

Solution-state 2D NMR of ball-milled plant cell wall gels

Organic and Biomolecular Chemistry

8, 576-591

DOI: 10.1039/b916070a

Citation Report

#	ARTICLE	IF	CITATIONS
8	NMR of Lignins. , 2010, , 137-243.		162
9	Identifying new lignin bioengineering targets: 1. Monolignol-substitute impacts on lignin formation and cell wall fermentability. BMC Plant Biology, 2010, 10, 114.	1.6	75
10	Solution-state 2D NMR of ball-milled plant cell wall gels in DMSO-d ₆ /pyridine-d ₅ . Organic and Biomolecular Chemistry, 2010, 8, 576-591.	1.5	565
11	Lignin Biosynthesis and Structure. Plant Physiology, 2010, 153, 895-905.	2.3	1,990
12	Chemical, ultrastructural and supramolecular analysis of tension wood in <i>Populus tremula x alba</i> as a model substrate for reduced recalcitrance. Energy and Environmental Science, 2011, 4, 4962.	15.6	61
13	Structural Characterization of Lignin from Triploid of <i>Populus tomentosa</i> Carr.. Journal of Agricultural and Food Chemistry, 2011, 59, 6605-6615.	2.4	108
14	Heteronuclear Single-Quantum Coherence Nuclear Magnetic Resonance (HSQC NMR) Characterization of Acetylated Fir (<i>Abies sachalinensis</i> MAST) Wood Regenerated from Ionic Liquid. Journal of Agricultural and Food Chemistry, 2011, 59, 5382-5389.	2.4	54
15	Deconstruction of Lignocellulosic Biomass to Fuels and Chemicals. Annual Review of Chemical and Biomolecular Engineering, 2011, 2, 121-145.	3.3	804
16	Structural Analysis of Alfa Grass (<i>Stipa tenacissima</i> L.) Lignin Obtained by Acetic Acid/Formic Acid Delignification. Biomacromolecules, 2011, 12, 3895-3902.	2.6	71
17	Molecular Weight Distributions and Linkages in Lignocellulosic Materials Derivatized from Ionic Liquid Media. Journal of Agricultural and Food Chemistry, 2011, 59, 829-838.	2.4	57
18	Characterization of Lignin Structures and Lignin-Carbohydrate Complex (LCC) Linkages by Quantitative ¹³ C and 2D HSQC NMR Spectroscopy. Journal of Agricultural and Food Chemistry, 2011, 59, 10604-10614.	2.4	483
19	Multi-scale visualization and characterization of lignocellulosic plant cell wall deconstruction during thermochemical pretreatment. Energy and Environmental Science, 2011, 4, 973.	15.6	437
20	Fluorescence-Tagged Monolignols: Synthesis, and Application to Studying In Vitro Lignification. Biomacromolecules, 2011, 12, 1752-1761.	2.6	37
21	Selective lignin and polysaccharide removal in natural fungal decay of wood as evidenced by <i>in situ</i> structural analyses. Environmental Microbiology, 2011, 13, 96-107.	1.8	93
22	Multidimensional NMR analysis reveals truncated lignin structures in wood decayed by the brown rot basidiomycete <i>Postia placenta</i> . Environmental Microbiology, 2011, 13, 1091-1100.	1.8	131
23	The DUF579 domain containing proteins IRX15 and IRX15 affect xylan synthesis in <i>Arabidopsis</i> . Plant Journal, 2011, 66, 387-400.	2.8	120
24	<i>CCoAOMT</i> suppression modifies lignin composition in <i>Pinus radiata</i> . Plant Journal, 2011, 67, 119-129.	2.8	136
25	Structural changes in switchgrass lignin and hemicelluloses during pretreatments by NMR analysis. Polymer Degradation and Stability, 2011, 96, 2002-2009.	2.7	88

#	ARTICLE	IF	CITATIONS
26	Molecular characterization of hydrolyzed cationized nanocrystalline cellulose, cotton cellulose and softwood kraft pulp using high resolution 1D and 2D NMR. <i>Carbohydrate Polymers</i> , 2011, 85, 738-746.	5.1	42
27	Enhancing the enzymatic hydrolysis of lignocellulosic biomass by increasing the carboxylic acid content of the associated lignin. <i>Biotechnology and Bioengineering</i> , 2011, 108, 538-548.	1.7	211
28	HSQC (heteronuclear single quantum coherence) ^{13}C - ^1H correlation spectra of whole biomass in perdeuterated pyridinium chloride-DMSO system: An effective tool for evaluating pretreatment. <i>Fuel</i> , 2011, 90, 2836-2842.	3.4	91
29	Delineating pMDI model reactions with loblolly pine via solution-state NMR spectroscopy. Part 1. Catalyzed reactions with wood models and wood polymers. <i>Holzforschung</i> , 2011, 65, .	0.9	9
30	Independent Recruitment of an O -Methyltransferase for Syringyl Lignin Biosynthesis in <i>Selaginella moellendorffii</i> . <i>Plant Cell</i> , 2011, 23, 2708-2724.	3.1	66
31	O -Acetylation of <i>Arabidopsis</i> Hemicellulose Xyloglucan Requires <i>AXY4</i> or <i>AXY4L</i> , Proteins with a TBL and DUF231 Domain. <i>Plant Cell</i> , 2011, 23, 4041-4053.	3.1	152
32	Lignin Composition and Structure in Young versus Adult <i>Eucalyptus globulus</i> Plants. <i>Plant Physiology</i> , 2011, 155, 667-682.	2.3	263
33	An Engineered Monoglucosyl O -Methyltransferase Depresses Lignin Biosynthesis and Confers Novel Metabolic Capability in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2012, 24, 3135-3152.	3.1	92
34	A polymer of caffeyl alcohol in plant seeds. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 1772-1777.	3.3	314
35	Chemical profiling of complex biochemical mixtures from various seaweeds. <i>Polymer Journal</i> , 2012, 44, 888-894.	1.3	39
36	4- O -methylation of glucuronic acid in <i>Arabidopsis</i> glucuronoxylan is catalyzed by a domain of unknown function family 579 protein. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 14253-14258.	3.3	164
37	Dissolution and acetylation of ball-milled birch (<i>Betula platyphylla</i>) and bamboo (<i>Phyllostachys Tj ETQq1 1 0.784314 rgBT /Overlock 10</i>	0.9	36
38	From plant biomass to bio-based chemicals: Latest developments in xylan research. <i>Biotechnology Advances</i> , 2012, 30, 1627-1640.	6.0	230
39	Biomass Characterization: Recent Progress in Understanding Biomass Recalcitrance. <i>Industrial Biotechnology</i> , 2012, 8, 191-208.	0.5	90
40	The impact of ionic liquid pretreatment on the chemistry and enzymatic digestibility of <i>Pinus radiata</i> compression wood. <i>Green Chemistry</i> , 2012, 14, 778.	4.6	87
41	^{13}C cell wall enrichment and ionic liquid NMR analysis: progress towards a high-throughput detailed chemical analysis of the whole plant cell wall. <i>Analyst</i> , 2012, 137, 3904.	1.7	22
42	Whole plant cell wall characterization using solution-state 2D NMR. <i>Nature Protocols</i> , 2012, 7, 1579-1589.	5.5	563
43	Structural Characterization of Wheat Straw Lignin as Revealed by Analytical Pyrolysis, 2D-NMR, and Reductive Cleavage Methods. <i>Journal of Agricultural and Food Chemistry</i> , 2012, 60, 5922-5935.	2.4	650

#	ARTICLE	IF	CITATIONS
44	Structural characterization of alkaline hydrogen peroxide pretreated grasses exhibiting diverse lignin phenotypes. <i>Biotechnology for Biofuels</i> , 2012, 5, 38.	6.2	106
45	Epigallocatechin gallate incorporation into lignin enhances the alkaline delignification and enzymatic saccharification of cell walls. <i>Biotechnology for Biofuels</i> , 2012, 5, 59.	6.2	35
46	Evolutionary History of Lignins. <i>Advances in Botanical Research</i> , 2012, , 309-350.	0.5	18
47	Structural Characterization of Switchgrass Lignin after Ethanol Organosolv Pretreatment. <i>Energy & Fuels</i> , 2012, 26, 740-745.	2.5	127
48	Identifying New Lignin Bioengineering Targets: Impact of Epicatechin, Quercetin Glycoside, and Gallate Derivatives on the Lignification and Fermentation of Maize Cell Walls. <i>Journal of Agricultural and Food Chemistry</i> , 2012, 60, 5152-5160.	2.4	30
49	Solid-State Selective ¹³ C Excitation and Spin Diffusion NMR To Resolve Spatial Dimensions in Plant Cell Walls. <i>Journal of Agricultural and Food Chemistry</i> , 2012, 60, 1419-1427.	2.4	30
50	Sequential solvent fractionation of heterogeneous bamboo organosolv lignin for value-added application. <i>Separation and Purification Technology</i> , 2012, 101, 18-25.	3.9	89
51	Unveiling the Structural Heterogeneity of Bamboo Lignin by In Situ HSQC NMR Technique. <i>Bioenergy Research</i> , 2012, 5, 886-903.	2.2	100
52	ECOMICS: A Web-Based Toolkit for Investigating the Biomolecular Web in Ecosystems Using a Trans-omics Approach. <i>PLoS ONE</i> , 2012, 7, e30263.	1.1	31
53	Structural and Chemical Characterization of Hardwood from Tree Species with Applications as Bioenergy Feedstocks. <i>PLoS ONE</i> , 2012, 7, e52820.	1.1	32
54	Graded Ethanol Fractionation and Structural Characterization of Alkali-Extractable Hemicelluloses from <i>Olea europaea</i> L.. <i>BioResources</i> , 2012, 8, .	0.5	5
55	Spectroscopic investigation of tissue-specific biomass profiling for <i>Jatropha curcas</i> L.. <i>Plant Biotechnology</i> , 2012, 29, 163-170.	0.5	15
56	Comparative Characterization of Lignins Extracted from Cotton Stalk Based on Complete Dissolution in Different Systems. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 9858-9866.	1.8	13
57	Hydroxycinnamate Conjugates as Potential Monolignol Replacements: In vitro Lignification and Cell Wall Studies with Rosmarinic Acid. <i>ChemSusChem</i> , 2012, 5, 676-686.	3.6	54
58	Cellulose microfibril angles and cell-wall polymers in different wood types of <i>Pinus radiata</i> . <i>Cellulose</i> , 2012, 19, 1385-1404.	2.4	40
59	Formic acid based organosolv pulping of bamboo (<i>Phyllostachys acuta</i>): Comparative characterization of the dissolved lignins with milled wood lignin. <i>Chemical Engineering Journal</i> , 2012, 179, 80-89.	6.6	123
60	Microwave-enhanced alkali treatment of <i>Pinus yunnanensis</i> : Physiochemical characterization of the dissolved lignins. <i>Industrial Crops and Products</i> , 2012, 36, 209-216.	2.5	8
61	Ultrasound-enhanced extraction of lignin from bamboo (<i>Neosinocalamus affinis</i>): Characterization of the ethanol-soluble fractions. <i>Ultrasonics Sonochemistry</i> , 2012, 19, 243-249.	3.8	63

#	ARTICLE	IF	CITATIONS
62	Biosynthesis and incorporation of side-chain-truncated lignin monomers to reduce lignin polymerization and enhance saccharification. <i>Plant Biotechnology Journal</i> , 2012, 10, 609-620.	4.1	140
63	Origin of the acetylated structures present in white birch (<i>Betula pendula</i> Roth) milled wood lignin. <i>Wood Science and Technology</i> , 2012, 46, 459-471.	1.4	17
64	Unmasking the structural features and property of lignin from bamboo. <i>Industrial Crops and Products</i> , 2013, 42, 332-343.	2.5	215
65	Comparison of sugar content for ionic liquid pretreated Douglas-fir woodchips and forestry residues. <i>Biotechnology for Biofuels</i> , 2013, 6, 61.	6.2	30
66	Plant cell wall profiling by fast maximum likelihood reconstruction (FMLR) and region-of-interest (ROI) segmentation of solution-state 2D ^1H - ^{13}C NMR spectra. <i>Biotechnology for Biofuels</i> , 2013, 6, 45.	6.2	18
67	Biodegradation of Lignocellulose by White-Rot Fungi: Structural Characterization of Water-Soluble Hemicelluloses. <i>Bioenergy Research</i> , 2013, 6, 1154-1164.	2.2	27
68	Two-Dimensional NMR Evidence for Cleavage of Lignin and Xylan Substituents in Wheat Straw Through Hydrothermal Pretreatment and Enzymatic Hydrolysis. <i>Bioenergy Research</i> , 2013, 6, 211-221.	2.2	68
69	Profiling of diferulates (plant cell wall cross-linkers) using ultrahigh-performance liquid chromatography-tandem mass spectrometry. <i>Analyst</i> , 2013, 138, 6683.	1.7	39
70	One-pot ionic liquid pretreatment and saccharification of switchgrass. <i>Green Chemistry</i> , 2013, 15, 2579.	4.6	175
71	Structural analysis for lignin characteristics in biomass straw. <i>Biomass and Bioenergy</i> , 2013, 57, 264-279.	2.9	221
72	Solution-State 2D NMR Spectroscopy of Plant Cell Walls Enabled by a Dimethylsulfoxide- d_6 /1-Ethyl-3-methylimidazolium Acetate Solvent. <i>Analytical Chemistry</i> , 2013, 85, 3213-3221.	3.2	102
73	Distribution of lignin and cellulose in compression wood tracheids of <i>Pinus yunnanensis</i> determined by fluorescence microscopy and confocal Raman microscopy. <i>Industrial Crops and Products</i> , 2013, 47, 212-217.	2.5	67
74	Aqueous-ammonia delignification of miscanthus followed by enzymatic hydrolysis to sugars. <i>Bioresource Technology</i> , 2013, 135, 23-29.	4.8	44
75	Ptr-miR397a is a negative regulator of laccase genes affecting lignin content in <i>Populus trichocarpa</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 10848-10853.	3.3	329
77	NMR a critical tool to study the production of carbon fiber from lignin. <i>Carbon</i> , 2013, 52, 65-73.	5.4	103
78	Effect of ionic liquid/organic solvent pretreatment on the enzymatic hydrolysis of corncob for bioethanol production. Part 1: Structural characterization of the lignins. <i>Industrial Crops and Products</i> , 2013, 43, 570-577.	2.5	97
79	Suppression of CCR impacts metabolite profile and cell wall composition in <i>Pinus radiata</i> tracheary elements. <i>Plant Molecular Biology</i> , 2013, 81, 105-117.	2.0	42
80	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

#	ARTICLE	IF	CITATIONS
81	Acetone Enhances the Direct Analysis of Procyanidin- and Prodelphinidin-Based Condensed Tannins in Lotus Species by the Butanol-HCl- ⁶⁵ Iron Assay. <i>Journal of Agricultural and Food Chemistry</i> , 2013, 61, 2669-2678.	2.4	112
82	Production and extraction of sugars from switchgrass hydrolyzed in ionic liquids. <i>Biotechnology for Biofuels</i> , 2013, 6, 39.	6.2	62
83	Quantitative structural characterization of the lignins from the stem and pith of bamboo (<i>Phyllostachys pubescens</i>). <i>Holzforschung</i> , 2013, 67, 613-627.	0.9	170
84	Chemoselective Metal-Free Aerobic Alcohol Oxidation in Lignin. <i>Journal of the American Chemical Society</i> , 2013, 135, 6415-6418.	6.6	547
85	Investigation of the fate of poplar lignin during autohydrolysis pretreatment to understand the biomass recalcitrance. <i>RSC Advances</i> , 2013, 3, 5305.	1.7	72
86	Structural Elucidation of the Lignins from Stems and Foliage of <i>Arundo donax</i> Linn.. <i>Journal of Agricultural and Food Chemistry</i> , 2013, 61, 5361-5370.	2.4	99
87	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
88	Breeding with rare defective alleles (BRDA): a natural <i>Populus nigra</i> HCT mutant with modified lignin as a case study. <i>New Phytologist</i> , 2013, 198, 765-776.	3.5	92
89	Comprehensive Signal Assignment of ¹³ C-Labeled Lignocellulose Using Multidimensional Solution NMR and ¹³ C Chemical Shift Comparison with Solid-State NMR. <i>Analytical Chemistry</i> , 2013, 85, 8857-8865.	3.2	48
90	Selective Signal Detection in Solid-State NMR Using Rotor-Synchronized Dipolar Dephasing for the Analysis of Hemicellulose in Lignocellulosic Biomass. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 2279-2283.	2.1	31
91	Structural Variation of Bamboo Lignin before and after Ethanol Organosolv Pretreatment. <i>International Journal of Molecular Sciences</i> , 2013, 14, 21394-21413.	1.8	82
92	Dissolution and acetylation of ball-milled lignocellulosic biomass in ionic liquids at room temperature: application to nuclear magnetic resonance analysis of cell-wall components. <i>Holzforschung</i> , 2013, 67, 25-32.	0.9	25
93	Multi-step degradation method for β -O-4 linkages in lignins: β -TTSA method. Part 3. Degradation of milled wood lignin (MWL) from <i>Eucalyptus globulus</i> . <i>Holzforschung</i> , 2013, 67, 835-841.	0.9	10
94	Reduced Wall Acetylation Proteins Play Vital and Distinct Roles in Cell Wall O-Acetylation in <i>Arabidopsis</i> . <i>Plant Physiology</i> , 2013, 163, 1107-1117.	2.3	83
95	Fractionation and characterization of lignin-carbohydrate complexes (LCCs) of <i>Eucalyptus globulus</i> in residues left after MWL isolation. Part II: Analyses of xylan-lignin fraction (X-L). <i>Holzforschung</i> , 2013, 67, 629-642.	0.9	17
96	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
97	Loss of function of cinnamyl alcohol dehydrogenase 1 leads to unconventional lignin and a temperature-sensitive growth defect in <i>Medicago truncatula</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 13660-13665.	3.3	115
98	Characterization of lignocellulose of <i>Erianthus arundinaceus</i> in relation to enzymatic saccharification efficiency. <i>Plant Biotechnology</i> , 2013, 30, 25-35.	0.5	40

#	ARTICLE	IF	CITATIONS
99	Structural Characterization of Lignin in Wild-Type versus COMT Down-Regulated Switchgrass. <i>Frontiers in Energy Research</i> , 2014, 1, .	1.2	22
100	Mutation of the Inducible <i>ARABIDOPSIS THALIANA</i> CYTOCHROME P450 REDUCTASE2 Alters Lignin Composition and Improves Saccharification. <i>Plant Physiology</i> , 2014, 166, 1956-1971.	2.3	63
101	Effects of lignin modification on wheat straw cell wall deconstruction by <i>Phanerochaete chrysosporium</i> . <i>Biotechnology for Biofuels</i> , 2014, 7, 161.	6.2	24
102	Loss of Arabidopsis GAUT12/IRX8 causes anther indehiscence and leads to reduced G lignin associated with altered matrix polysaccharide deposition. <i>Frontiers in Plant Science</i> , 2014, 5, 357.	1.7	50
103	Impact of Hot-Water Extraction on Acetone-Water Oxygen Delignification of Paulownia Spp. and Lignin Recovery. <i>Energies</i> , 2014, 7, 857-873.	1.6	23
104	Specific Lignin Accumulation in Granulated Juice Sacs of <i>Citrus maxima</i> . <i>Journal of Agricultural and Food Chemistry</i> , 2014, 62, 12082-12089.	2.4	34
105	Synthesis and fundamental HSQC NMR data of monolignol β -glycosides, dihydromonolignol β -glycosides and <i>p</i> -hydroxybenzaldehyde derivative β -glycosides for the analysis of phenyl glycoside type lignin-carbohydrate complexes (LCCs). <i>Holzforschung</i> , 2014, 68, 747-760.	0.9	21
106	Structural characterization of Kraft lignins from different spent cooking liquors by 1D and 2D Nuclear Magnetic Resonance spectroscopy. <i>Biomass and Bioenergy</i> , 2014, 63, 156-166.	2.9	87
107	Catalytic Alkaline Oxidation of Lignin and its Model Compounds: a Pathway to Aromatic Biochemicals. <i>Bioenergy Research</i> , 2014, 7, 78-86.	2.2	75
108	Identification and suppression of the <i>pa</i> coumaroyl CoA:hydroxycinnamyl alcohol transferase in <i>Zea mays</i> L.. <i>Plant Journal</i> , 2014, 78, 850-864.	2.8	72
109	A review of xylan and lignin biosynthesis: Foundation for studying Arabidopsis irregular xylem mutants with pleiotropic phenotypes. <i>Critical Reviews in Biochemistry and Molecular Biology</i> , 2014, 49, 212-241.	2.3	91
110	Supramolecular Hydrogels Made of Basic Biological Building Blocks. <i>Chemistry - an Asian Journal</i> , 2014, 9, 1446-1472.	1.7	105
111	<i>Plants and BioEnergy</i> , 2014, , .		7
112	NMR Insights on the Properties of ZnCl ₂ Molten Salt Hydrate Medium through Its Interaction with SnCl ₄ and Fructose. <i>ACS Sustainable Chemistry and Engineering</i> , 2014, 2, 2576-2581.	3.2	24
113	Characterization of biomass and its derived char using ¹³ C-solid state nuclear magnetic resonance. <i>Green Chemistry</i> , 2014, 16, 4839-4869.	4.6	82
114	<i>p</i> -Coumaroyl-CoA:monolignol transferase (PMT) acts specifically in the lignin biosynthetic pathway in <i>Brachypodium distachyon</i> . <i>Plant Journal</i> , 2014, 77, 713-726.	2.8	175
115	Substrate-Specific Development of Thermophilic Bacterial Consortia by Using Chemically Pretreated Switchgrass. <i>Applied and Environmental Microbiology</i> , 2014, 80, 7423-7432.	1.4	27
116	Dissolution of wood in β -keto acid and aldehydic carboxylic acids and fractionation at room temperature. <i>Green Chemistry</i> , 2014, 16, 3569-3579.	4.6	13

#	ARTICLE	IF	CITATIONS
117	Lignin Cross-Links with Cysteine- and Tyrosine-Containing Peptides under Biomimetic Conditions. <i>Journal of Agricultural and Food Chemistry</i> , 2014, 62, 10312-10319.	2.4	8
118	Successive and quantitative fractionation and extensive structural characterization of lignin from wheat straw. <i>Industrial Crops and Products</i> , 2014, 61, 249-257.	2.5	34
119	Catalytic Depolymerization of Lignin in Supercritical Ethanol. <i>ChemSusChem</i> , 2014, 7, 2276-2288.	3.6	313
120	Structural studies of arabinan-rich pectic polysaccharides from <i>Abies sibirica</i> L. Biological activity of pectins of <i>A. sibirica</i> . <i>Carbohydrate Polymers</i> , 2014, 113, 515-524.	5.1	54
121	Towards lignin-protein crosslinking: amino acid adducts of a lignin model quinone methide. <i>Cellulose</i> , 2014, 21, 1395-1407.	2.4	8
122	Unraveling the structural characteristics of lignin in hydrothermal pretreated fibers and manufactured binderless boards from <i>Eucalyptus grandis</i> . <i>Sustainable Chemical Processes</i> , 2014, 2, .	2.3	52
123	Enzymatic degradation of Elephant grass (<i>Pennisetum purpureum</i>) stems: Influence of the pith and bark in the total hydrolysis. <i>Bioresource Technology</i> , 2014, 167, 469-475.	4.8	19
124	Revealing the Changes in Topochemical Characteristics of Poplar Cell Wall During Hydrothermal Pretreatment. <i>Bioenergy Research</i> , 2014, 7, 1358-1368.	2.2	37
125	A gel-state 2D-NMR method for plant cell wall profiling and analysis: a model study with the amorphous cellulose and xylan from ball-milled cotton linters. <i>RSC Advances</i> , 2014, 4, 7549-7560.	1.7	100
126	Lignin fate and characterization during ionic liquid biomass pretreatment for renewable chemicals and fuels production. <i>Green Chemistry</i> , 2014, 16, 1236-1247.	4.6	137
127	Accumulation of <i>N</i> -Acetylglucosamine Oligomers in the Plant Cell Wall Affects Plant Architecture in a Dose-Dependent and Conditional Manner. <i>Plant Physiology</i> , 2014, 165, 290-308.	2.3	25
128	Pretreatment with laccase and a phenolic mediator degrades lignin and enhances saccharification of <i>Eucalyptus</i> feedstock. <i>Biotechnology for Biofuels</i> , 2014, 7, 6.	6.2	161
129	Multidimensional High-Resolution Magic Angle Spinning and Solution-State NMR Characterization of ¹³ C-labeled Plant Metabolites and Lignocellulose. <i>Scientific Reports</i> , 2015, 5, 11848.	1.6	42
130	Recalcitrance and structural analysis by water-only flowthrough pretreatment of ¹³ C enriched corn stover stem. <i>Bioresource Technology</i> , 2015, 197, 128-136.	4.8	6
131	Lignin-Furfural Based Adhesives. <i>Energies</i> , 2015, 8, 7897-7914.	1.6	81
132	Analysis of a Modern Hybrid and an Ancient Sugarcane Implicates a Complex Interplay of Factors in Affecting Recalcitrance to Cellulosic Ethanol Production. <i>PLoS ONE</i> , 2015, 10, e0134964.	1.1	12
133	Cell wall composition and digestibility alterations in <i>Brachypodium distachyon</i> achieved through reduced expression of the UDP-arabinopyranose mutase. <i>Frontiers in Plant Science</i> , 2015, 6, 446.	1.7	30
134	Lignins of Bioenergy Crops: A Review. <i>Natural Product Communications</i> , 2015, 10, 1934578X1501000.	0.2	11

#	ARTICLE	IF	CITATIONS
135	The <i>WRKY45</i> -Dependent Signaling Pathway Is Required For Resistance against <i>Striga hermonthica</i> Parasitism. <i>Plant Physiology</i> , 2015, 168, 1152-1163.	2.3	51
136	Purification, Structural Characterization, and Modification of Organosolv Wheat Straw Lignin. <i>Journal of Agricultural and Food Chemistry</i> , 2015, 63, 5178-5188.	2.4	26
137	¹³ C Tracking after ¹³ CO ₂ Supply Revealed Diurnal Patterns of Wood Formation in Aspen. <i>Plant Physiology</i> , 2015, 168, 478-489.	2.3	10
138	Supramolecular Hydrogelators and Hydrogels: From Soft Matter to Molecular Biomaterials. <i>Chemical Reviews</i> , 2015, 115, 13165-13307.	23.0	1,497
139	Changes in the Structure and the Thermal Properties of Kraft Lignin during Its Dissolution in Cholinium Ionic Liquids. <i>ACS Sustainable Chemistry and Engineering</i> , 2015, 3, 2951-2958.	3.2	69
140	Expression of a bacterial 3- α -dehydroshikimate dehydratase reduces lignin content and improves biomass saccharification efficiency. <i>Plant Biotechnology Journal</i> , 2015, 13, 1241-1250.	4.1	90
141	Biomimetic Fenton-Catalyzed Lignin Depolymerization to High-Value Aromatics and Dicarboxylic Acids. <i>ChemSusChem</i> , 2015, 8, 861-871.	3.6	101
142	High Resolution Solid State 2D NMR Analysis of Biomass and Biochar. <i>Analytical Chemistry</i> , 2015, 87, 843-847.	3.2	46
143	Lignin monomer production integrated into the γ -valerolactone sugar platform. <i>Energy and Environmental Science</i> , 2015, 8, 2657-2663.	15.6	212
144	Precipitate obtained following membrane separation of hydrothermally pretreated rice straw liquid revealed by 2D NMR to have high lignin content. <i>Biotechnology for Biofuels</i> , 2015, 8, 88.	6.2	20
145	Selective modification of the β - β' linkage in DDQ-treated Kraft lignin analysed by 2D NMR spectroscopy. <i>Green Chemistry</i> , 2015, 17, 244-249.	4.6	65
146	Structural elucidation of inhomogeneous lignins from bamboo. <i>International Journal of Biological Macromolecules</i> , 2015, 77, 250-259.	3.6	83
147	Structural elucidation of whole lignin from Eucalyptus based on preswelling and enzymatic hydrolysis. <i>Green Chemistry</i> , 2015, 17, 1589-1596.	4.6	157
148	Reductive lignocellulose fractionation into soluble lignin-derived phenolic monomers and dimers and processable carbohydrate pulps. <i>Energy and Environmental Science</i> , 2015, 8, 1748-1763.	15.6	688
149	Structural elucidation of lignin-carbohydrate complex (LCC) preparations and lignin from <i>Arundo donax</i> Linn. <i>Industrial Crops and Products</i> , 2015, 71, 65-74.	2.5	90
150	Nitric-acid hydrolysis of <i>Miscanthus giganteus</i> to sugars fermented to bioethanol. <i>Biotechnology and Bioprocess Engineering</i> , 2015, 20, 304-314.	1.4	17
151	Comparison of Different Biomass Pretreatment Techniques and Their Impact on Chemistry and Structure. <i>Frontiers in Energy Research</i> , 2015, 2, .	1.2	118
152	Syringyl lignin production in conifers: Proof of concept in a Pine tracheary element system. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 6218-6223.	3.3	98

#	ARTICLE	IF	CITATIONS
153	Engineering monolignol p-coumarate conjugates into Poplar and Arabidopsis lignins. <i>Plant Physiology</i> , 2015, 169, pp.00815.2015.	2.3	47
154	Manipulation of Guaiacyl and Syringyl Monomer Biosynthesis in an Arabidopsis Cinnamyl Alcohol Dehydrogenase Mutant Results in Atypical Lignin Biosynthesis and Modified Cell Wall Structure. <i>Plant Cell</i> , 2015, 27, 2195-2209.	3.1	136
155	Gaseous ammonia pretreatment lowers the required energy input for fine milling-enhanced enzymatic saccharification of switchgrass. <i>Biotechnology for Biofuels</i> , 2015, 8, 139.	6.2	9
156	Reductive deconstruction of organosolv lignin catalyzed by zeolite supported nickel nanoparticles. <i>Green Chemistry</i> , 2015, 17, 5079-5090.	4.6	98
157	How Alkyl Chain Length of Alcohols Affects Lignin Fractionation and Ionic Liquid Recycle During Lignocellulose Pretreatment. <i>Bioenergy Research</i> , 2015, 8, 973-981.	2.2	17
158	Cleavage of Covalent Bonds in the Pyrolysis of Lignin, Cellulose, and Hemicellulose. <i>Energy & Fuels</i> , 2015, 29, 5773-5780.	2.5	49
159	Using 2D NMR spectroscopy to assess effects of UV radiation on cell wall chemistry during litter decomposition. <i>Biogeochemistry</i> , 2015, 125, 427-436.	1.7	29
160	Biocomposite adhesion without added resin: understanding the chemistry of the direct conversion of wood into adhesives. <i>RSC Advances</i> , 2015, 5, 67267-67276.	1.7	6
161	Characterization and properties of organo-montmorillonite modified lignocellulosic fibers and their interaction mechanisms. <i>RSC Advances</i> , 2015, 5, 76708-76717.	1.7	13
162	Chemical and structural changes associated with Cu-catalyzed alkaline-oxidative delignification of hybrid poplar. <i>Biotechnology for Biofuels</i> , 2015, 8, 123.	6.2	16
163	NMR characterization of cellulose acetate: Chemical shift assignments, substituent effects, and chemical shift additivity. <i>Carbohydrate Polymers</i> , 2015, 118, 91-100.	5.1	87
164	Biological Treatment of Poplar Wood with White-rot Fungus <i>Trametes hirsuta</i> C7784: Structural Elucidation of the Whole Lignin in Treated Wood. <i>BioResources</i> , 2016, 11, .	0.5	1
165	Reaction Behavior of Cellulose in the Homogeneous Esterification of Bagasse Modified with Phthalic Anhydride in Ionic Liquid 1-Allyl-3-methylimidazolium Chloride. <i>International Journal of Polymer Science</i> , 2016, 2016, 1-9.	1.2	5
166	Expression of S-adenosylmethionine Hydrolase in Tissues Synthesizing Secondary Cell Walls Alters Specific Methylated Cell Wall Fractions and Improves Biomass Digestibility. <i>Frontiers in Bioengineering and Biotechnology</i> , 2016, 4, 58.	2.0	8
168	An essential role of caffeoyl shikimate esterase in monolignol biosynthesis in <i>Medicago truncatula</i> . <i>Plant Journal</i> , 2016, 86, 363-375.	2.8	111
169	A facile and fast method for quantitating lignin in lignocellulosic biomass using acidic lithium bromide trihydrate (ALBTH). <i>Green Chemistry</i> , 2016, 18, 5367-5376.	4.6	54
170	New Biorefinery Strategy for High Purity Lignin Production. <i>ChemistrySelect</i> , 2016, 1, 6562-6570.	0.7	15
171	Enhancing digestibility and ethanol yield of <i>Populus</i> wood via expression of an engineered monolignol 4-O-methyltransferase. <i>Nature Communications</i> , 2016, 7, 11989.	5.8	61

#	ARTICLE	IF	CITATIONS
172	NMR Assignment for Diaryl Ether Structures (4-O-5 Structures) in Pine Wood Lignin. <i>Biomacromolecules</i> , 2016, 17, 1921-1929.	2.6	40
173	Isolation and characterization of new lignin streams derived from extractive-ammonia (EA) pretreatment. <i>Green Chemistry</i> , 2016, 18, 4205-4215.	4.6	68
174	Identification of 4-O-5-Units in Softwood Lignins via Definitive Lignin Models and NMR. <i>Biomacromolecules</i> , 2016, 17, 1909-1920.	2.6	77
175	Techniques for Characterizing Lignin. , 2016, , 49-66.		63
176	Peroxidative Oxidation of Lignin and a Lignin Model Compound by a Manganese SALEN Derivative. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 3212-3219.	3.2	20
177	Chemoenzymatic Fractionation and Characterization of Pretreated Birch Outer Bark. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 5289-5302.	3.2	12
178	Comprehension of an organosolv process for lignin extraction on <i>Festuca arundinacea</i> and monitoring of the cellulose degradation. <i>Industrial Crops and Products</i> , 2016, 94, 308-317.	2.5	21
179	Role of Physicochemical Structure of Organosolv Hardwood and Herbaceous Lignins on Carbon Fiber Performance. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 5785-5798.	3.2	84
180	Structural elucidation of Eucalyptus lignin and its dynamic changes in the cell walls during an integrated process of ionic liquids and successive alkali treatments. <i>Bioresource Technology</i> , 2016, 222, 175-181.	4.8	13
181	Activation of lignocellulosic biomass for higher sugar yields using aqueous ionic liquid at low severity process conditions. <i>Biotechnology for Biofuels</i> , 2016, 9, 160.	6.2	44
182	Characterization of depolymerized lignin and renewable phenolic compounds from liquefied waste biomass. <i>RSC Advances</i> , 2016, 6, 95698-95707.	1.7	31
183	High-throughput microanalysis of large lignocellulosic sample sets by pyrolysis-gas chromatography/mass spectrometry. <i>Physiologia Plantarum</i> , 2016, 156, 127-138.	2.6	17
184	Fractionation of wheat straw Dioxane lignin reveals molar mass dependent structural differences. <i>Industrial Crops and Products</i> , 2016, 91, 186-193.	2.5	21
185	Sugarcane transgenics expressing MYB transcription factors show improved glucose release. <i>Biotechnology for Biofuels</i> , 2016, 9, 143.	6.2	21
186	Tandem Catalytic Depolymerization of Lignin by Water-tolerant Lewis Acids and Rhodium Complexes. <i>ChemSusChem</i> , 2016, 9, 2074-2079.	3.6	97
187	High Yield Production of Natural Phenolic Alcohols from Woody Biomass Using a Nickel-Based Catalyst. <i>ChemSusChem</i> , 2016, 9, 3353-3360.	3.6	104
188	Comprehensive evaluation of the liquid fraction during the hydrothermal treatment of rapeseed straw. <i>Biotechnology for Biofuels</i> , 2016, 9, 142.	6.2	57
189	Characterization of the Interunit Bonds of Lignin Oligomers Released by Acid-Catalyzed Selective Solvolysis of <i>Cryptomeria japonica</i> and <i>Eucalyptus globulus</i> Woods via Thioacidolysis and 2D-NMR. <i>Journal of Agricultural and Food Chemistry</i> , 2016, 64, 9152-9160.	2.4	15

#	ARTICLE	IF	CITATIONS
190	Formaldehyde stabilization facilitates lignin monomer production during biomass depolymerization. <i>Science</i> , 2016, 354, 329-333.	6.0	944
191	Elucidating Structural Characteristics of Biomass using Solution ² D NMR with a Mixture of Deuterated Dimethylsulfoxide and Hexamethylphosphoramide. <i>ChemSusChem</i> , 2016, 9, 1090-1095.	3.6	59
192	Magnesium Oxide-catalyzed Oxidative Depolymerization of Lignin. <i>Bulletin of the Korean Chemical Society</i> , 2016, 37, 515-521.	1.0	3
193	Toward the complete utilization of rice straw: Methane fermentation and lignin recovery by a combinational process involving mechanical milling, supporting material and nanofiltration. <i>Bioresource Technology</i> , 2016, 216, 830-837.	4.8	24
194	Impact of engineered lignin composition on biomass recalcitrance and ionic liquid pretreatment efficiency. <i>Green Chemistry</i> , 2016, 18, 4884-4895.	4.6	64
195	Organosolv pretreatment of sorghum bagasse using a low concentration of hydrophobic solvents such as 1-butanol or 1-pentanol. <i>Biotechnology for Biofuels</i> , 2016, 9, 27.	6.2	68
196	A review of whole cell wall NMR by the direct-dissolution of biomass. <i>Green Chemistry</i> , 2016, 18, 608-621.	4.6	50
197	Structural Elucidation of Whole Lignin in Cell Walls of Triploid of <i>Populus tomentosa</i> Carr.. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 1006-1015.	3.2	29
198	Enhancement in androgenesis efficiency in barley (<i>Hordeum vulgare</i> L.) and bread wheat (<i>Triticum</i>) Tissue and Organ Culture, 2016, 125, 11-22.	1.2	19
199	Revealing the thermal sensitivity of lignin during glycerol thermal processing through structural analysis. <i>RSC Advances</i> , 2016, 6, 30234-30246.	1.7	22
200	Chemistry of developing bordered-pit rims in balsam-fir trees. <i>Botany</i> , 2016, 94, 347-357.	0.5	0
201	Wheat straw lignin fractionation and characterization as lignin-carbohydrate complexes. <i>Industrial Crops and Products</i> , 2016, 85, 309-317.	2.5	39
202	Comparative study of lignin characteristics from wheat straw obtained by soda-AQ and kraft pretreatment and effect on the following enzymatic hydrolysis process. <i>Bioresource Technology</i> , 2016, 207, 361-369.	4.8	71
203	New insights into the structure and composition of technical lignins: a comparative characterisation study. <i>Green Chemistry</i> , 2016, 18, 2651-2665.	4.6	648
204	Characterization of Cell Wall Components and Their Modifications during Postharvest Storage of <i>Asparagus officinalis</i> L.: Storage-Related Changes in Dietary Fiber Composition. <i>Journal of Agricultural and Food Chemistry</i> , 2016, 64, 478-486.	2.4	23
205	Structural Characterization of the Lignins from the Green and Yellow Bamboo of Bamboo Culm (<i>Phyllostachys pubescens</i>). <i>Journal of Wood Chemistry and Technology</i> , 2016, 36, 157-172.	0.9	69
206	Understanding the Physicochemical Characteristics and the Improved Enzymatic Saccharification of Corn Stover Pretreated with Aqueous and Gaseous Ammonia. <i>Bioenergy Research</i> , 2016, 9, 67-76.	2.2	48
207	Low temperature hydrogenation of pyrolytic lignin over Ru/TiO ₂ : 2D HSQC and ¹³ C NMR study of reactants and products. <i>Green Chemistry</i> , 2016, 18, 271-281.	4.6	68

#	ARTICLE	IF	CITATIONS
208	Assessment of structural characteristics of regenerated cellulolytic enzyme lignin based on a mild DMSO/[Emim]OAc dissolution system from triploid of <i>Populus tomentosa</i> Carr.. RSC Advances, 2017, 7, 3376-3387.	1.7	10
209	Functionality and molecular weight distribution of red oak lignin before and after pyrolysis and hydrogenation. Green Chemistry, 2017, 19, 1378-1389.	4.6	80
210	Understanding factors controlling depolymerization and polymerization in catalytic degradation of β -ether linked model lignin compounds by versatile peroxidase. Green Chemistry, 2017, 19, 2145-2154.	4.6	29
211	Impact of lignin structure on oil production via hydroprocessing with a copper-doped porous metal oxide catalyst. Bioresource Technology, 2017, 233, 216-226.	4.8	29
212	Enhanced delignification of steam-pretreated poplar by a bacterial laccase. Scientific Reports, 2017, 7, 42121.	1.6	37
213	2D NMR characterization of wheat straw residual lignin after dilute acid pretreatment with different severities. Holzforschung, 2017, 71, 461-469.	0.9	46
214	Lignocellulose pretreatment in a fungus-cultivating termite. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4709-4714.	3.3	107
215	Effect of alkaline preswelling on the structure of lignins from Eucalyptus. Scientific Reports, 2017, 7, 45752.	1.6	7
216	Regulation of CONIFERALDEHYDE 5-HYDROXYLASE expression to modulate cell wall lignin structure in rice. Planta, 2017, 246, 337-349.	1.6	76
217	³¹ P NMR Characterization of Tricin and Its Structurally Similar Flavonoids. ChemistrySelect, 2017, 2, 3557-3561.	0.7	14
218	Differences in glucose yield of residues from among varieties of rice, wheat, and sorghum after dilute acid pretreatment. Bioscience, Biotechnology and Biochemistry, 2017, 81, 1650-1656.	0.6	2
219	Hydrothermal Processing in Biorefineries. , 2017, , .		41
220	Transfer of Biomatrix/Wood Cell Interactions to Hemicellulose-Based Materials to Control Water Interaction. Chemical Reviews, 2017, 117, 8177-8207.	23.0	50
221	Hydroxystilbenes Are Monomers in Palm Fruit Endocarp Lignins. Plant Physiology, 2017, 174, 2072-2082.	2.3	90
222	Comparative Study of the Structure of Hydroproducts Derived from Loblolly Pine and Straw Grass. ACS Sustainable Chemistry and Engineering, 2017, 5, 6131-6138.	3.2	2
223	Natural acetylation impacts carbohydrate recovery during deconstruction of <i>Populus trichocarpa</i> wood. Biotechnology for Biofuels, 2017, 10, 48.	6.2	40
224	Disrupting Flavone Synthase II Alters Lignin and Improves Biomass Digestibility. Plant Physiology, 2017, 174, 972-985.	2.3	89
225	Effects of Extraction Methods on Structure and Valorization of Corn Stover Lignin by a Pd/C Catalyst. ChemCatChem, 2017, 9, 1135-1143.	1.8	36

#	ARTICLE	IF	CITATIONS
226	Molar mass-dependent profiles of functional groups and carbohydrates in kraft lignin. <i>Journal of Wood Chemistry and Technology</i> , 2017, 37, 171-183.	0.9	29
227	Acetylation of Ground Pulp: Monitoring Acetylation via HSQC-NMR Spectroscopy. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 1755-1762.	3.2	16
228	Characterization and Elimination of Undesirable Protein Residues in Plant Cell Wall Materials for Enhancing Lignin Analysis by Solution-State Nuclear Magnetic Resonance Spectroscopy. <i>Biomacromolecules</i> , 2017, 18, 4184-4195.	2.6	94
229	Characterization of Kraft Lignin Fractions Obtained by Sequential Ultrafiltration and Their Potential Application as a Biobased Component in Blends with Polyethylene. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 11770-11779.	3.2	80
230	Predicting lignin depolymerization yields from quantifiable properties using fractionated biorefinery lignins. <i>Green Chemistry</i> , 2017, 19, 5131-5143.	4.6	74
231	Direct spectroscopic detection of binding formation by kneading of biomass filler and acid-modified resin. <i>Polymer</i> , 2017, 125, 161-171.	1.8	12
232	Rapid and near-complete dissolution of wood lignin at 80°C by a recyclable acid hydrotrope. <i>Science Advances</i> , 2017, 3, e1701735.	4.7	276
234	Different Routes for Conifer- and Sinapaldehyde and Higher Saccharification upon Deficiency in the Dehydrogenase CAD1. <i>Plant Physiology</i> , 2017, 175, 1018-1039.	2.3	99
235	Survey of Lignin-Structure Changes and Depolymerization during Ionic Liquid Pretreatment. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 10116-10127.	3.2	77
236	Silencing <i>CAFFEOYL SHIKIMATE ESTERASE</i> Affects Lignification and Improves Saccharification in Poplar. <i>Plant Physiology</i> , 2017, 175, 1040-1057.	2.3	90
237	Highly Decorated Lignins in Leaf Tissues of the Canary Island Date Palm <i>Phoenix canariensis</i> . <i>Plant Physiology</i> , 2017, 175, 1058-1067.	2.3	34
238	A strategy for generating high-quality cellulose and lignin simultaneously from woody biomass. <i>Green Chemistry</i> , 2017, 19, 4849-4857.	4.6	82
239	On the structure of softwood kraft lignin. <i>Green Chemistry</i> , 2017, 19, 4104-4121.	4.6	368
240	Two dimensional NMR spectroscopy for molecular characterization of soil organic matter: Application to boreal soils and litter. <i>Organic Geochemistry</i> , 2017, 113, 184-195.	0.9	18
241	Effect of in Vivo Deuteration on Structure of Switchgrass Lignin. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 8004-8010.	3.2	11
242	Chemical Pulping Advantages of Zip-lignin Hybrid Poplar. <i>ChemSusChem</i> , 2017, 10, 3565-3573.	3.6	45
243	Structural characteristics of water-soluble polysaccharides from Norway spruce (<i>Picea abies</i>). <i>Carbohydrate Polymers</i> , 2017, 175, 699-711.	5.1	27
244	Adsorption of cellobiohydrolases I onto lignin fractions from dilute acid pretreated <i>Broussonetia papyrifera</i> . <i>Bioresource Technology</i> , 2017, 244, 957-962.	4.8	25

#	ARTICLE	IF	CITATIONS
245	Assessment of integrated process based on autohydrolysis and robust delignification process for enzymatic saccharification of bamboo. <i>Bioresource Technology</i> , 2017, 244, 717-725.	4.8	35
246	<i>Biomass Conversion.</i> , 2017, , 285-419.		7
247	Transparent Woody Film Made by Dissolution of Finely Divided Japanese Beech in Formic Acid at Room Temperature. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 11536-11542.	3.2	19
248	Impact of lignin polymer backbone esters on ionic liquid pretreatment of poplar. <i>Biotechnology for Biofuels</i> , 2017, 10, 101.	6.2	48
249	Comparison of the Structural Characteristics of Cellulolytic Enzyme Lignin Preparations Isolated from Wheat Straw Stem and Leaf. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 342-349.	3.2	51
250	Pre-treatment of lignocellulosic feedstocks using biorenewable alcohols: towards complete biomass valorisation. <i>Green Chemistry</i> , 2017, 19, 202-214.	4.6	232
251	Homogeneous esterification mechanism of bagasse modified with phthalic anhydride in ionic liquid. Part 2: Reactive behavior of hemicelluloses. <i>Carbohydrate Polymers</i> , 2017, 157, 1365-1373.	5.1	13
252	Structural Variation of Lignin and Lignin- β -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
253	Tissue and cell-specific transcriptomes in cotton reveal the subtleties of gene regulation underlying the diversity of plant secondary cell walls. <i>BMC Genomics</i> , 2017, 18, 539.	1.2	38
254	Overexpression of a Domain of Unknown Function 231-containing protein increases O-xylan acetylation and cellulose biosynthesis in <i>Populus</i> . <i>Biotechnology for Biofuels</i> , 2017, 10, 311.	6.2	26
255	Role of Selective Fungal Delignification in Overcoming the Saccharification Recalcitrance of Bamboo Culms. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 8884-8894.	3.2	23
256	Structural Characterization of Lignin in Fruits and Stalks of Chinese Quince. <i>Molecules</i> , 2017, 22, 890.	1.7	25
257	Study of Organosolv Lignins as Adhesives in Wood Panel Production. <i>Polymers</i> , 2017, 9, 46.	2.0	24
258	Sugarcane straw lignin obtained by sulfur dioxide-alcohol-water (SAW) fractionation: Effect of solvent. <i>Industrial Crops and Products</i> , 2018, 115, 235-242.	2.5	11
259	Structural characterization of Chinese quince fruit lignin pretreated with enzymatic hydrolysis. <i>Bioresource Technology</i> , 2018, 262, 212-220.	4.8	28
260	Association of chemical structure and thermal degradation of lignins from crop straw and softwood. <i>Journal of Analytical and Applied Pyrolysis</i> , 2018, 134, 25-34.	2.6	30
261	Improving wood properties for wood utilization through multi-omics integration in lignin biosynthesis. <i>Nature Communications</i> , 2018, 9, 1579.	5.8	162
262	Sulfonic Acid Group Determination in Lignosulfonates by Headspace Gas Chromatography. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 6240-6246.	3.2	13

#	ARTICLE	IF	CITATIONS
263	Carbon-13 Cross-Polarization Magic-Angle Spinning Nuclear Magnetic Resonance for Measuring Proanthocyanidin Content and Procyanidin to Prodelphinidin Ratio in Sainfoin (<i>Onobrychis</i>)	1.6	10
264	NMR studies on lignocellulose deconstructions in the digestive system of the lower termite <i>Coptotermes formosanus</i> Shiraki. <i>Scientific Reports</i> , 2018, 8, 1290.	1.6	39
265	Engineered Lignin in Poplar Biomass Facilitates Cu-Catalyzed Alkaline-Oxidative Pretreatment. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 2932-2941.	3.2	31
266	Change in lignin structure, but not in lignin content, in transgenic poplar overexpressing the rice master regulator of secondary cell wall biosynthesis. <i>Physiologia Plantarum</i> , 2018, 163, 170-182.	2.6	19
267	Membrane filtration of kraft lignin: Structural characteristics and antioxidant activity of the low-molecular-weight fraction. <i>Industrial Crops and Products</i> , 2018, 112, 200-209.	2.5	60
268	Lignin extraction and catalytic upgrading from genetically modified poplar. <i>Green Chemistry</i> , 2018, 20, 745-753.	4.6	96
269	Structure-Reactivity Relationship in Fast Pyrolysis of Lignin into Monomeric Phenolic Compounds. <i>Energy & Fuels</i> , 2018, 32, 1843-1850.	2.5	35
270	Characterization of Lignin Streams during Bionic Liquid-Based Pretreatment from Grass, Hardwood, and Softwood. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 3079-3090.	3.2	70
271	Suppression of a single <i>BAHD</i> gene in <i>Setaria viridis</i> causes large, stable decreases in cell wall feruloylation and increases biomass digestibility. <i>New Phytologist</i> , 2018, 218, 81-93.	3.5	91
272	Reductive Cleavage Method for Quantitation of Monolignols and Low-Abundance Monolignol Conjugates. <i>ChemSusChem</i> , 2018, 11, 1600-1605.	3.6	45
273	Selective precipitation and characterization of lignin-carbohydrate complexes (LCCs) from <i>Eucalyptus</i> . <i>Planta</i> , 2018, 247, 1077-1087.	1.6	39
274	Mechanochemical Treatment Facilitates Two-Step Oxidative Depolymerization of Kraft Lignin. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 5990-5998.	3.2	47
275	Effect of structural characteristics on the depolymerization of lignin into phenolic monomers. <i>Fuel</i> , 2018, 223, 366-372.	3.4	55
276	Oxidative depolymerization of lignin improved by enzymolysis pretreatment with laccase. <i>Journal of Energy Chemistry</i> , 2018, 27, 801-805.	7.1	14
277	Maturation-related changes of carrot lignins. <i>Journal of the Science of Food and Agriculture</i> , 2018, 98, 1016-1023.	1.7	3
278	Co-production of oligosaccharides and fermentable sugar from wheat straw by hydrothermal pretreatment combined with alkaline ethanol extraction. <i>Industrial Crops and Products</i> , 2018, 111, 78-85.	2.5	86
279	Short-term facilitation of microbial litter decomposition by ultraviolet radiation. <i>Science of the Total Environment</i> , 2018, 615, 838-848.	3.9	39
280	Variability in Lignin Composition and Structure in Cell Walls of Different Parts of <i>Maca</i> (<i>Acrocomia aculeata</i>) Palm Fruit. <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 138-153.	2.4	70

#	ARTICLE	IF	CITATIONS
281	Relevance, structure and analysis of ferulic acid in maize cell walls. <i>Food Chemistry</i> , 2018, 246, 360-378.	4.2	89
282	The Nature of Hologlignin. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 957-964.	3.2	23
283	Alkaline oxidative cracking for effective depolymerization of biorefining lignin to mono-aromatic compounds and organic acids with molecular oxygen. <i>Biomass and Bioenergy</i> , 2018, 108, 7-14.	2.9	52
284	One-step green synthesis of composition-tunable Pt@Cu alloy nanowire networks with high catalytic activity for 4-nitrophenol reduction. <i>Dalton Transactions</i> , 2018, 47, 17461-17468.	1.6	25
286	Influence of drying process on reactivity of cellulose and xylan in acetylation of willow (<i>Salix</i>) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 582 T	2.4	10
288	Peculiarities of Synthesis and Properties of Lignin@Silica Nanocomposites Prepared by Sol-Gel Method. <i>Nanomaterials</i> , 2018, 8, 950.	1.9	32
289	<i>Dichomitus squalens</i> partially tailors its molecular responses to the composition of solid wood. <i>Environmental Microbiology</i> , 2018, 20, 4141-4156.	1.8	36
290	Mechanistic insight in the selective delignification of wheat straw by three white-rot fungal species through quantitative ¹³ C-IPY-GC-MS and whole cell wall HSQC NMR. <i>Biotechnology for Biofuels</i> , 2018, 11, 262.	6.2	33
291	An α-ideald lignin-facilitates full biomass utilization. <i>Science Advances</i> , 2018, 4, eaau2968.	4.7	184
292	Structural Characterization of Lignin and Lignin-Carbohydrate Complex (LCC) from Ginkgo Shells (<i>Ginkgo biloba</i> L.) by Comprehensive NMR Spectroscopy. <i>Polymers</i> , 2018, 10, 736.	2.0	59
293	Evaluating the production of monosaccharides and xylooligosaccharides from the pre-hydrolysis liquor of kraft pulping process by acid and enzymatic hydrolysis. <i>Industrial Crops and Products</i> , 2018, 124, 906-911.	2.5	24
294	Solvothermal liquefaction of alkali lignin to obtain a high yield of aromatic monomers while suppressing solvent consumption. <i>Green Chemistry</i> , 2018, 20, 4957-4974.	4.6	47
295	Revealing the Topochemistry and Structural Features of Lignin during the Growth of <i>Eucalyptus grandis</i> – <i>Eucalyptus urophylla</i> . <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 9198-9207.	3.2	13
296	Structural elucidation and antioxidant activity of lignin isolated from rice straw and alkali-oxygen black liquor. <i>International Journal of Biological Macromolecules</i> , 2018, 116, 513-519.	3.6	60
297	One-Step Lignocellulose Fractionation by using 2,5-Furandicarboxylic Acid as a Biogenic and Recyclable Catalyst. <i>ChemSusChem</i> , 2018, 11, 2051-2056.	3.6	32
298	Screening of fungi for decomposition of lignin-derived products from Japanese cedar. <i>Journal of Bioscience and Bioengineering</i> , 2018, 126, 573-579.	1.1	15
299	Variation in energy sorghum hybrid TX08001 biomass composition and lignin chemistry during development under irrigated and non-irrigated field conditions. <i>PLoS ONE</i> , 2018, 13, e0195863.	1.1	24
300	Structural Characterization of Lignins from Willow Bark and Wood. <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 7294-7300.	2.4	50

#	ARTICLE	IF	CITATIONS
301	Radically different lignin composition in <i>Posidonia</i> species may link to differences in organic carbon sequestration capacity. <i>Organic Geochemistry</i> , 2018, 124, 247-256.	0.9	31
302	Isolation and characterization of lignin from beech wood and chestnut sawdust for the preparation of lignin nanoparticles (LNPs) from wood industry side-streams. <i>Holzforschung</i> , 2018, 72, 961-972.	0.9	28
303	High-Solid Lignocellulose Processing Enabled by Natural Deep Eutectic Solvent for Lignin Extraction and Industrially Relevant Production of Renewable Chemicals. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 12205-12216.	3.2	137
304	Acetyl Groups in <i>Typha capensis</i> : Fate of Acetates during Organosolv and Ionosolv Pulping. <i>Polymers</i> , 2018, 10, 619.	2.0	7
305	Revisiting alkaline aerobic lignin oxidation. <i>Green Chemistry</i> , 2018, 20, 3828-3844.	4.6	114
306	Commelinid Monocotyledon Lignins Are Acylated by <i>p</i> -Coumarate. <i>Plant Physiology</i> , 2018, 177, 513-521.	2.3	51
307	Downregulation of <i>p</i> -COUMAROYL ESTER 3-HYDROXYLASE in rice leads to altered cell wall structures and improves biomass saccharification. <i>Plant Journal</i> , 2018, 95, 796-811.	2.8	65
308	RNAi suppression of barley caffeic acid O-methyltransferase modifies lignin despite redundancy in the gene family. <i>Plant Biotechnology Journal</i> , 2019, 17, 594-607.	4.1	37
309	Determination of hydroxyl groups in biorefinery resources via quantitative ³¹ P NMR spectroscopy. <i>Nature Protocols</i> , 2019, 14, 2627-2647.	5.5	272
310	Unexpected polymerization mechanism of dilignol in the lignin growing. <i>Royal Society Open Science</i> , 2019, 6, 190445.	1.1	5
311	Mild Alkaline Pretreatment for Isolation of Native-Like Lignin and Lignin-Containing Cellulose Nanofibers (LCNF) from Crop Waste. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 14135-14142.	3.2	72
312	Structural characterization of lignin in heartwood, sapwood, and bark of eucalyptus. <i>International Journal of Biological Macromolecules</i> , 2019, 138, 519-527.	3.6	36
313	One-pot selective conversion of lignocellulosic biomass into furfural and co-products using aqueous choline chloride/methyl isobutyl ketone biphasic solvent system. <i>Bioresource Technology</i> , 2019, 289, 121708.	4.8	45
314	Reactivity improvement by phenolation of wheat straw lignin isolated from a biorefinery process. <i>New Journal of Chemistry</i> , 2019, 43, 2238-2246.	1.4	24
315	Method to Regioselectively Iodine-Tag Free-Phenolic Aromatic End-Groups in Lignin for ¹³ C-HSQC NMR Analysis. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 18624-18629.	3.2	4
316	Unassisted solar lignin valorisation using a compartmented photo-electro-biochemical cell. <i>Nature Communications</i> , 2019, 10, 5123.	5.8	67
317	OrganoCat Fractionation of Empty Fruit Bunches from Palm Trees into Lignin, Sugars, and Cellulose-Enriched Pulp. <i>ACS Omega</i> , 2019, 4, 14451-14457.	1.6	12
318	Dataset on structure-antioxidant activity relationship of active oxygen catalytic lignin and lignin-carbohydrate complex. <i>Data in Brief</i> , 2019, 25, 104413.	0.5	3

#	ARTICLE	IF	CITATIONS
319	Quantitative glucose release from softwood after pretreatment with low-cost ionic liquids. <i>Green Chemistry</i> , 2019, 21, 692-703.	4.6	111
320	The influence of lignin content and structure on hemicellulose alkaline extraction for non-wood and hardwood lignocellulosic biomass. <i>Cellulose</i> , 2019, 26, 3219-3230.	2.4	53
321	Fractionation of pyrolysis oil derived from lignin through a simple water extraction method. <i>Fuel</i> , 2019, 242, 587-595.	3.4	33
322	Sustainable Lignin for Carbon Fibers: Principles, Techniques, and Applications. , 2019, , .		16
323	Characterization Techniques and Quality Assessment of Lignin and Lignin Carbon Materials. , 2019, , 193-279.		0
324	Cellulolytic enzyme-aided extraction of hemicellulose from switchgrass and its characteristics. <i>Green Chemistry</i> , 2019, 21, 3902-3910.	4.6	34
325	Versatility of a Dilute Acid/Butanol Pretreatment Investigated on Various Lignocellulosic Biomasses to Produce Lignin, Monosaccharides and Cellulose in Distinct Phases. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 11069-11079.	3.2	50
326	Recent progress in the thermal and catalytic conversion of lignin. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 111, 422-441.	8.2	141
327	Supercritical methanol depolymerization and hydrodeoxygenation of lignin and biomass over reduced copper porous metal oxides. <i>Green Chemistry</i> , 2019, 21, 2988-3005.	4.6	63
328	Silencing of a BAHD acyltransferase in sugarcane increases biomass digestibility. <i>Biotechnology for Biofuels</i> , 2019, 12, 111.	6.2	28
329	A Phosphotungstic Acid Catalyst for Depolymerization in Bulrush Lignin. <i>Catalysts</i> , 2019, 9, 399.	1.6	23
330	Toward Sustainable and Complete Wood Valorization by Fractionating Lignin with Low Condensation Using an Acid Hydrotrope at Low Temperatures (â%80 Å°C). <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 7063-7073.	1.8	34
331	Characterization of <i>Miscanthus</i> cell wall polymers. <i>GCB Bioenergy</i> , 2019, 11, 191-205.	2.5	38
332	Relationships between Cell Wall Digestibility and Lignin Content as Influenced by Lignin Type and Analysis Method. <i>Crop Science</i> , 2019, 59, 1122-1132.	0.8	3
333	Preparation of Lignin Nanoparticles from Wood Waste for Wood Surface Treatment. <i>Nanomaterials</i> , 2019, 9, 281.	1.9	79
334	High-purity lignin isolated from poplar wood meal through dissolving treatment with deep eutectic solvents. <i>Royal Society Open Science</i> , 2019, 6, 181757.	1.1	85
335	Extraction and characterization of lignin from corncob residue after acid-catalyzed steam explosion pretreatment. <i>Industrial Crops and Products</i> , 2019, 133, 241-249.	2.5	54
336	Estimation of Syringyl Units in Wood Lignins by FT-Raman Spectroscopy. <i>Journal of Agricultural and Food Chemistry</i> , 2019, 67, 4367-4374.	2.4	17

#	ARTICLE	IF	CITATIONS
337	Structural features of alternative lignin monomers associated with improved digestibility of artificially lignified maize cell walls. <i>Plant Science</i> , 2019, 287, 110070.	1.7	14
338	InterSpin: Integrated Supportive Webtools for Low- and High-Field NMR Analyses Toward Molecular Complexity. <i>ACS Omega</i> , 2019, 4, 3361-3369.	1.6	19
339	Catalytic depolymerization of organosolv lignin to phenolic monomers and low molecular weight oligomers. <i>Fuel</i> , 2019, 244, 247-257.	3.4	76
340	Evaluation of ring-5 structures of guaiacyl lignin in <i>Ginkgo biloba</i> L. using solid- and liquid-state ¹³ C NMR difference spectroscopy. <i>Holzforschung</i> , 2019, 73, 1083-1092.	0.9	8
341	Topology of Pretreated Wood Fibers Using Dynamic Nuclear Polarization. <i>Journal of Physical Chemistry C</i> , 2019, 123, 30407-30415.	1.5	22
342	Altered lignocellulose chemical structure and molecular assembly in CINNAMYL ALCOHOL DEHYDROGENASE-deficient rice. <i>Scientific Reports</i> , 2019, 9, 17153.	1.6	25
343	Structural Features of Alkaline Dioxane Lignin and Residual Lignin from <i>Eucalyptus grandis</i> – <i>E. urophylla</i> . <i>Journal of Agricultural and Food Chemistry</i> , 2019, 67, 968-974.	2.4	16
344	Structural Transformations of Hybrid <i>Pennisetum</i> Lignin: Effect of Microwave-Assisted Hydrothermal Pretreatment. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 3073-3082.	3.2	15
345	Analysis of phenolic compounds obtained from bamboo microwave liquefaction for fast-curing phenol-formaldehyde resin preparation. <i>Journal of Applied Polymer Science</i> , 2019, 136, 46952.	1.3	6
346	Assessing the Facile Pretreatments of Bagasse for Efficient Enzymatic Conversion and Their Impacts on Structural and Chemical Properties. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 1095-1104.	3.2	63
347	From Waste to Wealth: From Kraft Lignin to Free-standing Supercapacitors. <i>Carbon</i> , 2019, 145, 470-480.	5.4	145
348	Rapeseed Straw Biorefinery Process. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 790-801.	3.2	18
349	Lignin containing cellulose nanofibril production from willow bark at 80°C using a highly recyclable acid hydrotrope. <i>Industrial Crops and Products</i> , 2019, 129, 15-23.	2.5	46
350	Effects of synergistic fungal pretreatment on structure and thermal properties of lignin from corncob. <i>Bioresource Technology</i> , 2019, 272, 123-129.	4.8	42
351	Involvement of Cesa4, Cesa7-A/B and Cesa8-A/B in secondary wall formation in <i>Populus trichocarpa</i> wood. <i>Tree Physiology</i> , 2020, 40, 73-89.	1.4	30
352	Protic, Aprotic, and Choline-Derived Ionic Liquids: Toward Enhancing the Accessibility of Hardwood and Softwood. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 1362-1370.	3.2	22
353	Selective catalytic transformation of lignin with guaiacol as the only liquid product. <i>Chemical Science</i> , 2020, 11, 1347-1352.	3.7	68
354	Enhanced Softwood Cellulose Accessibility by H3PO4 Pretreatment: High Sugar Yield without Compromising Lignin Integrity. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 1010-1024.	1.8	9

#	ARTICLE	IF	CITATIONS
355	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
356	Deep Eutectic Solvent Pretreatment of Transgenic Biomass With Increased C6C1 Lignin Monomers. Frontiers in Plant Science, 2019, 10, 1774.	1.7	8
357	The molecular structure and multifunctionality of the cryptic plant polymer suberin. Materials Today Bio, 2020, 5, 100039.	2.6	24
358	Ni ^{II} -Mg ^{II} -Al Catalysts Effectively Promote Depolymerization of Rice Husk Lignin to Bio-Oil. Catalysis Letters, 2020, 150, 1591-1604.	1.4	11
359	One-pot hydrodeoxygenation (HDO) of lignin monomers to C9 hydrocarbons co-catalysed by Ru/C and Nb ₂ O ₅ . Green Chemistry, 2020, 22, 7406-7416.	4.6	33
360	A Robust Method to Quantify Cell Wall Bound Phenolics in Plant Suspension Culture Cells Using Pyrolysis-Gas Chromatography/Mass Spectrometry. Frontiers in Plant Science, 2020, 11, 574016.	1.7	3
361	Identifying the primary reactions and products of fast pyrolysis of alkali lignin. Journal of Analytical and Applied Pyrolysis, 2020, 151, 104917.	2.6	24
362	Comprehensive analysis of the chemical structure of lignin from raspberry stalks (<i>Rubus idaeus</i> L.). International Journal of Biological Macromolecules, 2020, 164, 3814-3822.	3.6	9
363	Tailoring poplar lignin without yield penalty by combining a null and haploinsufficient CINNAMOYL-CoA REDUCTASE2 allele. Nature Communications, 2020, 11, 5020.	5.8	41
364	Production of renewable alcohols from maple wood using supercritical methanol hydrodeoxygenation in a semi-continuous flowthrough reactor. Green Chemistry, 2020, 22, 8462-8477.	4.6	9
365	Production of <i>p</i> -Coumaric Acid from Corn GVL-Lignin. ACS Sustainable Chemistry and Engineering, 2020, 8, 17427-17438.	3.2	41
366	Transcriptome analysis provides insights into the non-methylated lignin synthesis in <i>Paphiopedilum armeniacum</i> seed. BMC Genomics, 2020, 21, 524.	1.2	19
367	Evaluating the Utility of Permethylated Polysaccharide Solution NMR Data for Characterization of Insoluble Plant Cell Wall Polysaccharides. Analytical Chemistry, 2020, 92, 13221-13228.	3.2	14
368	Depolymerization of Lignin into Monophenolics by Ferrous/Persulfate Reagent under Mild Conditions. ChemSusChem, 2020, 13, 6582-6593.	3.6	13
369	Selective One-Dimensional ¹³ C Spin-Diffusion Solid-State Nuclear Magnetic Resonance Methods to Probe Spatial Arrangements in Biopolymers Including Plant Cell Walls, Peptides, and Spider Silk. Journal of Physical Chemistry B, 2020, 124, 9870-9883.	1.2	11
370	Mild Acetylation and Solubilization of Ground Whole Plant Cell Walls in EmimAc: A Method for Solution-State NMR in DMSO- <i>d</i> ₆ . Analytical Chemistry, 2020, 92, 13101-13109.	3.2	6
371	Understanding the Structural Changes of Lignin Macromolecules From Balsa Wood at Different Growth Stages. Frontiers in Energy Research, 2020, 8, .	1.2	14
372	Lignin as a Key Component in Lignin-Containing Cellulose Nanofibrils for Enhancing the Performance of Polymeric Diphenylmethane Diisocyanate Wood Adhesives. ACS Sustainable Chemistry and Engineering, 2020, 8, 17165-17176.	3.2	21

#	ARTICLE	IF	CITATIONS
373	The class II KNOX transcription factors KNAT3 and KNAT7 synergistically regulate monolignol biosynthesis in Arabidopsis. <i>Journal of Experimental Botany</i> , 2020, 71, 5469-5483.	2.4	39
374	Structure and Monomer Ratio of Lignin in C3H and HCT RNAi Transgenic Poplar Saplings. <i>ChemistrySelect</i> , 2020, 5, 7164-7169.	0.7	9
375	Structure characterization and inhibitory effect of lignin from the outer and inner layers of bamboo after alkali pretreatment. <i>Cellulose</i> , 2020, 27, 5677-5688.	2.4	11
376	Structural Features of Lignin Fractionated From Industrial Furfural Residue Using Alkaline Cooking Technology and Its Antioxidant Performance. <i>Frontiers in Energy Research</i> , 2020, 8, .	1.2	10
377	Response of <i>Pseudomonas putida</i> to Complex, Aromatic-Rich Fractions from Biomass. <i>ChemSusChem</i> , 2020, 13, 4455-4467.	3.6	23
378	Short-Time Hydrothermal Treatment of Poplar Wood for the Production of a Lignin-Derived Polyphenol Antioxidant. <i>ChemSusChem</i> , 2020, 13, 4478-4486.	3.6	19
379	New Lignin Streams Derived from Heteropoly Acids Enhanced Neutral Deep Eutectic Solvent Fractionation: Toward Structural Elucidation and Antioxidant Performance. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 12110-12119.	3.2	35
380	Valorization of industrial xylan-rich hemicelluloses into water-soluble derivatives by in-situ acetylation in EmimAc ionic liquid. <i>International Journal of Biological Macromolecules</i> , 2020, 163, 457-463.	3.6	7
381	Dual Antioxidant Properties and Organic Radical Stabilization in Cellulose Nanocomposite Films Functionalized by In Situ Polymerization of Coniferyl Alcohol. <i>Biomacromolecules</i> , 2020, 21, 3163-3175.	2.6	19
382	Current advancement on the isolation, characterization and application of lignin. <i>International Journal of Biological Macromolecules</i> , 2020, 162, 985-1024.	3.6	223
383	Liquefaction of bamboo biomass and production of three fractions containing aromatic compounds. <i>Journal of Bioresources and Bioproducts</i> , 2020, 5, 114-123.	11.8	32
384	Possible mechanisms for the generation of phenyl glycoside-type lignin-carbohydrate linkages in lignification with monolignol glucosides. <i>Plant Journal</i> , 2020, 104, 156-170.	2.8	18
385	An integrated biorefinery process to comprehensively utilize corn stalk in a MIBK/water/Al(NO ₃) ₃ ·9H ₂ O biphasic system: Chemical and morphological changes. <i>Industrial Crops and Products</i> , 2020, 147, 112173.	2.5	10
386	Structural characteristics of different softwood lignins according to 1D and 2D NMR spectroscopy. <i>Journal of Wood Chemistry and Technology</i> , 2020, 40, 178-189.	0.9	23
387	Isolation and characterization of lignocellulosic nanofibers from four kinds of organosolv-fractionated lignocellulosic materials. <i>Wood Science and Technology</i> , 2020, 54, 503-517.	1.4	19
388	Monolignol Benzoates Incorporate into the Lignin of Transgenic <i>Populus trichocarpa</i> Depleted in C3H and C4H. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 3644-3654.	3.2	39
389	Bio-refining corn stover into microbial lipid and advanced energy material using ionic liquid-based organic electrolyte. <i>Industrial Crops and Products</i> , 2020, 145, 112137.	2.5	18
390	Assessing the Viability of Recovery of Hydroxycinnamic Acids from Lignocellulosic Biorefinery Alkaline Pretreatment Waste Streams. <i>ChemSusChem</i> , 2020, 13, 2012-2024.	3.6	54

#	ARTICLE	IF	CITATIONS
391	Black Liquor Valorization by Using Marine Protist <i>Thraustochytrium striatum</i> and the Preliminary Metabolic Mechanism Study. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 1786-1796.	3.2	5
392	Double knockout of OsWRKY36 and OsWRKY102 boosts lignification with altering culm morphology of rice. <i>Plant Science</i> , 2020, 296, 110466.	1.7	21
393	Methylation-triggered fractionation of lignocellulosic biomass to afford cellulose-, hemicellulose-, and lignin-based functional polymers <i>via</i> click chemistry. <i>Green Chemistry</i> , 2020, 22, 2909-2928.	4.6	18
394	Compensatory Guaiacyl Lignin Biosynthesis at the Expense of Syringyl Lignin in <i>4CL1</i> -Knockout Poplar. <i>Plant Physiology</i> , 2020, 183, 123-136.	2.3	36
395	Guidelines for performing lignin-first biorefining. <i>Energy and Environmental Science</i> , 2021, 14, 262-292.	15.6	416
396	Tandem conversion of lignin to catechols via demethylation and catalytic hydrogenolysis. <i>Industrial Crops and Products</i> , 2021, 159, 113095.	2.5	27
397	Rewired phenolic metabolism and improved saccharification efficiency of a <i>Zea mays cinnamyl alcohol dehydrogenase 2 (zmcad2)</i> mutant. <i>Plant Journal</i> , 2021, 105, 1240-1257.	2.8	13
398	Suppression of a BAHD acyltransferase decreases <i>p</i> -coumaroyl on arabinoxylan and improves biomass digestibility in the model grass <i>Setaria viridis</i> . <i>Plant Journal</i> , 2021, 105, 136-150.	2.8	27
399	Sequential fractionation of sugarcane bagasse using liquid hot water and formic acid-catalyzed glycerol-based organosolv with solvent recycling. <i>Bioenergy Research</i> , 2021, 14, 135-152.	2.2	22
400	Microbial Lipid Production from Lignocellulosic Biomass Pretreated by Effective Pretreatment. , 2021, , 175-206.		1
401	Termite Gut Microbiota Contribution to Wheat Straw Delignification in Anaerobic Bioreactors. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 2191-2202.	3.2	33
402	The exposome paradigm to predict environmental health in terms of systemic homeostasis and resource balance based on NMR data science. <i>RSC Advances</i> , 2021, 11, 30426-30447.	1.7	10
403	Advanced and versatile lignin-derived biodegradable composite film materials toward a sustainable world. <i>Green Chemistry</i> , 2021, 23, 3790-3817.	4.6	114
404	Combined whole cell wall analysis and streamlined in silico carbohydrate-active enzyme discovery to improve biocatalytic conversion of agricultural crop residues. <i>Biotechnology for Biofuels</i> , 2021, 14, 16.	6.2	15
405	Comparative study of the solvolytic deconstruction of corn stover lignin in batch and flow-through reactors. <i>Green Chemistry</i> , 2021, 23, 7731-7742.	4.6	17
406	Self-Standing Lignin-Containing Willow Bark Nanocellulose Films for Oxygen Blocking and UV Shielding. <i>ACS Applied Nano Materials</i> , 2021, 4, 2921-2929.	2.4	15
407	High-Yield Production of Deoxygenated Monomers from Kraft Lignin over ZnO-Co/N-CNTs in Water. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 3232-3245.	3.2	12
408	Wheat straw: A natural remedy against different maladies. <i>Food Science and Nutrition</i> , 2021, 9, 2335-2344.	1.5	36

#	ARTICLE	IF	CITATIONS
409	Localised laccase activity modulates distribution of lignin polymers in gymnosperm compression wood. <i>New Phytologist</i> , 2021, 230, 2186-2199.	3.5	23
410	Organosolv Fractionation of Walnut Shell Biomass to Isolate Lignocellulosic Components for Chemical Upgrading of Lignin to Aromatics. <i>ACS Omega</i> , 2021, 6, 8142-8150.	1.6	15
412	A multi-omics approach to lignocellulolytic enzyme discovery reveals a new ligninase activity from <i>Parascedosporium putredinis</i> NO1. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	18
413	Recent Advances in Multi-Scale Experimental Analysis to Assess the Role of Compatibilizers in Cellulosic Filler-Reinforced Plastic Composites. <i>Journal of Composites Science</i> , 2021, 5, 138.	1.4	6
414	Staged biorefinery of Moso bamboo by integrating polysaccharide hydrolysis and lignin reductive catalytic fractionation (RCF) for the sequential production of sugars and aromatics. <i>Industrial Crops and Products</i> , 2021, 164, 113358.	2.5	8
415	Durable Modification of Wood by Benzoylation—Proof of Covalent Bonding by Solution State NMR and DOSY NMR Quick-Test. <i>Polymers</i> , 2021, 13, 2164.	2.0	5
416	Conversion of Beech Wood into Antiviral Lignin–Carbohydrate Complexes by Microwave Acidolysis. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 9248-9256.	3.2	19
417	Maleic acid hydrotropic fractionation of wheat straw to facilitate value-added multi-product biorefinery at atmospheric pressure. <i>GCB Bioenergy</i> , 2021, 13, 1407-1424.	2.5	10
418	Pith-specific lignification in <i>Nicotiana attenuata</i> as a defense against a stem-boring herbivore. <i>New Phytologist</i> , 2021, 232, 332-344.	3.5	23
419	Depolymerization of biorefinery lignin by improved laccases of the white-rot fungus <i>Obba rivulosa</i> . <i>Microbial Biotechnology</i> , 2021, 14, 2140-2151.	2.0	6
420	Effect of drying pretreatment methods on structural features and antioxidant activities of Brauns native lignin extracted from Chinese quince fruit. <i>Process Biochemistry</i> , 2021, 106, 70-77.	1.8	17
421	Monolignol acyltransferase for lignin p-hydroxybenzoylation in <i>Populus</i> . <i>Nature Plants</i> , 2021, 7, 1288-1300.	4.7	30
422	Tailoring renewable materials via plant biotechnology. <i>Biotechnology for Biofuels</i> , 2021, 14, 167.	6.2	25
423	Preparation and characterization of hydrothermally pretreated bamboo powder with improved thermoplasticity by propargyl bromide modification in a heterogeneous system. <i>Advanced Composites and Hybrid Materials</i> , 2021, 4, 1059-1069.	9.9	20
424	Colloidal lignin nanoparticles from acid hydrotropic fractionation for producing tough, biodegradable, and UV blocking PVA nanocomposite. <i>Industrial Crops and Products</i> , 2021, 168, 113584.	2.5	6
425	Revealing the topochemical and structural changes of poplar lignin during a two-step hydrothermal pretreatment combined with alkali extraction. <i>Industrial Crops and Products</i> , 2021, 168, 113588.	2.5	29
426	Catalytic Hydrogenolysis of Lignin: The Influence of Minor Units and Saccharides. <i>ChemSusChem</i> , 2021, 14, 5186-5198.	3.6	9
427	The effect of ball milling on birch, pine, reed, walnut shell enzymatic hydrolysis recalcitrance and the structure of the isolated residual enzyme lignin. <i>Industrial Crops and Products</i> , 2021, 167, 113493.	2.5	37

#	ARTICLE	IF	CITATIONS
428	Economical concerns of lignin in the energy sector. <i>Cleaner Engineering and Technology</i> , 2021, 4, 100258.	2.1	14
429	Maximizing yield of liquid-lignin from membrane filtration retentate of kraft black liquor. <i>Industrial Crops and Products</i> , 2021, 169, 113657.	2.5	6
430	Enzymatic bioconversion process of lignin: mechanisms, reactions and kinetics. <i>Bioresource Technology</i> , 2021, 340, 125655.	4.8	28
431	Effect of Structural Changes of Lignin During the Microwave-Assisted Alkaline/Ethanol Pretreatment on Cotton Stalk for an Effective Enzymatic Hydrolysis. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
432	A facile spectroscopic method for measuring lignin content in lignocellulosic biomass. <i>Green Chemistry</i> , 2021, 23, 5106-5112.	4.6	46
433	Linking Plant Biology and Pretreatment: Understanding the Structure and Organization of the Plant Cell Wall and Interactions with Cellulosic Biofuel Production. , 2014, , 231-253.		25
434	Effect of Hydrothermal Processing on Hemicellulose Structure. , 2017, , 45-94.		19
435	Eudicot Nutshells: Cell-Wall Composition and Biofuel Feedstock Potential. <i>Energy & Fuels</i> , 2020, 34, 16274-16283.	2.5	12
436	CHAPTER 10. Bulk and Surface Analysis of Carbonaceous Materials. <i>RSC Green Chemistry</i> , 2015, , 311-354.	0.0	3
437	CHAPTER 17. Polysaccharides as Major Carbon Sources in Environmental Biodiversity. <i>New Developments in NMR</i> , 0, , 369-395.	0.1	2
438	Differences in Cellulosic Supramolecular Structure of Compositionally Similar Rice Straw Affect Biomass Metabolism by Paddy Soil Microbiota. <i>PLoS ONE</i> , 2013, 8, e66919.	1.1	30
439	A Versatile Click-Compatible Monolignol Probe to Study Lignin Deposition in Plant Cell Walls. <i>PLoS ONE</i> , 2015, 10, e0121334.	1.1	19
440	Changes in Lignin and Polysaccharide Components in 13 Cultivars of Rice Straw following Dilute Acid Pretreatment as Studied by Solution-State 2D 1H-13C NMR. <i>PLoS ONE</i> , 2015, 10, e0128417.	1.1	26
441	SbCOMT (Bmr12) is involved in the biosynthesis of triclin-lignin in sorghum. <i>PLoS ONE</i> , 2017, 12, e0178160.	1.1	59
442	Estimation of the S/G ratios of the lignins in three widely used North American hardwoods. <i>Tappi Journal</i> , 2016, 15, 449-457.	0.2	8
443	Applicability of Recombinant Laccases From the White-Rot Fungus <i>Obba rivulosa</i> for Mediator-Promoted Oxidation of Biorefinery Lignin at Low pH. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 604497.	2.0	14
444	Bond Structures between Wood Components and Citric Acid in Wood-Based Molding. <i>Polymers</i> , 2021, 13, 58.	2.0	19
445	Plant Cell Wall, a Challenge for Its Characterisation. <i>Advances in Biological Chemistry</i> , 2016, 06, 70-105.	0.2	23

#	ARTICLE	IF	CITATIONS
446	Cell Wall Characteristics of a Maize Mutant Selected for Decreased Ferulates. <i>American Journal of Plant Sciences</i> , 2018, 09, 446-466.	0.3	6
448	Exogenous chalcone synthase expression in developing poplar xylem incorporates naringenin into lignins. <i>Plant Physiology</i> , 2022, 188, 984-996.	2.3	14
449	Alkanolamines as Dual Functional Solvents for Biomass Deconstruction and Bioenergy Production. <i>Green Chemistry</i> , 2021, 23, 8611-8631.	4.6	8
450	Knockout of the lignin pathway gene <i>BnF5H</i> decreases the S/G lignin compositional ratio and improves <i>Sclerotinia sclerotiorum</i> resistance in <i>Brassica napus</i> . <i>Plant, Cell and Environment</i> , 2022, 45, 248-261.	2.8	33
451	Pretreatment of sugarcane bagasse with deep eutectic solvents affect the structure and morphology of lignin. <i>Industrial Crops and Products</i> , 2021, 173, 114108.	2.5	30
453	Structural analysis of poplar and Masson pine lignocresols and comparison of their bovine serum albumin adsorption characteristics. <i>Tappi Journal</i> , 2019, 18, 31-43.	0.2	3
458	Fractionation and quantitative structural analysis of lignin from a lignocellulosic biorefinery process by gradient acid precipitation. <i>Fuel</i> , 2022, 309, 122153.	3.4	14
459	Structural characteristics of plant cell wall elucidated by solution-state 2D NMR spectroscopy with an optimized procedure. <i>Green Processing and Synthesis</i> , 2020, 9, 650-663.	1.3	3
460	Valorization of Chinese hickory shell as novel sources for the efficient production of xylooligosaccharides. <i>Biotechnology for Biofuels</i> , 2021, 14, 226.	6.2	11
461	Process intensification strategies for lignin valorization. <i>Chemical Engineering and Processing: Process Intensification</i> , 2022, 171, 108732.	1.8	12
462	Chemical Structures of Adhesive and Interphase Parts in Sucrose/Citric Acid Type Adhesive Wood-Based Molding Derived from Japanese Cedar (<i>Cryptomeria japonica</i>). <i>Polymers</i> , 2021, 13, 4224.	2.0	4
463	The Sorghum (<i>Sorghum bicolor</i>) Brown Midrib 30 Gene Encodes a Chalcone Isomerase Required for Cell Wall Lignification. <i>Frontiers in Plant Science</i> , 2021, 12, 732307.	1.7	9
464	Sustainable Polymer-Based Materials for Energy and Environmental Applications. <i>Energy, Environment, and Sustainability</i> , 2022, , 9-30.	0.6	2
465	Structural changes for lignin from Chinese quince during the sequential fractionation of cell wall polysaccharides. <i>Process Biochemistry</i> , 2022, 113, 167-176.	1.8	4
466	Acidolysis mechanism of lignin from bagasse during p-toluenesulfonic acid treatment. <i>Industrial Crops and Products</i> , 2022, 176, 114374.	2.5	30
467	Sequential aqueous acetone fractionation and characterization of Brauns native lignin separated from Chinese quince fruit. <i>International Journal of Biological Macromolecules</i> , 2022, 201, 67-74.	3.6	10
468	Solid-State Nuclear Magnetic Resonance as a Tool to Probe the Impact of Mechanical Preprocessing on the Structure and Arrangement of Plant Cell Wall Polymers. <i>Frontiers in Plant Science</i> , 2021, 12, 766506.	1.7	3
469	Feruloylated oligosaccharides-emerging natural oligosaccharides for human health: Production, structural characterization, bioactive potential, and functional food applications. , 2022, , 141-173.		0

#	ARTICLE	IF	CITATIONS
470	Evaluation of Cell Wall Chemistry of Della and Its Mutant Sweet Sorghum Stalks. <i>Journal of Agricultural and Food Chemistry</i> , 2022, 70, 1689-1703.	2.4	4
471	Catalytic production of low-carbon footprint sustainable natural gas. <i>Nature Communications</i> , 2022, 13, 258.	5.8	26
472	Rerouting of the lignin biosynthetic pathway by inhibition of cytosolic shikimate recycling in transgenic hybrid aspen. <i>Plant Journal</i> , 2022, 110, 358-376.	2.8	10
473	Hemoglobinâ€“Laccase Modifications of Ligninsulfonate: A Promising Synergistic Stratagem for Lignin Biodegradation. <i>Advanced Sustainable Systems</i> , 0, , 2100324.	2.7	1
474	Ligninâ€“carbohydrate complexes, their fractionation, and application to healthcare materials: A review. <i>International Journal of Biological Macromolecules</i> , 2022, 203, 29-39.	3.6	16
475	Integrating lignin depolymerization with microbial funneling processes using agronomically relevant feedstocks. <i>Green Chemistry</i> , 2022, 24, 2795-2811.	4.6	20
476	A Structure-Activity Understanding of the Interaction between Lignin and Various Cellulase Domains. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
477	Organo-Chemical Characterisation of Peat Decomposition Reveals Preferential Degradation of Hemicelluloses as Main Cause for Organic Matter Loss in the Acrotelm. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
478	Structural basis of lignocellulose deconstruction by the wood-feeding anobiid beetle <i>Nicobium hirtum</i> . <i>Journal of Wood Science</i> , 2022, 68, .	0.9	2
479	Lignin as a multifunctional photocatalyst for solar-powered biocatalytic oxyfunctionalization of Câ€“H bonds. , 2022, 1, 217-226.		40
480	Enhancement of Secondary Cell Wall Formation in Poplar Xylem Using a Self-Reinforced System of Secondary Cell Wall-Related Transcription Factors. <i>Frontiers in Plant Science</i> , 2022, 13, 819360.	1.7	6
481	HSQC-NMR analysis of bamboo (<i>Phyllostachys nigra</i>)-cultured cell lignin produced under different phytohormone conditions. <i>Holzforschung</i> , 2022, .	0.9	1
482	Manipulation of Lignin Monomer Composition Combined with the Introduction of Monolignol Conjugate Biosynthesis Leads to Synergistic Changes in Lignin Structure. <i>Plant and Cell Physiology</i> , 2022, 63, 744-754.	1.5	12
483	A new approach to zipâ€“lignin: 3,4â€“dihydroxybenzoate is compatible with lignification. <i>New Phytologist</i> , 2022, 235, 234-246.	3.5	12
484	Structure and integrity of sequentially extracted lignin during poplar (alkaline) pretreatment. <i>Process Biochemistry</i> , 2022, 117, 198-208.	1.8	4
485	Catalytic conversion of waste corrugated cardboard into lactic acid using lanthanide triflates. <i>Waste Management</i> , 2022, 144, 41-48.	3.7	7
486	<i>p</i> HBMT1, a BAHD-family monolignol acyltransferase, mediates lignin acylation in poplar. <i>Plant Physiology</i> , 2022, 188, 1014-1027.	2.3	18
487	Deficiency in flavonoid biosynthesis genes <i>CHS</i> , <i>CHI</i> , and <i>CHIL</i> alters rice flavonoid and lignin profiles. <i>Plant Physiology</i> , 2022, 188, 1993-2011.	2.3	18

#	ARTICLE	IF	CITATIONS
488	Nitrogen deficiency results in changes to cell wall composition of sorghum seedlings. <i>Scientific Reports</i> , 2021, 11, 23309.	1.6	8
489	Facile preparation of lignin-containing cellulose nanofibrils from sugarcane bagasse by mild soda-oxygen pulping. <i>Carbohydrate Polymers</i> , 2022, 290, 119480.	5.1	13
493	The flying spider-monkey tree fern genome provides insights into fern evolution and arborescence. <i>Nature Plants</i> , 2022, 8, 500-512.	4.7	42
494	H-lignin can be deposited independently of CINNAMYL ALCOHOL DEHYDROGENASE C and D in <i>Arabidopsis</i> . <i>Plant Physiology</i> , 2022, 189, 2015-2028.	2.3	4
495	Limiting silicon supply alters lignin content and structures of sorghum seedling cell walls. <i>Plant Science</i> , 2022, 321, 111325.	1.7	10
496	Effect of structural changes of lignin during the microwave-assisted alkaline/ethanol pretreatment on cotton stalk for an effective enzymatic hydrolysis. <i>Energy</i> , 2022, 254, 124402.	4.5	10
497	Lignin biorefinery: Lignin source, isolation, characterization, and bioconversion. <i>Advances in Bioenergy</i> , 2022, , 211-270.	0.5	2
498	Lignin Nanoparticles as Highly Efficient, Recyclable Emulsifiers for Enhanced Oil Recovery. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 9334-9344.	3.2	17
499	CRISPR/Cas9 suppression of OsAT10, a rice BAHD acyltransferase, reduces p-coumaric acid incorporation into arabinoxylan without increasing saccharification. <i>Frontiers in Plant Science</i> , 0, 13, .	1.7	4
500	Efficient separation of eucalyptus hemicellulose and improvement of the stability of the remaining components by 1-amino-2-naphthol-4-sulfonic acid pretreatment. <i>Industrial Crops and Products</i> , 2022, 187, 115406.	2.5	14
501	Enzyme Discovery in Anaerobic Fungi (Neocallimastigomycetes) Enables Lignocellulosic Biorefinery Innovation. <i>Microbiology and Molecular Biology Reviews</i> , 2022, 86, .	2.9	5
502	Catalytic Hydrogenolysis of Lignin into Phenolics by Internal Hydrogen over Ru Catalyst. <i>ChemCatChem</i> , 2022, 14, .	1.8	5
503	The temptation from homogeneous linear catechyl lignin. <i>Trends in Chemistry</i> , 2022, 4, 948-961.	4.4	21
504	New ternary deep eutectic solvents with cycle performance for efficient pretreated radiata pine forming to lignin containing cellulose nanofibrils. <i>Chemical Engineering Journal</i> , 2023, 451, 138591.	6.6	28
505	Cationic functionalized bamboo fibers with spinnable and antibacterial properties prepared in chlorocholine chloride/urea deep eutectic solvent. <i>Industrial Crops and Products</i> , 2022, 188, 115607.	2.5	6
506	Quantitative Extraction of p-Coumaric Acid and Ferulic Acid in Different Gramineous Materials and Structural Changes of Residual Alkali Lignin. <i>Journal of Renewable Materials</i> , 2023, 11, 555-566.	1.1	1
507	Pathways and their usage in the conversion of carbohydrates by aqueous barium hydroxide: insights from hyperpolarized and quantitative NMR. <i>Catalysis Science and Technology</i> , 2023, 13, 362-371.	2.1	1
508	Existence of Syringyl β -Carbonyl-Type Tetrahydrofuran β -Structure in Hardwood Lignins. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 12394-12401.	3.2	2

#	ARTICLE	IF	CITATIONS
509	Genome-edited rice deficient in two <i>4-COUMARATE:COENZYME A LIGASE</i> genes displays diverse lignin alterations. <i>Plant Physiology</i> , 2022, 190, 2155-2172.	2.3	11
510	Chemically Different but Often Mistaken Phenolic Polymers of Food Plants: Proanthocyanidins and Lignin in Seeds. <i>Journal of Agricultural and Food Chemistry</i> , 2022, 70, 11704-11714.	2.4	1
511	Metabolic engineering of <i>p-coumaroyl</i> hydroxybenzoate in poplar lignin. <i>Plant Biotechnology Journal</i> , 2023, 21, 176-188.	4.1	9
512	Lignocellulose molecular assembly and deconstruction properties of lignin-altered rice mutants. <i>Plant Physiology</i> , 2023, 191, 70-86.	2.3	3
513	Evolution of <i>p-coumaroylated</i> lignin in eudicots provides new tools for cell wall engineering. <i>New Phytologist</i> , 2023, 237, 251-264.	3.5	10
514	Fungi's selectivity in the biodegradation of <i>Dendrocalamus sinicus</i> decayed by white and brown rot fungi. <i>Industrial Crops and Products</i> , 2022, 188, 115726.	2.5	6
515	<i>p-Coumaroylation</i> of lignin occurs outside of commelinid monocots in the eudicot genus <i>Morus</i> (mulberry). <i>Plant Physiology</i> , 2023, 191, 854-861.	2.3	5
516	Microwave-accelerated glycerolysis of sugarcane trash using Lewis acid, $AlK(SO_4)_2$, for bioethanol production. <i>Industrial Crops and Products</i> , 2022, 190, 115849.	2.5	0
517	Organochemical Characterization of Peat Reveals Decomposition of Specific Hemicellulose Structures as the Main Cause of Organic Matter Loss in the Acrotelm. <i>Environmental Science & Technology</i> , 2022, 56, 17410-17419.	4.6	5
518	Poplar lignin structural changes during extraction in γ -valerolactone (GVL). <i>Green Chemistry</i> , 2023, 25, 336-347.	4.6	10
519	Nanogrinding/ethanol activation facilitating lignin fractionation for preparation of monodispersed lignin nanoparticles. <i>International Journal of Biological Macromolecules</i> , 2023, 227, 608-618.	3.6	6
520	Fractionation of Technical Lignin from Enzymatically Treated Steam-Exploded Poplar Using Ethanol and Formic Acid. <i>ACS Applied Polymer Materials</i> , 2022, 4, 9388-9398.	2.0	1
521	Pulverization and Chemical Modification of Wood in One Pod: Acetylation Behavior of Wood by Mechanochemical Processing with Rod-Milling Treatment. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 17198-17206.	3.2	2
522	Comparison of solid and liquid fractions of pretreated Norway spruce as reductants in LPMO-supported saccharification of cellulose. <i>Frontiers in Bioengineering and Biotechnology</i> , 0, 10, .	2.0	3
523	Lignin Stabilization and Carbohydrate Nature in H^+ -transfer Reductive Catalytic Fractionation: The Role of Solvent Fractionation of Lignin Oil in Structural Profiling**. <i>ChemSusChem</i> , 2023, 16, .	3.6	5
524	Correlation between Lignin-Carbohydrate Complex Content in Grass Lignins and Phenolic Aldehyde Production by Rapid Spray Ozonolysis. <i>ACS Engineering Au</i> , 2023, 3, 84-90.	2.3	2
525	Downregulation of barley ferulate 5-hydroxylase dramatically alters straw lignin structure without impact on mechanical properties. <i>Frontiers in Plant Science</i> , 0, 13, .	1.7	6
526	Enhanced catalytic cleavage of C-O and C-C bonds of raw biomass into lignin monomers and glucose. <i>Industrial Crops and Products</i> , 2023, 197, 116659.	2.5	1

#	ARTICLE	IF	CITATIONS
527	Dissolution and Hydrolysis of Wood Particles in Glyoxylic Acid without Ball Milling. ACS Sustainable Chemistry and Engineering, 2023, 11, 2050-2054.	3.2	1
528	Thiourea dioxide as a green reductant for selective depolymerization of lignin to guaiacol. Industrial Crops and Products, 2023, 194, 116176.	2.5	0
529	Lignin: A sustainable precursor for nanostructured carbon materials for supercapacitors. Carbon, 2023, 207, 172-197.	5.4	23
530	Biomimetic oxidative copolymerization of hydroxystilbenes and monolignols. Science Advances, 2023, 9, .	4.7	2
531	Lignin deconstruction by anaerobic fungi. Nature Microbiology, 2023, 8, 596-610.	5.9	17
533	Current roles of lignin for the agroindustry: Applications, challenges, and opportunities. International Journal of Biological Macromolecules, 2023, 240, 124523.	3.6	14
534	Selectively enzymatic conversion of wood constituents with white and brown rot fungi. Industrial Crops and Products, 2023, 199, 116703.	2.5	2
545	Biorefining renewable aromatic carbon. , 2023, , 407-440.		0