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List of Publications by Year
in descending order

		8159	9073
230	22,820	76	144
papers	citations	h-index	g-index

235	235	235	19773
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Twinborn TiO₂â€“TiN heterostructures enabling smooth trappingâ€“diffusionâ€“conversion of polysulfides towards ultralong life lithiumâ€“sulfur batteries. Energy and Environmental Science, 2017, 10, 1694-1703.	15.6	884
2	Selfâ€Assembled Freeâ€Standing Graphite Oxide Membrane. Advanced Materials, 2009, 21, 3007-3011.	11.1	868
3	Chemical Dealloying Derived 3D Porous Current Collector for Li Metal Anodes. Advanced Materials, 2016, 28, 6932-6939.	11.1	751
4	Low-Temperature Exfoliated Graphenes: Vacuum-Promoted Exfoliation and Electrochemical Energy Storage. ACS Nano, 2009, 3, 3730-3736.	7.3	694
5	Catalytic Effects in Lithiumâ€“Sulfur Batteries: Promoted Sulfur Transformation and Reduced Shuttle Effect. Advanced Science, 2018, 5, 1700270.	5.6	669
6	Towards ultrahigh volumetric capacitance: graphene derived highly dense but porous carbons for supercapacitors. Scientific Reports, 2013, 3, 2975.	1.6	541
7	Capture and Catalytic Conversion of Polysulfides by In Situ Built TiO₂â€MXene Heterostructures for Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2019, 9, 1900219.	10.2	481
8	Adsorption of Lead(II) Ions from Aqueous Solution on Low-Temperature Exfoliated Graphene Nanosheets. Langmuir, 2011, 27, 7558-7562.	1.6	407
9	Progress and Perspective of Ceramic/Polymer Composite Solid Electrolytes for Lithium Batteries. Advanced Science, 2020, 7, 1903088.	5.6	403
10	Achieving superb sodium storage performance on carbon anodes through an ether-derived solid electrolyte interphase. Energy and Environmental Science, 2017, 10, 370-376.	15.6	395
11	Low Resistanceâ€“Integrated Allâ€Solidâ€State Battery Achieved by Li₇La₃Zr₂O₁₂ Nanowire Upgrading Polyethylene Oxide (PEO) Composite Electrolyte and PEO Cathode Binder. Advanced Functional Materials, 2019, 29, 1805301.	7.8	390
12	Fast Gelation of Ti₃C₂T_x MXene Initiated by Metal Ions. Advanced Materials, 2019, 31, e1902432.	11.1	389
13	Graphene-based materials for electrochemical energy storage devices: Opportunities and challenges. Energy Storage Materials, 2016, 2, 107-138.	9.5	371
14	Towards superior volumetric performance: design and preparation of novel carbon materials for energy storage. Energy and Environmental Science, 2015, 8, 1390-1403.	15.6	364
15	Propelling polysulfides transformation for high-rate and long-life lithiumâ€“sulfur batteries. Nano Energy, 2017, 33, 306-312.	8.2	352
16	Compact 3D Copper with Uniform Porous Structure Derived by Electrochemical Dealloying as Dendriteâ€Free Lithium Metal Anode Current Collector. Advanced Energy Materials, 2018, 8, 1800266.	10.2	336
17	Selfâ€Assembly of Graphene Oxide at Interfaces. Advanced Materials, 2014, 26, 5586-5612.	11.1	334
18	Twoâ€Dimensional Porous Carbon: Synthesis and Ionâ€Transport Properties. Advanced Materials, 2015, 27, 5388-5395.	11.1	318

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19	Vertically Aligned Carbon Nanotubes Grown on Graphene Paper as Electrodes in Lithiumâ€Ion Batteries and Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2011, 1, 486-490.	10.2	309
20	Evolution of the electrochemical interface in sodium ion batteries with ether electrolytes. Nature Communications, 2019, 10, 725.	5.8	289
21	Gassing in Li4Ti5O12-based batteries and its remedy. Scientific Reports, 2012, 2, 913.	1.6	284
22	Flexible and planar graphene conductive additives for lithium-ion batteries. Journal of Materials Chemistry, 2010, 20, 9644.	6.7	276
23	Vertically Aligned Lithiophilic CuO Nanosheets on a Cu Collector to Stabilize Lithium Deposition for Lithium Metal Batteries. Advanced Energy Materials, 2018, 8, 1703404.	10.2	274
24	Bidirectional Catalysts for Liquidâ€“Solid Redox Conversion in Lithiumâ€“Sulfur Batteries. Advanced Materials, 2020, 32, e2000315.	11.1	274
25	Selective Catalysis Remedies Polysulfide Shuttling in Lithiumâ€Sulfur Batteries. Advanced Materials, 2021, 33, e2101006.	11.1	229
26	Caging tin oxide in three-dimensional graphene networks for superior volumetric lithium storage. Nature Communications, 2018, 9, 402.	5.8	227
27	Optimized Catalytic WS₂â€“WO₃ Heterostructure Design for Accelerated Polysulfide Conversion in Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2020, 10, 2000091.	10.2	221
28	Cross-linked beta alumina nanowires with compact gel polymer electrolyte coating for ultra-stable sodium metal battery. Nature Communications, 2019, 10, 4244.	5.8	219
29	Rational design of MoS₂@graphene nanocables: towards high performance electrode materials for lithium ion batteries. Energy and Environmental Science, 2014, 7, 3320-3325.	15.6	218
30	A sheet-like porous carbon for high-rate supercapacitors produced by the carbonization of an eggplant. Carbon, 2015, 92, 11-14.	5.4	217
31	Engineering dâ€p Orbital Hybridization in Singleâ€Atom Metalâ€Embedded Threeâ€Dimensional Electrodes for Liâ€“S Batteries. Advanced Materials, 2021, 33, e2105947.	11.1	209
32	Could graphene construct an effective conducting network in a high-power lithium ion battery?. Nano Energy, 2012, 1, 429-439.	8.2	185
33	Oriented and Interlinked Porous Carbon Nanosheets with an Extraordinary Capacitive Performance. Chemistry of Materials, 2014, 26, 6896-6903.	3.2	180
34	Dense coating of Li4Ti5O12 and graphene mixture on the separator to produce long cycle life of lithium-sulfur battery. Nano Energy, 2016, 30, 1-8.	8.2	179
35	Functional Carbons Remedy the Shuttling of Polysulfides in Lithiumâ€“Sulfur Batteries: Confining, Trapping, Blocking, and Breaking up. Advanced Functional Materials, 2018, 28, 1800508.	7.8	164
36	Commercial carbon molecular sieves as a high performance anode for sodium-ion batteries. Energy Storage Materials, 2016, 3, 18-23.	9.5	163

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37	Self-Assembled 3D Graphene Monolith from Solution. Journal of Physical Chemistry Letters, 2015, 6, 658-668.	2.1	152
38	Reduction of Graphene Oxide by Hydrogen Sulfide: A Promising Strategy for Pollutant Control and as an Electrode for Liâ€S Batteries. Advanced Energy Materials, 2014, 4, 1301565.	10.2	149
39	Ethers Illume Sodiumâ€Based Battery Chemistry: Uniqueness, Surprise, and Challenges. Advanced Energy Materials, 2018, 8, 1801361.	10.2	149
40	Graphitic Carbon Nitride Induced Microâ€Electric Field for Dendriteâ€Free Lithium Metal Anodes. Advanced Energy Materials, 2019, 9, 1803186.	10.2	147
41	Multilayered silicon embedded porous carbon/graphene hybrid film as a high performance anode. Carbon, 2015, 84, 434-443.	5.4	144
42	Carbon coating to suppress the reduction decomposition of electrolyte on the Li4Ti5O12 electrode. Journal of Power Sources, 2012, 202, 253-261.	4.0	142
43	An in-plane heterostructure of graphene and titanium carbide for efficient polysulfide confinement. Nano Energy, 2017, 39, 291-296.	8.2	142
44	Cobalt-Doping of Molybdenum Disulfide for Enhanced Catalytic Polysulfide Conversion in Lithiumâ€“Sulfur Batteries. ACS Nano, 2021, 15, 7491-7499.	7.3	136
45	Porous MnO2 for use in a high performance supercapacitor: replication of a 3D graphene network as a reactive template. Chemical Communications, 2013, 49, 11092.	2.2	134
46	Towards low temperature thermal exfoliation of graphite oxide for graphene production. Carbon, 2013, 62, 11-24.	5.4	132
47	One-pot self-assembly of graphene/carbon nanotube/sulfur hybrid with three dimensionally interconnected structure for lithiumâ€“sulfur batteries. Journal of Power Sources, 2015, 295, 182-189.	4.0	128
48	A sandwich structure of graphene and nickel oxide with excellent supercapacitive performance. Journal of Materials Chemistry, 2011, 21, 9014.	6.7	125
49	Dual targeted nanocarrier for brain ischemic stroke treatment. Journal of Controlled Release, 2016, 233, 64-71.	4.8	124
50	N and S co-doped porous carbon spheres prepared using <scp>l</scp>-cysteine as a dual functional agent for high-performance lithiumâ€“sulfur batteries. Chemical Communications, 2015, 51, 17720-17723.	2.2	121
51	Sulfur confined in nitrogen-doped microporous carbon used in a carbonate-based electrolyte for long-life, safe lithium-sulfur batteries. Carbon, 2016, 109, 1-6.	5.4	119
52	In-situ topochemical nitridation derivative MoO2â€“Mo2N binary nanobelts as multifunctional interlayer for fast-kinetic Li-Sulfur batteries. Nano Energy, 2020, 68, 104356.	8.2	116
53	The effect of graphene wrapping on the performance of LiFePO4 for a lithium ion battery. Carbon, 2013, 57, 530-533.	5.4	115
54	A Lightweight 3D Cu Nanowire Network with Phosphidation Gradient as Current Collector for Highâ€Density Nucleation and Stable Deposition of Lithium. Advanced Materials, 2019, 31, e1904991.	11.1	114

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55	Disassemblyâ€“Reassembly Approach to RuO₂/Graphene Composites for Ultrahigh Volumetric Capacitance Supercapacitor. Small, 2017, 13, 1701026.	5.2	113
56	Spherical Li Deposited inside 3D Cu Skeleton as Anode with Ultrastable Performance. ACS Applied Materials & Interfaces, 2018, 10, 20244-20249.	4.0	113
57	Graphene-DNA hybrids: self-assembly and electrochemical detection performance. Journal of Materials Chemistry, 2010, 20, 6668.	6.7	112
58	Reviving catalytic activity of nitrides by the doping of the inert surface layer to promote polysulfide conversion in lithium-sulfur batteries. Nano Energy, 2019, 60, 305-311.	8.2	106
59	Unsaturated Single Atoms on Monolayer Transition Metal Dichalcogenides for Ultrafast Hydrogen Evolution. ACS Nano, 2020, 14, 767-776.	7.3	106
60	Carbon enables the practical use of lithium metal in a battery. Carbon, 2017, 123, 744-755.	5.4	105
61	A MoS2/Carbon hybrid anode for high-performance Li-ion batteries at low temperature. Nano Energy, 2020, 70, 104550.	8.2	101
62	Rich Heterointerfaces Enabling Rapid Polysulfides Conversion and Regulated Li₂S Deposition for High-Performance Lithiumâ€“Sulfur Batteries. ACS Nano, 2021, 15, 11491-11500.	7.3	99
63	Revisiting the Roles of Natural Graphite in Ongoing Lithiumâ€‐Ion Batteries. Advanced Materials, 2022, 34, e2106704.	11.1	99
64	Catalyzing polysulfide conversion by g-C3N4 in a graphene network for long-life lithium-sulfur batteries. Nano Research, 2018, 11, 3480-3489.	5.8	97
65	DNA-dispersed graphene/NiO hybrid materials for highly sensitive non-enzymatic glucose sensor. Electrochimica Acta, 2012, 73, 129-135.	2.6	96
66	A three-dimensional graphene skeleton as a fast electron and ion transport network for electrochemical applications. Journal of Materials Chemistry A, 2014, 2, 3031.	5.2	96
67	Lamellar MXene Composite Aerogels with Sandwiched Carbon Nanotubes Enable Stable Lithiumâ€“Sulfur Batteries with a High Sulfur Loading. Advanced Functional Materials, 2021, 31, 2100793.	7.8	95
68	A high-density grapheneâ€“sulfur assembly: a promising cathode for compact Liâ€“S batteries. Nanoscale, 2015, 7, 5592-5597.	2.8	92
69	Monolithic carbons with spheroidal and hierarchical pores produced by the linkage of functionalized graphene sheets. Carbon, 2014, 69, 169-177.	5.4	88
70	How a very trace amount of graphene additive works for constructing an efficient conductive network in LiCoO2-based lithium-ion batteries. Carbon, 2016, 103, 356-362.	5.4	87
71	Theoretical Investigation of the Intercalation Chemistry of Lithium/Sodium Ions in Transition Metal Dichalcogenides. Journal of Physical Chemistry C, 2017, 121, 13599-13605.	1.5	87
72	Ultrafast high-volumetric sodium storage of folded-graphene electrodes through surface-induced redox reactions. Energy Storage Materials, 2015, 1, 112-118.	9.5	83

#	Article	IF	Citations
73	A carbon sandwich electrode with graphene filling coated by N-doped porous carbon layers for lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2015, 3, 20218-20224.	5.2	83
74	ZnS spheres wrapped by an ultrathin wrinkled carbon film as a multifunctional interlayer for long-life Liâ€“S batteries. Journal of Materials Chemistry A, 2020, 8, 231-241.	5.2	83
75	Constructing a Highâ€Strength Solid Electrolyte Layer by In Vivo Alloying with Aluminum for an Ultrahighâ€Rate Lithium Metal Anode. Advanced Functional Materials, 2020, 30, 1907343.	7.8	83
76	High-performance ultrafiltration membranes based on polyethersulfoneâ€“graphene oxide composites. RSC Advances, 2013, 3, 21394.	1.7	79
77	â€œConcreteâ€•inspired construction of a silicon/carbon hybrid electrode for high performance lithium ion battery. Carbon, 2015, 93, 59-67.	5.4	78
78	Li-ion and Na-ion transportation and storage properties in various sized TiO₂ spheres with hierarchical pores and high tap density. Journal of Materials Chemistry A, 2017, 5, 4359-4367.	5.2	78
79	Elevated polysulfide regulation by an ultralight all-CVD-built ReS2@N-Doped graphene heterostructure interlayer for lithiumâ€“sulfur batteries. Nano Energy, 2019, 66, 104190.	8.2	77
80	Photocatalytic degradation of ranitidine and reduction of nitrosamine dimethylamine formation potential over MXeneâ€“Ti3C2/MoS2 under visible light irradiation. Journal of Hazardous Materials, 2021, 413, 125424.	6.5	76
81	The Interplay of Oxygen Functional Groups and Folded Texture in Densified Graphene Electrodes for Compact Sodiumâ€Ion Capacitors. Advanced Energy Materials, 2018, 8, 1702395.	10.2	75
82	Twin-functional graphene oxide: compacting with Fe 2 O 3 into a high volumetric capacity anode for lithium ion battery. Energy Storage Materials, 2017, 6, 98-103.	9.5	74
83	A Directional Strain Sensor Based on Anisotropic Microhoneycomb Cellulose Nanofiberâ€Carbon Nanotube Hybrid Aerogels Prepared by Unidirectional Freeze Drying. Small, 2019, 15, e1805363.	5.2	73
84	Realizing stable lithium deposition by in situ grown Cu₂S nanowires inside commercial Cu foam for lithium metal anodes. Journal of Materials Chemistry A, 2019, 7, 727-732.	5.2	72
85	Electrostatic-spraying an ultrathin, multifunctional and compact coating onto a cathode for a long-life and high-rate lithium-sulfur battery. Nano Energy, 2016, 30, 138-145.	8.2	71
86	Multifunctional binder designs for lithium-sulfur batteries. Journal of Energy Chemistry, 2019, 39, 88-100.	7.1	70
87	Evolution of the effect of sulfur confinement in graphene-based porous carbons for use in Liâ€“S batteries. Nanoscale, 2016, 8, 4447-4451.	2.8	69
88	Packing Activated Carbons into Dense Graphene Network by Capillarity for High Volumetric Performance Supercapacitors. Advanced Science, 2019, 6, 1802355.	5.6	69
89	Seeding lithium seeds towards uniform lithium deposition for stable lithium metal anodes. Nano Energy, 2019, 61, 47-53.	8.2	69
90	Efficient polysulfide blocker from conductive niobium nitride@graphene for Li-S batteries. Journal of Energy Chemistry, 2020, 45, 135-141.	7.1	69

#	Article	IF	Citations
91	An organic nickel salt-based electrolyte additive boosts homogeneous catalysis for lithium-sulfur batteries. Energy Storage Materials, 2020, 33, 290-297.	9.5	69
92	Catalytic effect in Li-S batteries: From band theory to practical application. Materials Today, 2022, 57, 84-120.	8.3	69
93	A graphene-based nanostructure with expanded ion transport channels for high rate Li-ion batteries. Chemical Communications, 2012, 48, 5904.	2.2	68
94	Necklace-like MoC sulfiphilic sites embedded in interconnected carbon networks for Liâ€“S batteries with high sulfur loading. Journal of Materials Chemistry A, 2019, 7, 11298-11304.	5.2	68
95	Tailoring Microstructure of Grapheneâ€Based Membrane by Controlled Removal of Trapped Water Inspired by the Phase Diagram. Advanced Functional Materials, 2014, 24, 3456-3463.	7.8	67
96	Unusual High Oxygen Reduction Performance in All-Carbon Electrocatalysts. Scientific Reports, 2014, 4, 6289.	1.6	67
97	Deactivating Defects in Graphenes with Al₂O₃ Nanoclusters to Produce Longâ€Life and Highâ€Rate Sodiumâ€Ion Batteries. Advanced Energy Materials, 2019, 9, 1803078.	10.2	65
98	One-pot self-assembly of three-dimensional graphene macroassemblies with porous core and layered shell. Journal of Materials Chemistry, 2011, 21, 12352.	6.7	64
99	Hybridization of graphene oxide and carbon nanotubes at the liquid/air interface. Chemical Communications, 2012, 48, 3706-3708.	2.2	64
100	Transcriptome Analysis Reveals Distinct Gene Expression Profiles in Eosinophilic and Noneosinophilic Chronic Rhinosinusitis with Nasal Polyps. Scientific Reports, 2016, 6, 26604.	1.6	63
101	Dual-functional hard template directed one-step formation of a hierarchical porous carbonâ€“carbon nanotube hybrid for lithiumâ€“sulfur batteries. Chemical Communications, 2016, 52, 12143-12146.	2.2	63
102	Status and prospects of porous graphene networks for lithiumâ€“sulfur batteries. Materials Horizons, 2020, 7, 2487-2518.	6.4	63
103	Precise carbon structure control by salt template for high performance sodium-ion storage. Journal of Energy Chemistry, 2019, 31, 101-106.	7.1	62
104	1000 Wh Lâ^'1 lithium-ion batteries enabled by crosslink-shrunk tough carbon encapsulated silicon microparticle anodes. National Science Review, 2021, 8, nwab012.	4.6	60
105	An air-stable and waterproof lithium metal anode enabled by wax composite packaging. Science Bulletin, 2019, 64, 910-917.	4.3	58
106	Graphene oxide hydrogel at solid/liquid interface. Chemical Communications, 2011, 47, 5771.	2.2	56
107	Graphene Emerges as a Versatile Template for Materials Preparation. Small, 2016, 12, 2674-2688.	5.2	56
108	Nitrate Additives Coordinated with Crown Ether Stabilize Lithium Metal Anodes in Carbonate Electrolyte. Advanced Functional Materials, 2021, 31, 2102128.	7.8	56

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109	Engineering Graphenes from the Nano- to the Macroscale for Electrochemical Energy Storage. Electrochemical Energy Reviews, 2018, 1, 139-168.	13.1	55
110	A Protective Layer for Lithium Metal Anode: Why and How. Small Methods, 2021, 5, e2001035.	4.6	55
111	Sieving carbons promise practical anodes with extensible low-potential plateaus for sodium batteries. National Science Review, 2022, 9, .	4.6	55
112	Functionalization of Graphene Sheets by Polyacetylene: Convenient Synthesis and Enhanced Emission. Macromolecular Chemistry and Physics, 2011, 212, 768-773.	1.1	54
113	LiNi0.8Co0.15Al0.05O2 as both a trapper and accelerator of polysulfides for lithium-sulfur batteries. Energy Storage Materials, 2019, 17, 111-117.	9.5	54
114	Facile synthesis of <scp>ZnO</scp> nanorods grown on graphene sheets and its enhanced photocatalytic efficiency. Journal of Chemical Technology and Biotechnology, 2015, 90, 550-558.	1.6	53
115	A lightweight carbon nanofiber-based 3D structured matrix with high nitrogen-doping level for lithium metal anodes. Science China Materials, 2019, 62, 87-94.	3.5	53
116	A unique carbon with a high specific surface area produced by the carbonization of agar in the presence of graphene. Chemical Communications, 2013, 49, 10427-10429.	2.2	52
117	A hybrid of holey graphene and Mn₃O₄ and its oxygen reduction reaction performance. Chemical Communications, 2015, 51, 3911-3914.	2.2	52
118	A Functionalized Carbon Surface for Highâ€Performance Sodiumâ€Ion Storage. Small, 2020, 16, e1902603.	5.2	51
119	Holey graphenes as the conductive additives for LiFePO4 batteries with an excellent rate performance. Carbon, 2019, 149, 257-262.	5.4	50
120	Graphene supported nano particles of Ptâ€“Ni for CO oxidation. Applied Surface Science, 2012, 258, 7795-7800.	3.1	49
121	A Passionfruitâ€Like Carbonâ€Confined Cu₂ZnSnS₄ Anode for Ultralongâ€Life Sodium Storage. Advanced Energy Materials, 2021, 11, 2100082.	10.2	49
122	Regulating the Li2S deposition by grain boundaries in metal nitrides for stable lithium-sulfur batteries. Nano Energy, 2022, 91, 106669.	8.2	49
123	Freestanding and Sandwich MXene-Based Cathode with Suppressed Lithium Polysulfides Shuttle for Flexible Lithiumâ€“Sulfur Batteries. Nano Letters, 2022, 22, 1207-1216.	4.5	49
124	pH-dependent size, surface chemistry and electrochemical properties of graphene oxide. New Carbon Materials, 2013, 28, 327-335.	2.9	47
125	Room-temperature liquid metal-based anodes for high-energy potassium-based electrochemical devices. Chemical Communications, 2018, 54, 8032-8035.	2.2	47
126	Wasp nest-imitated assembly of elastic rGO/p-Ti3C2Tx MXene-cellulose nanofibers for high-performance sodium-ion batteries. Carbon, 2019, 153, 625-633.	5.4	47

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127	Conductive graphene-based macroscopic membrane self-assembled at a liquidâ€“air interface. Journal of Materials Chemistry, 2011, 21, 3359.	6.7	46
128	Nanospace-confined formation of flattened Sn sheets in pre-seeded graphenes for lithium ion batteries. Nanoscale, 2014, 6, 9554-9558.	2.8	46
129	Oxygen-enriched carbon nanotubes as a bifunctional catalyst promote the oxygen reduction/evolution reactions in Li-O2 batteries. Carbon, 2019, 141, 561-567.	5.4	45
130	A Li-ion sulfur full cell with ambient resistant Al-Li alloy anode. Energy Storage Materials, 2018, 15, 209-217.	9.5	44
131	Electrode thickness control: Precondition for quite different functions of graphene conductive additives in LiFePO4 electrode. Carbon, 2015, 92, 311-317.	5.4	42
132	Intercalation-Induced Conversion Reactions Give High-Capacity Potassium Storage. ACS Nano, 2020, 14, 14026-14035.	7.3	42
133	Capillary shrinkage of graphene oxide hydrogels. Science China Materials, 2020, 63, 1870-1877.	3.5	41
134	A gradient topology host for a dendrite-free lithium metal anode. Nano Energy, 2022, 94, 106937.	8.2	41
135	Ultrafast presodiation of graphene anodes for highâ€•efficiency and highâ€•rate s<scp>odiumâ€•ion</scp> storage. InformaÄ•Ã-MateriÄ¡ly, 2021, 3, 1445-1454.	8.5	40
136	A Nacreâ€Like Carbon Nanotube Sheet for High Performance Liâ€Polysulfide Batteries with High Sulfur Loading. Advanced Science, 2018, 5, 1800384.	5.6	39
137	Interlayers for lithium-based batteries. Energy Storage Materials, 2019, 23, 112-136.	9.5	37
138	Electron and Ion Coâ€Conductive Catalyst Achieving Instant Transformation of Lithium Polysulfide towards Li₂S. Advanced Materials, 2021, 33, e2105362.	11.1	36
139	Constructing a highly efficient â€œsolidâ€“polymerâ€“solidâ€•elastic ion transport network in cathodes activates the room temperature performance of all-solid-state lithium batteries. Energy and Environmental Science, 2022, 15, 1503-1511.	15.6	36
140	A high-performance lithium ion oxygen battery consisting of Li2O2 cathode and lithiated aluminum anode with nafion membrane for reduced O2 crossover. Nano Energy, 2017, 40, 258-263.	8.2	35
141	Theoretical Investigation of the Electrochemical Performance of Transition Metal Nitrides for Lithiumâ€“Sulfur Batteries. Journal of Physical Chemistry C, 2019, 123, 25025-25030.	1.5	35
142	Synthesizing multilayer graphene from amorphous activated carbon via ammonia-assisted hydrothermal method. Carbon, 2019, 152, 24-32.	5.4	33
143	Occupational and environmental risk factors for chronic rhinosinusitis in China: a multicentre cross-sectional study. Respiratory Research, 2016, 17, 54.	1.4	32
144	Electrode Design from â€œInternalâ€•to â€œExternalâ€•for High Stability Silicon Anodes in Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 14142-14149.	4.0	32

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145	Crowning Metal Ions by Supramolecularization as a General Remedy toward a Dendriteâ€Free Alkaliâ€Metal Battery. Advanced Materials, 2021, 33, e2101745.	11.1	32
146	Practical Graphene Technologies for Electrochemical Energy Storage. Advanced Functional Materials, 2022, 32, .	7.8	32
147	Promoted conversion of polysulfides by MoO2 inlaid ordered mesoporous carbons towards high performance lithium-sulfur batteries. Chinese Chemical Letters, 2019, 30, 521-524.	4.8	31
148	A multifunctional artificial protective layer for producing an ultra-stable lithium metal anode in a commercial carbonate electrolyte. Journal of Materials Chemistry A, 2021, 9, 7667-7674.	5.2	31
149	Micron-sized Spherical Si/C Hybrids Assembled via Water/Oil System for High-Performance Lithium Ion Battery. Electrochimica Acta, 2016, 211, 982-988.	2.6	30
150	A Threeâ€Layer Allâ€Inâ€One Flexible Graphene Film Used as an Integrated Supercapacitor. Advanced Materials Interfaces, 2017, 4, 1700004.	1.9	30
151	Dense organic molecules/graphene network anodes with superior volumetric and areal performance for asymmetric supercapacitors. Journal of Materials Chemistry A, 2020, 8, 461-469.	5.2	30
152	Metallic Liquid Gating Membranes. ACS Nano, 2020, 14, 2465-2474.	7.3	30
153	pH-Mediated fine-tuning of optical properties of graphene oxide membranes. Carbon, 2012, 50, 3233-3239.	5.4	29
154	A Hollow Spherical Carbon Derived from the Spray Drying of Corncob Lignin for Highâ€Rateâ€Performance Supercapacitors. Chemistry - an Asian Journal, 2017, 12, 503-506.	1.7	29
155	An ion-conducting SnSâ€“SnS₂hybrid coating for commercial activated carbons enabling their use as high performance anodes for sodium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 10761-10768.	5.2	29
156	A (110) Facet-Dominated Vanadium Dioxide Enabling Bidirectional Electrocatalysis for Lithiumâ€“Sulfur Batteries. ACS Nano, 2021, 15, 16878-16886.	7.3	29
157	Functionalization of graphene by tetraphenylethylene using nitrene chemistry. RSC Advances, 2012, 2, 7042.	1.7	28
158	Abundant grain boundaries activate highly efficient lithium ion transportation in high rate Li4Ti5O12 compact microspheres. Journal of Materials Chemistry A, 2019, 7, 1168-1176.	5.2	28
159	Enhanced Antiglioblastoma Efficacy of Neovasculature and Glioma Cells Dual Targeted Nanoparticles. Molecular Pharmaceutics, 2016, 13, 3506-3517.	2.3	27
160	An interlayer composed of a porous carbon sheet embedded with TiO₂ nanoparticles for stable and high rate lithiumâ€“sulfur batteries. Nanoscale, 2020, 12, 12308-12316.	2.8	27
161	Graphene-Templated Growth of WS₂ Nanoclusters for Catalytic Conversion of Polysulfides in Lithiumâ€“Sulfur Batteries. ACS Applied Energy Materials, 2020, 3, 4923-4930.	2.5	27
162	How Is Cycle Life of Three-Dimensional Zinc Metal Anodes with Carbon Fiber Backbones Affected by Depth of Discharge and Current Density in Zincâ€“Ion Batteries?. ACS Applied Materials & Interfaces, 2022, 14, 12323-12330.	4.0	27

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163	An interlaced silver vanadium oxideâ€“graphene hybrid with high structural stability for use in lithium ion batteries. Chemical Communications, 2014, 50, 13447-13450.	2.2	26
164	A Dual-Function Na₂SO₄Template Directed Formation of Cathode Materials with a High Content of Sulfur Nanodots for Lithium-Sulfur Batteries. Small, 2017, 13, 1700358.	5.2	26
165	High catalytic activity of anatase titanium dioxide for decomposition of electrolyte solution in lithium ion battery. Journal of Power Sources, 2014, 268, 882-886.	4.0	25
166	Carbon coated porous tin peroxide/carbon composite electrode for lithium-ion batteries with excellent electrochemical properties. Carbon, 2015, 81, 739-747.	5.4	25
167	Easy fabrication of flexible and multilayer nanocarbon-based cathodes with a high unreal sulfur loading by electrostatic spraying for lithium-sulfur batteries. Carbon, 2018, 138, 18-25.	5.4	25
168	Reconfiguring confined magnetic colloids with tunable fluid transport behavior. National Science Review, 2021, 8, nwaa301.	4.6	25
169	Towards a reliable Li-metal-free LiNO₃-free Li-ion polysulphide full cell via parallel interface engineering. Energy and Environmental Science, 2018, 11, 2509-2520.	15.6	24
170	Highly stretchable and reliable graphene oxide-reinforced liquid gating membranes for tunable gas/liquid transport. Microsystems and Nanoengineering, 2020, 6, 43.	3.4	24
171	Constructing a Reinforced and Gradient Solid Electrolyte Interphase on Si Nanoparticles by Inâ€Situ Thiolâ€Ene Click Reaction for Long Cycling Lithiumâ€Ion Batteries. Small, 2021, 17, e2102316.	5.2	24
172	A graphene/poly(vinyl alcohol) hybrid membrane self-assembled at the liquid/air interface: enhanced mechanical performance and promising saturable absorber. Journal of Materials Chemistry, 2012, 22, 17204.	6.7	23
173	Sulfur-functionalized three-dimensional graphene monoliths as high-performance anodes for ultrafast sodium-ion storage. Chemical Communications, 2018, 54, 4317-4320.	2.2	22
174	Layered MXene Protected Lithium Metal Anode as an Efficient Polysulfide Blocker for Lithiumâ€Sulfur Batteries. Batteries and Supercaps, 2020, 3, 892-899.	2.4	22
175	Coordinated Adsorption and Catalytic Conversion of Polysulfides Enabled by Perovskite Bimetallic Hydroxide Nanocages for Lithiumâ€Sulfur Batteries. Small, 2021, 17, e2101538.	5.2	21
176	Direct assembly of micron-size porous graphene spheres with a high density as supercapacitor materials. Carbon, 2019, 149, 492-498.	5.4	20
177	Size Effects on the Mechanical Properties of Nanoporous Graphene Networks. Advanced Functional Materials, 2019, 29, 1900311.	7.8	20
178	Building Magnetoresponsive Composite Elastomers for Bionic Locomotion Applications. Journal of Bionic Engineering, 2020, 17, 405-420.	2.7	20
179	pHâ€Dependent Morphology Control of Cellulose Nanofiber/Graphene Oxide Cryogels. Small, 2021, 17, e2005564.	5.2	20
180	Dense graphene monolith oxygen cathodes for ultrahigh volumetric energy densities. Energy Storage Materials, 2017, 9, 134-139.	9.5	19

#	Article	IF	Citations
181	A one-step hard-templating method for the preparation of a hierarchical microporous-mesoporous carbon for lithium-sulfur batteries. New Carbon Materials, 2017, 32, 289-296.	2.9	19
182	Dendrite-Free Non-Newtonian Semisolid Lithium Metal Anode. ACS Energy Letters, 2021, 6, 3761-3768.	8.8	19
183	Water vapor adsorption on low-temperature exfoliated graphene nanosheets. Journal of Physics and Chemistry of Solids, 2012, 73, 1440-1443.	1.9	17
184	Preparation and electrochemical performance of a graphene-wrapped carbon/sulphur composite cathode. New Carbon Materials, 2014, 29, 309-315.	2.9	17
185	A Carbonâ€Sulfur Hybrid with Pomegranateâ€like Structure for Lithiumâ€Sulfur Batteries. Chemistry - an Asian Journal, 2016, 11, 1343-1347.	1.7	17
186	A new Suzuki synthesis of triphenylethylenes that inhibit aromatase and bind to estrogen receptors Î± and Î². Bioorganic and Medicinal Chemistry, 2016, 24, 5400-5409.	1.4	16
187	Graphene-Directed Formation of a Nitrogen-Doped Porous Carbon Sheet with High Catalytic Performance for the Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2018, 122, 13508-13514.	1.5	16
188	<scp>l</scp>-Cysteine-Modified Acacia Gum as a Multifunctional Binder for Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2019, 11, 47956-47962.	4.0	16
189	Realizing Ultralow Concentration Gelation of Graphene Oxide with Artificial Interfaces. Advanced Materials, 2019, 31, e1805075.	11.1	16
190	High-performance graphene/disodium terephthalate electrodes with ether electrolyte for exceptional cooperative sodiation/desodiation. Nano Energy, 2020, 77, 105203.	8.2	16
191	Confined growth of Fe2O3 nanoparticles by holey graphene for enhanced sodium-ion storage. Carbon, 2021, 176, 31-38.	5.4	16
192	Aligned Macroporous Monoliths by Ice-Templating. Bulletin of the Chemical Society of Japan, 2022, 95, 611-620.	2.0	16
193	Safety properties of liquid state soft pack high power batteries with carbon-coated LiFePO4/graphite electrodes. Journal of Solid State Electrochemistry, 2010, 14, 751-756.	1.2	15
194	Spatial and temporal film thickness measurement of a soap bubble based on large lateral shearing displacement interferometry. Applied Optics, 2012, 51, 8863.	0.9	15
195	Prevalence and Occupational and Environmental Risk Factors of Self-Reported Asthma: Evidence from a Cross-Sectional Survey in Seven Chinese Cities. International Journal of Environmental Research and Public Health, 2016, 13, 1084.	1.2	15
196	Porous graphene oxide-based carbon artefact with high capacity for methylene blue adsorption. Adsorption, 2016, 22, 1043-1050.	1.4	15
197	High-density three-dimensional graphene cathode with a tailored pore structure for high volumetric capacity zinc-ion storage. Carbon, 2022, 186, 624-631.	5.4	15
198	Deeply Cyclable and Ultrahighâ€Rate Lithium Metal Anodes Enabled by Coaxial Nanochamber Heterojunction on Carbon Nanofibers. Advanced Science, 2021, 8, e2101940.	5.6	14

#	Article	IF	Citations
199	A Highly Efficient Ion and Electron Conductive Interlayer To Achieve Low Self-Discharge of Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2022, 14, 1783-1790.	4.0	13
200	H2S + SO2 produces water-dispersed sulfur nanoparticles for lithium-sulfur batteries. Nano Energy, 2017, 41, 665-673.	8.2	12
201	A Reduced Graphene Oxide/Disodium Terephthalate Hybrid as a Highâ€Performance Anode for Sodiumâ€Ion Batteries. Chemistry - A European Journal, 2017, 23, 16586-16592.	1.7	12
202	A Stable Crossâ€Linked Binder Network for SnO₂ Anode with Enhanced Sodiumâ€Ion Storage Performance. ChemistrySelect, 2017, 2, 11365-11369.	0.7	12
203	Interconnected Ultrasmall V₂O₃ and Li₄Ti₅O₁₂ Particles Construct Robust Interfaces for Long-Cycling Anodes of Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 29993-30000.	4.0	12
204	Allâ€Solidâ€State Batteries: Low Resistanceâ€“Integrated Allâ€Solidâ€State Battery Achieved by Li₇La₃Zr₂O₁₂ Nanowire Upgrading Polyethylene Oxide (PEO) Composite Electrolyte and PEO Cathode Binder (Adv. Funct. Mater. 1/2019). Advanced Functional Materials, 2019, 29, 1970006.	7.8	12
205	High-performance lithiumâ€“sulfur batteries enabled by regulating Li₂S deposition. Physical Chemistry Chemical Physics, 2021, 23, 21385-21398.	1.3	12
206	Vertical Graphenes Grown on a Flexible Graphite Paper as an All-Carbon Current Collector towards Stable Li Deposition. Research, 2020, 2020, 7163948.	2.8	12
207	The Catalyst Design for Lithiumâ€Sulfur Batteries: Roles and Routes. Chemical Record, 2022, 22, .	2.9	12
208	Lithium titanate hybridized with trace amount of graphene used as an anode for a high rate lithium ion battery. Electrochimica Acta, 2014, 142, 247-253.	2.6	11
209	Porous carbons derived from carbonization of tissue papers for supercapacitors. Journal of Materials Science: Materials in Electronics, 2019, 30, 11250-11256.	1.1	11
210	Research Advances of Carbon-based Anode Materials for Sodium-Ion Batteries. Acta Chimica Sinica, 2017, 75, 163.	0.5	11
211	Diglyme-based electrolytes boosting high-rate and stable sodium-ion storage for three-dimensional VS4/Reduced graphene oxide hybrid anodes. Journal of Power Sources, 2022, 526, 231098.	4.0	11
212	Supercapacitors: Packing Activated Carbons into Dense Graphene Network by Capillarity for High Volumetric Performance Supercapacitors (Adv. Sci. 14/2019). Advanced Science, 2019, 6, 1970086.	5.6	10
213	Fast three-dimensional assembly of MoS2 inspired by the gelation of graphene oxide. Science China Materials, 2019, 62, 745-750.	3.5	10
214	Assembly of Ni(OH)2-graphene hybrids with a high electrochemical performance by a one-pot hydrothermal method. New Carbon Materials, 2014, 29, 426-431.	2.9	9
215	Dense yet highly ion permeable graphene electrodes obtained by capillary-drying of a holey graphene oxide assembly. Journal of Materials Chemistry A, 2019, 7, 12691-12697.	5.2	9
216	High-Level Heteroatom Doped Two-Dimensional Carbon Architectures for Highly Efficient Lithium-Ion Storage. Frontiers in Chemistry, 2018, 6, 97.	1.8	8

#	Article	IF	Citations
217	A Robust Integrated SnO_x/Carbon Composite Anode for Sodiumâ€Ion Batteries. ChemistrySelect, 2018, 3, 10869-10874.	0.7	7
218	3D Hollow Sn@Carbon-Graphene Hybrid Material as Promising Anode for Lithium-Ion Batteries. Journal of Nanomaterials, 2014, 2014, 1-6.	1.5	5
219	<scp>Lithiumâ€Sulfur</scp> Batteries at Extreme Temperatures: Challenges, Strategies and Prospects. Energy and Environmental Materials, 2023, 6, .	7.3	5
220	Ultrathin carbon nanotubeâ€“DNA hybrid membrane formation by simple physical adsorption onto a thin alumina substrate. Nanotechnology, 2010, 21, 285601.	1.3	4
221	Carbon: Two-Dimensional Porous Carbon: Synthesis and Ion-Transport Properties (Adv. Mater. 36/2015). Advanced Materials, 2015, 27, 5254-5254.	11.1	4
222	Regulating the Stable Lithium and Polysulfide Deposition in Batteries by a Gold Nanoparticle Modified Vertical Graphene Host. Advanced Energy and Sustainability Research, 2021, 2, 2100044.	2.8	4
223	Graphene: Self-Assembly of Graphene Oxide at Interfaces (Adv. Mater. 32/2014). Advanced Materials, 2014, 26, 5732-5732.	11.1	3
224	Wide-temperature rechargeable Li metal batteries enabled by an in-situ fabricated composite gel electrolyte with a hierarchical structure. Fundamental Research, 2022, 2, 611-618.	1.6	3
225	Regulating Liâ€ion Flux through a Dense yet Highly Ionic Conductive Interlayer for Stable Li Deposition. Advanced Materials Interfaces, 0, , 2200457.	1.9	3
226	Spatial Degrees of Freedom for MIMO Interference Channel with Local Channel State Information at Transmitters. Wireless Personal Communications, 2016, 89, 639-662.	1.8	2
227	Microhoneycomb Monoliths Prepared by the Unidirectional Freeze-drying of Cellulose Nanofiber Based Sols: Method and Extensions. Journal of Visualized Experiments, 2018, , .	0.2	1
228	Energy Storage: A Dual-Function Na2 SO4 Template Directed Formation of Cathode Materials with a High Content of Sulfur Nanodots for Lithium-Sulfur Batteries (Small 27/2017). Small, 2017, 13, .	5.2	0
229	Energy Storage: Disassemblyâ€“Reassembly Approach to RuO₂/Graphene Composites for Ultrahigh Volumetric Capacitance Supercapacitor (Small 30/2017). Small, 2017, 13, .	5.2	0
230	Sodium Ion Capacitors: The Interplay of Oxygen Functional Groups and Folded Texture in Densified Graphene Electrodes for Compact Sodium-Ion Capacitors (Adv. Energy Mater. 11/2018). Advanced Energy Materials, 2018, 8, 1870050.	10.2	0