Wout Boerjan

List of Publications by Year in Descending Order

207 papers	26,179 citations	77 h-index	160 g-index
226 ext. papers	30,456 ext. citations	8.9 avg, IF	6.77 L-index

#	Paper	IF	Citations
207	Synthesis of hydroxycinnamoyl shikimates and their role in monolignol biosynthesis. *Holzforschung*, **2022**, 76, 133-144	2	1
206	Incorporation of catechyl monomers into lignins: lignification from the non-phenolic end via Diels–Alder cycloaddition?. *Green Chemistry*, **2021**, 23, 8995-9013	10	1
205	Two chemically distinct root lignin barriers control solute and water balance. *Nature Communications*, **2021**, 12, 2320	17.4	10
204	Seedling developmental defects upon blocking CINNAMATE-4-HYDROXYLASE are caused by perturbations in auxin transport. *New Phytologist*, **2021**, 230, 2275-2291	9.8	10
203	Rewired phenolic metabolism and improved saccharification efficiency of a Zea mays cinnamyl alcohol dehydrogenase 2 (zmcad2) mutant. *Plant Journal*, **2021**, 105, 1240-1257	6.9	4
202	Seeing the forest for the trees: Retrieving plant secondary biochemical pathways from metabolome networks. *Computational and Structural Biotechnology Journal*, **2021**, 19, 72-85	6.8	5
201	Maize specialized metabolome networks reveal organ-preferential mixed glycosides. *Computational and Structural Biotechnology Journal*, **2021**, 19, 1127-1144	6.8	6
200	CRISPR-Cas9 editing of CAFFEOYL SHIKIMATE ESTERASE 1 and 2 shows their importance and partial redundancy in lignification in Populus tremula P. alba. *Plant Biotechnology Journal*, **2021**, 19, 2221-2234	11.6	6
199	Vessel- and ray-specific monolignol biosynthesis as an approach to engineer fiber-hypolignification and enhanced saccharification in poplar. *Plant Journal*, **2021**, 108, 752-765	6.9	1
198	Behind the Scenes: The Impact of Bioactive Phenylpropanoids on the Growth Phenotypes of Arabidopsis Lignin Mutants. *Frontiers in Plant Science*, **2021**, 12, 734070	6.2	2
197	A Century-Old Mystery Unveiled: Sekizaisou is a Natural Lignin Mutant. *Plant Physiology*, **2020**, 182, 1821–1828	6.9	4
196	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	11.5	29
195	Molecular Changes Concomitant with Vascular System Development in Mature Galls Induced by Root-Knot Nematodes in the Model Tree Host. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	5
194	Cell wall remodeling under salt stress: Insights into changes in polysaccharides, feruloylation, lignification, and phenolic metabolism in maize. *Plant, Cell and Environment*, **2020**, 43, 2172-2191	8.4	25
193	PIRIN2 suppresses S-type lignin accumulation in a noncell-autonomous manner in Arabidopsis xylem elements. *New Phytologist*, **2020**, 225, 1923-1935	9.8	4
192	Tailoring poplar lignin without yield penalty by combining a null and haploinsufficient CINNAMOYL-CoA REDUCTASE2 allele. *Nature Communications*, **2020**, 11, 5020	17.4	12
191	Alterations in the phenylpropanoid pathway affect poplar ability for ectomycorrhizal colonisation and susceptibility to root-knot nematodes. *Mycorrhiza*, **2020**, 30, 555-566	3.9	2

190	Chorismate mutase and isochorismatase, two potential effectors of the migratory nematode Hirschmanniella oryzae, increase host susceptibility by manipulating secondary metabolite content of rice. *Molecular Plant Pathology*, **2020**, 21, 1634-1646	5.7	4
189	Characterization of the UDP-glycosyltransferase UGT72 Family in Poplar and Identification of Genes Involved in the Glycosylation of Monolignols. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	5
188	Compensatory Guaiacyl Lignin Biosynthesis at the Expense of Syringyl Lignin in -Knockout Poplar. *Plant Physiology*, **2020**, 183, 123-136	6.6	16
187	cis-Cinnamic acid is a natural plant growth-promoting compound. *Journal of Experimental Botany*, **2019**, 70, 6293-6304	7	15
186	COSY catalyses trans-cis isomerization and lactonization in the biosynthesis of coumarins. *Nature Plants*, **2019**, 5, 1066-1075	11.5	24
185	Introducing curcumin biosynthesis in Arabidopsis enhances lignocellulosic biomass processing. *Nature Plants*, **2019**, 5, 225-237	11.5	30
184	Significant influence of lignin on axial elastic modulus of poplar wood at low microfibril angles under wet conditions. *Journal of Experimental Botany*, **2019**, 70, 4039-4047	7	17
183	Analytical Py-GC/MS of Genetically Modified Poplar for the Increased Production of Bio-aromatics. *Computational and Structural Biotechnology Journal*, **2019**, 17, 599-610	6.8	3
182	Lignin biosynthesis and its integration into metabolism. *Current Opinion in Biotechnology*, **2019**, 56, 230-239	11.4	189
181	Lignin structure and its engineering. *Current Opinion in Biotechnology*, **2019**, 56, 240-249	11.4	247
180	RNAi-suppression of barley caffeic acid O-methyltransferase modifies lignin despite redundancy in the gene family. *Plant Biotechnology Journal*, **2019**, 17, 594-607	11.6	16
179	Certification for gene-edited forests. *Science*, **2019**, 365, 767-768	33.3	3
178	Lignin Engineering in Forest Trees. *Frontiers in Plant Science*, **2019**, 10, 912	6.2	48
177	Passive membrane transport of lignin-related compounds. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 23117-23123	11.5	49
176	A metabolomics characterisation of natural variation in the resistance of cassava to whitefly. *BMC Plant Biology*, **2019**, 19, 518	5.3	12
175	Bioactivity: phenylpropanoids' best kept secret. *Current Opinion in Biotechnology*, **2019**, 56, 156-162	11.4	25
174	Polyploidy Affects Plant Growth and Alters Cell Wall Composition. *Plant Physiology*, **2019**, 179, 74-87	6.6	67
173	Plant cell wall sugars: sweeteners for a bio-based economy. *Physiologia Plantarum*, **2018**, 164, 27-44	4.6	9

172	The effect of altered lignin composition on mechanical properties of CINNAMYL ALCOHOL DEHYDROGENASE (CAD) deficient poplars. *Planta*, **2018**, 247, 887-897	4.7	17
171	Application of Py-GC/MS coupled with PARAFAC2 and PLS-DA to study fast pyrolysis of genetically engineered poplars. *Journal of Analytical and Applied Pyrolysis*, **2018**, 129, 101-111	6	7
170	Vessel-Specific Reintroduction of CINNAMOYL-COA REDUCTASE1 (CCR1) in Dwarfed Mutants Restores Vessel and Xylary Fiber Integrity and Increases Biomass. *Plant Physiology*, **2018**, 176, 611-633	6.6	45
169	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. *Biotechnology for Biofuels*, **2018**, 11, 257	7.8	6
168	Elucidating Tricin-Lignin Structures: Assigning Correlations in HSQC Spectra of Monocot Lignins. *Polymers*, **2018**, 10,	4.5	23
167	Structural variability and niche differentiation in the rhizosphere and endosphere bacterial microbiome of field-grown poplar trees. *Microbiome*, **2017**, 5, 25	16.6	206
166	Unravelling the impact of lignin on cell wall mechanics: a comprehensive study on young poplar trees downregulated for CINNAMYL ALCOHOL DEHYDROGENASE (CAD). *Plant Journal*, **2017**, 91, 480-490	6.9	38
165	A Key Role for Apoplastic HO in Norway Spruce Phenolic Metabolism. *Plant Physiology*, **2017**, 174, 1449-1475	6.6	36
164	Silencing CHALCONE SYNTHASE in Maize Impedes the Incorporation of Tricin into Lignin and Increases Lignin Content. *Plant Physiology*, **2017**, 173, 998-1016	6.6	61
163	Different Routes for Conifer- and Sinapaldehyde and Higher Saccharification upon Deficiency in the Dehydrogenase CAD1. *Plant Physiology*, **2017**, 175, 1018-1039	6.6	60
162	Silencing Affects Lignification and Improves Saccharification in Poplar. *Plant Physiology*, **2017**, 175, 1040-1057	6.6	63
161	ACCERBATIN, a small molecule at the intersection of auxin and reactive oxygen species homeostasis with herbicidal properties. *Journal of Experimental Botany*, **2017**, 68, 4185-4203	7	4
160	cis-Cinnamic Acid Is a Novel, Natural Auxin Efflux Inhibitor That Promotes Lateral Root Formation. *Plant Physiology*, **2017**, 173, 552-565	6.6	39
159	Degradation of lignin β-aryl ether units in Arabidopsis thaliana expressing LigD, LigF and LigG from Sphingomonas paucimobilis SYK-6. *Plant Biotechnology Journal*, **2017**, 15, 581-593	11.6	20
158	The Response of the Root Proteome to the Synthetic Strigolactone GR24 in Arabidopsis. *Molecular and Cellular Proteomics*, **2016**, 15, 2744-55	7.6	23
157	Designer lignins: harnessing the plasticity of lignification. *Current Opinion in Biotechnology*, **2016**, 37, 190-200	11.4	231
156	Potential of genetically engineered hybrid poplar for pyrolytic production of bio-based phenolic compounds. *Bioresource Technology*, **2016**, 207, 229-36	11	21
155	Lignin engineering in field-grown poplar trees affects the endosphere bacterial microbiome. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 2312-7	11.5	55

154	EU Regulations Impede Market Introduction of GM Forest Trees. *Trends in Plant Science*, **2016**, 21, 283-285	13.1	4
153	Saccharification Protocol for Small-scale Lignocellulosic Biomass Samples to Test Processing of Cellulose into Glucose. *Bio-protocol*, **2016**, 6,	0.9	6
152	Potential Impacts of GM Trees on the Environment and on Plant Omics Questionnaire-Based Responses. *Forestry Sciences*, **2016**, 195-205		
151	Performance of 16s rDNA Primer Pairs in the Study of Rhizosphere and Endosphere Bacterial Microbiomes in Metabarcoding Studies. *Frontiers in Microbiology*, **2016**, 7, 650	5.7	120
150	Improving total saccharification yield of Arabidopsis plants by vessel-specific complementation of caffeoyl shikimate esterase (cse) mutants. *Biotechnology for Biofuels*, **2016**, 9, 139	7.8	46
149	Overexpression of GA20-OXIDASE1 impacts plant height, biomass allocation and saccharification efficiency in maize. *Plant Biotechnology Journal*, **2016**, 14, 997-1007	11.6	37
148	Maize Tricin-Oligolignol Metabolites and Their Implications for Monocot Lignification. *Plant Physiology*, **2016**, 171, 810-20	6.6	43
147	Chemical Genetics Uncovers Novel Inhibitors of Lignification, Including p-Iodobenzoic Acid Targeting CINNAMATE-4-HYDROXYLASE. *Plant Physiology*, **2016**, 172, 198-220	6.6	16
146	Micropyrolysis of natural poplar mutants with altered p-hydroxyphenyl lignin content. *Journal of Analytical and Applied Pyrolysis*, **2016**, 122, 377-386	6	1
145	The Allelochemical MDCA Inhibits Lignification and Affects Auxin Homeostasis. *Plant Physiology*, **2016**, 172, 874-888	6.6	14
144	Small glycosylated lignin oligomers are stored in Arabidopsis leaf vacuoles. *Plant Cell*, **2015**, 27, 695-710	11.6	62
143	PtaRHE1, a Populus tremula Populus alba RING-H2 protein of the ATL family, has a regulatory role in secondary phloem fibre development. *Plant Journal*, **2015**, 82, 978-990	6.9	11
142	Reductive lignocellulose fractionation into soluble lignin-derived phenolic monomers and dimers and processable carbohydrate pulps. *Energy and Environmental Science*, **2015**, 8, 1748-1763	35.4	515
141	Naturally p-Hydroxybenzoylated Lignins in Palms. *Bioenergy Research*, **2015**, 8, 934-952	3.1	69
140	Tricin, a flavonoid monomer in monocot lignification. *Plant Physiology*, **2015**, 167, 1284-95	6.6	203
139	Clade classification of monolignol biosynthesis gene family members reveals target genes to decrease lignin in Lolium perenne. *Plant Biology*, **2015**, 17, 877-92	3.7	8
138	Carbon isotope compositions (13) C) of leaf, wood and holocellulose differ among genotypes of poplar and between previous land uses in a short-rotation biomass plantation. *Plant, Cell and Environment*, **2015**, 38, 144-56	8.4	16
137	Introduction of chemically labile substructures into Arabidopsis lignin through the use of LigD, the C dehydrogenase from Sphingobium sp. strain SYK-6. *Plant Biotechnology Journal*, **2015**, 13, 821-32	11.6	40

136	A click chemistry strategy for visualization of plant cell wall lignification. *Chemical Communications*, **2014**, 50, 12262-5	5.8	35
135	Side by Side Comparison of Chemical Compounds Generated by Aqueous Pretreatments of Maize Stover, Miscanthus and Sugarcane Bagasse. *Bioenergy Research*, **2014**, 7, 1466-1480	3.1	14
134	Accumulation of N-acetylglucosamine oligomers in the plant cell wall affects plant architecture in a dose-dependent and conditional manner. *Plant Physiology*, **2014**, 165, 290-308	6.6	20
133	Mutation of the inducible ARABIDOPSIS THALIANA CYTOCHROME P450 REDUCTASE2 alters lignin composition and improves saccharification. *Plant Physiology*, **2014**, 166, 1956-71	6.6	47
132	Phenylcoumaran benzylic ether reductase prevents accumulation of compounds formed under oxidative conditions in poplar xylem. *Plant Cell*, **2014**, 26, 3775-91	11.6	30
131	Systematic structural characterization of metabolites in Arabidopsis via candidate substrate-product pair networks. *Plant Cell*, **2014**, 26, 929-45	11.6	93
130	Ectopic lignification in the flax lignified bast fiber1 mutant stem is associated with tissue-specific modifications in gene expression and cell wall composition. *Plant Cell*, **2014**, 26, 4462-82	11.6	37
129	The role of the secondary cell wall in plant resistance to pathogens. *Frontiers in Plant Science*, **2014**, 5, 358	6.2	264
128	Transcript and metabolite profiling for the evaluation of tobacco tree and poplar as feedstock for the bio-based industry. *Journal of Visualized Experiments*, **2014**,	1.6	3
127	Bioethanol from poplar: a commercially viable alternative to fossil fuel in the European Union. *Biotechnology for Biofuels*, **2014**, 7, 113	7.8	23
126	Improved saccharification and ethanol yield from field-grown transgenic poplar deficient in cinnamoyl-CoA reductase. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 845-50	11.5	155
125	Lignin biosynthesis perturbations affect secondary cell wall composition and saccharification yield in Arabidopsis thaliana. *Biotechnology for Biofuels*, **2013**, 6, 46	7.8	194
124	Plant cell wall profiling by fast maximum likelihood reconstruction (FMLR) and region-of-interest (ROI) segmentation of solution-state 2D 1H-13C NMR spectra. *Biotechnology for Biofuels*, **2013**, 6, 45	7.8	18
123	Expression of SofLAC, a new laccase in sugarcane, restores lignin content but not S:G ratio of Arabidopsis lac17 mutant. *Journal of Experimental Botany*, **2013**, 64, 1769-81	7	57
122	Caffeoyl shikimate esterase (CSE) is an enzyme in the lignin biosynthetic pathway in Arabidopsis. *Science*, **2013**, 341, 1103-6	33.3	310
121	Suppression of CCR impacts metabolite profile and cell wall composition in Pinus radiata tracheary elements. *Plant Molecular Biology*, **2013**, 81, 105-17	4.6	36
120	MYB103 is required for FERULATE-5-HYDROXYLASE expression and syringyl lignin biosynthesis in Arabidopsis stems. *Plant Journal*, **2013**, 73, 63-76	6.9	94
119	Breeding with rare defective alleles (BRDA): a natural Populus nigra HCT mutant with modified lignin as a case study. *New Phytologist*, **2013**, 198, 765-776	9.8	73

118	Visualization of plant cell wall lignification using fluorescence-tagged monolignols. *Plant Journal*, **2013**, 76, 357-66	6.9	60
117	Lignification in sugarcane: biochemical characterization, gene discovery, and expression analysis in two genotypes contrasting for lignin content. *Plant Physiology*, **2013**, 163, 1539-57	6.6	82
116	Arabidopsis WAT1 is a vacuolar auxin transport facilitator required for auxin homoeostasis. *Nature Communications*, **2013**, 4, 2625	17.4	166
115	Towards a carbon-negative sustainable bio-based economy. *Frontiers in Plant Science*, **2013**, 4, 174	6.2	88
114	Retromer subunits VPS35A and VPS29 mediate prevacuolar compartment (PVC) function in Arabidopsis. *Molecular Plant*, **2013**, 6, 1849-62	14.4	35
113	Shikimate Hydroxycinnamoyl Transferase (HCT) Activity Assays in Populus nigra. *Bio-protocol*, **2013**, 3,	0.9	2
112	A systems biology view of responses to lignin biosynthesis perturbations in Arabidopsis. *Plant Cell*, **2012**, 24, 3506-29	11.6	252
111	Impact of the absence of stem-specific β-glucosidases on lignin and monolignols. *Plant Physiology*, **2012**, 160, 1204-17	6.6	46
110	Accelerating the domestication of forest trees in a changing world. *Trends in Plant Science*, **2012**, 17, 64-72	13.1	85
109	Metabolic engineering of novel lignin in biomass crops. *New Phytologist*, **2012**, 196, 978-1000	9.8	281
108	Natural hypolignification is associated with extensive oligolignol accumulation in flax stems. *Plant Physiology*, **2012**, 158, 1893-915	6.6	71
107	Transcription factor WRKY23 assists auxin distribution patterns during Arabidopsis root development through local control on flavonol biosynthesis. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 1554-9	11.5	129
106	Protein-protein and protein-membrane associations in the lignin pathway. *Plant Cell*, **2012**, 24, 4465-82	11.6	102
105	Large-scale detection of rare variants via pooled multiplexed next-generation sequencing: towards next-generation Ecotilling. *Plant Journal*, **2011**, 67, 736-45	6.9	55
104	Bud set in poplar--genetic dissection of a complex trait in natural and hybrid populations. *New Phytologist*, **2011**, 189, 106-21	9.8	97
103	Science, society and biosafety of a field trial with transgenic biofuel poplars. *BMC Proceedings*, **2011**, 5, I23	2.3	2
102	WAT1 (WALLS ARE THIN1) defines a novel auxin transporter in plants and integrates auxin signaling in secondary wall formation in Arabidopsis fibers. *BMC Proceedings*, **2011**, 5, O24	2.3	4
101	Temperature signals contribute to the timing of photoperiodic growth cessation and bud set in poplar. *Tree Physiology*, **2011**, 31, 472-82	4.2	118

100	Syringyl lignin is unaltered by severe sinapyl alcohol dehydrogenase suppression in tobacco. *Plant Cell*, **2011**, 23, 4492-506	11.6	27
99	Walls are thin 1 (WAT1), an Arabidopsis homolog of Medicago truncatula NODULIN21, is a tonoplast-localized protein required for secondary wall formation in fibers. *Plant Journal*, **2010**, 63, 469-83	6.9	128
98	Engineering traditional monolignols out of lignin by concomitant up-regulation of F5H1 and down-regulation of COMT in Arabidopsis. *Plant Journal*, **2010**, 64, 885-97	6.9	99
97	The 20-year environmental safety record of GM trees. *Nature Biotechnology*, **2010**, 28, 656-8	44.5	46
96	Mass spectrometry-based sequencing of lignin oligomers. *Plant Physiology*, **2010**, 153, 1464-78	6.6	143
95	Perturbation of indole-3-butyric acid homeostasis by the UDP-glucosyltransferase UGT74E2 modulates Arabidopsis architecture and water stress tolerance. *Plant Cell*, **2010**, 22, 2660-79	11.6	301
94	Sequencing around 5-hydroxyconiferyl alcohol-derived units in caffeic acid O-methyltransferase-deficient poplar lignins. *Plant Physiology*, **2010**, 153, 569-79	6.6	44
93	Lignin biosynthesis and structure. *Plant Physiology*, **2010**, 153, 895-905	6.6	1486
92	Mass spectrometry-based fragmentation as an identification tool in lignomics. *Analytical Chemistry*, **2010**, 82, 8095-105	7.8	123
91	Modeling lignin polymerization. I. Simulation model of dehydrogenation polymers. *Plant Physiology*, **2010**, 153, 1332-44	6.6	48
90	Genomic regions involved in productivity of two interspecific poplar families in Europe. 2. Biomass production and its relationships with tree architecture and phenology. *Tree Genetics and Genomes*, **2010**, 6, 533-554	2.1	12
89	Potential of Arabidopsis systems biology to advance the biofuel field. *Trends in Biotechnology*, **2010** , 28, 543-7	15.1	39
88	Genomic regions involved in productivity of two interspecific poplar families in Europe. 1. Stem height, circumference and volume. *Tree Genetics and Genomes*, **2009**, 5, 147-164	2.1	30
87	Strangled at birth? Forest biotech and the Convention on Biological Diversity. *Nature Biotechnology*, **2009**, 27, 519-27	44.5	48
86	Joint GC-MS and LC-MS platforms for comprehensive plant metabolomics: repeatability and sample pre-treatment. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2009**, 877, 3572-80	3.2	102
85	Lignin engineering. *Current Opinion in Plant Biology*, **2008**, 11, 278-85	9.9	503
84	Structure of the genetic diversity in black poplar (Populus nigra L.) populations across European river systems: Consequences for conservation and restoration. *Forest Ecology and Management*, **2008**, 255, 1388-1399	3.9	93
83	Mapping methyl jasmonate-mediated transcriptional reprogramming of metabolism and cell cycle progression in cultured Arabidopsis cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 1380-5	11.5	319

82	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). *Plant Journal*, **2008**, 53, 368-79	6.9	102
81	Genome-wide identification of NBS resistance genes in Populus trichocarpa. *Plant Molecular Biology*, **2008**, 66, 619-36	4.6	185
80	Genetically modified lignin below ground. *Nature Biotechnology*, **2007**, 25, 168-9	44.5	15
79	Molecular phenotyping of lignin-modified tobacco reveals associated changes in cell-wall metabolism, primary metabolism, stress metabolism and photorespiration. *Plant Journal*, **2007**, 52, 263-85	6.9	126
78	Downregulation of cinnamoyl-coenzyme A reductase in poplar: multiple-level phenotyping reveals effects on cell wall polymer metabolism and structure. *Plant Cell*, **2007**, 19, 3669-91	11.6	280
77	Lignins **2007**,		35
76	A molecular timetable for apical bud formation and dormancy induction in poplar. *Plant Cell*, **2007**, 19, 2370-90	11.6	362
75	Gene expression during the induction, maintenance, and release of dormancy in apical buds of poplar. *Journal of Experimental Botany*, **2007**, 58, 4047-60	7	104
74	Genetical metabolomics of flavonoid biosynthesis in Populus: a case study. *Plant Journal*, **2006**, 47, 224-37	6.9	122
73	The genome of black cottonwood, Populus trichocarpa (Torr. & Gray). *Science*, **2006**, 313, 1596-604	33.3	3205
72	Paternity analysis ofPopulus nigraL. offspring in a Belgian plantation of native and exotic poplars. *Annals of Forest Science*, **2006**, 63, 783-790	3.1	24
71	Postglacial migration of Populus nigra L.: lessons learnt from chloroplast DNA. *Forest Ecology and Management*, **2005**, 206, 71-90	3.9	31
70	Biotechnology and the domestication of forest trees. *Current Opinion in Biotechnology*, **2005**, 16, 159-66	11.4	99
69	Intraspecific and interspecific genetic and phylogenetic relationships in the genus Populus based on AFLP markers. *Theoretical and Applied Genetics*, **2005**, 111, 1440-56	6	94
68	Metabolite profiling reveals a role for atypical cinnamyl alcohol dehydrogenase CAD1 in the synthesis of coniferyl alcohol in tobacco xylem. *Plant Molecular Biology*, **2005**, 59, 753-69	4.6	38
67	Molecular changes associated with the setting up of secondary growth in aspen. *Journal of Experimental Botany*, **2005**, 56, 2211-27	7	36
66	Phenolic profiling of caffeic acid O-methyltransferase-deficient poplar reveals novel benzodioxane oligolignols. *Plant Physiology*, **2004**, 136, 4023-36	6.6	81
65	Profiling of oligolignols reveals monolignol coupling conditions in lignifying poplar xylem. *Plant Physiology*, **2004**, 136, 3537-49	6.6	160

64	Molecular phenotyping of the pal1 and pal2 mutants of Arabidopsis thaliana reveals far-reaching consequences on phenylpropanoid, amino acid, and carbohydrate metabolism. *Plant Cell*, **2004**, 16, 2749-71	11.6	305
63	Genetic and physical mapping of Melampsora rust resistance genes in Populus and characterization of linkage disequilibrium and flanking genomic sequence. *New Phytologist*, **2004**, 164, 95-105	9.8	60
62	Lignins: Natural polymers from oxidative coupling of 4-hydroxyphenyl- propanoids. *Phytochemistry Reviews*, **2004**, 3, 29-60	7.7	1062
61	Annotation of a 95-kb Populus deltoides genomic sequence reveals a disease resistance gene cluster and novel class I and class II transposable elements. *Theoretical and Applied Genetics*, **2004**, 109, 10-22	6	37
60	Preparation and relevance of a cross-coupling product between sinapyl alcohol and sinapyl p-hydroxybenzoate. *Organic and Biomolecular Chemistry*, **2004**, 2, 2888-90	3.9	68
59	Gene flow between cultivated poplars and native black poplar (Populus nigra L.): a case study along the river Meuse on the Dutch□Belgian border. *Forest Ecology and Management*, **2004**, 197, 307-310	3.9	50
58	Ex-situ conservation of Black poplar in Europe: genetic diversity in nine gene bank collections and their value for nature development. *Theoretical and Applied Genetics*, **2004**, 108, 969-81	6	60
57	Genome-wide characterization of the lignification toolbox in Arabidopsis. *Plant Physiology*, **2003**, 133, 1051-71	6.6	564
56	Lignin biosynthesis. *Annual Review of Plant Biology*, **2003**, 54, 519-46	30.7	3143
55	Stacking transgenes in forest trees. *Trends in Plant Science*, **2003**, 8, 363-5	13.1	42
54	Lignin: genetic engineering and impact on pulping. *Critical Reviews in Biochemistry and Molecular Biology*, **2003**, 38, 305-50	8.7	233
53	Expression of a poplar cDNA encoding a ferulate-5-hydroxylase/coniferaldehyde 5-hydroxylase increases S lignin deposition in Arabidopsis thaliana. *Plant Physiology and Biochemistry*, **2002**, 40, 1087-1096	5.4	30
52	Field and pulping performances of transgenic trees with altered lignification. *Nature Biotechnology*, **2002**, 20, 607-12	44.5	302
51	Constitutive Overexpression of Cystathionine □Synthase in Arabidopsis Leads to Accumulation of Soluble Methionine andS-Methylmethionine. *Plant Physiology*, **2002**, 128, 95-107	6.6	88
50	PtABI3 impinges on the growth and differentiation of embryonic leaves during bud set in poplar. *Plant Cell*, **2002**, 14, 1885-901	11.6	170
49	Constitutive overexpression of cystathionine gamma-synthase in Arabidopsis leads to accumulation of soluble methionine and S-methylmethionine. *Plant Physiology*, **2002**, 128, 95-107	6.6	30
48	Xylem Peroxidases: Purification and Altered Expression. *Progress in Biotechnology*, **2001**, 18, 171-176		1
47	Lignin Biosynthesis in Poplar: Genetic Engineering and Effects on Kraft Pulping. *Progress in Biotechnology*, **2001**, 18, 187-194		5

46	Elucidation of new structures in lignins of CAD- and COMT-deficient plants by NMR. *Phytochemistry*, **2001**, 57, 993-1003	4	165
45	A high-performance liquid chromatography radio method for determination of L-ascorbic acid and guanosine 5'-diphosphate-l-galactose, key metabolites of the plant vitamin C pathway. *Analytical Biochemistry*, **2001**, 294, 161-8	3.1	18
44	Unravelling cell wall formation in the woody dicot stem. *Plant Molecular Biology*, **2001**, 47, 239-274	4.6	276
43	The syringaldazine-oxidizing peroxidase PXP 3-4 from poplar xylem: cDNA isolation, characterization and expression. *Plant Molecular Biology*, **2001**, 47, 581-93	4.6	39
42	Biotechnology in trees: Towards improved paper pulping by lignin engineering. *Euphytica*, **2001**, 118, 185-195	2.1	32
41	Unravelling cell wall formation in the woody dicot stem **2001**, 239-274		18
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