

# Changtai Zhao

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

192  
papers

13,507  
citations

61  
h-index

112  
g-index

202  
ext. papers

15,988  
ext. citations

13.4  
avg, IF

6.98  
L-index

#	Paper	IF	Citations
192	Interlayer-Expanded Titanate Hierarchical Hollow Spheres Embedded in Carbon Nanofibers for Enhanced Na Storage.. <i>Small</i> , <b>2022</b> , e2107890	10.8	0
191	Mismatching integration-enabled strains and defects engineering in LDH microstructure for high-rate and long-life charge storage.. <i>Nature Communications</i> , <b>2022</b> , 13, 1409	16.9	1
190	Toward commercial-level mass-loading electrodes for supercapacitors: opportunities, challenges and perspectives. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 576-601	35	42
189	Recent research advances of self-discharge in supercapacitors: Mechanisms and suppressing strategies. <i>Journal of Energy Chemistry</i> , <b>2021</b> , 58, 94-109	11.9	25
188	Ternary NiFeMn layered metal oxide (LDO) compounds for capacitive deionization defluoridation: The unique role of Mn. <i>Separation and Purification Technology</i> , <b>2021</b> , 254, 117667	8.2	7
187	In-situ surface chemical and structural self-reconstruction strategy enables high performance of Li-rich cathode. <i>Nano Energy</i> , <b>2021</b> , 79, 105459	16.9	23
186	Transition of the Reaction from Three-Phase to Two-Phase by Using a Hybrid Conductor for High-Energy-Density High-Rate Solid-State Li-O <sub>2</sub> Batteries. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 5885-5890	3.5	5
185	Operando Tailoring of Defects and Strains in Corrugated Ni(OH) <sub>2</sub> Nanosheets for Stable and High-Rate Energy Storage. <i>Advanced Materials</i> , <b>2021</b> , 33, e2006147	23.6	17
184	Transition of the Reaction from Three-Phase to Two-Phase by Using a Hybrid Conductor for High-Energy-Density High-Rate Solid-State Li-O Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 5821-5826	16.1	13
183	Interface Inversion: A Promising Strategy to Configure Ultrafine Nanoparticles over Graphene for Fast Sodium Storage. <i>Small</i> , <b>2021</b> , 17, e2005119	10.8	2
182	Recent advances in innovative strategies for the CO <sub>2</sub> electroreduction reaction. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 765-780	35	50
181	Regulated lithium plating and stripping by a nano-scale gradient inorganic/organic coating for stable lithium metal anodes. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 4085-4094	35	12
180	A closed-loop and scalable process for the production of biomass-derived superhydrophilic carbon for supercapacitors. <i>Green Chemistry</i> , <b>2021</b> , 23, 3400-3409	9.9	15
179	Toward an Understanding of the Enhanced CO <sub>2</sub> Electroreduction in NaCl Electrolyte over CoPc Molecule-Implanted Graphitic Carbon Nitride Catalyst. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2100075	21.6	6
178	Oriented Nanosheet-Assembled CoNi-LDH Cages with Efficient Ion Diffusion for Quasi-Solid-State Hybrid Supercapacitors. <i>Inorganic Chemistry</i> , <b>2021</b> , 60, 12197-12205	4.9	7
177	Carbon-enabled microwave chemistry: From interaction mechanisms to nanomaterial manufacturing. <i>Nano Energy</i> , <b>2021</b> , 85, 106027	16.9	9
176	Activity descriptor of Ni,N-Codoped carbon electrocatalyst in CO <sub>2</sub> electroreduction reaction. <i>Chemical Engineering Journal</i> , <b>2021</b> , 131965	14.6	1

175	Operando leaching of pre-incorporated Al and mechanism in transition-metal hybrids on carbon substrates for enhanced charge storage. <i>Matter</i> , <b>2021</b> , 4, 2902-2918	12.4	3
174	Reviving Anode Protection Layer in Na-O <sub>2</sub> Batteries: Failure Mechanism and Resolving Strategy. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2003789	21.6	5
173	Energy Accumulation Enabling Fast Synthesis of Intercalated Graphite and Operando Decoupling for Lithium Storage. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2009801	15.4	2
172	Stable Silicon Anodes by Molecular Layer Deposited Artificial Zincone Coatings. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2010526	15.4	8
171	Design and Fabrication of Hierarchical NiCoP-MOF Heterostructure with Enhanced Pseudocapacitive Properties. <i>Small</i> , <b>2021</b> , 17, e2100353	10.8	27
170	The Electrolysis of Anti-Perovskite Li <sub>2</sub> OHCl for Prelithiation of High-Energy-Density Batteries. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 13123-13130	3.5	2
169	The Electrolysis of Anti-Perovskite Li OHCl for Prelithiation of High-Energy-Density Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 13013-13020	16.1	6
168	Three-dimensional hierarchical Na <sub>3</sub> Fe <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> /C with superior and fast sodium uptake for efficient hybrid capacitive deionization. <i>Desalination</i> , <b>2021</b> , 520, 115341	10.2	8
167	A tuned Lewis acidic catalyst guided by hard/soft acid/base theory to promote N <sub>2</sub> electroreduction. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 13036-13043	12.8	6
166	Strategies to suppress hydrogen evolution for highly selective electrocatalytic nitrogen reduction: challenges and perspectives. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 1176-1193	35	54
165	Decoupling the Voltage Hysteresis of Li-Rich Cathodes: Electrochemical Monitoring, Modulation Anionic Redox Chemistry and Theoretical Verifying. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2002643	15.4	17
164	A durable MXene-based zinc ion hybrid supercapacitor with sulfated polysaccharide reinforced hydrogel/electrolyte. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 23941-23954	12.8	0
163	Nitrogen-doped hierarchically porous carbon nanosheets derived from polymer/graphene oxide hydrogels for high-performance supercapacitors. <i>Journal of Colloid and Interface Science</i> , <b>2020</b> , 560, 69-76	9.1	66
162	NH <sub>4</sub> V <sub>4</sub> O <sub>10</sub> /rGO Composite as a high-performance electrode material for hybrid capacitive deionization. <i>Environmental Science: Water Research and Technology</i> , <b>2020</b> , 6, 303-311	4.1	12
161	Rapid and energy-efficient microwave pyrolysis for high-yield production of highly-active bifunctional electrocatalysts for water splitting. <i>Energy and Environmental Science</i> , <b>2020</b> , 13, 545-553	35	90
160	A 3D-printed ultra-high Se loading cathode for high energy density quasi-solid-state LiSe batteries. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 278-286	12.8	21
159	Fabrication of nitrogen-doped porous graphene hybrid nanosheets from metal-organic frameworks for lithium-ion batteries. <i>Nanotechnology</i> , <b>2020</b> , 31, 145402	3.3	10
158	Ultrafast construction of interfacial sites by wet chemical etching to enhance electrocatalytic oxygen evolution. <i>Nano Energy</i> , <b>2020</b> , 69, 104367	16.9	29

157	In Situ Growing Chromium Oxynitride Nanoparticles on Carbon Nanofibers to Stabilize Lithium Deposition for Lithium Metal Anodes. <i>Small</i> , <b>2020</b> , 16, e2003827	10.8	7
156	Scalable synthesis of 2D hydrogen-substituted graphdiyne on Zn substrate for high-yield N <sub>2</sub> fixation. <i>Nano Energy</i> , <b>2020</b> , 78, 105283	16.9	16
155	3D Porous Garnet/Gel Polymer Hybrid Electrolyte for Safe Solid-State Li <sub>2</sub> O <sub>2</sub> Batteries with Long Lifetimes. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 10113-10119	9.5	11
154	Insights into the electronic origin of enhancing the catalytic activity of Co <sub>3</sub> O <sub>4</sub> for oxygen evolution by single atom ruthenium. <i>Nano Today</i> , <b>2020</b> , 34, 100955	17.7	8
153	Full Bulk-Structure Reconstruction into Amorphorized Cobalt-Iron Oxyhydroxide Nanosheet Electrocatalysts for Greatly Improved Electrocatalytic Activity. <i>Small Methods</i> , <b>2020</b> , 4, 2000546	12.6	17
152	Ultrafast Construction of Oxygen-Containing Scaffold over Graphite for Trapping Ni into Single Atom Catalysts. <i>ACS Nano</i> , <b>2020</b> , 14, 11662-11669	16.4	5
151	Single crystal cathodes enabling high-performance all-solid-state lithium-ion batteries. <i>Energy Storage Materials</i> , <b>2020</b> , 30, 98-103	19.2	48
150	Graphene Oxide-Tuned MoS <sub>2</sub> with an Expanded Interlayer for Efficient Hybrid Capacitive Deionization. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 9690-9697	8.2	18
149	Halide-based solid-state electrolyte as an interfacial modifier for high performance solid-state Li <sub>2</sub> O <sub>2</sub> batteries. <i>Nano Energy</i> , <b>2020</b> , 75, 105036	16.9	15
148	Tailoring the Mechanical and Electrochemical Properties of an Artificial Interphase for High-Performance Metallic Lithium Anode. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2001139	21.6	18
147	Unveiling the critical role of interfacial ionic conductivity in all-solid-state lithium batteries. <i>Nano Energy</i> , <b>2020</b> , 72, 104686	16.9	25
146	Determining the limiting factor of the electrochemical stability window for PEO-based solid polymer electrolytes: main chain or terminal OH group?. <i>Energy and Environmental Science</i> , <b>2020</b> , 13, 1318-1325	35	116
145	3D Printing of Free-Standing O <sub>2</sub> Breathable Air Electrodes for High-Capacity and Long-Life Na <sub>2</sub> O <sub>2</sub> Batteries. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 3018-3027	9.5	18
144	Laser Irradiation of Electrode Materials for Energy Storage and Conversion. <i>Matter</i> , <b>2020</b> , 3, 95-126	12.4	43
143	Dual Hybrid Effect Endowing Nickel-Cobalt Sulfides with Enhanced Cycling Stability for Asymmetrical Supercapacitors. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 6977-6984	6	9
142	Fabrication of Porous Carbon Nanosheets with the Engineered Graphitic Structure for Electrochemical Supercapacitors. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 13623-13630	3.9	4
141	Boosting charge storage in 1D manganese oxide-carbon composite by phosphorus-assisted structural modification for supercapacitor applications. <i>Energy Storage Materials</i> , <b>2020</b> , 31, 172-180	19.2	15
140	Operando Revealing Dynamic Reconstruction of NiCo Carbonate Hydroxide for High-Rate Energy Storage. <i>Joule</i> , <b>2020</b> , 4, 673-687	27.5	43

139	Achieving Multiple and Tunable Ratios of Syngas to Meet Various Downstream Industrial Processes. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 3328-3335	8.2	5
138	DBD plasma-tuned functionalization of edge-enriched graphene nanoribbons for high performance supercapacitors. <i>Electrochimica Acta</i> , <b>2020</b> , 337, 135741	6.7	5
137	Rice husk-based hierarchical porous carbon for high performance supercapacitors: The structure-performance relationship. <i>Carbon</i> , <b>2020</b> , 161, 432-444	10.1	44
136	Suppressed dendrite formation realized by selective Li deposition in all-solid-state lithium batteries. <i>Energy Storage Materials</i> , <b>2020</b> , 27, 198-204	19.2	23
135	3D Carbon Frameworks for Ultrafast Charge/Discharge Rate Supercapacitors with High Energy-Power Density. <i>Nano-Micro Letters</i> , <b>2020</b> , 13, 8	19.2	22
134	3D nickel-cobalt phosphide heterostructure for high-performance solid-state hybrid supercapacitors. <i>Journal of Power Sources</i> , <b>2020</b> , 467, 228324	8.8	49
133	Hierarchical Bimetallic Hydroxides Built by Porous Nanowire-Lapped Bundles with Ultrahigh Areal Capacity for Stable Hybrid Solid-State Supercapacitors. <i>Advanced Materials Interfaces</i> , <b>2019</b> , 6, 1900959	4.5	6
132	O <sub>2</sub> /O <sub>2</sub> Crossover- and Dendrite-Free Hybrid Solid-State NaO <sub>2</sub> Batteries. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 9024-9031	9.5	14
131	Is It Appropriate to Use the Nafion Membrane in Electrocatalytic N <sub>2</sub> Reduction?. <i>Small Methods</i> , <b>2019</b> , 3, 1900474	12.6	32
130	Natural SEI-Inspired Dual-Protective Layers via Atomic/Molecular Layer Deposition for Long-Life Metallic Lithium Anode. <i>Matter</i> , <b>2019</b> , 1, 1215-1231	12.4	65
129	Multilevel Coupled Hybrids Made of Porous Cobalt Oxides and Graphene for High-Performance Lithium Storage. <i>Chemistry - A European Journal</i> , <b>2019</b> , 25, 5527-5533	4.6	4
128	Self-Templating Synthesis of 3D Hollow Tubular Porous Carbon Derived from Straw Cellulose Waste with Excellent Performance for Supercapacitors. <i>ChemSusChem</i> , <b>2019</b> , 12, 1390-1400	8.2	41
127	Activation of transition metal oxides by in-situ electro-regulated structure-reconstruction for ultra-efficient oxygen evolution. <i>Nano Energy</i> , <b>2019</b> , 58, 778-785	16.9	54
126	A Universal Converse Voltage Process for Triggering Transition Metal Hybrids In Situ Phase Restruction toward Ultrahigh-Rate Supercapacitors. <i>Advanced Materials</i> , <b>2019</b> , 31, e1901241	23.6	47
125	Polyethyleneimine-Mediated Fabrication of Two-Dimensional Cobalt Sulfide/Graphene Hybrid Nanosheets for High-Performance Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 26235-26242	9.4	25
124	Microwave-Assisted Ultrafast Synthesis of Molybdenum Carbide Nanoparticles Grown on Carbon Matrix for Efficient Hydrogen Evolution Reaction. <i>Small Methods</i> , <b>2019</b> , 3, 1900259	12.6	30
123	Membrane-Free Hybrid Capacitive Deionization System Based on Redox Reaction for High-Efficiency NaCl Removal. <i>Environmental Science &amp; Technology</i> , <b>2019</b> , 53, 6292-6301	10.2	64
122	A Phase Transformation-Resistant Electrode Enabled by a MnO <sub>2</sub> -Confined Effect for Enhanced Energy Storage. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1901342	15.4	11

121	High-area-capacity all-solid-state lithium batteries enabled by rational design of fast ion transport channels in vertically-aligned composite polymer electrodes. <i>Nano Energy</i> , <b>2019</b> , 61, 567-575	16.9	75
120	Phase controllable synthesis of Ni <sup>2+</sup> post-modified CoP nanowire for enhanced oxygen evolution. <i>Nano Energy</i> , <b>2019</b> , 62, 136-143	16.9	48
119	Design and fabrication of carbon dots for energy conversion and storage. <i>Chemical Society Reviews</i> , <b>2019</b> , 48, 2315-2337	57.5	344
118	Highly stable lithium-sulfur batteries based on p-n heterojunctions embedded on hollow sheath carbon propelling polysulfides conversion. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 9230-9240	12.8	41
117	Coal-based carbon anodes for high-performance potassium-ion batteries. <i>Carbon</i> , <b>2019</b> , 147, 574-581	10.1	47
116	A recyclable route to produce biochar with a tailored structure and surface chemistry for enhanced charge storage. <i>Green Chemistry</i> , <b>2019</b> , 21, 2095-2103	9.9	16
115	Facile Fabrication of NiCoAl-Layered Metal Oxide/Graphene Nanosheets for Efficient Capacitive Deionization Defluorination. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 31200-31209	9.4	22
114	Highly Stable Lithium Metal Anode Interface via Molecular Layer Deposition Zirconium Oxide Coatings for Long Life Next-Generation Battery Systems. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 15944-15949	3.5	8
113	Highly Stable Lithium Metal Anode Interface via Molecular Layer Deposition Zirconium Oxide Coatings for Long Life Next-Generation Battery Systems. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 15797-15802	16.1	58
112	Porous polyaniline arrays oriented on functionalized carbon cloth as binder-free electrode for flexible supercapacitors. <i>Journal of Electroanalytical Chemistry</i> , <b>2019</b> , 848, 113348	4.1	12
111	Decoupling and correlating the ion transport by engineering 2D carbon nanosheets for enhanced charge storage. <i>Nano Energy</i> , <b>2019</b> , 64, 103921	16.9	41
110	Self-healing electrostatic shield enabling uniform lithium deposition in all-solid-state lithium batteries. <i>Energy Storage Materials</i> , <b>2019</b> , 22, 194-199	19.2	32
109	Electrochemically Driven Coordination Tuning of FeOOH Integrated on Carbon Fiber Paper for Enhanced Oxygen Evolution. <i>Small</i> , <b>2019</b> , 15, e1901015	10.8	31
108	Restructuring of CuO to CuO@Cu-Metal-Organic Frameworks for Selective Electrochemical Reduction of CO. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 9904-9910	9.4	84
107	Implanting CNT Forest onto Carbon Nanosheets as Multifunctional Hosts for High-Performance Lithium Metal Batteries. <i>Small Methods</i> , <b>2019</b> , 3, 1800546	12.6	25
106	Engineering a Nanonet-reinforced polymer electrolyte for long-life LiD <sub>2</sub> batteries. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 24947-24952	12.8	12
105	Designed synthesis of cobalt nanoparticles embedded carbon nanocages as bifunctional electrocatalysts for oxygen evolution and reduction. <i>Carbon</i> , <b>2019</b> , 144, 492-499	10.1	24
104	Theoretical and Experimental Insights into the Effects of Oxygen-Containing Species within CNTs toward Triiodide Reduction. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 7527-7534	8.2	6

103	Strategies and insights towards the intrinsic capacitive properties of MnO <sub>2</sub> for supercapacitors: Challenges and perspectives. <i>Nano Energy</i> , <b>2019</b> , 57, 459-472	16.9	142
102	Cobalt nitride nanoparticles embedded in porous carbon nanosheet arrays propelling polysulfides conversion for highly stable lithium-sulfur batteries. <i>Energy Storage Materials</i> , <b>2019</b> , 21, 210-218	19.2	50
101	Scrutinizing Defects and Defect Density of Selenium-Doped Graphene for High-Efficiency Triiodide Reduction in Dye-Sensitized Solar Cells. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 4682-4686	16.1	97
100	Scrutinizing Defects and Defect Density of Selenium-Doped Graphene for High-Efficiency Triiodide Reduction in Dye-Sensitized Solar Cells. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 4772-4776	3.5	19
99	An electrocatalyst with anti-oxidized capability for overall water splitting. <i>Nano Research</i> , <b>2018</b> , 11, 3411-3418	11.9	9
98	Superhierarchical Cobalt-Embedded Nitrogen-Doped Porous Carbon Nanosheets as Two-in-One Hosts for High-Performance Lithium-Sulfur Batteries. <i>Advanced Materials</i> , <b>2018</b> , 30, e1706895	23.6	228
97	High performance concentration capacitors with graphene hydrogel electrodes for harvesting salinity gradient energy. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 4981-4987	12.8	21
96	Ultrahigh Rate and Long-Life Sodium-Ion Batteries Enabled by Engineered Surface and Near-Surface Reactions. <i>Advanced Materials</i> , <b>2018</b> , 30, 1702486	23.6	124
95	Interconnected sheet-like porous carbons from coal tar by a confined soft-template strategy for supercapacitors. <i>Chemical Engineering Journal</i> , <b>2018</b> , 350, 49-56	14.6	76
94	Calcined MgAl-Layered Double Hydroxide/Graphene Hybrids for Capacitive Deionization. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2018</b> , 57, 6417-6425	3.9	41
93	Nanopore-confined g-C <sub>3</sub> N <sub>4</sub> nanodots in N, S co-doped hollow porous carbon with boosted capacity for lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 7133-7141	12.8	67
92	Co ion-intercalation amorphous and ultrathin microstructure for high-rate oxygen evolution. <i>Energy Storage Materials</i> , <b>2018</b> , 10, 291-296	19.2	10
91	An effective graphene confined strategy to construct active edge sites-enriched nanosheets with enhanced oxygen evolution. <i>Carbon</i> , <b>2018</b> , 126, 437-442	10.1	30
90	Hierarchical porous carbon sheets derived from biomass containing an activation agent and in-built template for lithium ion batteries. <i>Carbon</i> , <b>2018</b> , 139, 1085-1092	10.1	69
89	Surface modification of biomass-derived hard carbon by grafting porous carbon nanosheets for high-performance supercapacitors. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 15954-15960	12.8	153
88	Graphite-graphene architecture stabilizing ultrafine Co <sub>3</sub> O <sub>4</sub> nanoparticles for superior oxygen evolution. <i>Carbon</i> , <b>2018</b> , 140, 17-23	10.1	15
87	Template-free synthesis of interconnected carbon nanosheets via cross-linking coupled with annealing for high-efficiency triiodide reduction. <i>Green Chemistry</i> , <b>2018</b> , 20, 250-254	9.9	6
86	Ultralong-Life Quasi-Solid-State Li-O <sub>2</sub> Batteries Enabled by Coupling Advanced Air Electrode Design with Li Metal Anode Protection. <i>Small Methods</i> , <b>2018</b> , 3, 1800437	12.6	14

85	Phosphate Species up to 70% Mass Ratio for Enhanced Pseudocapacitive Properties. <i>Small</i> , <b>2018</b> , 14, e1803811	10.8	18
84	Surface-Confined Fabrication of Ultrathin Nickel Cobalt-Layered Double Hydroxide Nanosheets for High-Performance Supercapacitors. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1803272	15.4	142
83	Ultrahigh-Capacity and Long-Life Lithium-Metal Batteries Enabled by Engineering Carbon Nanofiber-Stabilized Graphene Aerogel Film Host. <i>Small</i> , <b>2018</b> , 14, e1803310	10.8	35
82	High performance asymmetric capacitive mixing with oppositely charged carbon electrodes for energy production from salinity differences. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 20374-20380	12.8	17
81	Controlled Fabrication of Interconnected Porous Carbon Nanosheets for Supercapacitors with a Long Cycle Life. <i>ChemElectroChem</i> , <b>2017</b> , 4, 3196-3203	4.3	8
80	Engineered Fabrication of Hierarchical Frameworks with Tuned Pore Structure and N,O-Co-Doping for High-Performance Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 31940-31949	9.4	37
79	Graphene oxide induced fabrication of pillared and double-faced polyaniline arrays with enhanced triiodide reduction capability. <i>Electrochimica Acta</i> , <b>2017</b> , 252, 84-90	6.7	10
78	Hierarchical Hybrids Integrated by Dual Polypyrrole-Based Porous Carbons for Enhanced Capacitive Performance. <i>Chemistry - A European Journal</i> , <b>2017</b> , 23, 13474-13481	4.6	24
77	Enhanced sodium storage capability enabled by super wide-interlayer-spacing MoS <sub>2</sub> integrated on carbon fibers. <i>Nano Energy</i> , <b>2017</b> , 41, 66-74	16.9	213
76	High-Stacking-Density, Superior-Roughness LDH Bridged with Vertically Aligned Graphene for High-Performance Asymmetric Supercapacitors. <i>Small</i> , <b>2017</b> , 13, 1701288	10.8	56
75	Interface Engineering of Ni <sub>3</sub> N@Fe <sub>3</sub> N Heterostructure Supported on Carbon Fiber for Enhanced Water Oxidation. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2017</b> , 56, 14245-14251	3.9	30
74	Starch Derived Porous Carbon Nanosheets for High-Performance Photovoltaic Capacitive Deionization. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 9244-9251	10.2	92
73	Preparation of carbon nanosheets from petroleum asphalt via recyclable molten-salt method for superior lithium and sodium storage. <i>Carbon</i> , <b>2017</b> , 122, 344-351	10.1	69
72	Ultrathin Nitrogen-Enriched Hybrid Carbon Nanosheets for Supercapacitors with Ultrahigh Rate Performance and High Energy Density. <i>ChemElectroChem</i> , <b>2017</b> , 4, 369-375	4.3	28
71	In-situ growth of highly uniform and single crystalline Co <sub>3</sub> O <sub>4</sub> nanocubes on graphene for efficient oxygen evolution. <i>Catalysis Communications</i> , <b>2017</b> , 88, 81-84	3.1	20
70	Synthesis of 3D Flower-like Nanocomposites of Nitrogen-Doped Carbon Nanosheets Embedded with Hollow Cobalt(II,III) Oxide Nanospheres for Lithium Storage. <i>ChemElectroChem</i> , <b>2017</b> , 4, 102-108	4.3	12
69	Decoupling atomic-layer-deposition ultrafine RuO <sub>2</sub> for high-efficiency and ultralong-life Li-O <sub>2</sub> batteries. <i>Nano Energy</i> , <b>2017</b> , 34, 399-407	16.9	49
68	Iron-tuned super nickel phosphide microstructures with high activity for electrochemical overall water splitting. <i>Nano Energy</i> , <b>2017</b> , 34, 472-480	16.9	184



67	Ultrasensitive Iron-Triggered Nanosized Fe <sub>3</sub> O <sub>4</sub> /OOH Integrated with Graphene for Highly Efficient Oxygen Evolution. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1602148	21.6	170
66	Nitrogen-doped mesoporous carbon nanosheets derived from metal-organic frameworks in a molten salt medium for efficient desulfurization. <i>Carbon</i> , <b>2017</b> , 117, 376-382	10.1	56
65	Ultrafine MoO <sub>2</sub> -Carbon Microstructures Enable Ultralong-Life Power-Type Sodium Ion Storage by Enhanced Pseudocapacitance. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1602880	21.6	230
64	Flexible Paper-like Free-Standing Electrodes by Anchoring Ultrafine SnS Nanocrystals on Graphene Nanoribbons for High-Performance Sodium Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 15484-15491	9.4	83
63	Long life rechargeable Li-O <sub>2</sub> batteries enabled by enhanced charge transfer in nanocable-like Fe@N-doped carbon nanotube catalyst. <i>Science China Materials</i> , <b>2017</b> , 60, 415-426	7	23
62	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. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 11331-11339	12.8	44
61	Porous carbon nanosheets from coal tar for high-performance supercapacitors. <i>Journal of Power Sources</i> , <b>2017</b> , 357, 41-46	8.8	126
60	Nitrogen-doped tubular/porous carbon channels implanted on graphene frameworks for multiple confinement of sulfur and polysulfides. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 10380-10386	12.8	24
59	Metal-Organic-Framework-Derived Hybrid Carbon Nanocages as a Bifunctional Electrocatalyst for Oxygen Reduction and Evolution. <i>Advanced Materials</i> , <b>2017</b> , 29, 1700874	23.6	503
58	Synthesis of layered microporous carbons from coal tar by directing, space-confinement and self-sacrificed template strategy for supercapacitors. <i>Electrochimica Acta</i> , <b>2017</b> , 246, 634-642	6.7	42
57	A superhydrophilic "nanogluet" for stabilizing metal hydroxides onto carbon materials for high-energy and ultralong-life asymmetric supercapacitors. <i>Energy and Environmental Science</i> , <b>2017</b> , 10, 1958-1965	35	224
56	Solvothermal conversion of coal into nitrogen-doped carbon dots with singlet oxygen generation and high quantum yield. <i>Chemical Engineering Journal</i> , <b>2017</b> , 320, 570-575	14.6	81
55	Rational design and fabrication of sulfur-doped porous graphene with enhanced performance as a counter electrode in dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 2280-2287	12.8	66
54	Nitrogen-doped hierarchical porous carbon derived from metal-organic aerogel for high performance lithium-sulfur batteries. <i>Journal of Energy Chemistry</i> , <b>2017</b> , 26, 1282-1290	11.9	46
53	NiWO <sub>4</sub> /Ni/Carbon Composite Fibres for Supercapacitors with Excellent Cycling Performance. <i>Electrochimica Acta</i> , <b>2016</b> , 222, 446-454	6.7	21
52	Strongly Coupled Architectures of Cobalt Phosphide Nanoparticles Assembled on Graphene as Bifunctional Electrocatalysts for Water Splitting. <i>ChemElectroChem</i> , <b>2016</b> , 3, 719-725	4.3	75
51	Cobalt-embedded nitrogen-doped hollow carbon nanorods for synergistically immobilizing the discharge products in lithium-sulfur battery. <i>Energy Storage Materials</i> , <b>2016</b> , 5, 223-229	19.2	120
50	Chemically grafting graphene oxide to B,N co-doped graphene via ionic liquid and their superior performance for triiodide reduction. <i>Nano Energy</i> , <b>2016</b> , 25, 184-192	16.9	73

49	CoMn Layered Double Hydroxides/Carbon Nanotubes Architectures as High-Performance Electrocatalysts for the Oxygen Evolution Reaction. <i>ChemElectroChem</i> , <b>2016</b> , 3, 906-912	4.3	58
48	Graphene-mediated highly-dispersed MoS <sub>2</sub> nanosheets with enhanced triiodide reduction activity for dye-sensitized solar cells. <i>Carbon</i> , <b>2016</b> , 100, 474-483	10.1	88
47	Synthesis of ultrathin hollow carbon shell from petroleum asphalt for high-performance anode material in lithium-ion batteries. <i>Chemical Engineering Journal</i> , <b>2016</b> , 286, 632-639	14.6	73
46	Electroactive edge site-enriched nickel/cobalt sulfide into graphene frameworks for high-performance asymmetric supercapacitors. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 1299-1307	35	534
45	Dual integration system endowing two-dimensional titanium disulfide with enhanced triiodide reduction performance in dye-sensitized solar cells. <i>Nano Energy</i> , <b>2016</b> , 22, 59-69	16.9	57
44	Mass and Charge Transfer Coenhanced Oxygen Evolution Behaviors in CoFe-Layered Double Hydroxide Assembled on Graphene. <i>Advanced Materials Interfaces</i> , <b>2016</b> , 3, 1500782	4.5	110
43	A Dual Component Catalytic System Composed of Non-Noble Metal Oxides for LiO <sub>2</sub> Batteries with Enhanced Cyclability. <i>Particle and Particle Systems Characterization</i> , <b>2016</b> , 33, 228-234	3	3
42	Ultrafine Fe <sub>3</sub> O <sub>4</sub> Quantum Dots on Hybrid Carbon Nanosheets for Long-Life, High-Rate Alkali-Metal Storage. <i>ChemElectroChem</i> , <b>2016</b> , 3, 38-44	4.3	30
41	Sustainable Synthesis and Assembly of Biomass-Derived B/N Co-Doped Carbon Nanosheets with Ultrahigh Aspect Ratio for High-Performance Supercapacitors. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 111-119	15.4	482
40	CoS nanosheets-coupled graphene quantum dots architectures as a binder-free counter electrode for high-performance DSSCs. <i>Science China Materials</i> , <b>2016</b> , 59, 104-111	7	25
39	NiCo-layered double hydroxides vertically assembled on carbon fiber papers as binder-free high-active electrocatalysts for water oxidation. <i>Carbon</i> , <b>2016</b> , 110, 1-7	10.1	134
38	Bridging of Ultrathin NiCo <sub>2</sub> O <sub>4</sub> Nanosheets and Graphene with Polyaniline: A Theoretical and Experimental Study. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 5855-5863	9.5	95
37	Nitrogen and phosphorus dual-doped graphene as a metal-free high-efficiency electrocatalyst for triiodide reduction. <i>Nanoscale</i> , <b>2016</b> , 8, 17458-17464	7.5	49
36	Ultrasmall diiron phosphide nanodots anchored on graphene sheets with enhanced electrocatalytic activity for hydrogen production via high-efficiency water splitting. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 16028-16035	12.8	35
35	Polystyrene sphere-mediated ultrathin graphene sheet-assembled frameworks for high-power density Li-O <sub>2</sub> batteries. <i>Chemical Communications</i> , <b>2015</b> , 51, 13233-6	5.7	29
34	Nitrogen-Doped Graphene Nanoribbons with Surface Enriched Active Sites and Enhanced Performance for Dye-Sensitized Solar Cells. <i>Advanced Energy Materials</i> , <b>2015</b> , 5, 1500180	21.6	123
33	Sulfur-infiltrated graphene-backboned mesoporous carbon nanosheets with a conductive polymer coating for long-life lithium-sulfur batteries. <i>Nanoscale</i> , <b>2015</b> , 7, 7569-73	7.5	98
32	Organic amine-grafted carbon quantum dots with tailored surface and enhanced photoluminescence properties. <i>Carbon</i> , <b>2015</b> , 91, 291-297	10.1	60

31	Monolithic Electrodes: Ultrafast Self-Assembly of Graphene Oxide-Induced Monolithic NiCo <sub>2</sub> Carbonate Hydroxide Nanowire Architectures with a Superior Volumetric Capacitance for Supercapacitors (Adv. Funct. Mater. 14/2015). <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 2203-2203	15.4	2
30	Graphene Nanoribbons: Nitrogen-Doped Graphene Nanoribbons with Surface Enriched Active Sites and Enhanced Performance for Dye-Sensitized Solar Cells (Adv. Energy Mater. 11/2015). <i>Advanced Energy Materials</i> , <b>2015</b> , 5,	21.6	4
29	Tailor-made graphene aerogels with inbuilt baffle plates by charge-induced template-directed assembly for high-performance Li <sub>2</sub> S batteries. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 21842-21848	12.8	29
28	Towards efficient electrocatalysts for oxygen reduction by doping cobalt into graphene-supported graphitic carbon nitride. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 19657-19661	12.8	40
27	A Layered-Nanospace-Confinement Strategy for the Synthesis of Two-Dimensional Porous Carbon Nanosheets for High-Rate Performance Supercapacitors. <i>Advanced Energy Materials</i> , <b>2015</b> , 5, 1401761	21.6	246
26	Micro-sized porous carbon spheres with ultra-high rate capability for lithium storage. <i>Nanoscale</i> , <b>2015</b> , 7, 1791-5	7.5	76
25	3D Porous N-Doped Graphene Frameworks Made of Interconnected Nanocages for Ultrahigh-Rate and Long-Life Li <sub>2</sub> O <sub>2</sub> Batteries. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 6913-6920	15.4	204
24	Facile Fabrication of Bicomponent CoO/CoFe <sub>2</sub> O <sub>4</sub> -N-Doped Graphene Hybrids with Ultrahigh Lithium Storage Capacity. <i>Particle and Particle Systems Characterization</i> , <b>2015</b> , 32, 91-97	3	23
23	Ultrafast Self-Assembly of Graphene Oxide-Induced Monolithic NiCo <sub>2</sub> Carbonate Hydroxide Nanowire Architectures with a Superior Volumetric Capacitance for Supercapacitors. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 2109-2116	15.4	196
22	Boric acid-mediated B,N-codoped chitosan-derived porous carbons with a high surface area and greatly improved supercapacitor performance. <i>Nanoscale</i> , <b>2015</b> , 7, 5120-5	7.5	124
21	Nitrogen-rich carbon coupled multifunctional metal oxide/graphene nanohybrids for long-life lithium storage and efficient oxygen reduction. <i>Nano Energy</i> , <b>2015</b> , 12, 578-587	16.9	67
20	Nitrogen-doped carbon dots decorated on graphene: a novel all-carbon hybrid electrocatalyst for enhanced oxygen reduction reaction. <i>Chemical Communications</i> , <b>2015</b> , 51, 3419-22	5.7	132
19	Hierarchically porous carbon architectures embedded with hollow nanocapsules for high-performance lithium storage. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 5054-5059	12.8	19
18	Hydrothermal synthesis and activation of graphene-incorporated nitrogen-rich carbon composite for high-performance supercapacitors. <i>Carbon</i> , <b>2014</b> , 70, 130-141	10.1	149
17	Ultrafast Fabrication of Covalently Cross-linked Multifunctional Graphene Oxide Monoliths. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 4915-4921	15.4	84
16	Boron-doped graphene as a high-efficiency counter electrode for dye-sensitized solar cells. <i>Chemical Communications</i> , <b>2014</b> , 50, 3328-30	5.7	99
15	Enhancing lithium-sulphur battery performance by strongly binding the discharge products on amino-functionalized reduced graphene oxide. <i>Nature Communications</i> , <b>2014</b> , 5, 5002	16.9	782
14	Chemically tailoring coal to fluorescent carbon dots with tuned size and their capacity for Cu(II) detection. <i>Small</i> , <b>2014</b> , 10, 4926-33	10.8	154

13	Nanohybrids from NiCoAl-LDH coupled with carbon for pseudocapacitors: understanding the role of nano-structured carbon. <i>Nanoscale</i> , <b>2014</b> , 6, 3097-104	7.5	154
12	3D Architecture Materials Made of NiCoAl-LDH Nanoplates Coupled with NiCo-Carbonate Hydroxide Nanowires Grown on Flexible Graphite Paper for Asymmetric Supercapacitors. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1400761	21.6	218
11	Free-standing, hierarchically porous carbon nanotube film as a binder-free electrode for high-energy LiO <sub>2</sub> batteries. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 12033	12.8	71
10	Ultralight and highly compressible graphene aerogels. <i>Advanced Materials</i> , <b>2013</b> , 25, 2219-23	23.6	1053
9	Facile fabrication of MWCNT-doped NiCoAl-layered double hydroxide nanosheets with enhanced electrochemical performances. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 1963-1968	12.8	161
8	A flexible TiO(B)-based battery electrode with superior power rate and ultralong cycle life. <i>Advanced Materials</i> , <b>2013</b> , 25, 3462-7	23.6	271
7	Hydrothermal synthesis of phosphate-functionalized carbon nanotube-containing carbon composites for supercapacitors with highly stable performance. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 2104-10	9.4	82
6	Hierarchical Carbon-Encapsulated Iron Nanoparticles as a Magnetically Separable Adsorbent for Removing Thiophene in Liquid Fuel. <i>Particle and Particle Systems Characterization</i> , <b>2013</b> , 30, 637-644	3	17
5	The role of microwave absorption on formation of graphene from graphite oxide. <i>Carbon</i> , <b>2012</b> , 50, 3267-3273	32.73	210
4	Sodium Metal Anodes with Self-Correction Function Based on Fluorine-Superdoped CNTs/Cellulose Nanofibrils Composite Paper. <i>Advanced Functional Materials</i> , 2111133	15.4	0
3	Ultra-High Fluorine Enhanced Homogeneous Nucleation of Lithium Metal on Stepped Carbon Nanosheets with Abundant Edge Sites. <i>Advanced Energy Materials</i> , 2103123	21.6	0
2	A multi-interface CoNi-SP/C heterostructure for quasi-solid-state hybrid supercapacitors with a graphene oxide-containing hydrogel electrolyte. <i>Journal of Materials Chemistry A</i> ,	12.8	1
1	Strategies to activate inert nitrogen molecules for efficient ammonia electrosynthesis: current status, challenges, and perspectives. <i>Energy and Environmental Science</i> ,	35	