Fang Chen

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Lignin Valorization: Improving Lignin Processing in the Biorefinery. Science, 2014, 344, 1246843.	12.6	2,994
2	Lignin modification improves fermentable sugar yields for biofuel production. Nature Biotechnology, 2007, 25, 759-761.	17.5	1,135
3	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
4	<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
5	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
6	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
7	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
8	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
9	Role of bifunctional ammonia-lyase in grass cell wall biosynthesis. Nature Plants, 2016, 2, 16050.	9.3	242
10	An â€œideal ligninâ€•facilitates full biomass utilization. Science Advances, 2018, 4, eaau2968.	10.3	184
11	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
12	Coexistence but Independent Biosynthesis of Catechyl and Guaiacyl/Syringyl Lignin Polymers in Seed Coats. Plant Cell, 2013, 25, 2587-2600.	6.6	161
13	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
14	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
15	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
16	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
17	NAC domain function and transcriptional control of a secondary cell wall master switch. Plant Journal, 2011, 68, 1104-1114.	5.7	112
18	An NAC transcription factor orchestrates multiple features of cell wall development in Medicago truncatula. Plant Journal, 2010, 63, no-no.	5.7	109

#	Article	IF	Citations
19	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
20	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
21	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
22	Reductive Catalytic Fractionation of C-Lignin. ACS Sustainable Chemistry and Engineering, 2018, 6, 11211-11218.	6.7	89
23	Superior plant based carbon fibers from electrospun poly-(caffeyl alcohol) lignin. Carbon, 2016, 103, 372-383.	10.3	56
24	A deep transcriptomic analysis of pod development in the vanilla orchid (Vanilla planifolia). BMC Genomics, 2014, 15, 964.	2.8	42
25	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
26	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
27	Developmental changes in lignin composition are driven by both monolignol supply and laccase specificity. Science Advances, 2022, 8, eabm8145.	10.3	26
28	Transcriptome analysis of secondary cell wall development in Medicago truncatula. BMC Genomics, 2016, 17, 23.	2.8	22
29	A rapid thioacidolysis method for biomass lignin composition and tricin analysis. Biotechnology for Biofuels, 2021, 14, 18.	6.2	15
30	Dual Mechanisms of Coniferyl Alcohol in Phenylpropanoid Pathway Regulation. Frontiers in Plant Science, 2022, 13, .	3.6	8