

John Ralph

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

391
papers

37,442
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101
h-index

182
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413
ext. papers

43,317
ext. citations

7
avg. IF

7.51
L-index

#	Paper	IF	Citations
391	Lignin biosynthesis. <i>Annual Review of Plant Biology</i> , 2003 , 54, 519-46	30.7	3143
390	Lignin biosynthesis and structure. <i>Plant Physiology</i> , 2010 , 153, 895-905	6.6	1486
389	Paving the Way for Lignin Valorisation: Recent Advances in Bioengineering, Biorefining and Catalysis. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 8164-215	16.4	1136
388	Lignins: Natural polymers from oxidative coupling of 4-hydroxyphenyl- propanoids. <i>Phytochemistry Reviews</i> , 2004 , 3, 29-60	7.7	1062
387	Formaldehyde stabilization facilitates lignin monomer production during biomass depolymerization. <i>Science</i> , 2016 , 354, 329-333	33.3	651
386	Repression of lignin biosynthesis promotes cellulose accumulation and growth in transgenic trees. <i>Nature Biotechnology</i> , 1999 , 17, 808-12	44.5	594
385	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, 5922-35	5.7	522
384	Pyrolysis-GC-MS characterization of forage materials. <i>Journal of Agricultural and Food Chemistry</i> , 1991 , 39, 1426-1437	5.7	506
383	Lignin engineering. <i>Current Opinion in Plant Biology</i> , 2008 , 11, 278-85	9.9	503
382	Solution-state 2D NMR of ball-milled plant cell wall gels in DMSO-d(6)/pyridine-d(5). <i>Organic and Biomolecular Chemistry</i> , 2010 , 8, 576-91	3.9	473
381	Chemoselective metal-free aerobic alcohol oxidation in lignin. <i>Journal of the American Chemical Society</i> , 2013 , 135, 6415-8	16.4	460
380	Whole plant cell wall characterization using solution-state 2D NMR. <i>Nature Protocols</i> , 2012 , 7, 1579-89	18.8	434
379	Multi-scale visualization and characterization of lignocellulosic plant cell wall deconstruction during thermochemical pretreatment. <i>Energy and Environmental Science</i> , 2011 , 4, 973	35.4	392
378	Hydroxycinnamates in lignification. <i>Phytochemistry Reviews</i> , 2010 , 9, 65-83	7.7	365
377	Pathway of p-Coumaric Acid Incorporation into Maize Lignin As Revealed by NMR. <i>Journal of the American Chemical Society</i> , 1994 , 116, 9448-9456	16.4	337
376	Lignin-ferulate cross-links in grasses: active incorporation of ferulate polysaccharide esters into ryegrass lignins. <i>Carbohydrate Research</i> , 1995 , 275, 167-178	2.9	334
375	Combinatorial modification of multiple lignin traits in trees through multigene cotransformation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 4939-44	11.5	321

374	Caffeoyl shikimate esterase (CSE) is an enzyme in the lignin biosynthetic pathway in Arabidopsis. <i>Science</i> , 2013 , 341, 1103-6	33.3	310
373	Molecular phenotyping of the pal1 and pal2 mutants of Arabidopsis thaliana reveals far-reaching consequences on phenylpropanoid, amino acid, and carbohydrate metabolism. <i>Plant Cell</i> , 2004 , 16, 2749-71 ⁶	11.6	305
372	Non-degradative dissolution and acetylation of ball-milled plant cell walls: high-resolution solution-state NMR. <i>Plant Journal</i> , 2003 , 35, 535-44	6.9	302
371	Identification and synthesis of new ferulic acid dehydrodimers present in grass cell walls. <i>Journal of the Chemical Society Perkin Transactions 1</i> , 1994 , 3485		290
370	Discovery of lignin in seaweed reveals convergent evolution of cell-wall architecture. <i>Current Biology</i> , 2009 , 19, 169-75	6.3	288
369	Metabolic engineering of novel lignin in biomass crops. <i>New Phytologist</i> , 2012 , 196, 978-1000	9.8	281
368	Downregulation of cinnamoyl-coenzyme A reductase in poplar: multiple-level phenotyping reveals effects on cell wall polymer metabolism and structure. <i>Plant Cell</i> , 2007 , 19, 3669-91	11.6	280
367	The effects on lignin structure of overexpression of ferulate 5-hydroxylase in hybrid poplar. <i>Plant Physiology</i> , 2009 , 150, 621-35	6.6	273
366	Monolignol ferulate transferase introduces chemically labile linkages into the lignin backbone. <i>Science</i> , 2014 , 344, 90-3	33.3	265
365	Diferulates as structural components in soluble and insoluble cereal dietary fibre. <i>Journal of the Science of Food and Agriculture</i> , 2001 , 81, 653-660	4.3	254
364	Derivatization Followed by Reductive Cleavage (DFRC Method), a New Method for Lignin Analysis: Protocol for Analysis of DFRC Monomers. <i>Journal of Agricultural and Food Chemistry</i> , 1997 , 45, 2590-2592 ⁷	5.7	251
363	Cell Wall Esterified Phenolic Dimers: Identification and Quantification by Reverse Phase High Performance Liquid Chromatography and Diode Array Detection. <i>Phytochemical Analysis</i> , 1996 , 7, 305-312 ⁴	3.4	248
362	Lignin structure and its engineering. <i>Current Opinion in Biotechnology</i> , 2019 , 56, 240-249	11.4	247
361	Ptr-miR397a is a negative regulator of laccase genes affecting lignin content in Populus trichocarpa. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 10848-53	11.5	246
360	The gel-forming polysaccharide of psyllium husk (<i>Plantago ovata</i> Forsk). <i>Carbohydrate Research</i> , 2004 , 339, 2009-17	2.9	244
359	Disruption of Mediator rescues the stunted growth of a lignin-deficient Arabidopsis mutant. <i>Nature</i> , 2014 , 509, 376-80	50.4	243
358	Designer lignins: harnessing the plasticity of lignification. <i>Current Opinion in Biotechnology</i> , 2016 , 37, 190-200	11.4	231
357	Cell wall cross-linking by ferulates and diferulates in grasses. <i>Journal of the Science of Food and Agriculture</i> , 1999 , 79, 403-407	4.3	231

356	A comparison of the insoluble residues produced by the Klason lignin and acid detergent lignin procedures. <i>Journal of the Science of Food and Agriculture</i> , 1994 , 65, 51-58	4.3	227
355	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, 1772-7	11.5	224
354	Solution-state 2D NMR of Ball-milled Plant Cell Wall Gels in DMSO-d 6. <i>Bioenergy Research</i> , 2008 , 1, 56-66.1	6.1	218
353	Comparative transcriptome and secretome analysis of wood decay fungi <i>Postia placenta</i> and <i>Phanerochaete chrysosporium</i> . <i>Applied and Environmental Microbiology</i> , 2010 , 76, 3599-610	4.8	213
352	Lignin composition and structure in young versus adult <i>Eucalyptus globulus</i> plants. <i>Plant Physiology</i> , 2011 , 155, 667-82	6.6	212
351	Diferulate cross-links impede the enzymatic degradation of non-lignified maize walls. <i>Journal of the Science of Food and Agriculture</i> , 1998 , 77, 193-200	4.3	210
350	Peroxidase-dependent cross-linking reactions of p-hydroxycinnamates in plant cell walls. <i>Phytochemistry Reviews</i> , 2004 , 3, 79-96	7.7	209
349	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. <i>Plant Journal</i> , 2001 , 28, 257-70	6.9	209
348	Tricin, a flavonoid monomer in monocot lignification. <i>Plant Physiology</i> , 2015 , 167, 1284-95	6.6	203
347	Ferulate cross-linking in cell walls isolated from maize cell suspensions. <i>Phytochemistry</i> , 1995 , 40, 1077-1082	10.82	202
346	Genetic and molecular basis of grass cell-wall degradability. I. Lignin-cell wall matrix interactions. <i>Comptes Rendus - Biologies</i> , 2004 , 327, 455-65	1.4	198
345	Effects of coumarate 3-hydroxylase down-regulation on lignin structure. <i>Journal of Biological Chemistry</i> , 2006 , 281, 8843-53	5.4	192
344	Lignin biosynthesis and its integration into metabolism. <i>Current Opinion in Biotechnology</i> , 2019 , 56, 230-239.1	239.1	189
343	Modifications in lignin and accumulation of phenolic glucosides in poplar xylem upon down-regulation of caffeyl-coenzyme A O-methyltransferase, an enzyme involved in lignin biosynthesis. <i>Journal of Biological Chemistry</i> , 2000 , 275, 36899-909	5.4	188
342	Advances in modifying lignin for enhanced biofuel production. <i>Current Opinion in Plant Biology</i> , 2010 , 13, 313-20	9.9	187
341	Unexpected variation in lignin. <i>Current Opinion in Plant Biology</i> , 1999 , 2, 145-52	9.9	183
340	Cross-linking of maize walls by ferulate dimerization and incorporation into lignin. <i>Journal of Agricultural and Food Chemistry</i> , 2000 , 48, 6106-13	5.7	176
339	Lignin monomer production integrated into the D-valerolactone sugar platform. <i>Energy and Environmental Science</i> , 2015 , 8, 2657-2663	35.4	174

338	The charophycean green algae provide insights into the early origins of plant cell walls. <i>Plant Journal</i> , 2011 , 68, 201-11	6.9	172
337	Evidence for cleavage of lignin by a brown rot basidiomycete. <i>Environmental Microbiology</i> , 2008 , 10, 1844-9	5.9	170
336	Elucidation of new structures in lignins of CAD- and COMT-deficient plants by NMR. <i>Phytochemistry</i> , 2001 , 57, 993-1003	4	165
335	DFRC Method for Lignin Analysis. 1. New Method for Aryl Ether Cleavage: Lignin Model Studies. <i>Journal of Agricultural and Food Chemistry</i> , 1997 , 45, 4655-4660	5.7	162
334	Profiling of oligolignols reveals monolignol coupling conditions in lignifying poplar xylem. <i>Plant Physiology</i> , 2004 , 136, 3537-49	6.6	160
333	Ferulate Cross-Links Limit the Enzymatic Degradation of Synthetically Lignified Primary Walls of Maize. <i>Journal of Agricultural and Food Chemistry</i> , 1998 , 46, 2609-2614	5.7	156
332	Improved saccharification and ethanol yield from field-grown transgenic poplar deficient in cinnamoyl-CoA reductase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 845-50	11.5	155
331	Differences in the chemical structure of the lignins from sugarcane bagasse and straw. <i>Biomass and Bioenergy</i> , 2015 , 81, 322-338	5.3	153
330	Characterization of nonderivatized plant cell walls using high-resolution solution-state NMR spectroscopy. <i>Magnetic Resonance in Chemistry</i> , 2008 , 46, 508-17	2.1	151
329	Structural characterization of the lignin in the cortex and pith of elephant grass (<i>Pennisetum purpureum</i>) stems. <i>Journal of Agricultural and Food Chemistry</i> , 2012 , 60, 3619-34	5.7	150
328	A new <i>Arabidopsis thaliana</i> mutant deficient in the expression of O-methyltransferase impacts lignins and sinapoyl esters. <i>Plant Molecular Biology</i> , 2003 , 51, 973-89	4.6	146
327	Detection and determination of p-coumaroylated units in lignins. <i>Journal of Agricultural and Food Chemistry</i> , 1999 , 47, 1988-92	5.7	145
326	Laccases direct lignification in the discrete secondary cell wall domains of protoxylem. <i>Plant Physiology</i> , 2014 , 166, 798-807	6.6	144
325	Mass spectrometry-based sequencing of lignin oligomers. <i>Plant Physiology</i> , 2010 , 153, 1464-78	6.6	143
324	Guidelines for performing lignin-first biorefining. <i>Energy and Environmental Science</i> , 2021 , 14, 262-292	35.4	143
323	Next-generation ammonia pretreatment enhances cellulosic biofuel production. <i>Energy and Environmental Science</i> , 2016 , 9, 1215-1223	35.4	141
322	Suppression of 4-coumarate-CoA ligase in the coniferous gymnosperm <i>Pinus radiata</i> . <i>Plant Physiology</i> , 2009 , 149, 370-83	6.6	140
321	Facile large-scale synthesis of coniferyl, sinapyl, and p-coumaryl alcohol. <i>Journal of Agricultural and Food Chemistry</i> , 1992 , 40, 1108-1110	5.7	136

320	Exploring lignification in conifers by silencing hydroxycinnamoyl-CoA:shikimate hydroxycinnamoyltransferase in <i>Pinus radiata</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 11856-61	11.5	133
319	NMR of Lignins 2010 , 137-243		132
318	Wege zur Verwertung von Lignin: Fortschritte in der Biotechnik, der Bioraffination und der Katalyse. <i>Angewandte Chemie</i> , 2016 , 128, 8296-8354	3.6	132
317	Molecular phenotyping of lignin-modified tobacco reveals associated changes in cell-wall metabolism, primary metabolism, stress metabolism and photorespiration. <i>Plant Journal</i> , 2007 , 52, 263-85	6.9	126
316	NMR analysis of lignins in CAD-deficient plants. Part 1. Incorporation of hydroxycinnamaldehydes and hydroxybenzaldehydes into lignins. <i>Organic and Biomolecular Chemistry</i> , 2003 , 1, 268-81	3.9	124
315	Variations in the cell wall composition of maize brown midrib mutants. <i>Journal of Agricultural and Food Chemistry</i> , 2003 , 51, 1313-21	5.7	124
314	Mass spectrometry-based fragmentation as an identification tool in lignomics. <i>Analytical Chemistry</i> , 2010 , 82, 8095-105	7.8	123
313	Understanding the impact of ionic liquid pretreatment on eucalyptus. <i>Biofuels</i> , 2010 , 1, 33-46	2	122
312	Genetical metabolomics of flavonoid biosynthesis in <i>Populus</i> : a case study. <i>Plant Journal</i> , 2006 , 47, 224-37	3.9	122
311	Genetic and molecular basis of grass cell wall biosynthesis and degradability. II. Lessons from brown-midrib mutants. <i>Comptes Rendus - Biologies</i> , 2004 , 327, 847-60	1.4	120
310	Biosynthesis and incorporation of side-chain-truncated lignin monomers to reduce lignin polymerization and enhance saccharification. <i>Plant Biotechnology Journal</i> , 2012 , 10, 609-20	11.6	119
309	p-Coumaroyl-CoA:monolignol transferase (PMT) acts specifically in the lignin biosynthetic pathway in <i>Brachypodium distachyon</i> . <i>Plant Journal</i> , 2014 , 77, 713-26	6.9	118
308	The DFRC Method for Lignin Analysis. 2. Monomers from Isolated Lignins. <i>Journal of Agricultural and Food Chemistry</i> , 1998 , 46, 547-552	5.7	118
307	Coexistence but independent biosynthesis of catechyl and guaiacyl/syringyl lignin polymers in seed coats. <i>Plant Cell</i> , 2013 , 25, 2587-600	11.6	117
306	Are lignins optically active?. <i>Journal of Agricultural and Food Chemistry</i> , 1999 , 47, 2991-6	5.7	114
305	p-coumaroylated syringyl units in maize lignin: Implications for Ether cleavage by thioacidolysis. <i>Phytochemistry</i> , 1996 , 43, 1189-1194	4	114
304	An Unusual Lignin from Kenaf. <i>Journal of Natural Products</i> , 1996 , 59, 341-342	4.9	110
303	Structural characterization of lignin isolated from coconut (<i>Cocos nucifera</i>) coir fibers. <i>Journal of Agricultural and Food Chemistry</i> , 2013 , 61, 2434-45	5.7	109

302	An "ideal lignin" facilitates full biomass utilization. <i>Science Advances</i> , 2018 , 4, eaau2968	14.3	108
301	Identification of grass-specific enzyme that acylates monolignols with p-coumarate. <i>Journal of Biological Chemistry</i> , 2012 , 287, 8347-55	5.4	107
300	Effects of PHENYLALANINE AMMONIA LYASE (PAL) knockdown on cell wall composition, biomass digestibility, and biotic and abiotic stress responses in <i>Brachypodium</i> . <i>Journal of Experimental Botany</i> , 2015 , 66, 4317-35	7	106
299	The DUF579 domain containing proteins IRX15 and IRX15-L affect xylan synthesis in <i>Arabidopsis</i> . <i>Plant Journal</i> , 2011 , 66, 387-400	6.9	106
298	Convergent evolution of syringyl lignin biosynthesis via distinct pathways in the lycophyte <i>Selaginella</i> and flowering plants. <i>Plant Cell</i> , 2010 , 22, 1033-45	11.6	105
297	Related <i>Arabidopsis</i> serine carboxypeptidase-like sinapoylglucose acyltransferases display distinct but overlapping substrate specificities. <i>Plant Physiology</i> , 2007 , 144, 1986-99	6.6	104
296	CCoAOMT suppression modifies lignin composition in <i>Pinus radiata</i> . <i>Plant Journal</i> , 2011 , 67, 119-29	6.9	103
295	Cell wall fermentation kinetics are impacted more by lignin content and ferulate cross-linking than by lignin composition. <i>Journal of the Science of Food and Agriculture</i> , 2009 , 89, 122-129	4.3	102
294	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). <i>Plant Journal</i> , 2008 , 53, 368-79	6.9	102
293	Structural and compositional modifications in lignin of transgenic alfalfa down-regulated in caffeic acid 3-O-methyltransferase and caffeoyl coenzyme A 3-O-methyltransferase. <i>Phytochemistry</i> , 2003 , 62, 53-65	4	102
292	Multidimensional NMR analysis reveals truncated lignin structures in wood decayed by the brown rot basidiomycete <i>Postia placenta</i> . <i>Environmental Microbiology</i> , 2011 , 13, 1091-100	5.2	101
291	Coniferyl ferulate incorporation into lignin enhances the alkaline delignification and enzymatic degradation of cell walls. <i>Biomacromolecules</i> , 2008 , 9, 2510-6	6.9	101
290	Monolignol ferulate conjugates are naturally incorporated into plant lignins. <i>Science Advances</i> , 2016 , 2, e1600393	14.3	99
289	Engineering traditional monolignols out of lignin by concomitant up-regulation of F5H1 and down-regulation of COMT in <i>Arabidopsis</i> . <i>Plant Journal</i> , 2010 , 64, 885-97	6.9	99
288	NMR evidence for benzodioxane structures resulting from incorporation of 5-hydroxyconiferyl alcohol into Lignins of O-methyltransferase-deficient poplars. <i>Journal of Agricultural and Food Chemistry</i> , 2001 , 49, 86-91	5.7	98
287	Lignin Conversion to Low-Molecular-Weight Aromatics via an Aerobic Oxidation-Hydrolysis Sequence: Comparison of Different Lignin Sources. <i>ACS Sustainable Chemistry and Engineering</i> , 2018 , 6, 3367-3374	8.3	97
286	Improving wood properties for wood utilization through multi-omics integration in lignin biosynthesis. <i>Nature Communications</i> , 2018 , 9, 1579	17.4	96
285	Significant alteration of gene expression in wood decay fungi <i>Postia placenta</i> and <i>Phanerochaete chrysosporium</i> by plant species. <i>Applied and Environmental Microbiology</i> , 2011 , 77, 4499-507	4.8	96

284	Isolation and structural identification of complex feruloylated heteroxylan side-chains from maize bran. <i>Phytochemistry</i> , 2006 , 67, 1276-86	4	96
283	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, 13660-5	11.5	94
282	NMR Studies on the Occurrence of Spirodienone Structures in Lignins. <i>Journal of Wood Chemistry and Technology</i> , 2006 , 26, 65-79	2	94
281	Systematic structural characterization of metabolites in <i>Arabidopsis</i> via candidate substrate-product pair networks. <i>Plant Cell</i> , 2014 , 26, 929-45	11.6	93
280	Lignins and ferulate-coniferyl alcohol cross-coupling products in cereal grains. <i>Journal of Agricultural and Food Chemistry</i> , 2004 , 52, 6496-502	5.7	92
279	A potential role for sinapyl p-coumarate as a radical transfer mechanism in grass lignin formation. <i>Planta</i> , 2008 , 228, 919-28	4.7	91
278	Manipulation of Guaiacyl and Syringyl Monomer Biosynthesis in an <i>Arabidopsis</i> Cinnamyl Alcohol Dehydrogenase Mutant Results in Atypical Lignin Biosynthesis and Modified Cell Wall Structure. <i>Plant Cell</i> , 2015 , 27, 2195-209	11.6	90
277	p-Hydroxyphenyl, Guaiacyl, and Syringyl Lignins Have Similar Inhibitory Effects on Wall Degradability. <i>Journal of Agricultural and Food Chemistry</i> , 1997 , 45, 2530-2532	5.7	90
276	Cell Wall Structural Foundations: Molecular Basis for Improving Forage Digestibilities. <i>Crop Science</i> , 1999 , 39, 27-37	2.4	90
275	Tricin-lignins: occurrence and quantitation of triclin in relation to phylogeny. <i>Plant Journal</i> , 2016 , 88, 1046-1057	6.9	89
274	Model studies of ferulate-coniferyl alcohol cross-product formation in primary maize walls: implications for lignification in grasses. <i>Journal of Agricultural and Food Chemistry</i> , 2002 , 50, 6008-16	5.7	89
273	Lignin feruloyl ester cross-links in grasses. Part 1. Incorporation of feruloyl esters into coniferyl alcohol dehydrogenation polymers. <i>Journal of the Chemical Society Perkin Transactions 1</i> , 1992 , 2961-2969		89
272	Structural identification of dehydrotriferulic and dehydrotetraferulic acids isolated from insoluble maize bran fiber. <i>Journal of Agricultural and Food Chemistry</i> , 2006 , 54, 6409-18	5.7	87
271	Isolation and identification of a ferulic acid dehydrotrimer from saponified maize bran insoluble fiber. <i>European Food Research and Technology</i> , 2003 , 217, 128-133	3.4	87
270	Sinapate dehydrodimers and sinapate-ferulate heterodimers in cereal dietary fiber. <i>Journal of Agricultural and Food Chemistry</i> , 2003 , 51, 1427-34	5.7	86
269	An uncondensed lignin depolymerized in the solid state and isolated from lignocellulosic biomass: a mechanistic study. <i>Green Chemistry</i> , 2018 , 20, 4224-4235	10	85
268	Structural characterization of lignin during <i>Pinus taeda</i> wood treatment with <i>Ceriporiopsis subvermispora</i> . <i>Applied and Environmental Microbiology</i> , 2004 , 70, 4073-8	4.8	85
267	Isolation and structural characterisation of 8-O-4/8-O-4- and 8-8/8-O-4-coupled dehydrotriferulic acids from maize bran. <i>Phytochemistry</i> , 2005 , 66, 363-71	4	85

266	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	3.7	83
265	Novel seed coat lignins in the Cactaceae: structure, distribution and implications for the evolution of lignin diversity. <i>Plant Journal</i> , 2013 , 73, 201-11	6.9	83
264	Phenolic profiling of caffeic acid O-methyltransferase-deficient poplar reveals novel benzodioxane oligolignols. <i>Plant Physiology</i> , 2004 , 136, 4023-36	6.6	81
263	An engineered monolignol 4-o-methyltransferase depresses lignin biosynthesis and confers novel metabolic capability in Arabidopsis. <i>Plant Cell</i> , 2012 , 24, 3135-52	11.6	80
262	Grass lignin acylation: p-coumaroyl transferase activity and cell wall characteristics of C3 and C4 grasses. <i>Planta</i> , 2009 , 229, 1253-67	4.7	78
261	Structural elucidation of new ferulic acid-containing phenolic dimers and trimers isolated from maize bran. <i>Tetrahedron Letters</i> , 2005 , 46, 5845-5850	2	78
260	The DFRC Method for Lignin Analysis. 6. A Simple Modification for Identifying Natural Acetates on Lignins. <i>Journal of Agricultural and Food Chemistry</i> , 1998 , 46, 4616-4619	5.7	78
259	Identification of lignin and polysaccharide modifications in Populus wood by chemometric analysis of 2D NMR spectra from dissolved cell walls. <i>Molecular Plant</i> , 2009 , 2, 933-42	14.4	77
258	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, 6218-23	11.5	74
257	Novel tetrahydrofuran structures derived from beta-beta-coupling reactions involving sinapyl acetate in Kenaf lignins. <i>Organic and Biomolecular Chemistry</i> , 2008 , 6, 3681-94	3.9	74
256	NMR characterization of lignins isolated from fruit and vegetable insoluble dietary fiber. <i>Journal of Agricultural and Food Chemistry</i> , 2006 , 54, 8352-61	5.7	74
255	Plant-derived antifungal agent poacic acid targets β ,3-glucan. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, E1490-7	11.5	73
254	Lignin Monomers from beyond the Canonical Monolignol Biosynthetic Pathway: Another Brick in the Wall. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 4997-5012	8.3	73
253	Breeding with rare defective alleles (BRDA): a natural Populus nigra HCT mutant with modified lignin as a case study. <i>New Phytologist</i> , 2013 , 198, 765-776	9.8	73
252	Lignification: are Lignins Biosynthesized via simple Combinatorial Chemistry or via Proteinaceous Control and Template Replication?36-66		71
251	Signatures of cinnamyl alcohol dehydrogenase deficiency in poplar lignins. <i>Phytochemistry</i> , 2004 , 65, 313-21	4	71
250	Cell wall hydroxycinnamates in wild rice (Zizania aquatica L.) insoluble dietary fibre. <i>European Food Research and Technology</i> , 2002 , 214, 482-488	3.4	71
249	Formation of ferulic acid dehydrodimers through oxidative cross-linking of sugar beet pectin. <i>Carbohydrate Research</i> , 1997 , 300, 179-181	2.9	70

248	Naturally p-Hydroxybenzoylated Lignins in Palms. <i>Bioenergy Research</i> , 2015 , 8, 934-952	3.1	69
247	An essential role of caffeoyl shikimate esterase in monolignol biosynthesis in <i>Medicago truncatula</i> . <i>Plant Journal</i> , 2016 , 86, 363-75	6.9	69
246	Preparation and relevance of a cross-coupling product between sinapyl alcohol and sinapyl p-hydroxybenzoate. <i>Organic and Biomolecular Chemistry</i> , 2004 , 2, 2888-90	3.9	68
245	Lignin-based barrier restricts pathogens to the infection site and confers resistance in plants. <i>EMBO Journal</i> , 2019 , 38, e101948	13	68
244	Identifying new lignin bioengineering targets: 1. Monolignol-substitute impacts on lignin formation and cell wall fermentability. <i>BMC Plant Biology</i> , 2010 , 10, 114	5.3	67
243	Preliminary evidence for sinapyl acetate as a lignin monomer in kenaf. <i>Chemical Communications</i> , 2002 , 90-1	5.8	67
242	Biochemical transformation of lignin for deriving valued commodities from lignocellulose. <i>Current Opinion in Biotechnology</i> , 2017 , 45, 120-126	11.4	66
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