

# Yi Cui

## List of Publications by Year in descending order

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502  
papers

157,940  
citations

24

197  
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docs citations

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times ranked

74711  
citing authors

#	ARTICLE	IF	CITATIONS
1	Investigating size dependence in nanovoid-embedded high-entropy-alloy films under biaxial tension. <i>Archive of Applied Mechanics</i> , 2023, 93, 335-353.	2.2	5
2	Addressing personal protective equipment (PPE) decontamination: Methylene blue and light inactivates severe acute respiratory coronavirus virus 2 (SARS-CoV-2) on N95 respirators and medical masks with maintenance of integrity and fit. <i>Infection Control and Hospital Epidemiology</i> , 2022, 43, 876-885.	1.8	19
3	Improvement of low-cycle fatigue life of austenitic stainless steel by multiple high-density pulsed electric currents. <i>International Journal of Fatigue</i> , 2022, 156, 106639.	5.7	9
4	Liquid electrolyte: The nexus of practical lithium metal batteries. <i>Joule</i> , 2022, 6, 588-616.	24.0	191
5	Capturing the swelling of solid-electrolyte interphase in lithium metal batteries. <i>Science</i> , 2022, 375, 66-70.	12.6	183
6	Rational solvent molecule tuning for high-performance lithium metal battery electrolytes. <i>Nature Energy</i> , 2022, 7, 94-106.	39.5	336
7	Suspension electrolyte with modified Li <sup>+</sup> solvation environment for lithium metal batteries. <i>Nature Materials</i> , 2022, 21, 445-454.	27.5	155
8	Reprocessable and Recyclable Polymer Network Electrolytes via Incorporation of Dynamic Covalent Bonds. <i>Chemistry of Materials</i> , 2022, 34, 2393-2399.	6.7	43
9	Scalable, Ultrathin, and High-Temperature-Resistant Solid Polymer Electrolytes for Energy-Dense Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2022, 12, .	19.5	132
10	Graphene coating on silicon anodes enabled by thermal surface modification for high-energy lithium-ion batteries. <i>MRS Bulletin</i> , 2022, 47, 127-133.	3.5	13
11	Coloured low-emissivity films for building envelopes for year-round energy savings. <i>Nature Sustainability</i> , 2022, 5, 339-347.	23.7	80
12	Co-Solvent Electrolyte Engineering for Stable Anode-Free Zinc Metal Batteries. <i>Journal of the American Chemical Society</i> , 2022, 144, 7160-7170.	13.7	252
13	Anisotropy of the magnetic and transport properties of $\text{EuZn}_2\text{As}_2$ . <i>Physical Review B</i> , 2022, 105, .	3.2	9
14	Formulating energy density for designing practical lithium-sulfur batteries. <i>Nature Energy</i> , 2022, 7, 312-319.	39.5	342
15	Observation of an intermediate state during lithium intercalation of twisted bilayer MoS <sub>2</sub> . <i>Nature Communications</i> , 2022, 13, .	12.8	20
16	A tissue-like neurotransmitter sensor for the brain and gut. <i>Nature</i> , 2022, 606, 94-101.	27.8	162
17	Heat Conductor-Insulator Transition in Electrochemically Controlled Hybrid Superlattices. <i>Nano Letters</i> , 2022, 22, 5443-5450.	9.1	10
18	Chemomechanics of Rechargeable Batteries: Status, Theories, and Perspectives. <i>Chemical Reviews</i> , 2022, 122, 13043-13107.	47.7	59

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19	An X-ray Photoelectron Spectroscopy Primer for Solid Electrolyte Interphase Characterization in Lithium Metal Anodes. ACS Energy Letters, 2022, 7, 2540-2546.	17.4	46
20	Cathode-Electrolyte Interphase in Lithium Batteries Revealed by Cryogenic Electron Microscopy. Matter, 2021, 4, 302-312.	10.0	127
21	Fibrous Materials for Flexible Li-ion Battery. Advanced Energy Materials, 2021, 11, 2002580.	19.5	85
22	Organic wastewater treatment by a single-atom catalyst and electrolytically produced H <sub>2</sub> O <sub>2</sub> . Nature Sustainability, 2021, 4, 233-241.	23.7	350
23	Three-Dimensional Analysis of Particle Distribution on Filter Layers inside N95 Respirators by Deep Learning. Nano Letters, 2021, 21, 651-657.	9.1	41
24	Opportunities of Aqueous Manganese-Based Batteries with Deposition and Stripping Chemistry. Advanced Energy Materials, 2021, 11, 2002904.	19.5	107
25	An Anode-Free Zn-MnO <sub>2</sub> Battery. Nano Letters, 2021, 21, 1446-1453.	9.1	131
26	Concentrated dual-cation electrolyte strategy for aqueous zinc-ion batteries. Energy and Environmental Science, 2021, 14, 4463-4473.	30.8	203
27	Correlating Li-Ion Solvation Structures and Electrode Potential Temperature Coefficients. Journal of the American Chemical Society, 2021, 143, 2264-2271.	13.7	44
28	Electrolyte-Resistant Dual Materials for the Synergistic Safety Enhancement of Lithium-Ion Batteries. Nano Letters, 2021, 21, 2074-2080.	9.1	37
29	3D Artificial Solid-Electrolyte Interphase for Lithium Metal Anodes Enabled by Insulator-Metal-Insulator Layered Heterostructures. Advanced Materials, 2021, 33, e2006247.	21.0	147
30	Efficient Lithium Metal Cycling over a Wide Range of Pressures from an Anion-Derived Solid-Electrolyte Interphase Framework. ACS Energy Letters, 2021, 6, 816-825.	17.4	46
31	A Replacement Reaction Enabled Interdigitated Metal/Solid Electrolyte Architecture for Battery Cycling at 20 mA cm <sup>-2</sup> and 20 mAh cm <sup>-2</sup> . Journal of the American Chemical Society, 2021, 143, 3143-3152.	13.7	132
32	Corrosion of lithium metal anodes during calendar ageing and its microscopic origins. Nature Energy, 2021, 6, 487-494.	39.5	124
33	A Review of Existing and Emerging Methods for Lithium Detection and Characterization in Li-ion and Li-Metal Batteries. Advanced Energy Materials, 2021, 11, 2100372.	19.5	114
34	Electronic Structure Trends Across the Rare-Earth Series in Superconducting Infinite-Layer Nickelates. Physical Review X, 2021, 11, .	8.9	57
35	Tuning electrical and interfacial thermal properties of bilayer MoS <sub>2</sub> via electrochemical intercalation. Nanotechnology, 2021, 32, 265202.	2.6	3
36	Carbon nanotube thermoelectric devices by direct printing: Toward wearable energy converters. Applied Physics Letters, 2021, 118, .	3.3	7

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37	Li <sup>+</sup> S Batteries: Fibrous Materials for Flexible Li <sup>+</sup> S Battery (Adv. Energy Mater. 15/2021). Advanced Energy Materials, 2021, 11, 2170058.	19.5	5
38	Nanotwinning and tensile behavior in cold-welded high-entropy-alloy nanowires. Nanotechnology, 2021, 32, 315716.	2.6	9
39	Zeolite-based Electrolyte Accelerating the Realization of Solid-state Li-Air Battery. Chemical Research in Chinese Universities, 2021, 37, 801-802.	2.6	9
40	Dual <sup>+</sup> Solvent Li <sup>+</sup> Ion Solvation Enables High <sup>+</sup> Performance Li <sup>+</sup> Metal Batteries. Advanced Materials, 2021, 33, e2008619.	21.0	123
41	Free-standing ultrathin lithium metal <sup>+</sup> graphene oxide host foils with controllable thickness for lithium batteries. Nature Energy, 2021, 6, 790-798.	39.5	198
42	An Ultrastable Aqueous Iodine <sup>+</sup> Hydrogen Gas Battery. Advanced Functional Materials, 2021, 31, 2101024.	14.9	20
43	Potentiometric Measurement to Probe Solvation Energy and Its Correlation to Lithium Battery Cyclability. Journal of the American Chemical Society, 2021, 143, 10301-10308.	13.7	83
44	A Nickel <sup>+</sup> Decorated Carbon Flower/Sulfur Cathode for Lean <sup>+</sup> Electrolyte Lithium <sup>+</sup> Sulfur Batteries. Advanced Energy Materials, 2021, 11, 2101449.	19.5	67
45	Origin of enhanced water oxidation activity in an iridium single atom anchored on NiFe oxyhydroxide catalyst. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	71
46	Bright and stable light-emitting diodes made with perovskite nanocrystals stabilized in metal <sup>+</sup> organic frameworks. Nature Photonics, 2021, 15, 843-849.	31.4	117
47	Integrated cooling (i-Cool) textile of heat conduction and sweat transportation for personal perspiration management. Nature Communications, 2021, 12, 6122.	12.8	86
48	A Morphologically Stable Li/Electrolyte Interface for All <sup>+</sup> Solid <sup>+</sup> State Batteries Enabled by 3D <sup>+</sup> Micropatterned Garnet. Advanced Materials, 2021, 33, e2104009.	21.0	76
49	Silicon anodes. Nature Energy, 2021, 6, 995-996.	39.5	112
50	Steric Effect Tuned Ion Solvation Enabling Stable Cycling of High-Voltage Lithium Metal Battery. Journal of the American Chemical Society, 2021, 143, 18703-18713.	13.7	205
51	All-Solid-State Lithium <sup>+</sup> Sulfur Batteries Enhanced by Redox Mediators. Journal of the American Chemical Society, 2021, 143, 18188-18195.	13.7	66
52	Dynamic spatial progression of isolated lithium during battery operations. Nature, 2021, 600, 659-663.	27.8	111
53	Theoretical Calculation Guided Design of Single-Atom Catalysts toward Fast Kinetic and Long-Life Li <sup>+</sup> S Batteries. Nano Letters, 2020, 20, 1252-1261.	9.1	394
54	Synergistic enhancement of electrocatalytic CO <sub>2</sub> reduction to C <sub>2</sub> oxygenates at nitrogen-doped nanodiamonds/Cu interface. Nature Nanotechnology, 2020, 15, 131-137.	31.5	169

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55	Atomic-level insights into strain effect on p-nitrophenol reduction via Au@Pd core-shell nanocubes as an ideal platform. <i>Journal of Catalysis</i> , 2020, 381, 427-433.	6.2	30
56	A Water Stable, Near-Zero-Strain O <sub>3</sub> -Layered Titanium-Based Anode for Long Cycle Sodium-Ion Battery. <i>Advanced Functional Materials</i> , 2020, 30, 1907023.	14.9	36
57	Atomistic treatment of periodic gold nanowire array nanofasteners under shear loading. <i>Nanotechnology</i> , 2020, 31, 105704.	2.6	6
58	A binder-free high silicon content flexible anode for Li-ion batteries. <i>Energy and Environmental Science</i> , 2020, 13, 848-858.	30.8	245
59	Ultralight and fire-extinguishing current collectors for high-energy and high-safety lithium-ion batteries. <i>Nature Energy</i> , 2020, 5, 786-793.	39.5	168
60	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.	19.5	57
61	Designing hierarchical nanoporous membranes for highly efficient gas adsorption and storage. <i>Science Advances</i> , 2020, 6, .	10.3	41
62	Self-assembled materials for electrochemical energy storage. <i>MRS Bulletin</i> , 2020, 45, 815-822.	3.5	7
63	Revealing and Elucidating ALD-Derived Control of Lithium Plating Microstructure. <i>Advanced Energy Materials</i> , 2020, 10, 2002736.	19.5	37
64	Electrolyte-Phobic Surface for the Next-Generation Nanostructured Battery Electrodes. <i>Nano Letters</i> , 2020, 20, 7455-7462.	9.1	25
65	Design Principles of Artificial Solid Electrolyte Interphases for Lithium-Metal Anodes. <i>Cell Reports Physical Science</i> , 2020, 1, 100119.	5.6	133
66	Designing a Nanoscale Three-phase Electrochemical Pathway to Promote Pt-catalyzed Formaldehyde Oxidation. <i>Nano Letters</i> , 2020, 20, 8719-8724.	9.1	15
67	Solid Electrolytes: A Garnet-Type Solid-Electrolyte-Based Molten Lithium-Molybdenum-Iron(II) Chloride Battery with Advanced Reaction Mechanism (Adv. Mater. 32/2020). <i>Advanced Materials</i> , 2020, 32, 2070242.	21.0	1
68	Fracture of void-embedded high-entropy-alloy films: A comprehensive atomistic study. <i>Materialia</i> , 2020, 12, 100790.	2.7	13
69	Combining Superionic Conduction and Favorable Decomposition Products in the Crystalline Lithium-Boron-Sulfur System: A New Mechanism for Stabilizing Solid Li-Ion Electrolytes. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 37957-37966.	8.0	24
70	Opportunities for Cryogenic Electron Microscopy in Materials Science and Nanoscience. <i>ACS Nano</i> , 2020, 14, 9263-9276.	14.6	55
71	Immunizing lithium metal anodes against dendrite growth using protein molecules to achieve high energy batteries. <i>Nature Communications</i> , 2020, 11, 5429.	12.8	129
72	In Vivo Polymerization (Hard-Wiring) of Bioanodes Enables Rapid Start-Up and Order-of-Magnitude Higher Power Density in a Microbial Battery. <i>Environmental Science &amp; Technology</i> , 2020, 54, 14732-14739.	10.0	7

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73	Decontamination of SARS-CoV-2 and Other RNA Viruses from N95 Level Meltblown Polypropylene Fabric Using Heat under Different Humidities. <i>ACS Nano</i> , 2020, 14, 14017-14025.	14.6	69
74	COVID-19: Effects of Environmental Conditions on the Propagation of Respiratory Droplets. <i>Nano Letters</i> , 2020, 20, 7744-7750.	9.1	76
75	A Cation-Tethered Flowable Polymeric Interface for Enabling Stable Deposition of Metallic Lithium. <i>Journal of the American Chemical Society</i> , 2020, 142, 21393-21403.	13.7	65
76	Understanding the Mechanism of High Capacitance in Nickel Hexaaminobenzene-Based Conductive Metal-Organic Frameworks in Aqueous Electrolytes. <i>ACS Nano</i> , 2020, 14, 15919-15925.	14.6	46
77	Underpotential lithium plating on graphite anodes caused by temperature heterogeneity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 29453-29461.	7.1	94
78	Can N95 Respirators Be Reused after Disinfection? How Many Times?. <i>ACS Nano</i> , 2020, 14, 6348-6356.	14.6	355
79	Stretchable electrochemical energy storage devices. <i>Chemical Society Reviews</i> , 2020, 49, 4466-4495.	38.1	209
80	Household Materials Selection for Homemade Cloth Face Coverings and Their Filtration Efficiency Enhancement with Triboelectric Charging. <i>Nano Letters</i> , 2020, 20, 5544-5552.	9.1	207
81	Molecular design for electrolyte solvents enabling energy-dense and long-cycling lithium metal batteries. <i>Nature Energy</i> , 2020, 5, 526-533.	39.5	642
82	A Garnet-Type Solid-Electrolyte-Based Molten Lithium-Molybdenum-Iron(II) Chloride Battery with Advanced Reaction Mechanism. <i>Advanced Materials</i> , 2020, 32, e2000960.	21.0	14
83	Incorporating the Nanoscale Encapsulation Concept from Liquid Electrolytes into Solid-State Lithium-Sulfur Batteries. <i>Nano Letters</i> , 2020, 20, 5496-5503.	9.1	30
84	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.	17.4	199
85	A New Class of Ionically Conducting Fluorinated Ether Electrolytes with High Electrochemical Stability. <i>Journal of the American Chemical Society</i> , 2020, 142, 7393-7403.	13.7	225
86	A scalable method of applying heat and humidity for decontamination of N95 respirators during the COVID-19 crisis. <i>PLoS ONE</i> , 2020, 15, e0234851.	2.5	52
87	Double-sided transistor device processability of carrierless ultrathin silicon wafers. <i>Informa-Materials</i> , 2020, 2, 735-742.	17.3	4
88	High-purity electrolytic lithium obtained from low-purity sources using solid electrolyte. <i>Nature Sustainability</i> , 2020, 3, 386-390.	23.7	54
89	A novel battery scheme: Coupling nanostructured phosphorus anodes with lithium sulfide cathodes. <i>Nano Research</i> , 2020, 13, 1383-1388.	10.4	13
90	Mechanical rolling formation of interpenetrated lithium metal/lithium tin alloy foil for ultrahigh-rate battery anode. <i>Nature Communications</i> , 2020, 11, 829.	12.8	246

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91	A Single-Ion Conducting Borate Network Polymer as a Viable Quasi-Solid Electrolyte for Lithium Metal Batteries. <i>Advanced Materials</i> , 2020, 32, e1905771.	21.0	121
92	Electrochemical generation of liquid and solid sulfur on two-dimensional layered materials with distinct areal capacities. <i>Nature Nanotechnology</i> , 2020, 15, 231-237.	31.5	65
93	Robust ultraclean atomically thin membranes for atomic-resolution electron microscopy. <i>Nature Communications</i> , 2020, 11, 541.	12.8	37
94	Electrotunable liquid sulfur microdroplets. <i>Nature Communications</i> , 2020, 11, 606.	12.8	22
95	Membrane-Free Zn/MnO <sub>2</sub> Flow Battery for Large-Scale Energy Storage. <i>Advanced Energy Materials</i> , 2020, 10, 1902085.	19.5	111
96	Transient Voltammetry with Ultramicroelectrodes Reveals the Electron Transfer Kinetics of Lithium Metal Anodes. <i>ACS Energy Letters</i> , 2020, 5, 701-709.	17.4	91
97	Electrolytes for micro-sized silicon. <i>Nature Energy</i> , 2020, 5, 361-362.	39.5	19
98	Scalable synthesis of nanoporous silicon microparticles for highly cyclable lithium-ion batteries. <i>Nano Research</i> , 2020, 13, 1558-1563.	10.4	65
99	Improving Lithium Metal Composite Anodes with Seeding and Pillaring Effects of Silicon Nanoparticles. <i>ACS Nano</i> , 2020, 14, 4601-4608.	14.6	61
100	High-strain-rate void growth in high entropy alloys: Suppressed dislocation emission = suppressed void growth. <i>Scripta Materialia</i> , 2020, 185, 12-18.	5.2	18
101	A High-Rate Lithium Manganese Oxide-Hydrogen Battery. <i>Nano Letters</i> , 2020, 20, 3278-3283.	9.1	30
102	Aspects of the synthesis of thin film superconducting infinite-layer nickelates. <i>APL Materials</i> , 2020, 8, .	5.1	107
103	Supercooled liquid sulfur maintained in three-dimensional current collector for high-performance Li-S batteries. <i>Science Advances</i> , 2020, 6, eaay5098.	10.3	95
104	High-temperature, spectrally-selective, scalable, and flexible thin-film Si absorber and emitter. <i>Optical Materials Express</i> , 2020, 10, 208.	3.0	7
105	Multi-modal Analytical Insights Into Li-Ion Battery Ageing with XFC. <i>Microscopy and Microanalysis</i> , 2019, 25, 2130-2131.	0.4	0
106	Evolution of the Solid-Electrolyte Interphase on Carbonaceous Anodes Visualized by Atomic-Resolution Cryogenic Electron Microscopy. <i>Nano Letters</i> , 2019, 19, 5140-5148.	9.1	132
107	Charge-Free Mixing Entropy Battery Enabled by Low-Cost Electrode Materials. <i>ACS Omega</i> , 2019, 4, 11785-11790.	3.5	21
108	Improving cyclability of Li metal batteries at elevated temperatures and its origin revealed by cryo-electron microscopy. <i>Nature Energy</i> , 2019, 4, 664-670.	39.5	336

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109	Improved Oxygen Reduction Reaction Activity of Nanostructured CoS <sub>2</sub> through Electrochemical Tuning. ACS Applied Energy Materials, 2019, 2, 8605-8614.	5.1	42
110	Artificial Solid Electrolyte Interphase for Suppressing Surface Reactions and Cathode Dissolution in Aqueous Zinc Ion Batteries. ACS Energy Letters, 2019, 4, 2776-2781.	17.4	155
111	Two-dimensional inorganic molecular crystals. Nature Communications, 2019, 10, 4728.	12.8	91
112	Membrane curvature underlies actin reorganization in response to nanoscale surface topography. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 23143-23151.	7.1	147
113	Lithium Metal Anode Materials Design: Interphase and Host. Electrochemical Energy Reviews, 2019, 2, 509-517.	25.5	156
114	Dynamic Structure and Chemistry of the Silicon Solid-Electrolyte Interphase Visualized by Cryogenic Electron Microscopy. Matter, 2019, 1, 1232-1245.	10.0	107
115	Nanodiamonds for energy. , 2019, 1, 13-18.		116
116	Nonpolar Alkanes Modify Lithium-Ion Solvation for Improved Lithium Deposition and Stripping. Advanced Energy Materials, 2019, 9, 1902116.	19.5	86
117	Superconductivity in an infinite-layer nickelate. Nature, 2019, 572, 624-627.	27.8	673
118	Unravelling Degradation Mechanisms and Atomic Structure of Organic-Inorganic Halide Perovskites by Cryo-EM. Joule, 2019, 3, 2854-2866.	24.0	99
119	A Two-Dimensional MoS <sub>2</sub> Catalysis Transistor by Solid-State Ion Gating Manipulation and Adjustment (SIGMA). Nano Letters, 2019, 19, 7293-7300.	9.1	46
120	Elaboration of Aggregated Polysulfide Phases: From Molecules to Large Clusters and Solid Phases. Nano Letters, 2019, 19, 7487-7493.	9.1	12
121	Monolithic solid-electrolyte interphases formed in fluorinated orthoformate-based electrolytes minimize Li depletion and pulverization. Nature Energy, 2019, 4, 796-805.	39.5	621
122	A Dynamic, Electrolyte-Blocking, and Single-Ion-Conductive Network for Stable Lithium-Metal Anodes. Joule, 2019, 3, 2761-2776.	24.0	176
123	Nanowires for Electrochemical Energy Storage. Chemical Reviews, 2019, 119, 11042-11109.	47.7	309
124	Fast galvanic lithium corrosion involving a Kirkendall-type mechanism. Nature Chemistry, 2019, 11, 382-389.	13.6	180
125	Wrinkled Graphene Cages as Hosts for High-Capacity Li Metal Anodes Shown by Cryogenic Electron Microscopy. Nano Letters, 2019, 19, 1326-1335.	9.1	193
126	Ultrathin, flexible, solid polymer composite electrolyte enabled with aligned nanoporous host for lithium batteries. Nature Nanotechnology, 2019, 14, 705-711.	31.5	773

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127	Cryo-EM Structures of Atomic Surfaces and Host-Guest Chemistry in Metal-Organic Frameworks. <i>Matter</i> , 2019, 1, 428-438.	10.0	102
128	Diatomite derived hierarchical hybrid anode for high performance all-solid-state lithium metal batteries. <i>Nature Communications</i> , 2019, 10, 2482.	12.8	96
129	Temperature-Dependent Nucleation and Growth of Dendrite-Free Lithium Metal Anodes. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 11364-11368.	13.8	182
130	Temperature-Dependent Nucleation and Growth of Dendrite-Free Lithium Metal Anodes. <i>Angewandte Chemie</i> , 2019, 131, 11486-11490.	2.0	72
131	Challenges and opportunities towards fast-charging battery materials. <i>Nature Energy</i> , 2019, 4, 540-550.	39.5	1,053
132	Remediation of heavy metal contaminated soil by asymmetrical alternating current electrochemistry. <i>Nature Communications</i> , 2019, 10, 2440.	12.8	156
133	Direct/Alternating Current Electrochemical Method for Removing and Recovering Heavy Metal from Water Using Graphene Oxide Electrode. <i>ACS Nano</i> , 2019, 13, 6431-6437.	14.6	181
134	An Autotransferable $\text{Li}_3\text{N}_4$ Modulating Layer toward Stable Lithium Anodes. <i>Advanced Materials</i> , 2019, 31, e1900342.	21.0	205
135	Mass transfer and morphology change via dislocation emission in a macroporous FCC metal. <i>Materials Letters</i> , 2019, 247, 67-70.	2.6	13
136	Fast lithium growth and short circuit induced by localized-temperature hotspots in lithium batteries. <i>Nature Communications</i> , 2019, 10, 2067.	12.8	177
137	Uniform High Ionic Conducting Lithium Sulfide Protection Layer for Stable Lithium Metal Anode. <i>Advanced Energy Materials</i> , 2019, 9, 1900858.	19.5	333
138	Aqueous Zinc-Ion Storage in $\text{MoS}_2$ by Tuning the Intercalation Energy. <i>Nano Letters</i> , 2019, 19, 3199-3206.	9.1	362
139	Bright sub-20-nm cathodoluminescent nanoprobe for electron microscopy. <i>Nature Nanotechnology</i> , 2019, 14, 420-425.	31.5	36
140	Amidoxime-Functionalized Macroporous Carbon Self-Refreshed Electrode Materials for Rapid and High-Capacity Removal of Heavy Metal from Water. <i>ACS Central Science</i> , 2019, 5, 719-726.	11.3	76
141	Composite lithium electrode with mesoscale skeleton via simple mechanical deformation. <i>Science Advances</i> , 2019, 5, eaau5655.	10.3	79
142	Selenium Nanocomposite Cathode with Long Cycle Life for Rechargeable Lithium-Selenium Batteries. <i>Batteries and Supercaps</i> , 2019, 2, 784-791.	4.7	31
143	<i>In Situ</i> X-ray Absorption Spectroscopic Investigation of the Capacity Degradation Mechanism in Mg/S Batteries. <i>Nano Letters</i> , 2019, 19, 2928-2934.	9.1	63
144	Designing polymers for advanced battery chemistries. <i>Nature Reviews Materials</i> , 2019, 4, 312-330.	48.7	579

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145	Pathways for practical high-energy long-cycling lithium metal batteries. <i>Nature Energy</i> , 2019, 4, 180-186.	39.5	2,101
146	Quasi-Ballistic Thermal Transport Across MoS <sub>2</sub> Thin Films. <i>Nano Letters</i> , 2019, 19, 2434-2442.	9.1	61
147	Interview: Yi Cui. , 2019, 1, 6-7.		0
148	Minimized lithium trapping by isovalent isomorphism for high initial Coulombic efficiency of silicon anodes. <i>Science Advances</i> , 2019, 5, eaax0651.	10.3	122
149	An ultrathin ionomer interphase for high efficiency lithium anode in carbonate based electrolyte. <i>Nature Communications</i> , 2019, 10, 5824.	12.8	62
150	Decoupling of mechanical properties and ionic conductivity in supramolecular lithium ion conductors. <i>Nature Communications</i> , 2019, 10, 5384.	12.8	249
151	Energy storage: The future enabled by nanomaterials. <i>Science</i> , 2019, 366, .	12.6	1,119
152	An Interconnected Channel-Like Framework as Host for Lithium Metal Composite Anodes. <i>Advanced Energy Materials</i> , 2019, 9, 1802720.	19.5	83
153	Mitigation of Shuttle Effect in Li-S Battery Using a Self-Assembled Ultrathin Molybdenum Disulfide Interlayer. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 3080-3086.	8.0	58
154	Nanostructural and Electrochemical Evolution of the Solid-Electrolyte Interphase on CuO Nanowires Revealed by Cryogenic-Electron Microscopy and Impedance Spectroscopy. <i>ACS Nano</i> , 2019, 13, 737-744.	14.6	78
155	Direct electrochemical generation of supercooled sulfur microdroplets well below their melting temperature. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 765-770.	7.1	39
156	Fundamental insights into the mass transfer via full dislocation loops due to alternative surface cuts. <i>International Journal of Solids and Structures</i> , 2019, 161, 42-54.	2.7	12
157	Machine Learning-Assisted Discovery of Solid Li-Ion Conducting Materials. <i>Chemistry of Materials</i> , 2019, 31, 342-352.	6.7	196
158	Design of Hollow Nanostructures for Energy Storage, Conversion and Production. <i>Advanced Materials</i> , 2019, 31, e1801993.	21.0	313
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311	Ionic Conductivity Enhancement of Polymer Electrolytes with Ceramic Nanowire Fillers. <i>Nano Letters</i> , 2015, 15, 2740-2745.	9.1	782
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349	Effect of Chemical Structure on Polymer-Templated Growth of Graphitic Nanoribbons. <i>ACS Nano</i> , 2015, 9, 9043-9049.	14.6	6
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