Run-Cang Sun

List of Publications by Year
in descending order

215 papers	17,538 citations	10956 71 h-index	18075 120 g-index
216 all docs	216 docs citations	216 times ranked	16043 citing authors

#	Article	IF	Citations
1	Structural Differences between the Lignin-Carbohydrate Complexes (LCCs) from 2- and 24-Month-Old Bamboo (Neosinocalamus affinis). International Journal of Molecular Sciences, 2018, 19, 1.	1.8	1,144
2	Chemical, structural, and thermal characterizations of alkali-soluble lignins and hemicelluloses, and cellulose from maize stems, rye straw, and rice straw. Polymer Degradation and Stability, 2001, 74, 307-319.	2.7	669
3	Recent Advances in Characterization of Lignin Polymer by Solution-State Nuclear Magnetic Resonance (NMR) Methodology. Materials, 2013, 6, 359-391.	1.3	591
4	Characterization of Lignin Structures and Ligninâ€“Carbohydrate Complex (LCC) Linkages by Quantitative ¹³C and 2D HSQC NMR Spectroscopy. Journal of Agricultural and Food Chemistry, 2011, 59, 10604-10614.	2.4	483
5	Facile fractionation of lignocelluloses by biomass-derived deep eutectic solvent (DES) pretreatment for cellulose enzymatic hydrolysis and lignin valorization. Green Chemistry, 2019, 21, 275-283.	4.6	445
6	Fractional purification and bioconversion of hemicelluloses. Biotechnology Advances, 2012, 30, 879-903.	6.0	338
7	Comparative Study of Hemicelluloses Obtained by Graded Ethanol Precipitation from Sugarcane Bagasse. Journal of Agricultural and Food Chemistry, 2009, 57, 6305-6317.	2.4	312
8	Understanding the chemical transformations of lignin during ionic liquid pretreatment. Green Chemistry, 2014, 16, 181-190.	4.6	260
9	A Supercompressible, Elastic, and Bendable Carbon Aerogel with Ultrasensitive Detection Limits for Compression Strain, Pressure, and Bending Angle. Advanced Materials, 2018, 30, e1706705.	11.1	255
10	Gram-scale synthesis of single-crystalline graphene quantum dots derived from lignin biomass. Green Chemistry, 2018, 20, 1383-1390.	4.6	250
11	Probing Energy and Electron Transfer Mechanisms in Fluorescence Quenching of Biomass Carbon Quantum Dots. ACS Applied Materials & Interfaces, 2016, 8, 17478-17488.	4.0	223
12	Compressible, Elastic, and Pressure-Sensitive Carbon Aerogels Derived from 2D Titanium Carbide Nanosheets and Bacterial Cellulose for Wearable Sensors. Chemistry of Materials, 2019, 31, 3301-3312.	3.2	220
13	Manufacture and application of lignin-based carbon fibers (LCFs) and lignin-based carbon nanofibers (LCNFs). Green Chemistry, 2017, 19, 1794-1827.	4.6	216
14	Unmasking the structural features and property of lignin from bamboo. Industrial Crops and Products, 2013, 42, 332-343.	2.5	215
15	Catalytic Hydrogenolysis of Lignins into Phenolic Compounds over Carbon Nanotube Supported Molybdenum Oxide. ACS Catalysis, 2017, 7, 7535-7542.	5.5	198
16	Understanding the chemical and structural transformations of lignin macromolecule during torrefaction. Applied Energy, 2014, 121, 1-9.	5.1	190
17	Nanocomposite Films Based on Xylan-Rich Hemicelluloses and Cellulose Nanofibers with Enhanced Mechanical Properties. Biomacromolecules, 2011, 12, 3321-3329.	2.6	188
18	Quantitative Structures and Thermal Properties of Birch Lignins after Ionic Liquid Pretreatment. Journal of Agricultural and Food Chemistry, 2013, 61, 635-645.	2.4	179

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19	Quantitative structural characterization of the lignins from the stem and pith of bamboo (<i>Phyllostachys pubescens</i>). Holzforschung, 2013, 67, 613-627.	0.9	170
20	A lignosulfonate-modified graphene hydrogel with ultrahigh adsorption capacity for Pb(<scp>ii</scp>) removal. Journal of Materials Chemistry A, 2016, 4, 11888-11896.	5.2	169
21	Structural elucidation of whole lignin from Eucalyptus based on preswelling and enzymatic hydrolysis. Green Chemistry, 2015, 17, 1589-1596.	4.6	157
22	Application of biochar-based catalysts in biomass upgrading: a review. RSC Advances, 2017, 7, 48793-48805.	1.7	150
23	Lignin Source and Structural Characterization. ChemSusChem, 2020, 13, 4385-4393.	3.6	150
24	From lignin subunits to aggregates: insights into lignin solubilization. Green Chemistry, 2017, 19, 3272-3281.	4.6	149
25	Facile and High-Yield Synthesis of Carbon Quantum Dots from Biomass-Derived Carbons at Mild Condition. ACS Sustainable Chemistry and Engineering, 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. ACS Sustainable Chemistry and Engineering, 2019, 7, 2658-2666.	3.2	148
27	Ester and ether linkages between hydroxycinnamic acids and lignins from wheat, rice, rye, and barley straws, maize stems, and fast-growing poplar wood. Industrial Crops and Products, 2002, 15, 179-188.	2.5	147
28	Ultrasound-assisted dissolution of cellulose in ionic liquid. Carbohydrate Polymers, 2011, 86, 672-677.	5.1	143
29	Research Progress in Ligninâ€Based Slow/Controlled Release Fertilizer. ChemSusChem, 2020, 13, 4356-4366.	3.6	140
30	Quantitative Determination of Hydroxycinnamic Acids in Wheat, Rice, Rye, and Barley Straws, Maize Stems, Oil Palm Frond Fiber, and Fast-Growing Poplar Wood. Journal of Agricultural and Food Chemistry, 2001, 49, 5122-5129.	2.4	137
31	Structural features and antioxidant activity of xylooligosaccharides enzymatically produced from sugarcane bagasse. Bioresource Technology, 2013, 127, 236-241.	4.8	127
32	Formic acid based organosolv pulping of bamboo (Phyllostachys acuta): Comparative characterization of the dissolved lignins with milled wood lignin. Chemical Engineering Journal, 2012, 179, 80-89.	6.6	123
33	In-depth interpretation of the structural changes of lignin and formation of diketones during acidic deep eutectic solvent pretreatment. Green Chemistry, 2020, 22, 1851-1858.	4.6	123
34	Structural Characteristics of Lignin Macromolecules from Different <i>Eucalyptus</i> Species. ACS Sustainable Chemistry and Engineering, 2017, 5, 11618-11627.	3.2	122
35	Role of lignin in a biorefinery: separation characterization and valorization. Journal of Chemical Technology and Biotechnology, 2013, 88, 346-352.	1.6	120
36	Fabrication of Cellulose Film with Enhanced Mechanical Properties in Ionic Liquid 1-Allyl-3-methylimidaxolium Chloride (AmimCl). Materials, 2013, 6, 1270-1284.	1.3	114

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37	Advanced and versatile lignin-derived biodegradable composite film materials toward a sustainable world. Green Chemistry, 2021, 23, 3790-3817.	4.6	114
38	A metal-free and flexible supercapacitor based on redox-active lignosulfonate functionalized graphene hydrogels. Journal of Materials Chemistry A, 2017, 5, 20643-20650.	5.2	113
39	Economically Competitive Biodegradable PBAT/Lignin Composites: Effect of Lignin Methylation and Compatibilizer. ACS Sustainable Chemistry and Engineering, 2020, 8, 5338-5346.	3.2	113
40	Structural and physico-chemical characterization of hemicelluloses from ultrasound-assisted extractions of partially delignified fast-growing poplar wood through organic solvent and alkaline solutions. Biotechnology Advances, 2010, 28, 583-593.	6.0	112
41	High-Value Utilization of Lignin to Synthesize Ag Nanoparticles with Detection Capacity For Hg²⁺. ACS Applied Materials & Interfaces, 2014, 6, 16147-16155.	4.0	112
42	Recent advances in alcohol and organic acid fractionation of lignocellulosic biomass. Bioresource Technology, 2016, 200, 971-980.	4.8	112
43	Structural Elucidation of Lignin Polymers of <i>Eucalyptus</i> Chips during Organosolv Pretreatment and Extended Delignification. Journal of Agricultural and Food Chemistry, 2013, 61, 11067-11075.	2.4	109
44	Structural Characterization of Lignin from Triploid of Populus tomentosa Carr.. Journal of Agricultural and Food Chemistry, 2011, 59, 6605-6615.	2.4	108
45	Direct transformation of xylan-type hemicelluloses to furfural via SnCl4 catalysts in aqueous and biphasic systems. Bioresource Technology, 2015, 183, 188-194.	4.8	105
46	Compressive, ultralight and fire-resistant lignin-modified graphene aerogels as recyclable absorbents for oil and organic solvents. Chemical Engineering Journal, 2018, 350, 173-180.	6.6	105
47	Characterization and phenolation of biorefinery technical lignins for ligninâ€“phenolâ€“formaldehyde resin adhesive synthesis. RSC Advances, 2014, 4, 57996-58004.	1.7	103
48	Biomass polymer-assisted fabrication of aerogels from MXenes with ultrahigh compression elasticity and pressure sensitivity. Journal of Materials Chemistry A, 2019, 7, 10273-10281.	5.2	100
49	Effect of ionic liquid/organic solvent pretreatment on the enzymatic hydrolysis of corncob for bioethanol production. Part 1: Structural characterization of the lignins. Industrial Crops and Products, 2013, 43, 570-577.	2.5	97
50	Characterization and antioxidant activity of Î²-carotene loaded chitosan-graft-poly(lactide) nanomicelles. Carbohydrate Polymers, 2015, 117, 169-176.	5.1	96
51	Fractionation of bamboo culms by autohydrolysis, organosolv delignification and extended delignification: Understanding the fundamental chemistry of the lignin during the integrated process. Bioresource Technology, 2013, 150, 278-286.	4.8	95
52	Autohydrolysis of bamboo (Dendrocalamus giganteus Munro) culm for the production of xylo-oligosaccharides. Bioresource Technology, 2013, 138, 63-70.	4.8	92
53	Sustainable carbon quantum dots from forestry and agricultural biomass with amplified photoluminescence by simple NH₄OH passivation. Journal of Materials Chemistry C, 2014, 2, 9760-9766.	2.7	92
54	A feasible process for furfural production from the pre-hydrolysis liquor of corncob via biochar catalysts in a new biphasic system. Bioresource Technology, 2016, 216, 754-760.	4.8	92

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55	Highly Thermostable, Flexible, and Conductive Films Prepared from Cellulose, Graphite, and Polypyrrole Nanoparticles. ACS Applied Materials & Interfaces, 2015, 7, 15641-15648.	4.0	90
56	Availability of four energy crops assessing by the enzymatic hydrolysis and structural features of lignin before and after hydrothermal treatment. Energy Conversion and Management, 2018, 155, 58-67.	4.4	90
57	Sequential solvent fractionation of heterogeneous bamboo organosolv lignin for value-added application. Separation and Purification Technology, 2012, 101, 18-25.	3.9	89
58	Self-Assembly and Paclitaxel Loading Capacity of Cellulose-<i>graft</i>-poly(lactide) Nanomicelles. Journal of Agricultural and Food Chemistry, 2012, 60, 3900-3908.	2.4	88
59	Preparation of cellulose-graft-poly(É›-caprolactone) nanomicelles by homogeneous ROP in ionic liquid. Carbohydrate Polymers, 2013, 92, 77-83.	5.1	88
60	Chemosynthesis and structural characterization of a novel lignin-based bio-sorbent and its strong adsorption for Pb (II). Industrial Crops and Products, 2017, 108, 72-80.	2.5	88
61	Microwave-assisted acid hydrolysis to produce xylooligosaccharides from sugarcane bagasse hemicelluloses. Food Chemistry, 2014, 156, 7-13.	4.2	87
62	Highly Conductive and Mechanically Robust Cellulose Nanocomposite Hydrogels with Antifreezing and Antidehydration Performances for Flexible Humidity Sensors. ACS Applied Materials & Interfaces, 2022, 14, 10886-10897.	4.0	87
63	Effects of precipitation pH on the physico-chemical properties of the lignins isolated from the black liquor of oil palm empty fruit bunch fibre pulping. Polymer Degradation and Stability, 1999, 63, 195-200.	2.7	86
64	Effect of hydrothermal pretreatment on the structural changes of alkaline ethanol lignin from wheat straw. Scientific Reports, 2016, 6, 39354.	1.6	86
65	Successive alkali extraction and structural characterization of hemicelluloses from sweet sorghum stem. Carbohydrate Polymers, 2013, 92, 2224-2231.	5.1	84
66	Fractionational and structural characterization of lignin and its modification as biosorbents for efficient removal of chromium from wastewater: a review. Journal of Leather Science and Engineering, 2019, 1, .	2.7	84
67	Structural elucidation of inhomogeneous lignins from bamboo. International Journal of Biological Macromolecules, 2015, 77, 250-259.	3.6	83
68	Structural Variation of Bamboo Lignin before and after Ethanol Organosolv Pretreatment. International Journal of Molecular Sciences, 2013, 14, 21394-21413.	1.8	82
69	Oxidized nanocellulose facilitates preparing photoluminescent nitrogen-doped fluorescent carbon dots for Fe3+ ions detection and bioimaging. Chemical Engineering Journal, 2020, 384, 123260.	6.6	82
70	A highly conductive, pliable and foldable Cu/cellulose paper electrode enabled by controlled deposition of copper nanoparticles. Nanoscale, 2019, 11, 725-732.	2.8	80
71	High Production Yield and More Thermally Stable Lignin-Containing Cellulose Nanocrystals Isolated Using a Ternary Acidic Deep Eutectic Solvent. ACS Sustainable Chemistry and Engineering, 2020, 8, 7182-7191.	3.2	79
72	<i>Eucommia ulmoides</i> Oliver: A Potential Feedstock for Bioactive Products. Journal of Agricultural and Food Chemistry, 2018, 66, 5433-5438.	2.4	78

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73	Sequential utilization of bamboo biomass through reductive catalytic fractionation of lignin. Bioresource Technology, 2019, 285, 121335.	4.8	74
74	Selective Fragmentation of Biorefinery Corncob Lignin into <i>p</i>â€Hydroxycinnamic Esters with a Supported Zinc Molybdate Catalyst. ChemSusChem, 2018, 11, 2114-2123.	3.6	73
75	Ligninâ€"phenolâ€"formaldehyde resin adhesives prepared with biorefinery technical lignins. Journal of Applied Polymer Science, 2015, 132, .	1.3	72
76	Recent advances in lignocellulose prior-fractionation for biomaterials, biochemicals, and bioenergy. Carbohydrate Polymers, 2021, 261, 117884.	5.1	72
77	Insights into bamboo delignification with acidic deep eutectic solvents pretreatment for enhanced lignin fractionation and valorization. Industrial Crops and Products, 2021, 170, 113692.	2.5	72
78	Catechyl Lignin Extracted from Castor Seed Coats Using Deep Eutectic Solvents: Characterization and Depolymerization. ACS Sustainable Chemistry and Engineering, 2020, 8, 7031-7038.	3.2	70
79	Functional relationship of furfural yields and the hemicellulose-derived sugars in the hydrolysates from corncob by microwave-assisted hydrothermal pretreatment. Biotechnology for Biofuels, 2015, 8, 127.	6.2	69
80	Advanced Compressible and Elastic 3D Monoliths beyond Hydrogels. Advanced Functional Materials, 2019, 29, 1904472.	7.8	69
81	Characterization of lignins from wheat straw by alkaline peroxide treatment. Polymer Degradation and Stability, 2000, 67, 101-109.	2.7	68
82	Microwave-enhanced extraction of lignin from birch in formic acid: Structural characterization and antioxidant activity study. Process Biochemistry, 2012, 47, 1799-1806.	1.8	68
83	Green Process for Extraction of Lignin by the Microwave-Assisted Ionic Liquid Approach: Toward Biomass Biorefinery and Lignin Characterization. ACS Sustainable Chemistry and Engineering, 2019, 7, 13062-13072.	3.2	68
84	Chemodivergent hydrogenolysis of eucalyptus lignin with Ni@ZIF-8 catalyst. Green Chemistry, 2019, 21, 1498-1504.	4.6	65
85	Superelastic Carbon Aerogel with Ultrahigh and Wide-Range Linear Sensitivity. ACS Applied Materials & Interfaces, 2018, 10, 40641-40650.	4.0	64
86	Self-Assembled Conjugated Polymer/Chitosan-<i>graft</i>-Oleic Acid Micelles for Fast Visible Detection of Aliphatic Biogenic Amines by â€œTurn-Onâ€• FRET. ACS Applied Materials & Interfaces, 2017, 9, 22875-22884.	4.0	63
87	Heat Treatment of Industrial Alkaline Lignin and its Potential Application as an Adhesive for Green Woodâ€"Lignin Composites. ACS Sustainable Chemistry and Engineering, 2017, 5, 7269-7277.	3.2	63
88	Enhanced enzymatic digestibility of bamboo by a combined system of multiple steam explosion and alkaline treatments. Applied Energy, 2014, 136, 519-526.	5.1	61
89	Effects of aluminum chloride-catalyzed hydrothermal pretreatment on the structural characteristics of lignin and enzymatic hydrolysis. Bioresource Technology, 2016, 206, 57-64.	4.8	61
90	Production of xylooligosaccharides by microwave-induced, organic acid-catalyzed hydrolysis of different xylan-type hemicelluloses: Optimization by response surface methodology. Carbohydrate Polymers, 2017, 157, 214-225.	5.1	60

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91	Hydrothermal treatment and enzymatic hydrolysis of Tamarix ramosissima: Evaluation of the process as a conversion method in a biorefinery concept. Bioresource Technology, 2013, 135, 73-81.	4.8	59
92	Tunable, UV-shielding and biodegradable composites based on well-characterized lignins and poly(butylene adipate-<i>co</i>-terephthalate). Green Chemistry, 2020, 22, 8623-8632.	4.6	59
93	Unlocking Structureâ€"Reactivity Relationships for Catalytic Hydrogenolysis of Lignin into Phenolic Monomers. ChemSusChem, 2020, 13, 4548-4556.	3.6	58
94	Acidic deep eutectic solvent assisted isolation of lignin containing nanocellulose from thermomechanical pulp. Carbohydrate Polymers, 2020, 247, 116727.	5.1	58
95	Fragmentation of Woody Lignocellulose into Primary Monolignols and Their Derivatives. ACS Sustainable Chemistry and Engineering, 2019, 7, 4666-4674.	3.2	56
96	Structural Variations of Lignin Macromolecules from Early Growth Stages of Poplar Cell Walls. ACS Sustainable Chemistry and Engineering, 2020, 8, 1813-1822.	3.2	56
97	Preparation of sulfur-doped carbon quantum dots from lignin as a sensor to detect Sudan I in an acidic environment. Journal of Materials Chemistry B, 2020, 8, 10788-10796.	2.9	55
98	Copper oxide functionalized chitosan hybrid hydrogels for highly efficient photocatalytic-reforming of biomass-based monosaccharides to lactic acid. Applied Catalysis B: Environmental, 2021, 291, 120123.	10.8	55
99	Isolation of Cellulolytic Enzyme Lignin from Wood Preswollen/Dissolved in Dimethyl Sulfoxide/<i>N</i>-Methylimidazole. Journal of Agricultural and Food Chemistry, 2010, 58, 3446-3450.	2.4	54
100	Efficient separation and physico-chemical characterization of lignin from eucalyptus using ionic liquidâ€"organic solvent and alkaline ethanol solvent. Industrial Crops and Products, 2013, 47, 277-285.	2.5	54
101	Structural variations of lignin macromolecule from different growth years of Triploid of Populus tomentosa Carr.. International Journal of Biological Macromolecules, 2017, 101, 747-757.	3.6	54
102	Production of xylo-sugars from corncob by oxalic acid-assisted ball milling and microwave-induced hydrothermal treatments. Industrial Crops and Products, 2016, 79, 137-145.	2.5	53
103	Revealing the structure and distribution changes of Eucalyptus lignin during the hydrothermal and alkaline pretreatments. Scientific Reports, 2017, 7, 593.	1.6	53
104	Structural Variation of Lignin and Ligninâ€"Carbohydrate Complex in <i>Eucalyptus grandis Ã— E. urophylla</i> during Its Growth Process. ACS Sustainable Chemistry and Engineering, 2017, 5, 1113-1122.	3.2	53
105	Unraveling the structural characteristics of lignin in hydrothermal pretreated fibers and manufactured binderless boards from Eucalyptus grandis. Sustainable Chemical Processes, 2014, 2, .	2.3	52
106	Functional B@<i>m</i>CN-assisted photocatalytic oxidation of biomass-derived pentoses and hexoses to lactic acid. Green Chemistry, 2020, 22, 6384-6392.	4.6	52
107	Structural Characterization of Alkali-Extractable Lignin Fractions from Bamboo. Journal of Biobased Materials and Bioenergy, 2010, 4, 408-425.	0.1	52
108	Fractionation of Alkali-Solubilized Hemicelluloses from Delignified <i>Populus gansuensis</i>: Structure and Properties. Journal of Agricultural and Food Chemistry, 2010, 58, 5743-5750.	2.4	51

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109	Structural Elucidation of Sorghum Lignins from an Integrated Biorefinery Process Based on Hydrothermal and Alkaline Treatments. Journal of Agricultural and Food Chemistry, 2014, 62, 8120-8128.	2.4	51
110	Gasification of bio-oil: Effects of equivalence ratio and gasifying agents on product distribution and gasification efficiency. Bioresource Technology, 2016, 211, 164-172.	4.8	51
111	New Understandings of the Relationship and Initial Formation Mechanism for Pseudo-lignin, Humins, and Acid-Induced Hydrothermal Carbon. Journal of Agricultural and Food Chemistry, 2018, 66, 11981-11989.	2.4	51
112	Structural elucidation of lignin macromolecule from abaca during alkaline hydrogen peroxide delignification. International Journal of Biological Macromolecules, 2020, 144, 596-602.	3.6	51
113	Effects of Various Surfactants on Alkali Lignin Electrospinning Ability and Spun Fibers. Industrial & Engineering Chemistry Research, 2017, 56, 9551-9559.	1.8	49
114	Synthesis and characterization of hydrophobic long-chain fatty acylated cellulose and its self-assembled nanoparticles. Polymer Bulletin, 2012, 69, 389-403.	1.7	48
115	All-Biomass Fluorescent Hydrogels Based on Biomass Carbon Dots and Alginate/Nanocellulose for Biosensing. ACS Applied Bio Materials, 2018, 1, 1398-1407.	2.3	48
116	Isolation and physico-chemical characterization of lignins from ultrasound irradiated fast-growing poplar wood. BioResources, 2011, 6, 414-433.	0.5	48
117	Direct grafting modification of pulp in ionic liquids and self-assembly behavior of the graft copolymers. Cellulose, 2013, 20, 873-884.	2.4	47
118	Fabrication and Characterization of Regenerated Cellulose Films Using Different Ionic Liquids. Journal of Spectroscopy, 2014, 2014, 1-8.	0.6	47
119	Reasonable regulation of carbon/nitride ratio in carbon nitride for efficient photocatalytic reforming of biomass-derived feedstocks to lactic acid. Applied Catalysis B: Environmental, 2021, 299, 120698.	10.8	47
120	A renewable biomass-based lignin film as an effective protective layer to stabilize zinc metal anodes for high-performance zincâ€"iodine batteries. Journal of Materials Chemistry A, 2022, 10, 4845-4857.	5.2	47
121	Fractional Isolation and Chemical Structure of Hemicellulosic Polymers Obtained from Bambusa rigida Species. Journal of Agricultural and Food Chemistry, 2010, 58, 11372-11383.	2.4	46
122	<scp>d</scp>-Xylonic acid: a solvent and an effective biocatalyst for a three-component reaction. Green Chemistry, 2016, 18, 1738-1750.	4.6	46
123	Synthesizing green carbon dots with exceptionally high yield from biomass hydrothermal carbon. Cellulose, 2020, 27, 415-428.	2.4	46
124	Structural and dynamic changes of lignin in Eucalyptus cell walls during successive alkaline ethanol treatments. Industrial Crops and Products, 2015, 74, 200-208.	2.5	45
125	Hydrogenolysis of biorefinery corncob lignin into aromatic phenols over activated carbon-supported nickel. Sustainable Energy and Fuels, 2019, 3, 401-408.	2.5	45
126	Green synthesis of chemical converted graphene sheets derived from pulping black liquor. Carbon, 2020, 158, 690-697.	5.4	45

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127	Total utilization of lignin and carbohydrates in Eucalyptus grandis: an integrated biorefinery strategy towards phenolics, levulinic acid, and furfural. Biotechnology for Biofuels, 2020, 13, 2.	6.2	45
128	Three-step cascade over a single catalyst: synthesis of 5-(ethoxymethyl)furfural from glucose over a hierarchical lamellar multi-functional zeolite catalyst. Journal of Materials Chemistry A, 2018, 6, 7693-7705.	5.2	43
129	Characterization of Lignins Isolated with Alkaline Ethanol from the Hydrothermal Pretreated Tamarix ramosissima. Bioenergy Research, 2013, 6, 519-532.	2.2	42
130	Facile approach to prepare drug-loading film from hemicelluloses and chitosan. Carbohydrate Polymers, 2016, 153, 542-548.	5.1	42
131	Isolation and analysis of four constituents from barks and leaves of Eucommia ulmoides Oliver by a multi-step process. Industrial Crops and Products, 2016, 83, 124-132.	2.5	41
132	Ligninâ€Derived Thioacidolysis Dimers: Reevaluation, New Products, Authentication, and Quantification. ChemSusChem, 2017, 10, 830-835.	3.6	41
133	Life-cycle assessment and techno-economic analysis of the utilization of bio-oil components for the production of three chemicals. Green Chemistry, 2018, 20, 3287-3301.	4.6	41
134	Effect of hot-water extraction on alkaline pulping of bagasse. Biotechnology Advances, 2010, 28, 609-612.	6.0	39
135	Preparation of Lignin-Phenol-Formaldehyde Resin Adhesive Based on Active Sites of Technical Lignin. Journal of Biobased Materials and Bioenergy, 2015, 9, 266-272.	0.1	39
136	Selective precipitation and characterization of ligninâ€"carbohydrate complexes (LCCs) from Eucalyptus. Planta, 2018, 247, 1077-1087.	1.6	39
137	Microwave-assisted conversion of biomass derived hemicelluloses into xylo-oligosaccharides by novel sulfonated bamboo-based catalysts. Biomass and Bioenergy, 2015, 75, 245-253.	2.9	37
138	A new approach to recycle oxalic acid during lignocellulose pretreatment for xylose production. Biotechnology for Biofuels, 2018, 11, 324.	6.2	37
139	Fabrication of antimicrobial composite films based on xylan from pulping process for food packaging. International Journal of Biological Macromolecules, 2019, 134, 122-130.	3.6	37
140	Unraveling the Fate of Lignin from Eucalyptus and Poplar during Integrated Delignification and Bleaching. ChemSusChem, 2019, 12, 1059-1068.	3.6	37
141	Structural and Hydrolysis Characteristics of Cypress Pretreated by Ionic Liquids in a Microwave Irradiation Environment. Bioenergy Research, 2014, 7, 1305-1316.	2.2	36
142	Fluorescent pH-Sensing Probe Based on Biorefinery Wood Lignosulfonate and Its Application in Human Cancer Cell Bioimaging. Journal of Agricultural and Food Chemistry, 2016, 64, 9592-9600.	2.4	36
143	Evaluation of xylooligosaccharide production from residual hemicelluloses of dissolving pulp by acid and enzymatic hydrolysis. RSC Advances, 2018, 8, 35211-35217.	1.7	36
144	Structural characterization of lignin in heartwood, sapwood, and bark of eucalyptus. International Journal of Biological Macromolecules, 2019, 138, 519-527.	3.6	36

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145	Phosphorus-doped carbon nitride with grafted sulfonic acid groups for efficient photocatalytic synthesis of xylonic acid. Green Chemistry, 2021, 23, 4150-4160.	4.6	36
146	Phosphorus/oxygen co-doping in hollow-tube-shaped carbon nitride for efficient simultaneous visible-light-driven water splitting and biorefinery. Chemical Engineering Journal, 2022, 437, 135232.	6.6	36
147	Recent Advances and Challenges in Photoreforming of Biomassâ€Derived Feedstocks into Hydrogen, Biofuels, or Chemicals by Using Functional Carbon Nitride Photocatalysts. ChemSusChem, 2021, 14, 4903-4922.	3.6	35
148	Homogeneous lauroylation of ball-milled bamboo in ionic liquid for bio-based composites production. Industrial Crops and Products, 2011, 34, 1491-1501.	2.5	34
149	Synergistic benefits of ionic liquid and alkaline pretreatments of poplar wood. Part 1: Effect of integrated pretreatment on enzymatic hydrolysis. Bioresource Technology, 2013, 144, 429-434.	4.8	34
150	Lignosulfonic Acid: A Renewable and Effective Biomass-Based Catalyst for Multicomponent Reactions. ACS Sustainable Chemistry and Engineering, 2015, 3, 1366-1373.	3.2	34
151	Synthesis and Characterization of New 5â€Linked Pinoresinol Lignin Models. Chemistry - A European Journal, 2012, 18, 16402-16410.	1.7	33
152	The role of oxygen vacancies in biomass deoxygenation by reducible zinc/zinc oxide catalysts. Catalysis Science and Technology, 2018, 8, 1819-1827.	2.1	33
153	Comparative study of anatomy and lignin distribution in normal and tension wood of Salix gordejecii. Wood Science and Technology, 2006, 40, 358-370.	1.4	32
154	Eco-Friendly Phenolâ€“Ureaâ€“Formaldehyde Co-condensed Resin Adhesives Accelerated by Resorcinol for Plywood Manufacturing. ACS Omega, 2018, 3, 8521-8528.	1.6	32
155	Insights into the Structural Changes and Potentials of Lignin from Bagasse during the Integrated Delignification Process. ACS Sustainable Chemistry and Engineering, 2019, 7, 13886-13897.	3.2	32
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