Wei Liu

List of Publications by Year
in descending order

67	4,472	101384	106150
papers	citations	36 h-index	65 g-index

67	67	67	5615
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Biomass-Derived Porous Carbon-Based Nanostructures for Microwave Absorption. Nano-Micro Letters, 2019, 11, 24.	14.4	421
2	Nanocellulose-based conductive materials and their emerging applications in energy devices - A review. Nano Energy, 2017, 35, 299-320.	8.2	329
3	Soot oxidation over CeO2 and Ag/CeO2: Factors determining the catalyst activity and stability during reaction. Journal of Catalysis, 2016, 337, 188-198.	3.1	278
4	N, O-codoped hierarchical porous carbons derived from algae for high-capacity supercapacitors and battery anodes. Journal of Materials Chemistry A, 2016, 4, 5973-5983.	5.2	256
5	Biomass derived hierarchical porous carbons as high-performance anodes for sodium-ion batteries. Electrochimica Acta, 2016, 188, 103-110.	2.6	207
6	Rich sulfur doped porous carbon materials derived from ginkgo leaves for multiple electrochemical energy storage devices. Journal of Materials Chemistry A, 2017, 5, 2204-2214.	5.2	183
7	Bioinspired Mineralization under Freezing Conditions: An Approach to Fabricate Porous Carbons with Complicated Architecture and Superior K⁺ Storage Performance. ACS Nano, 2019, 13, 11582-11592.	7.3	146
8	Controlled Design of Wellâ€Dispersed Ultrathin MoS₂ Nanosheets inside Hollow Carbon Skeleton: Toward Fast Potassium Storage by Constructing Spacious â€œHousesâ€•for K Ions. Advanced Functional Materials, 2020, 30, 1908755.	7.8	138
9	Two-dimensional biomass-derived carbon nanosheets and MnO/carbon electrodes for high-performance Li-ion capacitors. Journal of Materials Chemistry A, 2017, 5, 15243-15252.	5.2	132
10	Ultrastable Au nanoparticles on titania through an encapsulation strategy under oxidative atmosphere. Nature Communications, 2019, 10, 5790.	5.8	128
11	Fluffy honeycomb-like activated carbon from popcorn with high surface area and well-developed porosity for ultra-high efficiency adsorption of organic dyes. Bioresource Technology, 2019, 285, 121340.	4.8	116
12	Self-doped carbon architectures with heteroatoms containing nitrogen, oxygen and sulfur as high-performance anodes for lithium- and sodium-ion batteries. Electrochimica Acta, 2017, 251, 396-406.	2.6	104
13	Extremely high-rate aqueous supercapacitor fabricated using doped carbon nanoflakes with large surface area and mesopores at near-commercial mass loading. Nano Research, 2017, 10, 1767-1783.	5.8	103
14	Roles of oxygen vacancy and Oâ˜ in oxidation reactions over CeO2 and Ag/CeO2 nanorod model catalysts. Journal of Catalysis, 2018, 368, 365-378.	3.1	102
15	Liquidâ€State Templates for Constructing B, N, Coâ€Doping Porous Carbons with a Boosting of Potassiumâ€Ion Storage Performance. Advanced Energy Materials, 2021, 11, 2003215.	10.2	99
16	Study of Ag promoted Fe2O3@CeO2 as superior soot oxidation catalysts: The role of Fe2O3 crystal plane and tandem oxygen delivery. Applied Catalysis B: Environmental, 2018, 237, 251-262.	10.8	94
17	Study of Ag/Ce Nd1-O2 nanocubes as soot oxidation catalysts for gasoline particulate filters: Balancing catalyst activity and stability by Nd doping. Applied Catalysis B: Environmental, 2017, 203, 116-126.	10.8	89
18	All-carbon lithium capacitor based on salt crystal-templated, N-doped porous carbon electrodes with superior energy storage. Journal of Materials Chemistry A, 2018, 6, 18276-18285.	5.2	72

#	Article	IF	Citations
19	High-performance sodium-ion hybrid capacitors based on an interlayer-expanded MoS2/rGO composite: surpassing the performance of lithium-ion capacitors in a uniform system. NPG Asia Materials, 2018, 10, 775-787.	3.8	71
20	A robust core-shell silver soot oxidation catalyst driven by Co3O4: Effect of tandem oxygen delivery and Co3O4-CeO2 synergy. Applied Catalysis B: Environmental, 2019, 250, 132-142.	10.8	71
21	Rigid-Flexible Coupling Carbon Skeleton and Potassium-Carbonate-Dominated Solid Electrolyte Interface Achieving Superior Potassium-Ion Storage. ACS Nano, 2020, 14, 4938-4949.	7.3	67
22	Metal-organic framework derived N-doped CNT@ porous carbon for high-performance sodium- and potassium-ion storage. Electrochimica Acta, 2019, 319, 541-551.	2.6	63
23	High energy supercapacitors based on interconnected porous carbon nanosheets with ionic liquid electrolyte. Microporous and Mesoporous Materials, 2017, 241, 202-209.	2.2	62
24	Marine-Biomass-Derived Porous Carbon Sheets with a Tunable N-Doping Content for Superior Sodium-Ion Storage. ACS Applied Materials & Interfaces, 2018, 10, 38376-38386.	4.0	61
25	An exploration of soot oxidation over CeO2-ZrO2 nanocubes: Do more surface oxygen vacancies benefit the reaction?. Catalysis Today, 2017, 281, 454-459.	2.2	57
26	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.	10.2	56
27	Activation and deactivation of Ag/CeO₂ during soot oxidation: influences of interfacial ceria reduction. Catalysis Science and Technology, 2017, 7, 2129-2139.	2.1	55
28	Biotemplated MnO/C microtubes from spirogyra with improved electrochemical performance for lithium-ion batterys. Electrochimica Acta, 2016, 188, 210-217.	2.6	47
29	Robust Pt@TiO_x/TiO₂ Catalysts for Hydrocarbon Combustion: Effects of Pt-TiO_x Interaction and Sulfates. ACS Catalysis, 2020, 10, 13543-13548.	5.5	47
30	Nitrogen-doped porous carbons derived from a natural polysaccharide for multiple energy storage devices. Sustainable Energy and Fuels, 2018, 2, 381-391.	2.5	43
31	Effect of surface modification on high-surface-area carbon nanosheets anode in sodium ion battery. Microporous and Mesoporous Materials, 2016, 227, 1-8.	2.2	39
32	Tuning the morphology and structure of nanocarbons with activating agents for ultrafast ionic liquid-based supercapacitors. Journal of Power Sources, 2017, 361, 182-194.	4.0	39
33	Squid inks-derived nanocarbons with unique â€œshell@pearlsâ€•structure for high performance supercapacitors. Journal of Power Sources, 2017, 354, 116-123.	4.0	38
34	Lithium Ion Capacitor with Identical Carbon Electrodes Yields 6 s Charging and 100â€¯000 Cycles Stability with 1% Capacity Fade. ACS Sustainable Chemistry and Engineering, 2019, 7, 2867-2877.	3.2	38
35	Sustainable nitrogen-doped carbon electrodes for use in high-performance supercapacitors and Li-ion capacitors. Sustainable Energy and Fuels, 2020, 4, 1789-1800.	2.5	38
36	Marine microalgaes-derived porous ZnMn 2 O 4 /C microspheres and performance evaluation as Li-ion battery Anode by using different binders. Chemical Engineering Journal, 2017, 308, 1200-1208.	6.6	36

#	Article	IF	Citations
37	Electrospun hetero-CoP/FeP embedded in porous carbon nanofibers: enhanced Na⁺ kinetics and specific capacity. Nanoscale, 2020, 12, 24477-24487.	2.8	36
38	Fibrous Bio-Carbon Foams: A New Material for Lithium-Ion Hybrid Supercapacitors with Ultrahigh Integrated Energy/Power Density and Ultralong Cycle Life. ACS Sustainable Chemistry and Engineering, 2018, 6, 14989-15000.	3.2	35
39	Balanced mesoporous nickle cobaltite-graphene and doped carbon electrodes for high-performance asymmetric supercapacitor. Chemical Engineering Journal, 2017, 326, 401-410.	6.6	34
40	Boosting pseudocapacitive charge storage in in situ functionalized carbons with a high surface area for high-energy asymmetric supercapacitors. Sustainable Energy and Fuels, 2018, 2, 2314-2324.	2.5	34
41	Nitrogen and Sulfur Co-doped Mesoporous Carbon for Sodium Ion Batteries. ACS Applied Nano Materials, 2019, 2, 5643-5654.	2.4	33
42	Simple Strategy Generating Hydrothermally Stable Coreâ€“Shell Platinum Catalysts with Tunable Distribution of Acid Sites. ACS Catalysis, 2018, 8, 2796-2804.	5.5	32
43	Dual-doped hierarchical porous carbon derived from biomass for advanced supercapacitors and lithium ion batteries. RSC Advances, 2019, 9, 32382-32394.	1.7	32
44	High-energy sodium-ion capacitor assembled by hierarchical porous carbon electrodes derived from Enteromorpha. Journal of Materials Science, 2018, 53, 6763-6773.	1.7	31
45	Ozone activated Ag/CeO2 catalysts for soot combustion: The surface and structural influences. Chemical Engineering Journal, 2019, 375, 121961.	6.6	28
46	Template-assisted loading of Fe₃O₄ nanoparticles inside hollow carbon â€œroomsâ€• to achieve high volumetric lithium storage. Nanoscale, 2020, 12, 10816-10826.	2.8	27
47	Bio-derived 3D TiO₂ hollow spheres with a mesocrystal nanostructure to achieve improved electrochemical performance of Na-ion batteries in ether-based electrolytes. Journal of Materials Chemistry A, 2019, 7, 3399-3407.	5.2	24
48	Sorghum core-derived carbon sheets as electrodes for a lithium-ion capacitor. RSC Advances, 2017, 7, 17178-17183.	1.7	19
49	Nitrogen functionalized carbon nanocages optimized as high-performance anodes for sodium ion storage. Electrochimica Acta, 2019, 304, 192-201.	2.6	19
50	Biomass derived fabrication of a novel sea cucumber-like LiMn 2 O 4 /C composite with a hierarchical porous structure as the cathode for lithium-ion batteries. Electrochimica Acta, 2016, 188, 645-652.	2.6	18
51	Thermally stable Ag/Al2O3 confined catalysts with high diffusion-induced oxidation activity. Catalysis Today, 2019, 332, 189-194.	2.2	18
52	Fe nanopowder-assisted fabrication of FeO_x/porous carbon for boosting potassium-ion storage performance. Nanoscale, 2021, 13, 2481-2491.	2.8	16
53	High-Performance Sodium-Ion Capacitor Constructed by Well-Matched Dual-Carbon Electrodes from a Single Biomass. ACS Sustainable Chemistry and Engineering, 0, , .	3.2	14
54	Biogelâ€Derived Polycrystalline MnO Spheres/Sâ€Doped Carbon Composites with Enhanced Performance as Anode Materials for Lithiumâ€Ion Batteries. ChemElectroChem, 2017, 4, 1411-1418.	1.7	12

#	Article	IF	Citations
55	Non-carbon coating: a new strategy for improving lithium ion storage of carbon matrix. Green Chemistry, 2018, 20, 3954-3962.	4.6	12
56	Spaceâ€Confined Fabrication of MoS₂@Carbon Tubes with Semienclosed Architecture Achieving Superior Cycling Capability for Sodium Ion Storage. Advanced Materials Interfaces, 2020, 7, 2000953.	1.9	10
57	Nitrate Salt Assisted Fabrication of Highly N-Doped Carbons for High-Performance Sodium Ion Capacitors. ACS Applied Energy Materials, 0, , .	2.5	9
58	Bio-derived yellow porous TiO₂: the lithiation induced activation of an oxygen-vacancy dominated TiO₂ lattice evoking a large boost in lithium storage performance. Nanoscale, 2020, 12, 746-754.	2.8	9
59	Microzone-explosion synthesis of porous carbon electrodes for advanced aqueous solid-state supercapacitors with a high-voltage gel electrolyte. Journal of Energy Chemistry, 2021, 60, 95-103.	7.1	9
60	â€œPlainsâ€“Hillsâ€• A New Model to Design Biomass-Derived Carbon Electrode Materials for High-Performance Potassium Ion Hybrid Supercapacitors. ACS Sustainable Chemistry and Engineering, 2021, 9, 3931-3941.	3.2	8
61	Polymer salt-derived carbon-based nanomaterials for high-performance hybrid Li-ion capacitors. Journal of Materials Science, 2019, 54, 7811-7822.	1.7	6
62	Intercalation pseudocapacitance of hollow carbon bubbles with multilayered shells for boosting K-ion storage. Journal of Materials Chemistry A, 2022, 10, 2075-2084.	5.2	6
63	N-doped engineering of a high-voltage LiNi_{0.5}Mn_{1.5}O₄ cathode with superior cycling capability for wide temperature lithiumâ€“ion batteries. Physical Chemistry Chemical Physics, 2022, 24, 12214-12225.	1.3	6
64	Cyano groups: New active sites of porous carbon materials achieving a superior K-ion storage. Carbon, 2021, 184, 156-166.	5.4	5
65	Biomineralized Mesocrystal KCl Microreactor for Solidâ€State Synthesis of Nonâ€Oxide Nanomaterials. Small Methods, 2022, , 2101207.	4.6	2
66	2D molten salt strategy for preparing large-sized MoS2/C sheets with self-adaptive structural deformation for K-ion storage. Chemical Engineering Journal, 2022, 440, 135871.	6.6	2
67	Cable-like heterogeneous porous carbon fibers with ultrahigh-rate capability and long cycle life for fast charging lithium-ion storage devices. Nanoscale, 2019, 11, 20893-20902.	2.8	1