Richard A Dixon

List of Publications by Year
in descending order

185	30,736	2975 93	4645 170
papers	citations	h-index	g-index

188	188	188	23713
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Lignin Valorization: Improving Lignin Processing in the Biorefinery. Science, 2014, 344, 1246843.	12.6	2,994
2	Activation Tagging Identifies a Conserved MYB Regulator of Phenylpropanoid Biosynthesis. Plant Cell, 2000, 12, 2383-2393.	6.6	1,310
3	The Medicago genome provides insight into the evolution of rhizobial symbioses. Nature, 2011, 480, 520-524.	27.8	1,166
4	Lignin modification improves fermentable sugar yields for biofuel production. Nature Biotechnology, 2007, 25, 759-761.	17.5	1,135
5	The phenylpropanoid pathway and plant defenceâ€”a genomics perspective. Molecular Plant Pathology, 2002, 3, 371-390.	4.2	1,095
6	Proanthocyanidins â€“ a final frontier in flavonoid research?. New Phytologist, 2005, 165, 9-28.	7.3	951
7	Role of Anthocyanidin Reductase, Encoded by BANYULS in Plant Flavonoid Biosynthesis. Science, 2003, 299, 396-399.	12.6	663
8	Flavonoids and isoflavonoids â€“ a gold mine for metabolic engineering. Trends in Plant Science, 1999, 4, 394-400.	8.8	626
9	Genetic manipulation of lignin reduces recalcitrance and improves ethanol production from switchgrass. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 3803-3808.	7.1	585
10	Transcriptional networks for lignin biosynthesis: more complex than we thought?. Trends in Plant Science, 2011, 16, 227-233.	8.8	505
11	<i>LACCASE</i> Is Necessary and Nonredundant with <i>PEROXIDASE</i> for Lignin Polymerization during Vascular Development in <i>Arabidopsis</i> Â Â. Plant Cell, 2013, 25, 3976-3987.	6.6	453
12	Downregulation of Caffeic Acid 3-O-Methyltransferase and Caffeoyl CoA 3-O-Methyltransferase in Transgenic Alfalfa: Impacts on Lignin Structure and Implications for the Biosynthesis of G and S Lignin. Plant Cell, 2001, 13, 73-88.	6.6	437
13	PHYTOESTROGENS. Annual Review of Plant Biology, 2004, 55, 225-261.	18.7	403
14	The â€˜insâ€™ and â€˜outsâ€™ of flavonoid transport. Trends in Plant Science, 2010, 15, 72-80.	8.8	390
15	Metabolic profiling of Medicago truncatula cell cultures reveals the effects of biotic and abiotic elicitors on metabolism. Journal of Experimental Botany, 2005, 56, 323-336.	4.8	347
16	Mutation of WRKY transcription factors initiates pith secondary wall formation and increases stem biomass in dicotyledonous plants. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 22338-22343.	7.1	338
17	MATE Transporters Facilitate Vacuolar Uptake of Epicatechin 3â€²-<i>O</i>-Glucoside for Proanthocyanidin Biosynthesis in<i>Medicago truncatula</i>and<i>Arabidopsis</i>Â Â. Plant Cell, 2009, 21, 2323-2340.	6.6	332
18	Genomeâ€wide analysis of phenylpropanoid defence pathways. Molecular Plant Pathology, 2010, 11, 829-846.	4.2	332

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19	Proanthocyanidin biosynthesis â€“ still more questions than answers?. Phytochemistry, 2005, 66, 2127-2144.	2.9	326
20	THE PHYTOALEXIN RESPONSE: ELICITATION, SIGNALLING AND CONTROL OF HOST GENE EXPRESSION. Biological Reviews, 1986, 61, 239-291.	10.4	324
21	Crystal Structures of a Multifunctional Triterpene/Flavonoid Glycosyltransferase from Medicago truncatula. Plant Cell, 2005, 17, 3141-3154.	6.6	322
22	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.	7.1	314
23	Structure and mechanism of the evolutionarily unique plant enzyme chalcone isomerase. Nature Structural Biology, 2000, 7, 786-791.	9.7	311
24	Targeted down-regulation of cytochrome P450 enzymes for forage quality improvement in alfalfa (Medicago sativa L.). Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 16573-16578.	7.1	306
25	Colocalization of l-Phenylalanine Ammonia-Lyase and Cinnamate 4-Hydroxylase for Metabolic Channeling in Phenylpropanoid Biosynthesis. Plant Cell, 2004, 16, 3098-3109.	6.6	291
26	Flavonoids and Isoflavonoids: From Plant Biology to Agriculture and Neuroscience. Plant Physiology, 2010, 154, 453-457.	4.8	271
27	Functional characterization of the switchgrass (<i>Panicum virgatum</i>) R2R3â€MYB transcription factor <i>PvMYB4</i> for improvement of lignocellulosic feedstocks. New Phytologist, 2012, 193, 121-136.	7.3	264
28	Genomics-based selection and functional characterization of triterpene glycosyltransferases from the model legume Medicago truncatula. Plant Journal, 2005, 41, 875-887.	5.7	262
29	Role of bifunctional ammonia-lyase in grass cell wall biosynthesis. Nature Plants, 2016, 2, 16050.	9.3	242
30	The biosynthesis of monolignols: a â€œmetabolic gridâ€ or independent pathways to guaiacyl and syringyl units?. Phytochemistry, 2001, 57, 1069-1084.	2.9	241
31	Down-regulation of hydroxycinnamoyl CoA: Shikimate hydroxycinnamoyl transferase in transgenic alfalfa affects lignification, development and forage quality. Phytochemistry, 2007, 68, 1521-1529.	2.9	232
32	MATE2 Mediates Vacuolar Sequestration of Flavonoid Glycosides and Glycoside Malonates in<i>Medicago truncatula</i>Â Â Â. Plant Cell, 2011, 23, 1536-1555.	6.6	227
33	Silencing of 4-coumarate:coenzyme A ligase in switchgrass leads to reduced lignin content and improved fermentable sugar yields for biofuel production. New Phytologist, 2011, 192, 611-625.	7.3	217
34	Metabolic engineering of proanthocyanidins through co-expression of anthocyanidin reductase and the PAP1 MYB transcription factor. Plant Journal, 2006, 45, 895-907.	5.7	210
35	Effects of Coumarate 3-Hydroxylase Down-regulation on Lignin Structure. Journal of Biological Chemistry, 2006, 281, 8843-8853.	3.4	209
36	Phenylalanine ammonia-lyase gene organization and structure. Plant Molecular Biology, 1989, 12, 367-383.	3.9	204

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37	Early Steps in Proanthocyanidin Biosynthesis in the Model Legume <i>Medicago truncatula</i> Â. Plant Physiology, 2007, 145, 601-615.	4.8	203
38	Brain-Targeted Proanthocyanidin Metabolites for Alzheimer's Disease Treatment. Journal of Neuroscience, 2012, 32, 5144-5150.	3.6	188
39	Onâ€“Off Switches for Secondary Cell Wall Biosynthesis. Molecular Plant, 2012, 5, 297-303.	8.3	186
40	A transcript profiling approach reveals an epicatechin-specific glucosyltransferase expressed in the seed coat of <i>Medicago truncatula</i>. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 14210-14215.	7.1	185
41	The Mysteries of Proanthocyanidin Transport and Polymerization. Plant Physiology, 2010, 153, 437-443.	4.8	185
42	Metabolic engineering of anthocyanins and condensed tannins in plants. Current Opinion in Biotechnology, 2013, 24, 329-335.	6.6	185
43	Epigenetic modulation of inflammation and synaptic plasticity promotes resilience against stress in mice. Nature Communications, 2018, 9, 477.	12.8	185
44	An â€œideal ligninâ€• facilitates full biomass utilization. Science Advances, 2018, 4, eaau2968.	10.3	184
45	Terpene Biosynthesis in Glandular Trichomes of Hop Â Â. Plant Physiology, 2008, 148, 1254-1266.	4.8	180
46	Multi-site genetic modulation of monolignol biosynthesis suggests new routes for formation of syringyl lignin and wall-bound ferulic acid in alfalfa (Medicago sativaL.). Plant Journal, 2006, 48, 113-124.	5.7	171
47	Selective lignin downregulation leads to constitutive defense response expression in alfalfa (<i>Medicago sativa</i> L.). New Phytologist, 2011, 190, 627-639.	7.3	171
48	4-Coumarate 3-hydroxylase in the lignin biosynthesis pathway is a cytosolic ascorbate peroxidase. Nature Communications, 2019, 10, 1994.	12.8	171
49	Crystal Structure of Medicago truncatula UGT85H2 â€“ Insights into the Structural Basis of a Multifunctional (Iso)flavonoid Glycosyltransferase. Journal of Molecular Biology, 2007, 370, 951-963.	4.2	170
50	Genomic and Coexpression Analyses Predict Multiple Genes Involved in Triterpene Saponin Biosynthesis in <i>Medicago truncatula</i> Â Â. Plant Cell, 2010, 22, 850-866.	6.6	168
51	Improvement of in-rumen digestibility of alfalfa forage by genetic manipulation of lignin O-methyltransferases. Transgenic Research, 2001, 10, 457-464.	2.4	165
52	Coexistence but Independent Biosynthesis of Catechyl and Guaiacyl/Syringyl Lignin Polymers in Seed Coats. Plant Cell, 2013, 25, 2587-2600.	6.6	161
53	Metabolic Engineering of Isoflavonoid Biosynthesis in Alfalfa. Plant Physiology, 2005, 138, 2245-2259.	4.8	159
54	Salicylic acid mediates the reduced growth of lignin down-regulated plants. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20814-20819.	7.1	159

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55	The LAP1 MYB transcription factor orchestrates anthocyanidin biosynthesis and glycosylation in <i>Medicago</i>. Plant Journal, 2009, 59, 136-149.	5.7	155
56	Anthocyanidin reductases from Medicago truncatula and Arabidopsis thaliana. Archives of Biochemistry and Biophysics, 2004, 422, 91-102.	3.0	154
57	Plant Phenylalanine/Tyrosine Ammonia-lyases. Trends in Plant Science, 2020, 25, 66-79.	8.8	154
58	Gatewayâ€compatible vectors for highâ€throughput gene functional analysis in switchgrass (<i>Panicum) Tj ETQq0 0 0 rgBT /Overlock	8.3	150
59	Substrate preferences of O-methyltransferases in alfalfa suggest new pathways for 3-O-methylation of monolignols. Plant Journal, 2001, 25, 193-202.	5.7	150
60	A functional genomics approach to (iso)flavonoid glycosylation in the model legume Medicago truncatula. Plant Molecular Biology, 2007, 64, 499-518.	3.9	149
61	l-Phenylalanine ammonia-lyase from Phaseolus vulgaris. Characterisation and differential induction of multiple forms from elicitor-treated cell suspension cultures. FEBS Journal, 1985, 149, 411-419.	0.2	147
62	Crystal Structures of Glycosyltransferase UGT78G1 Reveal the Molecular Basis for Glycosylation and Deglycosylation of (Iso)flavonoids. Journal of Molecular Biology, 2009, 392, 1292-1302.	4.2	142
63	Heterodimeric geranyl(geranyl)diphosphate synthase from hop (<i>Humulus lupulus</i>) and the evolution of monoterpene biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 9914-9919.	7.1	141
64	Developmental Expression and Substrate Specificities of Alfalfa Caffeic Acid 3-O-Methyltransferase and Caffeoyl Coenzyme A 3-O-Methyltransferase in Relation to Lignification1. Plant Physiology, 1998, 117, 761-770.	4.8	138
65	A WD40 Repeat Protein from<i>Medicago truncatula</i>Is Necessary for Tissue-Specific Anthocyanin and Proanthocyanidin Biosynthesis But Not for Trichome Development Â Â. Plant Physiology, 2009, 151, 1114-1129.	4.8	137
66	Lignin biosynthesis: old roads revisited and new roads explored. Open Biology, 2019, 9, 190215.	3.6	136
67	MtPAR MYB transcription factor acts as an on switch for proanthocyanidin biosynthesis in <i>Medicago truncatula</i>. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 1766-1771.	7.1	135
68	Regiospecific hydroxylation of isoflavones by cytochrome P450 81E enzymes fromMedicago truncatula. Plant Journal, 2003, 36, 471-484.	5.7	132
69	Role of a chalcone isomerase-like protein in flavonoid biosynthesis in<i>Arabidopsis thaliana</i>. Journal of Experimental Botany, 2015, 66, 7165-7179.	4.8	131
70	Functional Characterization of Proanthocyanidin Pathway Enzymes from Tea and Their Application for Metabolic Engineering Â Â. Plant Physiology, 2013, 161, 1103-1116.	4.8	130
71	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.	5.7	121
72	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.	2.9	120

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73	Current Models for Transcriptional Regulation of Secondary Cell Wall Biosynthesis in Grasses. Frontiers in Plant Science, 2018, 9, 399.	3.6	120
74	Enhanced characteristics of genetically modified switchgrass (Panicum virgatum L.) for high biofuel production. Biotechnology for Biofuels, 2013, 6, 71.	6.2	118
75	Lignin Impact on Fiber Degradation:Â Increased Enzymatic Digestibility of Genetically Engineered Tobacco (Nicotiana tabacum) Stems Reduced in Lignin Content. Journal of Agricultural and Food Chemistry, 1997, 45, 1977-1983.	5.2	116
76	Metabolic changes in elicitor-treated bean cells. Enzymic responses associated with rapid changes in cell wall components. FEBS Journal, 1985, 148, 571-578.	0.2	115
77	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.	7.1	115
78	Metabolic engineering of proanthocyanidins by ectopic expression of transcription factors in Arabidopsis thaliana. Plant Journal, 2005, 44, 62-75.	5.7	114
79	Multiâ€site genetic modification of monolignol biosynthesis in alfalfa (<i>Medicago sativa</i>): effects on lignin composition in specific cell types. New Phytologist, 2008, 179, 738-750.	7.3	113
80	MYB5 and MYB14 Play Pivotal Roles in Seed Coat Polymer Biosynthesis in <i>Medicago truncatula</i> Â Â Â. Plant Physiology, 2014, 165, 1424-1439.	4.8	113
81	NAC domain function and transcriptional control of a secondary cell wall master switch. Plant Journal, 2011, 68, 1104-1114.	5.7	112
82	An essential role of caffeoyl shikimate esterase in monolignol biosynthesis in <i>Medicago truncatula</i>. Plant Journal, 2016, 86, 363-375.	5.7	111
83	An NAC transcription factor orchestrates multiple features of cell wall development in Medicago truncatula. Plant Journal, 2010, 63, no-no.	5.7	109
84	A Genomics Approach to Deciphering Lignin Biosynthesis in Switchgrass. Plant Cell, 2013, 25, 4342-4361.	6.6	109
85	Improving Saccharification Efficiency of Alfalfa Stems Through Modification of the Terminal Stages of Monolignol Biosynthesis. Bioenergy Research, 2008, 1, 180-192.	3.9	106
86	The Transcriptional Repressor MYB2 Regulates Both Spatial and Temporal Patterns of Proanthocyandin and Anthocyanin Pigmentation in<i>Medicago truncatula</i>. Plant Cell, 2015, 27, tpc.15.00476.	6.6	106
87	A role for leucoanthocyanidin reductase in the extension of proanthocyanidins. Nature Plants, 2016, 2, 16182.	9.3	106
88	Twoâ€year field analysis of reduced recalcitrance transgenic switchgrass. Plant Biotechnology Journal, 2014, 12, 914-924.	8.3	104
89	Rapid Induction of the Synthesis of Phenylalanine Ammoniaâ€Lyase and of Chalcone Synthase in Elicitorâ€Treated Plant Cells. FEBS Journal, 1983, 129, 593-601.	0.2	103
90	Syringyl lignin biosynthesis is directly regulated by a secondary cell wall master switch. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 14496-14501.	7.1	103

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91	Increase in 4-Coumaryl Alcohol Units during Lignification in Alfalfa (Medicago sativa) Alters the Extractability and Molecular Weight of Lignin. Journal of Biological Chemistry, 2010, 285, 38961-38968.	3.4	102
92	Distinct cinnamoyl CoA reductases involved in parallel routes to lignin in <i>Medicago truncatula</i>. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 17803-17808.	7.1	101
93	TrichOME: A Comparative Omics Database for Plant Trichomes Â Â Â. Plant Physiology, 2009, 152, 44-54.	4.8	98
94	Down-regulation of the caffeic acid O-methyltransferase gene in switchgrass reveals a novel monolignol analog. Biotechnology for Biofuels, 2012, 5, 71.	6.2	96
95	Altering the Cell Wall and Its Impact on Plant Disease: From Forage to Bioenergy. Annual Review of Phytopathology, 2014, 52, 69-91.	7.8	96
96	Gene regulatory networks for lignin biosynthesis in switchgrass <i>(Panicum virgatum</i>). Plant Biotechnology Journal, 2019, 17, 580-593.	8.3	96
97	Passive membrane transport of lignin-related compounds. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 23117-23123.	7.1	94
98	Reductive Catalytic Fractionation of C-Lignin. ACS Sustainable Chemistry and Engineering, 2018, 6, 11211-11218.	6.7	89
99	Standardization of Switchgrass Sample Collection for Cell Wall and Biomass Trait Analysis. Bioenergy Research, 2013, 6, 755-762.	3.9	87
100	Unusual 4-hydroxybenzaldehyde synthase activity from tissue cultures of the vanilla orchid Vanilla planifolia. Phytochemistry, 2002, 61, 611-620.	2.9	86
101	Structural Studies of Cinnamoyl-CoA Reductase and Cinnamyl-Alcohol Dehydrogenase, Key Enzymes of Monolignol Biosynthesis Â. Plant Cell, 2014, 26, 3709-3727.	6.6	85
102	The Differences between NAD-ME and NADP-ME Subtypes of C4 Photosynthesis: More than Decarboxylating Enzymes. Frontiers in Plant Science, 2016, 7, 1525.	3.6	85
103	Switchgrass (<i>Panicum virgatum</i>) possesses a divergent family of cinnamoyl CoA reductases with distinct biochemical properties. New Phytologist, 2010, 185, 143-155.	7.3	83
104	Phenylalanine ammonia-lyase (PAL) from tobacco (<i>Nicotiana tabacum</i>): characterization of the four tobacco <i>PAL</i> genes and active heterotetrameric enzymes. Biochemical Journal, 2009, 424, 233-242.	3.7	82
105	Multifeature analyses of vascular cambial cells reveal longevity mechanisms in old <i>Ginkgo biloba</i> trees. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 2201-2210.	7.1	81
106	Elicitor Induction of mRNA Activity. FEBS Journal, 1983, 130, 131-139.	0.2	79
107	Combining enhanced biomass density with reduced lignin level for improved forage quality. Plant Biotechnology Journal, 2016, 14, 895-904.	8.3	75
108	Noncatalytic chalcone isomerase-fold proteins in <i>Humulus lupulus</i> are auxiliary components in prenylated flavonoid biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E5223-E5232.	7.1	74

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109	Co-expression networks for plant biology: why and how. Acta Biochimica Et Biophysica Sinica, 2019, 51, 981-988.	2.0	73
110	A genomic approach to isoflavone biosynthesis in kudzu (Pueraria lobata). Planta, 2011, 233, 843-855.	3.2	72
111	Development of an integrated transcript sequence database and a gene expression atlas for gene discovery and analysis in switchgrass (<i>Panicum virgatum</i> L.). Plant Journal, 2013, 74, 160-173.	5.7	70
112	Abscisic acid regulates secondary cell-wall formation and lignin deposition in <i>Arabidopsis thaliana</i> through phosphorylation of NST1. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	69
113	Profiling phenolic metabolites in transgenic alfalfa modified in lignin biosynthesis. Phytochemistry, 2003, 64, 1013-1021.	2.9	68
114	Comparative biochemistry of chalcone isomerases. Phytochemistry, 1988, 27, 2801-2808.	2.9	66
115	Development and commercialization of reduced lignin alfalfa. Current Opinion in Biotechnology, 2019, 56, 48-54.	6.6	65
116	Characterization of the Formation of Branched Short-Chain Fatty Acid:CoAs for Bitter Acid Biosynthesis in Hop Glandular Trichomes. Molecular Plant, 2013, 6, 1301-1317.	8.3	64
117	ARABIDOPSIS DEHISCENCE ZONE POLYGALACTURONASE 1 (ADPG1) releases latent defense signals in stems with reduced lignin content. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3281-3290.	7.1	64
118	Metabolic changes in elicitor-treated bean cells. Selectivity of enzyme induction in relation to phytoalexin accumulation. FEBS Journal, 1985, 148, 563-569.	0.2	62
119	Early lignin pathway enzymes and routes to chlorogenic acid in switchgrass (Panicum virgatum L.). Plant Molecular Biology, 2014, 84, 565-576.	3.9	62
120	Elicitors and defense gene induction in plants with altered lignin compositions. New Phytologist, 2018, 219, 1235-1251.	7.3	61
121	Proanthocyanidin subunit composition determined by functionally diverged dioxygenases. Nature Plants, 2018, 4, 1034-1043.	9.3	59
122	Proanthocyanidin Biosynthesisâ€"a Matter of Protection. Plant Physiology, 2020, 184, 579-591.	4.8	59
123	Superior plant based carbon fibers from electrospun poly-(caffeyl alcohol) lignin. Carbon, 2016, 103, 372-383.	10.3	56
124	Comparative cell-specific transcriptomics reveals differentiation of C₄photosynthesis pathways in switchgrass and other C₄lineages. Journal of Experimental Botany, 2016, 67, 1649-1662.	4.8	56
125	A 5-Enolpyruvylshikimate 3-Phosphate Synthase Functions as a Transcriptional Repressor in <i>Populus</i>. Plant Cell, 2018, 30, 1645-1660.	6.6	56
126	Integrative Analysis of Transgenic Alfalfa (Medicago sativa L.) Suggests New Metabolic Control Mechanisms for Monolignol Biosynthesis. PLoS Computational Biology, 2011, 7, e1002047.	3.2	54

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127	Regioselective synthesis of plant (iso)flavone glycosides in Escherichia coli. Applied Microbiology and Biotechnology, 2008, 80, 253-260.	3.6	50
128	Multiple levers for overcoming the recalcitrance of lignocellulosic biomass. Biotechnology for Biofuels, 2019, 12, 15.	6.2	47
129	VvLAR1 and VvLAR2 Are Bifunctional Enzymes for Proanthocyanidin Biosynthesis in Grapevine. Plant Physiology, 2019, 180, 1362-1374.	4.8	45
130	Induction of chalcone isomerase in elicitor-treated bean cells. Comparison of rates of synthesis and appearance of immunodetectable enzyme. FEBS Journal, 1984, 145, 195-202.	0.2	43
131	A deep transcriptomic analysis of pod development in the vanilla orchid (Vanilla planifolia). BMC Genomics, 2014, 15, 964.	2.8	42
132	Dynamic changes in transcriptome and cell wall composition underlying brassinosteroid-mediated lignification of switchgrass suspension cells. Biotechnology for Biofuels, 2017, 10, 266.	6.2	42
133	Growthâ€“defense tradeâ€offs and yield loss in plants with engineered cell walls. New Phytologist, 2021, 231, 60-74.	7.3	41
134	Single amino acid mutations of <i>Medicago</i> glycosyltransferase UGT85H2 enhance activity and impart reversibility. FEBS Letters, 2009, 583, 2131-2135.	2.8	39
135	Medicago glucosyltransferase UGT72L1: potential roles in proanthocyanidin biosynthesis. Planta, 2013, 238, 139-154.	3.2	39
136	Differential patterns of phytoalexin accumulation and enzyme induction in wounded and elicitor-treated tissues ofPhaseolus vulgaris. Planta, 1982, 154, 156-164.	3.2	38
137	Elicitor-mediated induction of chalcone isomerase in Phaseolus vulgaris cell suspension cultures. Planta, 1983, 159, 561-569.	3.2	37
138	Membrane-bound hydroxylases in elicitor-treated bean cells. Rapid induction of the synthesis of prolyl hydroxylase and a putative cytochrome P-450. FEBS Journal, 1986, 159, 163-169.	0.2	36
139	A re-evaluation of the final step of vanillin biosynthesis in the orchid Vanilla planifolia. Phytochemistry, 2017, 139, 33-46.	2.9	36
140	Biosynthesis of monolignols. Genomic and reverse genetic approaches. Phytochemistry Reviews, 2003, 2, 289-306.	6.5	35
141	RESEARCH BRIEFS: A hairy tissue produces vanillin. Israel Journal of Plant Sciences, 2003, 51, 157-159.	0.5	35
142	Substrate Specificity of LACCASE8 Facilitates Polymerization of Caffeyl Alcohol for C-Lignin Biosynthesis in the Seed Coat of <i>Cleome hassleriana</i>. Plant Cell, 2020, 32, 3825-3845.	6.6	35
143	O-Methylation of benzaldehyde derivatives by â€œlignin specificâ€• caffeic acid 3-O-methyltransferase. Phytochemistry, 2004, 65, 837-846.	2.9	32
144	Mathematical models of lignin biosynthesis. Biotechnology for Biofuels, 2018, 11, 34.	6.2	32

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145	Pinoresinol reductase 1 impacts lignin distribution during secondary cell wall biosynthesis in Arabidopsis. Phytochemistry, 2015, 112, 170-178.	2.9	31
146	Characterization of two TT2-type MYB transcription factors regulating proanthocyanidin biosynthesis in tetraploid cotton, Gossypium hirsutum. Planta, 2017, 246, 323-335.	3.2	31
147	Enzymatic basis for Câ€lignin monomer biosynthesis in the seed coat of <i>Cleome hassleriana</i>. Plant Journal, 2019, 99, 506-520.	5.7	31
148	Dissecting the transcriptional regulation of proanthocyanidin and anthocyanin biosynthesis in soybean (<i>Glycine max</i>). Plant Biotechnology Journal, 2021, 19, 1429-1442.	8.3	30
149	Transgenic switchgrass (<i>Panicum virgatum</i> L.) targeted for reduced recalcitrance to bioconversion: a 2â€year comparative analysis of fieldâ€grown lines modified for target gene or genetic element expression. Plant Biotechnology Journal, 2017, 15, 688-697.	8.3	29
150	Glucuronidated Flavonoids in Neurological Protection: Structural Analysis and Approaches for Chemical and Biological Synthesis. Journal of Agricultural and Food Chemistry, 2017, 65, 7607-7623.	5.2	28
151	Biosynthesis of Isoflavonoid Phytoalexins: Incorporation of Sodium [1,2-¹³C₂] Acetate into Phaseollin and Kievitone. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1982, 37, 363-368.	1.4	27
152	Loss of function of folylpolyglutamate synthetase 1 reduces lignin content and improves cell wall digestibility in Arabidopsis. Biotechnology for Biofuels, 2015, 8, 224.	6.2	27
153	Ectopic Defense Gene Expression Is Associated with Growth Defects in <i>Medicago truncatula</i> Lignin Pathway Mutants. Plant Physiology, 2019, 181, 63-84.	4.8	27
154	Development and use of a switchgrass (Panicum virgatum L.) transformation pipeline by the BioEnergy Science Center to evaluate plants for reduced cell wall recalcitrance. Biotechnology for Biofuels, 2017, 10, 309.	6.2	26
155	Developmental changes in lignin composition are driven by both monolignol supply and laccase specificity. Science Advances, 2022, 8, eabm8145.	10.3	26
156	Enzymatic synthesis of substituted epicatechins for bioactivity studies in neurological disorders. Biochemical and Biophysical Research Communications, 2012, 417, 457-461.	2.1	23
157	Control of Vegetative to Reproductive Phase Transition Improves Biomass Yield and Simultaneously Reduces Lignin Content in Medicago truncatula. Bioenergy Research, 2015, 8, 857-867.	3.9	23
158	The Tetracentron genome provides insight into the early evolution of eudicots and the formation of vessel elements. Genome Biology, 2020, 21, 291.	8.8	23
159	Synthesis and Quantitative Analysis of Plasma-Targeted Metabolites of Catechin and Epicatechin. Journal of Agricultural and Food Chemistry, 2015, 63, 2233-2240.	5.2	22
160	Transcriptome analysis of secondary cell wall development in Medicago truncatula. BMC Genomics, 2016, 17, 23.	2.8	22
161	Dual activity of anthocyanidin reductase supports the dominant plant proanthocyanidin extension unit pathway. Science Advances, 2021, 7, .	10.3	22
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