

Wei Lv

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7599752/publications.pdf>

Version: 2024-02-01

230
papers

22,820
citations

8181

76
h-index

9103

144
g-index

235
all docs

235
docs citations

235
times ranked

19773
citing authors

#	ARTICLE	IF	CITATIONS
1	Twinborn TiO ₂ â€”TiN heterostructures enabling smooth trappingâ€”diffusionâ€”conversion of polysulfides towards ultralong life lithiumâ€”sulfur batteries. Energy and Environmental Science, 2017, 10, 1694-1703.	30.8	884
2	Self-Assembled Free-Standing Graphite Oxide Membrane. Advanced Materials, 2009, 21, 3007-3011.	21.0	868
3	Chemical Dealloying Derived 3D Porous Current Collector for Li Metal Anodes. Advanced Materials, 2016, 28, 6932-6939.	21.0	751
4	Low-Temperature Exfoliated Graphenes: Vacuum-Promoted Exfoliation and Electrochemical Energy Storage. ACS Nano, 2009, 3, 3730-3736.	14.6	694
5	Catalytic Effects in Lithiumâ€”Sulfur Batteries: Promoted Sulfur Transformation and Reduced Shuttle Effect. Advanced Science, 2018, 5, 1700270.	11.2	669
6	Towards ultrahigh volumetric capacitance: graphene derived highly dense but porous carbons for supercapacitors. Scientific Reports, 2013, 3, 2975.	3.3	541
7	Capture and Catalytic Conversion of Polysulfides by In Situ Built TiO ₂ â€”MXene Heterostructures for Lithiumâ€”Sulfur Batteries. Advanced Energy Materials, 2019, 9, 1900219.	19.5	481
8	Adsorption of Lead(II) Ions from Aqueous Solution on Low-Temperature Exfoliated Graphene Nanosheets. Langmuir, 2011, 27, 7558-7562.	3.5	407
9	Progress and Perspective of Ceramic/Polymer Composite Solid Electrolytes for Lithium Batteries. Advanced Science, 2020, 7, 1903088.	11.2	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.	30.8	395
11	Low Resistanceâ€”Integrated All-Solid-State Battery Achieved by Li ₇ La ₃ Zr ₂ O ₁₂ Nanowire Upgrading Polyethylene Oxide (PEO) Composite Electrolyte and PEO Cathode Binder. Advanced Functional Materials, 2019, 29, 1805301.	14.9	390
12	Fast Gelation of Ti ₃ C ₂ T _x MXene Initiated by Metal Ions. Advanced Materials, 2019, 31, e1902432.	21.0	389
13	Graphene-based materials for electrochemical energy storage devices: Opportunities and challenges. Energy Storage Materials, 2016, 2, 107-138.	18.0	371
14	Towards superior volumetric performance: design and preparation of novel carbon materials for energy storage. Energy and Environmental Science, 2015, 8, 1390-1403.	30.8	364
15	Propelling polysulfides transformation for high-rate and long-life lithiumâ€”sulfur batteries. Nano Energy, 2017, 33, 306-312.	16.0	352
16	Compact 3D Copper with Uniform Porous Structure Derived by Electrochemical Dealloying as Dendrite-Free Lithium Metal Anode Current Collector. Advanced Energy Materials, 2018, 8, 1800266.	19.5	336
17	Self-Assembly of Graphene Oxide at Interfaces. Advanced Materials, 2014, 26, 5586-5612.	21.0	334
18	Two-Dimensional Porous Carbon: Synthesis and Ion-Transport Properties. Advanced Materials, 2015, 27, 5388-5395.	21.0	318

#	ARTICLE	IF	CITATIONS
19	Vertically Aligned Carbon Nanotubes Grown on Graphene Paper as Electrodes in Lithium-ion Batteries and Dye-sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2011, 1, 486-490.	19.5	309
20	Evolution of the electrochemical interface in sodium ion batteries with ether electrolytes. <i>Nature Communications</i> , 2019, 10, 725.	12.8	289
21	Gassing in Li ₄ Ti ₅ O ₁₂ -based batteries and its remedy. <i>Scientific Reports</i> , 2012, 2, 913.	3.3	284
22	Flexible and planar graphene conductive additives for lithium-ion batteries. <i>Journal of Materials Chemistry</i> , 2010, 20, 9644.	6.7	276
23	Vertically Aligned Lithiophilic CuO Nanosheets on a Cu Collector to Stabilize Lithium Deposition for Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1703404.	19.5	274
24	Bidirectional Catalysts for Liquid-Solid Redox Conversion in Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2020, 32, e2000315.	21.0	274
25	Selective Catalysis Remedies Polysulfide Shuttling in Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2021, 33, e2101006.	21.0	229
26	Caging tin oxide in three-dimensional graphene networks for superior volumetric lithium storage. <i>Nature Communications</i> , 2018, 9, 402.	12.8	227
27	Optimized Catalytic WS ₂ /WO ₃ Heterostructure Design for Accelerated Polysulfide Conversion in Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2000091.	19.5	221
28	Cross-linked beta alumina nanowires with compact gel polymer electrolyte coating for ultra-stable sodium metal battery. <i>Nature Communications</i> , 2019, 10, 4244.	12.8	219
29	Rational design of MoS ₂ @graphene nanocables: towards high performance electrode materials for lithium ion batteries. <i>Energy and Environmental Science</i> , 2014, 7, 3320-3325.	30.8	218
30	A sheet-like porous carbon for high-rate supercapacitors produced by the carbonization of an eggplant. <i>Carbon</i> , 2015, 92, 11-14.	10.3	217
31	Engineering <i>d</i> Orbital Hybridization in Single-Atom Metal-Embedded Three-Dimensional Electrodes for Li-S Batteries. <i>Advanced Materials</i> , 2021, 33, e2105947.	21.0	209
32	Could graphene construct an effective conducting network in a high-power lithium ion battery?. <i>Nano Energy</i> , 2012, 1, 429-439.	16.0	185
33	Oriented and Interlinked Porous Carbon Nanosheets with an Extraordinary Capacitive Performance. <i>Chemistry of Materials</i> , 2014, 26, 6896-6903.	6.7	180
34	Dense coating of Li ₄ Ti ₅ O ₁₂ and graphene mixture on the separator to produce long cycle life of lithium-sulfur battery. <i>Nano Energy</i> , 2016, 30, 1-8.	16.0	179
35	Functional Carbons Remedy the Shuttling of Polysulfides in Lithium-Sulfur Batteries: Confining, Trapping, Blocking, and Breaking up. <i>Advanced Functional Materials</i> , 2018, 28, 1800508.	14.9	164
36	Commercial carbon molecular sieves as a high performance anode for sodium-ion batteries. <i>Energy Storage Materials</i> , 2016, 3, 18-23.	18.0	163

#	ARTICLE	IF	CITATIONS
37	Self-Assembled 3D Graphene Monolith from Solution. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 658-668.	4.6	152
38	Reduction of Graphene Oxide by Hydrogen Sulfide: A Promising Strategy for Pollutant Control and as an Electrode for Li ⁺ Batteries. <i>Advanced Energy Materials</i> , 2014, 4, 1301565.	19.5	149
39	Ethers Illume Sodium-Based Battery Chemistry: Uniqueness, Surprise, and Challenges. <i>Advanced Energy Materials</i> , 2018, 8, 1801361.	19.5	149
40	Graphitic Carbon Nitride Induced Micro-Electric Field for Dendrite-Free Lithium Metal Anodes. <i>Advanced Energy Materials</i> , 2019, 9, 1803186.	19.5	147
41	Multilayered silicon embedded porous carbon/graphene hybrid film as a high performance anode. <i>Carbon</i> , 2015, 84, 434-443.	10.3	144
42	Carbon coating to suppress the reduction decomposition of electrolyte on the Li ₄ Ti ₅ O ₁₂ electrode. <i>Journal of Power Sources</i> , 2012, 202, 253-261.	7.8	142
43	An in-plane heterostructure of graphene and titanium carbide for efficient polysulfide confinement. <i>Nano Energy</i> , 2017, 39, 291-296.	16.0	142
44	Cobalt-Doping of Molybdenum Disulfide for Enhanced Catalytic Polysulfide Conversion in Lithium-Sulfur Batteries. <i>ACS Nano</i> , 2021, 15, 7491-7499.	14.6	136
45	Porous MnO ₂ for use in a high performance supercapacitor: replication of a 3D graphene network as a reactive template. <i>Chemical Communications</i> , 2013, 49, 11092.	4.1	134
46	Towards low temperature thermal exfoliation of graphite oxide for graphene production. <i>Carbon</i> , 2013, 62, 11-24.	10.3	132
47	One-pot self-assembly of graphene/carbon nanotube/sulfur hybrid with three dimensionally interconnected structure for lithium-sulfur batteries. <i>Journal of Power Sources</i> , 2015, 295, 182-189.	7.8	128
48	A sandwich structure of graphene and nickel oxide with excellent supercapacitive performance. <i>Journal of Materials Chemistry</i> , 2011, 21, 9014.	6.7	125
49	Dual targeted nanocarrier for brain ischemic stroke treatment. <i>Journal of Controlled Release</i> , 2016, 233, 64-71.	9.9	124
50	N and S co-doped porous carbon spheres prepared using L-cysteine as a dual functional agent for high-performance lithium-sulfur batteries. <i>Chemical Communications</i> , 2015, 51, 17720-17723.	4.1	121
51	Sulfur confined in nitrogen-doped microporous carbon used in a carbonate-based electrolyte for long-life, safe lithium-sulfur batteries. <i>Carbon</i> , 2016, 109, 1-6.	10.3	119
52	In-situ topochemical nitridation derivative MoO ₂ -Mo ₂ N binary nanobelts as multifunctional interlayer for fast-kinetic Li-Sulfur batteries. <i>Nano Energy</i> , 2020, 68, 104356.	16.0	116
53	The effect of graphene wrapping on the performance of LiFePO ₄ for a lithium ion battery. <i>Carbon</i> , 2013, 57, 530-533.	10.3	115
54	A Lightweight 3D Cu Nanowire Network with Phosphidation Gradient as Current Collector for High-Density Nucleation and Stable Deposition of Lithium. <i>Advanced Materials</i> , 2019, 31, e1904991.	21.0	114

#	ARTICLE	IF	CITATIONS
55	Disassembly&Reassembly Approach to RuO ₂ /Graphene Composites for Ultrahigh Volumetric Capacitance Supercapacitor. <i>Small</i> , 2017, 13, 1701026.	10.0	113
56	Spherical Li Deposited inside 3D Cu Skeleton as Anode with Ultrastable Performance. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 20244-20249.	8.0	113
57	Graphene-DNA hybrids: self-assembly and electrochemical detection performance. <i>Journal of Materials Chemistry</i> , 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. <i>Nano Energy</i> , 2019, 60, 305-311.	16.0	106
59	Unsaturated Single Atoms on Monolayer Transition Metal Dichalcogenides for Ultrafast Hydrogen Evolution. <i>ACS Nano</i> , 2020, 14, 767-776.	14.6	106
60	Carbon enables the practical use of lithium metal in a battery. <i>Carbon</i> , 2017, 123, 744-755.	10.3	105
61	A MoS ₂ /Carbon hybrid anode for high-performance Li-ion batteries at low temperature. <i>Nano Energy</i> , 2020, 70, 104550.	16.0	101
62	Rich Heterointerfaces Enabling Rapid Polysulfides Conversion and Regulated Li ₂ S Deposition for High-Performance Lithium&Sulfur Batteries. <i>ACS Nano</i> , 2021, 15, 11491-11500.	14.6	99
63	Revisiting the Roles of Natural Graphite in Ongoing Lithium&Ion Batteries. <i>Advanced Materials</i> , 2022, 34, e2106704.	21.0	99
64	Catalyzing polysulfide conversion by g-C ₃ N ₄ in a graphene network for long-life lithium-sulfur batteries. <i>Nano Research</i> , 2018, 11, 3480-3489.	10.4	97
65	DNA-dispersed graphene/NiO hybrid materials for highly sensitive non-enzymatic glucose sensor. <i>Electrochimica Acta</i> , 2012, 73, 129-135.	5.2	96
66	A three-dimensional graphene skeleton as a fast electron and ion transport network for electrochemical applications. <i>Journal of Materials Chemistry A</i> , 2014, 2, 3031.	10.3	96
67	Lamellar MXene Composite Aerogels with Sandwiched Carbon Nanotubes Enable Stable Lithium&Sulfur Batteries with a High Sulfur Loading. <i>Advanced Functional Materials</i> , 2021, 31, 2100793.	14.9	95
68	A high-density graphene&sulfur assembly: a promising cathode for compact Li&S batteries. <i>Nanoscale</i> , 2015, 7, 5592-5597.	5.6	92
69	Monolithic carbons with spheroidal and hierarchical pores produced by the linkage of functionalized graphene sheets. <i>Carbon</i> , 2014, 69, 169-177.	10.3	88
70	How a very trace amount of graphene additive works for constructing an efficient conductive network in LiCoO ₂ -based lithium-ion batteries. <i>Carbon</i> , 2016, 103, 356-362.	10.3	87
71	Theoretical Investigation of the Intercalation Chemistry of Lithium/Sodium Ions in Transition Metal Dichalcogenides. <i>Journal of Physical Chemistry C</i> , 2017, 121, 13599-13605.	3.1	87
72	Ultrafast high-volumetric sodium storage of folded-graphene electrodes through surface-induced redox reactions. <i>Energy Storage Materials</i> , 2015, 1, 112-118.	18.0	83

#	ARTICLE	IF	CITATIONS
73	A carbon sandwich electrode with graphene filling coated by N-doped porous carbon layers for lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 20218-20224.	10.3	83
74	ZnS spheres wrapped by an ultrathin wrinkled carbon film as a multifunctional interlayer for long-life Li-S batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 231-241.	10.3	83
75	Constructing a High-Strength Solid Electrolyte Layer by In Vivo Alloying with Aluminum for an Ultrahigh-Rate Lithium Metal Anode. <i>Advanced Functional Materials</i> , 2020, 30, 1907343.	14.9	83
76	High-performance ultrafiltration membranes based on polyethersulfone-graphene oxide composites. <i>RSC Advances</i> , 2013, 3, 21394.	3.6	79
77	Concrete-inspired construction of a silicon/carbon hybrid electrode for high performance lithium ion battery. <i>Carbon</i> , 2015, 93, 59-67.	10.3	78
78	Li-ion and Na-ion transportation and storage properties in various sized TiO_2 spheres with hierarchical pores and high tap density. <i>Journal of Materials Chemistry A</i> , 2017, 5, 4359-4367.	10.3	78
79	Elevated polysulfide regulation by an ultralight all-CVD-built ReS_2 @N-Doped graphene heterostructure interlayer for lithium-sulfur batteries. <i>Nano Energy</i> , 2019, 66, 104190.	16.0	77
80	Photocatalytic degradation of ranitidine and reduction of nitrosamine dimethylamine formation potential over MXene-Ti 3C_2 /MoS 2 under visible light irradiation. <i>Journal of Hazardous Materials</i> , 2021, 413, 125424.	12.4	76
81	The Interplay of Oxygen Functional Groups and Folded Texture in Densified Graphene Electrodes for Compact Sodium-ion Capacitors. <i>Advanced Energy Materials</i> , 2018, 8, 1702395.	19.5	75
82	Twin-functional graphene oxide: compacting with Fe_2O_3 into a high volumetric capacity anode for lithium ion battery. <i>Energy Storage Materials</i> , 2017, 6, 98-103.	18.0	74
83	A Directional Strain Sensor Based on Anisotropic Microhoneycomb Cellulose Nanofiber-Carbon Nanotube Hybrid Aerogels Prepared by Unidirectional Freeze Drying. <i>Small</i> , 2019, 15, e1805363.	10.0	73
84	Realizing stable lithium deposition by <i>in situ</i> grown Cu_2S nanowires inside commercial Cu foam for lithium metal anodes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 727-732.	10.3	72
85	Electrostatic-spraying an ultrathin, multifunctional and compact coating onto a cathode for a long-life and high-rate lithium-sulfur battery. <i>Nano Energy</i> , 2016, 30, 138-145.	16.0	71
86	Multifunctional binder designs for lithium-sulfur batteries. <i>Journal of Energy Chemistry</i> , 2019, 39, 88-100.	12.9	70
87	Evolution of the effect of sulfur confinement in graphene-based porous carbons for use in Li-S batteries. <i>Nanoscale</i> , 2016, 8, 4447-4451.	5.6	69
88	Packing Activated Carbons into Dense Graphene Network by Capillarity for High Volumetric Performance Supercapacitors. <i>Advanced Science</i> , 2019, 6, 1802355.	11.2	69
89	Seeding lithium seeds towards uniform lithium deposition for stable lithium metal anodes. <i>Nano Energy</i> , 2019, 61, 47-53.	16.0	69
90	Efficient polysulfide blocker from conductive niobium nitride@graphene for Li-S batteries. <i>Journal of Energy Chemistry</i> , 2020, 45, 135-141.	12.9	69

#	ARTICLE	IF	CITATIONS
91	An organic nickel salt-based electrolyte additive boosts homogeneous catalysis for lithium-sulfur batteries. <i>Energy Storage Materials</i> , 2020, 33, 290-297.	18.0	69
92	Catalytic effect in Li-S batteries: From band theory to practical application. <i>Materials Today</i> , 2022, 57, 84-120.	14.2	69
93	A graphene-based nanostructure with expanded ion transport channels for high rate Li-ion batteries. <i>Chemical Communications</i> , 2012, 48, 5904.	4.1	68
94	Necklace-like MoC sulfiphilic sites embedded in interconnected carbon networks for Li-S batteries with high sulfur loading. <i>Journal of Materials Chemistry A</i> , 2019, 7, 11298-11304.	10.3	68
95	Tailoring Microstructure of Graphene-Based Membrane by Controlled Removal of Trapped Water Inspired by the Phase Diagram. <i>Advanced Functional Materials</i> , 2014, 24, 3456-3463.	14.9	67
96	Unusual High Oxygen Reduction Performance in All-Carbon Electrocatalysts. <i>Scientific Reports</i> , 2014, 4, 6289.	3.3	67
97	Deactivating Defects in Graphenes with Al ₂ O ₃ Nanoclusters to Produce Long-Life and High-Rate Sodium-Ion Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1803078.	19.5	65
98	One-pot self-assembly of three-dimensional graphene macroassemblies with porous core and layered shell. <i>Journal of Materials Chemistry</i> , 2011, 21, 12352.	6.7	64
99	Hybridization of graphene oxide and carbon nanotubes at the liquid/air interface. <i>Chemical Communications</i> , 2012, 48, 3706-3708.	4.1	64
100	Transcriptome Analysis Reveals Distinct Gene Expression Profiles in Eosinophilic and Noneosinophilic Chronic Rhinosinusitis with Nasal Polyps. <i>Scientific Reports</i> , 2016, 6, 26604.	3.3	63
101	Dual-functional hard template directed one-step formation of a hierarchical porous carbon-carbon nanotube hybrid for lithium-sulfur batteries. <i>Chemical Communications</i> , 2016, 52, 12143-12146.	4.1	63
102	Status and prospects of porous graphene networks for lithium-sulfur batteries. <i>Materials Horizons</i> , 2020, 7, 2487-2518.	12.2	63
103	Precise carbon structure control by salt template for high performance sodium-ion storage. <i>Journal of Energy Chemistry</i> , 2019, 31, 101-106.	12.9	62
104	1000 Wh L ⁻¹ lithium-ion batteries enabled by crosslink-shrunk tough carbon encapsulated silicon microparticle anodes. <i>National Science Review</i> , 2021, 8, nwab012.	9.5	60
105	An air-stable and waterproof lithium metal anode enabled by wax composite packaging. <i>Science Bulletin</i> , 2019, 64, 910-917.	9.0	58
106	Graphene oxide hydrogel at solid/liquid interface. <i>Chemical Communications</i> , 2011, 47, 5771.	4.1	56
107	Graphene Emerges as a Versatile Template for Materials Preparation. <i>Small</i> , 2016, 12, 2674-2688.	10.0	56
108	Nitrate Additives Coordinated with Crown Ether Stabilize Lithium Metal Anodes in Carbonate Electrolyte. <i>Advanced Functional Materials</i> , 2021, 31, 2102128.	14.9	56

#	ARTICLE	IF	CITATIONS
109	Engineering Graphenes from the Nano- to the Macroscale for Electrochemical Energy Storage. <i>Electrochemical Energy Reviews</i> , 2018, 1, 139-168.	25.5	55
110	A Protective Layer for Lithium Metal Anode: Why and How. <i>Small Methods</i> , 2021, 5, e2001035.	8.6	55
111	Sieving carbons promise practical anodes with extensible low-potential plateaus for sodium batteries. <i>National Science Review</i> , 2022, 9, .	9.5	55
112	Functionalization of Graphene Sheets by Polyacetylene: Convenient Synthesis and Enhanced Emission. <i>Macromolecular Chemistry and Physics</i> , 2011, 212, 768-773.	2.2	54
113	LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ as both a trapper and accelerator of polysulfides for lithium-sulfur batteries. <i>Energy Storage Materials</i> , 2019, 17, 111-117.	18.0	54
114	Facile synthesis of ZnO nanorods grown on graphene sheets and its enhanced photocatalytic efficiency. <i>Journal of Chemical Technology and Biotechnology</i> , 2015, 90, 550-558.	3.2	53
115	A lightweight carbon nanofiber-based 3D structured matrix with high nitrogen-doping level for lithium metal anodes. <i>Science China Materials</i> , 2019, 62, 87-94.	6.3	53
116	A unique carbon with a high specific surface area produced by the carbonization of agar in the presence of graphene. <i>Chemical Communications</i> , 2013, 49, 10427-10429.	4.1	52
117	A hybrid of holey graphene and Mn ₃ O ₄ and its oxygen reduction reaction performance. <i>Chemical Communications</i> , 2015, 51, 3911-3914.	4.1	52
118	A Functionalized Carbon Surface for High-Performance Sodium-Ion Storage. <i>Small</i> , 2020, 16, e1902603.	10.0	51
119	Holey graphenes as the conductive additives for LiFePO ₄ batteries with an excellent rate performance. <i>Carbon</i> , 2019, 149, 257-262.	10.3	50
120	Graphene supported nano particles of Pt-Ni for CO oxidation. <i>Applied Surface Science</i> , 2012, 258, 7795-7800.	6.1	49
121	A Passionfruit-Like Carbon-Confined Cu ₂ ZnSn ₄ Anode for Ultralong-Life Sodium Storage. <i>Advanced Energy Materials</i> , 2021, 11, 2100082.	19.5	49
122	Regulating the Li ₂ S deposition by grain boundaries in metal nitrides for stable lithium-sulfur batteries. <i>Nano Energy</i> , 2022, 91, 106669.	16.0	49
123	Freestanding and Sandwich MXene-Based Cathode with Suppressed Lithium Polysulfides Shuttle for Flexible Lithium-Sulfur Batteries. <i>Nano Letters</i> , 2022, 22, 1207-1216.	9.1	49
124	pH-dependent size, surface chemistry and electrochemical properties of graphene oxide. <i>New Carbon Materials</i> , 2013, 28, 327-335.	6.1	47
125	Room-temperature liquid metal-based anodes for high-energy potassium-based electrochemical devices. <i>Chemical Communications</i> , 2018, 54, 8032-8035.	4.1	47
126	Wasp nest-imitated assembly of elastic rGO/p-Ti ₃ C ₂ T _x MXene-cellulose nanofibers for high-performance sodium-ion batteries. <i>Carbon</i> , 2019, 153, 625-633.	10.3	47

#	ARTICLE	IF	CITATIONS
127	Conductive graphene-based macroscopic membrane self-assembled at a liquid–air interface. <i>Journal of Materials Chemistry</i> , 2011, 21, 3359.	6.7	46
128	Nanospace-confined formation of flattened Sn sheets in pre-seeded graphenes for lithium ion batteries. <i>Nanoscale</i> , 2014, 6, 9554-9558.	5.6	46
129	Oxygen-enriched carbon nanotubes as a bifunctional catalyst promote the oxygen reduction/evolution reactions in Li-O ₂ batteries. <i>Carbon</i> , 2019, 141, 561-567.	10.3	45
130	A Li-ion sulfur full cell with ambient resistant Al-Li alloy anode. <i>Energy Storage Materials</i> , 2018, 15, 209-217.	18.0	44
131	Electrode thickness control: Precondition for quite different functions of graphene conductive additives in LiFePO ₄ electrode. <i>Carbon</i> , 2015, 92, 311-317.	10.3	42
132	Intercalation-Induced Conversion Reactions Give High-Capacity Potassium Storage. <i>ACS Nano</i> , 2020, 14, 14026-14035.	14.6	42
133	Capillary shrinkage of graphene oxide hydrogels. <i>Science China Materials</i> , 2020, 63, 1870-1877.	6.3	41
134	A gradient topology host for a dendrite-free lithium metal anode. <i>Nano Energy</i> , 2022, 94, 106937.	16.0	41
135	Ultrafast presodiation of graphene anodes for high efficiency and high rate sodium ion storage. <i>Informa An-Materials</i> , 2021, 3, 1445-1454.	17.3	40
136	A Nacre-Like Carbon Nanotube Sheet for High Performance Li-Polysulfide Batteries with High Sulfur Loading. <i>Advanced Science</i> , 2018, 5, 1800384.	11.2	39
137	Interlayers for lithium-based batteries. <i>Energy Storage Materials</i> , 2019, 23, 112-136.	18.0	37
138	Electron and Ion Co-Conductive Catalyst Achieving Instant Transformation of Lithium Polysulfide towards Li ₂ S. <i>Advanced Materials</i> , 2021, 33, e2105362.	21.0	36
139	Constructing a highly efficient “solid” polymer “solid”-elastic ion transport network in cathodes activates the room temperature performance of all-solid-state lithium batteries. <i>Energy and Environmental Science</i> , 2022, 15, 1503-1511.	30.8	36
140	A high-performance lithium ion oxygen battery consisting of Li ₂ O ₂ cathode and lithiated aluminum anode with nafion membrane for reduced O ₂ crossover. <i>Nano Energy</i> , 2017, 40, 258-263.	16.0	35
141	Theoretical Investigation of the Electrochemical Performance of Transition Metal Nitrides for Lithium–Sulfur Batteries. <i>Journal of Physical Chemistry C</i> , 2019, 123, 25025-25030.	3.1	35
142	Synthesizing multilayer graphene from amorphous activated carbon via ammonia-assisted hydrothermal method. <i>Carbon</i> , 2019, 152, 24-32.	10.3	33
143	Occupational and environmental risk factors for chronic rhinosinusitis in China: a multicentre cross-sectional study. <i>Respiratory Research</i> , 2016, 17, 54.	3.6	32
144	Electrode Design from “Internal” to “External” for High Stability Silicon Anodes in Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 14142-14149.	8.0	32

#	ARTICLE	IF	CITATIONS
145	Crowning Metal Ions by Supramolecularization as a General Remedy toward a Dendrite-Free Alkali-Metal Battery. <i>Advanced Materials</i> , 2021, 33, e2101745.	21.0	32
146	Practical Graphene Technologies for Electrochemical Energy Storage. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	32
147	Promoted conversion of polysulfides by MoO ₂ inlaid ordered mesoporous carbons towards high performance lithium-sulfur batteries. <i>Chinese Chemical Letters</i> , 2019, 30, 521-524.	9.0	31
148	A multifunctional artificial protective layer for producing an ultra-stable lithium metal anode in a commercial carbonate electrolyte. <i>Journal of Materials Chemistry A</i> , 2021, 9, 7667-7674.	10.3	31
149	Micron-sized Spherical Si/C Hybrids Assembled via Water/Oil System for High-Performance Lithium Ion Battery. <i>Electrochimica Acta</i> , 2016, 211, 982-988.	5.2	30
150	A Three-Layer All-in-One Flexible Graphene Film Used as an Integrated Supercapacitor. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700004.	3.7	30
151	Dense organic molecules/graphene network anodes with superior volumetric and areal performance for asymmetric supercapacitors. <i>Journal of Materials Chemistry A</i> , 2020, 8, 461-469.	10.3	30
152	Metallic Liquid Gating Membranes. <i>ACS Nano</i> , 2020, 14, 2465-2474.	14.6	30
153	pH-Mediated fine-tuning of optical properties of graphene oxide membranes. <i>Carbon</i> , 2012, 50, 3233-3239.	10.3	29
154	A Hollow Spherical Carbon Derived from the Spray Drying of Corncob Lignin for High-Rate-Performance Supercapacitors. <i>Chemistry - an Asian Journal</i> , 2017, 12, 503-506.	3.3	29
155	An ion-conducting SnS ₂ hybrid coating for commercial activated carbons enabling their use as high performance anodes for sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 10761-10768.	10.3	29
156	A (110) Facet-Dominated Vanadium Dioxide Enabling Bidirectional Electrocatalysis for Lithium-Sulfur Batteries. <i>ACS Nano</i> , 2021, 15, 16878-16886.	14.6	29
157	Functionalization of graphene by tetraphenylethylene using nitrene chemistry. <i>RSC Advances</i> , 2012, 2, 7042.	3.6	28
158	Abundant grain boundaries activate highly efficient lithium ion transportation in high rate Li ₄ Ti ₅ O ₁₂ compact microspheres. <i>Journal of Materials Chemistry A</i> , 2019, 7, 1168-1176.	10.3	28
159	Enhanced Antiglioblastoma Efficacy of Neovasculature and Glioma Cells Dual Targeted Nanoparticles. <i>Molecular Pharmaceutics</i> , 2016, 13, 3506-3517.	4.6	27
160	An interlayer composed of a porous carbon sheet embedded with TiO ₂ nanoparticles for stable and high rate lithium-sulfur batteries. <i>Nanoscale</i> , 2020, 12, 12308-12316.	5.6	27
161	Graphene-Templated Growth of WS ₂ Nanoclusters for Catalytic Conversion of Polysulfides in Lithium-Sulfur Batteries. <i>ACS Applied Energy Materials</i> , 2020, 3, 4923-4930.	5.1	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 Zinc-Ion Batteries?. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 12323-12330.	8.0	27

#	ARTICLE	IF	CITATIONS
163	An interlaced silver vanadium oxide-graphene hybrid with high structural stability for use in lithium ion batteries. <i>Chemical Communications</i> , 2014, 50, 13447-13450.	4.1	26
164	A Dual-Function Na ₂ SO ₄ Template Directed Formation of Cathode Materials with a High Content of Sulfur Nanodots for Lithium-Sulfur Batteries. <i>Small</i> , 2017, 13, 1700358.	10.0	26
165	High catalytic activity of anatase titanium dioxide for decomposition of electrolyte solution in lithium ion battery. <i>Journal of Power Sources</i> , 2014, 268, 882-886.	7.8	25
166	Carbon coated porous tin peroxide/carbon composite electrode for lithium-ion batteries with excellent electrochemical properties. <i>Carbon</i> , 2015, 81, 739-747.	10.3	25
167	Easy fabrication of flexible and multilayer nanocarbon-based cathodes with a high unreal sulfur loading by electrostatic spraying for lithium-sulfur batteries. <i>Carbon</i> , 2018, 138, 18-25.	10.3	25
168	Reconfiguring confined magnetic colloids with tunable fluid transport behavior. <i>National Science Review</i> , 2021, 8, nwaa301.	9.5	25
169	Towards a reliable Li-metal-free LiNO ₃ -free Li-ion polysulphide full cell <i>via</i> parallel interface engineering. <i>Energy and Environmental Science</i> , 2018, 11, 2509-2520.	30.8	24
170	Highly stretchable and reliable graphene oxide-reinforced liquid gating membranes for tunable gas/liquid transport. <i>Microsystems and Nanoengineering</i> , 2020, 6, 43.	7.0	24
171	Constructing a Reinforced and Gradient Solid Electrolyte Interphase on Si Nanoparticles by In-Situ Thiol-ene Click Reaction for Long Cycling Lithium-ion Batteries. <i>Small</i> , 2021, 17, e2102316.	10.0	24
172	A graphene/poly(vinyl alcohol) hybrid membrane self-assembled at the liquid/air interface: enhanced mechanical performance and promising saturable absorber. <i>Journal of Materials Chemistry</i> , 2012, 22, 17204.	6.7	23
173	Sulfur-functionalized three-dimensional graphene monoliths as high-performance anodes for ultrafast sodium-ion storage. <i>Chemical Communications</i> , 2018, 54, 4317-4320.	4.1	22
174	Layered MXene Protected Lithium Metal Anode as an Efficient Polysulfide Blocker for Lithium-Sulfur Batteries. <i>Batteries and Supercaps</i> , 2020, 3, 892-899.	4.7	22
175	Coordinated Adsorption and Catalytic Conversion of Polysulfides Enabled by Perovskite Bimetallic Hydroxide Nanocages for Lithium-Sulfur Batteries. <i>Small</i> , 2021, 17, e2101538.	10.0	21
176	Direct assembly of micron-size porous graphene spheres with a high density as supercapacitor materials. <i>Carbon</i> , 2019, 149, 492-498.	10.3	20
177	Size Effects on the Mechanical Properties of Nanoporous Graphene Networks. <i>Advanced Functional Materials</i> , 2019, 29, 1900311.	14.9	20
178	Building Magnetoresponse Composite Elastomers for Bionic Locomotion Applications. <i>Journal of Bionic Engineering</i> , 2020, 17, 405-420.	5.0	20
179	pH-Dependent Morphology Control of Cellulose Nanofiber/Graphene Oxide Cryogels. <i>Small</i> , 2021, 17, e2005564.	10.0	20
180	Dense graphene monolith oxygen cathodes for ultrahigh volumetric energy densities. <i>Energy Storage Materials</i> , 2017, 9, 134-139.	18.0	19

#	ARTICLE	IF	CITATIONS
181	A one-step hard-templating method for the preparation of a hierarchical microporous-mesoporous carbon for lithium-sulfur batteries. <i>New Carbon Materials</i> , 2017, 32, 289-296.	6.1	19
182	Dendrite-Free Non-Newtonian Semisolid Lithium Metal Anode. <i>ACS Energy Letters</i> , 2021, 6, 3761-3768.	17.4	19
183	Water vapor adsorption on low-temperature exfoliated graphene nanosheets. <i>Journal of Physics and Chemistry of Solids</i> , 2012, 73, 1440-1443.	4.0	17
184	Preparation and electrochemical performance of a graphene-wrapped carbon/sulphur composite cathode. <i>New Carbon Materials</i> , 2014, 29, 309-315.	6.1	17
185	A Carbon-Sulfur Hybrid with Pomegranate-Like Structure for Lithium-Sulfur Batteries. <i>Chemistry - an Asian Journal</i> , 2016, 11, 1343-1347.	3.3	17
186	A new Suzuki synthesis of triphenylethylenes that inhibit aromatase and bind to estrogen receptors β_1 and β_2 . <i>Bioorganic and Medicinal Chemistry</i> , 2016, 24, 5400-5409.	3.0	16
187	Graphene-Directed Formation of a Nitrogen-Doped Porous Carbon Sheet with High Catalytic Performance for the Oxygen Reduction Reaction. <i>Journal of Physical Chemistry C</i> , 2018, 122, 13508-13514.	3.1	16
188	γ -Cysteine-Modified Acacia Gum as a Multifunctional Binder for Lithium-Sulfur Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 47956-47962.	8.0	16
189	Realizing Ultralow Concentration Gelation of Graphene Oxide with Artificial Interfaces. <i>Advanced Materials</i> , 2019, 31, e1805075.	21.0	16
190	High-performance graphene/disodium terephthalate electrodes with ether electrolyte for exceptional cooperative sodiation/desodiation. <i>Nano Energy</i> , 2020, 77, 105203.	16.0	16
191	Confined growth of Fe ₂ O ₃ nanoparticles by holey graphene for enhanced sodium-ion storage. <i>Carbon</i> , 2021, 176, 31-38.	10.3	16
192	Aligned Macroporous Monoliths by Ice-Templating. <i>Bulletin of the Chemical Society of Japan</i> , 2022, 95, 611-620.	3.2	16
193	Safety properties of liquid state soft pack high power batteries with carbon-coated LiFePO ₄ /graphite electrodes. <i>Journal of Solid State Electrochemistry</i> , 2010, 14, 751-756.	2.5	15
194	Spatial and temporal film thickness measurement of a soap bubble based on large lateral shearing displacement interferometry. <i>Applied Optics</i> , 2012, 51, 8863.	1.8	15
195	Prevalence and Occupational and Environmental Risk Factors of Self-Reported Asthma: Evidence from a Cross-Sectional Survey in Seven Chinese Cities. <i>International Journal of Environmental Research and Public Health</i> , 2016, 13, 1084.	2.6	15
196	Porous graphene oxide-based carbon artefact with high capacity for methylene blue adsorption. <i>Adsorption</i> , 2016, 22, 1043-1050.	3.0	15
197	High-density three-dimensional graphene cathode with a tailored pore structure for high volumetric capacity zinc-ion storage. <i>Carbon</i> , 2022, 186, 624-631.	10.3	15
198	Deeply Cyclable and Ultrahigh-Rate Lithium Metal Anodes Enabled by Coaxial Nanochamber Heterojunction on Carbon Nanofibers. <i>Advanced Science</i> , 2021, 8, e2101940.	11.2	14

#	ARTICLE	IF	CITATIONS
199	A Highly Efficient Ion and Electron Conductive Interlayer To Achieve Low Self-Discharge of Lithium-Sulfur Batteries. ACS Applied Materials & Interfaces, 2022, 14, 1783-1790.	8.0	13
200	H ₂ S + SO ₂ produces water-dispersed sulfur nanoparticles for lithium-sulfur batteries. Nano Energy, 2017, 41, 665-673.	16.0	12
201	A Reduced Graphene Oxide/Disodium Terephthalate Hybrid as a High-Performance Anode for Sodium-Ion Batteries. Chemistry - A European Journal, 2017, 23, 16586-16592.	3.3	12
202	A Stable Cross-Linked Binder Network for SnO ₂ Anode with Enhanced Sodium-Ion Storage Performance. ChemistrySelect, 2017, 2, 11365-11369.	1.5	12
203	Interconnected Ultrasmall V ₂ O ₃ and Li ₄ Ti ₅ O ₁₂ Particles Construct Robust Interfaces for Long-Cycling Anodes of Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 29993-30000.	8.0	12
204	All-Solid-State Batteries: Low Resistance Integrated All-Solid-State Battery Achieved by Li ₇ La ₃ Zr ₂ O ₁₂ Nanowire Upgrading Polyethylene Oxide (PEO) Composite Electrolyte and PEO Cathode Binder (Adv. Funct. Mater. 1/2019). Advanced Functional Materials, 2019, 29, 1970006.	14.9	12
205	High-performance lithium-sulfur batteries enabled by regulating Li ₂ S deposition. Physical Chemistry Chemical Physics, 2021, 23, 21385-21398.	2.8	12
206	Vertical Graphenes Grown on a Flexible Graphite Paper as an All-Carbon Current Collector towards Stable Li Deposition. Research, 2020, 2020, 7163948.	5.7	12
207	The Catalyst Design for Lithium-Sulfur Batteries: Roles and Routes. Chemical Record, 2022, 22, .	5.8	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.	5.2	11
209	Porous carbons derived from carbonization of tissue papers for supercapacitors. Journal of Materials Science: Materials in Electronics, 2019, 30, 11250-11256.	2.2	11
210	Research Advances of Carbon-based Anode Materials for Sodium-Ion Batteries. Acta Chimica Sinica, 2017, 75, 163.	1.4	11
211	Diglyme-based electrolytes boosting high-rate and stable sodium-ion storage for three-dimensional VS ₄ /Reduced graphene oxide hybrid anodes. Journal of Power Sources, 2022, 526, 231098.	7.8	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.	11.2	10
213	Fast three-dimensional assembly of MoS ₂ inspired by the gelation of graphene oxide. Science China Materials, 2019, 62, 745-750.	6.3	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.	6.1	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.	10.3	9
216	High-Level Heteroatom Doped Two-Dimensional Carbon Architectures for Highly Efficient Lithium-Ion Storage. Frontiers in Chemistry, 2018, 6, 97.	3.6	8

#	ARTICLE	IF	CITATIONS
217	A Robust Integrated SnO _x /Carbon Composite Anode for Sodium-Ion Batteries. ChemistrySelect, 2018, 3, 10869-10874.	1.5	7
218	3D Hollow Sn@Carbon-Graphene Hybrid Material as Promising Anode for Lithium-Ion Batteries. Journal of Nanomaterials, 2014, 2014, 1-6.	2.7	5
219	Lithium-Sulfur Batteries at Extreme Temperatures: Challenges, Strategies and Prospects. Energy and Environmental Materials, 2023, 6, .	12.8	5
220	Ultrathin carbon nanotube-DNA hybrid membrane formation by simple physical adsorption onto a thin alumina substrate. Nanotechnology, 2010, 21, 285601.	2.6	4
221	Carbon: Two-Dimensional Porous Carbon: Synthesis and Ion-Transport Properties (Adv. Mater. 36/2015). Advanced Materials, 2015, 27, 5254-5254.	21.0	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.	5.8	4
223	Graphene: Self-Assembly of Graphene Oxide at Interfaces (Adv. Mater. 32/2014). Advanced Materials, 2014, 26, 5732-5732.	21.0	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.	3.3	3
225	Regulating Li-Ion Flux through a Dense yet Highly Ionic Conductive Interlayer for Stable Li Deposition. Advanced Materials Interfaces, 0, , 2200457.	3.7	3
226	Spatial Degrees of Freedom for MIMO Interference Channel with Local Channel State Information at Transmitters. Wireless Personal Communications, 2016, 89, 639-662.	2.7	2
227	Microhoneycomb Monoliths Prepared by the Unidirectional Freeze-drying of Cellulose Nanofiber Based Sols: Method and Extensions. Journal of Visualized Experiments, 2018, , .	0.3	1
228	Energy Storage: A Dual-Function Na ₂ SO ₄ Template Directed Formation of Cathode Materials with a High Content of Sulfur Nanodots for Lithium-Sulfur Batteries (Small 27/2017). Small, 2017, 13, .	10.0	0
229	Energy Storage: Disassembly-Reassembly Approach to RuO ₂ /Graphene Composites for Ultrahigh Volumetric Capacitance Supercapacitor (Small 30/2017). Small, 2017, 13, .	10.0	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.	19.5	0