Han Hu

List of Publications by Year
in descending order

207 papers	23,328 citations	8181 76 h-index	8167 148 g-index
214 all docs	214 docs citations	214 times ranked	22984 citing authors

#	Article	IF	Citations
1	Ultralight and Highly Compressible Graphene Aerogels. Advanced Materials, 2013, 25, 2219-2223.	21.0	1,249
2	Designed Formation of Co₃O₄/NiCo₂O₄Double-Shelled Nanocages with Enhanced Pseudocapacitive and Electrocatalytic Properties. Journal of the American Chemical Society, 2015, 137, 5590-5595.	13.7	1,059
3	Enhancing lithiumâ€“sulphur battery performance by strongly binding the discharge products on amino-functionalized reduced graphene oxide. Nature Communications, 2014, 5, 5002.	12.8	892
4	Complex Hollow Nanostructures: Synthesis and Energyâ€Related Applications. Advanced Materials, 2017, 29, 1604563.	21.0	627
5	Electroactive edge site-enriched nickelâ€“cobalt sulfide into graphene frameworks for high-performance asymmetric supercapacitors. Energy and Environmental Science, 2016, 9, 1299-1307.	30.8	623
6	Sustainable Synthesis and Assembly of Biomassâ€Derived B/N Coâ€Doped Carbon Nanosheets with Ultrahigh Aspect Ratio for Highâ€Performance Supercapacitors. Advanced Functional Materials, 2016, 26, 111-119.	14.9	607
7	Ultrathin MoS₂ Nanosheets Supported on Nâ€doped Carbon Nanoboxes with Enhanced Lithium Storage and Electrocatalytic Properties. Angewandte Chemie - International Edition, 2015, 54, 7395-7398.	13.8	596
8	Stabilizing the MXenes by Carbon Nanoplating for Developing Hierarchical Nanohybrids with Efficient Lithium Storage and Hydrogen Evolution Capability. Advanced Materials, 2017, 29, 1607017.	21.0	583
9	Design and fabrication of carbon dots for energy conversion and storage. Chemical Society Reviews, 2019, 48, 2315-2337.	38.1	552
10	Construction of Complex CoS Hollow Structures with Enhanced Electrochemical Properties for Hybrid Supercapacitors. CheM, 2016, 1, 102-113.	11.7	525
11	Doubleâ€Shelled Nanocages with Cobalt Hydroxide Inner Shell and Layered Double Hydroxides Outer Shell as Highâ€Efficiency Polysulfide Mediator for Lithiumâ€“Sulfur Batteries. Angewandte Chemie - International Edition, 2016, 55, 3982-3986.	13.8	505
12	Metalâ€“organic-framework-engaged formation of Co nanoparticle-embedded carbon@Co₉S₈ double-shelled nanocages for efficient oxygen reduction. Energy and Environmental Science, 2016, 9, 107-111.	30.8	499
13	Formation of Uniform Fe₃O₄ Hollow Spheres Organized by Ultrathin Nanosheets and Their Excellent Lithium Storage Properties. Advanced Materials, 2015, 27, 4097-4101.	21.0	396
14	Carbon foam: Preparation and application. Carbon, 2015, 87, 128-152.	10.3	347
15	Unusual Formation of CoSe@carbon Nanoboxes, which have an Inhomogeneous Shell, for Efficient Lithium Storage. Angewandte Chemie - International Edition, 2016, 55, 9514-9518.	13.8	308
16	Ultrafine MoO₂â€Carbon Microstructures Enable Ultralongâ€Life Powerâ€Type Sodium Ion Storage by Enhanced Pseudocapacitance. Advanced Energy Materials, 2017, 7, 1602880.	19.5	306
17	A superhydrophilic â€œnanoglueâ€•for stabilizing metal hydroxides onto carbon materials for high-energy and ultralong-life asymmetric supercapacitors. Energy and Environmental Science, 2017, 10, 1958-1965.	30.8	294
18	A Flexible TiO₂(B)â€Based Battery Electrode with Superior Power Rate and Ultralong Cycle Life. Advanced Materials, 2013, 25, 3462-3467.	21.0	286

#	Article	IF	Citations
19	Self-Sensing, Ultralight, and Conductive 3D Graphene/Iron Oxide Aerogel Elastomer Deformable in a Magnetic Field. ACS Nano, 2015, 9, 3969-3977.	14.6	266
20	Naturally Dried Graphene Aerogels with Superelasticity and Tunable Poisson's Ratio. Advanced Materials, 2016, 28, 9223-9230.	21.0	254
21	3D Architecture Materials Made of NiCoAlâ€LDH Nanoplates Coupled with NiCoâ€Carbonate Hydroxide Nanowires Grown on Flexible Graphite Paper for Asymmetric Supercapacitors. Advanced Energy Materials, 2014, 4, 1400761.	19.5	251
22	The role of microwave absorption on formation of graphene from graphite oxide. Carbon, 2012, 50, 3267-3273.	10.3	250
23	A Binderâ€Free and Freeâ€Standing Cobalt Sulfide@Carbon Nanotube Cathode Material for Aluminumâ€Ion Batteries. Advanced Materials, 2018, 30, 1703824.	21.0	250
24	Ultrafast Selfâ€Assembly of Graphene Oxideâ€Induced Monolithic NiCoâ€“Carbonate Hydroxide Nanowire Architectures with a Superior Volumetric Capacitance for Supercapacitors. Advanced Functional Materials, 2015, 25, 2109-2116.	14.9	230
25	Engineering hollow polyhedrons structured from carbon-coated CoSe₂ nanospheres bridged by CNTs with boosted sodium storage performance. Journal of Materials Chemistry A, 2017, 5, 13591-13600.	10.3	225
26	Metalâ€“Organic Frameworks Mediated Synthesis of One-Dimensional Molybdenum-Based/Carbon Composites for Enhanced Lithium Storage. ACS Nano, 2018, 12, 1990-2000.	14.6	221
27	Nitrogen-doped activated carbon derived from prawn shells for high-performance supercapacitors. Electrochimica Acta, 2016, 190, 1134-1141.	5.2	217
28	Construction of hybrid bowl-like structures by anchoring NiO nanosheets on flat carbon hollow particles with enhanced lithium storage properties. Energy and Environmental Science, 2015, 8, 1707-1711.	30.8	215
29	Compressible Carbon Nanotubeâ€“Graphene Hybrid Aerogels with Superhydrophobicity and Superoleophilicity for Oil Sorption. Environmental Science and Technology Letters, 2014, 1, 214-220.	8.7	212
30	Synthesis of Biomass-Derived Nitrogen-Doped Porous Carbon Nanosheests for High-Performance Supercapacitors. ACS Sustainable Chemistry and Engineering, 2019, 7, 8405-8412.	6.7	203
31	A Topâ€Down Strategy toward 3D Carbon Nanosheet Frameworks Decorated with Hollow Nanostructures for Superior Lithium Storage. Advanced Functional Materials, 2016, 26, 7590-7598.	14.9	201
32	Highly efficient synthesis of graphene/MnO2 hybrids and their application for ultrafast oxidative decomposition of methylene blue. Carbon, 2014, 66, 485-492.	10.3	189
33	Highly Stretchable and Ultrasensitive Strain Sensor Based on Reduced Graphene Oxide Microtubesâ€“Elastomer Composite. ACS Applied Materials & Interfaces, 2015, 7, 27432-27439.	8.0	189
34	Sandwichâ€Like Ultrathin TiS₂ Nanosheets Confined within N, S Codoped Porous Carbon as an Effective Polysulfide Promoter in Lithiumâ€Sulfur Batteries. Advanced Energy Materials, 2019, 9, 1901872.	19.5	186
35	Hierarchical tubular structures constructed from ultrathin TiO₂(B) nanosheets for highly reversible lithium storage. Energy and Environmental Science, 2015, 8, 1480-1483.	30.8	183
36	Mechanically robust honeycomb graphene aerogel multifunctional polymer composites. Carbon, 2015, 93, 659-670.	10.3	182

#	Article	IF	Citations
37	NiCo-layered double hydroxides vertically assembled on carbon fiber papers as binder-free high-active electrocatalysts for water oxidation. Carbon, 2016, 110, 1-7.	10.3	175
38	A layered-template-nanospace-confinement strategy for production of corrugated graphene nanosheets from petroleum pitch for supercapacitors. Chemical Engineering Journal, 2016, 297, 121-127.	12.7	168
39	Toward commercial-level mass-loading electrodes for supercapacitors: opportunities, challenges and perspectives. Energy and Environmental Science, 2021, 14, 576-601.	30.8	166
40	Mass and Charge Transfer Coenhanced Oxygen Evolution Behaviors in CoFeâ€Layered Double Hydroxide Assembled on Graphene. Advanced Materials Interfaces, 2016, 3, 1500782.	3.7	165
41	MXene-Based Electrode with Enhanced Pseudocapacitance and Volumetric Capacity for Power-Type and Ultra-Long Life Lithium Storage. ACS Nano, 2018, 12, 3928-3937.	14.6	163
42	Lithiationâ€Induced Vacancy Engineering of Co₃O₄ with Improved Faradic Reactivity for Highâ€Performance Supercapacitor. Advanced Functional Materials, 2020, 30, 2004172.	14.9	156
43	Scrutinizing Defects and Defect Density of Seleniumâ€Doped Graphene for Highâ€Efficiency Triiodide Reduction in Dyeâ€Sensitized Solar Cells. Angewandte Chemie - International Edition, 2018, 57, 4682-4686.	13.8	155
44	Ultrahigh Rate and Longâ€Life Sodiumâ€Ion Batteries Enabled by Engineered Surface and Nearâ€Surface Reactions. Advanced Materials, 2018, 30, 1702486.	21.0	153
45	Freestanding Flexible Li₂S Paper Electrode with High Mass and Capacity Loading for Highâ€Energy Liâ€“S Batteries. Advanced Energy Materials, 2017, 7, 1700018.	19.5	152
46	Nitrogenâ€Doped Graphene Nanoribbons with Surface Enriched Active Sites and Enhanced Performance for Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2015, 5, 1500180.	19.5	147
47	Polymer/Graphene Hybrid Aerogel with High Compressibility, Conductivity, and â€œStickyâ€• Superhydrophobicity. ACS Applied Materials & Interfaces, 2014, 6, 3242-3249.	8.0	140
48	Robust NiCoP/CoP Heterostructures for Highly Efficient Hydrogen Evolution Electrocatalysis in Alkaline Solution. ACS Applied Materials & Interfaces, 2019, 11, 15528-15536.	8.0	139
49	Graphene Sheets from Graphitized Anthracite Coal: Preparation, Decoration, and Application. Energy & Fuels, 2012, 26, 5186-5192.	5.1	136
50	Highly atom-economic synthesis of graphene/Mn3O4 hybrid composites for electrochemical supercapacitors. Nanoscale, 2013, 5, 2999.	5.6	128
51	Effect of activation time on the properties of activated carbons prepared by microwave-assisted activation for electric double layer capacitors. Carbon, 2010, 48, 1662-1669.	10.3	126
52	A Polymetallic Metalâ€Organic Frameworkâ€Derived Strategy toward Synergistically Multidoped Metal Oxide Electrodes with Ultralong Cycle Life and High Volumetric Capacity. Advanced Functional Materials, 2017, 27, 1605332.	14.9	116
53	Interlayer expanded MoS 2 enabled by edge effect of graphene nanoribbons for high performance lithium and sodium ion batteries. Carbon, 2016, 109, 461-471.	10.3	114
54	Lattice distortion induced internal electric field in TiO2 photoelectrode for efficient charge separation and transfer. Nature Communications, 2020, 11, 2129.	12.8	108

#	Article	IF	Citations
55	Boron-doped graphene as a high-efficiency counter electrode for dye-sensitized solar cells. Chemical Communications, 2014, 50, 3328.	4.1	107
56	Ultrasound-assisted preparation of electrospun carbon fiber/graphene electrodes for capacitive deionization: Importance and unique role of electrical conductivity. Carbon, 2016, 103, 311-317.	10.3	105
57	3D self-assembly synthesis of hierarchical porous carbon from petroleum asphalt for supercapacitors. Carbon, 2018, 134, 345-353.	10.3	103
58	Flexible Paper-like Free-Standing Electrodes by Anchoring Ultrafine SnS₂ Nanocrystals on Graphene Nanoribbons for High-Performance Sodium Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 15484-15491.	8.0	102
59	Ultrafast Fabrication of Covalently Crossâ€linked Multifunctional Graphene Oxide Monoliths. Advanced Functional Materials, 2014, 24, 4915-4921.	14.9	101
60	Design and Fabrication of Hierarchical NiCoPâ€“MOF Heterostructure with Enhanced Pseudocapacitive Properties. Small, 2021, 17, e2100353.	10.0	101
61	Graphene-mediated highly-dispersed MoS2 nanosheets with enhanced triiodide reduction activity for dye-sensitized solar cells. Carbon, 2016, 100, 474-483.	10.3	100
62	Synthesis of a carbon nanofiber/carbon foam composite from coal liquefaction residue for the separation of oil and water. Carbon, 2013, 59, 530-536.	10.3	99
63	Dually Fixed SnO₂ Nanoparticles on Graphene Nanosheets by Polyaniline Coating for Superior Lithium Storage. ACS Applied Materials & Interfaces, 2015, 7, 2444-2451.	8.0	99
64	Preparation of carbon nanosheets from petroleum asphalt via recyclable molten-salt method for superior lithium and sodium storage. Carbon, 2017, 122, 344-351.	10.3	99
65	Low temperature plasma synthesis of mesoporous Fe3O4 nanorods grafted on reduced graphene oxide for high performance lithium storage. Nanoscale, 2014, 6, 2286.	5.6	97
66	Ultrasound-assisted preparation of electrospun carbon nanofiber/graphene composite electrode for supercapacitors. Journal of Power Sources, 2013, 243, 350-353.	7.8	92
67	Intrinsic Defect-Rich Hierarchically Porous Carbon Architectures Enabling Enhanced Capture and Catalytic Conversion of Polysulfides. ACS Nano, 2020, 14, 6222-6231.	14.6	89
68	Operando Revealing Dynamic Reconstruction of NiCo Carbonate Hydroxide for High-Rate Energy Storage. Joule, 2020, 4, 673-687.	24.0	88
69	Chemically grafting graphene oxide to B,N co-doped graphene via ionic liquid and their superior performance for triiodide reduction. Nano Energy, 2016, 25, 184-192.	16.0	87
70	Accelerating polysulfide redox conversion on bifunctional electrocatalytic electrode for stable Li-S batteries. Energy Storage Materials, 2019, 20, 98-107.	18.0	87
71	Synthesis of ultrathin hollow carbon shell from petroleum asphalt for high-performance anode material in lithium-ion batteries. Chemical Engineering Journal, 2016, 286, 632-639.	12.7	86
72	Highly Efficient Lowâ€Temperature Plasmaâ€Assisted Modification of TiO₂ Nanosheets with Exposed {001} Facets for Enhanced Visibleâ€Light Photocatalytic Activity. Chemistry - A European Journal, 2014, 20, 14763-14770.	3.3	81

#	Article	IF	Citations
73	A Universal Converse Voltage Process for Triggering Transition Metal Hybrids In Situ Phase Restruction toward Ultrahighâ€Rate Supercapacitors. Advanced Materials, 2019, 31, e1901241.	21.0	81
74	Nanopore-confined g-C₃N₄ nanodots inÂN, S co-doped hollow porous carbon with boosted capacity for lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2018, 6, 7133-7141.	10.3	80
75	Preparation of porous carbons from petroleum coke by different activation methods. Fuel, 2005, 84, 1992-1997.	6.4	79
76	Highly stable lithiumâ€“sulfur batteries based on pâ€“n heterojunctions embedded on hollow sheath carbon propelling polysulfides conversion. Journal of Materials Chemistry A, 2019, 7, 9230-9240.	10.3	79
77	Graphene oxide-induced synthesis of button-shaped amorphous Fe2O3/rGO/CNFs films as flexible anode for high-performance lithium-ion batteries. Chemical Engineering Journal, 2019, 369, 215-222.	12.7	79
78	The Mechanism of Piezocatalysis: Energy Band Theory or Screening Charge Effect?. Angewandte Chemie - International Edition, 2022, 61, e202110429.	13.8	79
79	Nitrogen-rich carbon coupled multifunctional metal oxide/graphene nanohybrids for long-life lithium storage and efficient oxygen reduction. Nano Energy, 2015, 12, 578-587.	16.0	76
80	Laser Irradiation of Electrode Materials for Energy Storage and Conversion. Matter, 2020, 3, 95-126.	10.0	74
81	Three-dimensional ZnMn2O4/porous carbon framework from petroleum asphalt for high performance lithium-ion battery. Electrochimica Acta, 2015, 180, 164-172.	5.2	73
82	Two-dimensional graphene-like N, Co-codoped carbon nanosheets derived from ZIF-67 polyhedrons for efficient oxygen reduction reactions. Chemical Communications, 2017, 53, 7840-7843.	4.1	70
83	Reacquainting the Electrochemical Conversion Mechanism of FeS₂ Sodium-Ion Batteries by Operando Magnetometry. Journal of the American Chemical Society, 2021, 143, 12800-12808.	13.7	69
84	Direct Conversion of CO₂ to Ethanol Boosted by Intimacy-Sensitive Multifunctional Catalysts. ACS Catalysis, 2021, 11, 11742-11753.	11.2	69
85	Nitrogen-doped carbon nanotubes decorated with cobalt nanoparticles derived from zeolitic imidazolate framework-67 for highly efficient oxygen reduction reaction electrocatalysis. Carbon, 2018, 132, 580-588.	10.3	68
86	Decorating ZIF-67-derived cobaltâ€“nitrogen doped carbon nanocapsules on 3D carbon frameworks for efficient oxygen reduction and oxygen evolution. Carbon, 2021, 177, 344-356.	10.3	67
87	Microwave-assisted synthesis of MoS2/graphene nanocomposites for efficient hydrodesulfurization. Fuel, 2014, 119, 163-169.	6.4	66
88	Fe/Fe₃C Boosts H₂O₂ Utilization for Methane Conversion Overwhelming O₂ Generation. Angewandte Chemie - International Edition, 2021, 60, 8889-8895.	13.8	66
89	Dual integration system endowing two-dimensional titanium disulfide with enhanced triiodide reduction performance in dye-sensitized solar cells. Nano Energy, 2016, 22, 59-69.	16.0	65
90	Low temperature plasma-mediated synthesis of graphene nanosheets for supercapacitor electrodes. Journal of Materials Chemistry, 2012, 22, 6061.	6.7	64

#	Article	IF	Citations
91	Highly controllable and green reduction of graphene oxide to flexible graphene film with high strength. Materials Research Bulletin, 2013, 48, 4797-4803.	5.2	64
92	Doubleâ€Shelled Nanocages with Cobalt Hydroxide Inner Shell and Layered Double Hydroxides Outer Shell as Highâ€Efficiency Polysulfide Mediator for Lithiumâ€“Sulfur Batteries. Angewandte Chemie, 2016, 128, 4050-4054.	2.0	62
93	Low-temperature plasma-assisted preparation of graphene supported palladium nanoparticles with high hydrodesulfurization activity. Journal of Materials Chemistry, 2012, 22, 14363.	6.7	61
94	Pickering Emulsion Catalysis: Interfacial Chemistry, Catalyst Design, Challenges, and Perspectives. Angewandte Chemie - International Edition, 2022, 61, .	13.8	60
95	Unraveling the Synergy of Chemical Hydroxylation and the Physical Heterointerface upon Improving the Hydrogen Evolution Kinetics. ACS Nano, 2021, 15, 15017-15026.	14.6	59
96	Heavy oil-derived carbon for energy storage applications. Journal of Materials Chemistry A, 2020, 8, 7066-7082.	10.3	57
97	Nitrogen-doped hierarchical porous carbon derived from metalâ€“organic aerogel for high performance lithiumâ€“sulfur batteries. Journal of Energy Chemistry, 2017, 26, 1282-1290.	12.9	56
98	Promoting the electroreduction of CO₂ with oxygen vacancies on a plasma-activated SnO_x/carbon foam monolithic electrode. Journal of Materials Chemistry A, 2020, 8, 1779-1786.	10.3	56
99	Waterâ€Soluble Salt Templateâ€Assisted Anchor of Hollow FeS₂ Nanoparticle Inside 3D Carbon Skeleton to Achieve Fast Potassiumâ€Ion Storage. Advanced Energy Materials, 2021, 11, 2101343.	19.5	56
100	Electrochemical and Capacitive Properties of Carbon Dots/Reduced Graphene Oxide Supercapacitors. Nanomaterials, 2016, 6, 212.	4.1	55
101	Nitrogen and phosphorus dual-doped graphene as a metal-free high-efficiency electrocatalyst for triiodide reduction. Nanoscale, 2016, 8, 17458-17464.	5.6	55
102	Supramolecular polymerization-assisted synthesis of nitrogen and sulfur dual-doped porous graphene networks from petroleum coke as efficient metal-free electrocatalysts for the oxygen reduction reaction. Journal of Materials Chemistry A, 2017, 5, 11331-11339.	10.3	54
103	Boosting the Pseudocapacitive and High Massâ€Loaded Lithium/Sodium Storage through Bonding Polyoxometalate Nanoparticles on MXene Nanosheets. Advanced Functional Materials, 2021, 31, 2007636.	14.9	53
104	Synthesis of layered microporous carbons from coal tar by directing, space-confinement and self-sacrificed template strategy for supercapacitors. Electrochimica Acta, 2017, 246, 634-642.	5.2	52
105	Green fabrication of magnetic recoverable graphene/MnFe₂O₄hybrids for efficient decomposition of methylene blue and the Mn/FeÂredox synergetic mechanism. RSC Advances, 2016, 6, 104549-104555.	3.6	50
106	Multifunctional nitrogen-doped graphene nanoribbon aerogels for superior lithium storage and cell culture. Nanoscale, 2016, 8, 2159-2167.	5.6	50
107	Threeâ€dimensional printing of highâ€mass loading electrodes for energy storage applications. InformaÄnÃ-MateriÃ¡ly, 2021, 3, 631-647.	17.3	50
108	Carbon-enabled microwave chemistry: From interaction mechanisms to nanomaterial manufacturing. Nano Energy, 2021, 85, 106027.	16.0	50

#	Article	IF	Citations
109	A green and template recyclable approach to prepare Fe3O4/porous carbon from petroleum asphalt for lithium-ion batteries. Journal of Alloys and Compounds, 2017, 695, 2612-2618.	5.5	49
110	A Portable and Efficient Solarâ€Rechargeable Battery with Ultrafast Photoâ€Charge/Discharge Rate. Advanced Energy Materials, 2019, 9, 1900872.	19.5	49
111	Boosting the performance of hybrid supercapacitors through redox electrolyte-mediated capacity balancing. Nano Energy, 2020, 68, 104226.	16.0	48
112	Strategies to activate inert nitrogen molecules for efficient ammonia electrosynthesis: current status, challenges, and perspectives. Energy and Environmental Science, 2022, 15, 2776-2805.	30.8	48
113	Towards efficient electrocatalysts for oxygen reduction by doping cobalt into graphene-supported graphitic carbon nitride. Journal of Materials Chemistry A, 2015, 3, 19657-19661.	10.3	47
114	Polymer casting of ultralight graphene aerogels for the production of conductive nanocomposites with low filling content. Journal of Materials Chemistry A, 2014, 2, 3756-3760.	10.3	46
115	Graphene oxide liquid crystal Pickering emulsions and their assemblies. Carbon, 2015, 85, 16-23.	10.3	46
116	Microwaveâ€Assisted Ultrafast Synthesis of Molybdenum Carbide Nanoparticles Grown on Carbon Matrix for Efficient Hydrogen Evolution Reaction. Small Methods, 2019, 3, 1900259.	8.6	46
117	Carbon dots-oriented synthesis of fungus-like CoP microspheres as a bifunctional electrocatalyst for efficient overall water splitting. Carbon, 2021, 182, 327-334.	10.3	46
118	Self-Supported Amorphous SnO₂/TiO₂ Nanocomposite Films with Improved Electrochemical Performance for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2019, 166, A3072-A3078.	2.9	45
119	Green and scalable synthesis of porous carbon nanosheet-assembled hierarchical architectures for robust capacitive energy harvesting. Carbon, 2019, 152, 537-544.	10.3	45
120	Applications of nanogenerators for biomedical engineering and healthcare systems. InformaÄnÃ-MateriÃ¡ly, 2022, 4, .	17.3	45
121	SnO2 nanoflower arrays on an amorphous buffer layer as binder-free electrodes for flexible lithium-ion batteries. Applied Surface Science, 2020, 527, 146910.	6.1	42
122	Electrolysis removal of methyl orange dye from water by electrospun activated carbon fibers modified with carbon nanotubes. Chemical Engineering Journal, 2014, 253, 73-77.	12.7	41
123	Sulfur bridges between Co9S8 nanoparticles and carbon nanotubes enabling robust oxygen electrocatalysis. Carbon, 2019, 144, 259-268.	10.3	41
124	Three-dimensional hierarchical Na3Fe2(PO4)3/C with superior and fast sodium uptake for efficient hybrid capacitive deionization. Desalination, 2021, 520, 115341.	8.2	41
125	Non-corrosive and low-cost synthesis of hierarchically porous carbon frameworks for high-performance lithium-ion capacitors. Carbon, 2021, 173, 646-654.	10.3	40
126	Manipulation of interlayer spacing and surface charge of carbon nanosheets for robust lithium/sodium storage. Carbon, 2019, 153, 372-380.	10.3	39

#	Article	IF	Citations
127	Self-supported transition metal oxide electrodes for electrochemical energy storage. Tungsten, 2020, 2, 337-361.	4.8	39
128	Sub-5-nm Monolayer Silicane Transistor: A First-Principles Quantum Transport Simulation. Physical Review Applied, 2020, 14, .	3.8	38
129	Unusual Formation of CoSe@carbon Nanoboxes, which have an Inhomogeneous Shell, for Efficient Lithium Storage. Angewandte Chemie, 2016, 128, 9666-9670.	2.0	37
130	An effective graphene confined strategy to construct active edge sites-enriched nanosheets with enhanced oxygen evolution. Carbon, 2018, 126, 437-442.	10.3	37
131	Polycyclic Aromatic Hydrocarbons as a New Class of Promising Cathode Materials for Aluminumâ€ion Batteries. Angewandte Chemie - International Edition, 2022, 61, e202114681.	13.8	37
132	A non-toxic triboelectric nanogenerator for baby care applications. Journal of Materials Chemistry A, 2020, 8, 22745-22753.	10.3	36
133	Polyethyleneimine-Mediated Fabrication of Two-Dimensional Cobalt Sulfide/Graphene Hybrid Nanosheets for High-Performance Supercapacitors. ACS Applied Materials & Interfaces, 2019, 11, 26235-26242.	8.0	35
134	Influence of pore structures on the electrochemical performance of asphaltene-based ordered mesoporous carbons. Microporous and Mesoporous Materials, 2013, 174, 67-73.	4.4	34
135	The Mechanism of Piezocatalysis: Energy Band Theory or Screening Charge Effect?. Angewandte Chemie, 2022, 134, .	2.0	34
136	Chemically patterned polyaniline arrays located on pyrolytic graphene for supercapacitors. Carbon, 2014, 80, 799-807.	10.3	32
137	Compressible graphene aerogel supported CoO nanostructures as a binder-free electrode for high-performance lithium-ion batteries. RSC Advances, 2015, 5, 8929-8932.	3.6	32
138	Nitrogen-doped tubular/porous carbon channels implanted on graphene frameworks for multiple confinement of sulfur and polysulfides. Journal of Materials Chemistry A, 2017, 5, 10380-10386.	10.3	32
139	Unlocking the potential of commercial carbon nanofibers as free-standing positive electrodes for flexible aluminum ion batteries. Journal of Materials Chemistry A, 2019, 7, 15123-15130.	10.3	32
140	Covalent bonds-integrated graphene foam with superb electromechanical properties as elastic conductor and compressive sensor. Carbon, 2019, 147, 206-213.	10.3	32
141	General synthesis of zeolitic imidazolate framework-derived planar-N-doped porous carbon nanosheets for efficient oxygen reduction. Energy Storage Materials, 2017, 7, 181-188.	18.0	31
142	Designed synthesis of cobalt nanoparticles embedded carbon nanocages as bifunctional electrocatalysts for oxygen evolution and reduction. Carbon, 2019, 144, 492-499.	10.3	31
143	Î²-Hydrogen of Polythiophene Induced Aluminum Ion Storage for High-Performance Al-Polythiophene Batteries. ACS Applied Materials & Interfaces, 2020, 12, 46065-46072.	8.0	31
144	High-performance aluminum-polyaniline battery based on the interaction between aluminum ion and -NH groups. Science China Materials, 2021, 64, 318-328.	6.3	31

#	Article	IF	Citations
145	Rational design of metal oxide hollow nanostructures decorated carbon nanosheets for superior lithium storage. Journal of Materials Chemistry A, 2016, 4, 17718-17725.	10.3	30
146	Polyethylenimine Expanded Graphite Oxide Enables High Sulfur Loading and Longâ€Term Stability of Lithiumâ€“Sulfur Batteries. Small, 2019, 15, e1804578.	10.0	30
147	A temperature-dependent phosphorus doping on Ti3C2Tx MXene for enhanced supercapacitance. Journal of Colloid and Interface Science, 2021, 604, 239-247.	9.4	30
148	Nitrogen-doped carbon microfibers with porous textures. Carbon, 2013, 58, 128-133.	10.3	29
149	All-Climate Aluminum-Ion Batteries Based on Binder-Free MOF-Derived FeS2@C/CNT Cathode. Nano-Micro Letters, 2021, 13, 159.	27.0	29
150	Recent advances in the synthesis of nanoscale hierarchically porous metalâ€“organic frameworks. Nano Materials Science, 2022, 4, 351-365.	8.8	29
151	Scrutinizing Defects and Defect Density of Seleniumâ€Doped Graphene for Highâ€Efficiency Triiodide Reduction in Dyeâ€Sensitized Solar Cells. Angewandte Chemie, 2018, 130, 4772-4776.	2.0	28
152	Synthesis of metallic Ni-Co/graphene catalysts with enhanced hydrodesulfurization activity via a low-temperature plasma approach. Catalysis Today, 2015, 256, 203-208.	4.4	27
153	Reexamination of the Schottky Barrier Heights in Monolayer MoS₂ Field-Effect Transistors. ACS Applied Nano Materials, 2019, 2, 4717-4726.	5.0	27
154	Layered double hydroxides derived NiCo-sulfide as a cathode material for aluminum ion batteries. Electrochimica Acta, 2020, 344, 136174.	5.2	26
155	Fe/Fe₃C Boosts H₂O₂ Utilization for Methane Conversion Overwhelming O₂ Generation. Angewandte Chemie, 2021, 133, 8971-8977.	2.0	26
156	Facile Fabrication of Bicomponent CoO/CoFe₂O₄â€Nâ€Doped Graphene Hybrids with Ultrahigh Lithium Storage Capacity. Particle and Particle Systems Characterization, 2015, 32, 91-97.	2.3	25
157	In-situ growth of highly uniform and single crystalline Co3O4 nanocubes on graphene for efficient oxygen evolution. Catalysis Communications, 2017, 88, 81-84.	3.3	25
158	Templating synthesis of porous carbons for energy-related applications: A review. New Carbon Materials, 2022, 37, 25-45.	6.1	25
159	Molecular-level anchoring of polymer cathodes on carbon nanotubes towards rapid-rate and long-cycle sodium-ion storage. Materials Chemistry Frontiers, 2018, 2, 1805-1810.	5.9	24
160	Small graphite nanoflakes as an advanced cathode material for aluminum ion batteries. Chemical Communications, 2020, 56, 1593-1596.	4.1	24
161	Sliding non-contact inductive nanogenerator. Nano Energy, 2019, 63, 103878.	16.0	23
162	Engineering Kinetics-Favorable Carbon Sheets with an Intrinsic Network for a Superior Supercapacitor Containing a Dual Cross-linked Hydrogel Electrolyte. ACS Applied Materials & Interfaces, 2020, 12, 53164-53173.	8.0	23

#	Article	IF	Citations
163	Reinforced atomically dispersed Fe N C catalysts derived from petroleum asphalt for oxygen reduction reaction. Journal of Colloid and Interface Science, 2021, 587, 810-819.	9.4	23
164	An amorphous tin-based nanohybrid for ultra-stable sodium storage. Journal of Materials Chemistry A, 2018, 6, 18920-18927.	10.3	22
165	Imine-functionalized polysiloxanes for supramolecular elastomers with tunable mechanical properties. Polymer Chemistry, 2020, 11, 7721-7728.	3.9	21
166	Controllable Substitution of S Radicals on Triazine Covalent Framework to Expedite Degradation of Polysulfides. Small, 2020, 16, e2004631.	10.0	19
167	Precious potential regulation of carbon cathode enabling high-performance lithium-ion capacitors. Carbon, 2021, 180, 110-117.	10.3	19
168	Unraveling the Evolution of Transition Metals during Li Alloyingâ€“Dealloying by In-Operando Magnetometry. Chemistry of Materials, 2022, 34, 5852-5859.	6.7	19
169	Efficient synthesis of graphene/sulfur nanocomposites with high sulfur content and their application as cathodes for Liâ€“S batteries. Journal of Materials Chemistry A, 2016, 4, 16219-16224.	10.3	18
170	Nitrogen-doped porous carbon with well-balanced charge conduction and electrocatalytic activity for dye-sensitized solar cells. Carbon, 2018, 128, 201-204.	10.3	18
171	A Phase Transformationâ€Resistant Electrode Enabled by a MnO₂â€Confined Effect for Enhanced Energy Storage. Advanced Functional Materials, 2019, 29, 1901342.	14.9	18
172	High-performance metalâ€“iodine batteries enabled by a bifunctional dendrite-free Liâ€“Na alloy anode. Journal of Materials Chemistry A, 2021, 9, 538-545.	10.3	18
173	Preparation and piezoelectric catalytic performance of flexible inorganic Ba_{1â^'x}Ca_xTiO₃via electrospinning. Journal of Materials Chemistry A, 2021, 9, 24695-24703.	10.3	18
174	In Situ Construction of Nickel Sulfide Nano-Heterostructures for Highly Efficient Overall Urea Electrolysis. ACS Sustainable Chemistry and Engineering, 2021, 9, 15582-15590.	6.7	17
175	A Copper Iodide Clusterâ€Based Metalâ€“Organic Polyhedra for Photocatalytic Click Chemistry. Small Structures, 2022, 3, 2100155.	12.0	17
176	Petroleum pitch derived carbon as both cathode and anode materials for advanced potassium-ion hybrid capacitors. Carbon, 2022, 196, 727-735.	10.3	17
177	Recyclable catalyst for catalytic hydrogenation of phenylacetylene by coupling Pd nanoparticles with highly compressible graphene aerogels. RSC Advances, 2014, 4, 59977-59980.	3.6	16
178	Nitrogen-doped hollow carbon nanoboxes in zwitterionic polymer hydrogel electrolyte for superior quasi-solid-state zinc-ion hybrid supercapacitors. Journal of Materials Chemistry A, 2022, 10, 12856-12868.	10.3	16
179	Flexible electrodes with high areal capacity based on electrospun fiber mats. Nanoscale, 2021, 13, 18391-18409.	5.6	15
180	An Integrated Strategy towards Enhanced Performance of the Lithiumâ€“Sulfur Battery and its Fading Mechanism. Chemistry - A European Journal, 2018, 24, 18544-18550.	3.3	14

#	Article	IF	Citations
181	Synthesis of 3D Flowerâ€like Nanocomposites of Nitrogenâ€Doped Carbon Nanosheets Embedded with Hollow Cobalt(II,III) Oxide Nanospheres for Lithium Storage. ChemElectroChem, 2017, 4, 102-108.	3.4	13
182	DBD plasma-tuned functionalization of edge-enriched graphene nanoribbons for high performance supercapacitors. Electrochimica Acta, 2020, 337, 135741.	5.2	13
183	Fabrication of Porous Carbon Nanosheets with the Engineered Graphitic Structure for Electrochemical Supercapacitors. Industrial & Engineering Chemistry Research, 2020, 59, 13623-13630.	3.7	12
184	Kinetically accelerated and high-mass loaded lithium storage enabled by atomic iron embedded carbon nanofibers. Nano Research, 2022, 15, 6176-6183.	10.4	12
185	Fe, N co-doped amorphous carbon as efficient electrode materials for fast and stable Na/K-storage. Electrochimica Acta, 2021, 396, 139265.	5.2	11
186	Folding of graphene into elastic nanobelts. Carbon, 2014, 76, 46-53.	10.3	10
187	Theoretical and Experimental Insights into the Effects of Oxygen-Containing Species within CNTs toward Triiodide Reduction. ACS Sustainable Chemistry and Engineering, 2019, 7, 7527-7534.	6.7	10
188	Pickering Emulsion Catalysis: Interfacial Chemistry, Catalyst Design, Challenges, and Perspectives. Angewandte Chemie, 2022, 134, .	2.0	10
189	Theoretical design and experimental synthesis of counter electrode for dye-sensitized solar cells: Amino-functionalized graphene. Journal of Energy Chemistry, 2016, 25, 861-867.	12.9	9
190	Regulation of the cathode for amphi-charge storage in a redox electrolyte for high-energy lithium-ion capacitors. Chemical Communications, 2020, 56, 12777-12780.	4.1	9
191	Ohmic contacts of monolayer Tl2O field-effect transistors. Journal of Materials Science, 2020, 55, 11439-11450.	3.7	9
192	Energy Accumulation Enabling Fast Synthesis of Intercalated Graphite and Operando Decoupling for Lithium Storage. Advanced Functional Materials, 2021, 31, 2009801.	14.9	9
193	Robust and Fast Lithium Storage Enabled by Polypyrrole-Coated Nitrogen and Phosphorus Co-Doped Hollow Carbon Nanospheres for Lithium-Ion Capacitors. Frontiers in Chemistry, 2021, 9, 760473.	3.6	8
194	A metalâ€“organic framework-modified separator enables long cycling lithium-ion capacitors with asymmetric electrolyte design. Journal of Materials Chemistry A, 2022, 10, 19852-19858.	10.3	8
195	MXene-mediated regulation of local electric field surrounding polyoxometalate nanoparticles for improved lithium storage. Science China Materials, 2022, 65, 2958-2966.	6.3	8
196	Template-free synthesis of interconnected carbon nanosheets via cross-linking coupled with annealing for high-efficiency triiodide reduction. Green Chemistry, 2018, 20, 250-254.	9.0	7
197	Polycyclic Aromatic Hydrocarbons as a New Class of Promising Cathode Materials for Aluminumâ€Ion Batteries. Angewandte Chemie, 2022, 134, .	2.0	7
198	Multilevel Coupled Hybrids Made of Porous Cobalt Oxides and Graphene for Highâ€Performance Lithium Storage. Chemistry - A European Journal, 2019, 25, 5527-5533.	3.3	6

#	Article	IF	Citations
199	Oxygenâ€Deficient Metal Oxides for Supercapacitive Energy Storage: From Theoretical Calculation to Structural Regulation and Utilization. Advanced Energy and Sustainability Research, 2022, 3, .	5.8	5
200	Passivating the pHâ€Responsive Sites to Configure a Widely pHâ€Stable Emulsifier for Highâ€Efficiency Benzyl Alcohol Oxidation. ChemSusChem, 2022, 15, .	6.8	4
201	Frontispiece: Unusual Formation of CoSe@carbon Nanoboxes, which have an Inhomogeneous Shell, for Efficient Lithium Storage. Angewandte Chemie - International Edition, 2016, 55, .	13.8	3
202	Facile one-step synthesis of highly graphitized hierarchical porous carbon nanosheets with large surface area and high capacity for lithium storage. RSC Advances, 2016, 6, 51146-51152.	3.6	2
203	<i>In Situ</i> Growth of Carbon Nanotubes on Carbon Foam for Enhanced Oil Adsorption. Applied Mechanics and Materials, 0, 423-426, 130-134.	0.2	1
204	Functional materials for ecoâ€catalysis of small molecules. EcoMat, 2021, 3, e12121.	11.9	1
205	Graphene Oxide: Ultrafast Fabrication of Covalently Cross-linked Multifunctional Graphene Oxide Monoliths (Adv. Funct. Mater. 31/2014). Advanced Functional Materials, 2014, 24, 4914-4914.	14.9	0
206	Frontispiz: Unusual Formation of CoSe@carbon Nanoboxes, which have an Inhomogeneous Shell, for Efficient Lithium Storage. Angewandte Chemie, 2016, 128, .	2.0	0
207	Innentitelbild: Fe/Fe₃C Boosts H₂O₂ Utilization for Methane Conversion Overwhelming O₂ Generation (Angew. Chem. 16/2021). Angewandte Chemie, 2021, 133, 8642-8642.	2.0	0