John Ralph

List of Publications by Year
in descending order

401 papers	48,009 citations	1294 109 h-index	2171 202 g-index
413 all docs	413 docs citations	413 times ranked	23966 citing authors

#	Article	IF	Citations
1	LIGNINBIOSYNTHESIS. Annual Review of Plant Biology, 2003, 54, 519-546.	8.6	3,709
2	Lignin Biosynthesis and Structure. Plant Physiology, 2010, 153, 895-905.	2.3	1,990
3	Paving the Way for Lignin Valorisation: Recent Advances in Bioengineering, Biorefining and Catalysis. Angewandte Chemie - International Edition, 2016, 55, 8164-8215.	7.2	1,576
4	Lignins: Natural polymers from oxidative coupling of 4-hydroxyphenyl- propanoids. Phytochemistry Reviews, 2004, 3, 29-60.	3.1	1,282
5	Formaldehyde stabilization facilitates lignin monomer production during biomass depolymerization. Science, 2016, 354, 329-333.	6.0	944
6	Repression of lignin biosynthesis promotes cellulose accumulation and growth in transgenic trees. Nature Biotechnology, 1999, 17, 808-812.	9.4	684
7	Structural Characterization of Wheat Straw Lignin as Revealed by Analytical Pyrolysis, 2D-NMR, and Reductive Cleavage Methods. Journal of Agricultural and Food Chemistry, 2012, 60, 5922-5935.	2.4	650
8	Lignin engineering. Current Opinion in Plant Biology, 2008, 11, 278-285.	3.5	603
9	Pyrolysis-GC-MS characterization of forage materials. Journal of Agricultural and Food Chemistry, 1991, 39, 1426-1437.	2.4	576
10	Solution-state 2D NMR of ball-milled plant cell wall gels in DMSO-d6/pyridine-d5. Organic and Biomolecular Chemistry, 2010, 8, 576-591.	1.5	565
11	Whole plant cell wall characterization using solution-state 2D NMR. Nature Protocols, 2012, 7, 1579-1589.	5.5	563
12	Chemoselective Metal-Free Aerobic Alcohol Oxidation in Lignin. Journal of the American Chemical Society, 2013, 135, 6415-6418.	6.6	547
13	Lignin structure and its engineering. Current Opinion in Biotechnology, 2019, 56, 240-249.	3.3	533
14	Hydroxycinnamates in lignification. Phytochemistry Reviews, 2010, 9, 65-83.	3.1	468
15	Lignin biosynthesis and its integration into metabolism. Current Opinion in Biotechnology, 2019, 56, 230-239.	3.3	440
16	Multi-scale visualization and characterization of lignocellulosic plant cell wall deconstruction during thermochemical pretreatment. Energy and Environmental Science, 2011, 4, 973.	15.6	437
17	Caffeoyl Shikimate Esterase (CSE) Is an Enzyme in the Lignin Biosynthetic Pathway in <i>Arabidopsis</i>. Science, 2013, 341, 1103-1106.	6.0	432
18	Guidelines for performing lignin-first biorefining. Energy and Environmental Science, 2021, 14, 262-292.	15.6	416

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19	Pathway of p-Coumaric Acid Incorporation into Maize Lignin As Revealed by NMR. Journal of the American Chemical Society, 1994, 116, 9448-9456.	6.6	403
20	Lignin-ferulate cross-links in grasses: active incorporation of ferulate polysaccharide esters into ryegrass lignins. Carbohydrate Research, 1995, 275, 167-178.	1.1	386
21	Discovery of Lignin in Seaweed Reveals Convergent Evolution of Cell-Wall Architecture. Current Biology, 2009, 19, 169-175.	1.8	371
22	Combinatorial modification of multiple lignin traits in trees through multigene cotransformation. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 4939-4944.	3.3	370
23	Molecular Phenotyping of the pal1 and pal2 Mutants of Arabidopsis thaliana Reveals Far-Reaching Consequences on Phenylpropanoid, Amino Acid, and Carbohydrate Metabolism. Plant Cell, 2004, 16, 2749-2771.	3.1	367
24	Identification and synthesis of new ferulic acid dehydrodimers present in grass cell walls. Journal of the Chemical Society Perkin Transactions 1, 1994, , 3485.	0.9	353
25	Downregulation of Cinnamoyl-Coenzyme A Reductase in Poplar: Multiple-Level Phenotyping Reveals Effects on Cell Wall Polymer Metabolism and Structure. Plant Cell, 2007, 19, 3669-3691.	3.1	352
26	The Effects on Lignin Structure of Overexpression of Ferulate 5-Hydroxylase in Hybrid Poplar1 Â. Plant Physiology, 2009, 150, 621-635.	2.3	350
27	Metabolic engineering of novel lignin in biomass crops. New Phytologist, 2012, 196, 978-1000.	3.5	338
28	Monolignol Ferulate Transferase Introduces Chemically Labile Linkages into the Lignin Backbone. Science, 2014, 344, 90-93.	6.0	337
29	Designer lignins: harnessing the plasticity of lignification. Current Opinion in Biotechnology, 2016, 37, 190-200.	3.3	333
30	Non-degradative dissolution and acetylation of ball-milled plant cell walls: high-resolution solution-state NMR. Plant Journal, 2003, 35, 535-544.	2.8	330
31	Ptr-miR397a is a negative regulator of laccase genes affecting lignin content in <i>Populus trichocarpa</i>. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 10848-10853.	3.3	329
32	A polymer of caffeyl alcohol in plant seeds. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 1772-1777.	3.3	314
33	Disruption of Mediator rescues the stunted growth of a lignin-deficient Arabidopsis mutant. Nature, 2014, 509, 376-380.	13.7	313
34	The gel-forming polysaccharide of psyllium husk (Plantago ovata Forsk). Carbohydrate Research, 2004, 339, 2009-2017.	1.1	305
35	Diferulates as structural components in soluble and insoluble cereal dietary fibre. Journal of the Science of Food and Agriculture, 2001, 81, 653-660.	1.7	285
36	Tricin, a Flavonoid Monomer in Monocot Lignification Â. Plant Physiology, 2015, 167, 1284-1295.	2.3	283

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37	Derivatization Followed by Reductive Cleavage (DFRC Method), a New Method for Lignin Analysis:Â Protocol for Analysis of DFRC Monomers. Journal of Agricultural and Food Chemistry, 1997, 45, 2590-2592.	2.4	278
38	A comparison of the insoluble residues produced by the Klason lignin and acid detergent lignin procedures. Journal of the Science of Food and Agriculture, 1994, 65, 51-58.	1.7	271
39	Cell Wall Esterified Phenolic Dimers: Identification and Quantification by Reverse Phase High Performance Liquid Chromatography and Diode Array Detection. Phytochemical Analysis, 1996, 7, 305-312.	1.2	268
40	Solution-state 2D NMR of Ball-milled Plant Cell Wall Gels in DMSO-d 6. Bioenergy Research, 2008, 1, 56-66.	2.2	266
41	Lignin Composition and Structure in Young versus Adult<i>Eucalyptus globulus</i>Plants. Plant Physiology, 2011, 155, 667-682.	2.3	263
42	Cell wall cross-linking by ferulates and diferulates in grasses. Journal of the Science of Food and Agriculture, 1999, 79, 403-407.	1.7	259
43	Strong decrease in lignin content without significant alteration of plant development is induced by simultaneous down-regulation of cinnamoyl CoA reductase (CCR) and cinnamyl alcohol dehydrogenase (CAD) in tobacco plants. Plant Journal, 2001, 28, 257-270.	2.8	252
44	Peroxidase-dependent cross-linking reactions of p-hydroxycinnamates in plant cell walls. Phytochemistry Reviews, 2004, 3, 79-96.	3.1	239
45	Comparative Transcriptome and Secretome Analysis of Wood Decay Fungi <i>Postia placenta</i> and <i>Phanerochaete chrysosporium</i>. Applied and Environmental Microbiology, 2010, 76, 3599-3610.	1.4	237
46	Modifications in Lignin and Accumulation of Phenolic Glucosides in Poplar Xylem upon Down-regulation of Caffeoyl-Coenzyme A O-Methyltransferase, an Enzyme Involved in Lignin Biosynthesis. Journal of Biological Chemistry, 2000, 275, 36899-36909.	1.6	235
47	Evidence for cleavage of lignin by a brown rot basidiomycete. Environmental Microbiology, 2008, 10, 1844-1849.	1.8	232
48	Diferulate cross-links impede the enzymatic degradation of non-lignified maize walls. Journal of the Science of Food and Agriculture, 1998, 77, 193-200.	1.7	231
49	Differences in the chemical structure of the lignins from sugarcane bagasse and straw. Biomass and Bioenergy, 2015, 81, 322-338.	2.9	227
50	Ferulate cross-linking in cell walls isolated from maize cell suspensions. Phytochemistry, 1995, 40, 1077-1082.	1.4	226
51	The charophycean green algae provide insights into the early origins of plant cell walls. Plant Journal, 2011, 68, 201-211.	2.8	226
52	Genetic and molecular basis of grass cell-wall degradability. I.ÂLigninâ€“cell wall matrix interactions. Comptes Rendus - Biologies, 2004, 327, 455-465.	0.1	223
53	Unexpected variation in lignin. Current Opinion in Plant Biology, 1999, 2, 145-152.	3.5	213
54	Lignin monomer production integrated into the Î^{3}-valerolactone sugar platform. Energy and Environmental Science, 2015, 8, 2657-2663.	15.6	212

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55	Advances in modifying lignin for enhanced biofuel production. Current Opinion in Plant Biology, 2010, 13, 312-319.	3.5	211
56	Effects of Coumarate 3-Hydroxylase Down-regulation on Lignin Structure. Journal of Biological Chemistry, 2006, 281, 8843-8853.	1.6	209
57	Laccases Direct Lignification in the Discrete Secondary Cell Wall Domains of Protoxylem. Plant Physiology, 2014, 166, 798-807.	2.3	203
58	Ligninâ€based barrier restricts pathogens to the infection site and confers resistance in plants. EMBO Journal, 2019, 38, e101948.	3.5	198
59	Cross-Linking of Maize Walls by Ferulate Dimerization and Incorporation into Lignin. Journal of Agricultural and Food Chemistry, 2000, 48, 6106-6113.	2.4	196
60	Elucidation of new structures in lignins of CAD- and COMT-deficient plants by NMR. Phytochemistry, 2001, 57, 993-1003.	1.4	195
61	Improved saccharification and ethanol yield from field-grown transgenic poplar deficient in cinnamoyl-CoA reductase. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 845-850.	3.3	186
62	An â€œideal ligninâ€• facilitates full biomass utilization. Science Advances, 2018, 4, eaau2968.	4.7	184
63	Lignin Monomers from beyond the Canonical Monolignol Biosynthetic Pathway: Another Brick in the Wall. ACS Sustainable Chemistry and Engineering, 2020, 8, 4997-5012.	3.2	184
64	Detection and Determination ofp-Coumaroylated Units in Lignins. Journal of Agricultural and Food Chemistry, 1999, 47, 1988-1992.	2.4	181
65	A new Arabidopsis thaliana mutant deficient in the expression of O-methyltransferase impacts lignins and sinapoyl esters. Plant Molecular Biology, 2003, 51, 973-989.	2.0	181
66	Profiling of Oligolignols Reveals Monolignol Coupling Conditions in Lignifying Poplar Xylem. Plant Physiology, 2004, 136, 3537-3549.	2.3	180
67	DFRC Method for Lignin Analysis. 1. New Method for Î²-Aryl Ether Cleavage:Â Lignin Model Studies. Journal of Agricultural and Food Chemistry, 1997, 45, 4655-4660.	2.4	177
68	<i>p</i>â€Coumaroylâ€<scp>C</scp>o<scp>A</scp>:monolignol transferase (<scp>PMT</scp>) acts specifically in the lignin biosynthetic pathway in <i><scp>B</scp>rachypodium distachyon</i>. Plant Journal, 2014, 77, 713-726.	2.8	175
69	Structural Characterization of the Lignin in the Cortex and Pith of Elephant Grass (<i>Pennisetum) Tj ETQq1 1 0.784314 rgBT /Overlo	2.4	172
70	Ferulate Cross-Links Limit the Enzymatic Degradation of Synthetically Lignified Primary Walls of Maize. Journal of Agricultural and Food Chemistry, 1998, 46, 2609-2614.	2.4	171
71	Next-generation ammonia pretreatment enhances cellulosic biofuel production. Energy and Environmental Science, 2016, 9, 1215-1223.	15.6	169
72	Suppression of 4-Coumarate-CoA Ligase in the Coniferous Gymnosperm <i>Pinus radiata</i> Â Â. Plant Physiology, 2009, 149, 370-383.	2.3	166

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73	Mass Spectrometry-Based Sequencing of Lignin Oligomers. Plant Physiology, 2010, 153, 1464-1478.	2.3	166
74	Facile large-scale synthesis of coniferyl, sinapyl, and p-coumaryl alcohol. Journal of Agricultural and Food Chemistry, 1992, 40, 1108-1110.	2.4	163
75	Characterization of nonderivatized plant cell walls using highâ€resolution solutionâ€state NMR spectroscopy. Magnetic Resonance in Chemistry, 2008, 46, 508-517.	1.1	162
76	NMR of Lignins. , 2010, , 137-243.		162
77	Improving wood properties for wood utilization through multi-omics integration in lignin biosynthesis. Nature Communications, 2018, 9, 1579.	5.8	162
78	Molecular phenotyping of ligninâ€modified tobacco reveals associated changes in cellâ€wall metabolism, primary metabolism, stress metabolism and photorespiration. Plant Journal, 2007, 52, 263-285.	2.8	161
79	Coexistence but Independent Biosynthesis of Catechyl and Guaiacyl/Syringyl Lignin Polymers in Seed Coats. Plant Cell, 2013, 25, 2587-2600.	3.1	161
80	Wege zur Verwertung von Lignin: Fortschritte in der Biotechnik, der Bioraffination und der Katalyse. Angewandte Chemie, 2016, 128, 8296-8354.	1.6	159
81	Genetic and molecular basis of grass cell wall biosynthesis and degradability. II. Lessons from brown-midrib mutants. Comptes Rendus - Biologies, 2004, 327, 847-860.	0.1	148
82	Exploring lignification in conifers by silencing hydroxycinnamoyl-CoA:shikimate hydroxycinnamoyltransferase in <i>Pinus radiata</i>. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 11856-11861.	3.3	147
83	Monolignol ferulate conjugates are naturally incorporated into plant lignins. Science Advances, 2016, 2, e1600393.	4.7	147
84	Effects of<i>PHENYLALANINE AMMONIA LYASE</i>(<i>PAL</i>) knockdown on cell wall composition, biomass digestibility, and biotic and abiotic stress responses in<i>Brachypodium</i>. Journal of Experimental Botany, 2015, 66, 4317-4335.	2.4	146
85	NMR analysis of lignins in CAD-deficient plants. Part 1. Incorporation of hydroxycinnamaldehydes and hydroxybenzaldehydes into lignins. Organic and Biomolecular Chemistry, 2003, 1, 268-281.	1.5	145
86	Genetical metabolomics of flavonoid biosynthesis inPopulus: a case study. Plant Journal, 2006, 47, 224-237.	2.8	140
87	Mass Spectrometry-Based Fragmentation as an Identification Tool in Lignomics. Analytical Chemistry, 2010, 82, 8095-8105.	3.2	140
88	Identification of Grass-specific Enzyme That Acylates Monolignols with p-Coumarate. Journal of Biological Chemistry, 2012, 287, 8347-8355.	1.6	140
89	Biosynthesis and incorporation of sideâ€chainâ€truncated lignin monomers to reduce lignin polymerization and enhance saccharification. Plant Biotechnology Journal, 2012, 10, 609-620.	4.1	140
90	Variations in the Cell Wall Composition of Maizebrown midribMutants. Journal of Agricultural and Food Chemistry, 2003, 51, 1313-1321.	2.4	138

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91	Convergent Evolution of Syringyl Lignin Biosynthesis via Distinct Pathways in the Lycophyte <i>Selaginella</i> and Flowering Plants Â. Plant Cell, 2010, 22, 1033-1045.	3.1	138
92	p-coumaroylated syringyl units in maize lignin: Implications for Î²-ether cleavage by thioacidolysis. Phytochemistry, 1996, 43, 1189-1194.	1.4	137
93	<i>CCoAOMT</i> suppression modifies lignin composition in <i>Pinus radiata</i>. Plant Journal, 2011, 67, 119-129.	2.8	136
94	Manipulation of Guaiacyl and Syringyl Monomer Biosynthesis in an Arabidopsis Cinnamyl Alcohol Dehydrogenase Mutant Results in Atypical Lignin Biosynthesis and Modified Cell Wall Structure. Plant Cell, 2015, 27, 2195-2209.	3.1	136
95	Are Lignins Optically Active?. Journal of Agricultural and Food Chemistry, 1999, 47, 2991-2996.	2.4	132
96	An uncondensed lignin depolymerized in the solid state and isolated from lignocellulosic biomass: a mechanistic study. Green Chemistry, 2018, 20, 4224-4235.	4.6	132
97	The DFRC Method for Lignin Analysis. 2. Monomers from Isolated Lignins. Journal of Agricultural and Food Chemistry, 1998, 46, 547-552.	2.4	131
98	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
99	An Unusual Lignin from Kenaf. Journal of Natural Products, 1996, 59, 341-342.	1.5	130
100	Structural Characterization of Lignin Isolated from Coconut (<i>Cocos nucifera</i>) Coir Fibers. Journal of Agricultural and Food Chemistry, 2013, 61, 2434-2445.	2.4	130
101	Understanding the impact of ionic liquid pretreatment on eucalyptus. Biofuels, 2010, 1, 33-46.	1.4	129
102	Related Arabidopsis Serine Carboxypeptidase-Like Sinapoylglucose Acyltransferases Display Distinct But Overlapping Substrate Specificities. Plant Physiology, 2007, 144, 1986-1999.	2.3	121
103	Novel seed coat lignins in the <scp>C</scp>actaceae: structure, distribution and implications for the evolution of lignin diversity. Plant Journal, 2013, 73, 201-211.	2.8	121
104	Structural and compositional modifications in lignin of transgenic alfalfa down-regulated in caffeic acid 3-O-methyltransferase and caffeoyl coenzyme A 3-O-methyltransferase. Phytochemistry, 2003, 62, 53-65.	1.4	120
105	The DUF579 domain containing proteins IRX15 and IRX15â€L affect xylan synthesis in Arabidopsis. Plant Journal, 2011, 66, 387-400.	2.8	120
106	Tricinâ€lignins: occurrence and quantitation of tricin in relation to phylogeny. Plant Journal, 2016, 88, 1046-1057.	2.8	118
107	Lignin Conversion to Low-Molecular-Weight Aromatics via an Aerobic Oxidation-Hydrolysis Sequence: Comparison of Different Lignin Sources. ACS Sustainable Chemistry and Engineering, 2018, 6, 3367-3374.	3.2	118
108	Cell wall fermentation kinetics are impacted more by lignin content and ferulate crossâ€linking than by lignin composition. Journal of the Science of Food and Agriculture, 2009, 89, 122-129.	1.7	116

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109	Systematic Structural Characterization of Metabolites in <i>Arabidopsis</i> via Candidate Substrate-Product Pair Networks Â. Plant Cell, 2014, 26, 929-945.	3.1	116
110	Loss of function of cinnamyl alcohol dehydrogenase 1 leads to unconventional lignin and a temperature-sensitive growth defect in <i>Medicago truncatula</i>. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13660-13665.	3.3	115
111	Identification of the structure and origin of a thioacidolysis marker compound for ferulic acid incorporation into angiosperm lignins (and an indicator for cinnamoyl CoA reductase deficiency). Plant Journal, 2008, 53, 368-379.	2.8	114
112	Coniferyl Ferulate Incorporation into Lignin Enhances the Alkaline Delignification and Enzymatic Degradation of Cell Walls. Biomacromolecules, 2008, 9, 2510-2516.	2.6	114
113	Engineering traditional monolignols out of lignin by concomitant up-regulation of F5H1 and down-regulation of COMT in Arabidopsis. Plant Journal, 2010, 64, 885-897.	2.8	114
114	Ligninâ€"feruloyl ester cross-links in grasses. Part 1. Incorporation of feruloyl esters into coniferyl alcohol dehydrogenation polymers. Journal of the Chemical Society Perkin Transactions 1, 1992, , 2961-2969.	0.9	112
115	NMR Studies on the Occurrence of Spirodienone Structures in Lignins. Journal of Wood Chemistry and Technology, 2006, 26, 65-79.	0.9	112
116	Isolation and structural identification of complex feruloylated heteroxylan side-chains from maize bran. Phytochemistry, 2006, 67, 1276-1286.	1.4	112
117	An essential role of caffeoyl shikimate esterase in monolignol biosynthesis in <i>Medicago truncatula</i>. Plant Journal, 2016, 86, 363-375.	2.8	111
118	NMR Evidence for Benzodioxane Structures Resulting from Incorporation of 5-Hydroxyconiferyl Alcohol into Lignins ofO-Methyltransferase-Deficient Poplars. Journal of Agricultural and Food Chemistry, 2001, 49, 86-91.	2.4	109
119	Lignins and Ferulateâ^'Coniferyl Alcohol Cross-Coupling Products in Cereal Grains. Journal of Agricultural and Food Chemistry, 2004, 52, 6496-6502.	2.4	108
120	A potential role for sinapyl p-coumarate as a radical transfer mechanism in grass lignin formation. Planta, 2008, 228, 919-928.	1.6	107
121	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
122	Significant Alteration of Gene Expression in Wood Decay Fungi Postia placenta and Phanerochaete chrysosporium by Plant Species. Applied and Environmental Microbiology, 2011, 77, 4499-4507.	1.4	106
123	Cell Wall Structural Foundations: Molecular Basis for Improving Forage Digestibilities. Crop Science, 1999, 39, 27-37.	0.8	103
124	Model Studies of Ferulateâ^'Coniferyl Alcohol Cross-Product Formation in Primary Maize Walls:Â Implications for Lignification in Grasses. Journal of Agricultural and Food Chemistry, 2002, 50, 6008-6016.	2.4	103
125	Isolation and identification of a ferulic acid dehydrotrimer from saponified maize bran insoluble fiber. European Food Research and Technology, 2003, 217, 128-133.	1.6	103
126	Structural Identification of Dehydrotriferulic and Dehydrotetraferulic Acids Isolated from Insoluble Maize Bran Fiber. Journal of Agricultural and Food Chemistry, 2006, 54, 6409-6418.	2.4	103

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127	p-Hydroxyphenyl, Guaiacyl, and Syringyl Lignins Have Similar Inhibitory Effects on Wall Degradability. Journal of Agricultural and Food Chemistry, 1997, 45, 2530-2532.	2.4	102
128	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. RSC Advances, 2014, 4, 7549-7560.	1.7	100
129	Sinapate Dehydrodimers and Sinapateâˆ’Ferulate Heterodimers in Cereal Dietary Fiber. Journal of Agricultural and Food Chemistry, 2003, 51, 1427-1434.	2.4	99
130	Naturally p-Hydroxybenzoylated Lignins in Palms. Bioenergy Research, 2015, 8, 934-952.	2.2	99
131	Different Routes for Conifer- and Sinapaldehyde and Higher Saccharification upon Deficiency in the Dehydrogenase CAD1. Plant Physiology, 2017, 175, 1018-1039.	2.3	99
132	Syringyl lignin production in conifers: Proof of concept in a Pine tracheary element system. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6218-6223.	3.3	98
133	Structural Characterization of Lignin during Pinus taeda Wood Treatment with Ceriporiopsis subvermispora. Applied and Environmental Microbiology, 2004, 70, 4073-4078.	1.4	97
134	Biochemical transformation of lignin for deriving valued commodities from lignocellulose. Current Opinion in Biotechnology, 2017, 45, 120-126.	3.3	95
135	The DFRC Method for Lignin Analysis. 6. A Simple Modification for Identifying Natural Acetates on Lignins. Journal of Agricultural and Food Chemistry, 1998, 46, 4616-4619.	2.4	94
136	Novel tetrahydrofuran structures derived from Î²â€“Î²-coupling reactions involving sinapyl acetate in Kenaf lignins. Organic and Biomolecular Chemistry, 2008, 6, 3681.	1.5	94
137	Grass lignin acylation: p-coumaroyl transferase activity and cell wall characteristics of C3 and C4 grasses. Planta, 2009, 229, 1253-1267.	1.6	94
138	Characterization and Elimination of Undesirable Protein Residues in Plant Cell Wall Materials for Enhancing Lignin Analysis by Solution-State Nuclear Magnetic Resonance Spectroscopy. Biomacromolecules, 2017, 18, 4184-4195.	2.6	94
139	Passive membrane transport of lignin-related compounds. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 23117-23123.	3.3	94
140	Isolation and structural characterisation of 8?O?4/8?O?4- and 8?8/8?O?4-coupled dehydrotriferulic acids from maize bran. Phytochemistry, 2005, 66, 363-371.	1.4	92
141	An Engineered Monolignol 4-<i>O</i>-Methyltransferase Depresses Lignin Biosynthesis and Confers Novel Metabolic Capability in <i>Arabidopsis</i>. Plant Cell, 2012, 24, 3135-3152.	3.1	92
142	Syntheses of Lignin-Derived Thioacidolysis Monomers and Their Uses as Quantitation Standards. Journal of Agricultural and Food Chemistry, 2012, 60, 922-928.	2.4	92
143	Breeding with rare defective alleles (BRDA): a natural <i><scp>P</scp>opulus nigra </i><scp>HCT</scp> mutant with modified lignin as a case study. New Phytologist, 2013, 198, 765-776.	3.5	92
144	Structural elucidation of new ferulic acid-containing phenolic dimers and trimers isolated from maize bran. Tetrahedron Letters, 2005, 46, 5845-5850.	0.7	91

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145	Plant-derived antifungal agent poacic acid targets Î²-1,3-glucan. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E1490-7.	3.3	91
146	Suppression of a single <scp>BAHD</scp> gene in <i>Setaria viridis</i> causes large, stable decreases in cell wall feruloylation and increases biomass digestibility. New Phytologist, 2018, 218, 81-93.	3.5	91
147	Small Glycosylated Lignin Oligomers Are Stored in Arabidopsis Leaf Vacuoles. Plant Cell, 2015, 27, 695-710.	3.1	90
148	Hydroxystilbenes Are Monomers in Palm Fruit Endocarp Lignins. Plant Physiology, 2017, 174, 2072-2082.	2.3	90
149	Silencing <i>CAFFEOYL SHIKIMATE ESTERASE</i> Affects Lignification and Improves Saccharification in Poplar. Plant Physiology, 2017, 175, 1040-1057.	2.3	90
150	Preliminary evidence for sinapyl acetate as a lignin monomer in kenaf. Chemical Communications, 2002, , 90-91.	2.2	88
151	Identification of Lignin and Polysaccharide Modifications in Populus Wood by Chemometric Analysis of 2D NMR Spectra from Dissolved Cell Walls. Molecular Plant, 2009, 2, 933-942.	3.9	87
152	Phenolic Profiling of Caffeic Acid O-Methyltransferase-Deficient Poplar Reveals Novel Benzodioxane Oligolignols. Plant Physiology, 2004, 136, 4023-4036.	2.3	86
153	Signatures of cinnamyl alcohol dehydrogenase deficiency in poplar lignins. Phytochemistry, 2004, 65, 313-321.	1.4	85
154	Silencing <i>CHALCONE SYNTHASE</i> in Maize Impedes the Incorporation of Tricin into Lignin and Increases Lignin Content. Plant Physiology, 2017, 173, 998-1016.	2.3	84
155	Preparation and relevance of a cross-coupling product between sinapyl alcohol and sinapyl p-hydroxybenzoate. Organic and Biomolecular Chemistry, 2004, 2, 2888.	1.5	83
156	NMR Characterization of Lignins Isolated from Fruit and Vegetable Insoluble Dietary Fiber. Journal of Agricultural and Food Chemistry, 2006, 54, 8352-8361.	2.4	83
157	Protection Strategies Enable Selective Conversion of Biomass. Angewandte Chemie - International Edition, 2020, 59, 11704-11716.	7.2	82
158	Identification of the Structure and Origin of Thioacidolysis Marker Compounds for Cinnamyl Alcohol Dehydrogenase Deficiency in Angiosperms. Journal of Biological Chemistry, 2002, 277, 47412-47419.	1.6	80
159	Cell wall hydroxycinnamates in wild rice (Zizania aquatica L.) insoluble dietary fibre. European Food Research and Technology, 2002, 214, 482-488.	1.6	80
160	A Group of Sequence-Related Sphingomonad Enzymes Catalyzes Cleavage of Î²-Aryl Ether Linkages in Lignin Î²-Guaiacyl and Î²-Syringyl Ether Dimers. Environmental Science & Technology, 2014, 48, 12454-12463.	4.6	80
161	Functionality and molecular weight distribution of red oak lignin before and after pyrolysis and hydrogenation. Green Chemistry, 2017, 19, 1378-1389.	4.6	80
162	Effect of hydrothermal pretreatment severity on lignin inhibition in enzymatic hydrolysis. Bioresource Technology, 2019, 280, 303-312.	4.8	80

#	Article	IF	Citations
163	Formation of ferulic acid dehydrodimers through oxidative cross-linking of sugar beet pectin. Carbohydrate Research, 1997, 300, 179-181.	1.1	78
164	Identification of 4â€"Oâ€"5-Units in Softwood Lignins via Definitive Lignin Models and NMR. Biomacromolecules, 2016, 17, 1909-1920.	2.6	77
165	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
166	Catalytic Alkaline Oxidation of Lignin and its Model Compounds: a Pathway to Aromatic Biochemicals. Bioenergy Research, 2014, 7, 78-86.	2.2	75
167	Mild Alkaline Pretreatment for Isolation of Native-Like Lignin and Lignin-Containing Cellulose Nanofibers (LCNF) from Crop Waste. ACS Sustainable Chemistry and Engineering, 2019, 7, 14135-14142.	3.2	72
168	Visualization of plant cell wall lignification using fluorescenceâ€tagged monolignols. Plant Journal, 2013, 76, 357-366.	2.8	70
169	Variability in Lignin Composition and Structure in Cell Walls of Different Parts of MacaÃºba (<i>Acrocomia aculeata</i>) Palm Fruit. Journal of Agricultural and Food Chemistry, 2018, 66, 138-153.	2.4	70
170	Cross-Coupling of Hydroxycinnamyl Aldehydes into Lignins. Organic Letters, 2000, 2, 2197-2200.	2.4	69
171	Cell Wall Cross-Linking in Grasses by Ferulates and Diferulates. ACS Symposium Series, 1998, , 209-236.	0.5	68
172	Two-Dimensional NMR Evidence for Cleavage of Lignin and Xylan Substituents in Wheat Straw Through Hydrothermal Pretreatment and Enzymatic Hydrolysis. Bioenergy Research, 2013, 6, 211-221.	2.2	68
173	Isolation and characterization of new lignin streams derived from extractive-ammonia (EA) pretreatment. Green Chemistry, 2016, 18, 4205-4215.	4.6	68
174	Low temperature hydrogenation of pyrolytic lignin over Ru/TiO₂: 2D HSQC and ¹³C NMR study of reactants and products. Green Chemistry, 2016, 18, 271-281.	4.6	68
175	Antioxidant properties of 4,4?-dihydroxy-3,3?-dimethoxy-?,??-bicinnamic acid (8-8-diferulic acid,) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.7	67
176	Independent Recruitment of an <i>O</i>-Methyltransferase for Syringyl Lignin Biosynthesis in <i>Selaginella moellendorffii</i>. Plant Cell, 2011, 23, 2708-2724.	3.1	66
177	Effects on Lignin Structure of Coumarate 3-Hydroxylase Downregulation in Poplar. Bioenergy Research, 2012, 5, 1009-1019.	2.2	65
178	Downregulation of pâ€<i><scp>COUMAROYL ESTER</scp> 3â€<scp>HYDROXYLASE</scp></i> in rice leads to altered cell wall structures and improves biomass saccharification. Plant Journal, 2018, 95, 796-811.	2.8	65
179	COSY catalyses transâ€"cis isomerization and lactonization in the biosynthesis of coumarins. Nature Plants, 2019, 5, 1066-1075.	4.7	64
180	Mutation of the Inducible <i>ARABIDOPSIS THALIANA CYTOCHROME P450 REDUCTASE2</i> Alters Lignin Composition and Improves Saccharification Â Â. Plant Physiology, 2014, 166, 1956-1971.	2.3	63

#	Article	IF	Citations
181	Synthesis of methyl 5-O-trans-feruloyl-Î±-l-arabinofuranoside and its use as a substrate to assess feruloyl esterase activity. Analytical Biochemistry, 1991, 194, 25-33.	1.1	62
182	A Biomimetic Route to Lignin Model Compounds <i>via </i>Silver (I) Oxide Oxidation. 1. Synthesis of Dilignols and Non-cyclic Benzyl Aryl Ethers. Holzforschung, 1994, 48, 12-22.	0.9	62
183	Identification of 4-O-5â€˜-Coupled Diferulic Acid from Insoluble Cereal Fiber. Journal of Agricultural and Food Chemistry, 2000, 48, 3166-3169.	2.4	62
184	Dehydrogenation Polymerâˆ'Cell Wall Complexes as a Model for Lignified Grass Walls. Journal of Agricultural and Food Chemistry, 1996, 44, 1453-1459.	2.4	61
185	Association of non-starch polysaccharides and ferulic acid in grain amaranth (Amaranthus caudatus) Tj ETQq1 1 0.784314 rgBT /Overlo	1.5	61
186	Modeling Lignin Polymerization. I. Simulation Model of Dehydrogenation Polymers Â. Plant Physiology, 2010, 153, 1332-1344.	2.3	61
187	Enhancing digestibility and ethanol yield of Populus wood via expression of an engineered monolignol 4-O-methyltransferase. Nature Communications, 2016, 7, 11989.	5.8	61
188	Gold-catalyzed conversion of lignin to low molecular weight aromatics. Chemical Science, 2018, 9, 8127-8133.	3.7	61
189	Isolation and structural identification of diarabinosyl 8--4-dehydrodiferulate from maize bran insoluble fibre. Phytochemistry, 2005, 66, 113-124.	1.4	60
190	Stereochemical Features of Glutathione-dependent Enzymes in the Sphingobium sp. Strain SYK-6 Î²-Aryl Etherase Pathway. Journal of Biological Chemistry, 2014, 289, 8656-8667.	1.6	58
191	Isolation and characterisation of a coffee melanoidin fraction. Journal of the Science of Food and Agriculture, 2008, 88, 2153-2160.	1.7	56
192	Kinetic and mechanistic insights into hydrogenolysis of lignin to monomers in a continuous flow reactor. Green Chemistry, 2019, 21, 3561-3572.	4.6	56
193	Simple Preparation of 8âˆ'5-Coupled Diferulate. Journal of Agricultural and Food Chemistry, 1998, 46, 2531-2532.	2.4	55
194	Maize Tricin-Oligolignol Metabolites and their Implications for Monocot Lignification. Plant Physiology, 2016, 171, pp.02012.2016.	2.3	55
195	Apoplastic pH and Monolignol Addition Rate Effects on Lignin Formation and Cell Wall Degradability in Maize. Journal of Agricultural and Food Chemistry, 2003, 51, 4984-4989.	2.4	54
196	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
197	Hydroxycinnamate Conjugates as Potential Monolignol Replacements: Inâ€…vitro Lignification and Cell Wall Studies with Rosmarinic Acid. ChemSusChem, 2012, 5, 676-686.	3.6	54
198	Assessing the Viability of Recovery of Hydroxycinnamic Acids from Lignocellulosic Biorefinery Alkaline Pretreatment Waste Streams. ChemSusChem, 2020, 13, 2012-2024.	3.6	54

#	Article	IF	Citations
199	Stereochemical Aspects Op Addition Reactions Involving Lignin Model Quinone Methides. Journal of Wood Chemistry and Technology, 1983, 3, 161-181.	0.9	53
200	NMR characterization of lignins from transgenic poplars with suppressed caffeic acid O-methyltransferase activity. Journal of the Chemical Society, Perkin Transactions 1, 2001, , 2939-2945.	1.3	52
201	Sequencing around 5-Hydroxyconiferyl Alcohol-Derived Units in Caffeic Acid <i>O</i>-Methyltransferase-Deficient Poplar Lignins Â. Plant Physiology, 2010, 153, 569-579.	2.3	52
202	Environmental Stresses of Field Growth Allow Cinnamyl Alcohol Dehydrogenase-Deficient <i>Nicotiana attenuata</i> Plants to Compensate for their Structural Deficiencies Â Â Â. Plant Physiology, 2012, 159, 1545-1570.	2.3	51
203	Commelinid Monocotyledon Lignins Are Acylated by <i>p</i>-Coumarate. Plant Physiology, 2018, 177, 513-521.	2.3	51
204	Systematic parameterization of lignin for the CHARMM force field. Green Chemistry, 2019, 21, 109-122.	4.6	51
205	2H and 13C metabolic flux analysis elucidates in vivo thermodynamics of the ED pathway in Zymomonas mobilis. Metabolic Engineering, 2019, 54, 301-316.	3.6	51
206	Structural Characterization of Lignins from Willow Bark and Wood. Journal of Agricultural and Food Chemistry, 2018, 66, 7294-7300.	2.4	50
207	Introducing curcumin biosynthesis in Arabidopsis enhances lignocellulosic biomass processing. Nature Plants, 2019, 5, 225-237.	4.7	50
208	Genetic and molecular basis of grass cell-wall biosynthesis and degradability. III. Towards a forage grass ideotype. Comptes Rendus - Biologies, 2004, 327, 467-479.	0.1	49
209	Understanding the Physicochemical Characteristics and the Improved Enzymatic Saccharification of Corn Stover Pretreated with Aqueous and Gaseous Ammonia. Bioenergy Research, 2016, 9, 67-76.	2.2	48
210	Impact of lignin polymer backbone esters on ionic liquid pretreatment of poplar. Biotechnology for Biofuels, 2017, 10, 101.	6.2	48
211	Engineering monolignol p-coumarate conjugates into Poplar and Arabidopsis lignins. Plant Physiology, 2015, 169, pp.00815.2015.	2.3	47
212	Mechanochemical Treatment Facilitates Two-Step Oxidative Depolymerization of Kraft Lignin. ACS Sustainable Chemistry and Engineering, 2018, 6, 5990-5998.	3.2	47
213	Lignin-hydroxycinnamyl model compounds related to forage cell wall structure. 1. Ether-linked structures. Journal of Agricultural and Food Chemistry, 1992, 40, 2167-2175.	2.4	46
214	The DFRC Method for Lignin Analysis. 4. Lignin Dimers Isolated from DFRC-Degraded Loblolly Pine Wood. Journal of Agricultural and Food Chemistry, 1998, 46, 553-560.	2.4	46
215	The Structure and Catalytic Mechanism of <i>Sorghum bicolor</i> Caffeoyl-CoA <i>O</i>-Methyltransferase. Plant Physiology, 2016, 172, 78-92.	2.3	46
216	2D NMR characterization of wheat straw residual lignin after dilute acid pretreatment with different severities. Holzforschung, 2017, 71, 461-469.	0.9	46

#	Article	IF	Citations
217	A facile spectroscopic method for measuring lignin content in lignocellulosic biomass. Green Chemistry, 2021, 23, 5106-5112.	4.6	46
218	Severe inhibition of maize wall degradation by synthetic lignins formed with coniferaldehyde. Journal of the Science of Food and Agriculture, 1998, 78, 81-87.	1.7	45
219	Isochroman lignin trimers from DFRC-degraded Pinus taeda1Part 5 in the series â€œThe DFRC Method for Lignin Analysisâ€. Previous paper: Peng, J., Lu, F., & Ralph, J. (1998). â€œPart 4. Lignin Dimers Isolated from DFRC-Degraded Loblolly Pine Woodâ€.J. Agric. Food Chem., 46, 553â€“560.1. Phytochemistry, 1999, 50, 659-666.	1.4	45
220	Introduction of chemically labile substructures into <i>Arabidopsis</i> lignin through the use of LigD, the CÎ±â€dehydrogenase from <i>Sphingobium</i> sp. strain <scp>SYK</scp>â€6. Plant Biotechnology Journal, 2015, 13, 821-832.	4.1	45
221	Defining the Diverse Cell Populations Contributing to Lignification in Arabidopsis Stems. Plant Physiology, 2017, 174, 1028-1036.	2.3	45
222	Chemical Pulping Advantages of Zipâ€lignin Hybrid Poplar. ChemSusChem, 2017, 10, 3565-3573.	3.6	45
223	Reductive Cleavage Method for Quantitation of Monolignols and Lowâ€Abundance Monolignol Conjugates. ChemSusChem, 2018, 11, 1600-1605.	3.6	45
224	Structural and Biochemical Characterization of the Early and Late Enzymes in the Lignin Î²-Aryl Ether Cleavage Pathway from Sphingobium sp. SYK-6. Journal of Biological Chemistry, 2016, 291, 10228-10238.	1.6	44
225	Phenylcoumaran Benzylic Ether Reductase Prevents Accumulation of Compounds Formed under Oxidative Conditions in Poplar Xylem. Plant Cell, 2014, 26, 3775-3791.	3.1	43
226	Hydroxystilbene Glucosides Are Incorporated into Norway Spruce Bark Lignin. Plant Physiology, 2019, 180, 1310-1321.	2.3	43
227	<scp>CAD</scp>1 and <scp>CCR</scp>2 protein complex formation in monolignol biosynthesis in <i>Populus trichocarpa</i>. New Phytologist, 2019, 222, 244-260.	3.5	43
228	Isochroman structures in lignin: a new Î²-1 pathway. Tetrahedron Letters, 1998, 39, 4963-4964.	0.7	42
229	Suppression of CCR impacts metabolite profile and cell wall composition in Pinus radiata tracheary elements. Plant Molecular Biology, 2013, 81, 105-117.	2.0	42
230	Characterizing phenolâ€“formaldehyde adhesive cure chemistry within the wood cell wall. International Journal of Adhesion and Adhesives, 2016, 70, 26-36.	1.4	42
231	The flying spider-monkey tree fern genome provides insights into fern evolution and arborescence. Nature Plants, 2022, 8, 500-512.	4.7	42
232	Ligninâ€“ferulate cross-links in grasses. Part 4.1â€“3 Incorporation of 5â€“5-coupled dehydrodiferulate into synthetic lignin. Journal of the Chemical Society Perkin Transactions 1, 1997, , 2351-2358.	0.9	41
233	Cryoprobe 3D NMR of acetylated ball-milled pine cell walls. Organic and Biomolecular Chemistry, 2004, 2, 2714.	1.5	41
234	Ligninâ€Derived Thioacidolysis Dimers: Reevaluation, New Products, Authentication, and Quantification. ChemSusChem, 2017, 10, 830-835.	3.6	41

#	Article	IF	Citations
235	<i>In Vitro</i> Enzymatic Depolymerization of Lignin with Release of Syringyl, Guaiacyl, and Tricin Units. Applied and Environmental Microbiology, 2018, 84, .	1.4	41
236	Tailoring poplar lignin without yield penalty by combining a null and haploinsufficient CINNAMOYL-CoA REDUCTASE2 allele. Nature Communications, 2020, 11, 5020.	5.8	41
237	Production of <i>p</i>-Coumaric Acid from Corn GVL-Lignin. ACS Sustainable Chemistry and Engineering, 2020, 8, 17427-17438.	3.2	41
238	Solution-State NMR of Lignocellulosic Biomass. Journal of Biobased Materials and Bioenergy, 2011, 5, 169-180.	0.1	41
239	Synthesis of feruloylated and p-coumaroylated methyl glycosides. Carbohydrate Research, 1992, 229, 183-194.	1.1	40
240	Cellulose microfibril angles and cell-wall polymers in different wood types of Pinus radiata. Cellulose, 2012, 19, 1385-1404.	2.4	40
241	Structural Basis of Stereospecificity in the Bacterial Enzymatic Cleavage of Î²-Aryl Ether Bonds in Lignin. Journal of Biological Chemistry, 2016, 291, 5234-5246.	1.6	40
242	Natural acetylation impacts carbohydrate recovery during deconstruction of Populus trichocarpa wood. Biotechnology for Biofuels, 2017, 10, 48.	6.2	40
243	Profiling of diferulates (plant cell wall cross-linkers) using ultrahigh-performance liquid chromatography-tandem mass spectrometry. Analyst, The, 2013, 138, 6683.	1.7	39
244	A click chemistry strategy for visualization of plant cell wall lignification. Chemical Communications, 2014, 50, 12262-12265.	2.2	39
245	Selective Oxidation of Lignin Model Compounds. ChemSusChem, 2018, 11, 2045-2050.	3.6	39
246	Short-term facilitation of microbial litter decomposition by ultraviolet radiation. Science of the Total Environment, 2018, 615, 838-848.	3.9	39
247	Monolignol Benzoates Incorporate into the Lignin of Transgenic <i>Populus trichocarpa</i> Depleted in C3H and C4H. ACS Sustainable Chemistry and Engineering, 2020, 8, 3644-3654.	3.2	39
248	Tissue and cell-specific transcriptomes in cotton reveal the subtleties of gene regulation underlying the diversity of plant secondary cell walls. BMC Genomics, 2017, 18, 539.	1.2	38
249	Structural Characterization of Lignin from Maize (Zea mays L.) Fibers: Evidence for Diferuloylputrescine Incorporated into the Lignin Polymer in Maize Kernels. Journal of Agricultural and Food Chemistry, 2018, 66, 4402-4413.	2.4	38
250	A comparative study of secondary depolymerization methods on oxidized lignins. Green Chemistry, 2019, 21, 3940-3947.	4.6	38
251	Degradability of phenolic acid-hemicellulose esters: A model system. Journal of the Science of Food and Agriculture, 1991, 56, 469-478.	1.7	37
252	Cross-linking of arabinoxylans via 8-8-coupled diferulates as demonstrated by isolation and identification of diarabinosyl 8-8(cyclic)-dehydrodiferulate from maize bran. Journal of Cereal Science, 2008, 47, 29-40.	1.8	37

#	Article	IF	Citations
253	Fluorescence-Tagged Monolignols: Synthesis, and Application to Studying In Vitro Lignification. Biomacromolecules, 2011, 12, 1752-1761.	2.6	37
254	Enhanced delignification of steam-pretreated poplar by a bacterial laccase. Scientific Reports, 2017, 7, 42121.	1.6	37
255	Characteristics of Hot Water Extracts from the Bark of Cultivated Willow (<i>Salix</i> sp.). ACS Sustainable Chemistry and Engineering, 2018, 6, 5566-5573.	3.2	37
256	<scp>RNA</scp>iâ€suppression of barley caffeic acid <i>O</i>â€methyltransferase modifies lignin despite redundancy in the gene family. Plant Biotechnology Journal, 2019, 17, 594-607.	4.1	37
257	Arylpropane-1,3-diols in Lignins from Normal and CAD-Deficient Pines. Organic Letters, 1999, 1, 323-326.	2.4	36
258	Lignification and Lignin Manipulations in Conifers. Advances in Botanical Research, 2012, 61, 37-76.	0.5	36
259	Effective alkaline metal-catalyzed oxidative delignification of hybrid poplar. Biotechnology for Biofuels, 2016, 9, 34.	6.2	36
260	Mechanistic Study of Diaryl Ether Bond Cleavage during Palladiumâ€Catalyzed Lignin Hydrogenolysis. ChemSusChem, 2020, 13, 4487-4494.	3.6	36
261	Compensatory Guaiacyl Lignin Biosynthesis at the Expense of Syringyl Lignin in <i>4CL1</i>-Knockout Poplar. Plant Physiology, 2020, 183, 123-136.	2.3	36
262	Simplified Preparation of Coniferyl and Sinapyl Alcohols. Journal of Agricultural and Food Chemistry, 2005, 53, 3693-3695.	2.4	35
263	Non-enzymatic reduction of quinone methides during oxidative coupling of monolignols: implications for the origin of benzyl structures in lignins. Organic and Biomolecular Chemistry, 2006, 4, 3456.	1.5	35
264	Epigallocatechin gallate incorporation into lignin enhances the alkaline delignification and enzymatic saccharification of cell walls. Biotechnology for Biofuels, 2012, 5, 59.	6.2	35
265	OsCAldOMT1 is a bifunctional O-methyltransferase involved in the biosynthesis of tricin-lignins in rice cell walls. Scientific Reports, 2019, 9, 11597.	1.6	35
266	A cinnamoyl esterase from Aspergillus niger can break plant cell wall cross-links without release of free diferulic acids. FEBS Journal, 1999, 266, 644-652.	0.2	34
267	Modelling the feasibility of intramolecular dehydrodiferulate formation in grass walls. Journal of the Science of Food and Agriculture, 1999, 79, 425-427.	1.7	34
268	Deciphering the role of the phenylpropanoid metabolism in the tolerance of Capsicum annuum L. to Verticillium dahliae Kleb.. Plant Science, 2017, 258, 12-20.	1.7	34
269	Highly Decorated Lignins in Leaf Tissues of the Canary Island Date Palm <i>Phoenix canariensis</i>. Plant Physiology, 2017, 175, 1058-1067.	2.3	34
270	Facile Synthesis of 4-Hydroxycinnamylp-Coumarates. Journal of Agricultural and Food Chemistry, 1998, 46, 2911-2913.	2.4	33

#	Article	IF	Citations
271	Lignin. , 2010, , 169-207.		33
272	Synthesis and Characterization of New 5â€Linked Pinoresinol Lignin Models. Chemistry - A European Journal, 2012, 18, 16402-16410.	1.7	33
273	Structureâ€guided analysis of catalytic specificity of the abundantly secreted chitosanase SACTE_5457 from <i>Streptomyces</i> sp. SirexAAâ€E. Proteins: Structure, Function and Bioinformatics, 2014, 82, 1245-1257.	1.5	33
274	Determination of the Structure and Catalytic Mechanism of <i>Sorghum bicolor</i> Caffeic Acid <i>O</i>-Methyltransferase and the Structural Impact of Three <i>brown midrib12</i> Mutations Â. Plant Physiology, 2014, 165, 1440-1456.	2.3	33
275	Knockout of the lignin pathway gene <scp><i>BnF5H</i></scp> decreases the S/G lignin compositional ratio and improves <i>Sclerotinia sclerotiorum</i> resistance in <i>Brassica napus</i>. Plant, Cell and Environment, 2022, 45, 248-261.	2.8	33
276	The Enzyme Activity and Substrate Specificity of Two Major Cinnamyl Alcohol Dehydrogenases in Sorghum (<i>Sorghum bicolor</i>), SbCAD2 and SbCAD4. Plant Physiology, 2017, 174, 2128-2145.	2.3	32
277	Suppression of CINNAMOYL-CoA REDUCTASE increases the level of monolignol ferulates incorporated into maize lignins. Biotechnology for Biofuels, 2017, 10, 109.	6.2	32
278	Evaluation of Feruloylated and <i>p</i>-Coumaroylated Arabinosyl Units in Grass Arabinoxylans by Acidolysis in Dioxane/Methanol. Journal of Agricultural and Food Chemistry, 2018, 66, 5418-5424.	2.4	32
279	RNAi downregulation of three key lignin genes in sugarcane improves glucose release without reduction in sugar production. Biotechnology for Biofuels, 2016, 9, 270.	6.2	31
280	Engineered Lignin in Poplar Biomass Facilitates Cu-Catalyzed Alkaline-Oxidative Pretreatment. ACS Sustainable Chemistry and Engineering, 2018, 6, 2932-2941.	3.2	31
281	Diverse lignocellulosic feedstocks can achieve high fieldâ€scale ethanol yields while providing flexibility for the biorefinery and landscapeâ€level environmental benefits. GCB Bioenergy, 2018, 10, 825-840.	2.5	31
282	Identifying New Lignin Bioengineering Targets: Impact of Epicatechin, Quercetin Glycoside, and Gallate Derivatives on the Lignification and Fermentation of Maize Cell Walls. Journal of Agricultural and Food Chemistry, 2012, 60, 5152-5160.	2.4	30
283	Elucidating Tricin-Lignin Structures: Assigning Correlations in HSQC Spectra of Monocot Lignins. Polymers, 2018, 10, 916.	2.0	30
284	Involvement of CesA4, CesA7-A/B and CesA8-A/B in secondary wall formation in Populus trichocarpa wood. Tree Physiology, 2020, 40, 73-89.	1.4	30
285	Adducts of anthrahydroquinone and anthranol with lignin model quinone methides. 1. Synthesis and characterization. Journal of Organic Chemistry, 1982, 47, 3486-3495.	1.7	29
286	Characterization of Hardwood Lignin: Investigation of Syringyl/Guaiacyl Composition by13C Nuclear Magnetic Resonance Spectroscopy. Holzforschung, 1983, 37, 297-302.	0.9	29
287	Peroxidase-Catalyzed Oligomerization of Ferulic Acid Esters. Journal of Agricultural and Food Chemistry, 2008, 56, 10368-10375.	2.4	29
288	Ferulateâ€“coniferyl alcohol cross-coupled products formed by radical coupling reactions. Planta, 2009, 229, 1099-1108.	1.6	29

#	Article	IF	Citations
289	Using 2D NMR spectroscopy to assess effects of UV radiation on cell wall chemistry during litter decomposition. Biogeochemistry, 2015, 125, 427-436.	1.7	29
290	Degradation of lignin Î²â€•aryl ether units in <i>Arabidopsis thaliana</i> expressing <i>LigD</i>,<i> LigF</i> and <i>LigG</i> from <i>Sphingomonas paucimobilis </i><scp>SYK</scp>â€6. Plant Biotechnology Journal, 2017, 15, 581-593.	4.1	29
291	CRISPRâ€•Cas9 editing of CAFFEOYL SHIKIMATE ESTERASE 1 and 2 shows their importance and partial redundancy in lignification in <i>Populus tremula</i> Ã— <i>P. alba</i>. Plant Biotechnology Journal, 2021, 19, 2221-2234.	4.1	29
292	Rapid proton NMR method for determination of threo:erythro ratios in lignin model compounds and examination of reduction stereochemistry. Journal of Agricultural and Food Chemistry, 1991, 39, 705-709.	2.4	28
293	2D-NMR (HSQC) difference spectra between specifically 13C-enriched and unenriched protolignin of Ginkgo biloba obtained in the solution state of whole cell wall material. Holzforschung, 2009, 63, .	0.9	28
294	Influence of Populus Genotype on Gene Expression by the Wood Decay Fungus Phanerochaete chrysosporium. Applied and Environmental Microbiology, 2014, 80, 5828-5835.	1.4	28
295	Flavonoids naringenin chalcone, naringenin, dihydrotricin, and tricin are lignin monomers in papyrus. Plant Physiology, 2022, 188, 208-219.	2.3	28
296	Ligninâ€“feruloyl ester cross-links in grasses. Part 2. Model compound syntheses. Journal of the Chemical Society Perkin Transactions 1, 1992, , 2971-2980.	0.9	27
297	The DFRC Method for Lignin Analysis. Part 3. NMR Studies. Journal of Wood Chemistry and Technology, 1998, 18, 219-233.	0.9	27
298	Simulated Moving Bed Chromatography: Separation and Recovery of Sugars and Ionic Liquid from Biomass Hydrolysates. ChemSusChem, 2013, 6, 2083-2089.	3.6	27
299	Characterization and Fermentability of an Ethanol Soluble High Molecular Weight Coffee Fraction. Journal of Agricultural and Food Chemistry, 2008, 56, 5960-5969.	2.4	26
300	Highly Selective Syntheses of Coniferyl and Sinapyl Alcohols. Journal of Agricultural and Food Chemistry, 1998, 46, 1794-1796.	2.4	25
301	Synthesis and identification of 2,5-bis-(4-hydroxy-3-methoxyphenyl)-tetrahydrofuran-3,4-dicarboxylic acid, an unanticipated ferulate 8â€“8-coupling product acylating cereal plant cell walls. Organic and Biomolecular Chemistry, 2006, 4, 2801-2806.	1.5	25
302	Accumulation of <i>N</i>-Acetylglucosamine Oligomers in the Plant Cell Wall Affects Plant Architecture in a Dose-Dependent and Conditional Manner Â Â. Plant Physiology, 2014, 165, 290-308.	2.3	25
303	Acidolysis and hot water extraction provide new insights into the composition of the induced â€œlignin-likeâ€•material from squash fruit. Phytochemistry, 2001, 57, 1005-1011.	1.4	24
304	Altering carbon allocation in hybrid poplar (<i>Populus albaÂÃ—Âgrandidentata</i>) impacts cell wall growth and development. Plant Biotechnology Journal, 2017, 15, 865-878.	4.1	24
305	Variation in energy sorghum hybrid TX08001 biomass composition and lignin chemistry during development under irrigated and non-irrigated field conditions. PLoS ONE, 2018, 13, e0195863.	1.1	24
306	A Century-Old Mystery Unveiled: Sekizaisou is a Natural Lignin Mutant. Plant Physiology, 2020, 182, 1821-1828.	2.3	24

#	Article	IF	Citations
307	Molecular and Biochemical Basis for Stress-Induced Accumulation of Free and Bound<i>p</i>-Coumaraldehyde in Cucumber Â Â. Plant Physiology, 2011, 157, 1056-1066.	2.3	23
308	Pithâ€specific lignification in <i>Nicotiana attenuata</i> as a defense against a stemâ€boring herbivore. New Phytologist, 2021, 232, 332-344.	3.5	23
309	Determination of the Conformation and Isomeric Composition of Lignin Model Quinone Methides By NMR. Journal of Wood Chemistry and Technology, 1983, 3, 183-194.	0.9	22
310	The DFRC Method for Lignin Analysis. 7. Behavior of Cinnamyl End Groups. Journal of Agricultural and Food Chemistry, 1999, 47, 1981-1987.	2.4	22
311	Sugarcane transgenics expressing MYB transcription factors show improved glucose release. Biotechnology for Biofuels, 2016, 9, 143.	6.2	21
312	Dimeric ÃŸ-Ether Thioacidolysis Products Resulting from Incomplete Ether Cleavage. Holzforschung, 1996, 50, 425-428.	0.9	20
313	Monoclonal antibodies to p-coumarate. Phytochemistry, 2009, 70, 1366-1373.	1.4	20
314	Integrating lignin depolymerization with microbial funneling processes using agronomically relevant feedstocks. Green Chemistry, 2022, 24, 2795-2811.	4.6	20
315	Reactions of ÃŸ-ARYL Lignin Model Quinone Methides with Anthrahydroquinone and Anthranol. Journal of Wood Chemistry and Technology, 1987, 7, 133-160.	0.9	19
316	Lignin-hydroxycinnamoyl model compounds related to forage cell wall structure. 2. Ester-linked structures. Journal of Agricultural and Food Chemistry, 1993, 41, 570-576.	2.4	19
317	Stereoselective synthesis of 1-O-Î²-feruloyl and 1-O-Î²-sinapoyl glucopyranoses. Tetrahedron Letters, 2011, 52, 3729-3731.	0.7	19
318	Change in lignin structure, but not in lignin content, in transgenic poplar overexpressing the rice master regulator of secondary cell wall biosynthesis. Physiologia Plantarum, 2018, 163, 170-182.	2.6	19
319	Protection Strategies Enable Selective Conversion of Biomass. Angewandte Chemie, 2020, 132, 11800-11812.	1.6	19
320	Plant cell wall profiling by fast maximum likelihood reconstruction (FMLR) and region-of-interest (ROI) segmentation of solution-state 2D 1Hâ€“13C NMR spectra. Biotechnology for Biofuels, 2013, 6, 45.	6.2	18
321	Rapid Py-GC/MS assessment of the structural alterations of lignins in genetically modified plants. Journal of Analytical and Applied Pyrolysis, 2016, 121, 155-164.	2.6	18
322	A bacterial biosynthetic pathway for methylated furan fatty acids. Journal of Biological Chemistry, 2020, 295, 9786-9801.	1.6	18
323	A multi-omics approach to lignocellulolytic enzyme discovery reveals a new ligninase activity from <i>Parascedosporium putredinis</i> NO1. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	18
324	<i>p</i>HBMT1, a BAHD-family monolignol acyltransferase, mediates lignin acylation in poplar. Plant Physiology, 2022, 188, 1014-1027.	2.3	18

#	Article	IF	Citations
325	Adducts of anthrahydroquinone and anthranol with lignin model quinone methides. 2. Dehydration derivatives. Proof of threo configuration. Journal of Organic Chemistry, 1983, 48, 372-376.	1.7	17
326	Preparation of monolignol Î³-acetate, Î³-p-hydroxycinnamate, and Î³-p-hydroxybenzoate conjugates: selective deacylation of phenolic acetates with hydrazine acetate. RSC Advances, 2013, 3, 21964.	1.7	17
327	Radical coupling reactions of piceatannol and monolignols: A density functional theory study. Phytochemistry, 2019, 164, 12-23.	1.4	17
328	Synthesis of 4,8-bis(4-hydroxy-3-methoxyphenyl)-3,7-dioxabicyclo[3.3.0]octan-2-ones and determination of their relative configuration via long-range proton couplings. Journal of the Chemical Society Perkin Transactions 1, 1993, , 653.	0.9	16
329	Reactions of dehydrodiferulates with ammonia. Organic and Biomolecular Chemistry, 2011, 9, 6779.	1.5	16
330	Rapid Syntheses of Dehydrodiferulates via Biomimetic Radical Coupling Reactions of Ethyl Ferulate. Journal of Agricultural and Food Chemistry, 2012, 60, 8272-8277.	2.4	16
331	Chemical and structural changes associated with Cu-catalyzed alkaline-oxidative delignification of hybrid poplar. Biotechnology for Biofuels, 2015, 8, 123.	6.2	16
332	1H NMR of acetylated Î²-ether/Î²-ether lignin model trimers. Magnetic Resonance in Chemistry, 1993, 31, 357-363.	1.1	15
333	Stereospecificity for the Zinc Borohydride Reduction of Î±-Aryloxy-Î²-Hydroxy Ketones. Journal of Wood Chemistry and Technology, 1993, 13, 593-601.	0.9	15
334	Predicting allele frequencies in DNA pools using high density SNP genotyping data. Animal Genetics, 2011, 42, 113-116.	0.6	15
335	Maize specialized metabolome networks reveal organ-preferential mixed glycosides. Computational and Structural Biotechnology Journal, 2021, 19, 1127-1144.	1.9	15
336	Reactions of Lignin Model ÃŸ-Aryl Ethers with Acetyl Bromide. Holzforschung, 1996, 50, 360-364.	0.9	14
337	A Highly Diastereoselective Oxidant Contributes to Ligninolysis by the White Rot Basidiomycete Ceriporiopsis subvermispora. Applied and Environmental Microbiology, 2014, 80, 7536-7544.	1.4	14
338	Lignin/Hydroxycinnamic Acid/Polysaccharide Complexes: Synthetic Models for Regiochemical Characterization. Assa, Cssa and Sssa, 0, , 201-246.	0.6	14
339	Structural features of alternative lignin monomers associated with improved digestibility of artificially lignified maize cell walls. Plant Science, 2019, 287, 110070.	1.7	14
340	Improved analysis of arabinoxylan-bound hydroxycinnamate conjugates in grass cell walls. Biotechnology for Biofuels, 2020, 13, 202.	6.2	14
341	Exogenous chalcone synthase expression in developing poplar xylem incorporates naringenin into lignins. Plant Physiology, 2022, 188, 984-996.	2.3	14
342	A One- and Two-Dimensional 13C and 1H N.M.R. Study of Some Triterpenes of the Hopane, Stictane and Flavicene Groups. Australian Journal of Chemistry, 1989, 42, 243.	0.5	13

#	Article	IF	Citations
343	Cell Wall Composition and Biomass Recalcitrance Differences Within a Genotypically Diverse Set of Brachypodium distachyon Inbred Lines. Frontiers in Plant Science, 2016, 7, 708.	1.7	13
344	Arabinose Conjugates Diagnostic of Ferulate-Ferulate and Ferulate-Monolignol Cross-Coupling Are Released by Mild Acidolysis of Grass Cell Walls. Journal of Agricultural and Food Chemistry, 2019, 67, 12962-12971.	2.4	13
345	Rewired phenolic metabolism and improved saccharification efficiency of a <i>Zea mays cinnamyl alcohol dehydrogenase 2 (zmcad2)</i> mutant. Plant Journal, 2021, 105, 1240-1257.	2.8	13
346	Unconventional lignin monomersâ€"Extension of the lignin paradigm. Advances in Botanical Research, 2022, , 1-39.	0.5	13
347	Overexpression of the scopoletin biosynthetic pathway enhances lignocellulosic biomass processing. Science Advances, 2022, 8, .	4.7	13
348	Analysis of a Modern Hybrid and an Ancient Sugarcane Implicates a Complex Interplay of Factors in Affecting Recalcitrance to Cellulosic Ethanol Production. PLoS ONE, 2015, 10, e0134964.	1.1	12
349	Coupling and Reactions of Lignols and New Lignin Monomers: A Density Functional Theory Study. ACS Sustainable Chemistry and Engineering, 2020, 8, 11033-11045.	3.2	12
350	Eudicot Nutshells: Cell-Wall Composition and Biofuel Feedstock Potential. Energy & Fuels, 2020, 34, 16274-16283.	2.5	12
351	Manipulation of Lignin Monomer Composition Combined with the Introduction of Monolignol Conjugate Biosynthesis Leads to Synergistic Changes in Lignin Structure. Plant and Cell Physiology, 2022, 63, 744-754.	1.5	12
352	A new approach to zipâ€lignin: 3,4â€dihydroxybenzoate is compatible with lignification. New Phytologist, 2022, 235, 234-246.	3.5	12
353	Adducts of anthrahydroquinone and anthranol with lignin model quinone methides. 3. Independent synthesis of threo and erythro isomers. Journal of Organic Chemistry, 1983, 48, 3884-3889.	1.7	11
354	Evidence for Increased Steric Compression in<i>Anti</i>Compared to<i>Syn</i>Lignin Model Quinone Methides. Journal of Wood Chemistry and Technology, 1990, 10, 101-110.	0.9	11
355	A Biomimetic Route to Lignin Model CompoundsviaSilver (I) Oxide Oxidation. 2. NMR Characterization of Non-Cyclic Benzyl Aryl Ether Trimers and Tetramers. Holzforschung, 1994, 48, 124-132.	0.9	11
356	Efficient Ether Cleavage in Lignins: The Derivatization Followed by Reductive Cleavage Procedure as a Basis for New Analytical Methods. ACS Symposium Series, 1998, , 294-322.	0.5	11
357	Overexpression of a Sugarcane BAHD Acyltransferase Alters Hydroxycinnamate Content in Maize Cell Wall. Frontiers in Plant Science, 2021, 12, 626168.	1.7	11
358	Adducts of anthrahydroquinone and anthranol with lignin model quinone methides. 4. Proton NMR hindered rotation studies. Correlation between solution conformations and x-ray crystal structure. Journal of Organic Chemistry, 1984, 49, 3337-3340.	1.7	10
359	BdCESA7, BdCESA8, and BdPMT Utility Promoter Constructs for Targeted Expression to Secondary Cell-Wall-Forming Cells of Grasses. Frontiers in Plant Science, 2016, 7, 55.	1.7	10
360	Effects of rearing environment on the gut antimicrobial responses of two broiler chicken lines. Veterinary Immunology and Immunopathology, 2016, 178, 29-36.	0.5	10

#	Article	IF	Citations
361	Identification and characterization of a set of monocot BAHD monolignol transferases. Plant Physiology, 2022, 189, 37-48.	2.3	10
362	Rerouting of the lignin biosynthetic pathway by inhibition of cytosolic shikimate recycling in transgenic hybrid aspen. Plant Journal, 2022, 110, 358-376.	2.8	10
363	Delineating pMDI model reactions with loblolly pine via solution-state NMR spectroscopy. Part 1. Catalyzed reactions with wood models and wood polymers. Holzforschung, 2011, 65, .	0.9	9
364	Benzoyl Coenzyme A Pathway-Mediated Metabolism of <i>meta</i> -Hydroxy-Aromatic Acids in Rhodopseudomonas palustris. Journal of Bacteriology, 2013, 195, 4112-4120.	1.0	9
365	The Sorghum (Sorghum bicolor) Brown Midrib 30 Gene Encodes a Chalcone Isomerase Required for Cell Wall Lignification. Frontiers in Plant Science, 2021, 12, 732307.	1.7	9
366	Delineating pMDI model reactions with loblolly pine via solution-state NMR spectroscopy. Part 2. Non-catalyzed reactions with the wood cell wall. Holzforschung, 2011, 65, .	0.9	8
367	Towards lignin-protein crosslinking: amino acid adducts of a lignin model quinone methide. Cellulose, 2014, 21, 1395-1407.	2.4	8
368	Incorporation of Flavonoid Derivatives or Pentagalloyl Glucose into Lignin Enhances Cell Wall Saccharification Following Mild Alkaline or Acidic Pretreatments. Bioenergy Research, 2015, 8, 1391-1400.	2.2	8
369	Imaging Changes in Cell Walls of Engineered Poplar by Stimulated Raman Scattering and Atomic Force Microscopy. ACS Sustainable Chemistry and Engineering, 2019, 7, 10616-10622.	3.2	8
370	Tricin and tricinâ€lignins in Medicago versus in monocots. New Phytologist, 2020, 228, 11-14.	3.5	8
371	Radical Coupling Reactions of Hydroxystilbene Glucosides and Coniferyl Alcohol: A Density Functional Theory Study. Frontiers in Plant Science, 2021, 12, 642848.	1.7	8
372	Engineering Curcumin Biosynthesis in Poplar Affects Lignification and Biomass Yield. Frontiers in Plant Science, 0, 13, .	1.7	8
373	Impact of methyl 5-O-(E)-feruloyl-Î±-L-arabinofuranoside on in-vitro degradation of cellulose and xylan. Journal of the Science of Food and Agriculture, 1993, 61, 423-427.	1.7	7
374	Lignin Biosynthesis in Poplar: Genetic Engineering and Effects on Kraft Pulping. Progress in Biotechnology, 2001, 18, 187-194.	0.2	7
375	Synthesis and spectroscopic characterization of hydroxycinnamoylated methyl Î±-l-arabinofuranosyl-(1 â†’) Tj ETQq1 1 0.784314 rgBT	1.1	6
376	Scaled-up production of poacic acid, a plant-derived antifungal agent. Industrial Crops and Products, 2017, 103, 240-243.	2.5	6
377	Reductive Cleavage Method for Quantitation of Monolignols and Low-Abundance Monolignol Conjugates. ChemSusChem, 2018, 11, 1580-1580.	3.6	6
378	Editorial overview: Plant biotechnology â€" lignin engineering. Current Opinion in Biotechnology, 2019, 56, iii-v.	3.3	6

#	Article	IF	Citations
379	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
380	Incorporation of catechyl monomers into lignins: lignification from the non-phenolic end<i>via</i>Dielsâ€“Alder cycloaddition?. Green Chemistry, 2021, 23, 8995-9013.	4.6	6
381	Functional and structural insight into the flexibility of cytochrome P450 reductases from Sorghum bicolor and its implications for lignin composition. Journal of Biological Chemistry, 2022, 298, 101761.	1.6	6
382	The Stereochemistry of Guaiacyl Lignin Model Quinone Methides. Holzforschung, 1991, 45, 199-204.	0.9	5
383	Modeling Lignification in Grasses with Monolignol Dehydropolymerisate-Cell Wall Complexes. ACS Symposium Series, 1998, , 163-171.	0.5	5
384	Facile Synthesis of 4-Hydroxycinnamaldehydes. Bioenergy Research, 2012, 5, 407-411.	2.2	5
385	Poacic acid suppresses dollar spot and snow mould in amenity turfgrass. Plant Pathology, 2020, 69, 112-119.	1.2	5
386	Stacking AsFMT overexpression with BdPMT loss of function enhances monolignol ferulate production in BrachypodiumÂdistachyon. Plant Biotechnology Journal, 2021, 19, 1878-1886.	4.1	5
387	Cell wall cross-linking by ferulates and diferulates in grasses. , 1999, 79, 403.		5
388	High-throughput platform for yeast morphological profiling predicts the targets of bioactive compounds. Npj Systems Biology and Applications, 2022, 8, 3.	1.4	5
389	Method to Regioselectively Iodine-Tag Free-Phenolic Aromatic End-Groups in Lignin for¹Hâ€“¹³C-HSQC NMR Analysis. ACS Sustainable Chemistry and Engineering, 2019, 7, 18624-18629.	3.2	4
390	Severe inhibition of maize wall degradation by synthetic lignins formed with coniferaldehyde. Journal of the Science of Food and Agriculture, 1998, 78, 81-87.	1.7	4
391	H-lignin can be deposited independently of CINNAMYL ALCOHOL DEHYDROGENASE C and D in Arabidopsis. Plant Physiology, 2022, 189, 2015-2028.	2.3	4
392	Adducts of Anthrahydroquinone and Anthranol with Lignin Model Quinone Methides. 9,10-13C Labelled Anthranol-Lignin Aeducts; Examination of Adouct Formation and Stereochemistry in the Polymer. Journal of Wood Chemistry and Technology, 1986, 6, 73-88.	0.9	3
393	Flexible Method for Conjugation of Phenolic Lignin Model Compounds to Carrier Proteins. Journal of Agricultural and Food Chemistry, 2016, 64, 7782-7788.	2.4	3
394	Synthesis of Nepetoidin B. Synlett, 2018, 29, 1229-1231.	1.0	3
395	Improved chemical pulping and saccharification of a natural mulberry mutant deficient in cinnamyl alcohol dehydrogenase. Holzforschung, 2021, .	0.9	3
396	Synthesis of hydroxycinnamoyl shikimates and their role in monolignol biosynthesis. Holzforschung, 2022, 76, 133-144.	0.9	3

#	Article	IF	Citations
397	Anthraquinone Losses During Alkaline Pulping. Journal of Wood Chemistry and Technology, 1984, 4, 149-161.	0.9	2
398	Science, society and biosafety of a field trial with transgenic biofuel poplars. BMC Proceedings, 2011, 5, I23.	1.8	2
399	Efficient Synthesis of Pinoresinol, an Important Lignin Dimeric Model Compound. Frontiers in Energy Research, 2021, 9, .	1.2	2
400	Assessing the Viability of Recovery of Hydroxycinnamic Acids from Lignocellulosic Biorefinery Alkaline Pretreatment Waste Streams. ChemSusChem, 2020, 13, 1922-1922.	3.6	0
401	Density functional theory study on the coupling and reactions of diferuloylputrescine as a lignin monomer. Phytochemistry, 2022, 197, 113122.	1.4	0