Zinc Batteries. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	383
1944	Recovery of Copper and Aluminum from Spent Lithium-Ion Batteries by Froth Flotation: A Sustainable Approach. <i>Journal of Sustainable Metallurgy</i> , 2022, 8, 386-397.	1.1	22

#	ARTICLE	IF	CITATIONS
1945	Atomic Tuning of Single-Atom Fe@N-C Catalysts with Phosphorus for Robust Electrochemical CO ₂ Reduction. Nano Letters, 2022, 22, 1557-1565.	4.5	111
1946	Unveiling the effect of interstitial dopants on CO ₂ activation over CsPbBr ₃ catalyst for efficient photothermal CO ₂ reduction. Chemical Engineering Journal, 2022, 435, 135071.	6.6	35
1947	Alkali ions pre-intercalation of Γ -MnO ₂ nanosheets for high-capacity and stable Zn-ion battery. Materials Today Energy, 2022, 24, 100934.	2.5	35
1948	Electrochemical polymerization of polypyrrole on carbon cloth@ZIF67 using alizarin red S as redox dopant for flexible supercapacitors. Electrochimica Acta, 2022, 407, 139869.	2.6	20
1949	Development of different pretreatments and related technologies for efficient biomass conversion of lignocellulose. International Journal of Biological Macromolecules, 2022, 202, 256-268.	3.6	67
1950	New-generation iron-titanium flow batteries with low cost and ultrahigh stability for stationary energy storage. Chemical Engineering Journal, 2022, 434, 134588.	6.6	18
1951	V ₆ O ₁₃ nanosheets self-assembled into 3D hollow microflowers for long-life and high-rate Li-ion batteries. Journal of Alloys and Compounds, 2022, 903, 163845.	2.8	15
1952	In-situ construction of N-doped carbon nanosnakes encapsulated FeCoSe nanoparticles as efficient bifunctional electrocatalyst for overall water splitting. Journal of Energy Chemistry, 2022, 68, 699-708.	7.1	31
1953	é”çj«ç»µæ±ç»¼4â*æ€Sèf½2ââCæâ†ç-ç*¥. Chinese Science Bulletin, 2022, , .	0.4	1
1954	A lithiophilic/lithiophobic ternary alloy anode with Ag concentration gradients guides uniform Li deposition. Chemical Communications, 2022, 58, 3158-3161.	2.2	7
1955	Fe-Based metal-organic frameworks as functional materials for battery applications. Inorganic Chemistry Frontiers, 2022, 9, 827-844.	3.0	24
1956	A lotus-inspired 3D biomimetic design toward an advanced solar steam evaporator with ultrahigh efficiency and remarkable stability. Materials Horizons, 2022, 9, 1232-1242.	6.4	36
1957	Selective Center Charge Density Enables Conductive 2D Metal-Organic Frameworks with Exceptionally High Pseudocapacitance and Energy Density for Energy Storage Devices. Advanced Materials, 2022, 34, e2109870.	11.1	18
1958	Survey of Tetragonal Transition Metal Chalcogenide Hetero-Bilayers for Promising Photocatalysts. Advanced Materials Interfaces, 2022, 9, .	1.9	4
1959	Catalytic CO ₂ /CO Reduction: Gas, Aqueous, and Aprotic Phases. ACS Catalysis, 2022, 12, 2561-2568.	5.5	22
1960	Tuning charge distribution of Ru nanoparticles via coupling ammonium tungsten bronze as Pt-Like electrocatalyst for hydrogen evolution reaction. Chemical Engineering Journal, 2022, 436, 135044.	6.6	14
1961	Anisotropic Thermal Characterisation of Large-Format Lithium-Ion Pouch Cells**. Batteries and Supercaps, 2022, 5, .	2.4	7
1962	Water-Enabled Electricity Generation: A Perspective. Advanced Energy and Sustainability Research, 2022, 3, .	2.8	17

#	ARTICLE	IF	CITATIONS
1963	Ga ₂ O ₃ and Related Ultra-Wide Bandgap Power Semiconductor Oxides: New Energy Electronics Solutions for CO ₂ Emission Mitigation. <i>Materials</i> , 2022, 15, 1164.	1.3	24
1964	Stepwise Fabrication of Proton-conducting Covalent Organic Frameworks for Hydrogen Fuel Cell Applications. <i>Chemical Research in Chinese Universities</i> , 2022, 38, 461-467.	1.3	2
1965	Optimal absorbents of CO ₂ hydrate formation and energy consumption analysis for district cooling application under low pressure conditions. <i>Journal of Cleaner Production</i> , 2022, 343, 130869.	4.6	11
1966	Recent Advances of Aqueous Rechargeable Zinc-Iodine Batteries: Challenges, Solutions, and Prospects. <i>Advanced Materials</i> , 2022, 34, e2108856.	11.1	119
1967	Regenerated LiFePO ₄ /C for scrapped lithium iron phosphate powder batteries by pre-oxidation and reduction method. <i>Ionics</i> , 0, , 1.	1.2	4
1968	Rational design of fly ash-based composites for sustainable lithium-ion battery anodes. <i>Electrochimica Acta</i> , 2022, 410, 140035.	2.6	6
1970	A Reanalysis of the Diverse Sodium Species in Carbon Anodes for Sodium Ion Batteries: A Thermodynamic View. <i>Advanced Energy Materials</i> , 2021, 11, .	10.2	32
1971	High-Performance Aqueous Zinc-Ion Battery Based on an Al _{0.35} Mn _{2.52} O ₄ Cathode: A Design Strategy from Defect Engineering and Atomic Composition Tuning. <i>Small</i> , 2022, 18, e2105970.	5.2	13
1972	The Role of Structured Carbon in Downsized Transition Metal-Based Electrocatalysts toward a Green Nitrogen Fixation. <i>Catalysts</i> , 2021, 11, 1529.	1.6	2
1973	Efficient Modulation of Electron Pathway by Constructing MnO ₂ -X/CeO ₂ Interface Toward Advanced Lithium-Oxygen Batteries. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1974	Tuning Charge Distribution of Ru Nanoparticles Via Coupling Ammonium Tungsten Bronze as Pt-Like Electrocatalyst for Hydrogen Evolution Reaction. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1975	A Scalable Dew-Point Evaporative Cooler for Battery Thermal Management. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1977	A bioinspired solar evaporator with a horizontal channel-like framework for efficient and stable high-salinity brine desalination. <i>Nanoscale</i> , 2022, 14, 6066-6074.	2.8	8
1978	Morphology and Composition Dependence of Multicomponent Cu-Based Nanoreactor for Tandem Electrocatalysis CO ₂ Reduction. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1979	Robust Ru-N Metal-Support Interaction to Promote Self-Powered H ₂ Production Assisted by Hydrazine Oxidation. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1980	High Specific Capacity and Mechanism of Mof-73 Based Cathode for Aqueous Zinc-Ion Batteries. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1981	Increasing oxygen vacancies in CeO ₂ nanocrystals by Ni doping and reduced graphene oxide decoration towards electrocatalytic hydrogen evolution. <i>CrystEngComm</i> , 2022, 24, 3369-3379.	1.3	9
1982	Role of microbial nanotechnology in energy devices. , 2022, , 517-547.		0

#	ARTICLE	IF	CITATIONS
1983	A novel PdC monolayer with fully dispersed Pd atoms and a rigid carbon backbone: an intrinsic versatile electrocatalyst for overall water splitting and the corresponding reverse reaction. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 6811-6819.	1.3	1
1984	Encapsulation of Dodecane in Gasification Biochar for its Prolonged Thermal/Shape Stability, Reliability, and Ambient Enthalpy Storage. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1985	Artificial 2d Van Der Waals Inorganic Oxychloride Anhydrous Proton Conductor. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1986	Hydrogen Evolution Reaction Activity Obtained Using Platinum Single Atoms on Tio2 Nanosheets Modified with Graphene. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1987	Adjusting the Affinity between Electrode and Electrolyte by Loading Cobalt Boride on Vermiculite for Supercapacitor Electrode Application. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1988	Seed assisted synthesis of an anionic metal-organic framework membrane for selective and permeable hydrogen separation. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 1636-1643.	3.0	8
1989	Polypyrrole Incorporated Urchin-Flower Like Ni ₂ p ₂ o ₇ Cathode Material for Asymmetric Supercapacitor Applications. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1990	Recent advances in metal-organic frameworks for gas adsorption/separation. <i>Nanoscale Advances</i> , 2022, 4, 2077-2089.	2.2	59
1991	Optical and Mechanical Properties of Zr-Oxide Doped Tio ₂ /Sio ₂ Anti-Reflective Coatings for Pv Glass Cover. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1992	Perovskite Semiconductor Nanocrystals. <i>Energy Material Advances</i> , 2022, 2022, .	4.7	9
1993	Trilayer Metal-Organic Frameworks as Multifunctional Electrocatalysts for Energy Conversion and Storage Applications. <i>Journal of the American Chemical Society</i> , 2022, 144, 3411-3428.	6.6	142
1994	Driving Zn-MnO ₂ grid-scale batteries: A roadmap to cost-effective energy storage. <i>MRS Energy & Sustainability</i> , 2022, 9, 13-18.	1.3	8
1995	Applications of Nickel-Based Electrocatalysts for Hydrogen Evolution Reaction. <i>Advanced Energy and Sustainability Research</i> , 2022, 3, .	2.8	17
1996	Sharp Volcano-Type Synergy and Visible Light Acceleration in H ₂ Release upon B ₂ (OH) ₄ Hydrolysis Catalyzed by Au-Rh@Click-Dendrimer Nanozymes. <i>ACS Applied Energy Materials</i> , 2022, 5, 3834-3844.	2.5	5
1997	Nanostructured Au Electrode with 100 h Stability for Solar-Driven Electrochemical Reduction of Carbon Dioxide to Carbon Monoxide. <i>ACS Omega</i> , 2022, 7, 9422-9429.	1.6	9
1998	Zinc-Guided 3D Graphene for Thermally Chargeable Supercapacitors to Harvest Low-Grade Heat. <i>Molecules</i> , 2022, 27, 1239.	1.7	3
1999	Unraveling the reaction mechanisms of electrode materials for sodium-ion and potassium-ion batteries by in situ transmission electron microscopy. , 2022, 1, 196-212.		54
2000	Thermoelectric investigation of low-cost modular night-time electricity generation. <i>Heat and Mass Transfer</i> , 2022, 58, 1381-1391.	1.2	4

#	ARTICLE	IF	CITATIONS
2001	High-Valence Transition Metal Modified FeNiV Oxides Anchored on Carbon Fiber Cloth for Efficient Oxygen Evolution Catalysis. <i>Advanced Fiber Materials</i> , 2022, 4, 774-785.	7.9	24
2002	Understanding the Role of a Water-Soluble Catechol-Functionalized Binder for Silicon Anodes by Diverse In Situ Analyses. , 2022, 4, 831-839.		15
2003	Combining Perovskites and Quantum Dots: Synthesis, Characterization, and Applications in Solar Cells, LEDs, and Photodetectors. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	23
2004	Machine learning in energy storage materials. , 2022, 1, 175-195.		45
2005	Development of Prismatic Cells for Rechargeable Seawater Batteries. <i>Advanced Sustainable Systems</i> , 2022, 6, .	2.7	6
2006	Efficient Electrochemical Reduction of CO ₂ to CO by Ag-Decorated B-Doped g-C ₃ N ₄ : A Combined Theoretical and Experimental Study. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 10400-10408.	1.8	11
2007	General Synergistic Capture-Bonding Superassembly of Atomically Dispersed Catalysts on Micropore-Vacancy Frameworks. <i>Nano Letters</i> , 2022, 22, 2889-2897.	4.5	27
2008	An Ionic Liquid Promoted Clean and Direct Conversion of Triglycerides into Bio-Based Thermal Energy Storage Materials. <i>European Journal of Lipid Science and Technology</i> , 2022, 124, .	1.0	1
2009	UTSA@ZrO ₂ metal-organic framework incorporated 6FDA-polyimide mixed matrix membranes for ethylene/ethane separation. <i>AIChE Journal</i> , 2022, 68, .	1.8	17
2010	Ce(III)-Based Coordination-Complex-Based Efficient Radical Scavenger for Exceptional Durability Enhancement of Polymer Application in Proton-Exchange Membrane Fuel Cells and Organic Photovoltaics. <i>Advanced Energy and Sustainability Research</i> , 2022, 3, .	2.8	5
2011	Electro-Reconstruction-Induced Strain Regulation and Synergism of Ag@Ni toward Highly Efficient CO ₂ Electrolysis to Formate. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	41
2012	A novel all-solid-state S-scheme in CdS/ZnTHPP binary nanosystem for hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 13044-13053.	3.8	11
2013	Overpotential Tailored Thin and Dense Lithium Carbonate Growth in Solid Electrolyte Interphase for Advanced Lithium Ion Batteries. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	32
2014	Aldehyde replacement advances efficient hydrogen production in electrolyser. , 2022, , 100001.		0
2015	Surface Engineering on Commercial Cu Foil for Steering C ₂ H ₄ /CH ₄ Ratio in CO ₂ Electroreduction. <i>Nano Letters</i> , 2022, 22, 2988-2994.	4.5	16
2016	Electronic Regulation of Nickel Single Atoms by Confined Nickel Nanoparticles for Energy-Efficient CO ₂ Electroreduction. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	57
2017	Ultrahigh Photocatalytic CO ₂ Reduction Efficiency and Selectivity Manipulation by Single Tungsten Atom Oxide at the Atomic Step of TiO ₂ . <i>Advanced Materials</i> , 2022, 34, e2109074.	11.1	107
2018	Câ%N triple bond cleavage via transmembrane hydrogenation. <i>Chem Catalysis</i> , 2022, 2, 499-507.	2.9	10

#	ARTICLE	IF	CITATIONS
2019	Mesocarbon Microbeads Boost the Electrochemical Performances of LiFePO ₄ Li ₄ Ti ₅ O ₁₂ through Anion Intercalation. ChemSusChem, 2022, 15, .	3.6	7
2020	A Graphene-Supported Copper Complex as Site-Isolated Catalyst for Electrochemical CO ₂ Reduction. ChemElectroChem, 2022, 9, .	1.7	1
2021	Comprehensive review on zinc-ion battery anode: Challenges and strategies. Information Materials, 2022, 4, .	8.5	121
2022	Double Hypercrosslinked Porous Organic Polymer-Derived Electrocatalysts for a Water Splitting Device. ACS Applied Energy Materials, 2022, 5, 3269-3274.	2.5	6
2023	Effect of Hydrothermal reaction times and temperature-dependent Spherical like NiCo ₂ O ₄ nanoparticles for supercapacitor application. Materials Technology, 2022, 37, 2668-2678.	1.5	4
2024	Maximizing the performance of n-type Mg ₃ Bi ₂ based materials for room-temperature power generation and thermoelectric cooling. Nature Communications, 2022, 13, 1120.	5.8	101
2025	Emerging Trends in Sustainable CO ₂ -Management Materials. Advanced Materials, 2022, 34, e2201547.	11.1	52
2026	Electronic Regulation of Nickel Single Atoms by Confined Nickel Nanoparticles for Energy-Efficient CO ₂ Electroreduction. Angewandte Chemie, 2022, 134, .	1.6	9
2027	Engineering Ion Diffusion by CoS@SnS Heterojunction for Ultrahigh-Rate and Stable Potassium Batteries. ACS Applied Materials & Interfaces, 2022, 14, 16379-16385.	4.0	42
2028	Photocatalytic hydrogen generation using polydiacetylene crystal nanostructures. Molecular Crystals and Liquid Crystals, 0, , 1-5.	0.4	0
2029	A Heuristic Approach to Linking Experimental Descriptors with Product Selectivity in Electrochemical CO ₂ Reduction. ChemPhysChem, 2022, 23, .	1.0	3
2030	Ionic Liquid Stabilizes Olefin Facilitated Transport Membranes Against Reduction. Angewandte Chemie - International Edition, 2022, 61, .	7.2	13
2031	In Situ TEM Study of Structural Changes in Na ⁺ -Alumina Using Electron Beam Irradiation. Materials, 2022, 15, 2663.	1.3	0
2032	Electrochemical CO ₂ reduction to ethylene by ultrathin CuO nanoplate arrays. Nature Communications, 2022, 13, 1877.	5.8	172
2033	An efficient and robust chain-mail electrocatalyst Ni ₂ P@Ag-C ₃ N ₄ for oxygen evolution in alkaline solution. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 646, 128929.	2.3	8
2034	Engineering Bamboo Leaves Into 3D Macroporous Si@C Composites for Stable Lithium-Ion Battery Anodes. Frontiers in Chemistry, 2022, 10, 882681.	1.8	2
2035	Investigation of the role of back contact work function for hole transporting layer free perovskite solar cells applications. Optik, 2022, 256, 168749.	1.4	19
2036	Dual-Anion Doping Enables NiSe ₂ Electrocatalysts to Accelerate Alkaline Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2022, 5, 5036-5043.	2.5	12

#	ARTICLE	IF	CITATIONS
2037	Multi-objective optimizations of solid oxide co-electrolysis with intermittent renewable power supply via multi-physics simulation and deep learning strategy. <i>Energy Conversion and Management</i> , 2022, 258, 115560.	4.4	9
2038	Enhanced Cycling Performance of All-Solid-State Li-S Battery Enabled by PVP-Blended PEO-Based Double-Layer Electrolyte. <i>Chemistry - A European Journal</i> , 2022, 28, .	1.7	9
2039	Amphipathic Molecules Endowing Highly Structure Robust and Fast Kinetic Vanadium-Based Cathode for High-Performance Zinc-Ion Batteries. <i>Small Structures</i> , 2022, 3, .	6.9	19
2040	Ionic Liquid Stabilizes Olefin Facilitated Transport Membranes Against Reduction. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	2
2041	Generalization of solar power yield modeling using knowledge transfer. <i>Expert Systems With Applications</i> , 2022, 201, 116992.	4.4	3
2042	Superassembly of Surface-Enriched Ru Nanoclusters from Trapping-Bonding Strategy for Efficient Hydrogen Evolution. <i>ACS Nano</i> , 2022, 16, 7993-8004.	7.3	54
2043	In-situ synthesis of highly graphitized and Fe/N enriched carbon tubes as catalytic mediums for promoting multi-step conversion of lithium polysulfides. <i>Carbon</i> , 2022, 192, 418-428.	5.4	28
2044	Control of pore environment in highly porous carbon materials for C ₂ H ₆ /C ₂ H ₄ separation with exceptional ethane uptake. <i>Materials Today Chemistry</i> , 2022, 24, 100856.	1.7	2
2045	Comparison of SDS and L-Methionine in promoting CO ₂ hydrate kinetics: Implication for hydrate-based CO ₂ storage. <i>Chemical Engineering Journal</i> , 2022, 438, 135504.	6.6	51
2046	Biopolymer-based hydrogel electrolytes for advanced energy storage/conversion devices: Properties, applications, and perspectives. <i>Energy Storage Materials</i> , 2022, 48, 244-262.	9.5	166
2047	Honeycomb-like puckered PbTe monolayer: A promising n-type thermoelectric material with ultralow lattice thermal conductivity. <i>Journal of Alloys and Compounds</i> , 2022, 907, 164439.	2.8	25
2048	Proton exchange membranes for high temperature proton exchange membrane fuel cells: Challenges and perspectives. <i>Journal of Power Sources</i> , 2022, 533, 231386.	4.0	99
2049	A one-for-all strategy of polyimide coating layer for resolving the comprehensive issues of phosphorus anode. <i>Journal of Energy Chemistry</i> , 2022, 70, 276-282.	7.1	10
2050	Waste chicken bone-derived porous carbon materials as high performance electrode for supercapacitor applications. <i>Journal of Energy Storage</i> , 2022, 51, 104378.	3.9	25
2051	Expanded spinel Zn _x Mn ₂ O ₄ induced by electrochemical activation of glucose-mediated manganese oxide for stable cycle performance in zinc-ion batteries. <i>Journal of Colloid and Interface Science</i> , 2022, 617, 274-283.	5.0	10
2052	Influence of energy management strategies and storage devices on the techno-enviro-economic optimization of hybrid energy systems: A case study in Western Australia. <i>Journal of Energy Storage</i> , 2022, 51, 104239.	3.9	14
2053	Interface engineering of S-doped Co ₂ P@Ni ₂ P core-shell heterostructures for efficient and energy-saving water splitting. <i>Chemical Engineering Journal</i> , 2022, 439, 135743.	6.6	86
2054	Non-flammable fluorobenzene-diluted highly concentrated electrolytes enable high-performance Li-metal and Li-ion batteries. <i>Journal of Colloid and Interface Science</i> , 2022, 619, 399-406.	5.0	12

#	ARTICLE	IF	CITATIONS
2055	Atomic-level correlation between the electrochemical performance of an oxygen-evolving catalyst and the effects of CeO ₂ functionalization. <i>Nano Research</i> , 2022, 15, 2994-3000.	5.8	13
2056	Elucidating the Synergistic Behavior of Orientation-Controlled SnS Nanoplates and Carbon Layers for High-Performance Lithium- and Sodium-Ion Batteries. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	25
2057	A Nitrogen, Sulfur co-Doped Porphyrin-based Covalent Organic Framework as an Efficient Catalyst for Oxygen Reduction. <i>Chemical Research in Chinese Universities</i> , 2022, 38, 167-172.	1.3	11
2058	Ni and CeO ₂ Nanoparticles Anchored on Cicada-Wing-like Nitrogen-Doped Porous Carbon as Bifunctional Catalysts for Water Splitting. <i>ACS Applied Nano Materials</i> , 2022, 5, 1252-1262.	2.4	9
2059	Inorganometallic Photocatalyst for CO ₂ Reduction. <i>Accounts of Chemical Research</i> , 2021, 54, 4530-4544.	7.6	57
2060	CO ₂ reduction with coin catalyst. <i>Nano Research</i> , 2022, 15, 3859-3865.	5.8	9
2061	Red Phosphorus Anchored on Nitrogen-Doped Carbon Bubble-Carbon Nanotube Network for Highly Stable and Fast-Charging Lithium-Ion Batteries. <i>Small</i> , 2022, 18, e2105866.	5.2	16
2062	Metal-Organic Framework Based Hydrogen-Bonding Nanotrap for Efficient Acetylene Storage and Separation. <i>Journal of the American Chemical Society</i> , 2022, 144, 1681-1689.	6.6	172
2063	Corrosion Behaviors of SS310 and IN718 Alloys in Molten Carbonate. <i>Journal of the Electrochemical Society</i> , 2021, 168, 121510.	1.3	5
2064	Involvement in Renewable Energy in the Organization of the IR 4.0 Era Based on the Maturity of Socially Responsible Strategic Partnership with Customers—An Example of the Food Industry. <i>Energies</i> , 2022, 15, 180.	1.6	9
2065	Atomic Bridging Structure of Nickel-Nitrogen-Carbon for Highly Efficient Electrocatalytic Reduction of CO ₂ . <i>Angewandte Chemie - International Edition</i> , 2022, 61, e202113918.	7.2	85
2066	Design of a Hybrid Renewable Energy Operated Commercial Establishment. , 2021, , .		0
2067	Atomic Bridging Structure of Nickel-Nitrogen-Carbon for Highly Efficient Electrocatalytic Reduction of CO ₂ . <i>Angewandte Chemie</i> , 2022, 134, .	1.6	12
2068	Graphene-Based Assemblies for Moist-Electric Generation. <i>Frontiers in Energy Research</i> , 2021, 9, .	1.2	6
2069	Monitoring oxygen production on mass-selected iridium-tantalum oxide electrocatalysts. <i>Nature Energy</i> , 2022, 7, 55-64.	19.8	108
2070	Structures, stabilities, optoelectronic and photocatalytic properties of Janus aluminum mono-chalcogenides Al(Ga, In)STe monolayers. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2022, 142, 115229.	1.3	2
2071	Electrolytes for rechargeable aluminum batteries. <i>Progress in Materials Science</i> , 2022, 128, 100960.	16.0	32
2072	Critical review of life cycle assessment of lithium-ion batteries for electric vehicles: A lifespan perspective. <i>ETransportation</i> , 2022, 12, 100169.	6.8	151

#	ARTICLE	IF	CITATIONS
2073	Ligand centered electrocatalytic efficient CO ₂ reduction reaction at low overpotential on single-atom Ni regulated molecular catalyt. Nano Research, 2022, 15, 5816-5823.	5.8	11
2074	Toward dendrite-free and anti-corrosion Zn anodes by regulating a bismuth-based energizer. EScience, 2022, 2, 509-517.	25.0	124
2075	Recent advances in solid-state supercapacitors: From emerging materials to advanced applications. International Journal of Energy Research, 2022, 46, 10389-10452.	2.2	16
2076	How to Minimise Hydrogen Evolution on Carbon Based Materials?. Journal of the Electrochemical Society, 2022, 169, 054516.	1.3	6
2077	Accordion Frameworks Enable Free-standing, High Si Content Anode for Li-ion Batteries. Energy and Environmental Materials, 2023, 6, .	7.3	2
2078	Melt polymerization synthesis of a class of robust self-shaped olefin-linked COF foams as high-efficiency separators. Science China Chemistry, 2022, 65, 1173-1184.	4.2	35
2079	Modulating the electrocatalytic activity of N-doped carbon frameworks via coupling with dual metals for Zn-air batteries. Nano Convergence, 2022, 9, 17.	6.3	9
2080	Metallic and complex hydride-based electrochemical storage of energy. Progress in Energy, 2022, 4, 032001.	4.6	26
2081	Activation of Main-Group Antimony Atomic Sites for Oxygen Reduction Catalysis. Angewandte Chemie - International Edition, 2022, 61, .	7.2	42
2082	Reversible multielectron redox in NASICON cathode with high energy density for low-temperature sodium-ion batteries. Energy Storage Materials, 2022, 49, 291-298.	9.5	43
2083	Modulating electric field distribution by alkali cations for CO ₂ electroreduction in strongly acidic medium. Nature Catalysis, 2022, 5, 268-276.	16.1	248
2084	Amine-Wetting-Enabled Dendrite-Free Potassium Metal Anode. ACS Nano, 2022, 16, 7291-7300.	7.3	36
2085	Recent progress of quantum dots for energy storage applications. , 2022, 1, 1.		80
2086	Activation of Main-Group Antimony Atomic Sites for Oxygen Reduction Catalysis. Angewandte Chemie, 2022, 134, .	1.6	8
2087	Hierarchical nanoassembly of Ni/MoS ₂ @Ni ₁₂ P ₅ /ZnP ₂ achieved by a plasma assisted phosphorization with highly improved electrocatalytic activity for overall water splitting. Electrochimica Acta, 2022, 419, 140392.	2.6	13
2090	Freestanding Metal-Organic Frameworks and Their Derivatives: An Emerging Platform for Electrochemical Energy Storage and Conversion. Chemical Reviews, 2022, 122, 10087-10125.	23.0	126
2091	Oxygen Reduction Reaction at Single Entity Multiwalled Carbon Nanotubes. Journal of Physical Chemistry Letters, 2022, 13, 3748-3753.	2.1	11
2092	A Microporous Hydrogen-Bonded Organic Framework for Efficient Xe/Kr Separation. ACS Applied Materials & Interfaces, 2022, 14, 19623-19628.	4.0	44

#	ARTICLE	IF	CITATIONS
2093	Porphyrinic Mof Derived Single-Atom Electrocatalyst Enables Methanol Oxidation. SSRN Electronic Journal, 0, , .	0.4	0
2094	Energy harvesting by vitrimer-based moist-electric generators. Journal of Materials Chemistry A, 2022, 10, 11524-11534.	5.2	14
2095	Super high-performance 7-atomic-layer thermoelectric material $ZrGe_2N_4$. Nanoscale, 2022, 14, 8797-8805.	2.8	5
2096	Numerical Study of Condensation Film Formation and Transforming Processes on Porous Surface within Ceramic Membrane. SSRN Electronic Journal, 0, , .	0.4	0
2097	Introduction and overview of carbon nanomaterial-based sensors for sustainable response. , 2022, , 395-416.		1
2098	Catalysis research in rechargeable lithium-sulfur batteries. Chinese Science Bulletin, 2022, 67, 2906-2920.	0.4	2
2099	Formulating energy density for designing practical lithium-sulfur batteries. Nature Energy, 2022, 7, 312-319.	19.8	342
2100	NiCo ₂ O ₄ @PPy concurrently as cathode host material and interlayer for high-rate and long-cycle lithium sulfur batteries. Ceramics International, 2022, 48, 22287-22296.	2.3	16
2101	A significantly improved polymer Ni(OH) ₂ alkaline rechargeable battery using anthraquinone-based conjugated microporous polymer anode. Materials Today Energy, 2022, 27, 101014.	2.5	8
2102	Na _{0.76} V ₆ O ₁₅ @Boron Carbonitride Nanotube Composites as Cathodes for High-Performance Lithium-Ion Capacitors. Crystals, 2022, 12, 597.	1.0	6
2103	Experimental and Theoretical Advances on Single Atom and Atomic Cluster-Decorated Low-Dimensional Platforms towards Superior Electrocatalysts. Advanced Energy Materials, 2022, 12, .	10.2	25
2104	Efficient Modulation of Electrocatalyst Interfaces by Atomic Layer Deposition: Fundamentals to Application. Advanced Energy and Sustainability Research, 2022, 3, .	2.8	5
2105	InP-Quantum Dot Surface-Modified TiO ₂ Catalysts for Sustainable Photochemical Carbon Dioxide Reduction. ACS Sustainable Chemistry and Engineering, 2022, 10, 6033-6044.	3.2	10
2106	Electrocatalytic hydrogen evolution performance of modified Ti ₃ C ₂ O ₂ doped with non-metal elements: A DFT study. ChemPhysMater, 2022, 1, 321-329.	1.4	3
2107	Electrochemical Oxidation of HMF via Hydrogen Atom Transfer and Hydride Transfer on NiOOH and the Impact of NiOOH Composition. ChemSusChem, 2022, 15, .	3.6	24
2108	Highly efficient thermoelectric air conditioner with kilowatt capacity realized by ground source heat-exchanging system. IScience, 2022, 25, 104296.	1.9	6
2109	Crystal structure controlled synthesis of tin oxide nanoparticles for enhanced energy storage activity under neutral electrolyte. Journal of Materials Science: Materials in Electronics, 2022, 33, 13668-13683.	1.1	5
2110	An overview of metal-organic frameworks-derived carbon as anode materials for sodium- and potassium-ion batteries. Materials Today Sustainability, 2022, 18, 100156.	1.9	1

#	ARTICLE	IF	CITATIONS
2111	Emerging Electrochemical Processes to Decarbonize the Chemical Industry. <i>Jacs Au</i> , 2022, 2, 1054-1070.	3.6	59
2112	Mechanistic Study of Controlled Zinc Electrodeposition Behaviors Facilitated by Nanoscale Electrolyte Additives at the Electrode Interface. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 22016-22029.	4.0	5
2113	Efficient Modulation of Electron Pathways by Constructing a MnO ₂ @CeO ₂ Interface toward Advanced Lithium-Oxygen Batteries. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 22104-22113.	4.0	9
2114	One-Step C ₂ H ₄ Purification from Ternary C ₂ H ₆ /C ₂ H ₄ /C ₂ H ₂ Mixtures by a Robust Metal-Organic Framework with Customized Pore Environment. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	57
2115	Kinetic Atomic-Scale Reproducibility of the Oxygen Reduction Reaction Process and a Newly Suggested Strong Correlation Descriptor: A Case Study of BaCo _{0.75} Fe _{0.25} O ₃ . <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 4227-4234.	2.1	3
2116	2D van der Waals Inorganic Oxychloride Proton Conductor. <i>ACS Applied Energy Materials</i> , 2022, 5, 5490-5497.	2.5	0
2117	One-Step C ₂ H ₄ Purification from Ternary C ₂ H ₆ /C ₂ H ₄ /C ₂ H ₂ Mixtures by a Robust Metal-Organic Framework with Customized Pore Environment. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	15
2118	Tuning the Electronic Structure of Layered Co-based Serpentine Nanosheets for Efficient Oxygen Evolution Reaction. <i>Journal Physics D: Applied Physics</i> , 0, , .	1.3	2
2119	Nitrogen-Doped Carbon Felt as an Electrode Material for Vanadium Flow Batteries. <i>ChemElectroChem</i> , 2022, 9, .	1.7	5
2120	N and S co-doped 3D hierarchical porous carbon as high-performance electrode material for supercapacitors. <i>Diamond and Related Materials</i> , 2022, 126, 109080.	1.8	11
2121	Molecular dynamics simulations on AlCl ₃ -LiCl molten salt with deep learning potential. <i>Computational Materials Science</i> , 2022, 210, 111494.	1.4	7
2122	Cerium-incorporated Ni ₂ P nanosheets for enhancing hydrogen production from overall water splitting and urea electrolysis. <i>Journal of Alloys and Compounds</i> , 2022, 912, 165234.	2.8	29
2123	Flexible nanocomposite electrothermal films based on carbon nanotubes and waterborne polyurethane with high reliability, stretchability and low-temperature performance for wind turbine blade deicing. <i>Composites Part A: Applied Science and Manufacturing</i> , 2022, 158, 106979.	3.8	10
2124	Metal- and non-metal-incorporated vitamin B12 on graphene as a bio-derived electrocatalyst for the high-performance oxygen reduction reaction in acidic media. <i>Journal of Alloys and Compounds</i> , 2022, 912, 165118.	2.8	4
2125	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
2126	Morphology and composition dependence of multicomponent Cu-based nanoreactor for tandem electrocatalysis CO ₂ reduction. <i>Applied Catalysis B: Environmental</i> , 2022, 314, 121498.	10.8	39
2127	Facile synthesis of hierarchical MoS ₂ /ZnS @ porous hollow carbon nanofibers for a stable Li metal anode. <i>Journal of Colloid and Interface Science</i> , 2022, 622, 347-356.	5.0	4
2128	Organic Solvothermal Method Promoted Monoclinic Prussian Blue as a Superior Cathode for Na-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2022, 5, 6927-6935.	2.5	15

#	ARTICLE	IF	CITATIONS
2130	Utilization of cationic microporous metal-organic framework for efficient Xe/Kr separation. <i>Nano Research</i> , 2022, 15, 7559-7564.	5.8	25
2131	Efficient water oxidation using an Fe-doped nickel telluride/nickel phosphide electrocatalyst by partial phosphating. <i>Journal of Materials Chemistry A</i> , 2022, 10, 12438-12446.	5.2	35
2132	Energy development: A global perspective and advances in Ghana. <i>AIMS Energy</i> , 2022, 10, 306-339.	1.1	2
2133	Phosphate Group Dependent Metallic Co(OH) ₂ toward Hydrogen Evolution in Alkali for the Industrial Current Density. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 7100-7107.	3.2	7
2134	An in-depth mechanistic insight into the redox reaction and degradation of aqueous Zn-MnO ₂ batteries. <i>Chinese Chemical Letters</i> , 2023, 34, 107525.	4.8	8
2135	Applying Classical, <i>Ab Initio</i> , and Machine-Learning Molecular Dynamics Simulations to the Liquid Electrolyte for Rechargeable Batteries. <i>Chemical Reviews</i> , 2022, 122, 10970-11021.	23.0	138
2136	TaON doped metal-organic frameworks-based composite phase change materials with excellent photo-thermal conversion performance. <i>Solar Energy Materials and Solar Cells</i> , 2022, 243, 111790.	3.0	7
2137	Boosting Li-Ion Diffusion Kinetics of Na ₂ Ti ₆ Mo ₁₃ O ₁₃ via Coherent Dimensional Engineering and Lattice Tailoring: An Alternative High-Rate Anode. <i>ACS Nano</i> , 2022, 16, 9117-9129.	7.3	9
2138	Silver modified copper foam electrodes for enhanced reduction of CO ₂ to C ₂₊ products. <i>Materials Advances</i> , 2022, 3, 4964-4972.	2.6	11
2139	Promoting oxygen reduction <i>via</i> coordination environment modulation through secondary metal-atom incorporation. <i>Journal of Materials Chemistry A</i> , 2022, 10, 19626-19634.	5.2	9
2141	Lamella-like electrode with high Br ₂ -entrapping capability and activity enabled by adsorption and spatial confinement effects for bromine-based flow battery. <i>Science Bulletin</i> , 2022, 67, 1362-1371.	4.3	16
2142	Multiscale coupling of surface temperature with solid diffusion in large lithium-ion pouch cells. , 2022, 1, .		11
2143	Emerging Solid-to-Solid Phase-Change Materials for Thermal Energy Harvesting, Storage, and Utilization. <i>Advanced Materials</i> , 2022, 34, .	11.1	59
2144	Hybridized bimetallic phosphides of Ni-Mo, Co-Mo, and Co-Ni in a single ultrathin-3D-nanosheets for efficient HER and OER in alkaline media. <i>Composites Part B: Engineering</i> , 2022, 239, 109992.	5.9	96
2145	Progresses on carbon dioxide electroreduction into methane. <i>Chinese Journal of Catalysis</i> , 2022, 43, 1634-1641.	6.9	13
2146	Optical and mechanical properties of Zr-oxide doped TiO ₂ /SiO ₂ anti-reflective coatings for PV glass covers. <i>Solar Energy Materials and Solar Cells</i> , 2022, 243, 111784.	3.0	23
2147	A strategy combining the catalytic cracking of C ₆ -C ₈ olefins and methanol to olefins (MTO) reaction through SAPO-34 pre-coking. <i>Catalysis Communications</i> , 2022, 168, 106461.	1.6	2
2148	Long term stability assessment of perovskite solar cell via recycling of metal contacts under ambient conditions. <i>Materials Letters</i> , 2022, 322, 132490.	1.3	4

#	ARTICLE	IF	CITATIONS
2149	Mixed Metal Engineering of V ₂ O ₃ Hollow Nanoprisms Encapsulated in N-Doped Carbon as Anode for High-Performance Lithium-Ion Storage. SSRN Electronic Journal, 0, , .	0.4	0
2150	The Terpenes Limonene, Pinene(s), and Related Compounds: Advances in Their Utilization for Sustainable Polymers and Materials. Advances in Polymer Science, 2022, , 35-64.	0.4	2
2151	Two Types of Nitrogen and Sulfur Co-Doped Carbons Derived from Soybean Sprouts Enabling High Performance Lithium-Sulfur Batteries. SSRN Electronic Journal, 0, , .	0.4	0
2152	Challenges and Modification Strategies of Ni-Rich Cathode Materials Operating at High-Voltage. Nanomaterials, 2022, 12, 1888.	1.9	27
2153	Modulation of Z-Scheme Heterojunction Interface between Ultrathin C ₃ N ₅ Nanosheets and Metal-Organic Framework for Boosting Photocatalysis. ACS Applied Materials & Interfaces, 2022, 14, 26742-26751.	4.0	54
2154	Recent Advances of Carbon Materials in Anodes for Aqueous Zinc Ion Batteries. Chemical Record, 2022, 22, .	2.9	14
2155	A Composite Membrane with High Stability and Low Cost Specifically for Iron-Chromium Flow Battery. Polymers, 2022, 14, 2245.	2.0	7
2156	Topology optimization for the design of porous electrodes. Structural and Multidisciplinary Optimization, 2022, 65, .	1.7	14
2157	Magnetic-Stirring-Assisted Hydrothermal Synthesis of Nanosheet-Assembled V ₆ O ₁₃ Microflowers with Remarkable Electrochemical Performance for Li-Ion Batteries. Energy & Fuels, 2022, 36, 6502-6510.	2.5	8
2158	Quasi-Covalently Coupled Ni-Cu Atomic Pair for Synergistic Electroreduction of CO ₂ . Journal of the American Chemical Society, 2022, 144, 9661-9671.	6.6	134
2159	Interface regulated MnO ₂ /Mn ²⁺ redox chemistry in aqueous Zn ion batteries. Chemical Engineering Journal, 2022, 446, 137205.	6.6	21
2160	Mechanisms for self-templating design of micro/nanostructures toward efficient energy storage. Exploration, 2022, 2, .	5.4	11
2161	Boosting Oxygen Electrocatalysis by Combining Iron Nanoparticles with Single Atoms. Catalysts, 2022, 12, 585.	1.6	3
2162	Fe ₂ Dimers for Non-Polar Diatomic O ₂ Electroreduction. ChemSusChem, 2022, 15, .	3.6	2
2163	Environmental Impact Assessment of Na ₃ V ₂ (PO ₄) ₃ Cathode Production for Sodium-Ion Batteries. Advanced Energy and Sustainability Research, 2022, 3, .	2.8	14
2164	Topology Optimization of 3D Flow Fields for Flow Batteries. Journal of the Electrochemical Society, 2022, 169, 050540.	1.3	12
2165	Halogen Storage Electrode Materials for Rechargeable Batteries. Energy and Environmental Materials, 2022, 5, 1155-1179.	7.3	19
2166	Nanochitin: Chemistry, Structure, Assembly, and Applications. Chemical Reviews, 2022, 122, 11604-11674.	23.0	102

#	ARTICLE	IF	CITATIONS
2167	The surface of metal boride tinted by oxygen evolution reaction for enhanced water electrolysis. <i>Journal of Energy Chemistry</i> , 2022, 72, 509-515.	7.1	19
2168	Numerical Analysis of Degradation and Capacity Loss in Graphite Active Particles of Li-Ion Battery Anodes. <i>Materials</i> , 2022, 15, 3979.	1.3	3
2169	Boosting faradaic efficiency of CO ₂ electroreduction to CO for Fe ^{III} /N ^{III} C single-site catalysts by stabilizing Fe ³⁺ sites via F-doping. <i>Nano Research</i> , 2022, 15, 7896-7902.	5.8	27
2170	Hierarchical microstructure and performance of PVDF/PMMA/SiO ₂ lithium battery separator fabricated by thermally-induced phase separation (TIPS). <i>Journal of Materials Science</i> , 2022, 57, 11274-11288.	1.7	7
2171	Sweetening Lithium Metal Interface by High Surface and Adhesive Energy Coating of Crystalline Î±-D-Glucose Film to Inhibit Dendrite Growth. <i>Small</i> , 2022, 18, .	5.2	5
2172	Shape- and Size-Dependent Kinetic Ethylene Sieving from a Ternary Mixture by a Trap and Flow Channel Crystal. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	51
2173	Electrocatalytic CO ₂ and HCOOH interconversion on Pd-based catalysts. , 2022, 1, 100007.		6
2174	Simultaneously Enhancing Catalytic Performance and Increasing Density of Bifunctional Cu ₃ Active Sites in Dopant-Free 2D C ₃ N ₃ Cu for Oxygen Reduction/Evolution Reactions. <i>ACS Omega</i> , 2022, 7, 19794-19803.	1.6	4
2175	Robust interfacial engineering construction to alleviate polysulfide shuttling in metal sulfide electrodes for achieving Fast-charge High-capacity lithium storages. <i>Chemical Engineering Journal</i> , 2022, 446, 137291.	6.6	13
2176	UV-crosslinkable anthracene-based ionomer derived gas "Expressway" for anion exchange membrane fuel cells. <i>Journal of Materials Chemistry A</i> , 2022, 10, 13355-13367.	5.2	15
2177	Engineering Strong Electronegative Nitrogen-Rich Porous Organic Polymer for Practical Durable Lithium-Sulfur Battery. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
2178	Freestanding 2D NiFe Metal-Organic Framework Nanosheets: Facilitating Proton Transfer via Organic Ligands for Efficient Oxygen Evolution Reaction. <i>Small</i> , 2022, 18, .	5.2	23
2179	Iron-Phosphate-Based Cathode Materials for Cost-Effective Sodium-Ion Batteries: Development, Challenges, and Prospects. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	16
2180	Phase Prediction Study of High-Entropy Energy Alloy Generation Based on Machine Learning. <i>Computational Intelligence and Neuroscience</i> , 2022, 2022, 1-9.	1.1	2
2181	Nitrogen-deficient g-C ₃ N ₄ compounded with NiCo ₂ S ₄ (NiCo ₂ S ₄ @ND-CN) as a bifunctional electrocatalyst for boosting the activity of Li-O ₂ batteries. <i>Catalysis Today</i> , 2023, 409, 23-30.	2.2	9
2182	Electrochemical Reactors for Continuous Decentralized H ₂ O ₂ Production. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	31
2183	Electrochemical Reactors for Continuous Decentralized H ₂ O ₂ Production. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	12
2184	Elevating the Photothermal Conversion Efficiency of Phase-Change Materials Simultaneously toward Solar Energy Storage, Self-Healing, and Recyclability. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 29213-29222.	4.0	22

#	ARTICLE	IF	CITATIONS
2185	Direct synthesis of graphene by blowing CO ₂ bubble in Mg melt for the seawater/oil pollution. Journal of Alloys and Compounds, 2022, 921, 165938.	2.8	2
2186	Direct fabrication of graphitic carbon nitride-wrapped titanate nanotube arrays toward photoelectrochemical water oxidation in neutral medium. Korean Journal of Chemical Engineering, 2022, 39, 2523-2531.	1.2	5
2187	Self-activatable carbon nanotube@ruthenium-catechol coordination complex for hydrogen evolution reaction. Nanotechnology, 0, , .	1.3	0
2188	Recent Progress on Titanium Sesquioxide: Fabrication, Properties, and Applications. Advanced Functional Materials, 2022, 32, .	7.8	14
2189	Flow cell for operando X-ray photon-in-photon-out studies on photo-electrochemical thin film devices. Open Research Europe, 0, 2, 74.	2.0	0
2190	Materials Science Research by Ambient Pressure X-ray Photoelectron Spectroscopy Systems at Synchrotron Radiation Facilities in Japan: Applications in Energy, Catalysis, and Sensors. Synchrotron Radiation News, 2022, 35, 19-25.	0.2	1
2191	Next-Generation Energy Harvesting and Storage Technologies for Robots Across All Scales. Advanced Intelligent Systems, 2023, 5, .	3.3	10
2192	Hybrid Metal-Organic Frameworks Encapsulated Hybrid Ni-Doped CdS Nanoparticles for Visible-Light-Driven CO ₂ Reduction. ACS Applied Materials & Interfaces, 2022, 14, 28123-28132.	4.0	11
2193	Ferroelectric BaTiO ₃ Based Multi-Effects Coupled Materials and Devices. Advanced Electronic Materials, 2022, 8, .	2.6	10
2194	A review of recent advances in engineering bacteria for enhanced CO ₂ capture and utilization. International Journal of Environmental Science and Technology, 2023, 20, 4635-4648.	1.8	14
2195	Electrochemical Stability and Reversibility of Aqueous Polysulfide Electrodes Cycled Beyond the Solubility Limit. Journal of the Electrochemical Society, 2022, 169, 060524.	1.3	1
2196	Solid-state electrolytes for solid-state lithium-sulfur batteries: Comparisons, advances and prospects. Journal of Energy Chemistry, 2022, 73, 370-386.	7.1	32
2197	In-situ structural evolution of Bi ₂ O ₃ nanoparticle catalysts for CO ₂ electroreduction. International Journal of Extreme Manufacturing, 2022, 4, 035002.	6.3	12
2198	Serpentine Ni ₃ Ge ₂ O ₅ (OH) ₄ Nanosheets Grow on Porous Mo ₂ N for an Efficient Oxygen Evolution Reaction. Energy & Fuels, 2022, 36, 11467-11476.	2.5	4
2199	A Nafion protective layer for stabilizing lithium metal anodes in working lithium-sulfur batteries. , 2022, 1, .		30
2200	Efficient, Light-Driven Reduction of CO ₂ to CO by a Carbon Monoxide Dehydrogenase-CdSe/CdS Nanorod Photosystem. Journal of Physical Chemistry Letters, 2022, 13, 5553-5556.	2.1	4
2201	Research progress on recovering the components of spent Li-ion batteries. New Carbon Materials, 2022, 37, 435-460.	2.9	25
2202	Recent progress of artificial interfacial layers in aqueous Zn metal batteries. EnergyChem, 2022, 4, 100076.	10.1	59

#	ARTICLE	IF	CITATIONS
2203	Recent development and prospective of carbonaceous material, conducting polymer and their composite electrode materials for supercapacitor "A review. Journal of Energy Storage, 2022, 52, 104937.	3.9	61
2204	Boosting electrochemical kinetics by loading CoB on vermiculite for supercapacitor application. Journal of Electroanalytical Chemistry, 2022, 918, 116523.	1.9	7
2205	One stone, two birds: Multifunctional hierarchical iron sulfide nanosheet arrays enabling self-powered solar thermoelectric water electrolysis. Renewable Energy, 2022, 195, 230-237.	4.3	4
2206	Photocapacitor integrating perovskite solar cell and symmetrical supercapacitor generating a conversion storage efficiency over 20 %. Nano Energy, 2022, 100, 107501.	8.2	14
2207	Dual carbon regulated yolk-shell ZnSe microsphere anode materials towards high performance potassium ion batteries. Electrochimica Acta, 2022, 425, 140717.	2.6	3
2208	Robust Ru-N metal-support interaction to promote self-powered H ₂ production assisted by hydrazine oxidation. Nano Energy, 2022, 100, 107467.	8.2	35
2209	Direct utilization of radioactive irradiated graphite as a high-energy supercapacitor a promising electrode material. Fuel, 2022, 325, 124843.	3.4	14
2210	Steering interfacial charge kinetics: Synergizing cocatalyst roles of Ti ₃ C ₂ M (MXene) and NCDs for superior photocatalytic performance over TiO ₂ . Applied Surface Science, 2022, 599, 154001.	3.1	17
2211	Unravelling the thermoelectric properties and suppression of bipolar effect under strain engineering for the asymmetric Janus SnSSe and PbSSe monolayers. Applied Surface Science, 2022, 599, 153962.	3.1	25
2212	Unveiling the nanoalloying modulation on hydrogen evolution activity of ruthenium-based electrocatalysts encapsulated by B/N co-doped graphitic nanotubes. Applied Catalysis B: Environmental, 2022, 316, 121626.	10.8	13
2213	Constructing Three-Dimensional (3d) Nanoflower-Like Cu ₂ Xse-Mose ₂ Heterojunctions as an Excellent Long-Life and High-Rate Anode for Half/Full Na-Ion Batteries. SSRN Electronic Journal, 0, , .	0.4	0
2214	Conversion pathways for biomass-derived aviation fuels. , 2022, , 1-25.		0
2215	Screening binary alloys for electrochemical CO ₂ reduction towards multi-carbon products. Journal of Materials Chemistry A, 2022, 10, 16171-16181.	5.2	11
2216	Solid-State Nanocomposite Ionogel Electrolyte with In-Situ Formed Ionic Channels for Uniform Ion-Flux and Suppressing Dendrite Formation in Lithium Metal Batteries. SSRN Electronic Journal, 0, , .	0.4	0
2217	Feasibility Assessment of Bifacial Rooftop Photovoltaic Systems in the State of Gujarat in India. Frontiers in Energy Research, 0, 10, .	1.2	5
2218	MXene-Integrated Metal Oxide Transparent Photovoltaics and Self-Powered Photodetectors. ACS Applied Energy Materials, 2022, 5, 7134-7143.	2.5	27
2219	A facile way to optimize thermoelectric properties of SnSe thin films via sonication-assisted liquid-phase exfoliation. Journal of Materials Science: Materials in Electronics, 2022, 33, 15385-15392.	1.1	0
2220	Performance Metrics to Compare Various CO ₂ Reduction Processes. Current Alternative Energy, 2022, 5, .	1.5	0

#	ARTICLE	IF	CITATIONS
2221	Selective CO ₂ Electromethanation on Surface-Modified Cu Catalyst by Local Microenvironment Modulation. ACS Catalysis, 2022, 12, 8252-8258.	5.5	27
2222	Electricity generation from <i>Geobacter sulfurreducens</i> biofilm and its sensing application. Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica, 2022, 52, 1669-1678.	0.3	1
2223	Rational Design of Wood-Inspired Structured Thick Electrode for Electrochemical Energy Storage. Advanced Functional Materials, 2022, 32, .	7.8	33
2224	Powering the World with Solar Fuels from Photoelectrochemical CO ₂ Reduction: Basic Principles and Recent Advances. Advanced Energy Materials, 2022, 12, .	10.2	44
2225	Utilization of Cu-Foil Waste as a High-Capacity Anode Material for High Performance LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ @Graphite Batteries. Defect and Diffusion Forum, 0, 417, 207-217.	0	0
2226	Pore-Window Partitions in Metal-Organic Frameworks for Highly Efficient Reversed Ethylene/Ethane Separations. Inorganic Chemistry, 2022, 61, 10493-10501.	1.9	5
2227	Theory-Driven Design of a Cationic Accelerator for High-Performance Electrolytic MnO ₂ -Zn Batteries. Advanced Materials, 2022, 34, .	11.1	53
2228	Hydrothermal Synthesis of Binder-Free Metallic NiCo ₂ O ₄ Nano-Needles Supported on Carbon Cloth as an Advanced Electrode for Supercapacitor Applications. Materials, 2022, 15, 4499.	1.3	9
2229	Mechanisms of the Oxygen Evolution Reaction on NiFe ₂ O ₄ and CoFe ₂ O ₄ Inverse-Spinel Oxides. ACS Catalysis, 2022, 12, 9058-9073.	5.5	40
2230	Vanadate Encapsulated Polyoxoborate Framework with [V ₁₂ B ₁₈] Clusters: An Efficient Bifunctional Electrocatalyst for Oxygen and Hydrogen Evolution Reactions. Crystal Growth and Design, 2022, 22, 4666-4672.	1.4	11
2231	Electrical resistance of the current collector controls lithium morphology. Nature Communications, 2022, 13, .	5.8	20
2232	Anchoring NiO Nanosheet on the Surface of CNT to Enhance the Performance of a Li-O ₂ Battery. Nanomaterials, 2022, 12, 2386.	1.9	2
2233	Electrochemical CO ₂ reduction to C ₂₊ products using Cu-based electrocatalysts: A review. , 2022, 1, e9120021.		112
2234	Integrated Photovoltaic Charging and Energy Storage Systems: Mechanism, Optimization, and Future. Small, 2022, 18, .	5.2	16
2235	Nitrogen-Doped Cobalt-Molybdenum Sulfide Hybrid Heterojunctions as Active Electrocatalysts for Producing Hydrogen in Alkaline Media. Energy & Fuels, 2022, 36, 11591-11600.	2.5	3
2236	Synergetic piezo-photocatalytic effect in SbSI for highly efficient degradation of methyl orange. Ceramics International, 2022, 48, 31818-31826.	2.3	13
2237	Promoting Reversible Dissolution/Deposition of MnO ₂ for High-Energy-Density Zinc Batteries via Enhancing Cut-Off Voltage. ChemSusChem, 2022, 15, .	3.6	41
2238	Nitrogen/Phosphorus/Boron-Codoped Hollow Carbon Spheres as Highly Efficient Electrocatalysts for Zn-Air Batteries. Industrial & Engineering Chemistry Research, 2022, 61, 10969-10981.	1.8	6

#	ARTICLE	IF	CITATIONS
2239	A review of humidity gradient-based power generator: Devices, materials and mechanisms. <i>Nano Energy</i> , 2022, 101, 107591.	8.2	22
2240	Heterogeneity and Nanostructure of Superconcentrated LiTFSI/EmimTFSI Hybrid Aqueous Electrolytes: Beyond the 21 m Limit of Water-in-Salt Electrolyte. <i>Journal of Physical Chemistry B</i> , 2022, 126, 5291-5304.	1.2	8
2241	Introducing a Synergistic Ligand Containing an Exotic Metal in Metal-Organic Framework Nanoarrays Enabling Superior Electrocatalytic Water Oxidation Performance. <i>Inorganic Chemistry</i> , 0, , .	1.9	2
2242	Toward Automated Computational Discovery of Battery Materials. <i>Advanced Materials Technologies</i> , 2023, 8, .	3.0	5
2243	Advanced Materials for Electrochemical Energy Conversion and Storage. <i>Coatings</i> , 2022, 12, 982.	1.2	0
2244	Amperometric Hydrogen Sensor Based on Solid Polymer Electrolyte and Titanium Foam Electrode. <i>ACS Omega</i> , 2022, 7, 24895-24902.	1.6	2
2245	Electrochemical reduction of CO ₂ on single-atom catalysts anchored on N-terminated TiN (1 1 1): Low overpotential and high selectivity. <i>Applied Surface Science</i> , 2022, 602, 154239.	3.1	5
2246	Phosphorus-doping promotes the electrochemical etching of metals to nanoporous electrodes for efficient and durable overall water splitting. <i>Journal of Power Sources</i> , 2022, 542, 231774.	4.0	3
2247	Highly ordered asymmetric cellulose-based honeycomb membrane for moisture-electricity generation and humidity sensing. <i>Carbohydrate Polymers</i> , 2022, 294, 119809.	5.1	5
2248	Design of ultrasensitive gas sensor based on self-assembled Pd-SnO ₂ /rGO porous ternary nanocomposites for ppb-level hydrogen. <i>Sensors and Actuators B: Chemical</i> , 2022, 369, 132280.	4.0	25
2249	Edge electron-rich carbon nitride via π -acceptor frame with high-efficient charge separation for photocatalytic hydrogen evolution and environmental remediation. <i>Journal of Colloid and Interface Science</i> , 2022, 626, 889-898.	5.0	7
2250	Aluminothermic reduction synthesis of Si/C composite nanosheets from waste vermiculite as high-performance anode materials for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2022, 922, 166134.	2.8	39
2251	Porphyritic MOF derived Single-atom electrocatalyst enables methanol oxidation. <i>Chemical Engineering Journal</i> , 2022, 449, 137888.	6.6	13
2252	Poly(phthalazinone ether ketone) π -Poly(3,4-ethylenedioxythiophene) fiber for thermoelectric and hydroelectric energy harvesting. <i>Chemical Engineering Journal</i> , 2022, 450, 138093.	6.6	4
2253	Mixed metal engineering of V ₂ O ₃ hollow nanoprisms encapsulated in N-doped carbon as anode for high-performance lithium-ion storage. <i>Journal of Alloys and Compounds</i> , 2022, 924, 166451.	2.8	1
2254	Designing Cu-Based Tandem Catalysts for CO ₂ Electroreduction Based on Mass Transport of CO Intermediate. <i>ACS Catalysis</i> , 2022, 12, 9735-9752.	5.5	51
2255	Universal Synthesis of Transition-Metal Phosphide/Carbon Hybrid Nanosheets for Stable Sodium Ion Storage and Full-Cell Application. <i>ChemElectroChem</i> , 2022, 9, .	1.7	3
2256	Two-Dimensional Pentagraphyne as a High-Performance Anode Material for Li/Na-Ion Rechargeable Batteries. <i>ACS Applied Nano Materials</i> , 2022, 5, 10572-10582.	2.4	27

#	ARTICLE	IF	CITATIONS
2257	Design and Synthesis of Ag-based Catalysts for Electrochemical CO ₂ Reduction: Advances and Perspectives. <i>Chemistry - an Asian Journal</i> , 2022, 17, .	1.7	4
2258	Low-Dimensional Nanomaterial Systems Formed by IVA Group Elements Allow Energy Conversion Materials to Flourish. <i>Nanomaterials</i> , 2022, 12, 2521.	1.9	1
2259	Coupling ceria with dual-phased molybdenum carbides for efficient and stable hydrogen evolution electrocatalysis at large-current-density in freshwater and seawater. <i>Applied Catalysis B: Environmental</i> , 2022, 317, 121774.	10.8	21
2260	Synthesis of P-doped CdS nanorods for efficient blue LED light induced photocatalytic hydrogen evolution. <i>Sustainable Energy and Fuels</i> , 0, , .	2.5	3
2261	Catalytic activity trends of pyrite transition metal dichalcogenides for oxygen reduction and evolution. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 19911-19918.	1.3	3
2262	Breakdown Properties of Solid-Solid Interface between Epoxy Resin and Silicone Rubber under Vertical Stress. , 2022, , .		0
2263	Effect of Pulse Polarity and Dielectric Configuration on the Spatio-Temporal Evolution Characteristics of Methane Pulsed Dielectric Barrier Discharge Plasma. , 2022, , .		0
2264	Transition Metal (Co, Ni, Fe, Cu) Single-Atom Catalysts Anchored on 3D Nitrogen-Doped Porous Carbon Nanosheets as Efficient Oxygen Reduction Electrocatalysts for Zn-Air Battery. <i>Small</i> , 2022, 18, .	5.2	49
2265	Constructing a Micrometer-Sized Structure through an Initial Electrochemical Process for Ultrahigh-Performance Li ⁺ Storage. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 35522-35533.	4.0	4
2266	Electrostatic Interaction Tailored Anion-Rich Solvation Sheath Stabilizing High-Voltage Lithium Metal Batteries. <i>Nano-Micro Letters</i> , 2022, 14, .	14.4	16
2267	Lightest Metal Leads to Big Change: Lithium-Mediated Metal Oxides for Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	13
2268	Ultrahigh Lithium Storage Capacity of Al ₂ C Monolayer in a Restricted Multilayered Growth Mechanism. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 35663-35672.	4.0	4
2269	Ultrahigh-Content Co ₂ P Cluster as a Dual-Atom-Site Electrocatalyst for Accelerating Polysulfides Conversion in Li-S Batteries. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	37
2270	Synergistically Coupling of Manganese-Doped CoP Nanowires Arrays with Highly Dispersed Ni(PO ₃) ₂ Nanoclusters toward Efficient Overall Water Splitting. <i>Inorganic Chemistry</i> , 2022, 61, 14201-14210.	1.9	6
2271	A Metal-Organic Framework with Nonpolar Pore Surfaces for the One-Step Acquisition of C ₂ H ₄ from a C ₂ H ₄ and C ₂ H ₆ Mixture. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	41
2272	Outer-Sphere Electron-Transfer Process of Molecular Donor-Acceptor Organic Dye in the Dye-Sensitized Photocatalytic System for CO ₂ Reduction. <i>ACS Applied Energy Materials</i> , 2022, 5, 10526-10541.	2.5	5
2273	CdS Decorated on Hierarchically Structured Single Crystal TiO ₂ Nanosheets for Enhanced Photoelectrochemical H ₂ Generation. <i>ChemElectroChem</i> , 2022, 9, .	1.7	5
2274	Interpretable learning of voltage for electrode design of multivalent metal-ion batteries. <i>Npj Computational Materials</i> , 2022, 8, .	3.5	10

#	ARTICLE	IF	CITATIONS
2275	Recent Progress on Graphene-Based Nanocomposites for Electrochemical Sodium-Ion Storage. <i>Nanomaterials</i> , 2022, 12, 2837.	1.9	4
2276	Recent progress on the long-term stability of hydrogen evolution reaction electrocatalysts. <i>InformaÅnA-MateriÅjly</i> , 2022, 4, .	8.5	64
2277	Self-supported Co, P-doped MnCO ₃ pyramid as an efficient Electrocatalyst for hydrogen evolution reaction. <i>International Journal of Energy Research</i> , 0, , .	2.2	0
2278	Recent advances and perspectives on prelithiation strategies for lithium-ion capacitors. <i>Rare Metals</i> , 2022, 41, 3322-3335.	3.6	21
2279	Surface Boron Modulation on Cobalt Oxide Nanocrystals for Electrochemical Oxygen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	26
2280	Dithiophosphate Anchored Heterometallic (Ag(I)/Fe(II)) Molecular Catalysts for Electrochemical Hydrogen Evolution Reaction. <i>Inorganic Chemistry</i> , 2022, 61, 13342-13354.	1.9	3
2281	Calcium-organic frameworks cathode for high-stable aqueous Zn/organic batteries. <i>Chinese Chemical Letters</i> , 2023, 34, 107760.	4.8	12
2282	Metal-Organic Framework with High Densities of Open Metal Sites for Efficient Separation of Propylene from Propane. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2022, 648, .	0.6	7
2283	Phototriggered Desorption of Hydrogen, Ethylene, and Carbon Monoxide from a Cu(I)-Modified Covalent Organic Framework. <i>Journal of Physical Chemistry C</i> , 2022, 126, 14801-14812.	1.5	3
2284	Photo-assisted charging of carbon fiber paper-supported CeO ₂ /MnO ₂ heterojunction and its long-lasting capacitance enhancement in dark. <i>Journal of Advanced Ceramics</i> , 2022, 11, 1735-1750.	8.9	9
2285	A Metal-Organic Framework with Nonpolar Pore Surfaces for the One-Step Acquisition of C ₂ H ₄ from a C ₂ H ₄ and C ₂ H ₆ Mixture. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	5
2286	In Situ Dynamic Construction of a Copper Tin Sulfide Catalyst for High-Performance Electrochemical CO ₂ Conversion to Formate. <i>ACS Catalysis</i> , 2022, 12, 9922-9932.	5.5	45
2287	Natural high-porous diatomaceous-earth based self-floating aerogel for efficient solar steam power generation. <i>Green Energy and Environment</i> , 2024, 9, 378-389.	4.7	9
2288	In Situ Engineering of the Cu ⁺ /Cu ⁰ Interface to Boost C ₂₊ Selectivity in CO ₂ Electroreduction. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 36527-36535.	4.0	13
2289	Efficient Electrocatalytic Reduction of CO ₂ to Ethane over Nitrogen-Doped Fe ₂ O ₃ . <i>Journal of the American Chemical Society</i> , 2022, 144, 14769-14777.	6.6	41
2290	ZnS-assisted evolution of N,S-doped hierarchical porous carbon nanofiber membrane with highly exposed Fe-N ₄ /C sites for rechargeable Zn-air battery. <i>Journal of Energy Chemistry</i> , 2022, 75, 430-440.	7.1	14
2291	Surface boron modulation on cobalt oxide nanocrystals for electrochemical oxygen evolution reaction. <i>Angewandte Chemie</i> , 0, , .	1.6	0
2292	Binary heteroatom doping enhanced the sodium storage performance of porous carbon nanofibers with fast kinetics. <i>Ceramics International</i> , 2022, 48, 36264-36272.	2.3	2

#	ARTICLE	IF	CITATIONS
2293	Hydroxyl-Functionalized Covalent Organic Frameworks as High-Performance Supercapacitors. <i>Polymers</i> , 2022, 14, 3428.	2.0	12
2294	National Policies, Recent Research Hotspots, and Application of Sustainable Energy: Case of China, USA, and European Countries. <i>Sustainability</i> , 2022, 14, 10014.	1.6	2
2295	Sulfur-Decorated Ni ²⁺ /N ³⁺ C Catalyst for Electrocatalytic CO ₂ Reduction with Near 100% CO Selectivity. <i>ChemSusChem</i> , 2022, 15, .	3.6	14
2296	Bilayer Wood Membrane with Aligned Ion Nanochannels for Spontaneous Moist-Electric Generation. <i>Nano Letters</i> , 2022, 22, 6476-6483.	4.5	23
2297	Human- and machine-centred designs of molecules and materials for sustainability and decarbonization. <i>Nature Reviews Materials</i> , 2022, 7, 991-1009.	23.3	30
2298	Simultaneous solar water desalination and energy generation by high efficient graphene oxide-melanin photothermal membrane. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 108424.	3.3	8
2299	Highly stable lithium batteries enabled by composite solid electrolyte with synergistically enhanced in-built ion-conductive framework. <i>Journal of Power Sources</i> , 2022, 545, 231928.	4.0	3
2300	Review on the synergistic effect between metal-organic frameworks and gas hydrates for CH ₄ storage and CO ₂ separation applications. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 167, 112807.	8.2	36
2301	Recent developments of composite separators based on high-performance fibers for lithium batteries. <i>Composites Part A: Applied Science and Manufacturing</i> , 2022, 162, 107132.	3.8	12
2302	Interface modulation induced by the 1T Co-WS ₂ shell nanosheet layer at the metallic NiTe ₂ /Ni core-nanoskeleton: Glib electrode-kinetics for HER, OER, and ORR. <i>Nano Energy</i> , 2022, 102, 107712.	8.2	36
2303	Functional complexed zincate ions enable dendrite-free long cycle alkaline zinc-based flow batteries. <i>Nano Energy</i> , 2022, 102, 107697.	8.2	16
2304	Molecular-level solvation and selectivity behavior of Na ⁺ , K ⁺ , and Li ⁺ within glycerol-derived solvents. <i>Chemical Engineering Science</i> , 2022, 262, 117992.	1.9	1
2305	Towards efficient and effective renewable energy prediction via deep learning. <i>Energy Reports</i> , 2022, 8, 10230-10243.	2.5	26
2306	Surface reconstruction and sulfur vacancies engineering in pentlandite for improving hydrogen evolution reaction. <i>Applied Surface Science</i> , 2022, 604, 154470.	3.1	6
2307	Polypyrrole-coated Boron-doped Nickel-Cobalt sulfide on electrospinning carbon nanofibers for high performance asymmetric supercapacitors. <i>Journal of Colloid and Interface Science</i> , 2022, 628, 371-383.	5.0	16
2308	Structure optimization of ZIF-12-derived Co-N-C for efficient oxygen reduction and oxygen evolution. <i>Fuel</i> , 2022, 330, 125516.	3.4	6
2309	Numerical study of condensation film formation and transforming processes on porous surface within ceramic membrane. <i>International Journal of Thermal Sciences</i> , 2023, 183, 107850.	2.6	1
2310	Nanocrystalline WSe ₂ excels at high-performance anode for Na storage via a facile one-pot hydrothermal method. <i>Tungsten</i> , 2024, 6, 248-258.	2.0	3

#	ARTICLE	IF	CITATIONS
2329	Nickel-vanadium-cobalt ternary layered double hydroxide for efficient electrocatalytic upgrading of 5-hydroxymethylfurfural to 2,5-furancarboxylic acid at low potential. <i>Journal of Materials Chemistry A</i> , 2022, 10, 21135-21141.	5.2	9
2330	Elucidating the regulation mechanism of the photoelectrochemical effect of photocathodes on battery discharge voltages: a case study of aqueous zinc-iodine batteries. <i>Nanoscale</i> , 2022, 14, 15269-15274.	2.8	2
2331	Solar Pv Cleaning Techniques Contribute to Sustainable Development Goals (Sdgs) Using Multi-Criteria Decision-Making (Mcdm): Assessment and Review. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
2332	Graph-Based Algorithm Unfolding for Energy-Aware Power Allocation in Wireless Networks. <i>IEEE Transactions on Wireless Communications</i> , 2023, 22, 1359-1373.	6.1	5
2333	The origin of high Na ⁺ ion conductivity in Na _{1+x} Zr ₂ Si _x P ₃ O ₁₂ NASICON materials. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 22154-22167.	1.3	6
2334	Ultralow thermal conductivity and anisotropic thermoelectric performance in layered materials LaMOCh (M = Cu, Ag; Ch = S, Se). <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 21261-21269.	1.3	6
2335	Strain-mediated oxygen evolution reaction on magnetic two-dimensional monolayers. <i>Nanoscale Horizons</i> , 2022, 7, 1404-1410.	4.1	6
2336	Photocapacitor integrating voltage-adjustable hybrid supercapacitor and silicon solar cell generating a Joule efficiency of 86%. <i>Energy and Environmental Science</i> , 2022, 15, 4247-4258.	15.6	8
2337	A phenyl Sâ€Te bond with unique redox activity in dilute electrolyte of a lithium battery. <i>Chemical Communications</i> , 2022, 58, 10993-10996.	2.2	7
2338	First-principles study of two-dimensional C-silicyne nanosheet as a promising anode material for rechargeable Li-ion batteries. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 20274-20281.	1.3	4
2339	Praseodymium Oxide Improving Ag Loaded Calcium Titanate Photocatalyst for Carbon Dioxide Reduction by Water. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
2340	Emerging green technologies for recovery and reuse of spent lithium-ion batteries â€ a review. <i>Journal of Materials Chemistry A</i> , 2022, 10, 17053-17076.	5.2	28
2341	Carbon-Based Nanomaterials for Metal-Air Batteries. <i>Springer Series in Materials Science</i> , 2022, , 249-270.	0.4	0
2342	In-situ oriented oxygen-defect-rich Mn N O via nitridation and electrochemical oxidation based on industrial-scale Mn ₂ O ₃ to achieve high-performance aqueous zinc ion battery. <i>Journal of Energy Chemistry</i> , 2023, 76, 11-18.	7.1	22
2343	Direct Z-scheme ZnIn ₂ S ₄ spheres and CeO ₂ nanorods decorated on reduced-graphene-oxide heterojunction photocatalysts for hydrogen evolution and photocatalytic degradation. <i>Applied Surface Science</i> , 2023, 607, 155087.	3.1	20
2344	Cloud Edge Architecture Leveraging Artificial Intelligence and Analytics for Microgrid Energy Optimisation and Net Zero Carbon Emissions. , 2022, , .		6
2345	A Mini Review on Ni-rich Layered Oxide Cathode Materials. , 2022, 2, 197-202.		1
2346	Stabilizing the Unstable: Chromium Coating on NiMo Electrode for Enhanced Stability in Intermittent Water Electrolysis. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 40822-40833.	4.0	8

#	ARTICLE	IF	CITATIONS
2347	N-Doped CrS ₂ Monolayer as a Highly-Efficient Catalyst for Oxygen Reduction Reaction: A Computational Study. <i>Nanomaterials</i> , 2022, 12, 3012.	1.9	1
2348	Self-Powered and Fast Response MoO ₃ /n-Si Photodetectors on Flexible Silicon Substrates with Light-Trapping Structures. <i>ACS Applied Electronic Materials</i> , 2022, 4, 4641-4652.	2.0	10
2349	Controlled growth of a high selectivity interface for seawater electrolysis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	94
2350	Status and perspectives of key materials for PEM electrolyzer. , 2022, 1, e9120032.		182
2351	Topological Structure-Modulated Collagen Carbon as Two-Phase Energy Storage Configuration toward Ultrahigh Power and Energy Density. <i>Energy and Environmental Materials</i> , 0, , .	7.3	4
2352	Observation of Anomalously High Seebeck Coefficients in the Family of Zintl Phase Semiconductors Ca ₁₀ RECdSb ₉ (RE = Rare-Earth Metal). <i>Chemistry of Materials</i> , 2022, 34, 8808-8814.	3.2	4
2353	Performance of a Solid Cell with a Solid-Liquid Electrolyte Prepared by a Microwave-Assisted Sintering Technique from MCM-41 and Ionic Liquids. <i>ChemistrySelect</i> , 2022, 7, .	0.7	1
2354	High dimensionless figure of merit of the ZrI ₂ monolayer identified based on intrinsic carrier concentration and bipolar effect. <i>Applied Physics Letters</i> , 2022, 121, .	1.5	6
2355	Recent progress in electrochemical reduction of carbon monoxide toward multi-carbon products. <i>Materials Today</i> , 2022, 59, 182-199.	8.3	22
2356	MXenes serving aqueous supercapacitors: Preparation, energy storage mechanism and electrochemical performance enhancement. <i>Sustainable Materials and Technologies</i> , 2022, 33, e00490.	1.7	7
2357	Recent Advances in Non-Precious Metal-Nitrogen-Carbon Single-Site Catalysts for CO ₂ Electroreduction Reaction to CO. <i>Electrochemical Energy Reviews</i> , 2022, 5, .	13.1	18
2358	Synthesis of octahedral shaped Mn ₃ O ₄ and its reduced graphene oxide composite for electrocatalytic oxygen evolution reaction. <i>Catalysis Today</i> , 2023, 423, 113897.	2.2	4
2360	High-Entropy Sn _{0.8} (Co _{0.2} Mg _{0.2} Mn _{0.2} Ni _{0.2} Zn _{0.2}) _{2.2} O ₁₀ Conversion-Alloying Anode Material for Li-Ion Cells: Altered Lithium Storage Mechanism, Activation of Mg, and Origins of the Improved Cycling Stability. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 42057-42070.	4.0	10
2361	Adsorption Energy in Oxygen Electrocatalysis. <i>Chemical Reviews</i> , 2022, 122, 17028-17072.	23.0	45
2362	Dense inorganic electrolyte particles as a lever to promote composite electrolyte conductivity. <i>Nature Materials</i> , 2022, 21, 1412-1418.	13.3	30
2363	Recent Advances in Engineered Ru-Based Electrocatalysts for the Hydrogen/Oxygen Conversion Reactions. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	58
2364	Phase engineering of metal nanocatalysts for electrochemical CO ₂ reduction. <i>EScience</i> , 2022, 2, 467-485.	25.0	44
2365	Facile Vacuum Annealing of TiO ₂ with Ethanol-Induced Enhancement of Its Photocatalytic Performance under Visible Light. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 14455-14461.	1.8	2

#	ARTICLE	IF	CITATIONS
2366	Machine Learning for Harnessing Thermal Energy: From Materials Discovery to System Optimization. ACS Energy Letters, 2022, 7, 3204-3226.	8.8	11
2367	Graphene oxide sheets wrapped with poly (aniline-co-melamine) nanofibers furnished with SnO ₂ nanoparticles for electrochemical energy storage. Journal of Materials Research, 2022, 37, 3505-3521.	1.2	4
2368	Ultrathin ZIF-8 Membrane through Inhibited Ostwald Ripening for High-Flux C ₃ H ₆ /C ₃ H ₈ Separation. Advanced Functional Materials, 2022, 32, .	7.8	22
2369	Boosting Electrocatalytic Reduction of CO ₂ to HCOOH on Ni Single Atom Anchored WTe ₂ Monolayer. Small, 2022, 18, .	5.2	37
2370	Battery Materials Discovery and Smart Grid Management using Machine Learning. Batteries and Supercaps, 2022, 5, .	2.4	2
2371	Guest-molecule-induced self-adaptive pore engineering facilitates purification of ethylene from ternary mixture. Chem, 2022, 8, 3263-3274.	5.8	42
2372	In situ atomic-scale observation of size-dependent (de)potassiation and reversible phase transformation in tetragonal FeSe anodes. Information Materials, 2023, 5, .	8.5	13
2373	Development of Proteins for High-Performance Energy Storage Devices: Opportunities, Challenges, and Strategies. Advanced Energy Materials, 2022, 12, .	10.2	5
2374	Hydrogen evolution reaction activity obtained using platinum single atoms on TiO ₂ nanosheets modified with graphene. Journal of Materials Science, 2022, 57, 16448-16459.	1.7	2
2375	Cerium-Doped CoMn ₂ O ₄ Spinels as Highly Efficient Bifunctional Electrocatalysts for ORR/OER Reactions. Catalysts, 2022, 12, 1122.	1.6	11
2376	Electrochemical Hydrogenation, Hydrogenolysis, and Dehydrogenation for Reductive and Oxidative Biomass Upgrading Using 5-Hydroxymethylfurfural as a Model System. ACS Catalysis, 2022, 12, 12349-12368.	5.5	26
2377	Catalytic membrane electrode with Co ₃ O ₄ nanoarrays for simultaneous recovery of water and generation of hydrogen from wastewater. Science China Materials, 2023, 66, 651-663.	3.5	8
2378	Aligning Electronic Energy Levels in Pyridine-Assisted CO ₂ Activation at the GaP(110)/Water Interface Using Ab Initio Molecular Dynamics. ACS Catalysis, 2022, 12, 12521-12529.	5.5	3
2379	Sulfur Reduction Reaction in Lithium-Sulfur Batteries: Mechanisms, Catalysts, and Characterization. Advanced Energy Materials, 2022, 12, .	10.2	69
2380	Thiuram Monosulfide with Ultrahigh Redox Activity Triggered by Electrochemical Oxidation. Journal of the American Chemical Society, 2022, 144, 18918-18926.	6.6	17
2381	Synergistic Catalysis on Dual-Atom Sites for High-Performance Lithium-Sulfur Batteries. Small Structures, 2023, 4, .	6.9	32
2382	Composing atomic transition metal sites for high-performance bifunctional oxygen electrocatalysis in rechargeable zinc-air batteries. Particuology, 2023, 77, 146-152.	2.0	11
2383	Metal Confined in 2D Membranes for Molecular Recognition and Sieving towards Ethylene/Ethane Separation. Advanced Materials, 2022, 34, .	11.1	21

#	ARTICLE	IF	CITATIONS
2384	Role of Morphology of Platinum-Based Nanoclusters in ORR/OER Activity for Nonaqueous Li ⁺ Air Battery Applications. <i>ACS Applied Energy Materials</i> , 2022, 5, 12561-12570.	2.5	6
2385	Boosting Ethane/Ethylene Separation by MOFs through the Amino-Functionalization of Pores. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	79
2386	Weakening the Solvating Power of Solvents to Encapsulate Lithium Polysulfides Enables Long-Cycling Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2022, 34, .	11.1	35
2387	Kinetic energy harvesting based sensing and IoT systems: A review. <i>Frontiers in Electronics</i> , 0, 3, .	2.0	6
2388	Cobalt, sulfur, nitrogen co-doped carbon as highly active electrocatalysts towards oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 39058-39069.	3.8	4
2389	Nanoscale hetero-interfaces for electrocatalytic and photocatalytic water splitting. <i>Science and Technology of Advanced Materials</i> , 2022, 23, 587-616.	2.8	4
2390	Boosting Ethane/Ethylene Separation by MOFs through the Amino-Functionalization of Pores. <i>Angewandte Chemie</i> , 0, , .	1.6	5
2391	Chromium ditelluride monolayer: A novel promising 2H phase thermoelectric material with direct bandgap and ultralow lattice thermal conductivity. <i>Journal of Alloys and Compounds</i> , 2023, 930, 167485.	2.8	14
2392	Boron-Doped Platinum-Group Metals in Electrocatalysis: A Perspective. <i>ACS Catalysis</i> , 2022, 12, 12750-12764.	5.5	31
2393	Electricity storage requirements to support the transition towards high renewable penetration levels - Application to the Greek power system. <i>Journal of Energy Storage</i> , 2022, 55, 105748.	3.9	13
2394	The reduction reaction of carbon dioxide on a precise number of Fe atoms anchored on two-dimensional biphenylene. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 27474-27482.	1.3	4
2395	Microstructure-regulated inverted pyramidal Si photocathodes for efficient hydrogen generation. <i>Nanoscale</i> , 2022, 14, 17571-17580.	2.8	1
2396	A 2D copper-imidazolate framework without thermal treatment as an efficient ORR electrocatalyst for Zn-air batteries. <i>Journal of Materials Chemistry A</i> , 2022, 10, 24590-24597.	5.2	8
2397	Solution-phase controlled synthesis of Cu ₃ NbSe ₄ nanocrystals for optoelectronic applications. <i>Dalton Transactions</i> , 2022, 51, 16937-16944.	1.6	1
2398	Modulating between 2e ⁺ and 4e ⁺ pathways in the oxygen reduction reaction with laser-synthesized iron oxide-grafted nitrogen-doped carbon. <i>Journal of Materials Chemistry A</i> , 2022, 10, 24156-24166.	5.2	3
2399	Spatial disposition of square-planar mononuclear nodes in metal-organic frameworks for C ₂ H ₂ /CO ₂ separation. <i>Chemical Science</i> , 2022, 13, 12876-12882.	3.7	24
2400	Solar-Driven Reversible Hydrogen Storage. <i>Advanced Materials</i> , 2023, 35, .	11.1	23
2401	Quasi-Solid-State Ion-Conducting Arrays Composite Electrolytes with Fast Ion Transport Vertical-Aligned Interfaces for All-Weather Practical Lithium-Metal Batteries. <i>Nano-Micro Letters</i> , 2022, 14, .	14.4	20

#	ARTICLE	IF	CITATIONS
2403	Optimizing the semiconductor-metal-single-atom interaction for photocatalytic reactivity. <i>Nature Reviews Chemistry</i> , 2022, 6, 823-838.	13.8	42
2404	High-Entropy Alloy Nanoparticles Enabled Wood Evaporator for Efficient Photothermal Conversion and Sustainable Solar Desalination. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	26
2405	Gradient Designs for Efficient Sodium Batteries. <i>ACS Energy Letters</i> , 2022, 7, 4106-4117.	8.8	16
2406	Bioinspired Micro/Nanostructured Polyethylene/Poly(Ethylene Oxide)/Graphene Films with Robust Superhydrophobicity and Excellent Antireflectivity for Solar Thermal Power Generation, Thermal Management, and Afterheat Utilization. <i>ACS Nano</i> , 2022, 16, 16624-16635.	7.3	21
2407	Machine learning for a sustainable energy future. <i>Nature Reviews Materials</i> , 2023, 8, 202-215.	23.3	76
2408	Bifunctional Liquid Metals Allow Electrical Insulating Phase Change Materials to Dual-Mode Thermal Manage the Li-Ion Batteries. <i>Nano-Micro Letters</i> , 2022, 14, .	14.4	34
2409	Fine Tuning the Pore Surface in Zirconium Metal-Organic Frameworks for Selective Ethane/Ethylene Separation. , 2023, 1, 334-340.		0
2410	Review of vanadium and its redox flow batteries for renewable energy storage. <i>Proceedings of Institution of Civil Engineers: Energy</i> , 2024, 177, 3-13.	0.5	1
2411	Multiscale-Designed Nanocomposite with a Fast Na ⁺ Diffusion Channel for Ultra-High Rate Sodium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2022, 5, 13452-13460.	2.5	1
2412	A Solid Oxide Fuel Cell Runs on Hydrocarbon Fuels with Exceptional Durability and Power Output. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	14
2413	Bromine Assisted MnO ₂ Dissolution Chemistry: Toward a Hybrid Flow Battery with Energy Density of over 300 Wh L ⁻¹ . <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	12
2414	Electrospun Nanofiber Electrodes for Lithium-Ion Batteries. <i>Macromolecular Rapid Communications</i> , 2023, 44, .	2.0	10
2415	Bridging knowledge gaps in liquid- and vapor-fed CO ₂ electrolysis through active electrode area. <i>Chem Catalysis</i> , 2022, 2, 3239-3253.	2.9	6
2416	Bromine Assisted MnO ₂ Dissolution Chemistry: Toward a Hybrid Flow Battery with Energy Density of over 300 Wh L ⁻¹ . <i>Angewandte Chemie</i> , 0, , .	1.6	1
2417	Heteroatom-Doped Asymmetric Metal-N _x Single Atom Catalysts for Electrochemical CO ₂ Reduction Reaction. <i>Chemistry - an Asian Journal</i> , 2022, 17, .	1.7	4
2418	How to Promote the Industrial Application of SiO _x Anode Prelithiation: Capability, Accuracy, Stability, Uniformity, Cost, and Safety. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	22
2419	A Moisture-Induced Electric Generator with High Output Voltage for Self-Powered Wearable Electronics. <i>ChemNanoMat</i> , 2022, 8, .	1.5	4
2420	Solar PV cleaning techniques contribute to Sustainable Development Goals (SDGs) using Multi-criteria decision-making (MCDM): Assessment and review. <i>International Journal of Thermofluids</i> , 2022, 16, 100233.	4.0	27

#	ARTICLE	IF	CITATIONS
2421	Fe-Cu-Rh ternary alloy nanofibers as an outstanding pH-universal electrocatalyst for hydrogen evolution reaction: The catalytic roles of Fe depending on pH. <i>Applied Surface Science</i> , 2023, 611, 155484.	3.1	2
2422	Transition Metal-Based Electrocatalysts for Seawater Oxidation. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	11
2423	Recent progress in constructing halogenated interfaces for highly stable lithium metal anodes. <i>Energy Storage Materials</i> , 2023, 54, 732-775.	9.5	22
2424	Engineering strong electronegative nitrogen-rich porous organic polymer for practical durable lithium-sulfur battery. <i>Journal of Power Sources</i> , 2022, 551, 232212.	4.0	1
2425	A dibutylhydroquinone/dibutylbenzoquinone-Cd ²⁺ /Cd self-stratified Battery. <i>Energy Storage Materials</i> , 2022, 53, 873-880.	9.5	0
2426	Electronic structural engineering of transition metal-based electrocatalysts for the hydrogen evolution reaction. <i>Nano Energy</i> , 2022, 104, 107882.	8.2	61
2427	Core-sheath phase change fibers via coaxial wet spinning for solar energy active storage. <i>Composites Part B: Engineering</i> , 2022, 247, 110346.	5.9	10
2428	New high-entropy transition-metal sulfide nanoparticles for electrochemical oxygen evolution reaction. <i>Electrochimica Acta</i> , 2022, 436, 141444.	2.6	17
2429	Dual-atom catalysts for oxygen electrocatalysis. <i>Nano Energy</i> , 2022, 104, 107927.	8.2	57
2430	Molecular insights into the role of O ₂ in reversed C ₂ H ₆ /C ₂ H ₄ separation on metal-organic frameworks. <i>Separation and Purification Technology</i> , 2023, 304, 122332.	3.9	3
2431	Enhanced erosion resistance of anti-reflective TiO ₂ /SiO ₂ coatings induced by Zr-oxide doping. <i>Solar Energy Materials and Solar Cells</i> , 2023, 250, 112079.	3.0	11
2432	Anharmonic phonon renormalization assisted acoustic branch scattering induces ultralow thermal conductivity and high thermoelectric performance of 2D SnSe. <i>Journal of Alloys and Compounds</i> , 2023, 932, 167525.	2.8	6
2433	Solid-state nanocomposite ionogel electrolyte with in-situ formed ionic channels for uniform ion-flux and suppressing dendrite formation in lithium metal batteries. <i>Energy Storage Materials</i> , 2023, 54, 40-50.	9.5	17
2434	A perspective LDHs/Ti ₃ C ₂ O ₂ design by DFT calculation for photocatalytic reduction of CO ₂ to C ₂ organics. <i>Applied Surface Science</i> , 2023, 609, 155445.	3.1	5
2435	A novel biomass polyurethane-based composite coating with superior radiative cooling, anti-corrosion and recyclability for surface protection. <i>Progress in Organic Coatings</i> , 2023, 174, 107250.	1.9	6
2436	High specific capacity and mechanism of a metal-organic framework based cathode for aqueous zinc-ion batteries. <i>Energy Advances</i> , 2022, 1, 1065-1070.	1.4	5
2437	Advanced ammonium salt materials for electrochemical energy storage: Recent progress and future perspectives. <i>Chemical Engineering Journal</i> , 2023, 454, 140194.	6.6	6
2438	Identifying the roles of Ru single atoms and nanoclusters for energy-efficient hydrogen production assisted by electrocatalytic hydrazine oxidation. <i>Applied Catalysis B: Environmental</i> , 2023, 323, 122145.	10.8	35

#	ARTICLE	IF	CITATIONS
2439	La _{0.75} Sr _{0.25} MnO ₃ -based perovskite oxides as efficient and durable bifunctional oxygen electrocatalysts in rechargeable Zn-air batteries. <i>Science China Materials</i> , 2023, 66, 1002-1012.	3.5	4
2440	In-situ Constructing of Copper-Doped Bismuth Catalyst for Highly Efficient CO ₂ /Electrolysis to Formate in Ampere-Level. <i>Advanced Energy Materials</i> , 2023, 13, .	10.2	30
2441	Enhanced Capillary Wicking through Hierarchically Porous Constructs Derived from Bijel Templates. <i>Langmuir</i> , 2022, 38, 14063-14072.	1.6	1
2442	NCNT grafted perovskite oxide as an active bifunctional electrocatalyst for rechargeable zinc-air battery. <i>Materials Today Nano</i> , 2023, 21, 100287.	2.3	15
2443	Sustainable Carbon Dioxide Reduction of the P3HT Polymer-Sensitized TiO ₂ /Re(I) Photocatalyst. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 50718-50730.	4.0	4
2444	Tuning the d-Band States of Ni-Based Serpentine Materials via Fe ³⁺ Doping for Efficient Oxygen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 52857-52867.	4.0	11
2445	Identifying the geometric catalytic active sites of crystalline cobalt oxyhydroxides for oxygen evolution reaction. <i>Nature Communications</i> , 2022, 13, .	5.8	36
2446	Simultaneous Dangling Bond and Zincophilic Site Engineering of SiN _x Protective Coatings toward Stable Zinc Anodes. <i>ACS Energy Letters</i> , 2022, 7, 4443-4450.	8.8	27
2447	Improved energy storage performance of polyimide nanocomposites by constructing the meso- and macroscopic interfaces. <i>Materials Today Energy</i> , 2023, 31, 101200.	2.5	6
2448	Bio-inspired water-driven electricity generators: From fundamental mechanisms to practical applications. , 2023, 2, e9120042.		39
2449	Chitin Derived Carbon Anchored Ultrafine Ru Nanoparticles for Efficient Hydrogen Evolution Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 15530-15537.	3.2	9
2450	LaCoO ₃ Perovskite Nanoparticles Embedded in NiCo ₂ O ₄ Nanoflowers as Electrocatalysts for Oxygen Evolution. <i>ACS Applied Nano Materials</i> , 2022, 5, 16344-16353.	2.4	18
2451	Tandem strategy for electrochemical CO ₂ reduction reaction. <i>Chem Catalysis</i> , 2022, 2, 3395-3429.	2.9	9
2452	Self-assembled supramolecular materials for photocatalytic H ₂ production and CO ₂ reduction. <i>Materials Futures</i> , 2022, 1, 042104.	3.1	9
2453	TaIrTe ₄ Monolayer with Topological Insulator Characteristic: A New and Highly Efficient Electrocatalyst toward Oxygen Reduction Reaction. <i>Journal of Physical Chemistry C</i> , 2022, 126, 19685-19692.	1.5	2
2454	Highly soluble organic nitrate additives for practical lithium metal batteries. , 2023, 5, .		22
2455	Amorphous iron fluorosulfate as a high-capacity cathode utilizing combined intercalation and conversion reactions with unexpectedly high reversibility. <i>Nature Energy</i> , 2023, 8, 30-39.	19.8	18
2456	Proximity induced longitudinal and transverse thermoelectric response in graphene-ferromagnetic CrBr ₃ vdW heterostructure. <i>Journal of Physics Condensed Matter</i> , 0, , .	0.7	0

#	ARTICLE	IF	CITATIONS
2457	High-loading Co Single Atoms and Clusters Active Sites toward Enhanced Electrocatalysis of Oxygen Reduction Reaction for High-performance Zn-air Battery. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	58
2458	Pore-tailoring of pruned fruit tree branch derived activated carbon with hierarchical micropore structure for non-aqueous supercapacitors. <i>Journal of Energy Storage</i> , 2022, 56, 106098.	3.9	4
2459	NiSe ₂ Nanoparticles Supported on Halloysite Sheets as an Efficient Electrocatalyst toward Alkaline Oxygen Evolution Reaction. <i>Energy & Fuels</i> , 2022, 36, 14331-14340.	2.5	8
2460	3D-Printed Porous GO Framework Enabling Dendrite-Free Lithium-Metal Anodes. <i>ACS Applied Energy Materials</i> , 2022, 5, 15666-15672.	2.5	7
2461	Highly Exposed γ -NH ₂ Edge on Fragmented g-C ₃ N ₄ Framework with Integrated Molybdenum Atoms for Catalytic CO ₂ Cycloaddition: DFT and Techno-economic Assessment. <i>Small</i> , 2023, 19, .	5.2	1
2462	Boosting Electroreduction of CO ₂ to Tunable Syngas by Using a Pd-Based Trimetallic Alloy. <i>ChemNanoMat</i> , 2023, 9, .	1.5	3
2463	Structural design of supported electrocatalysts for rechargeable Zn-air batteries. <i>Energy Storage Materials</i> , 2023, 55, 166-192.	9.5	35
2464	Ultra-Broadband Spectrally Selective Absorber for Solar Thermal Absorption Based on TiN Square-Ring Meta-Structure. <i>IEEE Photonics Journal</i> , 2023, 15, 1-7.	1.0	1
2465	Insights into an air-stable methylene blue catholyte towards kW-scale practical aqueous organic flow batteries. <i>Energy and Environmental Science</i> , 2023, 16, 231-240.	15.6	19
2466	Fundamental, application and opportunities of single atom catalysts for Li-S batteries. <i>Energy Storage Materials</i> , 2023, 55, 322-355.	9.5	36
2467	Fabrication of hierarchical Ni nanowires@ NiCo-layered double hydroxide nanosheets core-shell hybrid arrays for high-performance hybrid supercapacitors. <i>Electrochimica Acta</i> , 2023, 439, 141622.	2.6	12
2468	Electrochemical methods contribute to the recycling and regeneration path of lithium-ion batteries. <i>Energy Storage Materials</i> , 2023, 55, 606-630.	9.5	20
2469	Self-sacrificial growth of hierarchical P(Ni, Co, Fe) for enhanced asymmetric supercapacitors and oxygen evolution reactions. <i>Electrochimica Acta</i> , 2023, 438, 141582.	2.6	10
2470	Na ₂ Mn(CO ₃) ₂ : A carbonate based prototype cathode material for Na-ion batteries with high rate capability - An ab-initio study. <i>Electrochimica Acta</i> , 2023, 439, 141687.	2.6	1
2471	Electrochemical properties of aluminum ion batteries with emeraldine base polyaniline as cathode material. <i>Journal of Electroanalytical Chemistry</i> , 2023, 929, 117102.	1.9	5
2472	3D fibrous aerogels from 1D polymer nanofibers for energy and environmental applications. <i>Journal of Materials Chemistry A</i> , 2023, 11, 512-547.	5.2	52
2473	Evaluation of amine-based solid adsorbents for direct air capture: a critical review. <i>Reaction Chemistry and Engineering</i> , 2022, 8, 10-40.	1.9	19
2474	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

#	ARTICLE	IF	CITATIONS
2475	Redox mediators promote electrochemical oxidation of nitric oxide toward ambient nitrate synthesis. <i>Journal of Materials Chemistry A</i> , 2023, 11, 1098-1107.	5.2	14
2476	Organic molecules involved in Cu-based electrocatalysts for selective CO ₂ reduction to C ₂ + products. <i>Materials Today Chemistry</i> , 2023, 27, 101328.	1.7	5
2477	Solid electrolyte membrane-containing rechargeable high-temperature molten salt electrolyte-based batteries. <i>Sustainable Energy and Fuels</i> , 2023, 7, 330-354.	2.5	2
2478	Copper-based catalysts for the electrochemical reduction of carbon dioxide: progress and future prospects. <i>Materials Horizons</i> , 2023, 10, 698-721.	6.4	7
2479	Ag-organic coordination polymers with multi-dimensional electron transfer channels for enhancing CO ₂ electroreduction. <i>Chemical Engineering Journal</i> , 2023, 454, 140496.	6.6	5
2480	High storage capacity and high formation rate of carbon dioxide hydrates via super-hydrophobic fluorinated graphenes. <i>Energy</i> , 2023, 264, 126045.	4.5	9
2481	Nickel-rich layered oxide cathodes for lithium-ion batteries: Failure mechanisms and modification strategies. <i>Journal of Energy Storage</i> , 2023, 58, 106405.	3.9	13
2482	Excellent thermoelectric properties of monolayer MoS ₂ -MoSe ₂ aperiodic superlattices. <i>Applied Surface Science</i> , 2023, 612, 155914.	3.1	9
2483	Navajoite phase V ₅ O ₁₂ ·6H ₂ O nanorods with ultra-long lifespan for aqueous zinc-ion batteries. <i>Journal of Alloys and Compounds</i> , 2023, 937, 168335.	2.8	14
2484	Strategies for enhancing the catalytic activity and electronic conductivity of MOFs-based electrocatalysts. <i>Coordination Chemistry Reviews</i> , 2023, 478, 214969.	9.5	35
2485	Techno-Economic Analysis and Optimization of Solar Energy System for Power Generation and Hydrogen Production in Al Mazyouna Area. , 2022, , .		2
2486	Design and Implementation of Automation Control System for Photovoltaic Modules Coating. , 2022, , .		0
2488	Chemically Induced Activity Recovery of Isolated Lithium in Anode-free Lithium Metal Batteries. <i>Nano Letters</i> , 2022, 22, 9268-9274.	4.5	8
2489	VO ₂ Nanosheets Assembled into Hierarchical Flower-Like Hollow Microspheres for Li-Ion Batteries. <i>ACS Applied Nano Materials</i> , 2022, 5, 18023-18034.	2.4	5
2490	Ultrathin Solid Polymer Electrolyte Design for High-Performance Li Metal Batteries: A Perspective of Synthetic Chemistry. <i>Advanced Science</i> , 2023, 10, .	5.6	16
2491	Fullerenes and derivatives as electrocatalysts: Promises and challenges. <i>Green Energy and Environment</i> , 2024, 9, 7-27.	4.7	14
2492	Dilute Alloying to Implant Activation Centers in Nitride Electrocatalysts for Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2023, 35, .	11.1	30
2493	Phase Change Materials for Renewable Energy Storage at Intermediate Temperatures. <i>Chemical Reviews</i> , 2023, 123, 491-514.	23.0	31

#	ARTICLE	IF	CITATIONS
2494	Interface Engineering of a TiO_2 Nanofibrous Membrane for Efficient Solar-Driven Evaporation. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 54855-54866.	4.0	14
2495	Following Paths of Maximum Catalytic Activity in the Composition Space of High-Entropy Alloys. <i>Advanced Energy Materials</i> , 2023, 13, .	10.2	8
2496	Fuel Cells and Hydrogen Production. , 2022, , 161-192.		1
2497	Time-resolved in-situ X-ray diffraction and crystal structure analysis of porous coordination polymer CPL-1 in CO_2 adsorption. <i>Journal of Solid State Chemistry</i> , 2022, , 123796.	1.4	3
2498	A Cavity-Tailored Metal-Organic Tetrahedral Nanocage and Gas Adsorption Property. <i>Nanomaterials</i> , 2022, 12, 4402.	1.9	2
2499	Performance Comparison of Proton Exchange Membrane Water Electrolysis Cell Using Channel and PTL Flow Fields through Three-Dimensional Two-Phase Flow Simulation. <i>Membranes</i> , 2022, 12, 1260.	1.4	4
2500	Bilayer MN4-O-MN4 by bridge-bonded oxygen ligands: Machine learning to accelerate the design of bifunctional electrocatalysts. <i>Renewable Energy</i> , 2023, 203, 445-454.	4.3	8
2501	Advanced Nanostructured Materials for Electrocatalysis in Lithium-Sulfur Batteries. <i>Nanomaterials</i> , 2022, 12, 4341.	1.9	12
2502	A comparative study of hydroxyethylcellulose-based solid polymer electrolytes for solid state Zn batteries. <i>Nano Select</i> , 2023, 4, 102-111.	1.9	5
2503	A scalable DG solver for the electroneutral Nernst-Planck equations. <i>Journal of Computational Physics</i> , 2022, , 111859.	1.9	2
2504	Design of ammonia oxidation electrocatalysts for efficient direct ammonia fuel cells. <i>EnergyChem</i> , 2023, 5, 100093.	10.1	6
2505	The Role of Hydrogen Adsorption Site Diversity in Catalysis on Transition-Metal Phosphide Surfaces. <i>ACS Catalysis</i> , 2023, 13, 287-295.	5.5	11
2506	Evaluation of Bi-Functional Electrochemical Catalytic Activity of Co_3O_4 - CoFe_2O_4 Composite Spinel Oxide. <i>Energies</i> , 2023, 16, 173.	1.6	3
2507	Interface Engineering on Amorphous/Crystalline Hydroxides/Sulfides Heterostructure Nanoarrays for Enhanced Solar Water Splitting. <i>ACS Nano</i> , 2023, 17, 636-647.	7.3	40
2508	Enhanced Electrolyte Transport and Kinetics Mitigate Graphite Exfoliation and Li Plating in Fast-Charging Li-Ion Batteries. <i>Advanced Energy Materials</i> , 2023, 13, .	10.2	8
2509	Flow cell for operando X-ray photon-in-photon-out studies on photo-electrochemical thin film devices. <i>Open Research Europe</i> , 0, 2, 74.	2.0	0
2510	Unveiling the inter-molecular charge transfer mechanism of N-doped graphene/carbon nanotubes heterostructure toward oxygen reduction process for Zn-air battery. <i>Applied Surface Science</i> , 2023, 614, 156096.	3.1	5
2511	FTIR-Assisted Electroreduction of CO_2 and H_2O to CO and H_2 by Electrochemically Deposited Copper on Oxidized Graphite Felt. <i>ACS Omega</i> , 2022, 7, 45067-45076.	1.6	1

#	ARTICLE	IF	CITATIONS
2512	Surface Bromination of Lithium-Metal Anode for High Cyclic Efficiency. <i>Advanced Energy Materials</i> , 2023, 13, .	10.2	8
2513	Metal-Organic Frameworks and Gas Hydrate Synergy: A Pandora's Box of Unanswered Questions and Revelations. <i>Energies</i> , 2023, 16, 111.	1.6	3
2514	Electrochemical Performance of ZIF-8 Coated Zn Anode in a Solid-State Zn Air Battery. , 2022, 1, 040503.		2
2515	Nanostructuring Strategies for Silicon-based Anodes in Lithium-ion Batteries: Tuning Areal Silicon Loading, SEI Formation/Irreversible Capacity Loss, Rate Capability Retention and Electrode Durability. <i>Batteries and Supercaps</i> , 2023, 6, .	2.4	2
2516	Nanocomposite phase change materials for high-performance thermal energy storage: A critical review. <i>Energy Storage Materials</i> , 2023, 55, 727-753.	9.5	37
2517	Can the CO ₂ Reduction Reaction Be Improved on Cu: Selectivity and Intrinsic Activity of Functionalized Cu Surfaces. <i>ACS Catalysis</i> , 2022, 12, 15737-15749.	5.5	17
2518	Dislocated Bilayer MOF Enables High-Selectivity Photocatalytic Reduction of CO ₂ to CO. <i>Advanced Materials</i> , 2023, 35, .	11.1	55
2519	Electrocatalytic oxidation of 5-hydroxymethylfurfural for sustainable 2,5-furandicarboxylic acid production-From mechanism to catalysts design. <i>SusMat</i> , 2023, 3, 21-43.	7.8	22
2520	Hydrogen Spillover-Promoted Hydrogen Evolution onto Copper. <i>ChemCatChem</i> , 2023, 15, .	1.8	1
2521	Deciphering Electrolyte Selection for Electrochemical Reduction of Carbon Dioxide and Nitrogen to High-Value-Added Chemicals. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	28
2522	Mechanisms of Oxygen Evolution Reaction in Metal Oxides: Adsorbate Evolution Mechanism versus Lattice Oxygen Mechanism. , 0, 2, .		0
2523	Mechanism Exploration and Catalyst Design for Hydrogen Evolution Reaction Accelerated by Density Functional Theory Simulations. <i>ACS Sustainable Chemistry and Engineering</i> , 2023, 11, 467-481.	3.2	8
2524	Enhanced one-step purification of C ₂ H ₄ from C ₂ H ₂ /C ₂ H ₄ mixtures by fluorinated Zr-MOF. <i>AIChE Journal</i> , 2023, 69, .	11.8	31
2525	Microporous metal-organic frameworks for the purification of propylene. <i>Journal of Materials Chemistry A</i> , 2023, 11, 12425-12433.	5.2	9
2526	Sulfur Mismatch Substitution in Layered Double Hydroxides as Efficient Oxygen Electrocatalysts for Flexible Zinc-Air Batteries. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	11
2527	Substituting inert phosphate with redox-active silicate towards advanced polyanion-type cathode materials for sodium-ion batteries. <i>Nanoscale</i> , 2023, 15, 3345-3350.	2.8	3
2528	Porous framework materials for energy & environment relevant applications: A systematic review. <i>Green Energy and Environment</i> , 2024, 9, 217-310.	4.7	12
2529	A Review of Transition Metal Compounds as Functional Separators for Lithium-Sulfur Batteries. <i>ChemistrySelect</i> , 2023, 8, .	0.7	5

#	ARTICLE	IF	CITATIONS
2530	A submillimeter bundled microtubular flow battery cell with ultrahigh volumetric power density. Proceedings of the National Academy of Sciences of the United States of America, 2023, 120, .	3.3	2
2531	Photocatalytic conversion of carbon dioxide on triethanolamine: Unheeded catalytic performance of sacrificial agent. Applied Catalysis B: Environmental, 2023, 326, 122338.	10.8	7
2532	The role of oxygen vacancies in TT-Nb ₂ O ₅ nanoparticles for the photoconversion of glycerol into solketal. Ceramics International, 2023, 49, 14719-14732.	2.3	6
2533	Filling the Gap between Heteroatom Doping and Edge Enrichment of 2D Electrocatalysts for Enhanced Hydrogen Evolution. ACS Nano, 2023, 17, 1287-1297.	7.3	9
2534	<i>In situ</i> encapsulating cobalt phosphide into a quasi-MOF: a high-performance catalyst for hydrolytic dehydrogenation of ammonia borane. New Journal of Chemistry, 2023, 47, 3151-3158.	1.4	3
2535	Synergetic thermodynamic/kinetic separation of C ₃ H ₈ /CH ₃ F on carbon adsorbents for ultrapure fluoromethane electronic gas. AIChE Journal, 2023, 69, .	1.8	7
2536	Ammonia Production Using Bacteria and Yeast toward a Sustainable Society. Bioengineering, 2023, 10, 82.	1.6	7
2537	Superhydrophobic SiO ₂ "Glass Bubbles Composite Coating for Stable and Highly Efficient Daytime Radiative Cooling. ACS Applied Materials & Interfaces, 2023, 15, 4799-4813.	4.0	9
2538	One-step ethylene separation from ternary C ₂ hydrocarbon mixture with a robust zirconium metal-organic framework. Chinese Journal of Chemical Engineering, 2023, 59, 9-15.	1.7	1
2539	A Novel Layered WO ₃ Derived from An Ion Etching Engineering for Ultrafast Proton Storage in Frozen Electrolyte. Advanced Functional Materials, 2023, 33, .	7.8	9
2540	Dual-functional vinylpyrrolidone electrolyte additive as anode surface leveler and cathode catalyst for lithium Metal-Oxygen batteries. Chemical Engineering Journal, 2023, 458, 141383.	6.6	9
2541	Robust and flexible bacterial cellulose-based thermogalvanic cells for low-grade heat harvesting in extreme environments. Chemical Engineering Journal, 2023, 457, 141274.	6.6	10
2542	Formation of La-rich tysonite nano-precipitates in fluorite Ba _{0.6} La _{0.4} F _{2.4} . Journal of Power Sources, 2023, 557, 232581.	4.0	2
2543	Determination of thermal diffusivity of thermoelectric materials using a micro four-point probe method. Materials Today Physics, 2023, 31, 100963.	2.9	1
2544	Correlating nanostructure features to transport properties of polymer electrolyte membrane electrolyzer anode catalyst layers. Journal of Power Sources, 2023, 559, 232654.	4.0	3
2545	Efficient ethylene/ethane separation by rare earth metal-containing ionic liquids in N,N-dimethylformamide. Separation and Purification Technology, 2023, 310, 123094.	3.9	2
2546	Soft-template derived Ni/Mo ₂ C hetero-sheet arrays for large current density hydrogen evolution reaction. Journal of Colloid and Interface Science, 2023, 635, 23-31.	5.0	5
2547	CeO ₂ as an "electron pump" to boost the performance of Co ₄ N in electrocatalytic hydrogen evolution, oxygen evolution and biomass oxidation valorization. Applied Catalysis B: Environmental, 2023, 325, 122364.	10.8	55

#	ARTICLE	IF	CITATIONS
2548	A Review of In-Situ Techniques for Probing Active Sites and Mechanisms of Electrocatalytic Oxygen Reduction Reactions. <i>Nano-Micro Letters</i> , 2023, 15, .	14.4	32
2549	A carbon mixed selenium sulfide separator coating for lithium-sulfur battery life enhancement. <i>ChemElectroChem</i> , 2023, 10, .	1.7	1
2550	Construction of binary metal sulphides via lignosulfonate as sulphur source for efficient oxygen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 9636-9646.	3.8	4
2551	Ionic Liquids for Light Hydrocarbon Separation. , 2022, , 702-713.		0
2552	Stabilizing copper sites in coordination polymers toward efficient electrochemical C-C coupling. <i>Nature Communications</i> , 2023, 14, .	5.8	30
2553	Electrostatic Induction Nanogenerator Boosted by One-Dimensional Metastructure: Application to Energy and Information Transmitting Smart Tag System. <i>Advanced Science</i> , 2023, 10, .	5.6	2
2554	Effect of heteroatom in conductive polymer coating of cathode materials on electrochemical performance of lithium sulfur batteries. <i>Ionics</i> , 2023, 29, 1019-1028.	1.2	4
2555	Moisture electricity generation: Mechanisms, structures, and applications. <i>Nano Research</i> , 2023, 16, 7496-7510.	5.8	13
2556	Selectively converting CO ₂ to HCOOH on Cu-alloys integrated in hematite-driven artificial photosynthetic cells. <i>Journal of Energy Chemistry</i> , 2023, 79, 601-610.	7.1	8
2557	A comprehensive review on the electrochemical parameters and recent material development of electrochemical water splitting electrocatalysts. <i>RSC Advances</i> , 2023, 13, 3843-3876.	1.7	81
2558	Challenges in the scale-up of MES for wastewater treatment. , 2023, , 257-276.		0
2559	Direct Detection of Fe ^{VI} Water Oxidation Intermediates in an Aqueous Solution. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	13
2560	Modified preparation of Si@C@TiO ₂ porous microspheres as anodes for high-performance lithium-ion batteries. <i>Dalton Transactions</i> , 2023, 52, 2463-2471.	1.6	7
2561	A hydrophobic Cu/Cu ₂ O sheet catalyst for selective electroreduction of CO to ethanol. <i>Nature Communications</i> , 2023, 14, .	5.8	23
2562	Dynamic Reconstructed RuO ₂ /NiFeOOH with Coherent Interface for Efficient Seawater Oxidation. <i>Small</i> , 2023, 19, .	5.2	16
2563	Transition Metal-based Perovskite Oxides: Emerging Electrocatalysts for Oxygen Evolution Reaction. <i>ChemCatChem</i> , 2023, 15, .	1.8	16
2564	Aggregation-induced emission materials: a platform for diverse energy transformation and applications. <i>Journal of Materials Chemistry A</i> , 2023, 11, 4850-4875.	5.2	6
2565	Synthesis and Characterization of Dense Carbon Films as Model Surfaces to Estimate Electron Transfer Kinetics on Redox Flow Battery Electrodes. <i>Langmuir</i> , 2023, 39, 1198-1214.	1.6	4

#	ARTICLE	IF	CITATIONS
2566	Optimal Binding Affinity for Sieving Separation of Propylene from Propane in an Oxyfluoride Anion-Based Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2023, 145, 2386-2394.	6.6	30
2567	Rational design of atomic site catalysts for electrochemical CO ₂ reduction. <i>Chemical Communications</i> , 2023, 59, 2682-2696.	2.2	1
2568	Tape-Casting Method of Hybrid Solid Electrolytes with a Residual Active Solvent of Tetraethylene Glycol Dimethyl Ether. <i>ACS Applied Energy Materials</i> , 2023, 6, 2031-2038.	2.5	3
2569	Rapid synthesis of doped metal oxides via Joule heating for oxygen electrocatalysis regulation. <i>Journal of Materials Chemistry A</i> , 2023, 11, 10267-10276.	5.2	6
2570	The growth of biopolymers and natural earthen sources as membrane/separator materials for microbial fuel cells: A comprehensive review. <i>Journal of Energy Chemistry</i> , 2023, 80, 402-431.	7.1	7
2571	Metal-Organic Frameworks for Photocatalytic Water Splitting and CO ₂ Reduction. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	14
2572	Phytic acid-doped and ammonium hydroxide de-doped polyaniline cathodes for rechargeable aluminum ion battery. <i>Solid State Ionics</i> , 2023, 392, 116166.	1.3	2
2573	A facile aqueous-phase synthesis of Co-based nanostructures composed of cobalt hydroxide and cobalt oxide for enhanced photocatalytic activity of dye-sensitized H ₂ production. <i>Journal of Alloys and Compounds</i> , 2023, 942, 169078.	2.8	6
2574	Uniform lithium deposition guided by Au nanoparticles in vertical-graphene/carbon-cloth skeleton for dendrite-free and stable lithium metal anode. <i>Scripta Materialia</i> , 2023, 229, 115352.	2.6	6
2575	Surface-functionalized three-dimensional MXene supports to boost the hydrogen evolution activity of Pt catalysts in alkaline media. <i>Journal of Materials Chemistry A</i> , 2023, 11, 5328-5336.	5.2	6
2576	Ag-doped Pd nano-dendritic for promoting the electrocatalytic oxidation of ethylene to ethylene glycol. <i>Materials Chemistry Frontiers</i> , 2023, 7, 1437-1445.	3.2	2
2577	Dynamically activating Ni-based catalysts with self-anchored mononuclear Fe for efficient water oxidation. <i>Journal of Materials Chemistry A</i> , 2023, 11, 10228-10238.	5.2	5
2578	Organic semiconducting materials for clean energy. , 2023, , 81-96.		0
2579	Metal-support interactions for heterogeneous catalysis: mechanisms, characterization techniques and applications. <i>Journal of Materials Chemistry A</i> , 2023, 11, 8540-8572.	5.2	13
2580	Self-assembled nanoflower-like FeSe ₂ /MoSe ₂ heterojunction anode with enhanced kinetics for superior-performance Na-ion half/full batteries. <i>Nanoscale</i> , 2023, 15, 5655-5664.	2.8	4
2581	Hybrid Nanostructure of Sputter Decorated Nanodots of Ag ₂ O/AgO over Flower-like Mn-Co-Cu Ternary Metal Oxide for Electrocatalytic Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2023, 6, 2286-2295.	2.5	8
2582	Density Functional Tight-Binding Model for Lithium-Silicon Alloys. <i>Journal of Physical Chemistry A</i> , 2023, 127, 2637-2645.	1.1	2
2583	Cu dopant triggered Fe-N-C catalysts toward high efficiency electroreduction of CO ₂ to CO. <i>Journal of CO₂ Utilization</i> , 2023, 70, 102420.	3.3	4

#	ARTICLE	IF	CITATIONS
2584	Scalable novel lanthanide-ligand complex for robust flexible micro-supercapacitors. <i>Journal of Power Sources</i> , 2023, 564, 232801.	4.0	0
2585	Intermolecular Interactions Mediated Nonflammable Electrolyte for High-Voltage Lithium Metal Batteries in Wide Temperature. <i>Advanced Energy Materials</i> , 2023, 13, .	10.2	28
2586	Stable CuIn alloy for electrochemical CO ₂ reduction to CO with high-selectivity. <i>Materials Today Physics</i> , 2023, 33, 101050.	2.9	6
2587	Agar-PVA/GO double network gel electrolyte for high performance flexible zinc-air batteries. <i>Materials Today Chemistry</i> , 2023, 29, 101384.	1.7	7
2588	Molten lithium metal battery with Li ₄ Ti ₅ O ₁₂ cathode and solid electrolyte. <i>ETransportation</i> , 2023, 16, 100235.	6.8	1
2589	Facet effects on bimetallic ZnSn hydroxide microcrystals for selective electrochemical CO ₂ reduction. <i>Green Energy and Environment</i> , 2023, , .	4.7	1
2590	3D printing and solar cell fabrication methods: A review of challenges, opportunities, and future prospects. <i>Results in Optics</i> , 2023, 11, 100385.	0.9	6
2591	Novel battery thermal management via scalable dew-point evaporative cooling. <i>Energy Conversion and Management</i> , 2023, 283, 116948.	4.4	10
2592	What happens when graphdiyne encounters doping for electrochemical energy conversion and storage. <i>Coordination Chemistry Reviews</i> , 2023, 482, 215082.	9.5	5
2593	Shape-controlled synthesis of polypyrrole incorporated urchin-flower like Ni ₂ P ₂ O ₇ cathode material for asymmetric supercapacitor applications. <i>Inorganic Chemistry Communication</i> , 2023, 151, 110634.	1.8	5
2594	Catalytic upcycling of waste polypropylene for gram-scale production of FeCo@N-doped carbon nanotubes toward efficient oxygen reduction electrocatalysis. <i>Journal of Electroanalytical Chemistry</i> , 2023, 936, 117394.	1.9	4
2595	MXene/carbon composites for electrochemical energy storage and conversion. <i>Materials Today Sustainability</i> , 2023, 22, 100350.	1.9	12
2596	Scalable fabrication of nano/porous Fe-Si coated by 2D carbon nanosheets composite anode for high-performance lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2023, 945, 169331.	2.8	6
2597	Construction of a bismuth-based perovskite direct Z-scheme heterojunction Au-Cs ₃ Bi ₂ Br ₉ /V ₂ O ₅ for efficient photocatalytic CO ₂ reduction. <i>Applied Surface Science</i> , 2023, 622, 156964.	3.1	13
2598	Regulation of Si nanodomain size and its effect on electrochemical performance in prelithiated SiO anode. <i>Journal of Power Sources</i> , 2023, 570, 233021.	4.0	1
2599	CO ₂ electrolysis toward Acetate: A review. <i>Current Opinion in Electrochemistry</i> , 2023, 39, 101253.	2.5	6
2600	Composition-tunable PtNiCu nanoparticles for boosting methanol oxidation reaction. <i>Journal of Alloys and Compounds</i> , 2023, 946, 169354.	2.8	3
2601	K ⁺ -doped P ₂ -Na _{0.67} Fe _{0.5} Mn _{0.5} O ₂ cathode for highly enhanced rate performance sodium-ion battery. <i>Journal of Alloys and Compounds</i> , 2023, 947, 169482.	2.8	7

#	ARTICLE	IF	CITATIONS
2602	Design of molecular M N C dual-atom catalysts for nitrogen reduction starting from surface state analysis. <i>Journal of Colloid and Interface Science</i> , 2023, 640, 983-989.	5.0	3
2603	Designed metal-organic frameworks with potential for multi-component hydrocarbon separation. <i>Coordination Chemistry Reviews</i> , 2023, 484, 215111.	9.5	20
2604	Energy harvesting based on water evaporation-induced electrokinetic streaming potential/current in porous carbonized carrots. <i>Journal of Power Sources</i> , 2023, 569, 233007.	4.0	0
2605	Enhancement of bifunctional photocatalytic activity of boron-doped g-C ₃ N ₄ /SnO ₂ heterojunction driven by plasmonic Ag quantum dots. <i>Materials Today Nano</i> , 2023, 22, 100325.	2.3	3
2606	Iron phthalocyanine decorated porous biomass-derived carbon as highly effective electrocatalyst for oxygen reduction reaction. <i>Journal of Environmental Chemical Engineering</i> , 2023, 11, 109676.	3.3	3
2607	A hybrid nanogenerator for collecting both water wave and steam evaporation energy. <i>Nano Energy</i> , 2023, 110, 108346.	8.2	6
2608	Electrochemical performance of Zn ₂ VO ₄ /ZnO nanocomposite material derived from Zn-V layered double hydroxides as a cathode for aqueous zinc ion battery. <i>Journal of Alloys and Compounds</i> , 2023, 952, 169915.	2.8	2
2609	Unique heterointerface engineering of Ni ₂ P@MnP nanosheets coupled Co ₂ P nanoflowers as hierarchical dual-functional electrocatalyst for highly proficient overall water-splitting. <i>Applied Catalysis B: Environmental</i> , 2023, 331, 122680.	10.8	51
2610	Recyclable Co ₃ O ₄ /NaF for hydrogen generation from ethyl acetate: The promoting effect between Co ₃ O ₄ and NaF. <i>Fuel</i> , 2023, 343, 127942.	3.4	0
2611	Anti-aggregation triggering molecular transformation and boosting stable sodium storage. <i>Cell Reports Physical Science</i> , 2023, 4, 101290.	2.8	3
2612	Main-Group Block Element Lithium Atoms within Carbon Frameworks as High-Active Sites for Electrocatalytic Reduction Reactions. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	4
2613	Mo-Doped Ni ₃ S ₂ Nanosheet Arrays for Overall Water Splitting. <i>ACS Applied Nano Materials</i> , 2023, 6, 6066-6075.	2.4	6
2614	A Honeycomb-Structured CoF ₂ -Modified Separator Enabling High-Performance Lithium-Sulfur Batteries. <i>Small Science</i> , 2023, 3, .	5.8	6
2615	Effects of enzymatic hydrolysis and physicochemical properties of lignocellulose waste through different choline based deep eutectic solvents (DESs) pretreatment. <i>Industrial Crops and Products</i> , 2023, 195, 116435.	2.5	7
2616	Self-assembly of symmetric tetramethylcucurbit[6]uril with phosphomolybdic acid: A stable anode material with lithium-storage properties. <i>Materials Chemistry and Physics</i> , 2023, 302, 127711.	2.0	1
2617	Three-dimensional ordered macroporous molybdenum doped NiCoP honeycomb electrode for two-step water electrolysis. <i>Journal of Colloid and Interface Science</i> , 2023, 642, 13-22.	5.0	4
2618	Modulating the electronic structure of CoS ₂ by Sn doping boosting urea oxidation for efficient alkaline hydrogen production. <i>Journal of Colloid and Interface Science</i> , 2023, 642, 574-583.	5.0	11
2619	Promotion of photocatalytic hydrogen evolution induced by graphitic carbon nitride transformation from 2D flakes to 1D nanowires. <i>Materials Research Bulletin</i> , 2023, 163, 112210.	2.7	3

#	ARTICLE	IF	CITATIONS
2620	A two-level optimization framework for battery energy storage systems to enhance economics and minimize long-term capacity fading. <i>Journal of Energy Storage</i> , 2023, 63, 106943.	3.9	1
2621	Direct Detection of Fe ^{VI} Water Oxidation Intermediates in an Aqueous Solution. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	0
2622	Metal-free radiative cooling polymer films containing high bandgap materials employing a tandem approach. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2023, 298, 108495.	1.1	1
2623	Lithium Batteries and the Solid Electrolyte Interphase (SEI) – Progress and Outlook. <i>Advanced Energy Materials</i> , 2023, 13, .	10.2	98
2624	Simultaneous cation-anion regulation of sodium vanadium phosphate cathode materials for high-energy and cycle-stable sodium-ion batteries. <i>Journal of Power Sources</i> , 2023, 560, 232709.	4.0	6
2625	Analysis and design of battery thermal management under extreme fast charging and discharging. <i>Journal of Energy Storage</i> , 2023, 60, 106501.	3.9	9
2626	Metal-Organic Frameworks for Photocatalytic Water Splitting and CO ₂ Reduction. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	81
2627	Simultaneous Stabilization of Lithium Anode and Cathode using Hyperconjugative Electrolytes for High-voltage Lithium Metal Batteries. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	3
2628	Simultaneous Stabilization of Lithium Anode and Cathode using Hyperconjugative Electrolytes for High-voltage Lithium Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	8
2629	Synthesis of expanded graphite-based materials for application in lithium-based batteries. <i>Journal of Energy Storage</i> , 2023, 60, 106678.	3.9	13
2630	Hydrothermal assisted synthesis of hierarchical SnO ₂ micro flowers with CdO nanoparticles based membrane for energy storage applications. <i>Chemosphere</i> , 2023, 321, 138004.	4.2	12
2631	Evaluating the stability of Ir single atom and Ru atomic cluster oxygen evolution reaction electrocatalysts. <i>Electrochimica Acta</i> , 2023, 444, 141982.	2.6	12
2632	Electrodeposited MOFs Membrane with In Situ Incorporation of Charged Molecules for Osmotic Energy Harvesting. <i>Small</i> , 2023, 19, .	5.2	13
2633	Thermodynamics, Kinetics, Morphology, and Raman studies for sH Hydrate of Methane and Cyclooctane. <i>ACS Engineering Au</i> , 0, , .	2.3	1
2634	Defect Engineering in Two-Dimensional Layered PdTe ₂ for Enhanced Hydrogen Evolution Reaction. <i>ACS Catalysis</i> , 2023, 13, 2601-2609.	5.5	10
2635	Computational mining of GeH-based Janus III-VI van der Waals heterostructures for solar cell applications. <i>Physical Chemistry Chemical Physics</i> , 2023, 25, 6674-6683.	1.3	0
2636	Modeling Anion Poisoning during Oxygen Reduction on Pt Near-Surface Alloys. <i>ACS Catalysis</i> , 2023, 13, 2735-2743.	5.5	5
2637	Dual Single-Atom Moieties Anchored on N-Doped Multilayer Graphene As a Catalytic Host for Lithium-Sulfur Batteries. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 9439-9446.	4.0	13

#	ARTICLE	IF	CITATIONS
2638	First-principles study of the effect of the local coordination environment on the electrochemical activity of Pd ₁ -CxNy single atom catalysts. <i>Chemical Engineering Science</i> , 2023, 270, 118551.	1.9	2
2639	Origin of the Universal Potential-Dependent Organic Oxidation on Nickel Oxyhydroxide. <i>ACS Catalysis</i> , 2023, 13, 2916-2927.	5.5	7
2640	Unveiling Hidden Zeolitic Imidazolate Frameworks Guided by Intuition-Based Geometrical Factors. <i>Small</i> , 2023, 19, .	5.2	0
2641	Carbon Nanotube/Hygroscopic Salt Nanocomposites with Dual-Functionality of Effective Cooling and Fire Resistance for Safe and Ultrahigh-Rate Operation of Practical Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 0, , 2213846.	7.8	2
2642	Spherical Magnetoelastic Generator for Multidirectional Vibration Energy Harvesting. <i>ACS Nano</i> , 2023, 17, 3865-3872.	7.3	11
2643	Recent advances in interfacial solar vapor generation: clean water production and beyond. <i>Journal of Materials Chemistry A</i> , 2023, 11, 5978-6015.	5.2	19
2644	Recent progress in the study of mechanisms for enhancing radiation tolerance of materials based on interfaces and nanoprecipitates. <i>Chinese Science Bulletin</i> , 2023, 68, 1125-1140.	0.4	1
2645	Sustainable Energy Research Trend: A Bibliometric Analysis Using VOSviewer, RStudio Bibliometrix, and CiteSpace Software Tools. <i>Sustainability</i> , 2023, 15, 3618.	1.6	10
2646	Enhancing the oxygen evolution reaction of cobalt hydroxide by fabricating nanocomposites with fluorine-doped graphene oxide. <i>Dalton Transactions</i> , 2023, 52, 3877-3883.	1.6	3
2647	Construction of a core-double-shell structured Si@graphene@Al ₂ O ₃ composite for a high-performance lithium-ion battery anode. <i>New Journal of Chemistry</i> , 2023, 47, 6313-6322.	1.4	2
2648	Ambient Electrosynthesis toward Single-Atom Sites for Electrocatalytic Green Hydrogen Cycling. <i>Advanced Materials</i> , 2023, 35, .	11.1	26
2649	Engineering strategies of metal-organic frameworks toward advanced batteries. , 2023, 2, .		13
2650	Cu Current Collector with Binder-Free Lithiophilic Nanowire Coating for High Energy Density Lithium Metal Batteries. <i>Small</i> , 2023, 19, .	5.2	12
2651	DFT-Based Study for the Enhancement of CO ₂ Adsorption on Metal-Doped Nitrogen-Enriched Polytriazines. <i>ACS Omega</i> , 2023, 8, 8876-8884.	1.6	7
2652	Dual Co _x S _y -Modified Tungsten Disulfide Double-Heterojunction Electrocatalyst for Efficient Hydrogen Evolution in All-pH Media. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 11765-11776.	4.0	8
2653	Biomass chitosan-derived Co-induced N-doped carbon nanotubes to support Mn ₃ O ₄ as efficient electrocatalysts for rechargeable Zn-air batteries. <i>Sustainable Energy and Fuels</i> , 2023, 7, 1698-1706.	2.5	1
2654	Flexible Ammonium-Ion Pouch Cells Based on a Tunneled Manganese Dioxide Cathode. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 12434-12442.	4.0	5
2655	F and rare V ⁴⁺ -doped cobalt hydroxide hybrid nanostructures: excellent OER activity with ultralow overpotential. <i>Dalton Transactions</i> , 2023, 52, 4606-4615.	1.6	3

#	ARTICLE	IF	CITATIONS
2656	Challenges and Opportunities to Mitigate the Catastrophic Thermal Runaway of High-Energy Batteries. <i>Advanced Energy Materials</i> , 2023, 13, .	10.2	22
2657	A new iron(II) complex as bi-functional electrocatalyst for hydrogen evolution reaction and hydrogen peroxide sensing. <i>Journal of Coordination Chemistry</i> , 2023, 76, 479-493.	0.8	0
2658	Encapsulating dual-phase WC-W ₂ C nanoparticles into hollow carbon dodecahedrons for all-pH electrocatalytic hydrogen evolution. <i>Chemical Engineering Journal</i> , 2023, 462, 142132.	6.6	7
2659	Recent Progress on Honeycomb Layered Oxides as a Durable Cathode Material for Sodium-Ion Batteries. <i>Small Methods</i> , 2023, 7, .	4.6	5
2660	Effects of Alternating Magnetic Fields on the OER of Heterogeneous Core-Shell Structured NiFe ₂ O ₄ @(Ni, Fe)S/P. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 11631-11641.	4.0	16
2661	Comprehensive Mechanism for CO Electroreduction on Dual-Atom-Catalyst-Anchored N-Doped Graphene. <i>ChemPhysChem</i> , 0, , .	1.0	0
2662	A Li ₃ PO ₄ coating strategy to enhance the Li-ion transport properties of Li ₂ ZnTi ₃ O ₈ anode material for Lithium-ion Battery. <i>Electrochimica Acta</i> , 2023, 447, 142151.	2.6	4
2663	Surface engineering AgNW transparent conductive films for triboelectric nanogenerator and self-powered pressure sensor. <i>Chemical Engineering Journal</i> , 2023, 462, 142170.	6.6	8
2664	Plant-leaf-inspired MXene-silk composite for intelligent solar steam generation combined with mechanical actuation. <i>Nano Research</i> , 2023, 16, 7792-7800.	5.8	3
2665	Unravelling catalytic activity trends in ceria surfaces toward the oxygen reduction and water oxidation reactions. <i>Reaction Chemistry and Engineering</i> , 2023, 8, 1285-1293.	1.9	0
2666	Recent Advances on Transition-Metal-Based Layered Double Hydroxides Nanosheets for Electrocatalytic Energy Conversion. <i>Advanced Science</i> , 2023, 10, .	5.6	30
2667	Vertical graphene on rice-husk-derived SiC/C composite for highly selective photocatalytic CO ₂ reduction into CO. <i>Carbon</i> , 2023, 207, 36-48.	5.4	17
2668	Tuning the Trade-Off between Ethane/Ethylene Selectivity and Adsorption Capacity within Isoreticular Microporous Metal-Organic Frameworks by Linker Fine-Fluorination. <i>Small</i> , 2023, 19, .	5.2	10
2669	Refreshing the liquid-gas reaction interface to provoke the zincothermic reduction of SiCl ₄ to prepare lithium-storage nano silicon. <i>Energy Storage Materials</i> , 2023, 57, 568-576.	9.5	2
2670	Regulating the d-band electrons of the Fe-N-C single-atom catalyst for high-efficiency CO ₂ electroreduction by electron-donating S-doping. <i>Dalton Transactions</i> , 2023, 52, 4819-4825.	1.6	2
2671	Zwitterionic Separator Featured with Superdesolvating Properties for High Performance Lithium-Sulfur Batteries. <i>ACS Applied Materials & Interfaces</i> , 0, , .	4.0	1
2672	Biofuel production, hydrogen production and water remediation by photocatalysis, biocatalysis and electrocatalysis. <i>Environmental Chemistry Letters</i> , 2023, 21, 1315-1379.	8.3	27
2673	Reversible Li Plating on Graphite Anodes through Electrolyte Engineering for Fast-Charging Batteries. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	26

#	ARTICLE	IF	CITATIONS
2674	Reversible Li Plating on Graphite Anodes through Electrolyte Engineering for Fast-Charging Batteries. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	0
2675	Shape-stable composite phase change materials encapsulated by lignin-based ordered porous carbon for thermal energy storage. <i>Journal of Wood Chemistry and Technology</i> , 2023, 43, 92-102.	0.9	2
2676	High-purity Lithium Carbonate Manufacturing Technology from the Secondary Battery Recycling Waste using D2EHPA + TBP Solvent. , 2023, 32, 21-32.		0
2677	Theoretical study on hydrogen evolution reaction in transition metal borides. <i>Rare Metals</i> , 2023, 42, 1808-1812.	3.6	2
2678	A tipping point for solar production of hydrogen?. <i>Joule</i> , 2023, 7, 459-461.	11.7	1
2679	Pressure and polymer selections for solid-state batteries investigated with high-throughput simulations. <i>Cell Reports Physical Science</i> , 2023, 4, 101328.	2.8	4
2680	Charge Transport in Water- NaCl Electrolytes with Molecular Dynamics Simulations. <i>Journal of Physical Chemistry B</i> , 2023, 127, 2729-2738.	1.2	5
2681	Self-Reconstructed Co-B Active Sites for High-Efficiency Hydrolysis of Ammonia Borane. , 2023, 5, 1188-1195.		5
2682	An ultra-high-entropy rare earth orthoferrite (UHE REO): solution combustion synthesis, structural features and ferrimagnetic behavior. <i>Dalton Transactions</i> , 2023, 52, 4779-4786.	1.6	2
2683	Effects of Operating Parameters and Feed Gas Compositions on the Dry Reforming of Methane over the Ni/Al ₂ O ₃ Catalyst. <i>Catalysts</i> , 2023, 13, 602.	1.6	2
2684	A Microporous Metal-Organic Framework with Unique Aromatic Pore Surfaces for High Performance C ₂ H ₆ /C ₂ H ₄ Separation. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	31
2685	A Microporous Metal-Organic Framework with Unique Aromatic Pore Surfaces for High Performance C ₂ H ₆ /C ₂ H ₄ Separation. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	0
2686	Chemical Bonding of g-C ₃ N ₄ /UiO-66(Zr/Ce) from Zr and Ce Single Atoms for Efficient Photocatalytic Reduction of CO ₂ under Visible Light. <i>ACS Catalysis</i> , 2023, 13, 4597-4610.	5.5	17
2687	Electrolyte Solvation Structure Manipulation and Synthetic Optimization for Enhanced Potassium Storage of Tin Phosphide/Carbon Alloy-Based Electrode. <i>Metals</i> , 2023, 13, 658.	1.0	2
2688	Atomic design of carbon-based dual-metal site catalysts for energy applications. <i>Nano Research</i> , 2023, 16, 6477-6506.	5.8	25
2689	A Multiscale Flow Battery Modeling Approach Using Mass Transfer Coefficients. <i>Energy Technology</i> , 2023, 11, .	1.8	0
2690	Electrospun Materials Based on Polymer and Biopolymer Blends—A Review. <i>Polymers</i> , 2023, 15, 1654.	2.0	5
2691	First-principles calculations to investigate optical and electrical properties of the half-Heusler materials TiXSn (X = Ni, Pt). <i>Molecular Simulation</i> , 2023, 49, 778-791.	0.9	3

#	ARTICLE	IF	CITATIONS
2712	Secondary-Phase-Induced Charge-Discharge Performance Enhancement of Co-Free High Entropy Spinel Oxide Electrodes for Li-Ion Batteries. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	8
2713	Designing dithiolene and bis(iminothiolato)-based 1D metal-organic-frameworks for electrocatalytic hydrogen evolution reaction. <i>Theoretical Chemistry Accounts</i> , 2023, 142, .	0.5	2
2714	Moisture-Induced Ionovoltaic Electricity Generation by Manipulating Organic-Inorganic Hybrid Halide Perovskites. <i>ACS Energy Letters</i> , 2023, 8, 2259-2266.	8.8	6
2715	Photosynthesis of Hydrogen Peroxide Based on C_3N_4 : The Road of a Cost-Effective Clean Fuel Production. <i>Small</i> , 2023, 19, .	5.2	16
2716	Colloidal inorganic nano- and microparticles for passive daytime radiative cooling. <i>Nano Convergence</i> , 2023, 10, .	6.3	3
2717	Highly enhanced electrocatalytic OER activity of water-coordinated copper complexes: effect of lattice water and bridging ligand. <i>RSC Advances</i> , 2023, 13, 12065-12071.	1.7	2
2718	Recent advances and challenges of anodes for aqueous alkaline batteries. <i>EnergyChem</i> , 2023, 5, 100102.	10.1	2
2719	A Review on Recent Progress in Preparation of Medium-Temperature Solar-Thermal Nanofluids with Stable Dispersion. <i>Nanomaterials</i> , 2023, 13, 1399.	1.9	4
2720	Polyamides Derived from Terpenes: Advances in Their Synthesis, Characterization and Applications. <i>European Journal of Lipid Science and Technology</i> , 2023, 125, .	1.0	2
2721	Intrinsic carbon structural imperfections for enhancing energy conversion electrocatalysts. <i>Chemical Engineering Journal</i> , 2023, 466, 143060.	6.6	7
2722	Trajectory and drivers of China's consumption-based and production-based renewable energy consumption. <i>Energy Strategy Reviews</i> , 2023, 47, 101083.	3.3	11
2723	Review of Carbon Support Coordination Environments for Single Metal Atom Electrocatalysts (SACS). <i>Advanced Materials</i> , 2024, 36, .	11.1	13
2724	Dzyaloshinskii-Moriya interactions in Nd ₂ Fe ₁₄ B as the origin of spin reorientation and the rotating magnetocaloric effect. <i>Applied Materials Today</i> , 2023, 32, 101825.	2.3	0
2725	Vacancy designed 2D materials for electrodes in energy storage devices. <i>Chemical Communications</i> , 2023, 59, 6109-6127.	2.2	21
2726	Rational design of interfacial bonds within dual carbon-protected manganese oxide towards durable aqueous zinc ion battery. <i>Science China Chemistry</i> , 2023, 66, 1406-1416.	4.2	4
2727	V_2O_3 @C Microspheres as the High-Performance Cathode Materials for Advanced Aqueous Zinc-Ion Storage. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 20876-20884.	4.0	4
2728	Ceramics for supercapacitors. , 2023, , 157-183.		0
2729	Constructing Novel Ternary Heterostructure of $Ce_5O_{14}/WP/WS_2$ to Enhance Catalytic Activity for Hydrogen Evolution in a Full pH Range. <i>Small Structures</i> , 2023, 4, .	6.9	5

#	ARTICLE	IF	CITATIONS
2730	A Recyclable Standalone Microporous Layer with Interpenetrating Network for Sustainable Fuel Cells. <i>Advanced Materials</i> , 2023, 35, .	11.1	1
2734	Applications of Metal-Organic Frameworks and Their Derivatives in Electrochemical CO ₂ Reduction. <i>Nano-Micro Letters</i> , 2023, 15, .	14.4	23
2735	Two-Dimensional Covalent Framework Derived Nonprecious Transition Metal Single-Atomic-Site Electrocatalyst toward High-Efficiency Oxygen Reduction. <i>Nano Letters</i> , 2023, 23, 3803-3809.	4.5	4
2751	Photoelectrocatalytic Seawater Splitting. , 2023, , 165-224.		0
2777	Integration of CO ₂ Capture and Electrochemical Conversion. <i>ACS Energy Letters</i> , 2023, 8, 2840-2857.	8.8	11
2791	Rapid, Direct Regeneration of Spent LiCoO ₂ Cathodes for Li-Ion Batteries. <i>ACS Energy Letters</i> , 2023, 8, 3005-3012.	8.8	15
2795	Recent Advances in Metal-Organic Frameworks Based on Electrospinning for Energy Storage. <i>Advanced Fiber Materials</i> , 2023, 5, 1592-1617.	7.9	11
2833	Photonic structures in radiative cooling. <i>Light: Science and Applications</i> , 2023, 12, .	7.7	28
2853	The design of alternative anodic reactions paired with electrochemical CO ₂ reduction. <i>Green Chemistry</i> , 2023, 25, 5320-5337.	4.6	5
2854	Review on modification routes for SnO _x -based anodes for Li storage: morphological structure tuning and phase structure design. <i>Rare Metals</i> , 0, , .	3.6	0
2869	Pulsed Discharge Plasma for Aromatic Compound Hydrogenation in Heavy Oils. <i>Springer Series in Plasma Science and Technology</i> , 2023, , 895-912.	0.1	0
2880	Crystal Facet Design in Layered Oxide Cathode Enables Low-Temperature Sodium-Ion Batteries. , 2023, 5, 2233-2242.		7
2904	Precise Control of Catalyst Interface at Atomic-level. <i>Materials Chemistry Frontiers</i> , 0, , .	3.2	0
2908	Recent progress in metal-organic frameworks for the separation of gaseous hydrocarbons. <i>Materials Chemistry Frontiers</i> , 2023, 7, 5693-5730.	3.2	0
2912	Metal-organic frameworks for hydrocarbon separation: design, progress, and challenges. <i>Journal of Materials Chemistry A</i> , 2023, 11, 20459-20469.	5.2	5
2914	Automated Machine Learning in Critical Energy Infrastructure for Net Zero Carbon Emissions. , 2023, , .		0
2925	Sustainable zinc-air battery chemistry: advances, challenges and prospects. <i>Chemical Society Reviews</i> , 2023, 52, 6139-6190.	18.7	24
2930	Advancements in catalysts for glycerol oxidation <i>via</i> photo-/electrocatalysis: a comprehensive review of recent developments. <i>Green Chemistry</i> , 0, , .	4.6	0

#	ARTICLE	IF	CITATIONS
2931	High-entropy materials for electrochemical energy storage devices. Energy Advances, 2023, 2, 1565-1590.	1.4	1
2932	Research progress on MOFs and their derivatives as promising and efficient electrode materials for electrocatalytic hydrogen production from water. RSC Advances, 2023, 13, 24393-24411.	1.7	2
2964	Recent advances in single-atom catalysts for electrochemical water splitting. , 2023, , 199-231.		0
3006	Fractional-Order Particle Swarm Optimization for Sustainable Energy Management. , 2023, , .		0
3018	Harnessing single-atom catalysts for CO ₂ electroreduction: a review of recent advances. , 2024, 2, 71-93.		0
3020	Nanostructure-based Colloidal Suspension for Thermal Enhancement for NEPCM. Materials Horizons, 2023, , 91-108.	0.3	0
3050	Recent advances in the utilization of covalent organic frameworks (COFs) as electrode materials for supercapacitors. Chemical Science, 2023, 14, 13601-13628.	3.7	3
3104	Sensory Application in Intelligent Monitoring for the Sustainability of Indoor Spaces. Springer Proceedings in Earth and Environmental Sciences, 2023, , 97-106.	0.2	0
3118	Rare earth oxide based electrocatalysts: synthesis, properties and applications. Chemical Society Reviews, 2024, 53, 714-763.	18.7	2
3119	Nature-inspired Green Supercapacitors: Advantages and Limitations. , 2023, , 291-325.		0
3145	Electrochemical CO ₂ reduction passes the acid test. Nature Nanotechnology, 2024, 19, 269-270.	15.6	0
3167	Study of In-Situ Visualization and Two-Phase Flow Characteristics in Proton Exchange Membrane Electrolyzer. Springer Proceedings in Physics, 2024, , 182-194.	0.1	0
3189	Membrane nanoarchitectonics: advanced nanoporous membranes for osmotic power generation. , 2024, , 29-46.		0
3191	Financing Energy Transition for Sustainable Development in Vietnam: Key Issues and Policy Implications. , 2023, , .		0
3223	An aqueous alkaline zinc-sulfur flow battery. Chemical Communications, 2024, 60, 2946-2949.	2.2	0
3239	Materials and components used for supercapacitors. , 2024, , 39-56.		0