Wei Zhang

List of Publications by Year
in descending order

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104 papers	7,176 citations	41258 49 h-index	56606 83 g-index
104 all docs	104 docs citations	104 times ranked	10116 citing authors

#	Article	IF	Citations
1	Highâ€Performance Fiberâ€Shaped Allâ€Solidâ€State Asymmetric Supercapacitors Based on Ultrathin MnO₂ Nanosheet/Carbon Fiber Cathodes for Wearable Electronics. Advanced Energy Materials, 2016, 6, 1501458.	10.2	409
2	Ni@Pd coreâ€“shell nanoparticles modified fibrous silica nanospheres as highly efficient and recoverable catalyst for reduction of 4-nitrophenol and hydrodechlorination of 4-chlorophenol. Applied Catalysis B: Environmental, 2015, 162, 372-380.	10.8	375
3	A Highly Stretchable Fiberâ€Based Triboelectric Nanogenerator for Selfâ€Powered Wearable Electronics. Advanced Functional Materials, 2017, 27, 1604378.	7.8	296
4	Aerogels from crosslinked cellulose nano/micro-fibrils and their fast shape recovery property in water. Journal of Materials Chemistry, 2012, 22, 11642.	6.7	218
5	High Efficiency Dye-Sensitized Solar Cells Based on Three-Dimensional Multilayered ZnO Nanowire Arrays with â€œCaterpillar-likeâ€•Structure. Nano Letters, 2012, 12, 3656-3662.	4.5	205
6	Polyethylenimine-Grafted Cellulose Nanofibril Aerogels as Versatile Vehicles for Drug Delivery. ACS Applied Materials & Interfaces, 2015, 7, 2607-2615.	4.0	202
7	Uniaxially Aligned Electrospun All-Cellulose Nanocomposite Nanofibers Reinforced with Cellulose Nanocrystals: Scaffold for Tissue Engineering. Biomacromolecules, 2014, 15, 618-627.	2.6	187
8	Adsorption removal of Congo red from aqueous solution by polyhedral Cu2O nanoparticles: Kinetics, isotherms, thermodynamics and mechanism analysis. Journal of Alloys and Compounds, 2015, 633, 338-346.	2.8	180
9	A Hierarchically Nanostructured Cellulose Fiberâ€Based Triboelectric Nanogenerator for Selfâ€Powered Healthcare Products. Advanced Functional Materials, 2018, 28, 1805540.	7.8	180
10	A novel reagentless approach for synthesizing cellulose nanocrystal-supported palladium nanoparticles with enhanced catalytic performance. Journal of Materials Chemistry A, 2013, 1, 8645.	5.2	171
11	Two-dimensional membrane and three-dimensional bulk aerogel materials via top-down wood nanotechnology for multibehavioral and reusable oil/water separation. Chemical Engineering Journal, 2019, 371, 769-780.	6.6	154
12	Melt-processed poly(vinyl alcohol) composites filled with microcrystalline cellulose from waste cotton fabrics. Carbohydrate Polymers, 2014, 101, 642-649.	5.1	140
13	Reusable, salt-tolerant and superhydrophilic cellulose hydrogel-coated mesh for efficient gravity-driven oil/water separation. Chemical Engineering Journal, 2018, 338, 271-277.	6.6	139
14	An ultrathin paper-based self-powered system for portable electronics and wireless human-machine interaction. Nano Energy, 2017, 39, 328-336.	8.2	134
15	Fabrication and characterization of electrospun cellulose/nano-hydroxyapatite nanofibers for bone tissue engineering. International Journal of Biological Macromolecules, 2017, 97, 568-573.	3.6	132
16	A super biosorbent from dendrimer poly(amidoamine)-grafted cellulose nanofibril aerogels for effective removal of Cr(<scp>vi</scp>). Journal of Materials Chemistry A, 2015, 3, 14703-14711.	5.2	130
17	In situ synthesis of MnO2 coated cellulose nanofibers hybrid for effective removal of methylene blue. Carbohydrate Polymers, 2014, 110, 302-308.	5.1	123
18	Continuous and scalable manufacture of amphibious energy yarns and textiles. Nature Communications, 2019, 10, 868.	5.8	121

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19	Solid-state flexible polyaniline/silver cellulose nanofibrils aerogel supercapacitors. Journal of Power Sources, 2014, 246, 283-289.	4.0	119
20	Facile synthesis of tunable silver nanostructures for antibacterial application using cellulose nanocrystals. Carbohydrate Polymers, 2013, 95, 214-219.	5.1	109
21	Extraction of cellulose nanofibrils from dry softwood pulp using high shear homogenization. Carbohydrate Polymers, 2013, 97, 695-702.	5.1	107
22	Mechanochemical activation of cellulose and its thermoplastic polyvinyl alcohol ecocomposites with enhanced physicochemical properties. Carbohydrate Polymers, 2011, 83, 257-263.	5.1	105
23	Selfâ€Adjusting, Polymeric Multilayered Roll that can Keep the Shapes of the Blood Vessel Scaffolds during Biodegradation. Advanced Materials, 2017, 29, 1700171.	11.1	104
24	Superhydrophilic graphene oxide@electrospun cellulose nanofiber hybrid membrane for high-efficiency oil/water separation. Carbohydrate Polymers, 2017, 175, 216-222.	5.1	104
25	Mechanically robust and highly compressible electrochemical supercapacitors from nitrogen-doped carbon aerogels. Carbon, 2018, 127, 236-244.	5.4	99
26	High thermal conductive shape-stabilized phase change materials of polyethylene glycol/boron nitride@chitosan composites for thermal energy storage. Composites Part A: Applied Science and Manufacturing, 2020, 129, 105710.	3.8	99
27	Morphological and structural development of hardwood cellulose during mechanochemical pretreatment in solid state through pan-milling. Cellulose, 2007, 14, 447-456.	2.4	93
28	Hollow polypyrrole/cellulose hydrogels for high-performance flexible supercapacitors. Energy Storage Materials, 2020, 31, 135-145.	9.5	90
29	Mechanochemical preparation of surface-acetylated cellulose powder to enhance mechanical properties of cellulose-filler-reinforced NR vulcanizates. Composites Science and Technology, 2008, 68, 2479-2484.	3.8	89
30	Acetone-soluble cellulose acetate extracted from waste blended fabrics via ionic liquid catalyzed acetylation. Carbohydrate Polymers, 2013, 98, 405-411.	5.1	89
31	Bamboo-inspired mechanically flexible and electrically conductive polydimethylsiloxane foam materials with designed hierarchical pore structures for ultra-sensitive and reliable piezoresistive pressure sensor. Composites Part B: Engineering, 2021, 225, 109243.	5.9	87
32	Aerogels from quaternary ammonium-functionalized cellulose nanofibers for rapid removal of Cr(VI) from water. Carbohydrate Polymers, 2014, 111, 683-687.	5.1	86
33	Synthesis of a ferric hydroxide-coated cellulose nanofiber hybrid for effective removal of phosphate from wastewater. Carbohydrate Polymers, 2016, 154, 40-47.	5.1	79
34	Aligned electrospun cellulose scaffolds coated with rhBMP-2 for both in vitro and in vivo bone tissue engineering. Carbohydrate Polymers, 2019, 213, 27-38.	5.1	79
35	Biodegradable all-cellulose composite membranes for simultaneous oil/water separation and dye removal from water. Carbohydrate Polymers, 2020, 250, 116872.	5.1	77
36	Reinforcement of all-cellulose nanocomposite films using native cellulose nanofibrils. Carbohydrate Polymers, 2014, 104, 143-150.	5.1	74

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37	3D printed robust superhydrophilic and underwater superoleophobic composite membrane for high efficient oil/water separation. Separation and Purification Technology, 2020, 237, 116324.	3.9	72
38	Solid-state, flexible, high strength paper-based supercapacitors. Journal of Materials Chemistry A, 2013, 1, 5835.	5.2	71
39	In-situ growth of polypyrrole onto bamboo cellulose-derived compressible carbon aerogels for high performance supercapacitors. Electrochimica Acta, 2019, 301, 55-62.	2.6	71
40	Fabrication and Characterization of Highly Porous Fe(OH)₃@Cellulose Hybrid Fibers for Effective Removal of Congo Red from Contaminated Water. ACS Sustainable Chemistry and Engineering, 2017, 5, 7723-7732.	3.2	69
41	High performance poly (vinyl alcohol)/cellulose nanocrystals nanocomposites manufactured by injection molding. Cellulose, 2014, 21, 485-494.	2.4	67
42	Mechanically Strong and Thermally Responsive Cellulose Nanofibers/Poly(N-isopropylacrylamide) Composite Aerogels. ACS Sustainable Chemistry and Engineering, 2016, 4, 4321-4327.	3.2	67
43	Flexible and Transparent Paper-Based Ionic Diode Fabricated from Oppositely Charged Microfibrillated Cellulose. Journal of Physical Chemistry C, 2012, 116, 9227-9234.	1.5	59
44	One-pot liquid-phase exfoliation from graphite to graphene with carbon quantum dots. Nanoscale, 2015, 7, 10527-10534.	2.8	59
45	Mass production of high thermal conductive boron nitride/nanofibrillated cellulose composite membranes. Chemical Engineering Journal, 2020, 383, 123101.	6.6	57
46	Flexible, highly transparent and iridescent all-cellulose hybrid nanopaper with enhanced mechanical strength and writable surface. Carbohydrate Polymers, 2014, 113, 264-271.	5.1	54
47	Continuous liquid interface production of alginate/polyacrylamide hydrogels with supramolecular shape memory properties. Carbohydrate Polymers, 2020, 231, 115736.	5.1	53
48	A Mussel-Inspired Antibacterial Hydrogel with High Cell Affinity, Toughness, Self-Healing, and Recycling Properties for Wound Healing. ACS Sustainable Chemistry and Engineering, 2021, 9, 3070-3082.	3.2	52
49	Preparation of low-density polyethylene/low-temperature expandable graphite composites with high thermal conductivity by an in situ expansion melt blending process. Materials & Design, 2013, 52, 621-629.	5.1	51
50	Highly efficient removal of p-arsanilic acid with Fe(II)/peroxydisulfate under near-neutral conditions. Water Research, 2020, 177, 115752.	5.3	51
51	Tissue engineering scaffolds electrospun from cotton cellulose. Carbohydrate Polymers, 2015, 115, 485-493.	5.1	50
52	Acrylic acid grafted and acrylic acid/sodium humate grafted bamboo cellulose nanofibers for Cu²⁺adsorption. RSC Advances, 2014, 4, 55195-55201.	1.7	49
53	Mechanically robust, flame-retardant and anti-bacterial nanocomposite films comprised of cellulose nanofibrils and magnesium hydroxide nanoplatelets in a regenerated cellulose matrix. Cellulose, 2014, 21, 1859-1872.	2.4	49
54	Grafting of polyethylenimine onto cellulose nanofibers for interfacial enhancement in their epoxy nanocomposites. Carbohydrate Polymers, 2017, 157, 1419-1425.	5.1	49

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55	Ultra-lightweight and highly porous carbon aerogels from bamboo pulp fibers as an effective sorbent for water treatment. Results in Physics, 2017, 7, 2919-2924.	2.0	46
56	A hemostatic sponge derived from skin secretion of Andrias davidianus and nanocellulose. Chemical Engineering Journal, 2021, 416, 129136.	6.6	46
57	Preparation of carboxylate-functionalized cellulose via solvent-free mechanochemistry and its characterization as a biosorbent for removal of Pb2+ from aqueous solution. Journal of Hazardous Materials, 2010, 181, 468-473.	6.5	44
58	Honeycomb-structured carbon aerogels from nanocellulose and skin secretion of Andrias davidianus for highly compressible binder-free supercapacitors. Carbohydrate Polymers, 2020, 245, 116554.	5.1	44
59	Effective dispersion and crosslinking in PVA/cellulose fiber biocomposites via solid-state mechanochemistry. International Journal of Biological Macromolecules, 2015, 72, 855-861.	3.6	39
60	Multifunctional La(OH)3@cellulose nanofibrous membranes for efficient oil/water separation and selective removal of dyes. Separation and Purification Technology, 2021, 254, 117603.	3.9	39
61	One-Step Fabrication of Fe(OH)₃@Cellulose Hollow Nanofibers with Superior Capability for Water Purification. ACS Applied Materials & Interfaces, 2017, 9, 25339-25349.	4.0	38
62	Solvent-free synthesis of carboxylate-functionalized cellulose from waste cotton fabrics for the removal of cationic dyes from aqueous solutions. Cellulose, 2014, 21, 473-484.	2.4	36
63	Biodegradation of nanocrystalline cellulose by two environmentally-relevant consortia.. Water Research, 2016, 104, 137-146.	5.3	36
64	Highly transparent 100% cellulose nanofibril films with extremely high oxygen barriers in high relative humidity. Cellulose, 2018, 25, 4057-4066.	2.4	36
65	Degradation and Characterisation of Electrospun Polycaprolactone (PCL) and Poly(lactic-co-glycolic) Tj ETQq1 1 0.784314 rgBT /Over	1.3	32
66	Gel-spun fibers from magnesium hydroxide nanoparticles and UHMWPE nanocomposite: The physical and flammability properties. Composites Part B: Engineering, 2013, 51, 276-281.	5.9	30
67	A new application of ionic liquids for heterogeneously catalyzed acetylation of cellulose under solvent-free conditions. RSC Advances, 2013, 3, 7722.	1.7	27
68	One-step synthesis of manganese dioxide/polystyrene nanocomposite foams via high internal phase emulsion and study of their catalytic activity. Colloid and Polymer Science, 2010, 288, 1031-1039.	1.0	24
69	Ti3C2Tx MXene as a novel functional photo blocker for stereolithographic 3D printing of multifunctional gels via Continuous Liquid Interface Production. Composites Part B: Engineering, 2021, 225, 109261.	5.9	24
70	Z-Schemed WO3/rGO/SnIn4S8 Sandwich Nanohybrids for Efficient Visible Light Photocatalytic Water Purification. Catalysts, 2019, 9, 187.	1.6	23
71	Exfoliation/dispersion of low-temperature expandable graphite in nanocellulose matrix by wet co-milling. Carbohydrate Polymers, 2017, 157, 1434-1441.	5.1	22
72	Flexible and Conductive Carbonized Cotton Fabrics Coupled with a Nanostructured Ni(OH)₂ Coating for High Performance Aqueous Symmetric Supercapacitors. ACS Sustainable Chemistry and Engineering, 2019, 7, 5231-5239.	3.2	22

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73	High-value utilization of biomass waste: from garbage floating on the ocean to high-performance rechargeable Znâ€“MnO₂ batteries with superior safety. Journal of Materials Chemistry A, 2020, 8, 18198-18206.	5.2	22
74	Cellulose hydrogels prepared from micron-sized bamboo cellulose fibers. Carbohydrate Polymers, 2014, 114, 166-169.	5.1	20
75	A TiO2 Coated Carbon Aerogel Derived from Bamboo Pulp Fibers for Enhanced Visible Light Photo-Catalytic Degradation of Methylene Blue. Nanomaterials, 2021, 11, 239.	1.9	20
76	Effect of solid-state shear milling on the physicochemical properties of thermally conductive low-temperature expandable graphite/low-density polyethylene composites. Composites Part A: Applied Science and Manufacturing, 2013, 55, 27-34.	3.8	19
77	Mechanochemically activated wasteâ€derived cellulose as a novel functional additive to enhance melt processability and mechanical properties of poly(vinyl alcohol). Journal of Vinyl and Additive Technology, 2014, 20, 177-184.	1.8	19
78	Nacre-mimetic elastomer composites with synergistic alignments of boron nitride/graphene oxide towards high through-plane thermal conductivity. Composites Part A: Applied Science and Manufacturing, 2022, 156, 106891.	3.8	19
79	Application of Hydrogels in Cartilage Tissue Engineering. Current Stem Cell Research and Therapy, 2018, 13, 497-516.	0.6	16
80	Synthesis of photocurable cellulose acetate butyrate resin for continuous liquid interface production of three-dimensional objects with excellent mechanical and chemical-resistant properties. Carbohydrate Polymers, 2019, 207, 609-618.	5.1	16
81	3D printing of robust and biocompatible poly(ethylene glycol)diacrylate/nano-hydroxyapatite composites via continuous liquid interface production. Journal of Materials Chemistry B, 2021, 9, 1315-1324.	2.9	16
82	Microstructure and properties of solvent-resistant fluorine-contained thermoplastic vulcanizates prepared through dynamic vulcanization. Materials & Design, 2013, 51, 658-664.	5.1	15
83	Preparation, characterization and thermal behavior of poly(vinyl alcohol)/organic montmorillonite nanocomposites through solid-state shear pan-milling. Journal of Thermal Analysis and Calorimetry, 2011, 103, 205-212.	2.0	13
84	Thermoplastic polyurethane composites prepared from mechanochemically activated waste cotton fabric and reclaimed polyurethane foam. Journal of Applied Polymer Science, 2013, 128, 3555-3563.	1.3	13
85	Fabrication and characterization of MnO2-Coated carbon fabrics from silk for shape-editable supercapacitors. Journal of Alloys and Compounds, 2021, 854, 157289.	2.8	12
86	Preparation and regeneration of iron-modified nanofibres for low-concentration phosphorus-containing wastewater treatment. Royal Society Open Science, 2019, 6, 190764.	1.1	11
87	Water repellent Ag/Ag2O@bamboo cellulose fiber membrane as bioinspired cargo carriers. Carbohydrate Polymers, 2015, 133, 493-496.	5.1	10
88	Flexible, all-solid-state supercapacitors derived from waste polyurethane foams. Chemical Engineering Journal, 2022, 431, 133228.	6.6	10
89	Characterization and Properties of Electroless Nickel Plated Poly (ethylene terephthalate) Nonwoven Fabric Enhanced by Dielectric Barrier Discharge Plasma Pretreatment. Plasma Science and Technology, 2010, 12, 715-722.	0.7	9
90	Morphology, Foaming Rheology and Physical Properties of Ethylene-Propylene Diene Rubber/Ground Tyre Rubber (GTR) Composite Foams: Effect of Mechanochemical Devulcanisation of GTR. Progress in Rubber, Plastics and Recycling Technology, 2013, 29, 81-98.	0.8	9

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91	Fabrication and Characterization of PCL/PLGA Coaxial and Bilayer Fibrous Scaffolds for Tissue Engineering. Materials, 2021, 14, 6295.	1.3	9
92	Iron-Loaded Carbon Aerogels Derived from Bamboo Cellulose Fibers as Efficient Adsorbents for Cr(VI) Removal. Polymers, 2021, 13, 4338.	2.0	9
93	One-pot superhydrophilic surface modification of waste polyurethane foams for high-efficiency oil/water separation. Journal of Environmental Management, 2022, 315, 115140.	3.8	9
94	Facile synthesis of 3D hierarchical micro-/nanostructures in capillaries for efficient capture of circulating tumor cells. Journal of Colloid and Interface Science, 2020, 575, 108-118.	5.0	7
95	Scarf patch repair of honeycomb sandwich composites and its simulation optimisation. Plastics, Rubber and Composites, 2021, 50, 307-314.	0.9	7
96	Preparation, characterization, and properties of polyethylene composites highly filled with calcium carbonate through coâ€rotating conical twinâ€screw extrusion. Journal of Vinyl and Additive Technology, 2014, 20, 108-115.	1.8	5
97	A highly porous fiber electrode derived from Juncus effusus and its shape recovery and electrochemical capacitive properties. Materials Today Energy, 2020, 17, 100430.	2.5	5
98	From Thermosetting to Thermoplastic: A Novel One-Pot Approach to Recycle Polyurethane Wastes via Reactive Compounding with Diethanolamine. Progress in Rubber, Plastics and Recycling Technology, 2014, 30, 221-236.	0.8	4
99	Polyethylenimine-Functionalized Nanofiber Nonwovens Electrospun from Cotton Cellulose for Wound Dressing with High Drug Loading and Sustained Release Properties. Polymers, 2022, 14, 1748.	2.0	4
100	Recycling and processing of several typical crosslinked polymer scraps with enhanced mechanical properties based on solid-state mechanochemical milling. AIP Conference Proceedings, 2015, , .	0.3	3
101	Weavable and wearable strip-shaped supercapacitors from bamboo cellulose nanofibers. Industrial Crops and Products, 2022, 186, 115174.	2.5	2
102	Preparation and Properties of Chemical Resistant Conductive Composites with Restrained Negative Temperature Coefficient Behaviour Based on Mechanochemically Devulcanised Waste Fluoroelastomers. Progress in Rubber, Plastics and Recycling Technology, 2014, 30, 19-36.	0.8	0
103	Scaffolds for reconstruction of the diaphragm. , 2019, , 449-474.		0
104	Scaffolds for blood vessel tissue engineering. , 2019, , 659-684.		0