

Dingchang Lin

List of Publications by Year in descending order

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241
papers

107,071
citations

¹⁹¹
150
h-index

⁹³²
240
g-index

241
all docs

241
docs citations

241
times ranked

47516
citing authors

#	ARTICLE	IF	CITATIONS
1	High-performance lithium battery anodes using silicon nanowires. <i>Nature Nanotechnology</i> , 2008, 3, 31-35.	31.5	5,860
2	Reviving the lithium metal anode for high-energy batteries. <i>Nature Nanotechnology</i> , 2017, 12, 194-206.	31.5	4,804
3	The path towards sustainable energy. <i>Nature Materials</i> , 2017, 16, 16-22.	27.5	3,288
4	Stable cycling of double-walled silicon nanotube battery anodes through solidâ€“electrolyte interphase control. <i>Nature Nanotechnology</i> , 2012, 7, 310-315.	31.5	2,144
5	A pomegranate-inspired nanoscale design for large-volume-change lithium battery anodes. <i>Nature Nanotechnology</i> , 2014, 9, 187-192.	31.5	2,109
6	Pathways for practical high-energy long-cycling lithium metal batteries. <i>Nature Energy</i> , 2019, 4, 180-186.	39.5	2,101
7	Synthesis of MoS ₂ and MoSe ₂ Films with Vertically Aligned Layers. <i>Nano Letters</i> , 2013, 13, 1341-1347.	9.1	2,036
8	Designing high-energy lithiumâ€“sulfur batteries. <i>Chemical Society Reviews</i> , 2016, 45, 5605-5634.	38.1	2,008
9	Graphene-Wrapped Sulfur Particles as a Rechargeable Lithiumâ€“Sulfur Battery Cathode Material with High Capacity and Cycling Stability. <i>Nano Letters</i> , 2011, 11, 2644-2647.	9.1	1,973
10	Sulphurâ€“TiO ₂ yolkâ€“shell nanoarchitecture with internal void space for long-cycle lithiumâ€“sulphur batteries. <i>Nature Communications</i> , 2013, 4, 1331.	12.8	1,884
11	Designing nanostructured Si anodes for high energy lithium ion batteries. <i>Nano Today</i> , 2012, 7, 414-429.	11.9	1,874
12	Nanostructured sulfur cathodes. <i>Chemical Society Reviews</i> , 2013, 42, 3018.	38.1	1,778
13	A Yolk-Shell Design for Stabilized and Scalable Li-Ion Battery Alloy Anodes. <i>Nano Letters</i> , 2012, 12, 3315-3321.	9.1	1,587
14	Layered reduced graphene oxide with nanoscale interlayer gaps as a stable host for lithium metal anodes. <i>Nature Nanotechnology</i> , 2016, 11, 626-632.	31.5	1,557
15	Interconnected hollow carbon nanospheres for stable lithium metal anodes. <i>Nature Nanotechnology</i> , 2014, 9, 618-623.	31.5	1,535
16	Selective deposition and stable encapsulation of lithium through heterogeneous seeded growth. <i>Nature Energy</i> , 2016, 1, .	39.5	1,516
17	Promises and challenges of nanomaterials for lithium-based rechargeable batteries. <i>Nature Energy</i> , 2016, 1, .	39.5	1,388
18	A phosphoreneâ€“graphene hybrid material as a high-capacity anode for sodium-ion batteries. <i>Nature Nanotechnology</i> , 2015, 10, 980-985.	31.5	1,287

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19	Interconnected Silicon Hollow Nanospheres for Lithium-Ion Battery Anodes with Long Cycle Life. Nano Letters, 2011, 11, 2949-2954.	9.1	1,278
20	The synergetic effect of lithium polysulfide and lithium nitrate to prevent lithium dendrite growth. Nature Communications, 2015, 6, 7436.	12.8	1,250
21	25th Anniversary Article: Understanding the Lithiation of Silicon and Other Alloying Anodes for Lithium-Ion Batteries. Advanced Materials, 2013, 25, 4966-4985.	21.0	1,233
22	Hollow Carbon Nanofiber-Encapsulated Sulfur Cathodes for High Specific Capacity Rechargeable Lithium Batteries. Nano Letters, 2011, 11, 4462-4467.	9.1	1,194
23	Balancing surface adsorption and diffusion of lithium-polysulfides on nonconductive oxides for lithium-sulfur battery design. Nature Communications, 2016, 7, 11203.	12.8	1,136
24	High-efficiency oxygen reduction to hydrogen peroxide catalysed by oxidized carbon materials. Nature Catalysis, 2018, 1, 156-162.	34.4	1,120
25	Energy storage: The future enabled by nanomaterials. Science, 2019, 366, .	12.6	1,119
26	Nanoscale Nucleation and Growth of Electrodeposited Lithium Metal. Nano Letters, 2017, 17, 1132-1139.	9.1	1,081
27	Challenges and opportunities towards fast-charging battery materials. Nature Energy, 2019, 4, 540-550.	39.5	1,053
28	Atomic structure of sensitive battery materials and interfaces revealed by cryo-electron microscopy. Science, 2017, 358, 506-510.	12.6	1,039
29	Self-healing chemistry enables the stable operation of silicon microparticle anodes for high-energy lithium-ion batteries. Nature Chemistry, 2013, 5, 1042-1048.	13.6	1,031
30	Bifunctional non-noble metal oxide nanoparticle electrocatalysts through lithium-induced conversion for overall water splitting. Nature Communications, 2015, 6, 7261.	12.8	1,006
31	Materials for lithium-ion battery safety. Science Advances, 2018, 4, eaas9820.	10.3	958
32	Electrochemical tuning of vertically aligned MoS ₂ nanofilms and its application in improving hydrogen evolution reaction. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 19701-19706.	7.1	894
33	Flexible and Stretchable Energy Storage: Recent Advances and Future Perspectives. Advanced Materials, 2017, 29, 1603436.	21.0	872
34	High Capacity Li Ion Battery Anodes Using Ge Nanowires. Nano Letters, 2008, 8, 307-309.	9.1	855
35	High Ionic Conductivity of Composite Solid Polymer Electrolyte via In Situ Synthesis of Monodispersed SiO ₂ Nanospheres in Poly(ethylene oxide). Nano Letters, 2016, 16, 459-465.	9.1	791
36	Ionic Conductivity Enhancement of Polymer Electrolytes with Ceramic Nanowire Fillers. Nano Letters, 2015, 15, 2740-2745.	9.1	782

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37	Ultrathin, flexible, solid polymer composite electrolyte enabled with aligned nanoporous host for lithium batteries. <i>Nature Nanotechnology</i> , 2019, 14, 705-711.	31.5	773
38	Radiative human body cooling by nanoporous polyethylene textile. <i>Science</i> , 2016, 353, 1019-1023.	12.6	764
39	Enhancing ionic conductivity in composite polymer electrolytes with well-aligned ceramic nanowires. <i>Nature Energy</i> , 2017, 2, .	39.5	763
40	Composite lithium metal anode by melt infusion of lithium into a 3D conducting scaffold with lithiophilic coating. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 2862-2867.	7.1	755
41	An Artificial Solid Electrolyte Interphase with High Li ⁺ Ion Conductivity, Mechanical Strength, and Flexibility for Stable Lithium Metal Anodes. <i>Advanced Materials</i> , 2017, 29, 1605531.	21.0	747
42	Lithium-coated polymeric matrix as a minimum volume-change and dendrite-free lithium metal anode. <i>Nature Communications</i> , 2016, 7, 10992.	12.8	745
43	Porous MoO ₂ Nanosheets as Non-noble Bifunctional Electrocatalysts for Overall Water Splitting. <i>Advanced Materials</i> , 2016, 28, 3785-3790.	21.0	729
44	Transparent air filter for high-efficiency PM2.5 capture. <i>Nature Communications</i> , 2015, 6, 6205.	12.8	690
45	Rapid water disinfection using vertically aligned MoS ₂ nanofilms and visible light. <i>Nature Nanotechnology</i> , 2016, 11, 1098-1104.	31.5	681
46	Engineering Empty Space between Si Nanoparticles for Lithium-Ion Battery Anodes. <i>Nano Letters</i> , 2012, 12, 904-909.	9.1	658
47	Ultrathin Two-Dimensional Atomic Crystals as Stable Interfacial Layer for Improvement of Lithium Metal Anode. <i>Nano Letters</i> , 2014, 14, 6016-6022.	9.1	656
48	Strong Sulfur Binding with Conducting Magn ⁺ li-Phase Ti ₂ O ₂ Nanomaterials for Improving Lithium-Sulfur Batteries. <i>Nano Letters</i> , 2014, 14, 5288-5294.	9.1	643
49	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
50	Monolithic solid electrolyte interphases formed in fluorinated orthoformate-based electrolytes minimize Li depletion and pulverization. <i>Nature Energy</i> , 2019, 4, 796-805.	39.5	621
51	Growth of conformal graphene cages on micrometre-sized silicon particles as stable battery anodes. <i>Nature Energy</i> , 2016, 1, .	39.5	609
52	Practical Challenges and Future Perspectives of All-Solid-State Lithium-Metal Batteries. <i>CheM</i> , 2019, 5, 753-785.	11.7	595
53	Designing polymers for advanced battery chemistries. <i>Nature Reviews Materials</i> , 2019, 4, 312-330.	48.7	579
54	Electrochemical Tuning of MoS ₂ Nanoparticles on Three-Dimensional Substrate for Efficient Hydrogen Evolution. <i>ACS Nano</i> , 2014, 8, 4940-4947.	14.6	566

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55	Scalable synthesis of silicon-nanolayer-embedded graphite for high-energy lithium-ion batteries. <i>Nature Energy</i> , 2016, 1, .	39.5	563
56	Surface chemistry and morphology of the solid electrolyte interphase on silicon nanowire lithium-ion battery anodes. <i>Journal of Power Sources</i> , 2009, 189, 1132-1140.	7.8	559
57	Two-dimensional layered transition metal disulphides for effective encapsulation of high-capacity lithium sulphide cathodes. <i>Nature Communications</i> , 2014, 5, 5017.	12.8	530
58	Studying the Kinetics of Crystalline Silicon Nanoparticle Lithiation with In Situ Transmission Electron Microscopy. <i>Advanced Materials</i> , 2012, 24, 6034-6041.	21.0	529
59	Impedance Analysis of Silicon Nanowire Lithium Ion Battery Anodes. <i>Journal of Physical Chemistry C</i> , 2009, 113, 11390-11398.	3.1	510
60	Polymer Nanofiber-Guided Uniform Lithium Deposition for Battery Electrodes. <i>Nano Letters</i> , 2015, 15, 2910-2916.	9.1	495
61	Prelithiated Silicon Nanowires as an Anode for Lithium Ion Batteries. <i>ACS Nano</i> , 2011, 5, 6487-6493.	14.6	471
62	Lithium Metal Anodes with an Adaptive "Solid-Liquid" Interfacial Protective Layer. <i>Journal of the American Chemical Society</i> , 2017, 139, 4815-4820.	13.7	460
63	Nanofiber Air Filters with High-Temperature Stability for Efficient PM _{2.5} Removal from the Pollution Sources. <i>Nano Letters</i> , 2016, 16, 3642-3649.	9.1	456
64	Self-healing SEI enables full-cell cycling of a silicon-majority anode with a coulombic efficiency exceeding 99.9%. <i>Energy and Environmental Science</i> , 2017, 10, 580-592.	30.8	421
65	Electrochemical tuning of layered lithium transition metal oxides for improvement of oxygen evolution reaction. <i>Nature Communications</i> , 2014, 5, 4345.	12.8	411
66	Rice husks as a sustainable source of nanostructured silicon for high performance Li-ion battery anodes. <i>Scientific Reports</i> , 2013, 3, 1919.	3.3	409
67	A dual-mode textile for human body radiative heating and cooling. <i>Science Advances</i> , 2017, 3, e1700895.	10.3	399
68	Surface Fluorination of Reactive Battery Anode Materials for Enhanced Stability. <i>Journal of the American Chemical Society</i> , 2017, 139, 11550-11558.	13.7	398
69	A high tap density secondary silicon particle anode fabricated by scalable mechanical pressing for lithium-ion batteries. <i>Energy and Environmental Science</i> , 2015, 8, 2371-2376.	30.8	397
70	Single-Cell Profiles of Retinal Ganglion Cells Differing in Resilience to Injury Reveal Neuroprotective Genes. <i>Neuron</i> , 2019, 104, 1039-1055.e12.	8.1	396
71	A Silica "Aerogel" Reinforced Composite Polymer Electrolyte with High Ionic Conductivity and High Modulus. <i>Advanced Materials</i> , 2018, 30, e1802661.	21.0	392
72	A half-wave rectified alternating current electrochemical method for uranium extraction from seawater. <i>Nature Energy</i> , 2017, 2, .	39.5	388

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73	Stabilizing Lithium Metal Anodes by Uniform Li-Ion Flux Distribution in Nanochannel Confinement. <i>Journal of the American Chemical Society</i> , 2016, 138, 15443-15450.	13.7	386
74	Solid-State Lithium–Sulfur Batteries Operated at 37 Å°C with Composites of Nanostructured Li ₇ La ₃ Zr ₂ O ₁₂ /Carbon Foam and Polymer. <i>Nano Letters</i> , 2017, 17, 2967-2972.	9.1	384
75	Conformal Lithium Fluoride Protection Layer on Three-Dimensional Lithium by Nonhazardous Gaseous Reagent Freon. <i>Nano Letters</i> , 2017, 17, 3731-3737.	9.1	377
76	Air-stable and freestanding lithium alloy/graphene foil as an alternative to lithium metal anodes. <i>Nature Nanotechnology</i> , 2017, 12, 993-999.	31.5	376
77	In Situ Electrochemical Oxidation Tuning of Transition Metal Disulfides to Oxides for Enhanced Water Oxidation. <i>ACS Central Science</i> , 2015, 1, 244-251.	11.3	373
78	Solubility-mediated sustained release enabling nitrate additive in carbonate electrolytes for stable lithium metal anode. <i>Nature Communications</i> , 2018, 9, 3656.	12.8	371
79	Nanoporous polyethylene microfibrils for large-scale radiative cooling fabric. <i>Nature Sustainability</i> , 2018, 1, 105-112.	23.7	370
80	Improving lithium–sulphur batteries through spatial control of sulphur species deposition on a hybrid electrode surface. <i>Nature Communications</i> , 2014, 5, 3943.	12.8	369
81	Spectrally Selective Nanocomposite Textile for Outdoor Personal Cooling. <i>Advanced Materials</i> , 2018, 30, e1802152.	21.0	362
82	Advanced Textiles for Personal Thermal Management and Energy. <i>Joule</i> , 2020, 4, 724-742.	24.0	358
83	Organic wastewater treatment by a single-atom catalyst and electrolytically produced H ₂ O ₂ . <i>Nature Sustainability</i> , 2021, 4, 233-241.	23.7	350
84	Formulating energy density for designing practical lithium–sulfur batteries. <i>Nature Energy</i> , 2022, 7, 312-319.	39.5	342
85	Efficient electrocatalytic CO ₂ reduction on a three-phase interface. <i>Nature Catalysis</i> , 2018, 1, 592-600.	34.4	336
86	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
87	Rational solvent molecule tuning for high-performance lithium metal battery electrolytes. <i>Nature Energy</i> , 2022, 7, 94-106.	39.5	336
88	Uniform High Ionic Conducting Lithium Sulfide Protection Layer for Stable Lithium Metal Anode. <i>Advanced Energy Materials</i> , 2019, 9, 1900858.	19.5	333
89	Transition-Metal Single Atoms in a Graphene Shell as Active Centers for Highly Efficient Artificial Photosynthesis. <i>CheM</i> , 2017, 3, 950-960.	11.7	326
90	Design of Hollow Nanostructures for Energy Storage, Conversion and Production. <i>Advanced Materials</i> , 2019, 31, e1801993.	21.0	313

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91	Improved Lithium Ionic Conductivity in Composite Polymer Electrolytes with Oxide-Ion Conducting Nanowires. <i>ACS Nano</i> , 2016, 10, 11407-11413.	14.6	311
92	Nanowires for Electrochemical Energy Storage. <i>Chemical Reviews</i> , 2019, 119, 11042-11109.	47.7	309
93	Effects of Polymer Coatings on Electrodeposited Lithium Metal. <i>Journal of the American Chemical Society</i> , 2018, 140, 11735-11744.	13.7	307
94	Improving battery safety by early detection of internal shorting with a bifunctional separator. <i>Nature Communications</i> , 2014, 5, 5193.	12.8	301
95	Sulfur Cathodes with Hydrogen Reduced Titanium Dioxide Inverse Opal Structure. <i>ACS Nano</i> , 2014, 8, 5249-5256.	14.6	297
96	Artificial Solid Electrolyte Interphase-Protected Li _x Si Nanoparticles: An Efficient and Stable Prelithiation Reagent for Lithium-Ion Batteries. <i>Journal of the American Chemical Society</i> , 2015, 137, 8372-8375.	13.7	297
97	Roll-to-Roll Transfer of Electrospun Nanofiber Film for High-Efficiency Transparent Air Filter. <i>Nano Letters</i> , 2016, 16, 1270-1275.	9.1	289
98	Three-dimensional stable lithium metal anode with nanoscale lithium islands embedded in ionically conductive solid matrix. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 4613-4618.	7.1	285
99	Correlating Structure and Function of Battery Interphases at Atomic Resolution Using Cryoelectron Microscopy. <i>Joule</i> , 2018, 2, 2167-2177.	24.0	284
100	High-Performance Lithium Metal Negative Electrode with a Soft and Flowable Polymer Coating. <i>ACS Energy Letters</i> , 2016, 1, 1247-1255.	17.4	281
101	Warming up human body by nanoporous metallized polyethylene textile. <i>Nature Communications</i> , 2017, 8, 496.	12.8	280
102	Dry-air-stable lithium silicide “lithium oxide core” shell nanoparticles as high-capacity prelithiation reagents. <i>Nature Communications</i> , 2014, 5, 5088.	12.8	276
103	Atomic Layer Deposition of Stable LiAlF ₄ Lithium Ion Conductive Interfacial Layer for Stable Cathode Cycling. <i>ACS Nano</i> , 2017, 11, 7019-7027.	14.6	276
104	Vertically Aligned and Continuous Nanoscale Ceramic “Polymer Interfaces in Composite Solid Polymer Electrolytes for Enhanced Ionic Conductivity. <i>Nano Letters</i> , 2018, 18, 3829-3838.	9.1	268
105	Improving the cycling stability of silicon nanowire anodes with conducting polymer coatings. <i>Energy and Environmental Science</i> , 2012, 5, 7927.	30.8	265
106	High-capacity battery cathode prelithiation to offset initial lithium loss. <i>Nature Energy</i> , 2016, 1, .	39.5	265
107	LiMn _{1.7} Fe _{0.3} PO ₄ Nanorods Grown on Graphene Sheets for Ultrahigh-Rate Performance Lithium Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 7364-7368.	13.8	262
108	Design of Complex Nanomaterials for Energy Storage: Past Success and Future Opportunity. <i>Accounts of Chemical Research</i> , 2017, 50, 2895-2905.	15.6	258

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109	Fast and reversible thermoresponsive polymer switching materials for safer batteries. <i>Nature Energy</i> , 2016, 1, .	39.5	253
110	Stitching h-BN by atomic layer deposition of LiF as a stable interface for lithium metal anode. <i>Science Advances</i> , 2017, 3, eaao3170.	10.3	252
111	Decoupling of mechanical properties and ionic conductivity in supramolecular lithium ion conductors. <i>Nature Communications</i> , 2019, 10, 5384.	12.8	249
112	Graphite-Encapsulated Li-Metal Hybrid Anodes for High-Capacity Li Batteries. <i>CheM</i> , 2016, 1, 287-297.	11.7	247
113	3D Porous Sponge-Inspired Electrode for Stretchable Lithium-Ion Batteries. <i>Advanced Materials</i> , 2016, 28, 3578-3583.	21.0	247
114	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
115	Electrospun core-shell microfiber separator with thermal-triggered flame-retardant properties for lithium-ion batteries. <i>Science Advances</i> , 2017, 3, e1601978.	10.3	245
116	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
117	Thermal Management in Nanofiber-Based Face Mask. <i>Nano Letters</i> , 2017, 17, 3506-3510.	9.1	228
118	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
119	Silicon-Carbon Nanotube Coaxial Sponge as Li-Ion Anodes with High Areal Capacity. <i>Advanced Energy Materials</i> , 2011, 1, 523-527.	19.5	220
120	Temperature Regulation in Colored Infrared-Transparent Polyethylene Textiles. <i>Joule</i> , 2019, 3, 1478-1486.	24.0	213
121	Stretchable electrochemical energy storage devices. <i>Chemical Society Reviews</i> , 2020, 49, 4466-4495.	38.1	209
122	An Autotransferable CCl_3N_4 Li ⁺ -Modulating Layer toward Stable Lithium Anodes. <i>Advanced Materials</i> , 2019, 31, e1900342.	21.0	205
123	Steric Effect Tuned Ion Solvation Enabling Stable Cycling of High-Voltage Lithium Metal Battery. <i>Journal of the American Chemical Society</i> , 2021, 143, 18703-18713.	13.7	205
124	Extending the Life of Lithium-Based Rechargeable Batteries by Reaction of Lithium Dendrites with a Novel Silica Nanoparticle Sandwiched Separator. <i>Advanced Materials</i> , 2017, 29, 1603987.	21.0	202
125	Ultrahigh-current density anodes with interconnected Li metal reservoir through overlithiation of mesoporous AlF_3 framework. <i>Science Advances</i> , 2017, 3, e1701301.	10.3	199
126	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

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127	Free-standing ultrathin lithium metal-graphene oxide host foils with controllable thickness for lithium batteries. <i>Nature Energy</i> , 2021, 6, 790-798.	39.5	198
128	A Stretchable Graphitic Carbon/Si Anode Enabled by Conformal Coating of a Self-Healing Elastic Polymer. <i>Advanced Materials</i> , 2016, 28, 2455-2461.	21.0	197
129	Robust Pinhole-free Li ₃ N Solid Electrolyte Grown from Molten Lithium. <i>ACS Central Science</i> , 2018, 4, 97-104.	11.3	197
130	Flexible and stable high-energy lithium-sulfur full batteries with only 100% oversized lithium. <i>Nature Communications</i> , 2018, 9, 4480.	12.8	193
131	Wrinkled Graphene Cages as Hosts for High-Capacity Li Metal Anodes Shown by Cryogenic Electron Microscopy. <i>Nano Letters</i> , 2019, 19, 1326-1335.	9.1	193
132	Liquid electrolyte: The nexus of practical lithium metal batteries. <i>Joule</i> , 2022, 6, 588-616.	24.0	191
133	Strong texturing of lithium metal in batteries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 12138-12143.	7.1	188
134	Temperature-Dependent Nucleation and Growth of Dendrite-Free Lithium Metal Anodes. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 11364-11368.	13.8	182
135	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
136	Fast galvanic lithium corrosion involving a Kirkendall-type mechanism. <i>Nature Chemistry</i> , 2019, 11, 382-389.	13.6	180
137	Fast lithium growth and short circuit induced by localized-temperature hotspots in lithium batteries. <i>Nature Communications</i> , 2019, 10, 2067.	12.8	177
138	A Dynamic, Electrolyte-Blocking, and Single-Ion-Conductive Network for Stable Lithium-Metal Anodes. <i>Joule</i> , 2019, 3, 2761-2776.	24.0	176
139	All-Integrated Bifunctional Separator for Li Dendrite Detection via Novel Solution Synthesis of a Thermostable Polyimide Separator. <i>Journal of the American Chemical Society</i> , 2016, 138, 11044-11050.	13.7	170
140	An intermediate temperature garnet-type solid electrolyte-based molten lithium battery for grid energy storage. <i>Nature Energy</i> , 2018, 3, 732-738.	39.5	170
141	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.	31.5	169
142	Design of Red Phosphorus Nanostructured Electrode for Fast-Charging Lithium-Ion Batteries with High Energy Density. <i>Joule</i> , 2019, 3, 1080-1093.	24.0	168
143	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
144	Electrochemical tuning of olivine-type lithium transition-metal phosphates as efficient water oxidation catalysts. <i>Energy and Environmental Science</i> , 2015, 8, 1719-1724.	30.8	167

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145	Core-Shell Nanoparticle Coating as an Interfacial Layer for Dendrite-Free Lithium Metal Anodes. ACS Central Science, 2017, 3, 135-140.	11.3	162
146	Fundamental study on the wetting property of liquid lithium. Energy Storage Materials, 2018, 14, 345-350.	18.0	161
147	Conducting Nanosponge Electroporation for Affordable and High-Efficiency Disinfection of Bacteria and Viruses in Water. Nano Letters, 2013, 13, 4288-4293.	9.1	160
148	Stretchable Lithium-Ion Batteries Enabled by Device-Scaled Wavy Structure and Elastic-Sticky Separator. Advanced Energy Materials, 2017, 7, 1701076.	19.5	158
149	Lithium Metal Anode Materials Design: Interphase and Host. Electrochemical Energy Reviews, 2019, 2, 509-517.	25.5	156
150	An Ultrastrong Double-Layer Nanodiamond Interface for Stable Lithium Metal Anodes. Joule, 2018, 2, 1595-1609.	24.0	155
151	Suspension electrolyte with modified Li ⁺ solvation environment for lithium metal batteries. Nature Materials, 2022, 21, 445-454.	27.5	155
152	Engineering stable interfaces for three-dimensional lithium metal anodes. Science Advances, 2018, 4, eaat5168.	10.3	153
153	Lithium Extraction from Seawater through Pulsed Electrochemical Intercalation. Joule, 2020, 4, 1459-1469.	24.0	152
154	Lithium metal stripping beneath the solid electrolyte interphase. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8529-8534.	7.1	150
155	Tortuosity Effects in Lithium-Metal Host Anodes. Joule, 2020, 4, 938-952.	24.0	150
156	3D Artificial Solid-Electrolyte Interphase for Lithium Metal Anodes Enabled by Insulator-Metal-Insulator Layered Heterostructures. Advanced Materials, 2021, 33, e2006247.	21.0	147
157	Metallurgically lithiated SiO _x anode with high capacity and ambient air compatibility. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7408-7413.	7.1	145
158	Identifying the Active Surfaces of Electrochemically Tuned LiCoO ₂ for Oxygen Evolution Reaction. Journal of the American Chemical Society, 2017, 139, 6270-6276.	13.7	143
159	Stabilized Li ₃ N for efficient battery cathode prelithiation. Energy Storage Materials, 2017, 6, 119-124.	18.0	143
160	Sulfiphilic Nickel Phosphosulfide Enabled Li ₂ S Impregnation in 3D Graphene Cages for Li-S Batteries. Advanced Materials, 2017, 29, 1603366.	21.0	139
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