Dingcai Wu

List of Publications by Year
in descending order

126 papers	10,096 citations	38742 50 h-index	34986 98 g-index
129 all docs	129 docs citations	129 times ranked	12020 citing authors

#	Article	IF	Citations
1	Molecular Engineering toward Highâ€Crystallinity Yet Highâ€Surfaceâ€Area Porous Carbon Nanosheets for Enhanced Electrocatalytic Oxygen Reduction. Advanced Science, 2022, 9, e2103477.	11.2	9
2	Peritoneumâ€Inspired Janus Porous Hydrogel with Antiâ€Deformation, Antiâ€Adhesion, and Proâ€Healing Characteristics for Abdominal Wall Defect Treatment. Advanced Materials, 2022, 34, e2108992.	21.0	58
3	Emerging porous organic polymers for biomedical applications. Chemical Society Reviews, 2022, 51, 1377-1414.	38.1	103
4	Selfâ€Supporting Electrocatalyst Film Based on Selfâ€Assembly of Heterogeneous Bottlebrush and Polyoxometalate for Efficient Hydrogen Evolution Reaction. Macromolecular Rapid Communications, 2022, 43, e2100915.	3.9	3
5	Easily-injectable shear-thinning hydrogel provides long-lasting submucosal barrier for gastrointestinal endoscopic surgery. Bioactive Materials, 2022, 15, 44-52.	15.6	3
6	A robust all-organic protective layer towards ultrahigh-rate and large-capacity Li metal anodes. Nature Nanotechnology, 2022, 17, 613-621.	31.5	152
7	Dendriteâ€Free and Longâ€Cycling Lithium Metal Battery Enabled by Ultrathin, 2D Shieldâ€Defensive, and Single Lithiumâ€Ion Conducting Polymeric Membrane. Advanced Materials, 2022, 34, .	21.0	21
8	A versatile sea anemone-inspired strategy toward 2D hybrid porous carbons from functional molecular brushes. Chemical Communications, 2021, 57, 1446-1449.	4.1	2
9	Fabrication of Advanced Hierarchical Porous Polymer Nanosheets and Their Application in Lithiumâ€“Sulfur Batteries. Macromolecules, 2021, 54, 2992-2999.	4.8	13
10	Highly Stretchable, Adhesive, Biocompatible, and Antibacterial Hydrogel Dressings for Wound Healing. Advanced Science, 2021, 8, 2003627.	11.2	291
11	Controllable Preparation of Coreâ€“Shell Composites and Their Templated Hollow Carbons Based on a Well-Orchestrated Molecular Bridge-Linked Organicâ€“Inorganic Hybrid Interface. ACS Applied Materials & Interfaces, 2021, 13, 26404-26410.	8.0	9
12	Ultrathin Yet Robust Single Lithiumâ€Ion Conducting Quasiâ€Solidâ€State Polymerâ€Brush Electrolytes Enable Ultralongâ€Life and Dendriteâ€Free Lithiumâ€Metal Batteries. Advanced Materials, 2021, 33, e2100943.	21.0	88
13	Long-lasting renewable antibacterial porous polymeric coatings enable titanium biomaterials to prevent and treat peri-implant infection. Nature Communications, 2021, 12, 3303.	12.8	111
14	CoS₂ Nanoparticles Embedded in Covalent Organic Polymers as Efficient Electrocatalyst for Oxygen Evolution Reaction with Ultralow Overpotential. Chemistry - an Asian Journal, 2021, 16, 3102-3106.	3.3	14
15	A Protective Layer for Lithium Metal Anode: Why and How. Small Methods, 2021, 5, e2001035.	8.6	55
16	Emerging Functional Porous Polymeric and Carbonaceous Materials for Environmental Treatment and Energy Storage. Advanced Functional Materials, 2020, 30, 1907006.	14.9	176
17	FeS/FeNC decorated N,S-co-doped porous carbon for enhanced ORR activity in alkaline media. Chemical Communications, 2020, 56, 12921-12924.	4.1	45
18	Morphology-Persistent Carbonization of Self-Assembled Block Copolymers for Multifunctional Coupled Two-Dimensional Porous Carbon Hybrids. Chemistry of Materials, 2020, 32, 8971-8980.	6.7	11

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19	Synthesis of SiO_{<i>x</i>}/C Composite Nanosheets As High-Rate and Stable Anode Materials for Lithium-Ion Batteries. ACS Applied Energy Materials, 2020, 3, 3562-3568.	5.1	30
20	A versatile bottom-up interface self-assembly strategy to hairy nanoparticle-based 2D monolayered composite and functional nanosheets. Chemical Communications, 2019, 55, 10241-10244.	4.1	15
21	An interfacial crosslinking strategy to fabricate an ultrathin two-dimensional composite of silicon oxycarbide-enwrapped silicon nanoparticles for high-performance lithium storage. Journal of Materials Chemistry A, 2019, 7, 22950-22957.	10.3	14
22	<i>In situ</i> synthesis of a silicon flake/nitrogen-doped graphene-like carbon composite from organoclay for high-performance lithium-ion battery anodes. Chemical Communications, 2019, 55, 2644-2647.	4.1	44
23	Fabrication of three-dimensionally nanostructured carbon materials with functional tube-in-tube network units for enhanced electrochemical performances. Carbon, 2019, 151, 103-108.	10.3	6
24	In-situ preparation of porous carbon nanosheets loaded with metal chalcogenides for a superior oxygen evolution reaction. Carbon, 2019, 149, 144-151.	10.3	32
25	Fabrication of Porous Nanonetwork-Structured Carbons from Well-Defined Cylindrical Molecular Bottlebrushes. ACS Applied Materials & Interfaces, 2019, 11, 18763-18769.	8.0	11
26	3D porous carbon networks with highly dispersed SiO_x by molecular-scale engineering toward stable lithium metal anodes. Chemical Communications, 2019, 55, 6034-6037.	4.1	16
27	Two-dimensional molecular brush-functionalized porous bilayer composite separators toward ultrastable high-current density lithium metal anodes. Nature Communications, 2019, 10, 1363.	12.8	268
28	Construction of 3D carbon networks with well-dispersed SiO_x nanodomains from gelable building blocks for lithium-ion batteries. RSC Advances, 2019, 9, 9086-9092.	3.6	11
29	Allâ€inâ€One Porous Polymer Adsorbents with Excellent Environmental Chemosensory Responsivity, Visual Detectivity, Superfast Adsorption, and Easy Regeneration. Advanced Materials, 2019, 31, e1900104.	21.0	46
30	A new supramolecular binder strongly enhancing the electrochemistry performance for lithiumâ€“sulfur batteries. Chemical Communications, 2019, 55, 13924-13927.	4.1	17
31	Porous Polymers as Multifunctional Material Platforms toward Taskâ€Specific Applications. Advanced Materials, 2019, 31, e1802922.	21.0	315
32	Cobalt and nitrogen codoped ultrathin porous carbon nanosheets as bifunctional electrocatalysts for oxygen reduction and evolution. Carbon, 2019, 141, 704-711.	10.3	53
33	Self-templating synthesis of silicon nanorods from natural sepiolite for high-performance lithium-ion battery anodes. Journal of Materials Chemistry A, 2018, 6, 6356-6362.	10.3	67
34	Hollow carbon nanospheres with high surface areas for fast, broad-spectrum and sensitive adsorption of pollutants. Nanoscale, 2018, 10, 5725-5730.	5.6	27
35	Superhierarchical Cobaltâ€Embedded Nitrogenâ€Doped Porous Carbon Nanosheets as Twoâ€inâ€One Hosts for Highâ€Performance Lithiumâ€“Sulfur Batteries. Advanced Materials, 2018, 30, e1706895.	21.0	300
36	Preparation of versatile yolk-shell nanoparticles with a precious metal yolk and a microporous polymer shell for high-performance catalysts and antibacterial agents. Polymer, 2018, 137, 195-200.	3.8	55

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37	Fabrication of powdery polymer aerogel as the stationary phase for high-resolution gas chromatographic separation. Talanta, 2018, 186, 445-451.	5.5	4
38	High-performance organic electrolyte supercapacitors based on intrinsically powdery carbon aerogels. Chinese Chemical Letters, 2018, 29, 633-636.	9.0	30
39	Interface Engineering of Carbonâ€Based Nanocomposites for Advanced Electrochemical Energy Storage. Advanced Materials Interfaces, 2018, 5, 1800430.	3.7	95
40	Fabrication of Porous Functional Nanonetwork-Structured Polymers with Enhanced Adsorption Performance from Well-Defined Molecular Brush Building Blocks. Chemistry of Materials, 2018, 30, 8624-8629.	6.7	13
41	Activation-free fabrication of high-surface-area porous carbon nanosheets from conjugated copolymers. Chemical Communications, 2018, 54, 11431-11434.	4.1	14
42	Construction of functional nanonetwork-structured carbon nitride with Au nanoparticle yolks for highly efficient photocatalytic applications. Chemical Communications, 2018, 54, 7159-7162.	4.1	48
43	Lightweight, Highly Permeable, Biocompatible, and Antiadhesive Composite Meshes for Intraperitoneal Repairs. Macromolecular Bioscience, 2018, 18, e1800067.	4.1	16
44	Nanonetwork-structured yolk-shell FeS2@C as high-performance cathode materials for Li-ion batteries. Carbon, 2018, 140, 433-440.	10.3	66
45	A stepwise crosslinking strategy toward lamellar carbon frameworks with covalently connected alternate layers of porous carbon nanosheets and porous carbon spacers. Chemical Communications, 2018, 54, 10332-10335.	4.1	3
46	Engineering 3D Aligned Nanofibers for Regulation of Cell Growth Behavior. Macromolecular Materials and Engineering, 2017, 302, 1600448.	3.6	29
47	Nitrogenâ€Doped Nanocarbons Derived from Tetrazine Crossâ€Linked Poly(4â€cyanostyrene)â€Silica Hybrids. Macromolecular Chemistry and Physics, 2017, 218, 1600524.	2.2	5
48	A hypercrosslinking-induced self-assembly strategy for preparation of advanced hierarchical porous polymers with customizable functional components. Chemical Communications, 2017, 53, 5294-5297.	4.1	29
49	Stepwise Crosslinking: A Facile Yet Versatile Conceptual Strategy to Nanomorphologyâ€Persistent Porous Organic Polymers. Advanced Materials, 2017, 29, 1700723.	21.0	47
50	Fabrication and nanostructure control of super-hierarchical carbon materials from heterogeneous bottlebrushes. Chemical Science, 2017, 8, 2101-2106.	7.4	62
51	A simple self-assembly strategy for ultrahigh surface area nitrogen-doped porous carbon nanospheres with enhanced adsorption and energy storage performances. Chemical Communications, 2017, 53, 6764-6767.	4.1	28
52	Powdery polymer and carbon aerogels with high surface areas for high-performance solid phase microextraction coatings. Nanoscale, 2017, 9, 5545-5550.	5.6	31
53	Facile, general and template-free construction of monodisperse yolkâ€"shell metal@carbon nanospheres. Chemical Communications, 2017, 53, 12136-12139.	4.1	25
54	Mechanochemistry: A Green, Activation-Free and Top-Down Strategy to High-Surface-Area Carbon Materials. ACS Sustainable Chemistry and Engineering, 2017, 5, 8535-8540.	6.7	78

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55	Design and preparation of porous carbons from conjugated polymer precursors. Materials Today, 2017, 20, 629-656.	14.2	133
56	Functional nanonetwork-structured polymers with inbuilt poly(acrylic acid) linings for enhanced adsorption. Polymer Chemistry, 2017, 8, 4771-4775.	3.9	35
57	Synthesis of novel hierarchical porous polymers with a nanowire-interconnected network structure from core-shell polymer nanoobjects. Science China Chemistry, 2017, 60, 1084-1089.	8.2	2
58	Functional nanonetwork-structured polymers and carbons with silver nanoparticle yolks for antibacterial application. Chemical Communications, 2017, 53, 9777-9780.	4.1	16
59	Fabrication of novel powdery carbon aerogels with high surface areas for superior energy storage. Energy Storage Materials, 2017, 7, 8-16.	18.0	55
60	Polyaniline-Coated Activated Carbon Aerogel/Sulfur Composite for High-performance Lithium-Sulfur Battery. Nanoscale Research Letters, 2017, 12, 617.	5.7	16
61	Fabrication and electrochemical performance of novel hollow microporous carbon nanospheres. RSC Advances, 2016, 6, 49661-49667.	3.6	13
62	Application of ordered mesoporous carbon in solid phase microextraction for fast mass transfer and high sensitivity. Chemical Communications, 2016, 52, 6829-6832.	4.1	48
63	Biocompatible, Free-Standing Film Composed of Bacterial Cellulose Nanofibersâ€"Graphene Composite. ACS Applied Materials & Interfaces, 2016, 8, 1011-1018.	8.0	59
64	Simple fabrication of solid phase microextraction fiber employing nitrogen-doped ordered mesoporous polymer by in situ polymerization. Journal of Chromatography A, 2016, 1427, 22-28.	3.7	19
65	Fabrication, Characterization, and Biocompatibility of Polymer Cored Reduced Graphene Oxide Nanofibers. ACS Applied Materials & Interfaces, 2016, 8, 5170-5177.	8.0	40
66	Novel hollow and yolkâ€"shell structured periodic mesoporous polymer nanoparticles. Chemical Communications, 2016, 52, 2489-2492.	4.1	29
67	Strong contribution of pore morphology to the high-rate electrochemical performance of lithium-ion batteries. Chemical Communications, 2016, 52, 803-806.	4.1	20
68	Monodisperse microporous carbon nanospheres: An efficient and stable solid phase microextraction coating material. Analytica Chimica Acta, 2015, 884, 44-51.	5.4	26
69	Electrochemically active, crystalline, mesoporous covalent organic frameworks on carbon nanotubes for synergistic lithium-ion battery energy storage. Scientific Reports, 2015, 5, 8225.	3.3	303
70	Ordered mesoporous polymers in situ coated on a stainless steel wire for a highly sensitive solid phase microextraction fibre. Nanoscale, 2015, 7, 11720-11726.	5.6	28
71	Facile synthesis of ultrahigh-surface-area hollow carbon nanospheres for enhanced adsorption and energy storage. Nature Communications, 2015, 6, 7221.	12.8	554
72	Antibacterial activity of polymeric quaternary ammonium compounds tuned by incorporating hydrophilic co-monomer. Chemical Research in Chinese Universities, 2015, 31, 160-166.	2.6	3

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73	Radical Covalent Organic Frameworks: A General Strategy to Immobilize Openâ€Accessible Polyradicals for Highâ€Performance Capacitive Energy Storage. Angewandte Chemie - International Edition, 2015, 54, 6814-6818.	13.8	342
74	Water-Dispersible, Responsive, and Carbonizable Hairy Microporous Polymeric Nanospheres. Journal of the American Chemical Society, 2015, 137, 13256-13259.	13.7	81
75	Multi-dimensional construction of a novel active yolk@conductive shell nanofiber web as a self-standing anode for high-performance lithium-ion batteries. Nanoscale, 2015, 7, 19930-19934.	5.6	13
76	Facile synthesis of MnO multi-core@nitrogen-doped carbon shell nanoparticles for high performance lithium-ion battery anodes. Carbon, 2015, 84, 419-425.	10.3	97
77	Templated Synthesis of Nitrogenâ€Enriched Nanoporous Carbon Materials from Porogenic Organic Precursors Prepared by ATRP. Angewandte Chemie - International Edition, 2014, 53, 3957-3960.	13.8	94
78	Synthesis and adsorption properties of highly monodisperse hollow microporous polystyrene nanospheres. RSC Advances, 2014, 4, 26166.	3.6	17
79	Redox-active conjugated microporous polymers: a new organic platform for highly efficient energy storage. Chemical Communications, 2014, 50, 4788-4790.	4.1	229
80	Fabrication of novel polymeric and carbonaceous nanoscale networks by the union of self-assembly and hypercrosslinking. Energy and Environmental Science, 2014, 7, 3006.	30.8	111
81	Synthesis of Well-Defined Microporous Carbons by Molecular-Scale Templating with Polyhedral Oligomeric Silsesquioxane Moieties. Journal of the American Chemical Society, 2014, 136, 4805-4808.	13.7	185
82	Ammonia-Assisted Semicarbonization: A Simple Method to Introduce Micropores without Damaging a 3D Mesoporous Carbon Nanonetwork Structure. Langmuir, 2014, 30, 9183-9189.	3.5	29
83	Pore morphology: a vital factor in determining electrochemical properties of electrical double layer capacitors. Chemical Communications, 2013, 49, 9998.	4.1	28
84	Polyethylene glycol-induced self-assembly to synthesize an ordered mesoporous polymer with a two-dimensional hexagonal structure. Journal of Materials Chemistry A, 2013, 1, 3061.	10.3	24
85	In situ polydopamine coating-directed synthesis of nitrogen-doped ordered nanoporous carbons with superior performance in supercapacitors. Journal of Materials Chemistry A, 2013, 1, 15207.	10.3	78
86	Facile fabrication of novel highly microporous carbons with superior size-selective adsorption and supercapacitance properties. Nanoscale, 2013, 5, 10824.	5.6	48
87	Reversible CO₂capture with porous polymers using the humidity swing. Energy and Environmental Science, 2013, 6, 488-493.	30.8	106
88	A facile approach for tailoring carbon frameworks from microporous to nonporous for nanocarbons. Journal of Materials Chemistry A, 2013, 1, 5001.	10.3	31
89	Reactive Template-Induced Self-Assembly to Ordered Mesoporous Polymeric and Carbonaceous Materials. ACS Nano, 2013, 7, 1748-1754.	14.6	69
90	Nanoporous carbons with a 3D nanonetwork-interconnected 2D ordered mesoporous structure for rapid mass transport. Journal of Materials Chemistry A, 2013, 1, 3768.	10.3	46

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91	High-energy supercapacitors based on hierarchical porous carbon with an ultrahigh ion-accessible surface area in ionic liquid electrolytes. Nanoscale, 2013, 5, 4678.	5.6	94
92	Highly Monodisperse Microporous Polymeric and Carbonaceous Nanospheres with Multifunctional Properties. Scientific Reports, 2013, 3, 1430.	3.3	78
93	An advanced carbonaceous porous network for high-performance organic electrolyte supercapacitors. Journal of Materials Chemistry A, 2013, 1, 7000.	10.3	104
94	Carbon Microfibers with Hierarchical Porous Structure from Electrospun Fiber-Like Natural Biopolymer. Scientific Reports, 2013, 3, 1119.	3.3	117
95	Graphene Oxide-Supported Two-Dimensional Microporous Polystyrene. Materials Research Society Symposia Proceedings, 2013, 1549, 25-29.	0.1	3
96	Reactive Template-Induced Self-Assembly to Ordered Mesoporous Polymer and Carbon. Materials Research Society Symposia Proceedings, 2013, 1549, 143-147.	0.1	0
97	Preparation of Polymeric Nanoscale Networks from Cylindrical Molecular Bottlebrushes. ACS Nano, 2012, 6, 6208-6214.	14.6	86
98	Design and Preparation of Porous Polymers. Chemical Reviews, 2012, 112, 3959-4015.	47.7	1,491
99	Preparation of antibacterial poly(methyl methacrylate) by solution blending with waterâ€insoluble antibacterial agent poly[(tertâ€butylamino) ethyl methacrylate]. Journal of Applied Polymer Science, 2012, 125, 3537-3544.	2.6	35
100	A facile soft-template synthesis of ordered mesoporous carbon/tungsten carbide composites with high surface area for methanol electrooxidation. Journal of Power Sources, 2012, 200, 8-13.	7.8	59
101	Ultrahigh surface area hierarchical porous carbons based on natural well-defined macropores in sisal fibers. Journal of Materials Chemistry, 2011, 21, 14424.	6.7	29
102	Construction of a hierarchical architecture in a wormhole-like mesostructure for enhanced mass transport. Physical Chemistry Chemical Physics, 2011, 13, 8852.	2.8	49
103	Nanopores array of ordered mesoporous carbons determine Pt's activity towards alcohol electrooxidation. Journal of Materials Chemistry, 2011, 21, 16357.	6.7	29
104	Novel Nanoporous Carbons from Well-Defined Poly(styrene-co-acrylonitrile)-Grafted Silica Nanoparticles. Chemistry of Materials, 2011, 23, 2024-2026.	6.7	46
105	Flexible Counter Electrodes Based on Mesoporous Carbon Aerogel for High-Performance Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2011, 115, 22615-22621.	3.1	61
106	Nanoporous Polystyrene and Carbon Materials with Coreâ€“Shell Nanosphere-Interconnected Network Structure. Macromolecules, 2011, 44, 5846-5849.	4.8	84
107	Fast ion transport and high capacitance of polystyrene-based hierarchical porous carbon electrode material for supercapacitors. Journal of Materials Chemistry, 2011, 21, 1970-1976.	6.7	220
108	Synthesis of antibacterial polymers from 2-dimethylamino ethyl methacrylate quaternized by dimethyl sulfate. Polymer Journal, 2010, 42, 766-771.	2.7	17

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109	Template-free fabrication of hierarchical porous carbon by constructing carbonyl crosslinking bridges between polystyrene chains. Journal of Materials Chemistry, 2010, 20, 731-735.	6.7	121
110	Template-free fabrication of hierarchical porous carbon based on intra-/inter-sphere crosslinking of monodisperse styreneâ€“divinylbenzene copolymer nanospheres. Chemical Communications, 2010, 46, 5927.	4.1	78
111	Nitrogen-Enriched Nanocarbons with a 3-D Continuous Mesopore Structure from Polyacrylonitrile for Supercapacitor Application. Journal of Physical Chemistry C, 2010, 114, 8581-8586.	3.1	234
112	The role of mass transport pathway in wormholelike mesoporous carbon for supercapacitors. Physical Chemistry Chemical Physics, 2010, 12, 10842.	2.8	39
113	Improving electrochemical performance of polyaniline by introducing carbon aerogel as filler. Physical Chemistry Chemical Physics, 2010, 12, 3270.	2.8	68
114	Preparation and characterization of petroleumâ€pitchâ€based carbon aerogels. Journal of Applied Polymer Science, 2009, 112, 309-314.	2.6	5
115	Adsorption of theophylline from aqueous solution on organic aerogels and carbon aerogels. Journal of Porous Materials, 2009, 16, 507-512.	2.6	6
116	Requirements of organic gels for a successful ambient pressure drying preparation of carbon aerogels. Journal of Porous Materials, 2008, 15, 29-34.	2.6	29
117	Preparation of Activated Ordered Mesoporous Carbons with a Channel Structure. Langmuir, 2008, 24, 2967-2969.	3.5	39
118	Porous structure and liquidâ€phase adsorption properties of activated carbon aerogels. Journal of Applied Polymer Science, 2007, 106, 2775-2779.	2.6	14
119	Fabrication and nano-structure control of carbon aerogels via a microemulsion-templated solâ€“gel polymerization method. Carbon, 2006, 44, 675-681.	10.3	138
120	Synthesis of organic and carbon aerogels from phenolâ€“furfural by two-step polymerization. Microporous and Mesoporous Materials, 2006, 96, 115-120.	4.4	54
121	Structure and adsorption properties of activated carbon aerogels. Journal of Applied Polymer Science, 2006, 99, 2263-2267.	2.6	33
122	Organic and carbon aerogels from the NaOH-catalyzed polycondensation of resorcinol-furfural and supercritical drying in ethanol. Journal of Applied Polymer Science, 2005, 96, 1429-1435.	2.6	49
123	Fabrication and Physical Properties of Organic and Carbon Aerogel Derived from Phenol and Furfural. Journal of Porous Materials, 2005, 12, 311-316.	2.6	26
124	Low-density organic and carbon aerogels from the solâ€“gel polymerization of phenol with formaldehyde. Journal of Non-Crystalline Solids, 2005, 351, 915-921.	3.1	90
125	Preparation of low-density carbon aerogels by ambient pressure drying. Carbon, 2004, 42, 2033-2039.	10.3	199
126	Fabrication of novel polymeric and carbonaceous nanoscale networks by the union of self-assembly and hypercrosslinking. , 0, .		1