

# Zhiguo Wang

## 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.

66

papers

1,248

citations

21

h-index

32

g-index

72

ext. papers

1,702

ext. citations

5.9

avg, IF

5.04

L-index

#	Paper	IF	Citations
66	All-weather Ag <sub>2</sub> ZnO/cellulose photocatalysts tailored by surface groups and aspect ratios of cellulose nanofibers. <i>Cellulose</i> , <b>2022</b> , 29, 2289	5.5	0
65	A honeycomb-like hydrogel in-situ constructed by Streptococcus zooepidemicus and TOCN for the proliferation of bacteria.. <i>Carbohydrate Polymers</i> , <b>2022</b> , 281, 119099	10.3	0
64	Lignocellulose nanofiber/poly(lactic acid) (LCNF/PLA) composite with internal lignin for enhanced performance as 3D printable filament. <i>Industrial Crops and Products</i> , <b>2022</b> , 178, 114590	5.9	2
63	Facile fabrication of multiscale ZnO/cellulose composite membrane towards enhancing photocatalytic and mechanical properties. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2022</b> , 636, 128156	5.1	0
62	Strong water-resistant, UV-blocking cellulose/glucomannan/lignin composite films inspired by natural LCC bonds.. <i>Carbohydrate Polymers</i> , <b>2022</b> , 281, 119083	10.3	1
61	Porous cellulose gel-regulated flower-like ZnO-Cu nanoparticles for enhancing interfacial catalysis activity and recyclability in environmental catalysis. <i>Applied Surface Science</i> , <b>2022</b> , 597, 153737	6.7	0
60	Botryoidal nanolignin channel stabilized ultrasmall PdNP incorporating with filter membrane for enhanced removal of Cr(VI) via synergetic filtration and catalysis. <i>Separation and Purification Technology</i> , <b>2022</b> , 121409	8.3	1
59	Cellulose controlled zinc oxide nanoparticles with adjustable morphology and their photocatalytic performances. <i>Carbohydrate Polymers</i> , <b>2021</b> , 259, 117752	10.3	10
58	Biomass-derived paper-based nanolignin/palladium nanoparticle composite film for catalytic reduction of hexavalent chromium. <i>Industrial Crops and Products</i> , <b>2021</b> , 165, 113439	5.9	5
57	Esterification of cellulose using carboxylic acid-based deep eutectic solvents to produce high-yield cellulose nanofibers. <i>Carbohydrate Polymers</i> , <b>2021</b> , 251, 117018	10.3	22
56	Construction of Ag <sub>2</sub> ZnO/cellulose nanocomposites via tunable cellulose size for improving photocatalytic performance. <i>Journal of Cleaner Production</i> , <b>2021</b> , 288, 125089	10.3	17
55	Contribution of lignin in esterified lignocellulose nanofibers (LCNFs) prepared by deep eutectic solvent treatment to the interface compatibility of LCNF/PLA composites. <i>Industrial Crops and Products</i> , <b>2021</b> , 166, 113460	5.9	7
54	Direct fractionation of wood chips by deep eutectic solvent facilitated pulping technology and application for enzyme hydrolysis. <i>Industrial Crops and Products</i> , <b>2021</b> , 171, 113927	5.9	0
53	Facile preparation of nanochitins via acid assisted colloid milling in glycerol. <i>Cellulose</i> , <b>2020</b> , 27, 6935-6944	5.5	3
52	Preparation of Silk Nanowhisiker-Composited Amphoteric Cellulose/Chitin Nanofiber Membranes. <i>Biomacromolecules</i> , <b>2020</b> , 21, 1625-1635	6.9	13
51	Preparation of Natural Multicompatible Silk Nanofibers by Green Deep Eutectic Solvent Treatment. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 4499-4510	8.3	11
50	3D porous chitin sponge with high absorbency, rapid shape recovery, and excellent antibacterial activities for noncompressible wound. <i>Chemical Engineering Journal</i> , <b>2020</b> , 388, 124169	14.7	54

49	Effect of lignin on the performance of biodegradable cellulose aerogels made from wheat straw pulp-LiCl/DMSO solution. <i>Cellulose</i> , <b>2020</b> , 27, 879-894	5.5	10
48	Macro-/nanoporous Al-doped ZnO/cellulose composites based on tunable cellulose fiber sizes for enhancing photocatalytic properties. <i>Carbohydrate Polymers</i> , <b>2020</b> , 250, 116873	10.3	23
47	Lignin-Directed Control of Silver Nanoparticles with Tunable Size in Porous Lignocellulose Hydrogels and Their Application in Catalytic Reduction. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 12655-12663	8.3	29
46	Ampholytic Chitosan/Alginate Composite Nanofibrous Membranes with Super Anti-Crude Oil-Fouling Behavior and Multifunctional Oil/Water Separation Properties. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 15463-15470	8.3	22
45	Strengthened cellulosic gels by the chemical gelation of cellulose via crosslinking with TEOS. <i>Cellulose</i> , <b>2019</b> , 26, 9819-9829	5.5	8
44	High Axial Ratio Nanochitins for Ultrastrong and Shape-Recoverable Hydrogels and Cryogels via Ice Templating. <i>ACS Nano</i> , <b>2019</b> , 13, 2927-2935	16.7	41
43	DDA (degree of deacetylation) and pH-dependent antibacterial properties of chitin nanofibers against Escherichia coli. <i>Cellulose</i> , <b>2019</b> , 26, 2279-2290	5.5	11
42	Physical nanochitin/microemulsion composite hydrogels for hydrophobic Nile Red release under in vitro physiological conditions. <i>Cellulose</i> , <b>2019</b> , 26, 1221-1230	5.5	5
41	Contribution of hemicellulose to cellulose nanofiber-based nanocomposite films with enhanced strength, flexibility and UV-blocking properties. <i>Cellulose</i> , <b>2019</b> , 26, 6023-6034	5.5	29
40	High-purity lignin isolated from poplar wood meal through dissolving treatment with deep eutectic solvents. <i>Royal Society Open Science</i> , <b>2019</b> , 6, 181757	3.3	43
39	Characterization of lignocellulose aerogels fabricated using a LiCl/DMSO solution. <i>Industrial Crops and Products</i> , <b>2019</b> , 131, 293-300	5.9	11
38	One-step recovery of noble metal ions from oil/water emulsions by chitin nanofibrous membrane for further recycling utilization. <i>Carbohydrate Polymers</i> , <b>2019</b> , 223, 115064	10.3	10
37	Investigation of Pretreatment Methods for Improving TEMPO-Mediated Oxidation and Nanofibrillation Efficiency of $\beta$ -Chitin. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 19463-19473	8.3	14
36	High-yield preparation of cellulose nanofiber by small quantity acid assisted milling in glycerol. <i>Cellulose</i> , <b>2019</b> , 26, 3735-3745	5.5	12
35	Fabrication of thermo-sensitive lignocellulose hydrogels with switchable hydrophilicity and hydrophobicity through an SIPN strategy.. <i>RSC Advances</i> , <b>2019</b> , 9, 29600-29608	3.7	1
34	Preparation of High-Strength Sustainable Lignocellulose Gels and Their Applications for Antiultraviolet Weathering and Dye Removal. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 2998-3009	8.3	41
33	Shrimp Shell-Inspired Antifouling Chitin Nanofibrous Membrane for Efficient Oil/Water Emulsion Separation with In Situ Removal of Heavy Metal Ions. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 2064-2072	8.3	46
32	Preparation of nanocellulose/filter paper (NC/FP) composite membranes for high-performance filtration. <i>Cellulose</i> , <b>2019</b> , 26, 1183-1194	5.5	24

31	Contribution of lignin to the microstructure and physical performance of three-dimensional lignocellulose hydrogels. <i>Cellulose</i> , <b>2019</b> , 26, 2375-2388	5.5	24
30	Adsorption of Reactive Blue 19 from aqueous solution by chitin nanofiber-/nanowhisker-based hydrogels.. <i>RSC Advances</i> , <b>2018</b> , 8, 15804-15812	3.7	26
29	Salt-Induced Colloidal Destabilization, Separation, Drying, and Redispersion in Aqueous Phase of Cationic and Anionic Nanochitins. <i>Journal of Agricultural and Food Chemistry</i> , <b>2018</b> , 66, 9189-9198	5.7	13
28	Synthesis of lignocellulose-based composite hydrogel as a novel biosorbent for Cu <sup>2+</sup> removal. <i>Cellulose</i> , <b>2018</b> , 25, 7315-7328	5.5	26
27	Preparation and Hydrogel Properties of pH-Sensitive Amphoteric Chitin Nanocrystals. <i>Journal of Agricultural and Food Chemistry</i> , <b>2018</b> , 66, 11372-11379	5.7	19
26	A Facile Approach for the Preparation of Nano-size Zinc Oxide in Water/Glycerol with Extremely Concentrated Zinc Sources. <i>Nanoscale Research Letters</i> , <b>2018</b> , 13, 202	5	14
25	Cellulose Nanofibers Prepared Using the TEMPO/Laccase/O System. <i>Biomacromolecules</i> , <b>2017</b> , 18, 288-294	5.5	58
24	Versatile protonic acid mediated preparation of partially deacetylated chitin nanofibers/nanowhiskers and their assembling of nano-structured hydro- and aero-gels. <i>Cellulose</i> , <b>2017</b> , 24, 5443-5454	5.5	8
23	Dissolution of Lignocelluloses with a High Lignin Content in a N-Methylmorpholine-N-oxide Monohydrate Solvent System via Simple Glycerol-Swelling and Mechanical Pretreatments. <i>Journal of Agricultural and Food Chemistry</i> , <b>2017</b> , 65, 9587-9594	5.7	30
22	Preparation of 3D printable micro/nanocellulose-poly(lactic acid) (MNC/PLA) composite wire rods with high MNC constitution. <i>Industrial Crops and Products</i> , <b>2017</b> , 109, 889-896	5.9	46
21	Cellulose laurate ester aerogel as a novel absorbing material for removing pollutants from organic wastewater. <i>Cellulose</i> , <b>2017</b> , 24, 5069-5078	5.5	8
20	Hemicellulose Composition in Different Cell Wall Fractions Obtained using a DMSO/LiCl Wood Solvent System and Enzyme Hydrolysis. <i>Journal of Wood Chemistry and Technology</i> , <b>2016</b> , 36, 56-62	2	6
19	The utilization of soybean straw III: Isolation and characterization of lignin from soybean straw. <i>Biomass and Bioenergy</i> , <b>2016</b> , 94, 12-20	5.3	15
18	Preparation of ZnO/cellulose nanocomposites by different cellulose solution systems with a colloid mill. <i>Cellulose</i> , <b>2016</b> , 23, 3703-3715	5.5	16
17	Analysis of Lignin Aromatic Structure in Wood Fractions Based on IR Spectroscopy. <i>Journal of Wood Chemistry and Technology</i> , <b>2016</b> , 36, 377-382	2	6
16	Preparation of Zinc Oxide-Starch Nanocomposite and Its Application on Coating. <i>Nanoscale Research Letters</i> , <b>2016</b> , 11, 200	5	47
15	Robust Self-Standing Chitin Nanofiber/Nanowhisker Hydrogels with Designed Surface Charges and Ultralow Mass Content via Gas Phase Coagulation. <i>Biomacromolecules</i> , <b>2016</b> , 17, 3773-3781	6.9	72
14	Preparation of antibacterial self-reinforced zinc oxide/cellulose composite by the synthesis of ZnO in partially dissolved cellulose. <i>Cellulose</i> , <b>2016</b> , 23, 3199-3208	5.5	12

13	Effect of complete dissolution in LiCl/DMSO on the isolation and characteristics of lignin from wheat straw internode. <i>Industrial Crops and Products</i> , <b>2015</b> , 74, 703-711	5.9	16
12	Reinforced chitosan beads by chitin nanofibers for the immobilization of <i>E</i> glucosidase. <i>RSC Advances</i> , <b>2015</b> , 5, 93331-93336	3.7	19
11	The Utilization of Soybean Straw. I. Fiber Morphology and Chemical Characteristics. <i>BioResources</i> , <b>2015</b> , 10,	1.3	5
10	Self-Reinforced Grease-Resistant Sheets Produced by Paper Treatment with Zinc Chloride Solution. <i>BioResources</i> , <b>2015</b> , 10,	1.3	9
9	The Utilization of Soybean Straw. II. Dissolution & Regeneration of Soybean Straw in LiCl/DMSO. <i>BioResources</i> , <b>2015</b> , 10, 2305-2317	1.3	6
8	Cellulose Esterification with Octanoyl Chloride and its Application to Films and Aerogels. <i>BioResources</i> , <b>2014</b> , 9,	1.3	3
7	Isolation of Cellulolytic Enzyme Lignin from Rice Straw Enhanced by LiCl/DMSO Dissolution and Regeneration. <i>BioResources</i> , <b>2014</b> , 9,	1.3	2
6	Effects of LiCl/DMSO dissolution and enzymatic hydrolysis on the chemical composition and lignin structure of rice straw. <i>Biomass and Bioenergy</i> , <b>2014</b> , 71, 357-362	5.3	19
5	Fractionation and Characterization of Wood Cell Wall Components of <i>Fagus crenata</i> Blume Using LiCl/DMSO Solvent System. <i>Journal of Wood Chemistry and Technology</i> , <b>2013</b> , 33, 188-196	2	7
4	Cellulose gel and aerogel from LiCl/DMSO solution. <i>Cellulose</i> , <b>2012</b> , 19, 393-399	5.5	80
3	Dissolution of Ethylenediamine Pretreated Pulp with High Lignin Content in LiCl/DMSO without Milling. <i>Journal of Wood Chemistry and Technology</i> , <b>2010</b> , 30, 219-229	2	18
2	Dissolution of beech and spruce milled woods in LiCl/DMSO. <i>Journal of Agricultural and Food Chemistry</i> , <b>2009</b> , 57, 6167-70	5.7	87
1	Rapid dissolution of cellulose in an AlCl <sub>3</sub> /ZnCl <sub>2</sub> aqueous system at room temperature and its versatile adaptability in functional materials. <i>Green Chemistry</i> ,	10	3