Laigeng Li

List of Publications by Year
in descending order

76	4,921	94269 37	95083 68
papers	citations	h-index	g-index

81	81	81	4917
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An MKP-MAPK protein phosphorylation cascade controls vascular immunity in plants. Science Advances, 2022, 8, eabg8723.	4.7	35
2	Molecular understanding of wood formation in trees. Forestry Research, 2022, 2, 0-0.	0.5	8
3	Two MADS-box genes regulate vascular cambium activity and secondary growth by modulating auxin homeostasis in Populus. Plant Communications, 2021, 2, 100134.	3.6	28
4	Chromosome-scale assembly and analysis of biomass crop Miscanthus lutarioriparius genome. Nature Communications, 2021, 12, 2458.	5.8	25
5	A Comparative Analysis of Transcription Networks Active in Juvenile and Mature Wood in Populus. Frontiers in Plant Science, 2021, 12, 675075.	1.7	7
6	A small molecule inhibits cell elongation by modulating cell wall polysaccharide composition in Arabidopsis. Cell Surface, 2021, 7, 100049.	1.5	2
7	Abscisic acid regulates secondary cell-wall formation and lignin deposition in Arabidopsis thaliana through phosphorylation of NST1. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	69
8	Multi-layered Regulation of Plant Cell Wall Thickening. Plant and Cell Physiology, 2021, 62, 1867-1873.	1.5	18
9	A xylemâ€produced peptide PtrCLE20 inhibits vascular cambium activity in Populus. Plant Biotechnology Journal, 2020, 18, 195-206.	4.1	23
10	Fibreâ€specific regulation of lignin biosynthesis improves biomass quality in Populus. New Phytologist, 2020, 226, 1074-1087.	3.5	43
11	Modulation of NAC transcription factor NST1 activity by XYLEM NAC DOMAIN1 regulates secondary cell wall formation in Arabidopsis. Journal of Experimental Botany, 2020, 71, 1449-1458.	2.4	39
12	Cell-Specific Suppression of 4-Coumarate-CoA Ligase Gene Reveals Differential Effect of Lignin on Cell Physiological Function in Populus. Frontiers in Plant Science, 2020, 11, 589729.	1.7	21
13	Genome biology of the paleotetraploid perennial biomass crop Miscanthus. Nature Communications, 2020, 11, 5442.	5.8	67
14	Phenylpropanoid Derivatives Are Essential Components of Sporopollenin in Vascular Plants. Molecular Plant, 2020, 13, 1644-1653.	3.9	66
15	Phosphorylation of LTF1, an MYB Transcription Factor in Populus, Acts as a Sensory Switch Regulating Lignin Biosynthesis in Wood Cells. Molecular Plant, 2019, 12, 1325-1337.	3.9	68
16	SUMO modification of LBD30 by SIZ1 regulates secondary cell wall formation in Arabidopsis thaliana. PLoS Genetics, 2019, 15, e1007928.	1.5	37
17	The Receptor-Like Kinase AtVRLK1 Regulates Secondary Cell Wall Thickening. Plant Physiology, 2018, 177, 671-683.	2.3	52
18	An auxin-induced Î²-type endo-1,4-Î²-glucanase in poplar is involved in cell expansion and lateral root formation. Planta, 2018, 247, 1149-1161.	1.6	8

#	Article	IF	Citations
19	Shortened Basal Internodes Encodes a Gibberellin 2-Oxidase and Contributes to Lodging Resistance in Rice. Molecular Plant, 2018, 11, 288-299.	3.9	85
20	The Receptor-Like Cytoplasmic Kinase STRK1 Phosphorylates and Activates CatC, Thereby Regulating H₂O₂ Homeostasis and Improving Salt Tolerance in Rice. Plant Cell, 2018, 30, 1100-1118.	3.1	142
21	A HDâ€ZIP III gene, PtrHB4, is required for interfascicular cambium development in Populus. Plant Biotechnology Journal, 2018, 16, 808-817.	4.1	50
22	Blue Light Regulates Secondary Cell Wall Thickening via MYC2/MYC4 Activation of the NST1-Directed Transcriptional Network in Arabidopsis. Plant Cell, 2018, 30, 2512-2528.	3.1	59
23	Identification of Auxin Activity Like 1, a chemical with weak functions in auxin signaling pathway. Plant Molecular Biology, 2018, 98, 275-287.	2.0	2
24	Decipher the ancestry of the plant-specific LBD gene family. BMC Genomics, 2017, 18, 951.	1.2	27
25	Formation of wood secondary cell wall may involve two type cellulose synthase complexes in Populus. Plant Molecular Biology, 2017, 93, 419-429.	2.0	42
26	A brief view of international conference on plant cell wall biology 2017. Science Bulletin, 2017, 62, 1357-1358.	4.3	1
27	Triplin, a small molecule, reveals copper ion transport in ethylene signaling from ATX1 to RAN1. PLoS Genetics, 2017, 13, e1006703.	1.5	32
28	Suppression of PtrDUF579-3 Expression Causes Structural Changes of the Glucuronoxylan in Populus. Frontiers in Plant Science, 2016, 7, 493.	1.7	17
29	OsREM4.1 Interacts with OsSERK1 to Coordinate the Interlinking between Abscisic Acid and Brassinosteroid Signaling in Rice. Developmental Cell, 2016, 38, 201-213.	3.1	114
30	Major Chromosomal Rearrangements Distinguish Willow and Poplar After the Ancestral â€œSalicoidâ€• Genome Duplication. Genome Biology and Evolution, 2016, 8, 1868-1875.	1.1	30
31	Grain setting defect1 (GSD1) function in rice depends on S-acylation and interacts with actin 1 (OsACT1) at its C-terminal. Frontiers in Plant Science, 2015, 6, 804.	1.7	51
32	CCR1, an enzyme required for lignin biosynthesis in Arabidopsis, mediates cell proliferation exit for leaf development. Plant Journal, 2015, 83, 375-387.	2.8	45
33	A new <i>O</i>-methyltransferase for monolignol synthesis in <i>Carthamus tinctorius</i>. Plant Biotechnology, 2014, 31, 545-553.	0.5	2
34	Conservation and functional influence of alternative splicing in wood formation of Populus and Eucalyptus. BMC Genomics, 2014, 15, 780.	1.2	41
35	PtrKOR1 is required for secondary cell wall cellulose biosynthesis in Populus. Tree Physiology, 2014, 34, 1289-1300.	1.4	43
36	Intron-Mediated Alternative Splicing of WOOD-ASSOCIATED NAC TRANSCRIPTION FACTOR1B Regulates Cell Wall Thickening during Fiber Development in Populus Species Â. Plant Physiology, 2014, 164, 765-776.	2.3	123

#	Article	IF	Citations
37	Grain setting defect1, Encoding a Remorin Protein, Affects the Grain Setting in Rice through Regulating Plasmodesmatal Conductance Â. Plant Physiology, 2014, 166, 1463-1478.	2.3	113
38	Diverse roles of PtrDUF579 proteins in Populus and PtrDUF579-1 function in vascular cambium proliferation during secondary growth. Plant Molecular Biology, 2014, 85, 601-612.	2.0	16
39	Identification of molecular processes needed for vascular formation through transcriptome analysis of different vascular systems. BMC Genomics, 2013, 14, 217.	1.2	21
40	PtrCel9A6, an Endo-1,4-Î²-Glucanase, Is Required for Cell Wall Formation during Xylem Differentiation in Populus. Molecular Plant, 2013, 6, 1904-1917.	3.9	42
41	PtrHB7, a class III HD-Zip Gene, Plays a Critical Role in Regulation of Vascular Cambium Differentiation in Populus. Molecular Plant, 2013, 6, 1331-1343.	3.9	108
42	Biomass properties from different Miscanthus species. Food and Energy Security, 2013, 2, 12-19.	2.0	26
43	N-glycosylation and dimerization regulate the PtrMAN6 enzyme activity that may modulate generation of oligosaccharide signals. Plant Signaling and Behavior, 2013, 8, e26956.	1.2	7
44	<scp>P</scp>opulus endoâ€betaâ€mannanase <scp>P</scp>tr<scp>MAN</scp>6 plays a role in coordinating cell wall remodeling with suppression of secondary wall thickening through generation of oligosaccharide signals. Plant Journal, 2013, 74, 473-485.	2.8	55
45	A lignan O-methyltransferase catalyzing the regioselective methylation of matairesinol in Carthamus tinctorius. Plant Biotechnology, 2013, 30, 97-109.	0.5	20
46	HD-Zip III Transcription Factor and Cell Differentiation in Plants. Chinese Bulletin of Botany, 2013, 48, 199-209.	0.0	1
47	Translate Plant Metabolism into Modern Agriculture: A Starting Point. Molecular Plant, 2012, 5, 291-293.	3.9	2
48	Rapid Characterization of Woody Biomass Digestibility and Chemical Composition Using Near-infrared SpectroscopyFree Access. Journal of Integrative Plant Biology, 2011, 53, 166-175.	4.1	57
49	Characterization of the plasma membrane proteins and receptor-like kinases associated with secondary vascular differentiation in poplar. Plant Molecular Biology, 2011, 76, 97-115.	2.0	35
50	Functional Characterization of Evolutionarily Divergent 4-Coumarate:Coenzyme A Ligases in Rice Â Â. Plant Physiology, 2011, 157, 574-586.	2.3	218
51	Profiling of phenylpropanoid monomers in developing xylem tissue of transgenic aspen (Populus) Tj ETQq1 1 0.784314 rgBT /Overloc	0.9	10
52	Characterization of cellulose synthase complexes in Populus xylem differentiation. New Phytologist, 2010, 187, 777-790.	3.5	98
53	Effect of Lignin Genetic Modification on Wood Anatomy of Aspen Trees. IAWA Journal, 2010, 31, 29-38.	2.7	9
54	Genetic modification of wood quality for second-generation biofuel production. GM Crops, 2010, 1, 230-236.	1.8	24

#	Article	IF	Citations
55	Elastic Modulus Determination of Transgenic Aspen Using a Dynamic Mechanical Analyzer in Static Bending Mode. Forest Products Journal, 2010, 60, 296-300.	0.2	7
56	Differential expression of three eucalyptus secondary cell wall-related cellulose synthase genes in response to tension stress. Journal of Experimental Botany, 2008, 59, 681-695.	2.4	43
57	Preliminary tests to evaluate the mechanical properties of young trees with small diameter. Holzforschung, 2007, 61, 390-393.	0.9	12
58	Microwave Pretreatment of Switchgrass to Enhance Enzymatic Hydrolysis. , 2007, , .		10
59	Plant growth, biomass partitioning and soil carbon formation in response to altered lignin biosynthesis in Populus tremuloides. New Phytologist, 2007, 173, 732-742.	3.5	40
60	A Genomic and Molecular View of Wood Formation. Critical Reviews in Plant Sciences, 2006, 25, 215-233.	2.7	56
61	The Cellulose Synthase Gene Superfamily and Biochemical Functions of Xylem-Specific Cellulose Synthase-Like Genes in Populus trichocarpa. Plant Physiology, 2006, 142, 1233-1245.	2.3	237
62	Distinct Roles of Cinnamate 4-hydroxylase Genes in Populus. Plant and Cell Physiology, 2006, 47, 905-914.	1.5	72
63	Rapid analysis of transgenic trees using transmittance near-infrared spectroscopy (NIR). Holzforschung, 2006, 60, 24-28.	0.9	35
64	Agrobacterium-Mediated Transformation of Common Bermudagrass (Cynodon dactylon). Plant Cell, Tissue and Organ Culture, 2005, 83, 223-229.	1.2	25
65	Novel and Mechanical Stressâ€"Responsive MicroRNAs in Populus trichocarpa That Are Absent from Arabidopsis. Plant Cell, 2005, 17, 2186-2203.	3.1	552
66	Clarification of Cinnamoyl Co-enzyme A Reductase Catalysis in Monolignol Biosynthesis of Aspen. Plant and Cell Physiology, 2005, 46, 1073-1082.	1.5	42
67	Development of highly regenerable callus lines and biolistic transformation of turf-type common bermudagrass [Cynodon dactylon (L.) Pers.]. Plant Cell Reports, 2004, 22, 403-407.	2.8	38
68	RNA silencing in plants by the expression of siRNA duplexes. Nucleic Acids Research, 2004, 32, e171-e171.	6.5	35
69	Combinatorial modification of multiple lignin traits in trees through multigene cotransformation. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 4939-4944.	3.3	370
70	In vitro somatic embryogenesis in turf-type bermudagrass: roles of abscisic acid and gibberellic acid, and occurrence of secondary somatic embryogenesis. Plant Breeding, 2002, 121, 155-158.	1.0	26
71	The Last Step of Syringyl Monolignol Biosynthesis in Angiosperms Is Regulated by a Novel Gene Encoding Sinapyl Alcohol Dehydrogenase. Plant Cell, 2001, 13, 1567.	3.1	5
72	The Last Step of Syringyl Monolignol Biosynthesis in Angiosperms Is Regulated by a Novel Gene Encoding Sinapyl Alcohol Dehydrogenase. Plant Cell, 2001, 13, 1567-1586.	3.1	219

#	Article	IF	Citations
73	5-Hydroxyconiferyl Aldehyde Modulates Enzymatic Methylation for Syringyl Monolignol Formation, a New View of Monolignol Biosynthesis in Angiosperms. Journal of Biological Chemistry, 2000, 275, 6537-6545.	1.6	216
74	Coniferyl aldehyde 5-hydroxylation and methylation direct syringyl lignin biosynthesis in angiosperms. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 8955-8960.	3.3	308
75	Secondary xylem-specific expression of caffeoyl-coenzyme A 3-O-methyltransferase plays an important role in the methylation pathway associated with lignin biosynthesis in loblolly pine. Plant Molecular Biology, 1999, 40, 555-565.	2.0	72
76	A novel multifunctional O-methyltransferase implicated in a dual methylation pathway associated with lignin biosynthesis in loblolly pine. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 5461-5466.	3.3	116