

Zhiguo Wang

List of Publications by Citations

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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	Dissolution of beech and spruce milled woods in LiCl/DMSO. <i>Journal of Agricultural and Food Chemistry</i> , 2009 , 57, 6167-70	5.7	87
65	Cellulose gel and aerogel from LiCl/DMSO solution. <i>Cellulose</i> , 2012 , 19, 393-399	5.5	80
64	Robust Self-Standing Chitin Nanofiber/Nanowhisker Hydrogels with Designed Surface Charges and Ultralow Mass Content via Gas Phase Coagulation. <i>Biomacromolecules</i> , 2016 , 17, 3773-3781	6.9	72
63	Cellulose Nanofibers Prepared Using the TEMPO/Laccase/O System. <i>Biomacromolecules</i> , 2017 , 18, 288-294	5.8	58
62	3D porous chitin sponge with high absorbency, rapid shape recovery, and excellent antibacterial activities for noncompressible wound. <i>Chemical Engineering Journal</i> , 2020 , 388, 124169	14.7	54
61	Preparation of Zinc Oxide-Starch Nanocomposite and Its Application on Coating. <i>Nanoscale Research Letters</i> , 2016 , 11, 200	5	47
60	Preparation of 3D printable micro/nanocellulose-poly(lactic acid) (MNC/PLA) composite wire rods with high MNC constitution. <i>Industrial Crops and Products</i> , 2017 , 109, 889-896	5.9	46
59	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> , 2019 , 7, 2064-2072	8.3	46
58	High-purity lignin isolated from poplar wood meal through dissolving treatment with deep eutectic solvents. <i>Royal Society Open Science</i> , 2019 , 6, 181757	3.3	43
57	High Axial Ratio Nanochitins for Ultrastrong and Shape-Recoverable Hydrogels and Cryogels via Ice Templating. <i>ACS Nano</i> , 2019 , 13, 2927-2935	16.7	41
56	Preparation of High-Strength Sustainable Lignocellulose Gels and Their Applications for Antiultraviolet Weathering and Dye Removal. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 2998-3009	8.2	41
55	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> , 2017 , 65, 9587-9594	5.7	30
54	Contribution of hemicellulose to cellulose nanofiber-based nanocomposite films with enhanced strength, flexibility and UV-blocking properties. <i>Cellulose</i> , 2019 , 26, 6023-6034	5.5	29
53	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> , 2020 , 8, 12655-12663	8.3	29
52	Adsorption of Reactive Blue 19 from aqueous solution by chitin nanofiber-/nanowhisker-based hydrogels. <i>RSC Advances</i> , 2018 , 8, 15804-15812	3.7	26
51	Synthesis of lignocellulose-based composite hydrogel as a novel biosorbent for Cu ²⁺ removal. <i>Cellulose</i> , 2018 , 25, 7315-7328	5.5	26
50	Preparation of nanocellulose/filter paper (NC/FP) composite membranes for high-performance filtration. <i>Cellulose</i> , 2019 , 26, 1183-1194	5.5	24

49	Contribution of lignin to the microstructure and physical performance of three-dimensional lignocellulose hydrogels. <i>Cellulose</i> , 2019 , 26, 2375-2388	5.5	24
48	Macro-/nanoporous Al-doped ZnO/cellulose composites based on tunable cellulose fiber sizes for enhancing photocatalytic properties. <i>Carbohydrate Polymers</i> , 2020 , 250, 116873	10.3	23
47	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> , 2019 , 7, 15463-15470	8.3	22
46	Esterification of cellulose using carboxylic acid-based deep eutectic solvents to produce high-yield cellulose nanofibers. <i>Carbohydrate Polymers</i> , 2021 , 251, 117018	10.3	22
45	Reinforced chitosan beads by chitin nanofibers for the immobilization of β -glucosidase. <i>RSC Advances</i> , 2015 , 5, 93331-93336	3.7	19
44	Effects of LiCl/DMSO dissolution and enzymatic hydrolysis on the chemical composition and lignin structure of rice straw. <i>Biomass and Bioenergy</i> , 2014 , 71, 357-362	5.3	19
43	Preparation and Hydrogel Properties of pH-Sensitive Amphoteric Chitin Nanocrystals. <i>Journal of Agricultural and Food Chemistry</i> , 2018 , 66, 11372-11379	5.7	19
42	Dissolution of Ethylenediamine Pretreated Pulp with High Lignin Content in LiCl/DMSO without Milling. <i>Journal of Wood Chemistry and Technology</i> , 2010 , 30, 219-229	2	18
41	Construction of Ag/ZnO/cellulose nanocomposites via tunable cellulose size for improving photocatalytic performance. <i>Journal of Cleaner Production</i> , 2021 , 288, 125089	10.3	17
40	Effect of complete dissolution in LiCl/DMSO on the isolation and characteristics of lignin from wheat straw internode. <i>Industrial Crops and Products</i> , 2015 , 74, 703-711	5.9	16
39	Preparation of ZnO/cellulose nanocomposites by different cellulose solution systems with a colloid mill. <i>Cellulose</i> , 2016 , 23, 3703-3715	5.5	16
38	The utilization of soybean straw III: Isolation and characterization of lignin from soybean straw. <i>Biomass and Bioenergy</i> , 2016 , 94, 12-20	5.3	15
37	Investigation of Pretreatment Methods for Improving TEMPO-Mediated Oxidation and Nanofibrillation Efficiency of β -Chitin. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 19463-19473	8.3	14
36	A Facile Approach for the Preparation of Nano-size Zinc Oxide in Water/Glycerol with Extremely Concentrated Zinc Sources. <i>Nanoscale Research Letters</i> , 2018 , 13, 202	5	14
35	Preparation of Silk Nanowhisiker-Composited Amphoteric Cellulose/Chitin Nanofiber Membranes. <i>Biomacromolecules</i> , 2020 , 21, 1625-1635	6.9	13
34	Salt-Induced Colloidal Destabilization, Separation, Drying, and Redispersion in Aqueous Phase of Cationic and Anionic Nanochitins. <i>Journal of Agricultural and Food Chemistry</i> , 2018 , 66, 9189-9198	5.7	13
33	Preparation of antibacterial self-reinforced zinc oxide/cellulose composite by the synthesis of ZnO in partially dissolved cellulose. <i>Cellulose</i> , 2016 , 23, 3199-3208	5.5	12
32	High-yield preparation of cellulose nanofiber by small quantity acid assisted milling in glycerol. <i>Cellulose</i> , 2019 , 26, 3735-3745	5.5	12

31	DDA (degree of deacetylation) and pH-dependent antibacterial properties of chitin nanofibers against <i>Escherichia coli</i> . <i>Cellulose</i> , 2019 , 26, 2279-2290	5.5	11
30	Characterization of lignocellulose aerogels fabricated using a LiCl/DMSO solution. <i>Industrial Crops and Products</i> , 2019 , 131, 293-300	5.9	11
29	Preparation of Natural Multicompatible Silk Nanofibers by Green Deep Eutectic Solvent Treatment. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 4499-4510	8.3	11
28	One-step recovery of noble metal ions from oil/water emulsions by chitin nanofibrous membrane for further recycling utilization. <i>Carbohydrate Polymers</i> , 2019 , 223, 115064	10.3	10
27	Effect of lignin on the performance of biodegradable cellulose aerogels made from wheat straw pulp-LiCl/DMSO solution. <i>Cellulose</i> , 2020 , 27, 879-894	5.5	10
26	Cellulose controlled zinc oxide nanoparticles with adjustable morphology and their photocatalytic performances. <i>Carbohydrate Polymers</i> , 2021 , 259, 117752	10.3	10
25	Self-Reinforced Grease-Resistant Sheets Produced by Paper Treatment with Zinc Chloride Solution. <i>BioResources</i> , 2015 , 10,	1.3	9
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> , 2017 , 24, 5443-5454	5.5	8
23	Strengthened cellulosic gels by the chemical gelation of cellulose via crosslinking with TEOS. <i>Cellulose</i> , 2019 , 26, 9819-9829	5.5	8
22	Cellulose laurate ester aerogel as a novel absorbing material for removing pollutants from organic wastewater. <i>Cellulose</i> , 2017 , 24, 5069-5078	5.5	8
21	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> , 2013 , 33, 188-196	2	7
20	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> , 2021 , 166, 113460	5.9	7
19	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> , 2016 , 36, 56-62	2	6
18	The Utilization of Soybean Straw. II. Dissolution & Regeneration of Soybean Straw in LiCl/DMSO. <i>BioResources</i> , 2015 , 10, 2305-2317	1.3	6
17	Analysis of Lignin Aromatic Structure in Wood Fractions Based on IR Spectroscopy. <i>Journal of Wood Chemistry and Technology</i> , 2016 , 36, 377-382	2	6
16	Physical nanochitin/microemulsion composite hydrogels for hydrophobic Nile Red release under in vitro physiological conditions. <i>Cellulose</i> , 2019 , 26, 1221-1230	5.5	5
15	The Utilization of Soybean Straw. I. Fiber Morphology and Chemical Characteristics. <i>BioResources</i> , 2015 , 10,	1.3	5
14	Biomass-derived paper-based nanolignin/palladium nanoparticle composite film for catalytic reduction of hexavalent chromium. <i>Industrial Crops and Products</i> , 2021 , 165, 113439	5.9	5

13	Facile preparation of nanochitins via acid assisted colloid milling in glycerol. <i>Cellulose</i> , 2020 , 27, 6935-6945	3	3
12	Cellulose Esterification with Octanoyl Chloride and its Application to Films and Aerogels. <i>BioResources</i> , 2014 , 9,	1.3	3
11	Rapid dissolution of cellulose in an AlCl ₃ /ZnCl ₂ aqueous system at room temperature and its versatile adaptability in functional materials. <i>Green Chemistry</i> ,	10	3
10	Isolation of Cellulolytic Enzyme Lignin From Rice Straw Enhanced by LiCl/DMSO Dissolution and Regeneration. <i>BioResources</i> , 2014 , 9,	1.3	2
9	Lignocellulose nanofiber/poly(lactic acid) (LCNF/PLA) composite with internal lignin for enhanced performance as 3D printable filament. <i>Industrial Crops and Products</i> , 2022 , 178, 114590	5.9	2
8	Strong water-resistant, UV-blocking cellulose/glucomannan/lignin composite films inspired by natural LCC bonds.. <i>Carbohydrate Polymers</i> , 2022 , 281, 119083	10.3	1
7	Fabrication of thermo-sensitive lignocellulose hydrogels with switchable hydrophilicity and hydrophobicity through an SIPN strategy.. <i>RSC Advances</i> , 2019 , 9, 29600-29608	3.7	1
6	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> , 2022 , 121409	8.3	1
5	All-weather Ag ₂ ZnO/cellulose photocatalysts tailored by surface groups and aspect ratios of cellulose nanofibers. <i>Cellulose</i> , 2022 , 29, 2289	5.5	0
4	A honeycomb-like hydrogel in-situ constructed by Streptococcus zooepidemicus and TOCN for the proliferation of bacteria.. <i>Carbohydrate Polymers</i> , 2022 , 281, 119099	10.3	0
3	Facile fabrication of multiscale ZnO/cellulose composite membrane towards enhancing photocatalytic and mechanical properties. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022 , 636, 128156	5.1	0
2	Direct fractionation of wood chips by deep eutectic solvent facilitated pulping technology and application for enzyme hydrolysis. <i>Industrial Crops and Products</i> , 2021 , 171, 113927	5.9	0
1	Porous cellulose gel-regulated flower-like ZnO-Cu nanoparticles for enhancing interfacial catalysis activity and recyclability in environmental catalysis. <i>Applied Surface Science</i> , 2022 , 597, 153737	6.7	0