

Monolignol Ferulate Transferase Introduces Chemically Backbone

Science

344, 90-93

DOI: [10.1126/science.1250161](https://doi.org/10.1126/science.1250161)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Tailoring lignin biosynthesis for efficient and sustainable biofuel production. <i>Plant Biotechnology Journal</i> , 2014, 12, 1154-1162.	4.1	21
2	Lignin triggers irreversible cellulase loss during pretreated lignocellulosic biomass saccharification. <i>Biotechnology for Biofuels</i> , 2014, 7, 175.	6.2	90
3	Plant biotechnology for lignocellulosic biofuel production. <i>Plant Biotechnology Journal</i> , 2014, 12, 1174-1192.	4.1	96
5	Herstellung von Grundchemikalien auf Basis nachwachsender Rohstoffe als Alternative zur Petrochemie?. <i>Chemie-Ingenieur-Technik</i> , 2014, 86, 2115-2134.	0.4	18
6	Development of a Clickable Designer Monolignol for Interrogation of Lignification in Plant Cell Walls. <i>Bioconjugate Chemistry</i> , 2014, 25, 2189-2196.	1.8	33
7	Re-constructing our models of cellulose and primary cell wall assembly. <i>Current Opinion in Plant Biology</i> , 2014, 22, 122-131.	3.5	362
8	Key Applications of Plant Metabolic Engineering. <i>PLoS Biology</i> , 2014, 12, e1001879.	2.6	39
9	Bioethanol from poplar: a commercially viable alternative to fossil fuel in the European Union. <i>Biotechnology for Biofuels</i> , 2014, 7, 113.	6.2	30
10	Modifying plants for biofuel and biomaterial production. <i>Plant Biotechnology Journal</i> , 2014, 12, 1246-1258.	4.1	82
11	Lignin Valorization: Improving Lignin Processing in the Biorefinery. <i>Science</i> , 2014, 344, 1246843.	6.0	2,994
12	A click chemistry strategy for visualization of plant cell wall lignification. <i>Chemical Communications</i> , 2014, 50, 12262-12265.	2.2	39
13	Impact of the Brown-Midrib <i>bm5</i> Mutation on Maize Lignins. <i>Journal of Agricultural and Food Chemistry</i> , 2014, 62, 5102-5107.	2.4	37
16	The DOE Bioenergy Research Centers: History, Operations, and Scientific Output. <i>Bioenergy Research</i> , 2015, 8, 881-896.	2.2	8
17	Production of Basic Chemicals on the Basis of Renewable Resources as an Alternative to Petrochemistry?. <i>ChemBioEng Reviews</i> , 2015, 2, 315-334.	2.6	10
18	Building Cognition: The Construction of Computational Representations for Scientific Discovery. <i>Cognitive Science</i> , 2015, 39, 1727-1763.	0.8	54
19	Lignin Refinery: Towards the Preparation of Renewable Aromatic Building Blocks. <i>ChemBioEng Reviews</i> , 2015, 2, 377-392.	2.6	62
20	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
21	Engineering of plant cell walls for enhanced biofuel production. <i>Current Opinion in Plant Biology</i> , 2015, 25, 151-161.	3.5	174

#	ARTICLE	IF	CITATIONS
22	Cell-wall properties contributing to improved deconstruction by alkaline pre-treatment and enzymatic hydrolysis in diverse maize (<i>Zea mays</i> L.) lines. <i>Journal of Experimental Botany</i> , 2015, 66, 4305-4315.	2.4	28
23	Recent developments in polymers derived from industrial lignin. <i>Journal of Applied Polymer Science</i> , 2015, 132, .	1.3	137
24	A metabolomic assessment of NAC154 transcription factor overexpression in field grown poplar stem wood. <i>Phytochemistry</i> , 2015, 115, 112-120.	1.4	12
25	Bio-inspired functional wood-based materials " hybrids and replicates. <i>International Materials Reviews</i> , 2015, 60, 431-450.	9.4	98
26	Enhancing cellulose utilization for fuels and chemicals by genetic modification of plant cell wall architecture. <i>Current Opinion in Biotechnology</i> , 2015, 32, 104-112.	3.3	54
27	Introduction of chemically labile substructures into <i>Arabidopsis</i> lignin through the use of LigD, the Cl ⁻ â€dehydrogenase from <i>Sphingobium</i> sp. strain <i>scp</i> SYK. <i>Plant Biotechnology Journal</i> , 2015, 13, 821-832.	4.1	45
28	Expression of a bacterial 3â€dehydroshikimate dehydratase reduces lignin content and improves biomass saccharification efficiency. <i>Plant Biotechnology Journal</i> , 2015, 13, 1241-1250.	4.1	90
29	UVâ€Absorbent Ligninâ€Based Multiâ€Arm Star Thermoplastic Elastomers. <i>Macromolecular Rapid Communications</i> , 2015, 36, 398-404.	2.0	96
30	Using <i>Populus</i> as a lignocellulosic feedstock for bioethanol. <i>Biotechnology Journal</i> , 2015, 10, 510-524.	1.8	52
31	Forest genomics research and development in Canada: Priorities for developing an economic framework. <i>Forestry Chronicle</i> , 2015, 91, 60-70.	0.5	15
32	Biomimetic composite materials inspired by wood. , 2015, , 357-394.		5
33	Imaging with the fluorogenic dye Basic Fuchsin reveals subcellular patterning and ecotype variation of lignification in <i>Brachypodium distachyon</i> . <i>Journal of Experimental Botany</i> , 2015, 66, 4295-4304.	2.4	43
34	Cell Wall Engineering by Heterologous Expression of Cell Wall-Degrading Enzymes for Better Conversion of Lignocellulosic Biomass into Biofuels. <i>Bioenergy Research</i> , 2015, 8, 1574-1588.	2.2	14
35	Biomass recalcitrance: a multi-scale, multi-factor, and conversion-specific property: Fig. 1.. <i>Journal of Experimental Botany</i> , 2015, 66, 4109-4118.	2.4	197
36	The cell biology of lignification in higher plants. <i>Annals of Botany</i> , 2015, 115, 1053-1074.	1.4	505
37	Naturally p-Hydroxybenzoylated Lignins in Palms. <i>Bioenergy Research</i> , 2015, 8, 934-952.	2.2	99
38	Conversion of plant materials into hydroxymethylfurfural using ionic liquids. <i>Environmental Chemistry Letters</i> , 2015, 13, 173-190.	8.3	29
39	Incorporation of Flavonoid Derivatives or Pentagalloyl Glucose into Lignin Enhances Cell Wall Saccharification Following Mild Alkaline or Acidic Pretreatments. <i>Bioenergy Research</i> , 2015, 8, 1391-1400.	2.2	8

#	ARTICLE	IF	CITATIONS
40	Engineering monolignol p-coumarate conjugates into Poplar and Arabidopsis lignins. <i>Plant Physiology</i> , 2015, 169, pp.00815.2015.	2.3	47
41	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
42	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
43	Genetic manipulation of lignocellulosic biomass for bioenergy. <i>Current Opinion in Chemical Biology</i> , 2015, 29, 32-39.	2.8	57
44	Lignification: different mechanisms for a versatile polymer. <i>Current Opinion in Plant Biology</i> , 2015, 23, 83-90.	3.5	86
45	Metabolic engineering to enhance the value of plants as green factories. <i>Metabolic Engineering</i> , 2015, 27, 83-91.	3.6	65
46	Secondary Cell Walls: Biosynthesis, Patterned Deposition and Transcriptional Regulation. <i>Plant and Cell Physiology</i> , 2015, 56, 195-214.	1.5	360
47	Designer Plants for Biofuels: A Review. <i>Current Metabolomics</i> , 2016, 4, 49-55.	0.5	10
48	Plant-based biofuels. <i>F1000Research</i> , 2016, 5, 185.	0.8	40
49	Current Understanding of the Correlation of Lignin Structure with Biomass Recalcitrance. <i>Frontiers in Chemistry</i> , 2016, 4, 45.	1.8	279
50	Creating Completely Both Male and Female Sterile Plants by Specifically Ablating Microspore and Megaspore Mother Cells. <i>Frontiers in Plant Science</i> , 2016, 7, 30.	1.7	27
51	BdCESA7, BdCESA8, and BdPMT Utility Promoter Constructs for Targeted Expression to Secondary Cell-Wall-Forming Cells of Grasses. <i>Frontiers in Plant Science</i> , 2016, 7, 55.	1.7	10
52	Wege zur Verwertung von Lignin: Fortschritte in der Biotechnik, der Bioraffination und der Katalyse. <i>Angewandte Chemie</i> , 2016, 128, 8296-8354.	1.6	159
53	Paving the Way for Lignin Valorisation: Recent Advances in Bioengineering, Biorefining and Catalysis. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 8164-8215.	7.2	1,576
54	Enhancing digestibility and ethanol yield of Populus wood via expression of an engineered monolignol 4-O-methyltransferase. <i>Nature Communications</i> , 2016, 7, 11989.	5.8	61
55	Radical Nature of C-Lignin. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 5327-5335.	3.2	52
56	Knockdown of a laccase in <i>Populus deltoides</i> confers altered cell wall chemistry and increased sugar release. <i>Plant Biotechnology Journal</i> , 2016, 14, 2010-2020.	4.1	64
57	New developments in engineering plant metabolic pathways. <i>Current Opinion in Biotechnology</i> , 2016, 42, 126-132.	3.3	83

#	ARTICLE	IF	CITATIONS
58	Lignification: Flexibility, Biosynthesis and Regulation. Trends in Plant Science, 2016, 21, 713-721.	4.3	177
59	Lignocellulosic biomass: Biosynthesis, degradation, and industrial utilization. Engineering in Life Sciences, 2016, 16, 1-16.	2.0	171
60	Progress toward Lignin Valorization via Selective Catalytic Technologies and the Tailoring of Biosynthetic Pathways. ACS Sustainable Chemistry and Engineering, 2016, 4, 5123-5135.	3.2	79
61	Exploiting members of the BAHD acyltransferase family to synthesize multiple hydroxycinnamate and benzoate conjugates in yeast. Microbial Cell Factories, 2016, 15, 198.	1.9	32
63	Bioenergy Trees: Genetic and Genomic Strategies to Improve Yield. , 2016, , 167-190.		4
64	Engineering genomes for biofuels. , 2016, , 569-597.		0
65	Decoding how a soil bacterium extracts building blocks and metabolic energy from ligninolysis provides road map for lignin valorization. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E5802-E5811.	3.3	76
66	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
67	Dynamics of biomass partitioning, stem gene expression, cell wall biosynthesis, and sucrose accumulation during development of <i>Sorghum bicolor</i> . Plant Journal, 2016, 88, 662-680.	2.8	75
68	Monolignol ferulate conjugates are naturally incorporated into plant lignins. Science Advances, 2016, 2, e1600393.	4.7	147
69	Building the wall: recent advances in understanding lignin metabolism in grasses. Acta Physiologiae Plantarum, 2016, 38, 1.	1.0	29
70	Improving biomass production and saccharification in <i>Brachypodium distachyon</i> through overexpression of a sucrose-phosphate synthase from sugarcane. Journal of Plant Biochemistry and Biotechnology, 2016, 25, 311-318.	0.9	8
71	Genetic modification of plant cell walls to enhance biomass yield and biofuel production in bioenergy crops. Biotechnology Advances, 2016, 34, 997-1017.	6.0	175
72	Impact of engineered lignin composition on biomass recalcitrance and ionic liquid pretreatment efficiency. Green Chemistry, 2016, 18, 4884-4895.	4.6	64
73	A Stochastic Method to Generate Libraries of Structural Representations of Lignin. Energy & Fuels, 2016, 30, 5835-5845.	2.5	40
74	Suberin as an Extra Barrier to Grass Digestibility: a Closer Look to Sugarcane Forage. Tropical Plant Biology, 2016, 9, 96-108.	1.0	4
75	Designer lignins: harnessing the plasticity of lignification. Current Opinion in Biotechnology, 2016, 37, 190-200.	3.3	333
76	Secondary cell walls: biosynthesis and manipulation. Journal of Experimental Botany, 2016, 67, 515-531.	2.4	216

#	ARTICLE	IF	CITATIONS
77	Molecular Breeding for Improved Second Generation Bioenergy Crops. Trends in Plant Science, 2016, 21, 43-54.	4.3	78
78	Unlocking the potential of lignocellulosic biomass through plant science. New Phytologist, 2016, 209, 1366-1381.	3.5	177
79	Structural Redesigning Arabidopsis Lignins into Alkali-Soluble Lignins through the Expression of <i>p-coumaroyl-CoA:Monolignol Transferase</i> PMT. Plant Physiology, 2016, 170, 1358-1366.	2.3	89
80	The 124202 candidate effector of <i>Melampsora larici-populina</i> interacts with membranes in <i>Nicotiana</i> and <i>Arabidopsis</i> . Canadian Journal of Plant Pathology, 2016, 38, 197-208.	0.8	12
81	Opportunities and challenges in biological lignin valorization. Current Opinion in Biotechnology, 2016, 42, 40-53.	3.3	517
82	<i>Oscp</i> CESA9 conserved site mutation leads to largely enhanced plant lodging resistance and biomass enzymatic saccharification by reducing cellulose <i>DP</i> and crystallinity in rice. Plant Biotechnology Journal, 2017, 15, 1093-1104.	4.1	143
83	Advances of Basic Science for Second Generation Bioethanol from Sugarcane. , 2017, , .		7
84	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
85	Defining the Diverse Cell Populations Contributing to Lignification in <i>Arabidopsis</i> Stems. Plant Physiology, 2017, 174, 1028-1036.	2.3	45
86	Microbial treatment of industrial lignin: Successes, problems and challenges. Renewable and Sustainable Energy Reviews, 2017, 77, 1179-1205.	8.2	85
87	The <i>Arabidopsis</i> NST3/SND1 promoter is active in secondary woody tissue in poplar. Journal of Wood Science, 2017, 63, 396-400.	0.9	5
88	Lignin-first biomass fractionation: the advent of active stabilisation strategies. Energy and Environmental Science, 2017, 10, 1551-1557.	15.6	503
89	Production of Ethanol from Lignocellulosic Biomass. Biofuels and Biorefineries, 2017, , 375-410.	0.5	20
90	Hydroxystilbenes Are Monomers in Palm Fruit Endocarp Lignins. Plant Physiology, 2017, 174, 2072-2082.	2.3	90
91	Production of Platform Chemicals from Sustainable Resources. Biofuels and Biorefineries, 2017, , .	0.5	30
92	Screening of rice mutants with improved saccharification efficiency results in the identification of CONSTITUTIVE PHOTOMORPHOGENIC 1 and GOLD HULL AND INTERNODE 1. Planta, 2017, 246, 61-74.	1.6	5
93	Biochemical transformation of lignin for deriving valued commodities from lignocellulose. Current Opinion in Biotechnology, 2017, 45, 120-126.	3.3	95
94	Phenolic Compounds in Plants: Implications for Bioenergy. , 2017, , 39-52.		2

#	ARTICLE	IF	CITATIONS
95	Silencing <i>CHALCONE SYNTHASE</i> in Maize Impedes the Incorporation of Tricin into Lignin and Increases Lignin Content. <i>Plant Physiology</i> , 2017, 173, 998-1016.	2.3	84
96	Genetics and Genomics of <i>Setaria</i> . <i>Plant Genetics and Genomics: Crops and Models</i> , 2017, , .	0.3	18
97	Regulation of secondary cell wall biosynthesis by a <i>NAC</i> transcription factor from <i>Miscanthus</i> . <i>Plant Direct</i> , 2017, 1, e00024.	0.8	19
98	Different Routes for Conifer- and Sinapaldehyde and Higher Saccharification upon Deficiency in the Dehydrogenase <i>CAD1</i> . <i>Plant Physiology</i> , 2017, 175, 1018-1039.	2.3	99
99	Silencing <i>CAFFEOYL SHIKIMATE ESTERASE</i> Affects Lignification and Improves Saccharification in Poplar. <i>Plant Physiology</i> , 2017, 175, 1040-1057.	2.3	90
100	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
101	Chemical Pulping Advantages of <i>Zip</i> Lignin Hybrid Poplar. <i>ChemSusChem</i> , 2017, 10, 3565-3573.	3.6	45
102	Characterization and analysis of <i>CCR</i> and <i>CAD</i> gene families at the whole-genome level for lignin synthesis of stone cells in pear (<i>Pyrus bretschneideri</i>) fruit. <i>Biology Open</i> , 2017, 6, 1602-1613.	0.6	71
103	A collection of genetically engineered <i>Populus</i> trees reveals wood biomass traits that predict glucose yield from enzymatic hydrolysis. <i>Scientific Reports</i> , 2017, 7, 15798.	1.6	35
104	Genetic engineering of <i>Arabidopsis</i> to overproduce disinapoyl esters, potential lignin modification molecules. <i>Biotechnology for Biofuels</i> , 2017, 10, 40.	6.2	16
105	Impact of lignin polymer backbone esters on ionic liquid pretreatment of poplar. <i>Biotechnology for Biofuels</i> , 2017, 10, 101.	6.2	48
106	Suppression of <i>CINNAMOYL-CoA REDUCTASE</i> increases the level of monolignol ferulates incorporated into maize lignins. <i>Biotechnology for Biofuels</i> , 2017, 10, 109.	6.2	32
107	Yes, we can make money out of lignin and other bio-based resources. <i>Industrial Crops and Products</i> , 2017, 106, 74-85.	2.5	109
108	Engineering biosynthesis of high-value compounds in photosynthetic organisms. <i>Critical Reviews in Biotechnology</i> , 2017, 37, 779-802.	5.1	15
110	Mutant Transcriptome Sequencing Provides Insights into Pod Development in Peanut (<i>Arachis</i>) <i>Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 18</i>	1.7	23
111	Identification of developmental stage and anatomical fraction contributions to cell wall recalcitrance in switchgrass. <i>Biotechnology for Biofuels</i> , 2017, 10, 184.	6.2	28
112	Photocatalytic conversion of biomass into valuable products: a meaningful approach?. <i>Green Chemistry</i> , 2018, 20, 1169-1192.	4.6	181
113	Structural Characterization of Lignin from Maize (<i>Zea mays</i> L.) Fibers: Evidence for Diferuloylputrescine Incorporated into the Lignin Polymer in Maize Kernels. <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 4402-4413.	2.4	38

#	ARTICLE	IF	CITATIONS
114	Dried cell wall nanopore configuration of Douglas-fir, western red cedar and aspen heartwoods. <i>Wood Science and Technology</i> , 2018, 52, 1025-1037.	1.4	17
115	Plant cell wall sugars: sweeteners for a bio-based economy. <i>Physiologia Plantarum</i> , 2018, 164, 27-44.	2.6	14
116	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
117	Lignin modification in planta for valorization. <i>Phytochemistry Reviews</i> , 2018, 17, 1305-1327.	3.1	67
118	Chemicals from lignin: an interplay of lignocellulose fractionation, depolymerisation, and upgrading. <i>Chemical Society Reviews</i> , 2018, 47, 852-908.	18.7	1,708
119	Field evaluation of transgenic poplars expressing the constitutively active small G protein for improved biomass traits. <i>Biomass and Bioenergy</i> , 2018, 109, 16-22.	2.9	3
120	Reductive Cleavage Method for Quantitation of Monolignols and Low-Abundance Monolignol Conjugates. <i>ChemSusChem</i> , 2018, 11, 1600-1605.	3.6	45
121	Understanding Lignin Fractionation and Characterization from Engineered Switchgrass Treated by an Aqueous Ionic Liquid. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 6612-6623.	3.2	56
122	Biotechnology for bioenergy dedicated trees: meeting future energy demands. <i>Zeitschrift Fur Naturforschung - Section C Journal of Biosciences</i> , 2018, 73, 15-32.	0.6	10
123	Is embolism resistance in plant xylem associated with quantity and characteristics of lignin?. <i>Trees - Structure and Function</i> , 2018, 32, 349-358.	0.9	58
124	Lignocellulosic biorefinery as a model for sustainable development of biofuels and value added products. <i>Bioresource Technology</i> , 2018, 247, 1144-1154.	4.8	346
125	Vessel-Specific Reintroduction of CINNAMOYL-COA REDUCTASE1 (CCR1) in Dwarfed <i>ccr1</i> Mutants Restores Vessel and Xylary Fiber Integrity and Increases Biomass. <i>Plant Physiology</i> , 2018, 176, 611-633.	2.3	76
126	Overexpression and cosuppression of xylem-related genes in an early xylem differentiation stage-specific manner by the AtTED4 promoter. <i>Plant Biotechnology Journal</i> , 2018, 16, 451-458.	4.1	11
128	Current Approaches and Key Applications of Plant Metabolic Engineering. , 2018, , 47-61.		1
129	Complete substitution of a secondary cell wall with a primary cell wall in Arabidopsis. <i>Nature Plants</i> , 2018, 4, 777-783.	4.7	63
130	Heat-Shock-Induced Removal of Transgenes Using the Gene-Deletor System in Hybrid Aspen (Populus) Tj ETQq1 1 Q.784314 rgBT /Over	1.0	
131	Stacking of a low-lignin trait with an increased guaiacyl and 5-hydroxyguaiacyl unit trait leads to additive and synergistic effects on saccharification efficiency in Arabidopsis thaliana. <i>Biotechnology for Biofuels</i> , 2018, 11, 257.	6.2	14
132	Overexpression of OsPIL1 enhanced biomass yield and saccharification efficiency in switchgrass. <i>Plant Science</i> , 2018, 276, 143-151.	1.7	11

#	ARTICLE	IF	CITATIONS
133	Genetic engineering of trees: progress and new horizons. <i>In Vitro Cellular and Developmental Biology - Plant</i> , 2018, 54, 341-376.	0.9	47
134	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
135	A Transcriptomic Analysis of Xylan Mutants Does Not Support the Existence of a Secondary Cell Wall Integrity System in Arabidopsis. <i>Frontiers in Plant Science</i> , 2018, 9, 384.	1.7	26
136	Functional Analysis of Cellulose Synthase CesA4 and CesA6 Genes in Switchgrass (<i>Panicum virgatum</i>) by Overexpression and RNAi-Mediated Gene Silencing. <i>Frontiers in Plant Science</i> , 2018, 9, 1114.	1.7	34
137	Effects of Different Pollens on Primary Metabolism and Lignin Biosynthesis in Pear. <i>International Journal of Molecular Sciences</i> , 2018, 19, 2273.	1.8	20
138	Genetic Engineering of Energy Crops to Reduce Recalcitrance and Enhance Biomass Digestibility. <i>Agriculture (Switzerland)</i> , 2018, 8, 76.	1.4	17
139	Facilitated delignification in CAD deficient transgenic poplar studied by confocal Raman spectroscopy imaging. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 206, 177-184.	2.0	11
140	Raw plant-based biorefinery: A new paradigm shift towards biotechnological approach to sustainable manufacturing of HMF. <i>Biotechnology Advances</i> , 2019, 37, 107422.	6.0	35
141	Biocatalysis in ionic liquids for lignin valorization: Opportunities and recent developments. <i>Biotechnology Advances</i> , 2019, 37, 107418.	6.0	36
142	A review on biopolymer production via lignin valorization. <i>Bioresource Technology</i> , 2019, 290, 121790.	4.8	180
143	Lignin Engineering in Forest Trees. <i>Frontiers in Plant Science</i> , 2019, 10, 912.	1.7	92
144	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
145	Integration of renewable deep eutectic solvents with engineered biomass to achieve a closed-loop biorefinery. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 13816-13824.	3.3	68
146	Modification of Lignoboost Kraft Lignin from softwoods with dihydroxybenzenes. <i>Reactive and Functional Polymers</i> , 2019, 142, 112-118.	2.0	11
147	The Pear Genome. <i>Compendium of Plant Genomes</i> , 2019, , .	0.3	5
148	Stone Cell Development in Pear. <i>Compendium of Plant Genomes</i> , 2019, , 201-225.	0.3	5
149	Introducing curcumin biosynthesis in Arabidopsis enhances lignocellulosic biomass processing. <i>Nature Plants</i> , 2019, 5, 225-237.	4.7	50
150	Carboxylation of Hydroxyaromatic Compounds with HCO ₃ ²⁻ by Enzyme Catalysis: Recent Advances Open the Perspective for Valorization of Lignin-Derived Aromatics. <i>Catalysts</i> , 2019, 9, 37.	1.6	18

#	ARTICLE	IF	CITATIONS
151	Multiple levers for overcoming the recalcitrance of lignocellulosic biomass. <i>Biotechnology for Biofuels</i> , 2019, 12, 15.	6.2	47
152	Imaging Changes in Cell Walls of Engineered Poplar by Stimulated Raman Scattering and Atomic Force Microscopy. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 10616-10622.	3.2	8
153	Systems and Synthetic Biology of Forest Trees: A Bioengineering Paradigm for Woody Biomass Feedstocks. <i>Frontiers in Plant Science</i> , 2019, 10, 775.	1.7	17
154	Genetic Modification of Biomass to Alter Lignin Content and Structure. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 16190-16203.	1.8	23
155	Biomass-derived aviation fuels: Challenges and perspective. <i>Progress in Energy and Combustion Science</i> , 2019, 74, 31-49.	15.8	166
156	Exploring the Treasure of Plant Molecules With Integrated Biorefineries. <i>Frontiers in Plant Science</i> , 2019, 10, 478.	1.7	7
157	Hydroxystilbene Glucosides Are Incorporated into Norway Spruce Bark Lignin. <i>Plant Physiology</i> , 2019, 180, 1310-1321.	2.3	43
158	Approaches for More Efficient Biological Conversion of Lignocellulosic Feedstocks to Biofuels and Bioproducts. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 9062-9079.	3.2	89
159	Desirable plant cell wall traits for higher-quality miscanthus lignocellulosic biomass. <i>Biotechnology for Biofuels</i> , 2019, 12, 85.	6.2	29
160	Lignin biosynthesis and its integration into metabolism. <i>Current Opinion in Biotechnology</i> , 2019, 56, 230-239.	3.3	440
161	Lignin structure and its engineering. <i>Current Opinion in Biotechnology</i> , 2019, 56, 240-249.	3.3	533
162	Metabolic Engineering and Genetic Manipulation of Novel Biomass Species for Biofuel Production. , 2019, , 13-34.		3
163	Cell culture systems: invaluable tools to investigate lignin formation and cell wall properties. <i>Current Opinion in Biotechnology</i> , 2019, 56, 215-222.	3.3	49
164	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
165	Deposition of lignin in four species of <i>Saccharum</i> . <i>Scientific Reports</i> , 2019, 9, 5877.	1.6	41
166	The potential of biotechnology for mitigation of greenhouse gasses effects: solutions, challenges, and future perspectives. <i>Arabian Journal of Geosciences</i> , 2019, 12, 1.	0.6	7
167	Pretreatment for biorefineries: a review of common methods for efficient utilisation of lignocellulosic materials. <i>Biotechnology for Biofuels</i> , 2019, 12, 294.	6.2	282
168	Expression of <i>Eucalyptus globulus</i> LACCASE48 Restores Lignin Content of <i>Arabidopsis thaliana</i> lac17 Mutant. <i>Plant Molecular Biology Reporter</i> , 2019, 37, 488-498.	1.0	1

#	ARTICLE	IF	CITATIONS
169	Lignin biosynthesis: old roads revisited and new roads explored. <i>Open Biology</i> , 2019, 9, 190215.	1.5	136
170	Tailor-made trees: engineering lignin for ease of processing and tomorrow's bioeconomy. <i>Current Opinion in Biotechnology</i> , 2019, 56, 147-155.	3.3	44
171	Lignin-Enzyme Interactions in the Hydrolysis of Lignocellulosic Biomass. <i>Trends in Biotechnology</i> , 2019, 37, 518-531.	4.9	183
172	Harnessing lignin evolution for biotechnological applications. <i>Current Opinion in Biotechnology</i> , 2019, 56, 105-111.	3.3	71
173	Wood-lignin: Supply, extraction processes and use as bio-based material. <i>European Polymer Journal</i> , 2019, 112, 228-240.	2.6	216
174	Reductive catalytic fractionation: state of the art of the lignin-first biorefinery. <i>Current Opinion in Biotechnology</i> , 2019, 56, 193-201.	3.3	264
175	The transport of monomers during lignification in plants: anything goes but how?. <i>Current Opinion in Biotechnology</i> , 2019, 56, 69-74.	3.3	66
176	Secondary cell wall biosynthesis. <i>New Phytologist</i> , 2019, 221, 1703-1723.	3.5	185
177	Polyploidy Affects Plant Growth and Alters Cell Wall Composition. <i>Plant Physiology</i> , 2019, 179, 74-87.	2.3	134
178	Plant synthetic biology could drive a revolution in biofuels and medicine. <i>Experimental Biology and Medicine</i> , 2019, 244, 323-331.	1.1	41
179	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
181	Genome-wide characterization of the laccase gene family in <i>Setaria viridis</i> reveals members potentially involved in lignification. <i>Planta</i> , 2020, 251, 46.	1.6	46
182	Deep Eutectic Solvent Pretreatment of Transgenic Biomass With Increased C6C1 Lignin Monomers. <i>Frontiers in Plant Science</i> , 2019, 10, 1774.	1.7	8
183	Fibre-specific regulation of lignin biosynthesis improves biomass quality in <i>Populus</i> . <i>New Phytologist</i> , 2020, 226, 1074-1087.	3.5	43
185	A Robust Method to Quantify Cell Wall Bound Phenolics in Plant Suspension Culture Cells Using Pyrolysis-Gas Chromatography/Mass Spectrometry. <i>Frontiers in Plant Science</i> , 2020, 11, 574016.	1.7	3
186	The fractionation of woody biomass under mild conditions using bifunctional phenol-4-sulfonic acid as a catalyst and lignin solvent. <i>Green Chemistry</i> , 2020, 22, 5414-5422.	4.6	33
187	Production of <i>p</i> -Coumaric Acid from Corn GVL-Lignin. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 17427-17438.	3.2	41
188	Emerging Strategies for Modifying Lignin Chemistry to Enhance Biological Lignin Valorization. <i>ChemSusChem</i> , 2020, 13, 5423-5432.	3.6	28

#	ARTICLE	IF	CITATIONS
189	Wood Derived Cellulose Scaffoldsâ€™ Processing and Mechanics. <i>Advanced Materials</i> , 2021, 33, e2001375.	11.1	52
190	Tricin and tricinâ€™lignins in <i>Medicago</i> versus in monocots. <i>New Phytologist</i> , 2020, 228, 11-14.	3.5	8
191	Biotechnology for Biofuel Production. <i>Progress in Botany Fortschritte Der Botanik</i> , 2020, , 383-403.	0.1	0
192	Improved analysis of arabinoxylan-bound hydroxycinnamate conjugates in grass cell walls. <i>Biotechnology for Biofuels</i> , 2020, 13, 202.	6.2	14
193	Ammonia Fiber Expansion (AFEX) Pretreatment of Lignocellulosic Biomass. <i>Journal of Visualized Experiments</i> , 2020, , .	0.2	23
194	Pearprocess: A new phenotypic tool for stone cell trait evaluation in pear fruit. <i>Journal of Integrative Agriculture</i> , 2020, 19, 1625-1634.	1.7	10
195	Transgenic Poplar Designed for Biofuels. <i>Trends in Plant Science</i> , 2020, 25, 881-896.	4.3	45
196	Identification of enzymatic genes with the potential to reduce biomass recalcitrance through lignin manipulation in <i>Arabidopsis</i> . <i>Biotechnology for Biofuels</i> , 2020, 13, 97.	6.2	19
197	Present status and future prospect of genetic and metabolic engineering for biofuels production from lignocellulosic biomass. , 2020, , 171-192.		1
198	Silencing Folylpolyglutamate Synthetase1 (FPGS1) in Switchgrass (<i>Panicum virgatum</i> L.) Improves Lignocellulosic Biofuel Production. <i>Frontiers in Plant Science</i> , 2020, 11, 843.	1.7	6
199	Lignin Source and Structural Characterization. <i>ChemSusChem</i> , 2020, 13, 4385-4393.	3.6	150
200	Preparation of low carbon impact lignin nanoparticles with controllable size by using different strategies for particles recovery. <i>Industrial Crops and Products</i> , 2020, 147, 112243.	2.5	35
201	Expression of the <i>Trichoderma reesei</i> expansin-like protein, swollenin, in poplar results in biomass with improved sugar release by enzymatic hydrolysis. <i>Biomass and Bioenergy</i> , 2020, 134, 105473.	2.9	5
202	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
203	Phenolic cross-links: building and de-constructing the plant cell wall. <i>Natural Product Reports</i> , 2020, 37, 919-961.	5.2	111
204	Eco-CaMnOx: A Greener Generation of Eco-catalysts for Eco-friendly Oxidation Processes. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 4044-4057.	3.2	12
205	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
206	Engineering hydroxyprolineâ€™O â€™glycosylated biopolymers to reconstruct the plant cell wall for improved biomass processability. <i>Biotechnology and Bioengineering</i> , 2020, 117, 945-958.	1.7	3

#	ARTICLE	IF	CITATIONS
207	Mesoscale Reactionâ€“Diffusion Phenomena Governing Ligninâ€“First Biomass Fractionation. ChemSusChem, 2020, 13, 4495-4509.	3.6	35
208	Grass secondary cell walls, <i>Brachypodium distachyon</i> as a model for discovery. New Phytologist, 2020, 227, 1649-1667.	3.5	40
209	Solid-State NMR Studies of Solvent-Mediated, Acid-Catalyzed Woody Biomass Pretreatment for Enzymatic Conversion of Residual Cellulose. ACS Sustainable Chemistry and Engineering, 2020, 8, 6551-6563.	3.2	10
210	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
211	Contribution of phenylpropanoid metabolism to plant development and plantâ€“environment interactions. Journal of Integrative Plant Biology, 2021, 63, 180-209.	4.1	509
212	Suppression of a BAHD acyltransferase decreases <i>p</i> -coumaroyl on arabinoxylan and improves biomass digestibility in the model grass <i>Setaria viridis</i> . Plant Journal, 2021, 105, 136-150.	2.8	27

213

#	ARTICLE	IF	CITATIONS
225	Comparative transcriptome profiling provides insights into endocarp lignification of walnut (<i>Juglans</i>) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.7	7
226	Improved chemical pulping and saccharification of a natural mulberry mutant deficient in cinnamyl alcohol dehydrogenase. <i>Holzforchung</i> , 2021, .	0.9	3
227	Opportunities and barriers for biofuel and bioenergy production from poplar. <i>GCB Bioenergy</i> , 2021, 13, 905-913.	2.5	10
228	Stacking AsFMT overexpression with BdPMT loss of function enhances monolignol ferulate production in <i>Brachypodium distachyon</i> . <i>Plant Biotechnology Journal</i> , 2021, 19, 1878-1886.	4.1	5
229	FTIR Screening to Elucidate Compositional Differences in Maize Recombinant Inbred Lines with Contrasting Saccharification Efficiency Yields. <i>Agronomy</i> , 2021, 11, 1130.	1.3	10
230	Genetic Engineering of Lignin Biosynthesis in Trees: Compromise between Wood Properties and Plant Viability. <i>Russian Journal of Plant Physiology</i> , 2021, 68, 596-612.	0.5	10
232	CRISPR-Cas9 editing of CAFFEYOYL SHIKIMATE ESTERASE 1 and 2 shows their importance and partial redundancy in lignification in <i>Populus tremula</i> – <i>P. alba</i> . <i>Plant Biotechnology Journal</i> , 2021, 19, 2221-2234.	4.1	29
233	Monolignol acyltransferase for lignin p-hydroxybenzoylation in <i>Populus</i> . <i>Nature Plants</i> , 2021, 7, 1288-1300.	4.7	30
234	Tailoring renewable materials via plant biotechnology. <i>Biotechnology for Biofuels</i> , 2021, 14, 167.	6.2	25
235	A gene-editing/complementation strategy for tissue-specific lignin reduction while preserving biomass yield. <i>Biotechnology for Biofuels</i> , 2021, 14, 175.	6.2	12
236	CRISPR-Knockout of CSE Gene Improves Saccharification Efficiency by Reducing Lignin Content in Hybrid Poplar. <i>International Journal of Molecular Sciences</i> , 2021, 22, 9750.	1.8	26
237	Catalytic Hydrogenolysis of Lignin: The Influence of Minor Units and Saccharides. <i>ChemSusChem</i> , 2021, 14, 5186-5198.	3.6	9
238	Analysis of transcriptome profiles of two <i>Pyrus pyrifolia</i> cultivars reveals genes associated with stone cell development. <i>Scientia Horticulturae</i> , 2021, 288, 110380.	1.7	1
239	Effect of dewaxing on saccharification and ethanol production from different lignocellulosic biomass. <i>Bioresource Technology</i> , 2021, 339, 125596.	4.8	23
240	Fractionation, Characterization, and Valorization of Lignin Derived from Engineered Plants. , 2021, , 245-288.		0
243	Structure and Characteristics of Lignin. <i>Springer Series on Polymer and Composite Materials</i> , 2020, , 17-75.	0.5	10
244	Economic and Environmental Aspects of Biofuels. <i>Green Energy and Technology</i> , 2016, , 525-555.	0.4	4
245	Recent advances and future directions in plant and yeast engineering to improve lignocellulosic biofuel production. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 134, 110390.	8.2	41

#	ARTICLE	IF	CITATIONS
246	Cell wall remodeling under salt stress: Insights into changes in polysaccharides, feruloylation, lignification, and phenolic metabolism in maize. <i>Plant, Cell and Environment</i> , 2020, 43, 2172-2191.	2.8	79
247	A Versatile Click-Compatible Monolignol Probe to Study Lignin Deposition in Plant Cell Walls. <i>PLoS ONE</i> , 2015, 10, e0121334.	1.1	19
248	Recent Land Use Change to Agriculture in the U.S. Lake States: Impacts on Cellulosic Biomass Potential and Natural Lands. <i>PLoS ONE</i> , 2016, 11, e0148566.	1.1	19
249	In Planta Cell Wall Engineering: From Mutants to Artificial Cell Walls. <i>Plant and Cell Physiology</i> , 2021, 62, 1813-1827.	1.5	7
250	Exogenous chalcone synthase expression in developing poplar xylem incorporates naringenin into lignins. <i>Plant Physiology</i> , 2022, 188, 984-996.	2.3	14
251	Enzyme Complexes of Ptr4CL and PtrHCT Modulate Co-enzyme A Ligation of Hydroxycinnamic Acids for Monolignol Biosynthesis in <i>Populus trichocarpa</i> . <i>Frontiers in Plant Science</i> , 2021, 12, 727932.	1.7	5
252	Progress and challenges in sorghum biotechnology, a multipurpose feedstock for the bioeconomy. <i>Journal of Experimental Botany</i> , 2022, 73, 646-664.	2.4	21
253	Regulation of Lignin Biosynthesis Through RNAi in Aid of Biofuel Production. , 2015, , 185-201.		0
254	Cell Wall Development in an Elongating Internode of <i>Setaria</i> . <i>Plant Genetics and Genomics: Crops and Models</i> , 2017, , 211-238.	0.3	0
258	Expression of Cell Wall-Modifying Enzymes in Aspen for Improved Lignocellulose Processing. <i>Methods in Molecular Biology</i> , 2020, 2149, 145-164.	0.4	0
259	Plant Synthetic Biology: A Paradigm Shift Targeting Stress Mitigation, Reduction of Ecological Footprints and Sustainable Transformation in Agriculture. , 2020, , 435-489.		1
260	Fruit pomace-lignin as a sustainable biopolymer for biomedical applications. <i>Journal of Cleaner Production</i> , 2021, 328, 129498.	4.6	24
261	Energy plants (crops): potential natural and future designer plants. , 2022, , 73-114.		1
262	Targeted re-sequencing and genome-wide association analysis for wood property traits in breeding population of <i>Eucalyptus tereticornis</i> × <i>E. grandis</i> . <i>Genomics</i> , 2021, 113, 4276-4292.	1.3	7
263	The inhibition of p-hydroxyphenyl hydroxyl group in residual lignin on enzymatic hydrolysis of cellulose and its underlying mechanism. <i>Bioresource Technology</i> , 2022, 346, 126585.	4.8	8
264	Ultrafast fractionation of wild-type and CSE down-regulated poplars by microwave-assisted deep eutectic solvents (DES) for cellulose bioconversion enhancement and lignin nanoparticles fabrication. <i>Industrial Crops and Products</i> , 2022, 176, 114275.	2.5	19
265	Identification and characterization of a set of monocot BAHD monolignol transferases. <i>Plant Physiology</i> , 2022, 189, 37-48.	2.3	10
266	Crystal structure of the plant feruloyl-coenzyme A monolignol transferase provides insights into the formation of monolignol ferulate conjugates. <i>Biochemical and Biophysical Research Communications</i> , 2022, 594, 8-14.	1.0	4

#	ARTICLE	IF	CITATIONS
267	Valorisation of lignocellulosic biomass to value-added products: Paving the pathway towards low-carbon footprint. <i>Fuel</i> , 2022, 313, 122678.	3.4	66
268	The alkaline extraction efficiency of bamboo cell walls is related to their structural differences on both anatomical and molecular level. <i>Industrial Crops and Products</i> , 2022, 178, 114628.	2.5	21
270	Unconventional lignin monomers—Extension of the lignin paradigm. <i>Advances in Botanical Research</i> , 2022, , 1-39.	0.5	13
271	Ferulic and coumaric acids in the cereal grain: Occurrence, biosynthesis, biological and technological functions. <i>Advances in Botanical Research</i> , 2022, , 169-213.	0.5	1
272	Systematic identification and expression profiles of the BAHD superfamily acyltransferases in barley (<i>Hordeum vulgare</i>). <i>Scientific Reports</i> , 2022, 12, 5063.	1.6	5
273	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
274	A new approach to zip—Lignin: 3,4-dihydroxybenzoate is compatible with lignification. <i>New Phytologist</i> , 2022, 235, 234-246.	3.5	12
275	HBMT1, a BAHD-family monolignol acyltransferase, mediates lignin acylation in poplar. <i>Plant Physiology</i> , 2022, 188, 1014-1027.	2.3	18
276	Reimagining Lignin for the Biorefinery. <i>Plant and Cell Physiology</i> , 2022, , .	1.5	0
285	Isolation of Promoters and Transcription Factors Involved in the Regulation of Lignin Biosynthesis in <i>Saccharum</i> Species. <i>Methods in Molecular Biology</i> , 2022, 2469, 103-118.	0.4	1
288	Flexible and digestible wood caused by viral-induced alteration of cell wall composition. <i>Current Biology</i> , 2022, , .	1.8	0
289	Engineering Curcumin Biosynthesis in Poplar Affects Lignification and Biomass Yield. <i>Frontiers in Plant Science</i> , 0, 13, .	1.7	8
290	Overexpression of the scopoletin biosynthetic pathway enhances lignocellulosic biomass processing. <i>Science Advances</i> , 2022, 8, .	4.7	13
291	Field and saccharification performances of poplars severely downregulated in <i>CAD1</i> . <i>New Phytologist</i> , 2022, 236, 2075-2090.	3.5	9
292	Lignin p-Hydroxybenzoylation Is Negatively Correlated With Syringyl Units in Poplar. <i>Frontiers in Plant Science</i> , 0, 13, .	1.7	7
293	One-pot conversion of engineered poplar into biochemicals and biofuels using biocompatible deep eutectic solvents. <i>Green Chemistry</i> , 2022, 24, 9055-9068.	4.6	2
295	Developing <i>Rhodococcus opacus</i> and <i>Sphingobium</i> sp. coculture systems for valorization of lignin-derived dimers. <i>Biotechnology and Bioengineering</i> , 2022, 119, 3162-3177.	1.7	4
297	Evolution of coumaroylated lignin in eudicots provides new tools for cell wall engineering. <i>New Phytologist</i> , 2023, 237, 251-264.	3.5	10

#	ARTICLE	IF	CITATIONS
298	Biological funneling of phenolics from transgenic plants engineered to express the bacterial 3-dehydroshikimate dehydratase (qsuB) gene. <i>Frontiers in Chemical Engineering</i> , 0, 4, .	1.3	4
299	Improve Enzymatic Hydrolysis of Lignocellulosic Biomass by Modifying Lignin Structure via Sulfite Pretreatment and Using Lignin Blockers. <i>Fermentation</i> , 2022, 8, 558.	1.4	26
300	<i>p</i>-Coumaroylation 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
301	Lignin engineering in forest trees: From gene discovery to field trials. <i>Plant Communications</i> , 2022, 3, 100465.	3.6	18
302	Overexpression of PtoMYB115 improves lignocellulose recalcitrance to enhance biomass digestibility and bioethanol yield by specifically regulating lignin biosynthesis in transgenic poplar. , 2022, 15, .		5
303	Natural lignin modulators improve lignocellulose saccharification of field-grown sugarcane, soybean, and brachiaria. <i>Biomass and Bioenergy</i> , 2023, 168, 106684.	2.9	3
304	High value valorization of lignin as environmental benign antimicrobial. <i>Materials Today Bio</i> , 2023, 18, 100520.	2.6	13
305	BAHD Company: The Ever-Expanding Roles of the BAHD Acyltransferase Gene Family in Plants. <i>Annual Review of Plant Biology</i> , 2023, 74, 165-194.	8.6	10
306	Sustainability in Wood Products: A New Perspective for Handling Natural Diversity. <i>Chemical Reviews</i> , 2023, 123, 1889-1924.	23.0	15
307	Revisiting Mechanisms, Methods, and Models for Altering Forage Cell Wall Utilization for Ruminants. <i>Journal of Animal Science</i> , 0, , .	0.2	2
308	Modification of plant cell walls with hydroxycinnamic acids by BAHD acyltransferases. <i>Frontiers in Plant Science</i> , 0, 13, .	1.7	9
309	Paving the way towards future-proofing our crops. <i>Food and Energy Security</i> , 2023, 12, .	2.0	4
310	Field testing of transgenic aspen from large greenhouse screening identifies unexpected winners. <i>Plant Biotechnology Journal</i> , 2023, 21, 1005-1021.	4.1	3
312	Evolution of the Cellulose Microfibril through Gamma-Valerolactone-Assisted Co-Solvent and Enzymatic Hydrolysis. <i>ACS Sustainable Chemistry and Engineering</i> , 2023, 11, 3270-3283.	3.2	3
313	Rapid Biocatalytic Synthesis of Aromatic Acid CoA Thioesters by Using Microbial Aromatic Acid CoA Ligases. <i>ChemBioChem</i> , 2023, 24, .	1.3	0
314	Metabolic engineering of green chemical biosynthesis. , 2023, , 247-276.		0
315	Genetic markers and tree properties predicting wood biorefining potential in aspen (<i>Populus tremula</i>) bioenergy feedstock. , 2023, 16, .		1
316	Genetically engineered lignocellulosic feedstocks for enhanced biofuel yields. , 2023, , 47-80.		0

#	ARTICLE	IF	CITATIONS
325	Chemical aspects of the composite structure of wood and its recalcitrance to enzymatic hydrolysis. , 2024, , 1-41.		0
326	A comprehensive review on genetic modification of plant cell wall for improved saccharification efficiency. Molecular Biology Reports, 2023, 50, 10509-10524.	1.0	0
327	A guide to lignin valorization in biorefineries: traditional, recent, and forthcoming approaches to convert raw lignocellulose into valuable materials and chemicals. , 2024, 2, 37-90.		3