

Ming-Qiang Zhu

List of Publications by Year in descending order

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440
papers

23,662
citations

7069

78
h-index

17546

121
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446
all docs

446
docs citations

446
times ranked

21113
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural Differences between the Lignin-Carbohydrate Complexes (LCCs) from 2- and 24-Month-Old Bamboo (<i>Neosinocalamus affinis</i>). <i>International Journal of Molecular Sciences</i> , 2018, 19, 1.	1.8	1,144
2	The role of pretreatment in improving the enzymatic hydrolysis of lignocellulosic materials. <i>Bioresource Technology</i> , 2016, 199, 49-58.	4.8	708
3	Recent Advances in Characterization of Lignin Polymer by Solution-State Nuclear Magnetic Resonance (NMR) Methodology. <i>Materials</i> , 2013, 6, 359-391.	1.3	591
4	Facile fractionation of lignocelluloses by biomass-derived deep eutectic solvent (DES) pretreatment for cellulose enzymatic hydrolysis and lignin valorization. <i>Green Chemistry</i> , 2019, 21, 275-283.	4.6	445
5	Understanding the chemical transformations of lignin during ionic liquid pretreatment. <i>Green Chemistry</i> , 2014, 16, 181-190.	4.6	260
6	A Supercompressible, Elastic, and Bendable Carbon Aerogel with Ultrasensitive Detection Limits for Compression Strain, Pressure, and Bending Angle. <i>Advanced Materials</i> , 2018, 30, e1706705.	11.1	255
7	Gram-scale synthesis of single-crystalline graphene quantum dots derived from lignin biomass. <i>Green Chemistry</i> , 2018, 20, 1383-1390.	4.6	250
8	Engineering aspects of hydrothermal pretreatment: From batch to continuous operation, scale-up and pilot reactor under biorefinery concept. <i>Bioresource Technology</i> , 2020, 299, 122685.	4.8	236
9	Probing Energy and Electron Transfer Mechanisms in Fluorescence Quenching of Biomass Carbon Quantum Dots. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 17478-17488.	4.0	223
10	Compressible, Elastic, and Pressure-Sensitive Carbon Aerogels Derived from 2D Titanium Carbide Nanosheets and Bacterial Cellulose for Wearable Sensors. <i>Chemistry of Materials</i> , 2019, 31, 3301-3312.	3.2	220
11	Manufacture and application of lignin-based carbon fibers (LCFs) and lignin-based carbon nanofibers (LCNFs). <i>Green Chemistry</i> , 2017, 19, 1794-1827.	4.6	216
12	Catalytic Hydrogenolysis of Lignins into Phenolic Compounds over Carbon Nanotube Supported Molybdenum Oxide. <i>ACS Catalysis</i> , 2017, 7, 7535-7542.	5.5	198
13	The strong association of condensed phenolic moieties in isolated lignins with their inhibition of enzymatic hydrolysis. <i>Green Chemistry</i> , 2016, 18, 4276-4286.	4.6	195
14	Comparative study of lignins isolated by alkali and ultrasound-assisted alkali extractions from wheat straw. <i>Ultrasonics Sonochemistry</i> , 2002, 9, 85-93.	3.8	190
15	Understanding the chemical and structural transformations of lignin macromolecule during torrefaction. <i>Applied Energy</i> , 2014, 121, 1-9.	5.1	190
16	An ultralight, elastic, cost-effective, and highly recyclable superabsorbent from microfibrillated cellulose fibers for oil spillage cleanup. <i>Journal of Materials Chemistry A</i> , 2015, 3, 8772-8781.	5.2	186
17	Quantitative Structures and Thermal Properties of Birch Lignins after Ionic Liquid Pretreatment. <i>Journal of Agricultural and Food Chemistry</i> , 2013, 61, 635-645.	2.4	179
18	Lignin-Based Rigid Polyurethane Foam Reinforced with Pulp Fiber: Synthesis and Characterization. <i>ACS Sustainable Chemistry and Engineering</i> , 2014, 2, 1474-1480.	3.2	176

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19	A lignosulfonate-modified graphene hydrogel with ultrahigh adsorption capacity for Pb(II) removal. <i>Journal of Materials Chemistry A</i> , 2016, 4, 11888-11896.	5.2	169
20	Structural elucidation of whole lignin from Eucalyptus based on preswelling and enzymatic hydrolysis. <i>Green Chemistry</i> , 2015, 17, 1589-1596.	4.6	157
21	Colloidal stability of negatively charged cellulose nanocrystalline in aqueous systems. <i>Carbohydrate Polymers</i> , 2012, 90, 644-649.	5.1	152
22	Application of biochar-based catalysts in biomass upgrading: a review. <i>RSC Advances</i> , 2017, 7, 48793-48805.	1.7	150
23	Lignin Source and Structural Characterization. <i>ChemSusChem</i> , 2020, 13, 4385-4393.	3.6	150
24	From lignin subunits to aggregates: insights into lignin solubilization. <i>Green Chemistry</i> , 2017, 19, 3272-3281.	4.6	149
25	Facile and High-Yield Synthesis of Carbon Quantum Dots from Biomass-Derived Carbons at Mild Condition. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 7833-7843.	3.2	149
26	Green and Facile Preparation of Regular Lignin Nanoparticles with High Yield and Their Natural Broad-Spectrum Sunscreens. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 2658-2666.	3.2	148
27	High Strength Hemicellulose-Based Nanocomposite Film for Food Packaging Applications. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 1985-1993.	3.2	145
28	Properties of polyvinyl alcohol/xylan composite films with citric acid. <i>Carbohydrate Polymers</i> , 2014, 103, 94-99.	5.1	140
29	Research Progress in Lignin-Based Slow/Controlled Release Fertilizer. <i>ChemSusChem</i> , 2020, 13, 4356-4366.	3.6	140
30	Studies on the properties and formation mechanism of flexible nanocomposite hydrogels from cellulose nanocrystals and poly(acrylic acid). <i>Journal of Materials Chemistry</i> , 2012, 22, 22467.	6.7	138
31	Cold sodium hydroxide/urea based pretreatment of bamboo for bioethanol production: Characterization of the cellulose rich fraction. <i>Industrial Crops and Products</i> , 2010, 32, 551-559.	2.5	132
32	Structural and Morphological Transformations of Lignin Macromolecules during Bio-Based Deep Eutectic Solvent (DES) Pretreatment. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 2130-2137.	3.2	131
33	Synthesis and characterization of mechanically flexible and tough cellulose nanocrystals-polyacrylamide nanocomposite hydrogels. <i>Cellulose</i> , 2013, 20, 227-237.	2.4	128
34	3D hierarchical porous N-doped carbon aerogel from renewable cellulose: an attractive carbon for high-performance supercapacitor electrodes and CO ₂ adsorption. <i>RSC Advances</i> , 2016, 6, 15788-15795.	1.7	127
35	In-depth interpretation of the structural changes of lignin and formation of diketones during acidic deep eutectic solvent pretreatment. <i>Green Chemistry</i> , 2020, 22, 1851-1858.	4.6	123
36	Structural Characteristics of Lignin Macromolecules from Different Eucalyptus Species. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 11618-11627.	3.2	122

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37	Role of lignin in a biorefinery: separation characterization and valorization. <i>Journal of Chemical Technology and Biotechnology</i> , 2013, 88, 346-352.	1.6	120
38	Comparison of physical properties of regenerated cellulose films fabricated with different cellulose feedstocks in ionic liquid. <i>Carbohydrate Polymers</i> , 2015, 121, 71-78.	5.1	120
39	Fabrication of Cellulose Film with Enhanced Mechanical Properties in Ionic Liquid 1-Allyl-3-methylimidazolium Chloride (AmimCl). <i>Materials</i> , 2013, 6, 1270-1284.	1.3	114
40	Advanced and versatile lignin-derived biodegradable composite film materials toward a sustainable world. <i>Green Chemistry</i> , 2021, 23, 3790-3817.	4.6	114
41	A metal-free and flexible supercapacitor based on redox-active lignosulfonate functionalized graphene hydrogels. <i>Journal of Materials Chemistry A</i> , 2017, 5, 20643-20650.	5.2	113
42	Economically Competitive Biodegradable PBAT/Lignin Composites: Effect of Lignin Methylation and Compatibilizer. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 5338-5346.	3.2	113
43	Structural and physico-chemical characterization of hemicelluloses from ultrasound-assisted extractions of partially delignified fast-growing poplar wood through organic solvent and alkaline solutions. <i>Biotechnology Advances</i> , 2010, 28, 583-593.	6.0	112
44	Recent advances in alcohol and organic acid fractionation of lignocellulosic biomass. <i>Bioresource Technology</i> , 2016, 200, 971-980.	4.8	112
45	Production of furfural from xylose, water-insoluble hemicelluloses and water-soluble fraction of corncob via a tin-loaded montmorillonite solid acid catalyst. <i>Bioresource Technology</i> , 2015, 176, 242-248.	4.8	108
46	Electrolyte Regulation towards Stable Lithium-Metal Anodes in Lithium-Sulfur Batteries with Sulfurized Polyacrylonitrile Cathodes. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 10732-10745.	7.2	108
47	Xylan-based temperature/pH sensitive hydrogels for drug controlled release. <i>Carbohydrate Polymers</i> , 2016, 151, 189-197.	5.1	107
48	Direct transformation of xylan-type hemicelluloses to furfural via SnCl ₄ catalysts in aqueous and biphasic systems. <i>Bioresource Technology</i> , 2015, 183, 188-194.	4.8	105
49	Characterization and phenolation of biorefinery technical lignins for lignin-phenol-formaldehyde resin adhesive synthesis. <i>RSC Advances</i> , 2014, 4, 57996-58004.	1.7	103
50	Studies on the Starch and Hemicelluloses Fractionated by Graded Ethanol Precipitation from Bamboo <i>Phyllostachys bambusoides</i> f. <i>shouzhu</i> Yi. <i>Journal of Agricultural and Food Chemistry</i> , 2011, 59, 2680-2688.	2.4	102
51	Catalytic hydrothermal pretreatment of corncob into xylose and furfural via solid acid catalyst. <i>Bioresource Technology</i> , 2014, 158, 313-320.	4.8	101
52	Unveiling the Structural Heterogeneity of Bamboo Lignin by In Situ HSQC NMR Technique. <i>Bioenergy Research</i> , 2012, 5, 886-903.	2.2	100
53	Quantitative structural characterization and thermal properties of birch lignins after auto-catalyzed organosolv pretreatment and enzymatic hydrolysis. <i>Journal of Chemical Technology and Biotechnology</i> , 2013, 88, 1663-1671.	1.6	100
54	Biomass polymer-assisted fabrication of aerogels from MXenes with ultrahigh compression elasticity and pressure sensitivity. <i>Journal of Materials Chemistry A</i> , 2019, 7, 10273-10281.	5.2	100

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55	Naturally p-Hydroxybenzoylated Lignins in Palms. <i>Bioenergy Research</i> , 2015, 8, 934-952.	2.2	99
56	Characterization and antioxidant activity of Î²-carotene loaded chitosan-graft-poly(lactide) nanomicelles. <i>Carbohydrate Polymers</i> , 2015, 117, 169-176.	5.1	96
57	Fractionation of bamboo culms by autohydrolysis, organosolv delignification and extended delignification: Understanding the fundamental chemistry of the lignin during the integrated process. <i>Bioresource Technology</i> , 2013, 150, 278-286.	4.8	95
58	Self-Biotemplate Preparation of Hierarchical Porous Carbon with Rational Mesopore Ratio and High Oxygen Content for an Ultrahigh Energy-Density Supercapacitor. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 7138-7150.	3.2	95
59	Plasticized hemicelluloses/chitosan-based edible films reinforced by cellulose nanofiber with enhanced mechanical properties. <i>Carbohydrate Polymers</i> , 2019, 224, 115164.	5.1	93
60	Syntheses of Lignin-Derived Thioacidolysis Monomers and Their Uses as Quantitation Standards. <i>Journal of Agricultural and Food Chemistry</i> , 2012, 60, 922-928.	2.4	92
61	Autohydrolysis of bamboo (<i>Dendrocalamus giganteus</i> Munro) culm for the production of xylo-oligosaccharides. <i>Bioresource Technology</i> , 2013, 138, 63-70.	4.8	92
62	Enhanced enzymatic hydrolysis of bamboo (<i>Dendrocalamus giganteus</i> Munro) culm by hydrothermal pretreatment. <i>Bioresource Technology</i> , 2014, 159, 41-47.	4.8	92
63	Sustainable carbon quantum dots from forestry and agricultural biomass with amplified photoluminescence by simple NH ₄ OH passivation. <i>Journal of Materials Chemistry C</i> , 2014, 2, 9760-9766.	2.7	92
64	A feasible process for furfural production from the pre-hydrolysis liquor of corncob via biochar catalysts in a new biphasic system. <i>Bioresource Technology</i> , 2016, 216, 754-760.	4.8	92
65	Highly Thermostable, Flexible, and Conductive Films Prepared from Cellulose, Graphite, and Polypyrrole Nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 15641-15648.	4.0	90
66	Cellulose acetate fibers prepared from different raw materials with rapid synthesis method. <i>Carbohydrate Polymers</i> , 2016, 137, 685-692.	5.1	88
67	Chemosynthesis and structural characterization of a novel lignin-based bio-sorbent and its strong adsorption for Pb (II). <i>Industrial Crops and Products</i> , 2017, 108, 72-80.	2.5	88
68	“Green” films from renewable resources: Properties of epoxidized soybean oil plasticized ethyl cellulose films. <i>Carbohydrate Polymers</i> , 2014, 103, 198-206.	5.1	87
69	Microwave-assisted acid hydrolysis to produce xylooligosaccharides from sugarcane bagasse hemicelluloses. <i>Food Chemistry</i> , 2014, 156, 7-13.	4.2	87
70	Highly Conductive and Mechanically Robust Cellulose Nanocomposite Hydrogels with Antifreezing and Antidehydration Performances for Flexible Humidity Sensors. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 10886-10897.	4.0	87
71	Effect of hydrothermal pretreatment on the structural changes of alkaline ethanol lignin from wheat straw. <i>Scientific Reports</i> , 2016, 6, 39354.	1.6	86
72	Comparative study of the pyrolysis of lignocellulose and its major components: Characterization and overall distribution of their biochars and volatiles. <i>Bioresource Technology</i> , 2014, 155, 21-27.	4.8	85

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73	Comparison of activated carbons prepared by one-step and two-step chemical activation process based on cotton stalk for supercapacitors application. <i>Energy</i> , 2021, 215, 119144.	4.5	85
74	Choline chloride/urea as an effective plasticizer for production of cellulose films. <i>Carbohydrate Polymers</i> , 2015, 117, 133-139.	5.1	84
75	One-pot synthesis of levulinic acid from cellulose in ionic liquids. <i>Bioresource Technology</i> , 2015, 192, 812-816.	4.8	83
76	Structural elucidation of inhomogeneous lignins from bamboo. <i>International Journal of Biological Macromolecules</i> , 2015, 77, 250-259.	3.6	83
77	Hydrothermal synthesis and applications of advanced carbonaceous materials from biomass: a review. <i>Advanced Composites and Hybrid Materials</i> , 2020, 3, 267-284.	9.9	83
78	Severity factor kinetic model as a strategic parameter of hydrothermal processing (steam explosion) <i>Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5</i> 2021, 342, 125961.	4.8	83
79	Microwave-assisted organic acid extraction of lignin from bamboo: Structure and antioxidant activity investigation. <i>Food Chemistry</i> , 2012, 134, 1392-1398.	4.2	82
80	Electrolyte Regulation towards Stable Lithium-Metal Anodes in Lithium-Sulfur Batteries with Sulfurized Polyacrylonitrile Cathodes. <i>Angewandte Chemie</i> , 2020, 132, 10821-10834.	1.6	80
81	High Production Yield and More Thermally Stable Lignin-Containing Cellulose Nanocrystals Isolated Using a Ternary Acidic Deep Eutectic Solvent. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 7182-7191.	3.2	79
82	<i>Eucommia ulmoides</i> Oliver: A Potential Feedstock for Bioactive Products. <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 5433-5438.	2.4	78
83	Sequential utilization of bamboo biomass through reductive catalytic fractionation of lignin. <i>Bioresource Technology</i> , 2019, 285, 121335.	4.8	74
84	Producing Lignin-Based Polyols through Microwave-Assisted Liquefaction for Rigid Polyurethane Foam Production. <i>Materials</i> , 2015, 8, 586-599.	1.3	73
85	Selective Fragmentation of Biorefinery Corncob Lignin into <i>p</i> -Hydroxycinnamic Esters with a Supported Zinc Molybdate Catalyst. <i>ChemSusChem</i> , 2018, 11, 2114-2123.	3.6	73
86	Lignin-phenol-formaldehyde resin adhesives prepared with biorefinery technical lignins. <i>Journal of Applied Polymer Science</i> , 2015, 132, .	1.3	72
87	Recent advances in lignocellulose prior-fractionation for biomaterials, biochemicals, and bioenergy. <i>Carbohydrate Polymers</i> , 2021, 261, 117884.	5.1	72
88	Graphene Oxide Encapsulating Liquid Metal to Toughen Hydrogel. <i>Advanced Functional Materials</i> , 2021, 31, 2106761.	7.8	72
89	Insights into bamboo delignification with acidic deep eutectic solvents pretreatment for enhanced lignin fractionation and valorization. <i>Industrial Crops and Products</i> , 2021, 170, 113692.	2.5	72
90	Chemical modification of ultrasound-pretreated sugarcane bagasse with maleic anhydride. <i>Industrial Crops and Products</i> , 2007, 26, 212-219.	2.5	71

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91	Evaluation of the two-step treatment with ionic liquids and alkali for enhancing enzymatic hydrolysis of Eucalyptus: chemical and anatomical changes. <i>Biotechnology for Biofuels</i> , 2016, 9, 166.	6.2	71
92	Assessment of integrated process based on hydrothermal and alkaline treatments for enzymatic saccharification of sweet sorghum stems. <i>Bioresource Technology</i> , 2015, 175, 473-479.	4.8	70
93	Catechyl Lignin Extracted from Castor Seed Coats Using Deep Eutectic Solvents: Characterization and Depolymerization. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 7031-7038.	3.2	70
94	Isolation and Structural Characterization of Lignin from Cotton Stalk Treated in an Ammonia Hydrothermal System. <i>International Journal of Molecular Sciences</i> , 2012, 13, 15209-15226.	1.8	69
95	Functional relationship of furfural yields and the hemicellulose-derived sugars in the hydrolysates from corncob by microwave-assisted hydrothermal pretreatment. <i>Biotechnology for Biofuels</i> , 2015, 8, 127.	6.2	69
96	Hydrothermal conversion of xylose, glucose, and cellulose under the catalysis of transition metal sulfates. <i>Carbohydrate Polymers</i> , 2015, 118, 44-51.	5.1	69
97	Advanced Compressible and Elastic 3D Monoliths beyond Hydrogels. <i>Advanced Functional Materials</i> , 2019, 29, 1904472.	7.8	69
98	Microwave-enhanced extraction of lignin from birch in formic acid: Structural characterization and antioxidant activity study. <i>Process Biochemistry</i> , 2012, 47, 1799-1806.	1.8	68
99	Synthetic and viscoelastic behaviors of silicananoparticle reinforced poly(acrylamide) core-shell nanocomposite hydrogels. <i>Soft Matter</i> , 2013, 9, 1220-1230.	1.2	68
100	Green Process for Extraction of Lignin by the Microwave-Assisted Ionic Liquid Approach: Toward Biomass Biorefinery and Lignin Characterization. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 13062-13072.	3.2	68
101	Microwave-Induced Synthesis of Carboxymethyl Hemicelluloses and Their Rheological Properties. <i>Journal of Agricultural and Food Chemistry</i> , 2011, 59, 570-576.	2.4	66
102	Wet Torrefaction of Bamboo in Hydrochloric Acid Solution by Microwave Heating. <i>ACS Sustainable Chemistry and Engineering</i> , 2015, 3, 2022-2029.	3.2	66
103	Enhanced adsorption activity for phosphate removal by functional lignin-derived carbon-based adsorbent: Optimization, performance and evaluation. <i>Science of the Total Environment</i> , 2021, 761, 143217.	3.9	66
104	Hemicelluloses and Their Derivatives. <i>ACS Symposium Series</i> , 2003, , 2-22.	0.5	65
105	Effect of structural changes of lignin during the autohydrolysis and organosolv pretreatment on <i>Eucommia ulmoides</i> Oliver for an effective enzymatic hydrolysis. <i>Bioresource Technology</i> , 2015, 185, 378-385.	4.8	65
106	Chemodivergent hydrogenolysis of eucalyptus lignin with Ni@ZIF-8 catalyst. <i>Green Chemistry</i> , 2019, 21, 1498-1504.	4.6	65
107	Structural changes and electrochemical properties of lacquer wood activated carbon prepared by phosphoric acid-chemical activation for supercapacitor applications. <i>Renewable Energy</i> , 2021, 177, 82-94.	4.3	65
108	Superelastic Carbon Aerogel with Ultrahigh and Wide-Range Linear Sensitivity. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 40641-40650.	4.0	64

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109	Structural and physicochemical characterization of hemicelluloses isolated by alkaline peroxide from barley straw. <i>Polymer International</i> , 2002, 51, 117-124.	1.6	63
110	Self-Assembled Conjugated Polymer/Chitosan- <i>graft</i> -Oleic Acid Micelles for Fast Visible Detection of Aliphatic Biogenic Amines by Turn-On FRET . <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 22875-22884.	4.0	63
111	Heat Treatment of Industrial Alkaline Lignin and its Potential Application as an Adhesive for Green Wood-Lignin Composites. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 7269-7277.	3.2	63
112	Transparent, Self-Adhesive, Conductive Organohydrogels with Fast Gelation from Lignin-Based Self-Catalytic System for Extreme Environment-Resistant Triboelectric Nanogenerators. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	63
113	Enhanced enzymatic digestibility of bamboo by a combined system of multiple steam explosion and alkaline treatments. <i>Applied Energy</i> , 2014, 136, 519-526.	5.1	61
114	Effects of aluminum chloride-catalyzed hydrothermal pretreatment on the structural characteristics of lignin and enzymatic hydrolysis. <i>Bioresource Technology</i> , 2016, 206, 57-64.	4.8	61
115	Effects of pretreatments on crystalline properties and morphology of cellulose nanocrystals. <i>Cellulose</i> , 2013, 20, 2427-2437.	2.4	60
116	Self-assembly and β -carotene loading capacity of hydroxyethyl cellulose-graft-linoleic acid nanomicelles. <i>Carbohydrate Polymers</i> , 2016, 145, 56-63.	5.1	60
117	Production of xylooligosaccharides by microwave-induced, organic acid-catalyzed hydrolysis of different xylan-type hemicelluloses: Optimization by response surface methodology. <i>Carbohydrate Polymers</i> , 2017, 157, 214-225.	5.1	60
118	Hemicellulose from Plant Biomass in Medical and Pharmaceutical Application: A Critical Review. <i>Current Medicinal Chemistry</i> , 2019, 26, 2430-2455.	1.2	60
119	Tunable, UV-shielding and biodegradable composites based on well-characterized lignins and poly(butylene adipate-co-terephthalate). <i>Green Chemistry</i> , 2020, 22, 8623-8632.	4.6	59
120	Unlocking Structure-Reactivity Relationships for Catalytic Hydrogenolysis of Lignin into Phenolic Monomers. <i>ChemSusChem</i> , 2020, 13, 4548-4556.	3.6	58
121	Acidic deep eutectic solvent assisted isolation of lignin containing nanocellulose from thermomechanical pulp. <i>Carbohydrate Polymers</i> , 2020, 247, 116727.	5.1	58
122	Comprehensive evaluation of the liquid fraction during the hydrothermal treatment of rapeseed straw. <i>Biotechnology for Biofuels</i> , 2016, 9, 142.	6.2	57
123	Fragmentation of Woody Lignocellulose into Primary Monolignols and Their Derivatives. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 4666-4674.	3.2	56
124	Structural Variations of Lignin Macromolecules from Early Growth Stages of Poplar Cell Walls. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 1813-1822.	3.2	56
125	Recent advances and challenges on removal and recycling of phosphate from wastewater using biomass-derived adsorbents. <i>Chemosphere</i> , 2021, 278, 130377.	4.2	56
126	Alkaline hydrothermal liquefaction of swine carcasses to bio-oil. <i>Waste Management</i> , 2015, 43, 230-238.	3.7	55

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127	Efficient separation and physico-chemical characterization of lignin from eucalyptus using ionic liquid–organic solvent and alkaline ethanol solvent. <i>Industrial Crops and Products</i> , 2013, 47, 277-285.	2.5	54
128	Structural variations of lignin macromolecule from different growth years of Triploid of <i>Populus tomentosa</i> Carr.. <i>International Journal of Biological Macromolecules</i> , 2017, 101, 747-757.	3.6	54
129	Facile fabrication of chitosan active film with xylan via direct immersion. <i>Cellulose</i> , 2014, 21, 1873-1883.	2.4	53
130	Revealing the structure and distribution changes of Eucalyptus lignin during the hydrothermal and alkaline pretreatments. <i>Scientific Reports</i> , 2017, 7, 593.	1.6	53
131	Fractionation of rapeseed straw by hydrothermal/dilute acid pretreatment combined with alkali post-treatment for improving its enzymatic hydrolysis. <i>Bioresource Technology</i> , 2017, 225, 127-133.	4.8	53
132	Structural Variation of Lignin and Lignin–Carbohydrate Complex in <i>Eucalyptus grandis</i> – <i>E. urophylla</i> during Its Growth Process. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 1113-1122.	3.2	53
133	Understanding the structural changes and depolymerization of Eucalyptus lignin under mild conditions in aqueous $AlCl_3$. <i>RSC Advances</i> , 2016, 6, 45315-45325.	1.7	52
134	Functional B@CN-assisted photocatalytic oxidation of biomass-derived pentoses and hexoses to lactic acid. <i>Green Chemistry</i> , 2020, 22, 6384-6392.	4.6	52
135	Facile synthesis of cellulose-based carbon with tunable N content for potential supercapacitor application. <i>Carbohydrate Polymers</i> , 2017, 170, 107-116.	5.1	52
136	Preparation and characterization of double crosslinked hydrogel films from carboxymethylchitosan and carboxymethylcellulose. <i>Carbohydrate Polymers</i> , 2014, 110, 113-120.	5.1	51
137	Multifunctional cellulosic paper based on quaternized chitosan and gold nanoparticle–reduced graphene oxide via electrostatic self-assembly. <i>Journal of Materials Chemistry A</i> , 2015, 3, 7422-7428.	5.2	51
138	Gasification of bio-oil: Effects of equivalence ratio and gasifying agents on product distribution and gasification efficiency. <i>Bioresource Technology</i> , 2016, 211, 164-172.	4.8	51
139	New Understandings of the Relationship and Initial Formation Mechanism for Pseudo-lignin, Humins, and Acid-Induced Hydrothermal Carbon. <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 11981-11989.	2.4	51
140	Structural elucidation of lignin macromolecule from abaca during alkaline hydrogen peroxide delignification. <i>International Journal of Biological Macromolecules</i> , 2020, 144, 596-602.	3.6	51
141	Removed heavy metal ions from wastewater reuse for chemiluminescence: Successive application of lignin-based composite hydrogels. <i>Journal of Hazardous Materials</i> , 2022, 421, 126722.	6.5	51
142	Effect of structural characteristics of corncob hemicelluloses fractionated by graded ethanol precipitation on furfural production. <i>Carbohydrate Polymers</i> , 2016, 136, 203-209.	5.1	50
143	Activated carbons prepared by hydrothermal pretreatment and chemical activation of <i>Eucommia ulmoides</i> wood for supercapacitors application. <i>Industrial Crops and Products</i> , 2018, 125, 41-49.	2.5	50
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