Jin-Ming Zhang

List of Publications by Year
in descending order

89 papers	4,372 citations	101384 36 h-index	114278 63 g-index
90 all docs	90 docs citations	90 times ranked	4647 citing authors

#	Article	IF	Citations
1	Application of ionic liquids for dissolving cellulose and fabricating cellulose-based materials: state of the art and future trends. Materials Chemistry Frontiers, 2017, 1, 1273-1290.	3.2	304
2	Amine-responsive cellulose-based ratiometric fluorescent materials for real-time and visual detection of shrimp and crab freshness. Nature Communications, 2019, 10, 795.	5.8	279
3	NMR spectroscopic studies of cellobiose solvation in EmimAc aimed to understand the dissolution mechanism of cellulose in ionic liquids. Physical Chemistry Chemical Physics, 2010, 12, 1941.	1.3	258
4	Phototunable Fullâ€Color Emission of Celluloseâ€Based Dynamic Fluorescent Materials. Advanced Functional Materials, 2018, 28, 1703548.	7.8	163
5	Processing and valorization of cellulose, lignin and lignocellulose using ionic liquids. Journal of Bioresources and Bioproducts, 2020, 5, 79-95.	11.8	159
6	Thermoplastic Cellulose-<i>graft</i>-poly(<scp>l</scp>-lactide) Copolymers Homogeneously Synthesized in an Ionic Liquid with 4-Dimethylaminopyridine Catalyst. Biomacromolecules, 2009, 10, 2013-2018.	2.6	145
7	Extraction and characterization of cellulose single fibers from native african napier grass. Carbohydrate Polymers, 2018, 188, 85-91.	5.1	137
8	Stable dispersions of reduced graphene oxide in ionic liquids. Journal of Materials Chemistry, 2010, 20, 5401.	6.7	115
9	Effect of Alkali Treatment on the Properties of Century Fiber. Journal of Natural Fibers, 2013, 10, 282-296.	1.7	113
10	Rheological properties of cellulose/ionic liquid/dimethylsulfoxide (DMSO) solutions. Polymer, 2012, 53, 2524-2531.	1.8	106
11	Cellulose Aerogel Membranes with a Tunable Nanoporous Network as a Matrix of Gel Polymer Electrolytes for Safer Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 24591-24599.	4.0	103
12	Cellulose-Based Sensor Containing Phenanthroline for the Highly Selective and Rapid Detection of Fe²⁺ Ions with Naked Eye and Fluorescent Dual Modes. ACS Applied Materials & Interfaces, 2018, 10, 2114-2121.	4.0	101
13	All-Cellulose Nanocomposites Reinforced with <i>in Situ</i> Retained Cellulose Nanocrystals during Selective Dissolution of Cellulose in an Ionic Liquid. ACS Sustainable Chemistry and Engineering, 2016, 4, 4417-4423.	3.2	87
14	Synthesis of cellulose benzoates under homogeneous conditions in an ionic liquid. Cellulose, 2009, 16, 299-308.	2.4	85
15	Preparation and properties of self-reinforced cellulose composite films from Agave microfibrils using an ionic liquid. Carbohydrate Polymers, 2014, 114, 537-545.	5.1	83
16	Celluloseâ€Based Solid Fluorescent Materials. Advanced Optical Materials, 2016, 4, 2044-2050.	3.6	81
17	Transparent Celluloseâ€"Silica Composite Aerogels with Excellent Flame Retardancy via an in Situ Solâ€"Gel Process. ACS Sustainable Chemistry and Engineering, 2017, 5, 11117-11123.	3.2	81
18	Novel Thermoplastic Cellulose Esters Containing Bulky Moieties and Soft Segments. ACS Sustainable Chemistry and Engineering, 2018, 6, 4931-4939.	3.2	79

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19	Cellulose-based films prepared directly from waste newspapers via an ionic liquid. Carbohydrate Polymers, 2016, 151, 223-229.	5.1	71
20	Preparation and Characterization of Polypropylene Carbonate Bio-Filler (Eggshell Powder) Composite Films. International Journal of Polymer Analysis and Characterization, 2014, 19, 637-647.	0.9	69
21	Preparation and characterization of regenerated cellulose films using borassus fruit fibers and an ionic liquid. Carbohydrate Polymers, 2017, 160, 203-211.	5.1	68
22	Ultralong phosphorescence cellulose with excellent anti-bacterial, water-resistant and ease-to-process performance. Nature Communications, 2022, 13, 1117.	5.8	66
23	Understanding cellulose dissolution: effect of the cation and anion structure of ionic liquids on the solubility of cellulose. Science China Chemistry, 2016, 59, 1421-1429.	4.2	62
24	Preparation and Properties of Biodegradable Spent Tea Leaf Powder/Poly(Propylene Carbonate) Composite Films. International Journal of Polymer Analysis and Characterization, 2015, 20, 377-387.	0.9	58
25	â€œOne potâ€•homogeneous synthesis of thermoplastic cellulose acetate-graft-poly(l-lactide) copolymers from unmodified cellulose. Cellulose, 2013, 20, 327-337.	2.4	55
26	All-cellulose composites based on the self-reinforced effect. Composites Communications, 2018, 9, 42-53.	3.3	51
27	Sunlightâ€Driven Wearable and Robust Antibacterial Coatings with Waterâ€Soluble Celluloseâ€Based Photosensitizers. Advanced Healthcare Materials, 2019, 8, e1801591.	3.9	50
28	Facile access to photo-switchable, dynamic-optical, multi-colored and solid-state materials from carbon dots and cellulose for photo-rewritable paper and advanced anti-counterfeiting. Chemical Engineering Journal, 2021, 406, 126794.	6.6	50
29	Direct visualization of solution morphology of cellulose in ionic liquids by conventional TEM at room temperature. Chemical Communications, 2012, 48, 6283.	2.2	48
30	A facile strategy to fabricate cellulose-based, flame-retardant, transparent and anti-dripping protective coatings. Chemical Engineering Journal, 2020, 379, 122270.	6.6	48
31	Transparent and flame retardant cellulose/aluminum hydroxide nanocomposite aerogels. Science China Chemistry, 2016, 59, 1335-1341.	4.2	45
32	Facile Access to Solid-State Carbon Dots with High Luminescence Efficiency and Excellent Formability via Cellulose Derivative Coatings. ACS Sustainable Chemistry and Engineering, 2020, 8, 5937-5945.	3.2	45
33	Colorimetric and fluorescent detection of glutathione over cysteine and homocysteine with red-emitting N-doped carbon dots. Sensors and Actuators B: Chemical, 2020, 321, 128506.	4.0	43
34	Cellulose-based fluorescent sensor for visual and versatile detection of amines and anions. Journal of Hazardous Materials, 2020, 387, 121719.	6.5	41
35	Highly efficient propionylation and butyralation of cellulose in an ionic liquid catalyzed by 4-dimethylminopyridine. Carbohydrate Polymers, 2013, 92, 307-311.	5.1	40
36	Homogeneous esterification of cellulose in room temperature ionic liquids. Polymer International, 2015, 64, 963-970.	1.6	39

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37	Direct and complete utilization of agricultural straw to fabricate all-biomass films with high-strength, high-haze and UV-shielding properties. Carbohydrate Polymers, 2019, 223, 115057.	5.1	38
38	Visual and Precise Detection of pH Values under Extreme Acidic and Strong Basic Environments by Cellulose-Based Superior Sensor. Analytical Chemistry, 2019, 91, 3085-3092.	3.2	37
39	Cellulose nanosphere: Preparation and applications of the novel nanocellulose. Carbohydrate Polymers, 2022, 277, 118863.	5.1	37
40	Directly Converting Agricultural Straw into All-Biomass Nanocomposite Films Reinforced with Additional in Situ-Retained Cellulose Nanocrystals. ACS Sustainable Chemistry and Engineering, 2017, 5, 5127-5133.	3.2	36
41	Synthesis, characterization and properties of novel cellulose derivatives containing phosphorus: cellulose diphenyl phosphate and its mixed esters. Cellulose, 2014, 21, 2369-2378.	2.4	34
42	Synthesis and characterization of temperature-sensitive cellulose-graft-poly(N-isopropylacrylamide) copolymers. Chinese Journal of Polymer Science (English Edition), 2015, 33, 1640-1649.	2.0	34
43	Multifunctional Cellulose Ester Containing Hindered Phenol Groups with Free-Radical-Scavenging and UV-Resistant Activities. ACS Applied Materials & Interfaces, 2019, 11, 4302-4310.	4.0	33
44	Transparent cellulose/polyhedral oligomeric silsesquioxane nanocomposites with enhanced UV-shielding properties. Carbohydrate Polymers, 2016, 147, 171-177.	5.1	32
45	A facile and efficient method to fabricate high-resolution immobilized cellulose-based chiral stationary phases via thiol-ene click chemistry. Separation and Purification Technology, 2019, 210, 175-181.	3.9	31
46	Complete recycling and valorization of waste textiles for value-added transparent films via an ionic liquid. Journal of Environmental Chemical Engineering, 2021, 9, 106182.	3.3	31
47	Transparent cellulose/aramid nanofibers films with improved mechanical and ultraviolet shielding performance from waste cotton textiles by in-situ fabrication. Carbohydrate Polymers, 2021, 273, 118569.	5.1	30
48	Reply to â€œComment on â€˜NMR spectroscopic studies of cellobiose solvation in EmimAc aimed to understand the dissolution mechanism of cellulose in ionic liquidsâ€™â€•by R. C. Remsing, I. D. Petrik, Z. Liu and G. Moyna, Phys. Chem. Chem. Phys., 2010, 12, DOI: 10.1039/c004203j. Physical Chemistry Chemical Physics, 2010, 12, 14829.	1.3	28
49	Determination of intrinsic viscosity-molecular weight relationship for cellulose in BmimAc/DMSO solutions. Cellulose, 2016, 23, 2341-2348.	2.4	25
50	Cellulose/microalgae composite films prepared in ionic liquids. Algal Research, 2016, 20, 135-141.	2.4	25
51	Synthesis, characterization, and gas permeabilities of cellulose derivatives containing adamantane groups. Journal of Membrane Science, 2014, 469, 507-514.	4.1	24
52	Irreversible Humidity-Responsive Phosphorescence Materials from Cellulose for Advanced Anti-Counterfeiting and Environmental Monitoring. ACS Applied Materials & Interfaces, 2022, 14, 16582-16591.	4.0	24
53	Regioselectively substituted cellulose mixed esters synthesized by two-steps route to understand chiral recognition mechanism and fabricate high-performance chiral stationary phases. Analytica Chimica Acta, 2019, 1073, 90-98.	2.6	23
54	ADVANCED FUNCTIONAL MATERIALS BASED ON CELLULOSE. Acta Polymerica Sinica, 2010, 00, 1376-1398.	0.0	23

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55	Cellulose-Based Conductive Films with Superior Joule Heating Performance, Electromagnetic Shielding Efficiency, and High Stability by In Situ Welding to Construct a Segregated MWCNT Conductive Network. Industrial & Engineering Chemistry Research, 2022, 61, 1773-1785.	1.8	22
56	The solution state and dissolution process of cellulose in ionic-liquid-based solvents with different hydrogen-bonding basicity and microstructures. Green Chemistry, 2022, 24, 3824-3833.	4.6	22
57	Effect of molecular structure on the gas permeability of cellulose aliphatate esters. Chinese Journal of Polymer Science (English Edition), 2014, 32, 1-8.	2.0	21
58	Polymer solubility in ionic liquids: dominated by hydrogen bonding. Physical Chemistry Chemical Physics, 2021, 23, 21893-21900.	1.3	21
59	Electrochemical process of early-stage corrosion detection based on N-doped carbon dots with superior Fe3+ responsiveness. Journal of Colloid and Interface Science, 2022, 606, 567-576.	5.0	21
60	Molecular weight characterization of cellulose using ionic liquids. Polymer Testing, 2021, 93, 106985.	2.3	20
61	Hydrolytic degradation of cellulose-graft-poly(l-lactide) copolymers. Polymer Degradation and Stability, 2015, 118, 130-136.	2.7	18
62	Homogeneous synthesis of partially substituted cellulose phenylcarbamates aiming at chiral recognition. Polymer International, 2015, 64, 1037-1044.	1.6	17
63	Modification of agricultural waste tamarind fruit shell powder by <i>in situ</i> generation of silver nanoparticles for antibacterial filler applications. International Journal of Polymer Analysis and Characterization, 2019, 24, 421-427.	0.9	17
64	Homogeneous benzoylation of cellulose in 1-allyl-3-methylimidazolium chloride: Hammett correlation, mechanism and regioselectivity. RSC Advances, 2015, 5, 58536-58542.	1.7	16
65	Fabrication, hydrolysis and cell cultivation of microspheres from cellulose-graft-poly(<scp>l</scp>-lactide) copolymers. RSC Advances, 2016, 6, 17617-17623.	1.7	15
66	Patternable cellulose/MWCNT laminated nanocomposites with anisotropic thermal and electrical conductivity. Composites Communications, 2021, 26, 100786.	3.3	15
67	Controllable synthesis of cellulose benzoates for understanding of chiral recognition mechanism and fabrication of highly efficient chiral stationary phases. Analytical Methods, 2018, 10, 2844-2853.	1.3	14
68	Chiral separation abilities of homogeneously synthesized cellulose 3,5-dimethylphenylcarbamates: Influences of degree of substitution and molecular weight. Chinese Journal of Polymer Science (English Edition), 2015, 33, 1633-1639.	2.0	13
69	Homogeneous synthesis of amino-reserved chitosan-graft-polycaprolactone in an ionic liquid and the application in cell cultivation. Polymer International, 2015, 64, 1045-1052.	1.6	12
70	Fabrication and Characterization of Transparent and Uniform Cellulose/Polyethylene Composite Films from Used Disposable Paper Cups by the â€œOne-Pot Methodâ€. Polymers, 2022, 14, 1070.	2.0	12
71	Cellulose-Based Films with Ultraviolet Shielding Performance Prepared Directly from Waste Corrugated Pulp. Polymers, 2021, 13, 3359.	2.0	11
72	Eco-Friendly and Complete Recycling of Waste Bamboo-Based Disposable Paper Cups for Value-Added Transparent Cellulose-Based Films and Paper Plastic Composites. Polymers, 2022, 14, 1589.	2.0	11

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73	Thermostable and Redispersible Cellulose Nanocrystals with Thixotropic Gelation Behavior by a Facile Desulfation Process. ACS Sustainable Chemistry and Engineering, 2020, 8, 11737-11746.	3.2	10
74	Cellulose Acetate Thermoplastics with High Modulus, Dimensional Stability and Anti-migration Properties by Using CA-g-PLA as Macromolecular Plasticizer. Chinese Journal of Polymer Science (English Edition), 2020, 38, 1141-1148.	2.0	10
75	Transparent Cellulose-Based Films Prepared from Used Disposable Paper Cups via an Ionic Liquid. Polymers, 2021, 13, 4209.	2.0	10
76	Hydrogen-Bonding Interactions in Polymerâ€“Organic Solvent Mixtures. Macromolecules, 2022, 55, 4578-4588.	2.2	10
77	Poly(propylene carbonate)/clay nanocomposites with enhanced mechanical property, thermal stability and oxygen barrier property. Composites Communications, 2020, 22, 100520.	3.3	9
78	Immobilization of Ionic Liquids with a New Cellulose Ester Containing Imidazolium Cation for Highâ€Performance CO 2 Separation Membranes. Macromolecular Rapid Communications, 2021, 42, 2000494.	2.0	9
79	Click Modification for Polysaccharides via Novel Tunnel Transmission Phenomenon in Ionic Liquids. Research, 2022, 2022, 9853529.	2.8	7
80	Triggering the Biodegradability and Green-Reuse of Cigarette Filters by a Facile and Home-Operating Treatment. ACS Sustainable Chemistry and Engineering, 2022, 10, 2822-2829.	3.2	7
81	Natural grass to all-biomass biodegradable tape and superior oil-water separation fabric. Resources, Conservation and Recycling, 2022, 182, 106320.	5.3	6
82	Micromechanical and positron annihilation lifetime study of new cellulose esters with different topological structures. Carbohydrate Polymers, 2019, 219, 56-62.	5.1	5
83	Reâ€Dispersible 1D and 2D Nanoparticle Solid Powders without any Surfactant. ChemNanoMat, 2019, 5, 163-168.	1.5	5
84	Confronting the Challenge of Cellulose Molecular Weight Measurement: An Accurate, Rapid, and Universal Method with Ionic Liquid as an Additive. Analytical Chemistry, 2022, 94, 5432-5440.	3.2	4
85	Super-rapid and highly-efficient esterification of cellulose to achieve an accurate chromatographic analysis of its molecular weight. Carbohydrate Polymers, 2022, 286, 119301.	5.1	4
86	Enhancement of biofilm formation and microalgae growth by preparing cellulose film with rough surface. Journal of Polymer Research, 2022, 29, 1.	1.2	2
87	ä»¥ç¦»åæ¶²ä½“ä¸ºä»‹è´¨çš„çº¤ç»´ç´ åŒ–å¦è½¬åŒ–. Chinese Science Bulletin, 2015, 60, 1513-1521.	0.4	1
88	Chemical Modification of Cellulose in Solvents for Functional Materials. , 2018, , 1-34.		1
89	Chemical Modification of Cellulose in Solvents for Functional Materials. , 2019, , 427-460.		1