Wei Zhang

List of Publications by Citations

101 papers	5,325 citations	43 h-index	72 g-index
104 ext. papers	6,213 ext. citations	8.8 avg, IF	5.95 L-index

#	Paper	IF	Citations
101	High-Performance Fiber-Shaped All-Solid-State Asymmetric Supercapacitors Based on Ultrathin MnO2 Nanosheet/Carbon Fiber Cathodes for Wearable Electronics. *Advanced Energy Materials*, **2016**, 6, 1501458	21.8	362
100	Ni@Pd core–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	21.8	326
99	A Highly Stretchable Fiber-Based Triboelectric Nanogenerator for Self-Powered Wearable Electronics. *Advanced Functional Materials*, **2017**, 27, 1604378	15.6	230
98	High efficiency dye-sensitized solar cells based on three-dimensional multilayered ZnO nanowire arrays with "caterpillar-like" structure. *Nano Letters*, **2012**, 12, 3656-62	11.5	193
97	Aerogels from crosslinked cellulose nano/micro-fibrils and their fast shape recovery property in water. *Journal of Materials Chemistry*, **2012**, 22, 11642		175
96	Uniaxially aligned electrospun all-cellulose nanocomposite nanofibers reinforced with cellulose nanocrystals: scaffold for tissue engineering. *Biomacromolecules*, **2014**, 15, 618-27	6.9	165
95	Polyethylenimine-grafted cellulose nanofibril aerogels as versatile vehicles for drug delivery. *ACS Applied Materials & Interfaces*, **2015**, 7, 2607-15	9.5	162
94	A novel reagentless approach for synthesizing cellulose nanocrystal-supported palladium nanoparticles with enhanced catalytic performance. *Journal of Materials Chemistry A*, **2013**, 1, 8645	13	151
93	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	5.7	146
92	A super biosorbent from dendrimer poly(amidoamine)-grafted cellulose nanofibril aerogels for effective removal of Cr(VI). *Journal of Materials Chemistry A*, **2015**, 3, 14703-14711	13	110
91	Melt-processed poly(vinyl alcohol) composites filled with microcrystalline cellulose from waste cotton fabrics. *Carbohydrate Polymers*, **2014**, 101, 642-9	10.3	109
90	An ultrathin paper-based self-powered system for portable electronics and wireless human-machine interaction. *Nano Energy*, **2017**, 39, 328-336	17.1	107
89	A Hierarchically Nanostructured Cellulose Fiber-Based Triboelectric Nanogenerator for Self-Powered Healthcare Products. *Advanced Functional Materials*, **2018**, 28, 1805540	15.6	104
88	Solid-state flexible polyaniline/silver cellulose nanofibrils aerogel supercapacitors. *Journal of Power Sources*, **2014**, 246, 283-289	8.9	103
87	Fabrication and characterization of electrospun cellulose/nano-hydroxyapatite nanofibers for bone tissue engineering. *International Journal of Biological Macromolecules*, **2017**, 97, 568-573	7.9	102
86	Reusable, salt-tolerant and superhydrophilic cellulose hydrogel-coated mesh for efficient gravity-driven oil/water separation. *Chemical Engineering Journal*, **2018**, 338, 271-277	14.7	97
85	In situ synthesis of MnO2 coated cellulose nanofibers hybrid for effective removal of methylene blue. *Carbohydrate Polymers*, **2014**, 110, 302-8	10.3	96

84	Facile synthesis of tunable silver nanostructures for antibacterial application using cellulose nanocrystals. *Carbohydrate Polymers*, **2013**, 95, 214-9	10.3	94
83	Extraction of cellulose nanofibrils from dry softwood pulp using high shear homogenization. *Carbohydrate Polymers*, **2013**, 97, 695-702	10.3	90
82	Mechanochemical activation of cellulose and its thermoplastic polyvinyl alcohol ecocomposites with enhanced physicochemical properties. *Carbohydrate Polymers*, **2011**, 83, 257-263	10.3	87
81	Morphological and structural development of hardwood cellulose during mechanochemical pretreatment in solid state through pan-milling. *Cellulose*, **2007**, 14, 447-456	5.5	83
80	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	8.6	77
79	Mechanically robust and highly compressible electrochemical supercapacitors from nitrogen-doped carbon aerogels. *Carbon*, **2018**, 127, 236-244	10.4	75
78	Continuous and scalable manufacture of amphibious energy yarns and textiles. *Nature Communications*, **2019**, 10, 868	17.4	75
77	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	14.7	73
76	Self-Adjusting, Polymeric Multilayered Roll that can Keep the Shapes of the Blood Vessel Scaffolds during Biodegradation. *Advanced Materials*, **2017**, 29, 1700171	24	72
75	Aerogels from quaternary ammonium-functionalized cellulose nanofibers for rapid removal of Cr(VI) from water. *Carbohydrate Polymers*, **2014**, 111, 683-7	10.3	72
74	Superhydrophilic graphene oxide@electrospun cellulose nanofiber hybrid membrane for high-efficiency oil/water separation. *Carbohydrate Polymers*, **2017**, 175, 216-222	10.3	66
73	Reinforcement of all-cellulose nanocomposite films using native cellulose nanofibrils. *Carbohydrate Polymers*, **2014**, 104, 143-50	10.3	64
72	Acetone-soluble cellulose acetate extracted from waste blended fabrics via ionic liquid catalyzed acetylation. *Carbohydrate Polymers*, **2013**, 98, 405-11	10.3	63
71	Solid-state, flexible, high strength paper-based supercapacitors. *Journal of Materials Chemistry A*, **2013**, 1, 5835	13	62
70	Synthesis of a ferric hydroxide-coated cellulose nanofiber hybrid for effective removal of phosphate from wastewater. *Carbohydrate Polymers*, **2016**, 154, 40-7	10.3	61
69	Aligned electrospun cellulose scaffolds coated with rhBMP-2 for both in vitro and in vivo bone tissue engineering. *Carbohydrate Polymers*, **2019**, 213, 27-38	10.3	60
68	High performance poly (vinyl alcohol)/cellulose nanocrystals nanocomposites manufactured by injection molding. *Cellulose*, **2014**, 21, 485-494	5.5	56
67	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	8.4	53

66	One-pot liquid-phase exfoliation from graphite to graphene with carbon quantum dots. *Nanoscale*, **2015**, 7, 10527-34	7.7	52
65	Flexible and Transparent Paper-Based Ionic Diode Fabricated from Oppositely Charged Microfibrillated Cellulose. *Journal of Physical Chemistry C*, **2012**, 116, 9227-9234	3.8	52
64	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	8.3	51
63	In-situ growth of polypyrrole onto bamboo cellulose-derived compressible carbon aerogels for high performance supercapacitors. *Electrochimica Acta*, **2019**, 301, 55-62	6.7	50
62	Mechanically Strong and Thermally Responsive Cellulose Nanofibers/Poly(N-isopropylacrylamide) Composite Aerogels. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 4321-4327	8.3	48
61	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		45
60	3D printed robust superhydrophilic and underwater superoleophobic composite membrane for high efficient oil/water separation. *Separation and Purification Technology*, **2020**, 237, 116324	8.3	45
59	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, 468-73	12.8	44
58	Tissue engineering scaffolds electrospun from cotton cellulose. *Carbohydrate Polymers*, **2015**, 115, 485-93	10.3	43
57	Flexible, highly transparent and iridescent all-cellulose hybrid nanopaper with enhanced mechanical strength and writable surface. *Carbohydrate Polymers*, **2014**, 113, 264-71	10.3	42
56	Grafting of polyethylenimine onto cellulose nanofibers for interfacial enhancement in their epoxy nanocomposites. *Carbohydrate Polymers*, **2017**, 157, 1419-1425	10.3	40
55	Hollow polypyrrole/cellulose hydrogels for high-performance flexible supercapacitors. *Energy Storage Materials*, **2020**, 31, 135-145	19.4	39
54	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	5.5	38
53	Acrylic acid grafted and acrylic acid/sodium humate grafted bamboo cellulose nanofibers for Cu2+ adsorption. *RSC Advances*, **2014**, 4, 55195-55201	3.7	37
52	Biodegradable all-cellulose composite membranes for simultaneous oil/water separation and dye removal from water. *Carbohydrate Polymers*, **2020**, 250, 116872	10.3	36
51	Continuous liquid interface production of alginate/polyacrylamide hydrogels with supramolecular shape memory properties. *Carbohydrate Polymers*, **2020**, 231, 115736	10.3	32
50	Effective dispersion and crosslinking in PVA/cellulose fiber biocomposites via solid-state mechanochemistry. *International Journal of Biological Macromolecules*, **2015**, 72, 855-61	7.9	31
49	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	3.7	31

48	One-Step Fabrication of Fe(OH)@Cellulose Hollow Nanofibers with Superior Capability for Water Purification. *ACS Applied Materials & Interfaces*, **2017**, 9, 25339-25349	9.5	29
47	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	5.5	28
46	Gel-spun fibers from magnesium hydroxide nanoparticles and UHMWPE nanocomposite: The physical and flammability properties. *Composites Part B: Engineering*, **2013**, 51, 276-281	10	26
45	Mass production of high thermal conductive boron nitride/nanofibrillated cellulose composite membranes. *Chemical Engineering Journal*, **2020**, 383, 123101	14.7	26
44	A new application of ionic liquids for heterogeneously catalyzed acetylation of cellulose under solvent-free conditions. *RSC Advances*, **2013**, 3, 7722	3.7	25
43	Highly efficient removal of p-arsanilic acid with Fe(II)/peroxydisulfate under near-neutral conditions. *Water Research*, **2020**, 177, 115752	12.5	24
42	Highly transparent 100% cellulose nanofibril films with extremely high oxygen barriers in high relative humidity. *Cellulose*, **2018**, 25, 4057-4066	5.5	23
41	Biodegradation of nanocrystalline cellulose by two environmentally-relevant consortia. *Water Research*, **2016**, 104, 137-146	12.5	21
40	Honeycomb-structured carbon aerogels from nanocellulose and skin secretion of Andrias davidianus for highly compressible binder-free supercapacitors. *Carbohydrate Polymers*, **2020**, 245, 116554	10.3	20
39	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	2.4	20
38	Multifunctional La(OH)3@cellulose nanofibrous membranes for efficient oil/water separation and selective removal of dyes. *Separation and Purification Technology*, **2021**, 254, 117603	8.3	19
37	Cellulose hydrogels prepared from micron-sized bamboo cellulose fibers. *Carbohydrate Polymers*, **2014**, 114, 166-169	10.3	18
36	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	8.3	17
35	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	8.4	17
34	Mechanochemically activated waste-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	2	17
33	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	8.3	16
32	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	10	15
31	Z-Schemed WO3/rGO/SnIn4S8 Sandwich Nanohybrids for Efficient Visible Light Photocatalytic Water Purification. *Catalysts*, **2019**, 9, 187	4	14

30	Exfoliation/dispersion of low-temperature expandable graphite in nanocellulose matrix by wet co-milling. *Carbohydrate Polymers*, **2017**, 157, 1434-1441	10.3	13
29	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	4.1	13
28	High-value utilization of biomass waste: from garbage floating on the ocean to high-performance rechargeable Zn-MnO2 batteries with superior safety. *Journal of Materials Chemistry A*, **2020**, 8, 18198-18206	13	13
27	A hemostatic sponge derived from skin secretion of Andrias davidianus and nanocellulose. *Chemical Engineering Journal*, **2021**, 416, 129136	14.7	12
26	Thermoplastic polyurethane composites prepared from mechanochemically activated waste cotton fabric and reclaimed polyurethane foam. *Journal of Applied Polymer Science*, **2013**, 128, 3555-3563	2.9	11
25	Microstructure and properties of solvent-resistant fluorine-contained thermoplastic vulcanizates prepared through dynamic vulcanization. *Materials & Design*, **2013**, 51, 658-664		10
24	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	10.3	10
23	Water repellent Ag/Ag2O@bamboo cellulose fiber membrane as bioinspired cargo carriers. *Carbohydrate Polymers*, **2015**, 133, 493-6	10.3	9
22	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	1.5	9
21	Application of Hydrogels in Cartilage Tissue Engineering. *Current Stem Cell Research and Therapy*, **2018**, 13, 497-516	3.6	9
20	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	1.7	8
19	Degradation and Characterisation of Electrospun Polycaprolactone (PCL) and Poly(lactic-co-glycolic acid) (PLGA) Scaffolds for Vascular Tissue Engineering. *Materials*, **2021**, 14,	3.5	8
18	3D printing of robust and biocompatible poly(ethylene glycol)diacrylate/nano-hydroxyapatite composites continuous liquid interface production. *Journal of Materials Chemistry B*, **2021**, 9, 1315-1324	7.3	6
17	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	10	6
16	Preparation and regeneration of iron-modified nanofibres for low-concentration phosphorus-containing wastewater treatment. *Royal Society Open Science*, **2019**, 6, 190764	3.3	5
15	Fabrication and characterization of MnO2-Coated carbon fabrics from silk for shape-editable supercapacitors. *Journal of Alloys and Compounds*, **2021**, 854, 157289	5.7	5
14	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	9.3	4
13	Preparation, characterization, and properties of polyethylene composites highly filled with calcium carbonate through co-rotating conical twin-screw extrusion. *Journal of Vinyl and Additive Technology*, **2014**, 20, 108-115	2	4

12	A TiO Coated Carbon Aerogel Derived from Bamboo Pulp Fibers for Enhanced Visible Light Photo-Catalytic Degradation of Methylene Blue. *Nanomaterials*, **2021**, 11,	5.4	4
11	A highly porous fiber electrode derived from Juncus effusus and its shape recovery and electrochemical capacitive properties. *Materials Today Energy*, **2020**, 17, 100430	7	3
10	Fabrication and Characterization of PCL/PLGA Coaxial and Bilayer Fibrous Scaffolds for Tissue Engineering. *Materials*, **2021**, 14,	3.5	3
9	Recycling and processing of several typical crosslinked polymer scraps with enhanced mechanical properties based on solid-state mechanochemical milling **2015**,		2
8	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	1.7	2
7	Flexible, all-solid-state supercapacitors derived from waste polyurethane foams. *Chemical Engineering Journal*, **2021**, 133228	14.7	2
6	Scarf patch repair of honeycomb sandwich composites and its simulation optimisation. *Plastics, Rubber and Composites*, **2021**, 50, 307-314	1.5	1
5	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	8.4	0
4	One-pot superhydrophilic surface modification of waste polyurethane foams for high-efficiency oil/water separation.. *Journal of Environmental Management*, **2022**, 315, 115140	7.9	0
3	Scaffolds for reconstruction of the diaphragm **2019**, 449-474		
2	Scaffolds for blood vessel tissue engineering **2019**, 659-684		
1	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	1.7	