Qi Zhou

List of Publications by Year
in descending order

87 papers	9,321 citations	38660 50 h-index	51492 86 g-index
88 all docs	88 docs citations	88 times ranked	9060 citing authors

#	Article	IF	Citations
1	Strong, transparent, and thermochromic composite hydrogel from wood derived highly mesoporous cellulose network and PNIPAM. Composites Part A: Applied Science and Manufacturing, 2022, 154, 106757.	3.8	18
2	Assembly of AIEgenâ€Based Fluorescent Metalâ€“Organic Framework Nanosheets and Seaweed Cellulose Nanofibrils for Humidity Sensing and UVâ€Shielding. Advanced Materials, 2022, 34, e2201470.	11.1	34
3	Utilizing native lignin as redox-active material in conductive wood for electronic and energy storage applications. Journal of Materials Chemistry A, 2022, 10, 15677-15688.	5.2	11
4	Surface Charges Control the Structure and Properties of Layered Nanocomposite of Cellulose Nanofibrils and Clay Platelets. ACS Applied Materials & Interfaces, 2021, 13, 4463-4472.	4.0	25
5	Strong Foam-like Composites from Highly Mesoporous Wood and Metal-Organic Frameworks for Efficient CO₂ Capture. ACS Applied Materials & Interfaces, 2021, 13, 29949-29959.	4.0	37
6	Structure and Self-Assembly of Lytic Polysaccharide Monooxygenase-Oxidized Cellulose Nanocrystals. ACS Sustainable Chemistry and Engineering, 2021, 9, 11331-11341.	3.2	20
7	Surface Functionalization of Spruceâ€Derived Cellulose Scaffold for Glycoprotein Separation. Advanced Materials Interfaces, 2021, 8, 2100787.	1.9	7
8	Surface Functionalization of Spruceâ€Derived Cellulose Scaffold for Glycoprotein Separation (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.9	0
9	High strength and low swelling composite hydrogels from gelatin and delignified wood. Scientific Reports, 2020, 10, 17842.	1.6	14
10	Selfâ€Densification of Highly Mesoporous Wood Structure into a Strong and Transparent Film. Advanced Materials, 2020, 32, e2003653.	11.1	99
11	The conversion of nanocellulose into solvent-free nanoscale liquid crystals by attaching long side-arms for multi-responsive optical materials. Journal of Materials Chemistry C, 2020, 8, 11022-11031.	2.7	13
12	Stronger cellulose microfibril network structure through the expression of cellulose-binding modules in plant primary cell walls. Cellulose, 2019, 26, 3083-3094.	2.4	11
13	Lytic polysaccharide monooxygenase (LPMO) mediated production of ultra-fine cellulose nanofibres from delignified softwood fibres. Green Chemistry, 2019, 21, 5924-5933.	4.6	69
14	Strong and Tough Chitin Film from Î±-Chitin Nanofibers Prepared by High Pressure Homogenization and Chitosan Addition. ACS Sustainable Chemistry and Engineering, 2019, 7, 1692-1697.	3.2	44
15	Wellâ€dispersed polyurethane/cellulose nanocrystal nanocomposites synthesized by a solventâ€free procedure in bulk. Polymer Composites, 2019, 40, E456.	2.3	21
16	Reinforcement Effects from Nanodiamond in Cellulose Nanofibril Films. Biomacromolecules, 2018, 19, 2423-2431.	2.6	30
17	Wood Nanotechnology for Strong, Mesoporous, and Hydrophobic Biocomposites for Selective Separation of Oil/Water Mixtures. ACS Nano, 2018, 12, 2222-2230.	7.3	272
18	Enhancing strength and toughness of cellulose nanofibril network structures with an adhesive peptide. Carbohydrate Polymers, 2018, 181, 256-263.	5.1	19

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19	Proteomic Analysis of Plasmodesmata From Populus Cell Suspension Cultures in Relation With Callose Biosynthesis. Frontiers in Plant Science, 2018, 9, 1681.	1.7	32
20	High-Strength, High-Toughness Aligned Polymer-Based Nanocomposite Reinforced with Ultralow Weight Fraction of Functionalized Nanocellulose. Biomacromolecules, 2018, 19, 4075-4083.	2.6	37
21	Rheological properties of nanocellulose suspensions: effects of fibril/particle dimensions and surface characteristics. Cellulose, 2017, 24, 2499-2510.	2.4	146
22	Bioinspired Interface Engineering for Moisture Resistance in Nacre-Mimetic Cellulose Nanofibrils/Clay Nanocomposites. ACS Applied Materials & Interfaces, 2017, 9, 20169-20178.	4.0	93
23	Flexible and Responsive Chiral Nematic Cellulose Nanocrystal/Poly(ethylene glycol) Composite Films with Uniform and Tunable Structural Color. Advanced Materials, 2017, 29, 1701323.	11.1	306
24	Preparation and Viscoelastic Properties of Composite Fibres Containing Cellulose Nanofibrils: Formation of a Coherent Fibrillar Network. Journal of Nanomaterials, 2016, 2016, 1-10.	1.5	4
25	Rhamnogalacturonan-I Based Microcapsules for Targeted Drug Release. PLoS ONE, 2016, 11, e0168050.	1.1	13
26	Nanostructurally Controlled Hydrogel Based on Smallâ€Diameter Native Chitin Nanofibers: Preparation, Structure, and Properties. ChemSusChem, 2016, 9, 989-995.	3.6	63
27	Review of the recent developments in cellulose nanocomposite processing. Composites Part A: Applied Science and Manufacturing, 2016, 83, 2-18.	3.8	573
28	A Transparent, Hazy, and Strong Macroscopic Ribbon of Oriented Cellulose Nanofibrils Bearing Poly(ethylene glycol). Advanced Materials, 2015, 27, 2070-2076.	11.1	185
29	Coreâ€“shell cellulose nanofibers for biocomposites â€“ Nanostructural effects in hydrated state. Carbohydrate Polymers, 2015, 125, 92-102.	5.1	44
30	Synthesis of Multifunctional Cellulose Nanocrystals for Lectin Recognition and Bacterial Imaging. Biomacromolecules, 2015, 16, 1426-1432.	2.6	64
31	Strong Surface Treatment Effects on Reinforcement Efficiency in Biocomposites Based on Cellulose Nanocrystals in Poly(vinyl acetate) Matrix. Biomacromolecules, 2015, 16, 3916-3924.	2.6	54
32	Biocomposites from Natural Rubber: Synergistic Effects of Functionalized Cellulose Nanocrystals as Both Reinforcing and Cross-Linking Agents via Free-Radical Thiolâ€“ene Chemistry. ACS Applied Materials & Interfaces, 2015, 7, 16303-16310.	4.0	124
33	Impact of microcrystalline cellulose material attributes: A case study on continuous twin screw granulation. International Journal of Pharmaceutics, 2015, 478, 705-717.	2.6	53
34	Nanopaper membranes from chitinâ€“protein composite nanofibersâ€”structure and mechanical properties. Journal of Applied Polymer Science, 2014, 131, .	1.3	25
35	Surface modification of cellulose nanocrystals by grafting with poly(lactic acid). Polymer International, 2014, 63, 1056-1062.	1.6	52
36	CHAPTER 9. PLA-nanocellulose Biocomposites. RSC Polymer Chemistry Series, 2014, , 225-242.	0.1	1

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37	Water redispersible cellulose nanofibrils adsorbed with carboxymethyl cellulose. Cellulose, 2014, 21, 4349-4358.	2.4	109
38	Topochemical acetylation of cellulose nanopaper structures for biocomposites: mechanisms for reduced water vapour sorption. Cellulose, 2014, 21, 2773-2787.	2.4	67
39	Nanostructured membranes based on native chitin nanofibers prepared by mild process. Carbohydrate Polymers, 2014, 112, 255-263.	5.1	84
40	Glycan-Functionalized Fluorescent Chitin Nanocrystals for Biorecognition Applications. Bioconjugate Chemistry, 2014, 25, 640-643.	1.8	41
41	Tough nanopaper structures based on cellulose nanofibers and carbon nanotubes. Composites Science and Technology, 2013, 87, 103-110.	3.8	94
42	Nanocomposites of bacterial cellulose nanofibers and chitin nanocrystals: fabrication, characterization and bactericidal activity. Green Chemistry, 2013, 15, 3404.	4.6	129
43	Cellulose nanocrystals/polyurethane nanocomposites. Study from the viewpoint of microphase separated structure. Carbohydrate Polymers, 2013, 92, 751-757.	5.1	119
44	Regioselective modification of a xyloglucan hemicellulose for high-performance biopolymer barrier films. Carbohydrate Polymers, 2013, 93, 466-472.	5.1	31
45	In situ polymerization and characterization of elastomeric polyurethane-cellulose nanocrystal nanocomposites. Cell response evaluation. Cellulose, 2013, 20, 1819-1828.	2.4	50
46	Surface quaternized cellulose nanofibrils with high water absorbency and adsorption capacity for anionic dyes. Soft Matter, 2013, 9, 2047.	1.2	294
47	Bioinspired and Highly Oriented Clay Nanocomposites with a Xyloglucan Biopolymer Matrix: Extending the Range of Mechanical and Barrier Properties. Biomacromolecules, 2013, 14, 84-91.	2.6	68
48	BIOREFINERY: Nanofibrillated cellulose for enhancement of strength in high-density paper structures. Nordic Pulp and Paper Research Journal, 2013, 28, 182-189.	0.3	63
49	Microstructure and nonisothermal cold crystallization of PLA composites based on silver nanoparticles and nanocrystalline cellulose. Polymer Degradation and Stability, 2012, 97, 2027-2036.	2.7	193
50	Hydrophobic cellulose nanocrystals modified with quaternary ammonium salts. Journal of Materials Chemistry, 2012, 22, 19798.	6.7	282
51	Electroactive nanofibrillated cellulose aerogel composites with tunable structural and electrochemical properties. Journal of Materials Chemistry, 2012, 22, 19014.	6.7	136
52	Multifunctional bionanocomposite films of poly(lactic acid), cellulose nanocrystals and silver nanoparticles. Carbohydrate Polymers, 2012, 87, 1596-1605.	5.1	538
53	Nanostructured biocomposites of high toughnessâ€"a wood cellulose nanofiber network in ductile hydroxyethylcellulose matrix. Soft Matter, 2011, 7, 7342.	1.2	153
54	Strong and Tough Cellulose Nanopaper with High Specific Surface Area and Porosity. Biomacromolecules, 2011, 12, 3638-3644.	2.6	432

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55	A transparent hybrid of nanocrystalline cellulose and amorphous calcium carbonate nanoparticles. Nanoscale, 2011, 3, 3563.	2.8	80
56	Strong Nanocomposite Reinforcement Effects in Polyurethane Elastomer with Low Volume Fraction of Cellulose Nanocrystals. Macromolecules, 2011, 44, 4422-4427.	2.2	365
57	High-porosity aerogels of high specific surface area prepared from nanofibrillated cellulose (NFC). Composites Science and Technology, 2011, 71, 1593-1599.	3.8	479
58	Isocyanate-rich cellulose nanocrystals and their selective insertion in elastomeric polyurethane. Composites Science and Technology, 2011, 71, 1953-1960.	3.8	91
59	Different types of microfibrillated cellulose as filler materials in polysodium acrylate superabsorbents. Chinese Journal of Polymer Science (English Edition), 2011, 29, 407-413.	2.0	14
60	Investigation of the graft length impact on the interfacial toughness in a cellulose/poly(Îµ-caprolactone) bilayer laminate. Composites Science and Technology, 2011, 71, 9-12.	3.8	41
61	Wood cellulose biocomposites with fibrous structures at micro- and nanoscale. Composites Science and Technology, 2011, 71, 382-387.	3.8	152
62	Functionalized cellulose nanocrystals as biobased nucleation agents in poly(l-lactide) (PLLA) â€" Crystallization and mechanical property effects. Composites Science and Technology, 2010, 70, 815-821.	3.8	459
63	Chitin Synthases from Saprolegnia Are Involved in Tip Growth and Represent a Potential Target for Anti-Oomycete Drugs. PLoS Pathogens, 2010, 6, e1001070.	2.1	61
64	Fast Preparation Procedure for Large, Flat Cellulose and Cellulose/Inorganic Nanopaper Structures. Biomacromolecules, 2010, 11, 2195-2198.	2.6	351
65	Mechanical performance tailoring of tough ultra-high porosity foams prepared from cellulose I nanofiber suspensions. Soft Matter, 2010, 6, 1824.	1.2	400
66	Tamarind seed xyloglucan â€" a thermostable high-performance biopolymer from non-food feedstock. Journal of Materials Chemistry, 2010, 20, 4321.	6.7	50
67	Self-Organization of Cellulose Nanocrystals Adsorbed with Xyloglucan Oligosaccharideâˆ'Poly(ethylene glycol)âˆ'Polystyrene Triblock Copolymer. Macromolecules, 2009, 42, 5430-5432.	2.2	85
68	Nanostructured biocomposites based on bacterial cellulosic nanofibers compartmentalized by a soft hydroxyethylcellulose matrix coating. Soft Matter, 2009, 5, 4124.	1.2	83
69	Top-Down Grafting of Xyloglucan to Gold Monitored by QCM-D and AFM: Enzymatic Activity and Interactions with Cellulose. Biomacromolecules, 2008, 9, 942-948.	2.6	29
70	Xyloglucan in cellulose modification. Cellulose, 2007, 14, 625-641.	2.4	93
71	Engineered xyloglucan specificity in a carbohydrate-binding module. Glycobiology, 2006, 16, 1171-1180.	1.3	37
72	Xyloglucan and xyloglucan endo-transglycosylases (XET): Tools forex vivocellulose surface modification. Biocatalysis and Biotransformation, 2006, 24, 107-120.	1.1	16

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73	Grafting of Cellulose Fibers with Poly(Îµ-caprolactone) and Poly(l-lactic acid) via Ring-Opening Polymerization. Biomacromolecules, 2006, 7, 2178-2185.	2.6	199
74	Friction between Cellulose Surfaces and Effect of Xyloglucan Adsorption. Biomacromolecules, 2006, 7, 2147-2153.	2.6	63
75	The influence of surface chemical composition on the adsorption of xyloglucan to chemical and mechanical pulps. Carbohydrate Polymers, 2006, 63, 449-458.	5.1	34
76	Homogeneous hydroxyethylation of cellulose in NaOH/urea aqueous solution. Polymer Bulletin, 2005, 53, 243-248.	1.7	40
77	Use of Xyloglucan as a Molecular Anchor for the Elaboration of Polymers from Cellulose Surfaces:Â A General Route for the Design of Biocomposites. Macromolecules, 2005, 38, 3547-3549.	2.2	74
78	Activation of Crystalline Cellulose Surfaces through the Chemoenzymatic Modification of Xyloglucan. Journal of the American Chemical Society, 2004, 126, 5715-5721.	6.6	117
79	Miscibility, free volume behavior and properties of blends from cellulose acetate and castor oil-based polyurethane. Polymer, 2003, 44, 1733-1739.	1.8	55
80	Transition from Triple Helix to Coil of Lentinan in Solution Measured by SEC, Viscometry, and 13C NMR. Polymer Journal, 2002, 34, 443-449.	1.3	52
81	Triple Helix of Î²-D-Glucan from Lentinus Edodes in 0.5 M NaCl Aqueous Solution Characterized by Light Scattering. Polymer Journal, 2001, 33, 317-321.	1.3	77
82	Synthesis and properties ofO-2-[2-(2-methoxyethoxy)ethoxy]acetyl cellulose. Journal of Polymer Science Part A, 2001, 39, 376-382.	2.5	9
83	Phase transition of thermosensitive amphiphilic cellulose esters bearing olig(oxyethylene)s. Polymer Bulletin, 2000, 45, 381-388.	1.7	10
84	Solution Properties of Antitumor Sulfated Derivative of Î±-(1â†'3)-D-Glucan fromGanoderma lucidum. Bioscience, Biotechnology and Biochemistry, 2000, 64, 2172-2178.	0.6	85
85	Effects of molecular weight of nitrocellulose on structure and properties of polyurethane/nitrocellulose IPNs. Journal of Polymer Science, Part B: Polymer Physics, 1999, 37, 1623-1631.	2.4	40
86	Biodegradability of Regenerated Cellulose Films Coated with Polyurethane/Natural Polymers Interpenetrating Polymer Networks. Industrial & Engineering Chemistry Research, 1999, 38, 4284-4289.	1.8	54
87	Water-Resistant Film from Polyurethane/Nitrocellulose Coating to Regenerated Cellulose. Industrial & Engineering Chemistry Research, 1997, 36, 2651-2656.	1.8	28