

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1542143/publications.pdf Version: 2024-02-01

		24	59
502	157,940	197	388
papers	citations	h-index	g-index
511	511	511	74711
all docs	docs citations	times ranked	citing authors

VI CIII

#	Article	IF	CITATIONS
1	High-performance lithium battery anodes using silicon nanowires. Nature Nanotechnology, 2008, 3, 31-35.	15.6	5,860
2	Reviving the lithium metal anode for high-energy batteries. Nature Nanotechnology, 2017, 12, 194-206.	15.6	4,804
3	The path towards sustainable energy. Nature Materials, 2017, 16, 16-22.	13.3	3,288
4	Stable cycling of double-walled silicon nanotube battery anodes through solid–electrolyte interphase control. Nature Nanotechnology, 2012, 7, 310-315.	15.6	2,144
5	A pomegranate-inspired nanoscale design for large-volume-change lithium battery anodes. Nature Nanotechnology, 2014, 9, 187-192.	15.6	2,109
6	Pathways for practical high-energy long-cycling lithium metal batteries. Nature Energy, 2019, 4, 180-186.	19.8	2,101
7	High Performance Silicon Nanowire Field Effect Transistors. Nano Letters, 2003, 3, 149-152.	4.5	2,010
8	Designing high-energy lithium–sulfur batteries. Chemical Society Reviews, 2016, 45, 5605-5634.	18.7	2,008
9	Graphene-Wrapped Sulfur Particles as a Rechargeable Lithium–Sulfur Battery Cathode Material with High Capacity and Cycling Stability. Nano Letters, 2011, 11, 2644-2647.	4.5	1,973
10	Sulphur–TiO2 yolk–shell nanoarchitecture with internal void space for long-cycle lithium–sulphur batteries. Nature Communications, 2013, 4, 1331.	5.8	1,884
11	Designing nanostructured Si anodes for high energy lithium ion batteries. Nano Today, 2012, 7, 414-429.	6.2	1,874
12	Highly Polarized Photoluminescence and Photodetection from Single Indium Phosphide Nanowires. Science, 2001, 293, 1455-1457.	6.0	1,744
13	Solution-Processed Metal Nanowire Mesh Transparent Electrodes. Nano Letters, 2008, 8, 689-692.	4.5	1,713
14	A Yolk-Shell Design for Stabilized and Scalable Li-Ion Battery Alloy Anodes. Nano Letters, 2012, 12, 3315-3321.	4.5	1,587
15	Layered reduced graphene oxide with nanoscale interlayer gaps as a stable host for lithium metal anodes. Nature Nanotechnology, 2016, 11, 626-632.	15.6	1,557
16	Interconnected hollow carbon nanospheres for stable lithium metal anodes. Nature Nanotechnology, 2014, 9, 618-623.	15.6	1,535
17	Selective deposition and stable encapsulation of lithium through heterogeneous seeded growth. Nature Energy, 2016, 1, .	19.8	1,516
18	Promises and challenges of nanomaterials for lithium-based rechargeable batteries. Nature Energy, 2016, 1, .	19.8	1,388

#	Article	IF	CITATIONS
19	Silicon Nanotube Battery Anodes. Nano Letters, 2009, 9, 3844-3847.	4.5	1,362
20	A phosphorene–graphene hybrid material as a high-capacity anode for sodium-ion batteries. Nature Nanotechnology, 2015, 10, 980-985.	15.6	1,287
21	Interconnected Silicon Hollow Nanospheres for Lithium-Ion Battery Anodes with Long Cycle Life. Nano Letters, 2011, 11, 2949-2954.	4.5	1,278
22	The synergetic effect of lithium polysulfide and lithium nitrate to prevent lithium dendrite growth. Nature Communications, 2015, 6, 7436.	5.8	1,250
23	25th Anniversary Article: Understanding the Lithiation of Silicon and Other Alloying Anodes for Lithiumâ€lon Batteries. Advanced Materials, 2013, 25, 4966-4985.	11.1	1,233
24	Hollow Carbon Nanofiber-Encapsulated Sulfur Cathodes for High Specific Capacity Rechargeable Lithium Batteries. Nano Letters, 2011, 11, 4462-4467.	4.5	1,194
25	Stable Li-ion battery anodes by in-situ polymerization of conducting hydrogel to conformally coat silicon nanoparticles. Nature Communications, 2013, 4, 1943.	5.8	1,138
26	Balancing surface adsorption and diffusion of lithium-polysulfides on nonconductive oxides for lithium–sulfur battery design. Nature Communications, 2016, 7, 11203.	5.8	1,136
27	High-efficiency oxygen reduction to hydrogen peroxide catalysed by oxidized carbon materials. Nature Catalysis, 2018, 1, 156-162.	16.1	1,120
28	Energy storage: The future enabled by nanomaterials. Science, 2019, 366, .	6.0	1,119
29	Crystalline-Amorphous Coreâ^'Shell Silicon Nanowires for High Capacity and High Current Battery Electrodes. Nano Letters, 2009, 9, 491-495.	4.5	1,110
30	Nanoscale Nucleation and Growth of Electrodeposited Lithium Metal. Nano Letters, 2017, 17, 1132-1139.	4.5	1,081
31	Diameter-controlled synthesis of single-crystal silicon nanowires. Applied Physics Letters, 2001, 78, 2214-2216.	1.5	1,078
32	Challenges and opportunities towards fast-charging battery materials. Nature Energy, 2019, 4, 540-550.	19.8	1,053
33	Atomic structure of sensitive battery materials and interfaces revealed by cryo–electron microscopy. Science, 2017, 358, 506-510.	6.0	1,039
34	Self-healing chemistry enables the stable operation of silicon microparticle anodes for high-energy lithium-ion batteries. Nature Chemistry, 2013, 5, 1042-1048.	6.6	1,031
35	Catalytic oxidation of Li <sub>2</sub> S on the surface of metal sulfides for Liâ^'S batteries. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 840-845.	3.3	1,030
36	Hierarchical nanostructured conducting polymer hydrogel with high electrochemical activity. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 9287-9292.	3.3	1,025

#	Article	IF	CITATIONS
37	Polarization-sensitive broadband photodetector using a black phosphorus vertical p–n junction. Nature Nanotechnology, 2015, 10, 707-713.	15.6	1,007
38	Bifunctional non-noble metal oxide nanoparticle electrocatalysts through lithium-induced conversion for overall water splitting. Nature Communications, 2015, 6, 7261.	5.8	1,006
39	Self-limited plasmonic welding of silver nanowireÂjunctions. Nature Materials, 2012, 11, 241-249.	13.3	1,002
40	Toward N-Doped Graphene via Solvothermal Synthesis. Chemistry of Materials, 2011, 23, 1188-1193.	3.2	984
41	Carbonâ^'Silicon Coreâ^'Shell Nanowires as High Capacity Electrode for Lithium Ion Batteries. Nano Letters, 2009, 9, 3370-3374.	4.5	967
42	Materials for lithium-ion battery safety. Science Advances, 2018, 4, eaas9820.	4.7	958
43	First-row transition metal dichalcogenide catalysts for hydrogen evolution reaction. Energy and Environmental Science, 2013, 6, 3553.	15.6	946
44	Controlled Growth and Structures of Molecular-Scale Silicon Nanowires. Nano Letters, 2004, 4, 433-436.	4.5	892
45	Doping and Electrical Transport in Silicon Nanowires. Journal of Physical Chemistry B, 2000, 104, 5213-5216.	1.2	885
46	Flexible and Stretchable Energy Storage: Recent Advances and Future Perspectives. Advanced Materials, 2017, 29, 1603436.	11.1	872
47	A transparent electrode based on a metal nanotrough network. Nature Nanotechnology, 2013, 8, 421-425.	15.6	851
48	Improving the Performance of Lithium–Sulfur Batteries by Conductive Polymer Coating. ACS Nano, 2011, 5, 9187-9193.	7.3	815
49	Light management for photovoltaics using high-index nanostructures. Nature Materials, 2014, 13, 451-460.	13.3	796
50	High Ionic Conductivity of Composite Solid Polymer Electrolyte via In Situ Synthesis of Monodispersed SiO <sub>2</sub> Nanospheres in Poly(ethylene oxide). Nano Letters, 2016, 16, 459-465.	4.5	791
51	Robust and conductive two-dimensional metalâ^'organic frameworks with exceptionally high volumetric and areal capacitance. Nature Energy, 2018, 3, 30-36.	19.8	786
52	Ionic Conductivity Enhancement of Polymer Electrolytes with Ceramic Nanowire Fillers. Nano Letters, 2015, 15, 2740-2745.	4.5	782
53	Understanding the Anchoring Effect of Two-Dimensional Layered Materials for Lithium–Sulfur Batteries. Nano Letters, 2015, 15, 3780-3786.	4.5	779
54	Ultrathin, flexible, solid polymer composite electrolyte enabled with aligned nanoporous host for lithium batteries. Nature Nanotechnology, 2019, 14, 705-711.	15.6	773

#	Article	IF	CITATIONS
55	Radiative human body cooling by nanoporous polyethylene textile. Science, 2016, 353, 1019-1023.	6.0	764
56	Enhancing ionic conductivity in composite polymer electrolytes with well-aligned ceramicÂnanowires. Nature Energy, 2017, 2, .	19.8	763
57	Composite lithium metal anode by melt infusion of lithium into a 3D conducting scaffold with lithiophilic coating. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2862-2867.	3.3	755
58	An Artificial Solid Electrolyte Interphase with High Liâ€lon Conductivity, Mechanical Strength, and Flexibility for Stable Lithium Metal Anodes. Advanced Materials, 2017, 29, 1605531.	11.1	747
59	Lithium-coated polymeric matrix as a minimum volume-change and dendrite-free lithium metal anode. Nature Communications, 2016, 7, 10992.	5.8	745
60	A Highly Reversible Room-Temperature Sodium Metal Anode. ACS Central Science, 2015, 1, 449-455.	5.3	733
61	Porous MoO <sub>2</sub> Nanosheets as Nonâ€noble Bifunctional Electrocatalysts for Overall Water Splitting. Advanced Materials, 2016, 28, 3785-3790.	11.1	729
62	Transparent air filter for high-efficiency PM2.5 capture. Nature Communications, 2015, 6, 6205.	5.8	690
63	Rapid water disinfection using vertically aligned MoS2 nanofilms and visible light. Nature Nanotechnology, 2016, 11, 1098-1104.	15.6	681
64	In Situ TEM of Two-Phase Lithiation of Amorphous Silicon Nanospheres. Nano Letters, 2013, 13, 758-764.	4.5	680
65	Superconductivity in an infinite-layer nickelate. Nature, 2019, 572, 624-627.	13.7	673
66	Amphiphilic Surface Modification of Hollow Carbon Nanofibers for Improved Cycle Life of Lithium Sulfur Batteries. Nano Letters, 2013, 13, 1265-1270.	4.5	668
67	Electrospun Metal Nanofiber Webs as High-Performance Transparent Electrode. Nano Letters, 2010, 10, 4242-4248.	4.5	660
68	Engineering Empty Space between Si Nanoparticles for Lithium-Ion Battery Anodes. Nano Letters, 2012, 12, 904-909.	4.5	658
69	Strong Sulfur Binding with Conducting Magnéli-Phase Ti <sub><i>n</i></sub> O <sub>2<i>n</i>–1</sub> Nanomaterials for Improving Lithium–Sulfur Batteries. Nano Letters, 2014, 14, 5288-5294.	4.5	643
70	Molecular design for electrolyte solvents enabling energy-dense and long-cycling lithium metal batteries. Nature Energy, 2020, 5, 526-533.	19.8	642
71	Nanostructured conductive polypyrrole hydrogels as high-performance, flexible supercapacitor electrodes. Journal of Materials Chemistry A, 2014, 2, 6086-6091.	5.2	624
72	Monolithic solid–electrolyte interphases formed in fluorinated orthoformate-based electrolytes minimize Li depletion and pulverization. Nature Energy, 2019, 4, 796-805.	19.8	621

#	Article	IF	CITATIONS
73	New Nanostructured Li <sub>2</sub> S/Silicon Rechargeable Battery with High Specific Energy. Nano Letters, 2010, 10, 1486-1491.	4.5	612
74	Growth of conformal graphene cages on micrometre-sized silicon particles as stable battery anodes. Nature Energy, 2016, 1, .	19.8	609
75	Understanding the Role of Different Conductive Polymers in Improving the Nanostructured Sulfur Cathode Performance. Nano Letters, 2013, 13, 5534-5540.	4.5	601
76	Transition-metal doped edge sites in vertically aligned MoS2 catalysts for enhanced hydrogen evolution. Nano Research, 2015, 8, 566-575.	5.8	594
77	Absorption Enhancement in Ultrathin Crystalline Silicon Solar Cells with Antireflection and Light-Trapping Nanocone Gratings. Nano Letters, 2012, 12, 1616-1619.	4.5	592
78	Designing polymers for advanced battery chemistries. Nature Reviews Materials, 2019, 4, 312-330.	23.3	579
79	Scalable synthesis of silicon-nanolayer-embedded graphite for high-energy lithium-ion batteries. Nature Energy, 2016, 1, .	19.8	563
80	Surface chemistry and morphology of the solid electrolyte interphase on silicon nanowire lithium-ion battery anodes. Journal of Power Sources, 2009, 189, 1132-1140.	4.0	559
81	Nanowire Solar Cells. Annual Review of Materials Research, 2011, 41, 269-295.	4.3	556
82	Two-dimensional layered transition metal disulphides for effective encapsulation of high-capacity lithium sulphide cathodes. Nature Communications, 2014, 5, 5017.	5.8	530
83	Studying the Kinetics of Crystalline Silicon Nanoparticle Lithiation with In Situ Transmission Electron Microscopy. Advanced Materials, 2012, 24, 6034-6041.	11.1	529
84	High-Performance Anode Materials for Rechargeable Lithium-Ion Batteries. Electrochemical Energy Reviews, 2018, 1, 35-53.	13.1	514
85	Direct and continuous strain control of catalysts with tunable battery electrode materials. Science, 2016, 354, 1031-1036.	6.0	512
86	Impedance Analysis of Silicon Nanowire Lithium Ion Battery Anodes. Journal of Physical Chemistry C, 2009, 113, 11390-11398.	1.5	510
87	Polymer Nanofiber-Guided Uniform Lithium Deposition for Battery Electrodes. Nano Letters, 2015, 15, 2910-2916.	4.5	495
88	Improved lithium–sulfur batteries with a conductive coating on the separator to prevent the accumulation of inactive S-related species at the cathode–separator interface. Energy and Environmental Science, 2014, 7, 3381-3390.	15.6	476
89	In Operando X-ray Diffraction and Transmission X-ray Microscopy of Lithium Sulfur Batteries. Journal of the American Chemical Society, 2012, 134, 6337-6343.	6.6	475
90	Lithium Metal Anodes with an Adaptive "Solid-Liquid―Interfacial Protective Layer. Journal of the American Chemical Society, 2017, 139, 4815-4820.	6.6	460

#	Article	IF	CITATIONS
91	Nanofiber Air Filters with High-Temperature Stability for Efficient PM <sub>2.5</sub> Removal from the Pollution Sources. Nano Letters, 2016, 16, 3642-3649.	4.5	456
92	Entrapment of Polysulfides by a Blackâ€Phosphorusâ€Modified Separator for Lithium–Sulfur Batteries. Advanced Materials, 2016, 28, 9797-9803.	11.1	453
93	Manganese hexacyanomanganate open framework as a high-capacity positive electrode material for sodium-ion batteries. Nature Communications, 2014, 5, 5280.	5.8	446
94	Full open-framework batteries for stationary energy storage. Nature Communications, 2014, 5, 3007.	5.8	440
95	Metal nanogrids, nanowires, and nanofibers for transparent electrodes. MRS Bulletin, 2011, 36, 760-765.	1.7	434
96	Nonfilling Carbon Coating of Porous Silicon Micrometer-Sized Particles for High-Performance Lithium Battery Anodes. ACS Nano, 2015, 9, 2540-2547.	7.3	433
97	Transparent and conductive paper from nanocellulose fibers. Energy and Environmental Science, 2013, 6, 513-518.	15.6	431
98	Self-healing SEI enables full-cell cycling of a silicon-majority anode with a coulombic efficiency exceeding 99.9%. Energy and Environmental Science, 2017, 10, 580-592.	15.6	421
99	Personal Thermal Management by Metallic Nanowire-Coated Textile. Nano Letters, 2015, 15, 365-371.	4.5	415
100	Stable cycling of lithium sulfide cathodes through strong affinity with a bifunctional binder. Chemical Science, 2013, 4, 3673.	3.7	412
101	Electrochemical tuning of layered lithium transition metal oxides for improvement of oxygen evolution reaction. Nature Communications, 2014, 5, 4345.	5.8	411
102	Roll-to-Roll Encapsulation of Metal Nanowires between Graphene and Plastic Substrate for High-Performance Flexible Transparent Electrodes. Nano Letters, 2015, 15, 4206-4213.	4.5	410
103	Subzeroâ€Temperature Cathode for a Sodiumâ€Ion Battery. Advanced Materials, 2016, 28, 7243-7248.	11.1	406
104	A dual-mode textile for human body radiative heating and cooling. Science Advances, 2017, 3, e1700895.	4.7	399
105	Surface Fluorination of Reactive Battery Anode Materials for Enhanced Stability. Journal of the American Chemical Society, 2017, 139, 11550-11558.	6.6	398
106	A high tap density secondary silicon particle anode fabricated by scalable mechanical pressing for lithium-ion batteries. Energy and Environmental Science, 2015, 8, 2371-2376.	15.6	397
107	Theoretical Calculation Guided Design of Single-Atom Catalysts toward Fast Kinetic and Long-Life Li–S Batteries. Nano Letters, 2020, 20, 1252-1261.	4.5	394
108	Rechargeable Li–O2 batteries with a covalently coupled MnCo2O4–graphene hybrid as an oxygen cathode catalyst. Energy and Environmental Science, 2012, 5, 7931.	15.6	393

#	Article	IF	CITATIONS
109	A Silicaâ€Aerogelâ€Reinforced Composite Polymer Electrolyte with High Ionic Conductivity and High Modulus. Advanced Materials, 2018, 30, e1802661.	11.1	392
110	Sulfur-Modulated Tin Sites Enable Highly Selective Electrochemical Reduction of CO2 to Formate. Joule, 2017, 1, 794-805.	11.7	390
111	A half-wave rectified alternating current electrochemical method for uranium extraction from seawater. Nature Energy, 2017, 2, .	19.8	388
112	Stabilizing Lithium Metal Anodes by Uniform Li-Ion Flux Distribution in Nanochannel Confinement. Journal of the American Chemical Society, 2016, 138, 15443-15450.	6.6	386
113	Solid-State Lithium–Sulfur Batteries Operated at 37 °C with Composites of Nanostructured Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub> /Carbon Foam and Polymer. Nano Letters, 2017, 17, 2967-2972.	4.5	384
114	Conformal Lithium Fluoride Protection Layer on Three-Dimensional Lithium by Nonhazardous Gaseous Reagent Freon. Nano Letters, 2017, 17, 3731-3737.	4.5	377
115	Air-stable and freestanding lithium alloy/graphene foil as an alternative to lithium metal anodes. Nature Nanotechnology, 2017, 12, 993-999.	15.6	376
116	Energy and environmental nanotechnology in conductive paper and textiles. Energy and Environmental Science, 2012, 5, 6423.	15.6	374
117	In Situ Electrochemical Oxidation Tuning of Transition Metal Disulfides to Oxides for Enhanced Water Oxidation. ACS Central Science, 2015, 1, 244-251.	5.3	373
118	Fracture of crystalline silicon nanopillars during electrochemical lithium insertion. Proceedings of the United States of America, 2012, 109, 4080-4085.	3.3	372
119	High-performance sodium–organic battery by realizing four-sodium storage in disodium rhodizonate. Nature Energy, 2017, 2, 861-868.	19.8	372
120	Solubility-mediated sustained release enabling nitrate additive in carbonate electrolytes for stable lithium metal anode. Nature Communications, 2018, 9, 3656.	5.8	371
121	Nanoporous polyethylene microfibres for large-scale radiative cooling fabric. Nature Sustainability, 2018, 1, 105-112.	11.5	370
122	Improving lithium–sulphur batteries through spatial control of sulphur species deposition on a hybrid electrode surface. Nature Communications, 2014, 5, 3943.	5.8	369
123	Spectrally Selective Nanocomposite Textile for Outdoor Personal Cooling. Advanced Materials, 2018, 30, e1802152.	11.1	362
124	Aqueous Zinc-Ion Storage in MoS <sub>2</sub> by Tuning the Intercalation Energy. Nano Letters, 2019, 19, 3199-3206.	4.5	362
125	High-performance hollow sulfur nanostructured battery cathode through a scalable, room temperature, one-step, bottom-up approach. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7148-7153.	3.3	359
126	A membrane-free lithium/polysulfide semi-liquid battery for large-scale energy storage. Energy and Environmental Science, 2013, 6, 1552.	15.6	359

#	Article	IF	CITATIONS
127	Size-dependent fracture of Si nanowire battery anodes. Journal of the Mechanics and Physics of Solids, 2011, 59, 1717-1730.	2.3	355
128	Can N95 Respirators Be Reused after Disinfection? How Many Times?. ACS Nano, 2020, 14, 6348-6356.	7.3	355
129	Efficient solar-driven water splitting by nanocone BiVO <sub>4</sub> -perovskite tandem cells. Science Advances, 2016, 2, e1501764.	4.7	351
130	Organic wastewater treatment by a single-atom catalyst and electrolytically produced H2O2. Nature Sustainability, 2021, 4, 233-241.	11.5	350
131	Formulating energy density for designing practical lithium–sulfur batteries. Nature Energy, 2022, 7, 312-319.	19.8	342
132	Wafer-scale silicon nanopillars and nanocones by Langmuir–Blodgett assembly and etching. Applied Physics Letters, 2008, 93, .	1.5	341
133	Efficient electrocatalytic CO2 reduction on a three-phase interface. Nature Catalysis, 2018, 1, 592-600.	16.1	336
134	Improving cyclability of Li metal batteries at elevated temperatures and its origin revealed by cryo-electron microscopy. Nature Energy, 2019, 4, 664-670.	19.8	336
135	Rational solvent molecule tuning for high-performance lithium metal battery electrolytes. Nature Energy, 2022, 7, 94-106.	19.8	336
136	Uniform High Ionic Conducting Lithium Sulfide Protection Layer for Stable Lithium Metal Anode. Advanced Energy Materials, 2019, 9, 1900858.	10.2	333
137	Non-encapsulation approach for high-performance Li–S batteries through controlled nucleation and growth. Nature Energy, 2017, 2, 813-820.	19.8	326
138	A manganese–hydrogen battery with potential for grid-scale energy storage. Nature Energy, 2018, 3, 428-435.	19.8	325
139	An electrochemical system for efficiently harvesting low-grade heat energy. Nature Communications, 2014, 5, 3942.	5.8	324
140	Design of Hollow Nanostructures for Energy Storage, Conversion and Production. Advanced Materials, 2019, 31, e1801993.	11.1	313
141	Li Intercalation in MoS <sub>2</sub> : In Situ Observation of Its Dynamics and Tuning Optical and Electrical Properties. Nano Letters, 2015, 15, 6777-6784.	4.5	312
142	Improved Lithium Ionic Conductivity in Composite Polymer Electrolytes with Oxide-Ion Conducting Nanowires. ACS Nano, 2016, 10, 11407-11413.	7.3	311
143	Nanowires for Electrochemical Energy Storage. Chemical Reviews, 2019, 119, 11042-11109.	23.0	309
144	Effects of Polymer Coatings on Electrodeposited Lithium Metal. Journal of the American Chemical Society, 2018, 140, 11735-11744.	6.6	307

#	Article	IF	CITATIONS
145	Improving battery safety by early detection of internal shorting with a bifunctional separator. Nature Communications, 2014, 5, 5193.	5.8	301
146	Sulfur Cathodes with Hydrogen Reduced Titanium Dioxide Inverse Opal Structure. ACS Nano, 2014, 8, 5249-5256.	7.3	297
147	Artificial Solid Electrolyte Interphase-Protected Li <sub><i>x</i></sub> Si Nanoparticles: An Efficient and Stable Prelithiation Reagent for Lithium-Ion Batteries. Journal of the American Chemical Society, 2015, 137, 8372-8375.	6.6	297
148	A Bamboo-Inspired Nanostructure Design for Flexible, Foldable, and Twistable Energy Storage Devices. Nano Letters, 2015, 15, 3899-3906.	4.5	296
149	Paper supercapacitors by a solvent-free drawing method. Energy and Environmental Science, 2011, 4, 3368.	15.6	290
150	Roll-to-Roll Transfer of Electrospun Nanofiber Film for High-Efficiency Transparent Air Filter. Nano Letters, 2016, 16, 1270-1275.	4.5	289
151	All-back-contact ultra-thin silicon nanocone solar cells with 13.7% power conversion efficiency. Nature Communications, 2013, 4, 2950.	5.8	287
152	Avoiding short circuits from zinc metal dendrites in anode by backside-plating configuration. Nature Communications, 2016, 7, 11801.	5.8	286
153	Three-dimensional stable lithium metal anode with nanoscale lithium islands embedded in ionically conductive solid matrix. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4613-4618.	3.3	285
154	Novel Size and Surface Oxide Effects in Silicon Nanowires as Lithium Battery Anodes. Nano Letters, 2011, 11, 4018-4025.	4.5	284
155	Carbon nanotube-coated macroporous sponge for microbial fuel cell electrodes. Energy and Environmental Science, 2012, 5, 5265-5270.	15.6	284
156	Correlating Structure and Function of Battery Interphases at Atomic Resolution Using Cryoelectron Microscopy. Joule, 2018, 2, 2167-2177.	11.7	284
157	High-Performance Lithium Metal Negative Electrode with a Soft and Flowable Polymer Coating. ACS Energy Letters, 2016, 1, 1247-1255.	8.8	281
158	A Threeâ€Ðimensionally Interconnected Carbon Nanotube–Conducting Polymer Hydrogel Network for Highâ€Performance Flexible Battery Electrodes. Advanced Energy Materials, 2014, 4, 1400207.	10.2	280
159	Warming up human body by nanoporous metallized polyethylene textile. Nature Communications, 2017, 8, 496.	5.8	280
160	Generation and electric control of spin–valley-coupled circular photogalvanic current in WSe2. Nature Nanotechnology, 2014, 9, 851-857.	15.6	278
161	Facile synthesis of Li2S–polypyrrole composite structures for high-performance Li2S cathodes. Energy and Environmental Science, 2014, 7, 672.	15.6	277
162	Dry-air-stable lithium silicide–lithium oxide core–shell nanoparticles as high-capacity prelithiation reagents. Nature Communications, 2014, 5, 5088.	5.8	276

#	Article	IF	CITATIONS
163	Atomic Layer Deposition of Stable LiAlF <sub>4</sub> Lithium Ion Conductive Interfacial Layer for Stable Cathode Cycling. ACS Nano, 2017, 11, 7019-7027.	7.3	276
164	High Responsivity Phototransistors Based on Few‣ayer ReS <sub>2</sub> for Weak Signal Detection. Advanced Functional Materials, 2016, 26, 1938-1944.	7.8	270
165	High Electrochemical Selectivity of Edge versus Terrace Sites in Two-Dimensional Layered MoS <sub>2</sub> Materials. Nano Letters, 2014, 14, 7138-7144.	4.5	269
166	Spatially controlled doping of two-dimensional SnS2 through intercalation for electronics. Nature Nanotechnology, 2018, 13, 294-299.	15.6	269
167	Vertically Aligned and Continuous Nanoscale Ceramic–Polymer Interfaces in Composite Solid Polymer Electrolytes for Enhanced Ionic Conductivity. Nano Letters, 2018, 18, 3829-3838.	4.5	268
168	Improving the cycling stability of silicon nanowire anodes with conducting polymer coatings. Energy and Environmental Science, 2012, 5, 7927.	15.6	265
169	High-capacity battery cathode prelithiation to offset initial lithium loss. Nature Energy, 2016, 1, .	19.8	265
170	Graphene–sponges as high-performance low-cost anodes for microbial fuel cells. Energy and Environmental Science, 2012, 5, 6862.	15.6	264
171	Holistic computational structure screening of more than 12 000 candidates for solid lithium-ion conductor materials. Energy and Environmental Science, 2017, 10, 306-320.	15.6	259
172	Design of Complex Nanomaterials for Energy Storage: Past Success and Future Opportunity. Accounts of Chemical Research, 2017, 50, 2895-2905.	7.6	258
173	Fast and reversible thermoresponsive polymer switching materials for safer batteries. Nature Energy, 2016, 1, .	19.8	253
174	Stitching h-BN by atomic layer deposition of LiF as a stable interface for lithium metal anode. Science Advances, 2017, 3, eaao3170.	4.7	252
175	Co-Solvent Electrolyte Engineering for Stable Anode-Free Zinc Metal Batteries. Journal of the American Chemical Society, 2022, 144, 7160-7170.	6.6	252
176	Decoupling of mechanical properties and ionic conductivity in supramolecular lithium ion conductors. Nature Communications, 2019, 10, 5384.	5.8	249
177	Direct Blow-Spinning of Nanofibers on a Window Screen for Highly Efficient PM <sub>2.5</sub> Removal. Nano Letters, 2017, 17, 1140-1148.	4.5	248
178	3D Porous Spongeâ€Inspired Electrode for Stretchable Lithiumâ€Ion Batteries. Advanced Materials, 2016, 28, 3578-3583.	11.1	247
179	Self-assembled three-dimensional and compressible interdigitated thin-film supercapacitors and batteries. Nature Communications, 2015, 6, 7259.	5.8	246
180	Mechanical rolling formation of interpenetrated lithium metal/lithium tin alloy foil for ultrahigh-rate battery anode. Nature Communications, 2020, 11, 829.	5.8	246

#	Article	IF	CITATIONS
181	Electrospun core-shell microfiber separator with thermal-triggered flame-retardant properties for lithium-ion batteries. Science Advances, 2017, 3, e1601978.	4.7	245
182	A binder-free high silicon content flexible anode for Li-ion batteries. Energy and Environmental Science, 2020, 13, 848-858.	15.6	245
183	Nanoscale manipulation of membrane curvature for probing endocytosis in live cells. Nature Nanotechnology, 2017, 12, 750-756.	15.6	242
184	Lithiumâ€lon Textile Batteries with Large Areal Mass Loading. Advanced Energy Materials, 2011, 1, 1012-1017.	10.2	230
185	Thermal Management in Nanofiber-Based Face Mask. Nano Letters, 2017, 17, 3506-3510.	4.5	228
186	A New Class of Ionically Conducting Fluorinated Ether Electrolytes with High Electrochemical Stability. Journal of the American Chemical Society, 2020, 142, 7393-7403.	6.6	225
187	Ionically Conductive Selfâ€Healing Binder for Low Cost Si Microparticles Anodes in Liâ€Ion Batteries. Advanced Energy Materials, 2018, 8, 1703138.	10.2	224
188	Design and fabrication of bioelectrodes for microbial bioelectrochemical systems. Energy and Environmental Science, 2015, 8, 3418-3441.	15.6	223
189	Silicon–Carbon Nanotube Coaxial Sponge as Liâ€lon Anodes with High Areal Capacity. Advanced Energy Materials, 2011, 1, 523-527.	10.2	220
190	Plasmonic Dyeâ€ <b>S</b> ensitized Solar Cells. Advanced Energy Materials, 2011, 1, 52-57.	10.2	217
191	Highâ€Efficiency Amorphous Silicon Solar Cell on a Periodic Nanocone Back Reflector. Advanced Energy Materials, 2012, 2, 628-633.	10.2	212
192	Stretchable electrochemical energy storage devices. Chemical Society Reviews, 2020, 49, 4466-4495.	18.7	209
193	Ultrahigh Surface Area Three-Dimensional Porous Graphitic Carbon from Conjugated Polymeric Molecular Framework. ACS Central Science, 2015, 1, 68-76.	5.3	207
194	Highâ€Arealâ€Capacity Silicon Electrodes with Lowâ€Cost Silicon Particles Based on Spatial Control of Selfâ€Healing Binder. Advanced Energy Materials, 2015, 5, 1401826.	10.2	207
195	Household Materials Selection for Homemade Cloth Face Coverings and Their Filtration Efficiency Enhancement with Triboelectric Charging. Nano Letters, 2020, 20, 5544-5552.	4.5	207
196	Charging-free electrochemical system for harvesting low-grade thermal energy. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17011-17016.	3.3	206
197	Woodâ€Inspired Highâ€Performance Ultrathick Bulk Battery Electrodes. Advanced Materials, 2018, 30, e1706745.	11.1	205
198	An Autotransferable g <sub>3</sub> N <sub>4</sub> Li <sup>+</sup> â€Modulating Layer toward Stable Lithium Anodes. Advanced Materials, 2019, 31, e1900342.	11.1	205

#	Article	IF	CITATIONS
199	Steric Effect Tuned Ion Solvation Enabling Stable Cycling of High-Voltage Lithium Metal Battery. Journal of the American Chemical Society, 2021, 143, 18703-18713.	6.6	205
200	Concentrated dual-cation electrolyte strategy for aqueous zinc-ion batteries. Energy and Environmental Science, 2021, 14, 4463-4473.	15.6	203
201	Extending the Life of Lithiumâ€Based Rechargeable Batteries by Reaction of Lithium Dendrites with a Novel Silica Nanoparticle Sandwiched Separator. Advanced Materials, 2017, 29, 1603987.	11.1	202
202	One dimensional Si/Sn - based nanowires and nanotubes for lithium-ion energy storage materials. Journal of Materials Chemistry, 2011, 21, 9825.	6.7	200
203	Nanostructured paper for flexible energy and electronic devices. MRS Bulletin, 2013, 38, 320-325.	1.7	199
204	Ultrahigh–current density anodes with interconnected Li metal reservoir through overlithiation of mesoporous AlF <sub>3</sub> framework. Science Advances, 2017, 3, e1701301.	4.7	199
205	Resolving Nanoscopic and Mesoscopic Heterogeneity of Fluorinated Species in Battery Solid-Electrolyte Interphases by Cryogenic Electron Microscopy. ACS Energy Letters, 2020, 5, 1128-1135.	8.8	199
206	Free-standing ultrathin lithium metal–graphene oxide host foils with controllable thickness for lithium batteries. Nature Energy, 2021, 6, 790-798.	19.8	198
207	Aqueous supercapacitors on conductive cotton. Nano Research, 2010, 3, 452-458.	5.8	197
208	Iridium oxide nanotube electrodes for sensitive and prolonged intracellular measurement of action potentials. Nature Communications, 2014, 5, 3206.	5.8	197
209	A Stretchable Graphitic Carbon/Si Anode Enabled by Conformal Coating of a Selfâ€Healing Elastic Polymer. Advanced Materials, 2016, 28, 2455-2461.	11.1	197
210	Robust Pinhole-free Li <sub>3</sub> N Solid Electrolyte Grown from Molten Lithium. ACS Central Science, 2018, 4, 97-104.	5.3	197
211	Theoretical Investigation of 2D Layered Materials as Protective Films for Lithium and Sodium Metal Anodes. Advanced Energy Materials, 2017, 7, 1602528.	10.2	196
212	Machine Learning-Assisted Discovery of Solid Li-Ion Conducting Materials. Chemistry of Materials, 2019, 31, 342-352.	3.2	196
213	Pressure induced metallization with absence of structural transition in layered molybdenum diselenide. Nature Communications, 2015, 6, 7312.	5.8	193
214	Flexible and stable high-energy lithium-sulfur full batteries with only 100% oversized lithium. Nature Communications, 2018, 9, 4480.	5.8	193
215	Wrinkled Graphene Cages as Hosts for High-Capacity Li Metal Anodes Shown by Cryogenic Electron Microscopy. Nano Letters, 2019, 19, 1326-1335.	4.5	193
216	Large-Area Nanosphere Self-Assembly by a Micro-Propulsive Injection Method for High Throughput Periodic Surface Nanotexturing. Nano Letters, 2015, 15, 4591-4598.	4.5	191

#	Article	IF	CITATIONS
217	Liquid electrolyte: The nexus of practical lithium metal batteries. Joule, 2022, 6, 588-616.	11.7	191
218	Electrolessly Deposited Electrospun Metal Nanowire Transparent Electrodes. Journal of the American Chemical Society, 2014, 136, 10593-10596.	6.6	189
219	Strong texturing of lithium metal in batteries. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12138-12143.	3.3	188
220	In Situ Electrochemically Derived Nanoporous Oxides from Transition Metal Dichalcogenides for Active Oxygen Evolution Catalysts. Nano Letters, 2016, 16, 7588-7596.	4.5	186
221	Reversible Multivalent (Monovalent, Divalent, Trivalent) Ion Insertion in Open Framework Materials. Advanced Energy Materials, 2015, 5, 1401869.	10.2	185
222	Capturing the swelling of solid-electrolyte interphase in lithium metal batteries. Science, 2022, 375, 66-70.	6.0	183
223	Temperatureâ€Dependent Nucleation and Growth of Dendriteâ€Free Lithium Metal Anodes. Angewandte Chemie - International Edition, 2019, 58, 11364-11368.	7.2	182
224	Direct/Alternating Current Electrochemical Method for Removing and Recovering Heavy Metal from Water Using Graphene Oxide Electrode. ACS Nano, 2019, 13, 6431-6437.	7.3	181
225	Manganese–cobalt hexacyanoferrate cathodes for sodium-ion batteries. Journal of Materials Chemistry A, 2016, 4, 4211-4223.	5.2	180
226	Fast galvanic lithium corrosion involving a Kirkendall-type mechanism. Nature Chemistry, 2019, 11, 382-389.	6.6	180
227	Fast lithium growth and short circuit induced by localized-temperature hotspots in lithium batteries. Nature Communications, 2019, 10, 2067.	5.8	177
228	Passivation Coating on Electrospun Copper Nanofibers for Stable Transparent Electrodes. ACS Nano, 2012, 6, 5150-5156.	7.3	176
229	A Dynamic, Electrolyte-Blocking, and Single-Ion-Conductive Network for Stable Lithium-Metal Anodes. Joule, 2019, 3, 2761-2776.	11.7	176
230	Growth Mechanism of Graphene on Ru(0001) and O <sub>2</sub> Adsorption on the Graphene/Ru(0001) Surface. Journal of Physical Chemistry C, 2009, 113, 8296-8301.	1.5	172
231	All-Integrated Bifunctional Separator for Li Dendrite Detection via Novel Solution Synthesis of a Thermostable Polyimide Separator. Journal of the American Chemical Society, 2016, 138, 11044-11050.	6.6	170
232	An intermediate temperature garnet-type solid electrolyte-based molten lithium battery for grid energy storage. Nature Energy, 2018, 3, 732-738.	19.8	170
233	Synergistic enhancement of electrocatalytic CO2 reduction to C2 oxygenates at nitrogen-doped nanodiamonds/Cu interface. Nature Nanotechnology, 2020, 15, 131-137.	15.6	169
234	Ultralight and fire-extinguishing current collectors for high-energy and high-safety lithium-ion batteries. Nature Energy, 2020, 5, 786-793.	19.8	168

#	Article	IF	CITATIONS
235	Electrochemical tuning of olivine-type lithium transition-metal phosphates as efficient water oxidation catalysts. Energy and Environmental Science, 2015, 8, 1719-1724.	15.6	167
236	Si nanoparticle-decorated Si nanowire networks for Li-ion battery anodes. Chemical Communications, 2011, 47, 367-369.	2.2	166
237	Core–Shell Nanoparticle Coating as an Interfacial Layer for Dendrite-Free Lithium Metal Anodes. ACS Central Science, 2017, 3, 135-140.	5.3	162
238	Shape-Controlled TiO <sub>2</sub> Nanocrystals for Na-Ion Battery Electrodes: The Role of Different Exposed Crystal Facets on the Electrochemical Properties. Nano Letters, 2017, 17, 992-1000.	4.5	162
239	A tissue-like neurotransmitter sensor for the brain and gut. Nature, 2022, 606, 94-101.	13.7	162
240	Metamaterial mirrors in optoelectronic devices. Nature Nanotechnology, 2014, 9, 542-547.	15.6	158
241	Organotrisulfide: A High Capacity Cathode Material for Rechargeable Lithium Batteries. Angewandte Chemie - International Edition, 2016, 55, 10027-10031.	7.2	158
242	Stretchable Lithiumâ€ion Batteries Enabled by Deviceâ€Scaled Wavy Structure and Elasticâ€Sticky Separator. Advanced Energy Materials, 2017, 7, 1701076.	10.2	158
243	Lithium Metal Anode Materials Design: Interphase and Host. Electrochemical Energy Reviews, 2019, 2, 509-517.	13.1	156
244	Remediation of heavy metal contaminated soil by asymmetrical alternating current electrochemistry. Nature Communications, 2019, 10, 2440.	5.8	156
245	An Ultrastrong Double-Layer Nanodiamond Interface for Stable Lithium Metal Anodes. Joule, 2018, 2, 1595-1609.	11.7	155
246	Artificial Solid Electrolyte Interphase for Suppressing Surface Reactions and Cathode Dissolution in Aqueous Zinc Ion Batteries. ACS Energy Letters, 2019, 4, 2776-2781.	8.8	155
247	Suspension electrolyte with modified Li+ solvation environment for lithium metal batteries. Nature Materials, 2022, 21, 445-454.	13.3	155
248	Engineering stable interfaces for three-dimensional lithium metal anodes. Science Advances, 2018, 4, eaat5168.	4.7	153
249	Large-Area Free-Standing Ultrathin Single-Crystal Silicon as Processable Materials. Nano Letters, 2013, 13, 4393-4398.	4.5	152
250	Vertical nanopillars for in situ probing of nuclear mechanics in adherent cells. Nature Nanotechnology, 2015, 10, 554-562.	15.6	152
251	Revealing the Cell–Material Interface with Nanometer Resolution by Focused Ion Beam/Scanning Electron Microscopy. ACS Nano, 2017, 11, 8320-8328.	7.3	152
252	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.	3.3	150

#	Article	IF	CITATIONS
253	An Aqueous Inorganic Polymer Binder for High Performance Lithium–Sulfur Batteries with Flame-Retardant Properties. ACS Central Science, 2018, 4, 260-267.	5.3	147
254	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.	3.3	147
255	3D Artificial Solidâ€Electrolyte Interphase for Lithium Metal Anodes Enabled by Insulator–Metal–Insulator Layered Heterostructures. Advanced Materials, 2021, 33, e2006247.	11.1	147
256	Shape Evolution of Layer-Structured Bismuth Oxychloride Nanostructures via Low-Temperature Chemical Vapor Transport. Chemistry of Materials, 2009, 21, 247-252.	3.2	146
257	Metallurgically lithiated SiO <sub>x</sub> 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.	3.3	145
258	Identifying the Active Surfaces of Electrochemically Tuned LiCoO <sub>2</sub> for Oxygen Evolution Reaction. Journal of the American Chemical Society, 2017, 139, 6270-6276.	6.6	143
259	Stabilized Li3N for efficient battery cathode prelithiation. Energy Storage Materials, 2017, 6, 119-124.	9.5	143
260	Sulfiphilic Nickel Phosphosulfide Enabled Li <sub>2</sub> S Impregnation in 3D Graphene Cages for Li–S Batteries. Advanced Materials, 2017, 29, 1603366.	11.1	139
261	Design Principles of Artificial Solid Electrolyte Interphases for Lithium-Metal Anodes. Cell Reports Physical Science, 2020, 1, 100119.	2.8	133
262	Evolution of the Solid–Electrolyte Interphase on Carbonaceous Anodes Visualized by Atomic-Resolution Cryogenic Electron Microscopy. Nano Letters, 2019, 19, 5140-5148.	4.5	132
263	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.	6.6	132
264	Scalable, Ultrathin, and Highâ€Temperatureâ€Resistant Solid Polymer Electrolytes for Energyâ€Đense Lithium Metal Batteries. Advanced Energy Materials, 2022, 12, .	10.2	132
265	Transforming from planar to three-dimensional lithium with flowable interphase for solid lithium metal batteries. Science Advances, 2017, 3, eaao0713.	4.7	131
266	An Anode-Free Zn–MnO <sub>2</sub> Battery. Nano Letters, 2021, 21, 1446-1453.	4.5	131
267	Nanoscale perspective: Materials designs and understandings in lithium metal anodes. Nano Research, 2017, 10, 4003-4026.	5.8	130
268	Immunizing lithium metal anodes against dendrite growth using protein molecules to achieve high energy batteries. Nature Communications, 2020, 11, 5429.	5.8	129
269	A Dualâ€Crosslinking Design for Resilient Lithiumâ€ion Conductors. Advanced Materials, 2018, 30, e1804142.	11.1	128
270	Cathode-Electrolyte Interphase in Lithium Batteries Revealed by Cryogenic Electron Microscopy. Matter, 2021, 4, 302-312.	5.0	127

#	Article	IF	CITATIONS
271	Silicon/Organic Hybrid Solar Cells with 16.2% Efficiency and Improved Stability by Formation of Conformal Heterojunction Coating and Moistureâ€Resistant Capping Layer. Advanced Materials, 2017, 29, 1606321.	11.1	126
272	Realization of 13.6% Efficiency on 20 μm Thick Si/Organic Hybrid Heterojunction Solar Cells <i>via</i> Advanced Nanotexturing and Surface Recombination Suppression. ACS Nano, 2015, 9, 6522-6531.	7.3	124
273	Corrosion of lithium metal anodes during calendar ageing and its microscopic origins. Nature Energy, 2021, 6, 487-494.	19.8	124
274	Carbon nanofiber supercapacitors with large areal capacitances. Applied Physics Letters, 2009, 95, .	1.5	123
275	Dualâ€Solvent Liâ€ion Solvation Enables Highâ€Performance Liâ€Metal Batteries. Advanced Materials, 2021, 33, e2008619.	11.1	123
276	A Sulfur Cathode with Pomegranate‣ike Cluster Structure. Advanced Energy Materials, 2015, 5, 1500211.	10.2	122
277	Minimized lithium trapping by isovalent isomorphism for high initial Coulombic efficiency of silicon anodes. Science Advances, 2019, 5, eaax0651.	4.7	122
278	Shell-Protective Secondary Silicon Nanostructures as Pressure-Resistant High-Volumetric-Capacity Anodes for Lithium-Ion Batteries. Nano Letters, 2018, 18, 7060-7065.	4.5	121
279	A Singleâ€Ion Conducting Borate Network Polymer as a Viable Quasiâ€Solid Electrolyte for Lithium Metal Batteries. Advanced Materials, 2020, 32, e1905771.	11.1	121
280	Reversible and selective ion intercalation through the top surface of few-layer MoS2. Nature Communications, 2018, 9, 5289.	5.8	119
281	Surface-Coating Regulated Lithiation Kinetics and Degradation in Silicon Nanowires for Lithium Ion Battery. ACS Nano, 2015, 9, 5559-5566.	7.3	118
282	Bright and stable light-emitting diodes made with perovskite nanocrystals stabilized in metal–organic frameworks. Nature Photonics, 2021, 15, 843-849.	15.6	117
283	Nanodiamonds for energy. , 2019, 1, 13-18.		116
284	A Review of Existing and Emerging Methods for Lithium Detection and Characterization in Liâ€lon and Liâ€Metal Batteries. Advanced Energy Materials, 2021, 11, 2100372.	10.2	114
285	Surface Coating Constraint Induced Self-Discharging of Silicon Nanoparticles as Anodes for Lithium Ion Batteries. Nano Letters, 2015, 15, 7016-7022.	4.5	113
286	Understanding Phase Transformation in Crystalline Ge Anodes for Li-Ion Batteries. Chemistry of Materials, 2014, 26, 3739-3746.	3.2	112
287	In Situ Chemical Synthesis of Lithium Fluoride/Metal Nanocomposite for High Capacity Prelithiation of Cathodes. Nano Letters, 2016, 16, 1497-1501.	4.5	112

Silicon anodes. Nature Energy, 2021, 6, 995-996.

19.8 112

Үі Сиі

#	Article	IF	CITATIONS
289	Membraneâ€Free Zn/MnO <sub>2</sub> Flow Battery for Largeâ€Scale Energy Storage. Advanced Energy Materials, 2020, 10, 1902085.	10.2	111
290	Dynamic spatial progression of isolated lithium during battery operations. Nature, 2021, 600, 659-663.	13.7	111
291	High-capacity Li2S–graphene oxide composite cathodes with stable cycling performance. Chemical Science, 2014, 5, 1396.	3.7	109
292	Kinetics and fracture resistance of lithiated silicon nanostructure pairs controlled by their mechanical interaction. Nature Communications, 2015, 6, 7533.	5.8	107
293	Enhanced Intrinsic Catalytic Activity of λâ€MnO <sub>2</sub> by Electrochemical Tuning and Oxygen Vacancy Generation. Angewandte Chemie - International Edition, 2016, 55, 8599-8604.	7.2	107
294	Dynamic Structure and Chemistry of the Silicon Solid-Electrolyte Interphase Visualized by Cryogenic Electron Microscopy. Matter, 2019, 1, 1232-1245.	5.0	107
295	Aspects of the synthesis of thin film superconducting infinite-layer nickelates. APL Materials, 2020, 8, .	2.2	107
296	Opportunities of Aqueous Manganeseâ€Based Batteries with Deposition and Stripping Chemistry. Advanced Energy Materials, 2021, 11, 2002904.	10.2	107
297	An electrochemical thermal transistor. Nature Communications, 2018, 9, 4510.	5.8	105
298	Cryo-EM Structures of Atomic Surfaces and Host-Guest Chemistry in Metal-Organic Frameworks. Matter, 2019, 1, 428-438.	5.0	102
299	Vertical nanopillars for highly localized fluorescence imaging. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 3894-3899.	3.3	100
300	Optical transmission enhacement through chemically tuned two-dimensional bismuth chalcogenide nanoplates. Nature Communications, 2014, 5, 5670.	5.8	99
301	Unravelling Degradation Mechanisms and Atomic Structure of Organic-Inorganic Halide Perovskites by Cryo-EM. Joule, 2019, 3, 2854-2866.	11.7	99
302	Composites of a Prussian Blue Analogue and Gelatinâ€Derived Nitrogenâ€Doped Carbon‣upported Porous Spinel Oxides as Electrocatalysts for a Zn–Air Battery. Advanced Energy Materials, 2016, 6, 1601052.	10.2	98
303	Highly Nitridated Graphene–Li <sub>2</sub> S Cathodes with Stable Modulated Cycles. Advanced Energy Materials, 2015, 5, 1501369.	10.2	97
304	Diatomite derived hierarchical hybrid anode for high performance all-solid-state lithium metal batteries. Nature Communications, 2019, 10, 2482.	5.8	96
305	Supercooled liquid sulfur maintained in three-dimensional current collector for high-performance Li-S batteries. Science Advances, 2020, 6, eaay5098.	4.7	95
306	Schottky Barrier Catalysis Mechanism in Metal-Assisted Chemical Etching of Silicon. ACS Applied Materials & Interfaces, 2016, 8, 8875-8879.	4.0	94

#	Article	IF	CITATIONS
307	Underpotential lithium plating on graphite anodes caused by temperature heterogeneity. Proceedings of the United States of America, 2020, 117, 29453-29461.	3.3	94
308	Two-dimensional inorganic molecular crystals. Nature Communications, 2019, 10, 4728.	5.8	91
309	Transient Voltammetry with Ultramicroelectrodes Reveals the Electron Transfer Kinetics of Lithium Metal Anodes. ACS Energy Letters, 2020, 5, 701-709.	8.8	91
310	The Effects of Cross-Linking in a Supramolecular Binder on Cycle Life in Silicon Microparticle Anodes. ACS Applied Materials & Interfaces, 2016, 8, 2318-2324.	4.0	90
311	Prognostic Imaging Biomarkers in Glioblastoma: Development and Independent Validation on the Basis of Multiregion and Quantitative Analysis of MR Images. Radiology, 2016, 278, 546-553.	3.6	90
312	Interfacial stabilizing effect of ZnO on Si anodes for lithium ion battery. Nano Energy, 2015, 13, 620-625.	8.2	88
313	Revealing Nanoscale Passivation and Corrosion Mechanisms of Reactive Battery Materials in Gas Environments. Nano Letters, 2017, 17, 5171-5178.	4.5	88
314	Lithium Sulfide/Metal Nanocomposite as a Highâ€Capacity Cathode Prelithiation Material. Advanced Energy Materials, 2016, 6, 1600154.	10.2	87
315	Nanomaterials for electrochemical energy storage. Frontiers of Physics, 2014, 9, 323-350.	2.4	86
316	Nonpolar Alkanes Modify Lithiumâ€lon Solvation for Improved Lithium Deposition and Stripping. Advanced Energy Materials, 2019, 9, 1902116.	10.2	86
317	Integrated cooling (i-Cool) textile of heat conduction and sweat transportation for personal perspiration management. Nature Communications, 2021, 12, 6122.	5.8	86
318	Fibrous Materials for Flexible Li–S Battery. Advanced Energy Materials, 2021, 11, 2002580.	10.2	85
319	Enhanced reactivity of graphene wrinkles and their function as nanosized gas inlets for reactions under graphene. Physical Chemistry Chemical Physics, 2013, 15, 19042.	1.3	84
320	In-operando optical imaging of temporal and spatial distribution of polysulfides in lithium-sulfur batteries. Nano Energy, 2015, 11, 579-586.	8.2	84
321	An Interconnected Channel‣ike Framework as Host for Lithium Metal Composite Anodes. Advanced Energy Materials, 2019, 9, 1802720.	10.2	83
322	Potentiometric Measurement to Probe Solvation Energy and Its Correlation to Lithium Battery Cyclability. Journal of the American Chemical Society, 2021, 143, 10301-10308.	6.6	83
323	Nanostructures for photon management in solar cells. Nanophotonics, 2013, 2, 187-210.	2.9	82
324	Deformable Organic Nanowire Fieldâ€Effect Transistors. Advanced Materials, 2018, 30, 1704401.	11.1	82

#	Article	IF	CITATIONS
325	High-Efficiency Silicon/Organic Heterojunction Solar Cells with Improved Junction Quality and Interface Passivation. ACS Nano, 2016, 10, 11525-11531.	7.3	80
326	Coloured low-emissivity films for building envelopes for year-round energy savings. Nature Sustainability, 2022, 5, 339-347.	11.5	80
327	Composite lithium electrode with mesoscale skeleton via simple mechanical deformation. Science Advances, 2019, 5, eaau5655.	4.7	79
328	Engineering the surface of LiCoO2 electrodes using atomic layer deposition for stable high-voltage lithium ion batteries. Nano Research, 2017, 10, 3754-3764.	5.8	78
329	Nanostructural and Electrochemical Evolution of the Solid-Electrolyte Interphase on CuO Nanowires Revealed by Cryogenic-Electron Microscopy and Impedance Spectroscopy. ACS Nano, 2019, 13, 737-744.	7.3	78
330	Ordered Vacancy Compounds and Nanotube Formation in CuInSe <sub>2</sub> â^'CdS Coreâ^'Shell Nanowires. Nano Letters, 2007, 7, 3734-3738.	4.5	77
331	Nickel-hydrogen batteries for large-scale energy storage. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11694-11699.	3.3	77
332	Adsorption, Activation, and Dissociation of Oxygen on Doped Oxides. Angewandte Chemie - International Edition, 2013, 52, 11385-11387.	7.2	76
333	Amidoxime-Functionalized Macroporous Carbon Self-Refreshed Electrode Materials for Rapid and High-Capacity Removal of Heavy Metal from Water. ACS Central Science, 2019, 5, 719-726.	5.3	76
334	COVID-19: Effects of Environmental Conditions on the Propagation of Respiratory Droplets. Nano Letters, 2020, 20, 7744-7750.	4.5	76
335	A Morphologically Stable Li/Electrolyte Interface for Allâ€Solidâ€State Batteries Enabled by 3Dâ€Micropatterned Garnet. Advanced Materials, 2021, 33, e2104009.	11.1	76
336	Tuning of the Contact Properties for High-Efficiency Si/PEDOT:PSS Heterojunction Solar Cells. ACS Energy Letters, 2017, 2, 556-562.	8.8	75
337	Formation of identical-size graphene nanoclusters on Ru(0001). Chemical Communications, 2011, 47, 1470-1472.	2.2	74
338	Li <sub>2</sub> S Nanocrystals Confined in Free-Standing Carbon Paper for High Performance Lithium–Sulfur Batteries. ACS Applied Materials & Interfaces, 2015, 7, 21479-21486.	4.0	73
339	A Prussian blue route to nitrogen-doped graphene aerogels as efficient electrocatalysts for oxygen reduction with enhanced active site accessibility. Nano Research, 2017, 10, 1213-1222.	5.8	73
340	Core–Shell Nanofibrous Materials with High Particulate Matter Removal Efficiencies and Thermally Triggered Flame Retardant Properties. ACS Central Science, 2018, 4, 894-898.	5.3	73
341	Nano-structured textiles as high-performance aqueous cathodes for microbial fuel cells. Energy and Environmental Science, 2011, 4, 1293.	15.6	72
342	Temperatureâ€Dependent Nucleation and Growth of Dendriteâ€Free Lithium Metal Anodes. Angewandte Chemie, 2019, 131, 11486-11490.	1.6	72

#	Article	IF	CITATIONS
343	An exchange intercalation mechanism for the formation of a two-dimensional Si structure underneath graphene. Nano Research, 2012, 5, 352-360.	5.8	71
344	The unique chemistry of thiuram polysulfides enables energy dense lithium batteries. Journal of Materials Chemistry A, 2017, 5, 25005-25013.	5.2	71
345	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, .	3.3	71
346	Decontamination of SARS-CoV-2 and Other RNA Viruses from N95 Level Meltblown Polypropylene Fabric Using Heat under Different Humidities. ACS Nano, 2020, 14, 14017-14025.	7.3	69
347	Reversible Structural Modulation of Fe–Pt Bimetallic Surfaces and Its Effect on Reactivity. ChemPhysChem, 2009, 10, 1013-1016.	1.0	68
348	Topological insulator nanostructures. Physica Status Solidi - Rapid Research Letters, 2013, 7, 15-25.	1.2	68
349	A Class of Organopolysulfides As Liquid Cathode Materials for High-Energy-Density Lithium Batteries. ACS Applied Materials & Interfaces, 2018, 10, 21084-21090.	4.0	68
350	Microbial battery for efficient energy recovery. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15925-15930.	3.3	67
351	A Nickelâ€Decorated Carbon Flower/Sulfur Cathode for Leanâ€Electrolyte Lithium–Sulfur Batteries. Advanced Energy Materials, 2021, 11, 2101449.	10.2	67
352	Phenyl Selenosulfides as Cathode Materials for Rechargeable Lithium Batteries. Advanced Functional Materials, 2018, 28, 1801791.	7.8	66
353	All-Solid-State Lithium–Sulfur Batteries Enhanced by Redox Mediators. Journal of the American Chemical Society, 2021, 143, 18188-18195.	6.6	66
354	Nanoporous silicon networks as anodes for lithium ion batteries. Physical Chemistry Chemical Physics, 2013, 15, 440-443.	1.3	65
355	In Situ Investigation on the Nanoscale Capture and Evolution of Aerosols on Nanofibers. Nano Letters, 2018, 18, 1130-1138.	4.5	65
356	A Cation-Tethered Flowable Polymeric Interface for Enabling Stable Deposition of Metallic Lithium. Journal of the American Chemical Society, 2020, 142, 21393-21403.	6.6	65
357	Electrochemical generation of liquid and solid sulfur on two-dimensional layered materials with distinct areal capacities. Nature Nanotechnology, 2020, 15, 231-237.	15.6	65
358	Scalable synthesis of nanoporous silicon microparticles for highly cyclable lithium-ion batteries. Nano Research, 2020, 13, 1558-1563.	5.8	65
359	Gluing Carbon Black and Sulfur at Nanoscale: A Polydopamineâ€Based "Nanoâ€Binder―for Double‧helled Sulfur Cathodes. Advanced Energy Materials, 2017, 7, 1601591.	10.2	64
360	Functionalization of silicon nanowire surfaces with metal-organic frameworks. Nano Research, 2012, 5, 109-116.	5.8	63

#	Article	IF	CITATIONS
361	Use of low cost and easily regenerated Prussian Blue cathodes for efficient electrical energy recovery in a microbial battery. Energy and Environmental Science, 2015, 8, 546-551.	15.6	63
362	<i>In Situ</i> X-ray Absorption Spectroscopic Investigation of the Capacity Degradation Mechanism in Mg/S Batteries. Nano Letters, 2019, 19, 2928-2934.	4.5	63
363	An ultrathin ionomer interphase for high efficiency lithium anode in carbonate based electrolyte. Nature Communications, 2019, 10, 5824.	5.8	62
364	General Strategy for Zero-Valent Intercalation into Two-Dimensional Layered Nanomaterials. Chemistry of Materials, 2014, 26, 2313-2317.	3.2	61
365	Light trapping in photonic crystals. Energy and Environmental Science, 2014, 7, 2725.	15.6	61
366	Magnetic Field-Controlled Lithium Polysulfide Semiliquid Battery with Ferrofluidic Properties. Nano Letters, 2015, 15, 7394-7399.	4.5	61
367	Quasi-Ballistic Thermal Transport Across MoS <sub>2</sub> Thin Films. Nano Letters, 2019, 19, 2434-2442.	4.5	61
368	Improving Lithium Metal Composite Anodes with Seeding and Pillaring Effects of Silicon Nanoparticles. ACS Nano, 2020, 14, 4601-4608.	7.3	61
369	Gate-Induced Metal–Insulator Transition in MoS <sub>2</sub> by Solid Superionic Conductor LaF <sub>3</sub> . Nano Letters, 2018, 18, 2387-2392.	4.5	60
370	Chemomechanics of Rechargeable Batteries: Status, Theories, and Perspectives. Chemical Reviews, 2022, 122, 13043-13107.	23.0	59
371	Mitigation of Shuttle Effect in Li–S Battery Using a Self-Assembled Ultrathin Molybdenum Disulfide Interlayer. ACS Applied Materials & Interfaces, 2019, 11, 3080-3086.	4.0	58
372	A residue-free green synergistic antifungal nanotechnology for pesticide thiram by ZnO nanoparticles. Scientific Reports, 2014, 4, 5408.	1.6	57
373	Microclusters of Kinked Silicon Nanowires Synthesized by a Recyclable Iodide Process for Highâ€Performance Lithiumâ€lon Battery Anodes. Advanced Energy Materials, 2020, 10, 2002108.	10.2	57
374	Electronic Structure Trends Across the Rare-Earth Series in Superconducting Infinite-Layer Nickelates. Physical Review X, 2021, 11, .	2.8	57
375	Performance of a mixing entropy battery alternately flushed with wastewater effluent and seawater for recovery of salinity-gradient energy. Energy and Environmental Science, 2014, 7, 2295-2300.	15.6	56
376	Nanopurification of silicon from 84% to 99.999% purity with a simple and scalable process. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13473-13477.	3.3	56
377	Sea-Sponge-like Structure of Nano-Fe <sub>3</sub> O <sub>4</sub> on Skeleton-C with Long Cycle Life under High Rate for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 19656-19663.	4.0	56
378	Opportunities for Cryogenic Electron Microscopy in Materials Science and Nanoscience. ACS Nano, 2020. 14. 9263-9276.	7.3	55

#	Article	IF	CITATIONS
379	Single Nanostructure Electrochemical Devices for Studying Electronic Properties and Structural Changes in Lithiated Si Nanowires. Advanced Energy Materials, 2011, 1, 894-900.	10.2	54
380	Morphology and property investigation of primary particulate matter particles from different sources. Nano Research, 2018, 11, 3182-3192.	5.8	54
381	High-purity electrolytic lithium obtained from low-purity sources using solid electrolyte. Nature Sustainability, 2020, 3, 386-390.	11.5	54
382	Optical Absorption Enhancement in Freestanding GaAs Thin Film Nanopyramid Arrays. Advanced Energy Materials, 2012, 2, 1254-1260.	10.2	52
383	A scalable method of applying heat and humidity for decontamination of N95 respirators during the COVID-19 crisis. PLoS ONE, 2020, 15, e0234851.	1.1	52
384	Lithium Electrochemical Tuning for Electrocatalysis. Advanced Materials, 2018, 30, e1800978.	11.1	51
385	Strategy for Boosting Li-Ion Current in Silicon Nanoparticles. ACS Energy Letters, 2018, 3, 2252-2258.	8.8	49
386	Reactivation of dead sulfide species in lithium polysulfide flow battery for grid scale energy storage. Nature Communications, 2017, 8, 462.	5.8	48
387	Dynamic Characterization of Graphene Growth and Etching by Oxygen on Ru(0001) by Photoemission Electron Microscopy. Journal of Physical Chemistry C, 2009, 113, 20365-20370.	1.5	47
388	A Two-Dimensional MoS <sub>2</sub> Catalysis Transistor by Solid-State Ion Gating Manipulation and Adjustment (SIGMA). Nano Letters, 2019, 19, 7293-7300.	4.5	46
389	Understanding the Mechanism of High Capacitance in Nickel Hexaaminobenzene-Based Conductive Metal–Organic Frameworks in Aqueous Electrolytes. ACS Nano, 2020, 14, 15919-15925.	7.3	46
390	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.	8.8	46
391	An X-ray Photoelectron Spectroscopy Primer for Solid Electrolyte Interphase Characterization in Lithium Metal Anodes. ACS Energy Letters, 2022, 7, 2540-2546.	8.8	46
392	Continuous Draw Spinning of Extra-Long Silver Submicron Fibers with Micrometer Patterning Capability. Nano Letters, 2017, 17, 1883-1891.	4.5	45
393	Correlating Li-Ion Solvation Structures and Electrode Potential Temperature Coefficients. Journal of the American Chemical Society, 2021, 143, 2264-2271.	6.6	44
394	Resonanceâ€Enhanced Absorption in Hollow Nanoshell Spheres with Omnidirectional Detection and High Responsivity and Speed. Advanced Materials, 2018, 30, e1801972.	11.1	43
395	Reprocessable and Recyclable Polymer Network Electrolytes via Incorporation of Dynamic Covalent Bonds. Chemistry of Materials, 2022, 34, 2393-2399.	3.2	43
396	Oxidation processes on conducting carbon additives for lithium-ion batteries. Journal of Applied Electrochemistry, 2013, 43, 1-7.	1.5	42

#	Article	IF	CITATIONS
397	Improved Oxygen Reduction Reaction Activity of Nanostructured CoS <sub>2</sub> through Electrochemical Tuning. ACS Applied Energy Materials, 2019, 2, 8605-8614.	2.5	42
398	Hybrid Metal–Semiconductor Nanostructure for Ultrahigh Optical Absorption and Low Electrical Resistance at Optoelectronic Interfaces. ACS Nano, 2015, 9, 10590-10597.	7.3	41
399	Designing hierarchical nanoporous membranes for highly efficient gas adsorption and storage. Science Advances, 2020, 6, .	4.7	41
400	Three-Dimensional Analysis of Particle Distribution on Filter Layers inside N95 Respirators by Deep Learning. Nano Letters, 2021, 21, 651-657.	4.5	41
401	Direct electrochemical generation of supercooled sulfur microdroplets well below their melting temperature. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 765-770.	3.3	39
402	Fabrication of metal nanoclusters on graphene grown on Ru(0001). Science Bulletin, 2009, 54, 2446-2450.	1.7	37
403	Revealing and Elucidating ALDâ€Đerived Control of Lithium Plating Microstructure. Advanced Energy Materials, 2020, 10, 2002736.	10.2	37
404	Robust ultraclean atomically thin membranes for atomic-resolution electron microscopy. Nature Communications, 2020, 11, 541.	5.8	37
405	Electrolyte-Resistant Dual Materials for the Synergistic Safety Enhancement of Lithium-Ion Batteries. Nano Letters, 2021, 21, 2074-2080.	4.5	37
406	Gold Adsorption on CeO <sub>2</sub> Thin Films Grown on Ru(0001). Journal of Physical Chemistry C, 2013, 117, 21879-21885.	1.5	36
407	Interwall Friction and Sliding Behavior of Centimeters Long Double-Walled Carbon Nanotubes. Nano Letters, 2016, 16, 1367-1374.	4.5	36
408	Bright sub-20-nm cathodoluminescent nanoprobes for electron microscopy. Nature Nanotechnology, 2019, 14, 420-425.	15.6	36
409	A Water Stable, Nearâ€Zeroâ€Strain O3‣ayered Titaniumâ€Based Anode for Long Cycle Sodiumâ€Ion Battery. Advanced Functional Materials, 2020, 30, 1907023.	7.8	36
410	Electrochemical Control of Copper Intercalation into Nanoscale Bi <sub>2</sub> Se <sub>3</sub> . Nano Letters, 2017, 17, 1741-1747.	4.5	34
411	Hierarchical assembly and superior sodium storage properties of a sea-sponge structured C/SnS@C nanocomposite. Journal of Materials Chemistry A, 2018, 6, 7631-7638.	5.2	34
412	Gated tuned superconductivity and phonon softening in monolayer and bilayer MoS2. Npj Quantum Materials, 2017, 2, .	1.8	33
413	First-principles approaches to simulate lithiation in silicon electrodes. Modelling and Simulation in Materials Science and Engineering, 2013, 21, 074001.	0.8	32
414	Enhanced Cyclability of Li/Polysulfide Batteries by a Polymer-Modified Carbon Paper Current Collector. ACS Applied Materials & Interfaces, 2015, 7, 20369-20376.	4.0	31

#	Article	IF	CITATIONS
415	Selenium Nanocomposite Cathode with Long Cycle Life for Rechargeable Lithium elenium Batteries. Batteries and Supercaps, 2019, 2, 784-791.	2.4	31
416	Critical-temperature/Peierls-stress dependent size effects in body centered cubic nanopillars. Applied Physics Letters, 2013, 102, .	1.5	30
417	Lateral and Vertical Two-Dimensional Layered Topological Insulator Heterostructures. ACS Nano, 2015, 9, 10916-10921.	7.3	30
418	Atomic-level insights into strain effect on p-nitrophenol reduction via Au@Pd core–shell nanocubes as an ideal platform. Journal of Catalysis, 2020, 381, 427-433.	3.1	30
419	Incorporating the Nanoscale Encapsulation Concept from Liquid Electrolytes into Solid-State Lithium–Sulfur Batteries. Nano Letters, 2020, 20, 5496-5503.	4.5	30
420	A High-Rate Lithium Manganese Oxide-Hydrogen Battery. Nano Letters, 2020, 20, 3278-3283.	4.5	30
421	Vacancy ordering and lithium insertion in III2VI3 nanowires. Nano Research, 2009, 2, 327-335.	5.8	26
422	Electrolyte-Phobic Surface for the Next-Generation Nanostructured Battery Electrodes. Nano Letters, 2020, 20, 7455-7462.	4.5	25
423	Controlling the charge state of single Mo dopants in a CaO film. Physical Review B, 2013, 88, .	1.1	24
424	Combining Superionic Conduction and Favorable Decomposition Products in the Crystalline Lithium–Boron–Sulfur System: A New Mechanism for Stabilizing Solid Li-Ion Electrolytes. ACS Applied Materials & Interfaces, 2020, 12, 37957-37966.	4.0	24
425	Enhanced Cycling Stability of Sulfur Electrodes through Effective Binding of Pyridine-Functionalized Polymer. ACS Energy Letters, 2017, 2, 2454-2462.	8.8	23
426	A reaction-controlled diffusion model for the lithiation of silicon in lithium-ion batteries. Extreme Mechanics Letters, 2015, 4, 61-75.	2.0	22
427	Electrotunable liquid sulfurÂmicrodroplets. Nature Communications, 2020, 11, 606.	5.8	22
428	Dual-Functional Lipid Coating for the Nanopillar-Based Capture of Circulating Tumor Cells with High Purity and Efficiency. Langmuir, 2017, 33, 1097-1104.	1.6	21
429	Charge-Free Mixing Entropy Battery Enabled by Low-Cost Electrode Materials. ACS Omega, 2019, 4, 11785-11790.	1.6	21
430	An Ultrastable Aqueous Iodineâ€Hydrogen Gas Battery. Advanced Functional Materials, 2021, 31, 2101024.	7.8	20
431	Observation of an intermediate state during lithium intercalation of twisted bilayer MoS2. Nature Communications, 2022, 13, .	5.8	20
432	Surface defects and their impact on the electronic structure of Mo-doped CaO films: an STM and DFT study. Physical Chemistry Chemical Physics, 2014, 16, 12764-12772.	1.3	19

#	Article	IF	CITATIONS
433	Organotrisulfide: A High Capacity Cathode Material for Rechargeable Lithium Batteries. Angewandte Chemie, 2016, 128, 10181-10185.	1.6	19
434	Electrolytes for microsized silicon. Nature Energy, 2020, 5, 361-362.	19.8	19
435	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. Infection Control and Hospital Epidemiology, 2022, 43, 876-885.	1.0	19
436	Reaction Front Evolution during Electrochemical Lithiation of Crystalline Silicon Nanopillars. Israel Journal of Chemistry, 2012, 52, 1118-1123.	1.0	18
437	Enhanced Intrinsic Catalytic Activity of λâ€MnO <sub>2</sub> by Electrochemical Tuning and Oxygen Vacancy Generation. Angewandte Chemie, 2016, 128, 8741-8746.	1.6	18
438	High-strain-rate void growth in high entropy alloys: Suppressed dislocation emissionÂ=Âsuppressed void growth. Scripta Materialia, 2020, 185, 12-18.	2.6	18
439	Designing a Nanoscale Three-phase Electrochemical Pathway to Promote Pt-catalyzed Formaldehyde Oxidation. Nano Letters, 2020, 20, 8719-8724.	4.5	15
440	A Novel Phase of Li <sub>15</sub> Si <sub>4</sub> Synthesized under Pressure. Advanced Energy Materials, 2015, 5, 1500214.	10.2	14
441	A Garnetâ€Type Solidâ€Electrolyteâ€Based Molten Lithiumâ^'Molybdenumâ^'Iron(II) Chloride Battery with Advanced Reaction Mechanism. Advanced Materials, 2020, 32, e2000960.	11.1	14
442	Growth of Two-Dimensional Lithium Islands on CaO(001) Thin Films. Journal of Physical Chemistry C, 2012, 116, 17980-17984.	1.5	13
443	Theory of Half-Space Light Absorption Enhancement for Leaky Mode Resonant Nanowires. Nano Letters, 2015, 15, 5513-5518.	4.5	13
444	Phase Separation of Dirac Electrons in Topological Insulators at the Spatial Limit. Nano Letters, 2017, 17, 97-103.	4.5	13
445	Photoinduced Field-Effect Passivation from Negative Carrier Accumulation for High-Efficiency Silicon/Organic Heterojunction Solar Cells. ACS Nano, 2017, 11, 12687-12695.	7.3	13
446	Mass transfer and morphology change via dislocation emission in a macroporous FCC metal. Materials Letters, 2019, 247, 67-70.	1.3	13
447	Fracture of void-embedded high-entropy-alloy films: A comprehensive atomistic study. Materialia, 2020, 12, 100790.	1.3	13
448	A novel battery scheme: Coupling nanostructured phosphorus anodes with lithium sulfide cathodes. Nano Research, 2020, 13, 1383-1388.	5.8	13
449	Graphene coating on silicon anodes enabled by thermal surface modification for high-energy lithium-ion batteries. MRS Bulletin, 2022, 47, 127-133.	1.7	13
450	Effects of nanostructured back reflectors on the external quantum efficiency in thin film solar cells. Nano Research, 2011, 4, 153-158.	5.8	12

#	Article	IF	CITATIONS
451	Elaboration of Aggregated Polysulfide Phases: From Molecules to Large Clusters and Solid Phases. Nano Letters, 2019, 19, 7487-7493.	4.5	12
452	Fundamental insights into the mass transfer via full dislocation loops due to alternative surface cuts. International Journal of Solids and Structures, 2019, 161, 42-54.	1.3	12
453	Plasmonic Back Reflectors: Plasmonic Dye-Sensitized Solar Cells. Advanced Energy Materials, 2011, 1, 51-51.	10.2	11
454	Organic Molecule-Modulated Phase Evolution of Inorganic Mesostructures. Langmuir, 2008, 24, 2372-2380.	1.6	10
455	Phase transformations in one-dimensional materials: applications in electronics and energy sciences. Journal of Materials Chemistry, 2009, 19, 5879.	6.7	10
456	Nanowire platform for mapping neural circuits. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 4489-4490.	3.3	10
457	Silicon nanowire hybrid photovoltaics. , 2010, , .		10
458	Charge competition with oxygen molecules determines the growth of gold particles on doped CaO films. Faraday Discussions, 2013, 162, 153.	1.6	10
459	A binder-free sulfur/carbon composite electrode prepared by a sulfur sublimation method for Li–S batteries. RSC Advances, 2016, 6, 52642-52645.	1.7	10
460	Heat Conductor–Insulator Transition in Electrochemically Controlled Hybrid Superlattices. Nano Letters, 2022, 22, 5443-5450.	4.5	10
461	Development of an Activated Carbon-Based Electrode for the Capture and Rapid Electrolytic Reductive Debromination of Methyl Bromide from Postharvest Fumigations. Environmental Science & Technology, 2016, 50, 11200-11208.	4.6	9
462	Nanotwinning and tensile behavior in cold-welded high-entropy-alloy nanowires. Nanotechnology, 2021, 32, 315716.	1.3	9
463	Zeolite-based Electrolyte Accelerating the Realization of Solid-state Li-Air Battery. Chemical Research in Chinese Universities, 2021, 37, 801-802.	1.3	9
464	Improvement of low-cycle fatigue life of austenitic stainless steel by multiple high-density pulsed electric currents. International Journal of Fatigue, 2022, 156, 106639.	2.8	9
465	Anisotropy of the magnetic and transport properties of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"&gt; <mml:mrow> <mml:msub> <mml:mi mathvariant="normal"&gt;EuZn  <mml:mn> 2 </mml:mn> </mml:mi </mml:msub> <mml:msub> <mml:mi mathvariant="normal"&gt;As  <mml:mn> 2 </mml:mn> </mml:mi </mml:msub> </mml:mrow> .</mml:math 	1.1	9
466	Physical Review D, 2022, 105, . Nanoparticle and Microparticle Flow in Porous and Fractured Media: An Experimental Study. , 2011, , .		8
467	New mechanisms of helical dislocation formation via the pinch-off process near a nano-inhomogeneity. Computational Materials Science, 2018, 155, 400-409.	1.4	8
468	Temperature Dependence of the Formation of Graphene and Subsurface Carbon on Ru(0001) and Its Effect on Surface Reactivity. ChemPhysChem, 2010, 11, 995-998.	1.0	7

#	Article	IF	CITATIONS
469	Design and growth of III–V nanowire solar cell arrays on low cost substrates. , 2010, , .		7
470	Optical Absorption Enhancement: Optical Absorption Enhancement in Freestanding GaAs Thin Film Nanopyramid Arrays (Adv. Energy Mater. 10/2012). Advanced Energy Materials, 2012, 2, 1150-1150.	10.2	7
471	Use of an intermediate solid-state electrode to enable efficient hydrogen production from dilute organic matter. Nano Energy, 2017, 39, 499-505.	8.2	7
472	Self-assembled materials for electrochemical energy storage. MRS Bulletin, 2020, 45, 815-822.	1.7	7
473	In Vivo Polymerization ("Hard-Wiringâ€) of Bioanodes Enables Rapid Start-Up and Order-of-Magnitude Higher Power Density in a Microbial Battery. Environmental Science & Technology, 2020, 54, 14732-14739.	4.6	7
474	Carbon nanotube thermoelectric devices by direct printing: Toward wearable energy converters. Applied Physics Letters, 2021, 118, .	1.5	7
475	High-temperature, spectrally-selective, scalable, and flexible thin-film Si absorber and emitter. Optical Materials Express, 2020, 10, 208.	1.6	7
476	High-performance lithium battery anodes using silicon nanowires. , 2010, , 187-191.		6
477	Topological insulator nanostructures. MRS Bulletin, 2014, 39, 873-879.	1.7	6
478	Effect of Chemical Structure on Polymer-Templated Growth of Graphitic Nanoribbons. ACS Nano, 2015, 9, 9043-9049.	7.3	6
479	Atomistic treatment of periodic gold nanowire array nanofasteners under shear loading. Nanotechnology, 2020, 31, 105704.	1.3	6
480	Li–S Batteries: Fibrous Materials for Flexible Li–S Battery (Adv. Energy Mater. 15/2021). Advanced Energy Materials, 2021, 11, 2170058.	10.2	5
481	Investigating size dependence in nanovoid-embedded high-entropy-alloy films under biaxial tension. Archive of Applied Mechanics, 2023, 93, 335-353.	1.2	5
482	Amorphous silicon core-shell nanowire Schottky solar cells. , 2010, , .		4
483	Looking cool. Nature Energy, 2018, 3, 1023-1024.	19.8	4
484	Doubleâ€ <b>s</b> ided transistor device processability of carrierless ultrathin silicon wafers. InformaÄnÃ- Materiály, 2020, 2, 735-742.	8.5	4
485	Nanophotonic Devices: Resonance-Enhanced Absorption in Hollow Nanoshell Spheres with Omnidirectional Detection and High Responsivity and Speed (Adv. Mater. 34/2018). Advanced Materials, 2018, 30, 1870257.	11.1	3
486	Tuning electrical and interfacial thermal properties of bilayer MoS <sub>2</sub> via electrochemical intercalation. Nanotechnology, 2021, 32, 265202.	1.3	3

<ul> <li>\</li> </ul>	21	C1	
	T L	Cι	

#	Article	IF	CITATIONS
487	Nanowire batteries for next generation electronics. , 2008, , .		1
488	Faceting and disorder in nanowire solar cell arrays. , 2010, , .		1
489	Nanostructured photon management for high performance solar cells. , 2010, , .		1
490	Black TiO2 Nanomaterials for Lithium–Sulfur Batteries. , 2017, , 275-304.		1
491	Solid Electrolytes: A Garnetâ€Type Solidâ€Electrolyteâ€Based Molten Lithiumâ^'Molybdenumâ^'Iron(II) Chloride Battery with Advanced Reaction Mechanism (Adv. Mater. 32/2020). Advanced Materials, 2020, 32, 2070242.	11.1	1
492	High-performance lithium battery anodes using silicon nanowires. , 0, .		1
493	Controlled Transformation of the Structures of Surface Fe (FeO) and Subsur-face Fe on Pt(111). Chinese Journal of Catalysis, 2010, 31, 24-32.	6.9	1
494	Phase-Change Nanowires for Non Volatile Memory. Materials Research Society Symposia Proceedings, 2007, 997, 1.	0.1	0
495	Enhancing the efficiency of solid-state dye-sensitized solar cells with plasmonic back reflectors. , 2011, , .		0
496	ONE-DIMENSIONAL NANOSTRUCTURED ELECTRODES FOR HIGH CAPACITY LITHIUM-ION BATTERY ELECTRODES. , 2011, , 175-217.		0
497	Lithium Batteries: Highly Nitridated Graphene-Li2S Cathodes with Stable Modulated Cycles (Adv.) Tj ETQq1 1 0.78	84314 rgE 10.2	3T /Overloc <mark>k</mark>
498	Zn-Air Batteries: Composites of a Prussian Blue Analogue and Gelatin-Derived Nitrogen-Doped Carbon-Supported Porous Spinel Oxides as Electrocatalysts for a Zn-Air Battery (Adv. Energy Mater.) Tj ETQq0 0 C	) r <b>g6.</b> ₽/Ov	erlock 10 Tf
499	Energy Materials Research at the University of Science and Technology of China. Advanced Materials, 2018, 30, 1806572.	11.1	0
500	Multi-modal Analytical Insights Into Li-Ion Battery Ageing with XFC. Microscopy and Microanalysis, 2019, 25, 2130-2131.	0.2	0
501	Interview: Yi Cui. , 2019, 1, 6-7.		0
502	10.1063/1.4776658.1., 2013,,.		0

10.1063/1.4776658.1., 2013,,.