

Chunlin Xu

List of Publications by Year in descending order

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105
papers

4,894
citations

94433

37
h-index

102487

66
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106
all docs

106
docs citations

106
times ranked

5665
citing authors

#	ARTICLE	IF	CITATIONS
1	Removal of nafcillin sodium monohydrate from aqueous solution by hydrogels containing nanocellulose: An experimental and theoretical study. <i>Journal of Molecular Liquids</i> , 2022, 347, 117946.	4.9	5
2	Injectable thiol-ene hydrogel of galactoglucomannan and cellulose nanocrystals in delivery of therapeutic inorganic ions with embedded bioactive glass nanoparticles. <i>Carbohydrate Polymers</i> , 2022, 276, 118780.	10.2	20
3	Green fractionation approaches for isolation of biopolymers and the critical technical challenges. <i>Industrial Crops and Products</i> , 2022, 177, 114451.	5.2	19
4	Ultralight and porous cellulose nanofibers/polyethyleneimine composite aerogels with exceptional performance for selective anionic dye adsorption. <i>Industrial Crops and Products</i> , 2022, 177, 114513.	5.2	37
5	Digital light processing (DLP) 3D-fabricated antimicrobial hydrogel with a sustainable resin of methacrylated woody polysaccharides and hybrid silver-lignin nanospheres. <i>Green Chemistry</i> , 2022, 24, 2129-2145.	9.0	27
6	Rapid and manual-shaking exfoliation of amidoximated cellulose nanofibrils for a large-capacity filtration capture of uranium. <i>Journal of Materials Chemistry A</i> , 2022, 10, 7920-7927.	10.3	12
7	A Rapid and Reversible pH Control Process for the Formation and Dissociation of Lignin Nanoparticles. <i>ChemSusChem</i> , 2022, 15, e202200449.	6.8	10
8	Nanocellulose bio-based composites for the removal of methylene blue from water: An experimental and theoretical exploration. <i>Journal of Molecular Liquids</i> , 2022, 357, 119089.	4.9	6
9	Subfossil Scots Pine (<i>Pinus sylvestris</i> L.) Wood from Northern Finland—Physical, Mechanical, and Chemical Properties and Suitability for Specialty Products. <i>Forests</i> , 2022, 13, 704.	2.1	1
10	Synthesis of galactoglucomannan-based latex via emulsion polymerization. <i>Carbohydrate Polymers</i> , 2022, 291, 119565.	10.2	7
11	Electrospinning of Electroconductive Water-Resistant Nanofibers of PEDOT/PSS, Cellulose Nanofibrils and PEO: Fabrication, Characterization, and Cytocompatibility. <i>ACS Applied Bio Materials</i> , 2021, 4, 483-493.	4.6	17
12	Interactions in N-[(2-hydroxyl)-propyl-3-trimethyl ammonium] chitosan chloride/sodium carboxymethyl cellulose based films. <i>Journal of Dispersion Science and Technology</i> , 2021, 42, 161-172.	2.4	6
13	Novel and Efficient Lignin Fractionation Processes for Tailing Lignin-Based Materials. , 2021, , 363-387.		0
14	Chromatographic recovery and purification of natural phytochemicals from underappreciated willow bark water extracts. <i>Separation and Purification Technology</i> , 2021, 261, 118247.	7.9	19
15	Functional Lignin Nanoparticles with Tunable Size and Surface Properties: Fabrication, Characterization, and Use in Layer-by-Layer Assembly. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 26308-26317.	8.0	13
16	Bio-Based Hydrogels With Ion Exchange Properties Applied to Remove Cu(II), Cr(VI), and As(V) Ions From Water. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 656472.	4.1	7
17	On Laccase-Catalyzed Polymerization of Biorefinery Lignin Fractions and Alignment of Lignin Nanoparticles on the Nanocellulose Surface via One-Pot Water-Phase Synthesis. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 8770-8782.	6.7	22
18	3D Modeling of Epithelial Tumors—The Synergy between Materials Engineering, 3D Bioprinting, High-Content Imaging, and Nanotechnology. <i>International Journal of Molecular Sciences</i> , 2021, 22, 6225.	4.1	13

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19	Comparative hydrolysis analysis of cellulose samples and aspects of its application in conservation science. <i>Cellulose</i> , 2021, 28, 8719-8734.	4.9	21
20	Rheological and Printability Assessments on Biomaterial Inks of Nanocellulose/Photo-Crosslinkable Biopolymer in Light-Aided 3D Printing. <i>Frontiers in Chemical Engineering</i> , 2021, 3, .	2.7	11
21	Fractionation of Lignin with Decreased Heterogeneity: Based on a Detailed Characteristics Study of Sequentially Extracted Softwood Kraft Lignin. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 13862-13873.	6.7	20
22	Facile fractionation of bamboo hydrolysate and characterization of isolated lignin and lignin-carbohydrate complexes. <i>Holzforschung</i> , 2021, 75, 399-408.	1.9	5
23	Molecular interactions in N-[(2-hydroxyl)-propyl-3-trimethyl ammonium] chitosan chloride-sodium alginate polyelectrolyte complexes. <i>Food Hydrocolloids</i> , 2020, 100, 105400.	10.7	16
24	Robust shape-retaining nanocellulose-based aerogels decorated with silver nanoparticles for fast continuous catalytic discoloration of organic dyes. <i>Separation and Purification Technology</i> , 2020, 242, 116523.	7.9	54
25	Synthesis, structure, and properties of N-2-hydroxypropyl-3-trimethylammonium-O-carboxymethyl chitosan derivatives. <i>International Journal of Biological Macromolecules</i> , 2020, 144, 568-577.	7.5	13
26	Color evolution of poplar wood chips and its response to lignin and extractives changes in autohydrolysis pretreatment. <i>International Journal of Biological Macromolecules</i> , 2020, 157, 673-679.	7.5	15
27	Biomass Fractionation and Lignin Fractionation towards Lignin Valorization. <i>ChemSusChem</i> , 2020, 13, 4284-4295.	6.8	188
28	Tailored Thermosetting Wood Adhesive Based on Well-Defined Hardwood Lignin Fractions. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 13517-13526.	6.7	41
29	Lignin-Based Micro- and Nanomaterials and their Composites in Biomedical Applications. <i>ChemSusChem</i> , 2020, 13, 4266-4283.	6.8	130
30	Human Dermal Fibroblast Viability and Adhesion on Cellulose Nanomaterial Coatings: Influence of Surface Characteristics. <i>Biomacromolecules</i> , 2020, 21, 1560-1567.	5.4	27
31	O-Carboxymethyl chitosan-based pH-responsive amphiphilic chitosan derivatives: Characterization, aggregation behavior, and application. <i>Carbohydrate Polymers</i> , 2020, 237, 116112.	10.2	32
32	Nanocellulose-Based Inks for 3D Bioprinting: Key Aspects in Research Development and Challenging Perspectives in Applications—A Mini Review. <i>Bioengineering</i> , 2020, 7, 40.	3.5	77
33	Enhancement of a zwitterionic chitosan derivative on mechanical properties and antibacterial activity of carboxymethyl cellulose-based films. <i>International Journal of Biological Macromolecules</i> , 2020, 159, 1197-1205.	7.5	25
34	3D Scaffolds of Polycaprolactone/Copper-Doped Bioactive Glass: Architecture Engineering with Additive Manufacturing and Cellular Assessments in a Coculture of Bone Marrow Stem Cells and Endothelial Cells. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 4496-4510.	5.2	25
35	Ultrafast adsorption of heavy metal ions onto functionalized lignin-based hybrid magnetic nanoparticles. <i>Chemical Engineering Journal</i> , 2019, 372, 82-91.	12.7	176
36	Environmentally-compatible alkyd paints stabilized by wood hemicelluloses. <i>Industrial Crops and Products</i> , 2019, 133, 212-220.	5.2	37

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37	Surface Engineered Biomimetic Inks Based on UV Cross-Linkable Wood Biopolymers for 3D Printing. ACS Applied Materials & Interfaces, 2019, 11, 12389-12400.	8.0	65
38	TEMPO-oxidized O-acetyl galactoglucomannan oligomers: isolation and comprehensive structural elucidation. Wood Science and Technology, 2019, 53, 71-85.	3.2	3
39	On Low-Concentration Inks Formulated by Nanocellulose Assisted with Gelatin Methacrylate (GelMA) for 3D Printing toward Wound Healing Application. ACS Applied Materials & Interfaces, 2019, 11, 8838-8848.	8.0	189
40	From Biomass to Nanomaterials: A Green Procedure for Preparation of Holistic Bamboo Multifunctional Nanocomposites Based On Formic Acid Rapid Fractionation. ACS Sustainable Chemistry and Engineering, 2019, 7, 6592-6600.	6.7	33
41	Valorization of Lignin-Carbohydrate Complexes from Hydrolysates of Norway Spruce: Efficient Separation, Structural Characterization, and Antioxidant Activity. ACS Sustainable Chemistry and Engineering, 2019, 7, 1447-1456.	6.7	25
42	Structural changes of bamboo-derived lignin in an integrated process of autohydrolysis and formic acid inducing rapid delignification. Industrial Crops and Products, 2018, 115, 194-201.	5.2	50
43	Characteristics of Hot Water Extracts from the Bark of Cultivated Willow (<i>Salix</i> sp.). ACS Sustainable Chemistry and Engineering, 2018, 6, 5566-5573.	6.7	37
44	Novel biorenewable composite of wood polysaccharide and polylactic acid for three dimensional printing. Carbohydrate Polymers, 2018, 187, 51-58.	10.2	83
45	Three-Dimensional Printing of Wood-Derived Biopolymers: A Review Focused on Biomedical Applications. ACS Sustainable Chemistry and Engineering, 2018, 6, 5663-5680.	6.7	183
46	Solubility of Softwood Hemicelluloses. Biomacromolecules, 2018, 19, 1245-1255.	5.4	37
47	Thermally induced degradation of NaCMC in water and effects of NaHCO ₃ on acid formation and charge. Food Hydrocolloids, 2018, 74, 32-36.	10.7	5
48	Phenolic residues in spruce galactoglucomannans improve stabilization of oil-in-water emulsions. Journal of Colloid and Interface Science, 2018, 512, 536-547.	9.4	39
49	Effects of chitosan quaternary ammonium salt on the physicochemical properties of sodium carboxymethyl cellulose-based films. Carbohydrate Polymers, 2018, 184, 37-46.	10.2	67
50	Hemicelluloses from stone pine, holm oak, and Norway spruce with subcritical water extraction - comparative study with characterization and kinetics. Journal of Supercritical Fluids, 2018, 133, 647-657.	3.2	34
51	3D printing of nanocellulose hydrogel scaffolds with tunable mechanical strength towards wound healing application. Journal of Materials Chemistry B, 2018, 6, 7066-7075.	5.8	129
52	Insights on the distribution of substitutions in spruce galactoglucomannan and its derivatives using integrated chemo-enzymatic deconstruction, chromatography and mass spectrometry. International Journal of Biological Macromolecules, 2018, 112, 616-625.	7.5	7
53	Stiffness and swelling characteristics of nanocellulose films in cell culture media. Cellulose, 2018, 25, 4969-4978.	4.9	15
54	One-Step Fractionation of the Main Components of Bamboo by Formic Acid-based Organosolv Process Under Pressure. Journal of Wood Chemistry and Technology, 2018, 38, 170-182.	1.7	22

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55	Mild Oxalic Acid-Catalyzed Hydrolysis as a Novel Approach to Prepare Cellulose Nanocrystals. <i>ChemNanoMat</i> , 2017, 3, 109-119.	2.8	45
56	Revealing the structure of bamboo lignin obtained by formic acid delignification at different pressure levels. <i>Industrial Crops and Products</i> , 2017, 108, 864-871.	5.2	51
57	Tailored Approaches in Drug Development and Diagnostics: From Molecular Design to Biological Model Systems. <i>Advanced Healthcare Materials</i> , 2017, 6, 1700258.	7.6	38
58	Conducting ink based on cellulose nanocrystals and polyaniline for flexographical printing. <i>Journal of Materials Chemistry C</i> , 2017, 5, 12172-12181.	5.5	31
59	Aqueous Extraction of the Sulfated Polysaccharide Ulvan from the Green Alga <i>Ulva rigida</i> Kinetics and Modeling. <i>Bioenergy Research</i> , 2017, 10, 915-928.	3.9	13
60	Synthesis of tunable hydrogels based on O-acetyl-galactoglucomannans from spruce. <i>Carbohydrate Polymers</i> , 2017, 157, 1349-1357.	10.2	29
61	Development of nanocellulose scaffolds with tunable structures to support 3D cell culture. <i>Carbohydrate Polymers</i> , 2016, 148, 259-271.	10.2	116
62	Profiling the substitution pattern of xyloglucan derivatives by integrated enzymatic hydrolysis, hydrophilic-interaction liquid chromatography and mass spectrometry. <i>Journal of Chromatography A</i> , 2016, 1463, 110-120.	3.7	13
63	Hemicellulose-reinforced nanocellulose hydrogels for wound healing application. <i>Cellulose</i> , 2016, 23, 3129-3143.	4.9	159
64	Biocomposites of copper-containing mesoporous bioactive glass and nanofibrillated cellulose: Biocompatibility and angiogenic promotion in chronic wound healing application. <i>Acta Biomaterialia</i> , 2016, 46, 286-298.	8.3	151
65	Functionalized galactoglucomannan-based hydrogels for the removal of metal cations from aqueous solutions. <i>Journal of Applied Polymer Science</i> , 2016, 133, .	2.6	14
66	Spruce galactoglucomannans inhibit lipid oxidation in rapeseed oil-in-water emulsions. <i>Food Hydrocolloids</i> , 2016, 58, 255-266.	10.7	42
67	Spruce galactoglucomannans in rapeseed oil-in-water emulsions: Efficient stabilization performance and structural partitioning. <i>Food Hydrocolloids</i> , 2016, 52, 615-624.	10.7	42
68	Tailor-made hemicellulose-based hydrogels reinforced with nanofibrillated cellulose. <i>Nordic Pulp and Paper Research Journal</i> , 2015, 30, 373-384.	0.7	13
69	Improvement of ultrafiltration performance by oxidation treatment in the recovery of galactoglucomannan from wood autohydrolyzate. <i>Separation and Purification Technology</i> , 2015, 149, 428-436.	7.9	7
70	Composite films of nanofibrillated cellulose and O-acetyl galactoglucomannan (GGM) coated with succinic esters of GGM showing potential as barrier material in food packaging. <i>Journal of Materials Science</i> , 2015, 50, 3189-3199.	3.7	38
71	Cellulose nanocrystals prepared via formic acid hydrolysis followed by TEMPO-mediated oxidation. <i>Carbohydrate Polymers</i> , 2015, 133, 605-612.	10.2	184
72	Transparent nanocellulose-pigment composite films. <i>Journal of Materials Science</i> , 2015, 50, 7343-7352.	3.7	43

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73	Strong reinforcing effects from galactoglucomannan hemicellulose on mechanical behavior of wet cellulose nanofiber gels. <i>Journal of Materials Science</i> , 2015, 50, 7413-7423.	3.7	34
74	Conductivity of PEDOT:PSS on Spin-Coated and Drop Cast Nanofibrillar Cellulose Thin Films. <i>Nanoscale Research Letters</i> , 2015, 10, 386.	5.7	46
75	A review of bioactive plant polysaccharides: Biological activities, functionalization, and biomedical applications. <i>Bioactive Carbohydrates and Dietary Fibre</i> , 2015, 5, 31-61.	2.7	461
76	O-acetyl galactoglucomannan esters for barrier coatings. <i>Cellulose</i> , 2014, 21, 4497-4509.	4.9	30
77	Targeted allylation and propargylation of galactose-containing polysaccharides in water. <i>Carbohydrate Polymers</i> , 2014, 100, 46-54.	10.2	28
78	Cationised O-acetyl galactoglucomannans: Synthesis and characterisation. <i>Carbohydrate Polymers</i> , 2014, 99, 755-764.	10.2	14
79	Modification of nanofibrillated cellulose using amphiphilic block-structured galactoglucomannans. <i>Carbohydrate Polymers</i> , 2014, 110, 163-172.	10.2	34
80	Enzymatic oxidation of plant polysaccharides adsorbed to cellulose surfaces. <i>New Biotechnology</i> , 2014, 31, S7-S8.	4.4	0
81	Biocomposites of Nanofibrillated Cellulose, Polypyrrole, and Silver Nanoparticles with Electroconductive and Antimicrobial Properties. <i>Biomacromolecules</i> , 2014, 15, 3655-3663.	5.4	106
82	Obtaining Spruce Hemicelluloses of Desired Molar Mass by using Pressurized Hot Water Extraction. <i>ChemSusChem</i> , 2014, 7, 2947-2953.	6.8	42
83	Wood cell wall mimicking for composite films of spruce nanofibrillated cellulose with spruce galactoglucomannan and arabinoglucuronoxylan. <i>Journal of Materials Science</i> , 2014, 49, 5043-5055.	3.7	14
84	Cationic hemicellulose-based hydrogels for arsenic and chromium removal from aqueous solutions. <i>Carbohydrate Polymers</i> , 2014, 111, 797-805.	10.2	70
85	Nanofibrillated cellulose originated from birch sawdust after sequential extractions: a promising polymeric material from waste to films. <i>Cellulose</i> , 2014, 21, 2587-2598.	4.9	61
86	Anionic Polysaccharides as Templates for the Synthesis of Conducting Polyaniline and as Structural Matrix for Conducting Biocomposites. <i>Macromolecular Rapid Communications</i> , 2013, 34, 1056-1061.	3.9	20
87	Synthesis of SETâ€‘LRPâ€‘induced galactoglucomannanâ€‘diblock copolymers. <i>Journal of Polymer Science Part A</i> , 2013, 51, 5100-5110.	2.3	21
88	Targeted functionalization of spruce <i>O</i>-acetyl galactoglucomannansâ€‘2,2,6,6-tetramethylpiperidinâ€‘1-oxylâ€‘oxidation and carbodiimideâ€‘mediated amidation. <i>Journal of Applied Polymer Science</i> , 2013, 130, 3122-3129.	2.6	13
89	Hot Water Extraction of Hemicelluloses from Aspen Wood Chips of Different Sizes. <i>BioResources</i> , 2013, 8, .	1.0	15
90	Amphiphilic Spruce Galactoglucomannan Derivatives Based on Naturally-Occurring Fatty Acids. <i>BioResources</i> , 2013, 8, .	1.0	15

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91	Romania needs overseas reviewers. <i>Nature</i> , 2012, 492, 186-186.	27.8	1
92	Functional and Anionic Cellulose-Interacting Polymers by Selective Chemo-Enzymatic Carboxylation of Galactose-Containing Polysaccharides. <i>Biomacromolecules</i> , 2012, 13, 2418-2428.	5.4	50
93	Antithrombotic properties of sulfated wood-derived galactoglucomannans. <i>Holzforschung</i> , 2012, 66, 149-154.	1.9	23
94	Chemo-enzymatic Assembly of Clickable Cellulose Surfaces via Multivalent Polysaccharides. <i>ChemSusChem</i> , 2012, 5, 661-665.	6.8	60
95	Building Custom Polysaccharides in Vitro with an Efficient, Broad-Specificity Xyloglucan Glycosynthase and a Fucosyltransferase. <i>Journal of the American Chemical Society</i> , 2011, 133, 10892-10900.	13.7	37
96	Carboxymethylated spruce galactoglucomannans: preparation, characterisation, dispersion stability, water-in-oil emulsion stability, and sorption on cellulose surface. <i>Nordic Pulp and Paper Research Journal</i> , 2011, 26, 1-12.	0.7	34
97	Kinetics of Acid Hydrolysis of Arabinogalactans. <i>International Journal of Chemical Reactor Engineering</i> , 2010, 8, .	1.1	14
98	Glucomannan composite films with cellulose nanowhiskers. <i>Cellulose</i> , 2010, 17, 69-81.	4.9	60
99	Acetylation and characterization of spruce (<i>Picea abies</i>) galactoglucomannans. <i>Carbohydrate Research</i> , 2010, 345, 810-816.	2.3	89
100	Lipophilic Extractives in <i>Populus Æ— euramericana</i> Æ—Guariento Æ—Stemwood and Bark. <i>Journal of Wood Chemistry and Technology</i> , 2010, 30, 105-117.	1.7	14
101	Rheological properties of water-soluble spruce O-acetyl galactoglucomannans. <i>Carbohydrate Polymers</i> , 2009, 75, 498-504.	10.2	59
102	Mannans as stabilizers of oil-in-water beverage emulsions. <i>LWT - Food Science and Technology</i> , 2009, 42, 849-855.	5.2	74
103	Hydrolytic stability of water-soluble spruce O-acetyl galactoglucomannans. <i>Holzforschung</i> , 2009, 63, .	1.9	25
104	Norway spruce galactoglucomannans exhibiting immunomodulating and radical-scavenging activities. <i>International Journal of Biological Macromolecules</i> , 2008, 42, 1-5.	7.5	68
105	Kinetics of Acid Hydrolysis of Water-Soluble Spruce O-Acetyl Galactoglucomannans. <i>Journal of Agricultural and Food Chemistry</i> , 2008, 56, 2429-2435.	5.2	56