Guangmin Zhou

List of Publications by Year
in descending order

259 papers	38,900 citations	4010 85 h-index	2314 193 g-index
271 all docs	271 docs citations	271 times ranked	24356 citing authors

#	Article	IF	Citations
1	Two-dimensional silica enhanced solid polymer electrolyte for lithium metal batteries. Particuology, 2024, 85, 146-154.	4.0	7
2	Unraveling the Coupling Effect between Cathode and Anode toward Practical Lithiumâ€“Sulfur Batteries. Advanced Materials, 2024, 36, .	24.1	18
3	Integrated interconnected porous and lamellar structures realized fast ion/electron conductivity in high-performance lithium-sulfur batteries. Chinese Chemical Letters, 2024, 35, 109200.	9.1	1
4	Band Structure Engineering and Orbital Orientation Control Constructing Dual Active Sites for Efficient Sulfur Redox Reaction. Advanced Materials, 2024, 36, .	24.1	14
5	Roomâ€Temperature Salt Template Synthesis of Nitrogenâ€Doped 3D Porous Carbon for Fast Metalâ€Ion Storage. Angewandte Chemie - International Edition, 2024, 63, .	14.7	8
6	Design and application of copper/lithium composite anodes for advanced lithium metal batteries. Rare Metals, 2024, 43, 942-970.	7.2	5
7	Integration of Porous Highâ€Loading Electrode and Gel Polymer Electrolyte for Highâ€Performance Quasiâ€Solidâ€State Battery. Advanced Energy Materials, 2024, 14, .	22.1	5
8	Roomâ€Temperature Salt Template Synthesis of Nitrogenâ€Doped 3D Porous Carbon for Fast Metalâ€Ion Storage. Angewandte Chemie, 2024, 136, .	2.1	0
9	A Multifunctional Amino Acid Enables Direct Recycling of Spent LiFePO₄ Cathode Material. Advanced Materials, 2024, 36, .	24.1	12
10	Homogeneous Repair of Highly Degraded Niâ€Rich Cathode Material with Spent Lithium Anode. Advanced Materials, 2024, 36, .	24.1	1
11	An extended substrate screening strategy enabling a low lattice mismatch for highly reversible zinc anodes. Nature Communications, 2024, 15, .	13.2	17
12	Self-Assembly of Ultrathin, Ultrastrong Layered Membranes by Protic Solvent Penetration. Journal of the American Chemical Society, 2024, 146, 3553-3563.	14.6	5
13	Rapid and sustainable battery health diagnosis for recycling pretreatment using fast pulse test and random forest machine learning. Journal of Power Sources, 2024, 597, 234156.	8.0	7
14	Subtractive transformation of cathode materials in spent Li-ion batteries to a low-cobalt 5 V-class cathode material. Nature Communications, 2024, 15, .	13.2	7
15	Achieving Stable Lithium Anodes through Leveraging Inevitable Stress Variations via Adaptive Piezoelectric Effect. Advanced Materials, 2024, 36, .	24.1	0
16	Intrinsic carbon structure modification overcomes the challenge of potassium bond chemistry. Energy and Environmental Science, 2024, 17, 2968-3003.	32.2	1
17	Toward Direct Regeneration of Spent Lithium-Ion Batteries: A Next-Generation Recycling Method. Chemical Reviews, 2024, 124, 2839-2887.	51.5	22
18	Fast Li Replenishment Channelsâ€Assisted Recycling of Degraded Layered Cathodes with Enhanced Cycling Performance and Thermal Stability. Advanced Materials, 2024, 36, .	24.1	4

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19	Constructing an inorganic-rich solid electrolyte interphase by adjusting electrolyte additives for stable Li metal anodes. Journal of Materials Chemistry A, 2024, 12, 10072-10080.	10.5	2
20	Deciphering the contributing motifs of reconstructed cobalt (II) sulfides catalysts in Li-CO2 batteries. Nature Communications, 2024, 15, .	13.2	4
21	A Cu-Ag double-layer coating strategy for stable and reversible Zn metal anodes. Journal of Colloid and Interface Science, 2024, 665, 163-171.	9.7	2
22	Degradation Mechanisms of Electrodes Promotes Direct Regeneration of Spent Liâ€ion Batteries: A Review. Advanced Materials, 2024, 36, .	24.1	5
23	Single-Atom Catalysts with Unsaturated Coâ€“N₂ Active Sites Based on a C₂N 2D-Organic Framework for Efficient Sulfur Redox Reaction. ACS Energy Letters, 2024, 9, 2083-2091.	18.3	4
24	Constructing Bipolar Dualâ€Active Sites through Highâ€Entropyâ€induced Electric Dipole Transition for Decoupling Oxygen Redox. Advanced Materials, 2024, 36, .	24.1	0
25	A high-current initiated formation strategy for improved cycling stability of anode-free lithium metal batteries. Journal of Materials Chemistry A, 2024, 12, 11719-11729.	10.5	0
26	Uncovering the Geometry Activity of Spinel Oxides in Li-CO₂ Battery Reactions. ACS Energy Letters, 2024, 9, 2173-2181.	18.3	2
27	Self-Catalyzed Growth of Co₄N and N-Doped Carbon Nanotubes toward Bifunctional Cathode for Highly Safe and Flexible Liâ€“Air Batteries. ACS Nano, 2024, 18, 10902-10911.	15.2	1
28	Chlorine bridge bond-enabled binuclear copper complex for electrocatalyzing lithiumâ€“sulfur reactions. Nature Communications, 2024, 15, .	13.2	11
29	Tailoring <scp>Li₂CO₃</scp> configuration and orbital structure of <scp>CoS</scp> to improve catalytic activity and stability for <scp>Liâ€CO₂</scp> batteries. EcoMat, 2024, 6, .	12.0	1
30	Unraveling Paradoxical Effects of Large Current Density on Zn Deposition. Advanced Materials, 2024, 36, .	24.1	0
31	A locally solvent-tethered polymer electrolyte for long-life lithium metal batteries. Nature Communications, 2024, 15, .	13.2	0
32	In Situ Construction of a Multifunctional Interphase Enabling Continuous Capture of Unstable Lattice Oxygen Under Ultrahigh Voltages. Journal of the American Chemical Society, 2024, 146, 14036-14047.	14.6	0
33	Asymmetric Coordination of Bimetallic Feâ€“Co Single-Atom Pairs toward Enhanced Bifunctional Activity for Rechargeable Zincâ€“Air Batteries. ACS Nano, 2024, 18, 13006-13018.	15.2	1
34	Sustainable upcycling of mixed spent cathodes to a high-voltage polyanionic cathode material. Nature Communications, 2024, 15, .	13.2	1
35	In situ constructing a porous organic component-zincophilic Cu clusters layer on zinc anode for high performance aqueous zinc ion batteries. Chemical Engineering Journal, 2024, 494, 152789.	13.0	0
36	Fe3O4-doped mesoporous carbon cathode with a plumberâ€™s nightmare structure for high-performance Li-S batteries. Nature Communications, 2024, 15, .	13.2	2

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37	Energy-saving hydrogen production by seawater electrolysis coupling tip-enhanced electric field promoted electrocatalytic sulfion oxidation. Nature Communications, 2024, 15, .	13.2	0
38	Towards High Value-Added Recycling of Spent Lithium-Ion Batteries for Catalysis Application. Electrochemical Energy Reviews, 2024, 7, .	26.2	0
39	An ultraflexible energy harvesting-storage system for wearable applications. Nature Communications, 2024, 15, .	13.2	0
40	High-voltage electrosynthesis of organic-inorganic hybrid with ultrahigh fluorine content toward fast Li-ion transport. Science Advances, 2024, 10, .	10.9	0
41	Fast Remaining Capacity Estimation for Lithiumâ€ion Batteries Based on Shortâ€time Pulse Test and Gaussian Process Regression. Energy and Environmental Materials, 2023, 6, .	13.2	6
42	Longâ€Life Regenerated LiFePO₄ from Spent Cathode by Elevating the dâ€Band Center of Fe. Advanced Materials, 2023, 35, .	24.1	75
43	A 3D Framework with Li₃Nâ€“Li₂S Solid Electrolyte Interphase and Fast Ion Transfer Channels for a Stabilized Lithiumâ€Metal Anode. Advanced Materials, 2023, 35, .	24.1	51
44	Air-stable high-PLQY cesium lead halide perovskites for laser-patterned displays. Journal of Materials Chemistry C, 2023, 11, 2282-2290.	5.6	8
45	Engineering the interfacial orientation of MoS ₂ /Co ₉ S ₈ bidirectional catalysts with highly exposed active sites for reversible Li-CO ₂ batteries. Proceedings of the National Academy of Sciences of the United States of America, 2023, 120, .	7.6	27
46	Rational Design of Flexible Zn-Based Batteries for Wearable Electronic Devices. ACS Nano, 2023, 17, 1764-1802.	15.2	85
47	Flexible Zincâ€“Air Batteries with Ampereâ€Hour Capacities and Wideâ€Temperature Adaptabilities. Advanced Materials, 2023, 35, .	24.1	72
48	Dynamically activating Ni-based catalysts with self-anchored mononuclear Fe for efficient water oxidation. Journal of Materials Chemistry A, 2023, 11, 10228-10238.	10.5	6
49	Rechargeable Zincâ€“Air Batteries with an Ultralarge Discharge Capacity per Cycle and an Ultralong Cycle Life. Advanced Materials, 2023, 35, .	24.1	51
50	Direct regeneration of degraded lithium-ion battery cathodes with a multifunctional organic lithium salt. Nature Communications, 2023, 14, .	13.2	126
51	A Permselective Coating Protects Lithium Anode toward a Practical Lithiumâ€“Sulfur Battery. ACS Nano, 2023, 17, 4453-4462.	15.2	42
52	Ultrahighâ€Voltage LiCoO₂ at 4.7ÂV by Interface Stabilization and Band Structure Modification. Advanced Materials, 2023, 35, .	24.1	65
53	A Polarized Gel Electrolyte for Wideâ€Temperature Flexible Zincâ€Air Batteries. Angewandte Chemie - International Edition, 2023, 62, .	14.7	56
54	A Polarized Gel Electrolyte for Wideâ€Temperature Flexible Zincâ€Air Batteries. Angewandte Chemie, 2023, 135, .	2.1	8

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55	Topotactic Transformation of Surface Structure Enabling Direct Regeneration of Spent Lithium-Ion Battery Cathodes. Journal of the American Chemical Society, 2023, 145, 7288-7300.	14.6	45
56	Sustainable upcycling of spent LiCoO2 to an ultra-stable battery cathode at high voltage. Nature Sustainability, 2023, 6, 797-805.	21.0	89
57	Dualâ€Functional V₂C MXene Assembly in Facilitating Sulfur Evolution Kinetics and Liâ€Ion Sieving toward Practical Lithiumâ€“Sulfur Batteries. Advanced Materials, 2023, 35, .	24.1	64
58	Uncoordinated chemistry enables highly conductive and stable electrolyte/filler interfaces for solid-state lithiumâ€“sulfur batteries. Proceedings of the National Academy of Sciences of the United States of America, 2023, 120, .	7.6	25
59	Toward Sustainable All Solidâ€State Liâ€“Metal Batteries: Perspectives on Battery Technology and Recycling Processes. Advanced Materials, 2023, 35, .	24.1	28
60	Clayâ€Originated Twoâ€Dimensional Holey Silica Separator for Dendriteâ€Free Lithium Metal Anode. Small, 2023, 19, .	11.1	6
61	Battery Cross-Operation-Condition Lifetime Prediction via Interpretable Feature Engineering Assisted Adaptive Machine Learning. ACS Energy Letters, 2023, 8, 3269-3279.	18.3	17
62	Insights into the solvation chemistry in liquid electrolytes for lithium-based rechargeable batteries. Chemical Society Reviews, 2023, 52, 5255-5316.	40.3	70
63	A recyclable biomass electrolyte towards green zinc-ion batteries. Nature Communications, 2023, 14, .	13.2	75
64	Carbon-coated nitrogen, vanadium co-doped MXene interlayer for enhanced polysulfide shuttling inhibition in lithium-sulfur batteries. Journal of Power Sources, 2023, 580, 233445.	8.0	12
65	A Stable and Energy-Dense Polysulfide/Permanganate Flow Battery. ACS Nano, 2023, 17, 16252-16263.	15.2	18
66	Machine-learning-assisted design of a binary descriptor to decipher electronic and structural effects on sulfur reduction kinetics. Nature Catalysis, 2023, 6, 1073-1086.	28.3	51
67	Regulating the Spin State Configuration in Bimetallic Phosphorus Trisulfides for Promoting Sulfur Redox Kinetics. Journal of the American Chemical Society, 2023, 145, 22516-22526.	14.6	38
68	Ammonium fluoride additive-modified interphase chemistry stabilizes zinc anodes in aqueous electrolytes. Chemical Communications, 2023, 59, 13891-13894.	4.2	6
69	A Semisolvated Sole-Solvent Electrolyte for High-Voltage Lithium Metal Batteries. Journal of the American Chemical Society, 2023, 145, 24260-24271.	14.6	29
70	Fundamentals, status and challenges of direct recycling technologies for lithium ion batteries. Chemical Society Reviews, 2023, 52, 8194-8244.	40.3	52
71	Unravelling the proton hysteresis mechanism in vacancy modified vanadium oxides for High-Performance aqueous zinc ion battery. Chemical Engineering Journal, 2023, 477, 146901.	13.0	5
72	Three-dimensional flower-like NiO on Cu foam as a lithiophilic current collector for high-performance lithium metal batteries. Sustainable Energy and Fuels, 2023, 7, 5492-5498.	4.8	2

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73	Collaborative and privacy-preserving retired battery sorting for profitable direct recycling via federated machine learning. Nature Communications, 2023, 14, .	13.2	14
74	An efficient Ni₃S₂â€“Ni electrode constructed by a one-step powder metallurgy approach for the hydrogen evolution reaction. Sustainable Energy and Fuels, 2023, 8, 29-35.	4.8	2
75	Sulfion oxidation assisting self-powered hydrogen production system based on efficient catalysts from spent lithium-ion batteries. Proceedings of the National Academy of Sciences of the United States of America, 2023, 120, .	7.6	4
76	Grapheneâ€Supported Atomically Dispersed Metals as Bifunctional Catalysts for Nextâ€Generation Batteries Based on Conversion Reactions. Advanced Materials, 2022, 34, e2105812.	24.1	123
77	Precise separation of spent lithium-ion cells in water without discharging for recycling. Energy Storage Materials, 2022, 45, 1092-1099.	18.4	61
78	High performance and long cycle life neutral zinc-iron flow batteries enabled by zinc-bromide complexation. Energy Storage Materials, 2022, 44, 433-440.	18.4	85
79	Constructing a Stable Interface Layer by Tailoring Solvation Chemistry in Carbonate Electrolytes for Highâ€Performance Lithiumâ€Metal Batteries. Advanced Materials, 2022, 34, e2108400.	24.1	188
80	Direct conversion of degraded LiCoO2 cathode materials into high-performance LiCoO2: A closed-loop green recycling strategy for spent lithium-ion batteries. Energy Storage Materials, 2022, 45, 768-776.	18.4	133
81	<scp>Inâ€situ</scp> growth of ultrathin sulfur <scp>microcrystal</scp> on <scp>MXene</scp>â€based <scp>3D</scp> matrice for flexible lithiumâ€“sulfur batteries. EcoMat, 2022, 4, .	12.0	34
82	Freestanding and Sandwich MXene-Based Cathode with Suppressed Lithium Polysulfides Shuttle for Flexible Lithiumâ€“Sulfur Batteries. Nano Letters, 2022, 22, 1207-1216.	9.5	58
83	3D Printed Template-Assisted Assembly of Additive-Free Ti₃C₂T_x MXene Microlattices with Customized Structures toward High Areal Capacitance. ACS Nano, 2022, 16, 2699-2710.	15.2	53
84	Co3O4/Mn3O4 hybrid catalysts with heterointerfaces as bifunctional catalysts for Zn-air batteries. Journal of Energy Chemistry, 2022, 68, 679-687.	13.4	52
85	Designing Electrophilic and Nucleophilic Dual Centers in the ReS₂ Plane toward Efficient Bifunctional Catalysts for Li-CO₂ Batteries. Journal of the American Chemical Society, 2022, 144, 3106-3116.	14.6	124
86	A single-crystal nickel-rich material as a highly stable cathode for lithium-ion batteries. Journal of Materials Chemistry A, 2022, 10, 19680-19689.	10.5	26
87	Dendriteâ€Free Lithium Deposition and Stripping Regulated by Aligned Microchannels for Stable Lithium Metal Batteries. Advanced Functional Materials, 2022, 32, .	16.4	45
88	Toward an Understanding of the Reversible Li-CO₂ Batteries over Metalâ€“N₄-Functionalized Graphene Electrocatalysts. ACS Nano, 2022, 16, 1523-1532.	15.2	66
89	Regulating Polysulfide Redox Kinetics on a Selfâ€Healing Electrode for Highâ€Performance Flexible Lithiumâ€Sulfur Batteries. Advanced Functional Materials, 2022, 32, .	16.4	92
90	A nonflammable electrolyte for ultrahigh-voltage (4.8 V-class) Li||NCM811 cells with a wide temperature range of 100 Â°C. Energy and Environmental Science, 2022, 15, 2435-2444.	32.2	138

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91	Formulating energy density for designing practical lithiumâ€“sulfur batteries. Nature Energy, 2022, 7, 312-319.	30.0	452
92	Recycling spent LiNi _{1-x-y} Mn _x Co _y O ₂ cathodes to bifunctional NiMnCo catalysts for zinc-air batteries. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2202202119.	7.6	120
93	Direct and green repairing of degraded LiCoO2 for reuse in lithium-ion batteries. National Science Review, 2022, 9, .	9.5	115
94	Self-extinguishing Janus separator with high safety for flexible lithium-sulfur batteries. Science China Materials, 2022, 65, 2169-2178.	6.5	26
95	Moâ€Oâ€C Between MoS₂ and Graphene Toward Accelerated Polysulfide Catalytic Conversion for Advanced Lithiumâ€Sulfur Batteries. Advanced Science, 2022, 9, .	12.3	54
96	Progress, Key Issues, and Future Prospects for Liâ€Ion Battery Recycling. Global Challenges, 2022, 6, .	3.9	71
97	Vacancy-Rich MoSSe with Sulfiphilicityâ€“Lithiophilicity Dual Function for Kinetics-Enhanced and Dendrite-Free Li-S Batteries. Nano Letters, 2022, 22, 4999-5008.	9.5	62
98	Catalytic effect in Li-S batteries: From band theory to practical application. Materials Today, 2022, 57, 84-120.	18.1	87
99	Coldâ€Starting Allâ€Solidâ€State Batteries from Room Temperature by Thermally Modulated Current Collector in Subâ€Minute. Advanced Materials, 2022, 34, .	24.1	11
100	Solid Carbon Spheres with Interconnected Open Pore Channels Enabling High-Efficient Polysulfide Conversion for High-Rate Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2022, 14, 32183-32195.	8.3	20
101	Isolating Contiguous Fe Atoms by Forming a Coâ€“Fe Intermetallic Catalyst from Spent Lithium-Ion Batteries to Regulate Activity for Zincâ€“Air Batteries. ACS Nano, 2022, 16, 13223-13231.	15.2	59
102	Crosslinked Nanofiberâ€Reinforced Solidâ€State Electrolytes with Polysulfide Fixation Effect Towards High Safety Flexible Lithiumâ€“Sulfur Batteries. Advanced Functional Materials, 2022, 32, .	16.4	59
103	Efficient Extraction of Lithium from Anode for Direct Regeneration of Cathode Materials of Spent Li-Ion Batteries. ACS Energy Letters, 2022, 7, 2816-2824.	18.3	87
104	A quasi-intercalation reaction for fast sulfur redox kinetics in solid-state lithiumâ€“sulfur batteries. Energy and Environmental Science, 2022, 15, 4289-4300.	32.2	76
105	Suppressed Lattice Oxygen Release via Ni/Mn Doping from Spent LiNi_{0.5}Mn_{0.3}Co_{0.2}O₂ toward High-Energy Layered-Oxide Cathodes. Nano Letters, 2022, 22, 8372-8380.	9.5	47
106	Fast Clustering of Retired Lithium-Ion Batteries for Secondary Life with a Two-Step Learning Method. ACS Energy Letters, 2022, 7, 3817-3825.	18.3	17
107	Adaptable Eutectic Salt for the Direct Recycling of Highly Degraded Layer Cathodes. Journal of the American Chemical Society, 2022, 144, 20306-20314.	14.6	103
108	Ti_nO_{2n}â€“1</sub>/MXene Hierarchical Bifunctional Catalyst Anchored on Graphene Aerogel toward Flexible and High-Energy Liâ€“S Batteries. ACS Nano, 2022, 16, 19133-19144.	15.2	41

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109	Rational design of functional binder systems for high-energy lithium-based rechargeable batteries. Energy Storage Materials, 2021, 35, 353-377.	18.4	71
110	Efficient Reversible Conversion between MoS₂ and Mo/Na₂S Enabled by Grapheneâ€Supported Single Atom Catalysts. Advanced Materials, 2021, 33, e2007090.	24.1	119
111	Nitrate Additives Coordinated with Crown Ether Stabilize Lithium Metal Anodes in Carbonate Electrolyte. Advanced Functional Materials, 2021, 31, 2102128.	16.4	70
112	Aligned Carbonâ€Based Electrodes for Fastâ€Charging Batteries: A Review. Small, 2021, 17, e2007676.	11.1	34
113	Lamellar MXene Composite Aerogels with Sandwiched Carbon Nanotubes Enable Stable Lithiumâ€“Sulfur Batteries with a High Sulfur Loading. Advanced Functional Materials, 2021, 31, 2100793.	16.4	119
114	Engineering the Active Sites of Graphene Catalyst: From CO₂ Activation to Activate Li-CO₂ Batteries. ACS Nano, 2021, 15, 9841-9850.	15.2	91
115	Regulating the Stable Lithium and Polysulfide Deposition in Batteries by a Gold Nanoparticle Modified Vertical Graphene Host. Advanced Energy and Sustainability Research, 2021, 2, 2100044.	6.1	6
116	Unlocking the dissolution mechanism of phosphorus anode for lithium-ion batteries. Energy Storage Materials, 2021, 37, 417-423.	18.4	49
117	High-Performance Lithium Metal Batteries with a Wide Operating Temperature Range in Carbonate Electrolyte by Manipulating Interfacial Chemistry. ACS Energy Letters, 2021, 6, 3170-3179.	18.3	85
118	Graphene-Based Materials for Flexible Lithiumâ€“Sulfur Batteries. ACS Nano, 2021, 15, 13901-13923.	15.2	108
119	Stabilized Solid Electrolyte Interphase Induced by Ultrathin Boron Nitride Membranes for Safe Lithium Metal Batteries. Nano Letters, 2021, 21, 8447-8454.	9.5	61
120	Engineering dâ€p Orbital Hybridization in Singleâ€Atom Metalâ€Embedded Threeâ€Dimensional Electrodes for Liâ€“S Batteries. Advanced Materials, 2021, 33, e2105947.	24.1	249
121	Integrated cooling (i-Cool) textile of heat conduction and sweat transportation for personal perspiration management. Nature Communications, 2021, 12, 6122.	13.2	113
122	Dendrite-Free Non-Newtonian Semisolid Lithium Metal Anode. ACS Energy Letters, 2021, 6, 3761-3768.	18.3	22
123	A Universal Seeding Strategy to Synthesize Single Atom Catalysts on 2D Materials for Electrocatalytic Applications. Advanced Functional Materials, 2020, 30, 1906157.	16.4	96
124	High energy density lithium metal batteries enabled by a porous graphene/MgF2 framework. Energy Storage Materials, 2020, 26, 73-82.	18.4	87
125	Theoretical Calculation Guided Design of Single-Atom Catalysts toward Fast Kinetic and Long-Life Liâ€“S Batteries. Nano Letters, 2020, 20, 1252-1261.	9.5	439
126	Airâ€Stable and Dendriteâ€Free Lithium Metal Anodes Enabled by a Hybrid Interphase of C₆₀ and Mg. Advanced Energy Materials, 2020, 10, 1903292.	22.1	60

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127	Thermal pyrolysis of Si@ZIF-67 into Si@N-doped CNTs towards highly stable lithium storage. Science Bulletin, 2020, 65, 452-459.	11.1	54
128	Intercalation-Induced Conversion Reactions Give High-Capacity Potassium Storage. ACS Nano, 2020, 14, 14026-14035.	15.2	50
129	Ultralight and fire-extinguishing current collectors for high-energy and high-safety lithium-ion batteries. Nature Energy, 2020, 5, 786-793.	30.0	199
130	Status and prospects of porous graphene networks for lithiumâ€“sulfur batteries. Materials Horizons, 2020, 7, 2487-2518.	12.7	68
131	A high-volumetric-capacity bismuth nanosheet/graphene electrode for potassium ion batteries. Science China Materials, 2020, 63, 1920-1928.	6.5	39
132	Electrode Design with Integration of High Tortuosity and Sulfur-Philicity for High-Performance Lithium-Sulfur Battery. Matter, 2020, 2, 1605-1620.	10.2	85
133	Bidirectional Catalysts for Liquidâ€“Solid Redox Conversion in Lithiumâ€“Sulfur Batteries. Advanced Materials, 2020, 32, e2000315.	24.1	298
134	Optimized Catalytic WS₂â€“WO₃ Heterostructure Design for Accelerated Polysulfide Conversion in Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2020, 10, 2000091.	22.1	239
135	A novel battery scheme: Coupling nanostructured phosphorus anodes with lithium sulfide cathodes. Nano Research, 2020, 13, 1383-1388.	10.6	14
136	Electrochemical generation of liquid and solid sulfur on two-dimensional layered materials with distinct areal capacities. Nature Nanotechnology, 2020, 15, 231-237.	30.5	72
137	Electrotunable liquid sulfurÂmicrodroplets. Nature Communications, 2020, 11, 606.	13.2	23
138	Solubility-Dependent Protective Effects of Binary Alloys for Lithium Anode. ACS Applied Energy Materials, 2020, 3, 2278-2284.	5.3	19
139	Controlled Oneâ€pot Synthesis of Nickel Single Atoms Embedded in Carbon Nanotube and Graphene Supports with High Loading. ChemNanoMat, 2020, 6, 1063-1074.	2.9	15
140	Graphene-Templated Growth of WS₂ Nanoclusters for Catalytic Conversion of Polysulfides in Lithiumâ€“Sulfur Batteries. ACS Applied Energy Materials, 2020, 3, 4923-4930.	5.3	32
141	Highly Dispersed Cobalt Clusters in Nitrogenâ€Doped Porous Carbon Enable Multiple Effects for Highâ€Performance Liâ€“S Battery. Advanced Energy Materials, 2020, 10, 1903550.	22.1	214
142	Supercooled liquid sulfur maintained in three-dimensional current collector for high-performance Li-S batteries. Science Advances, 2020, 6, eaay5098.	10.9	103
143	Vertical Graphenes Grown on a Flexible Graphite Paper as an All-Carbon Current Collector towards Stable Li Deposition. Research, 2020, 2020, 7163948.	5.9	13
144	Self-Selective Catalyst Synthesis for CO2 Reduction. Joule, 2019, 3, 1927-1936.	24.7	68

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145	Investigation of lithium content changes to understand the capacity fading mechanism in LiFePO4/graphite battery. Journal of Electroanalytical Chemistry, 2019, 853, 113544.	3.9	14
146	A Lightweight 3D Cu Nanowire Network with Phosphidation Gradient as Current Collector for Highâ€Ðensity Nucleation and Stable Deposition of Lithium. Advanced Materials, 2019, 31, e1904991.	24.1	123
147	A Two-Dimensional MoS₂ Catalysis Transistor by Solid-State Ion Gating Manipulation and Adjustment (SIGMA). Nano Letters, 2019, 19, 7293-7300.	9.5	49
148	Elaboration of Aggregated Polysulfide Phases: From Molecules to Large Clusters and Solid Phases. Nano Letters, 2019, 19, 7487-7493.	9.5	14
149	Nanowires for Electrochemical Energy Storage. Chemical Reviews, 2019, 119, 11042-11109.	51.5	337
150	Realizing stable lithium deposition by in situ grown Cu₂S nanowires inside commercial Cu foam for lithium metal anodes. Journal of Materials Chemistry A, 2019, 7, 727-732.	10.5	77
151	An air-stable and waterproof lithium metal anode enabled by wax composite packaging. Science Bulletin, 2019, 64, 910-917.	11.1	61
152	Capture and Catalytic Conversion of Polysulfides by In Situ Built TiO₂â€MXene Heterostructures for Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2019, 9, 1900219.	22.1	520
153	Size Effects on the Mechanical Properties of Nanoporous Graphene Networks. Advanced Functional Materials, 2019, 29, 1900311.	16.4	23
154	Composite lithium electrode with mesoscale skeleton via simple mechanical deformation. Science Advances, 2019, 5, eaau5655.	10.9	82
155	Seeding lithium seeds towards uniform lithium deposition for stable lithium metal anodes. Nano Energy, 2019, 61, 47-53.	16.5	76
156	<scp>l</scp>-Cysteine-Modified Acacia Gum as a Multifunctional Binder for Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2019, 11, 47956-47962.	8.3	17
157	An Interconnected Channelâ€Like Framework as Host for Lithium Metal Composite Anodes. Advanced Energy Materials, 2019, 9, 1802720.	22.1	85
158	Improving a Mg/S Battery with YCl₃ Additive and Magnesium Polysulfide. Advanced Science, 2019, 6, 1800981.	12.3	54
159	Mitigation of Shuttle Effect in Liâ€“S Battery Using a Self-Assembled Ultrathin Molybdenum Disulfide Interlayer. ACS Applied Materials & Interfaces, 2019, 11, 3080-3086.	8.3	61
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