Richard Meilan

List of Publications by Year
in descending order

72 papers	5,172 citations	109321 35 h-index	91884 69 g-index
75 all docs	75 docs citations	75 times ranked	5840 citing authors

#	Article	IF	Citations
1	Formaldehyde stabilization facilitates lignin monomer production during biomass depolymerization. Science, 2016, 354, 329-333.	12.6	944
2	A synergistic biorefinery based on catalytic conversion of lignin prior to cellulose starting from lignocellulosic biomass. Green Chemistry, 2015, 17, 1492-1499.	9.0	370
3	Activation Tagging of a Dominant Gibberellin Catabolism Gene (GA 2-oxidase) from Poplar That Regulates Tree Stature. Plant Physiology, 2003, 132, 1283-1291.	4.8	244
4	Diverse effects of overexpression of LEAFY and PTLF, a poplar (Populus) homolog of LEAFY/FLORICAULA, in transgenic poplar and Arabidopsis. Plant Journal, 2000, 22, 235-245.	5.7	212
5	Populus CEN/TFL1 regulates first onset of flowering, axillary meristem identity and dormancy release in Populus. Plant Journal, 2010, 62, 674-688.	5.7	197
6	Lignin monomer composition affects Arabidopsis cell-wall degradability after liquid hot water pretreatment. Biotechnology for Biofuels, 2010, 3, 27.	6.2	178
7	Enhanced phytoremediation of volatile environmental pollutants with transgenic trees. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 16816-16821.	7.1	172
8	An Agrobacterium tumefaciens transformation protocol effective on a variety of cottonwood hybrids (genus Populus). Plant Cell Reports, 2000, 19, 315-320.	5.6	159
9	Loosening lignin's grip on biofuel production. Nature Biotechnology, 2007, 25, 746-748.	17.5	155
10	Overexpression of Cytosolic Ascorbate Peroxidase in Tomato Confers Tolerance to Chilling and Salt Stress. Journal of the American Society for Horticultural Science, 2005, 130, 167-173.	1.0	149
11	Tree genetic engineering and applications to sustainable forestry and biomass production. Trends in Biotechnology, 2011, 29, 9-17.	9.3	145
12	Molecular and physiological responses to abiotic stress in forest trees and their relevance to tree improvement. Tree Physiology, 2014, 34, 1181-1198.	3.1	144
13	Transgenic modification of gai or rgl1 causes dwarfing and alters gibberellins, root growth, and metabolite profiles in Populus. Planta, 2006, 224, 288-299.	3.2	130
14	Revisiting alkaline aerobic lignin oxidation. Green Chemistry, 2018, 20, 3828-3844.	9.0	114
15	Accelerating the domestication of forest trees in a changing world. Trends in Plant Science, 2012, 17, 64-72.	8.8	109
16	Floral induction in woody angiosperms. New Forests, 1997, 14, 179-202.	1.7	99
17	Identification, characterization of an AP2/ERF transcription factor that promotes adventitious, lateral root formation in Populus. Planta, 2013, 238, 271-282.	3.2	92
18	Cytokinins in Plant Pathogenic Bacteria and Developing Cereal Grains. Functional Plant Biology, 1993, 20, 621.	2.1	81

#	Article	IF	Citations
19	Ten lessons from 15 years of transgenic Populus research. Forestry, 2004, 77, 455-465.	2.3	77
20	Alcohol-inducible gene expression in transgenic Populus. Plant Cell Reports, 2006, 25, 660-667.	5.6	67
21	The CP4 transgene provides high levels of tolerance to RoundupÂ® herbicide in field-grown hybrid poplars. Canadian Journal of Forest Research, 2002, 32, 967-976.	1.7	66
22	Genetic transformation: a powerful tool for dissection of adaptive traits in trees. New Phytologist, 2005, 167, 9-18.	7.3	65
23	Stability of transgenes in trees: expression of two reporter genes in poplar over three field seasons. Tree Physiology, 2008, 29, 299-312.	3.1	55
24	TransgenicPopulusTrees for Forest Products, Bioenergy, and Functional Genomics. Critical Reviews in Plant Sciences, 2011, 30, 415-434.	5.7	52
25	Gene and Enhancer Trap Tagging of Vascular-Expressed Genes in Poplar Trees. Plant Physiology, 2004, 134, 1742-1751.	4.8	48
26	Field trial detects incomplete barstar attenuation of vegetative cytotoxicity in Populus trees containing a poplar LEAFY promoter::barnase sterility transgene. Molecular Breeding, 2006, 19, 69-85.	2.1	48
27	Overexpression of Constans Homologs CO1 and CO2 Fails to Alter Normal Reproductive Onset and Fall Bud Set in Woody Perennial Poplar. PLoS ONE, 2012, 7, e45448.	2.5	48
28	Containment of transgenic trees by suppression of LEAFY. Nature Biotechnology, 2016, 34, 918-922.	17.5	46
29	Genetically modified poplars in context. Forestry Chronicle, 2001, 77, 271-279.	0.6	45
30	Poplar (Populus spp.). , 2006, 344, 143-151.		43
31	Constitutive expression of the Corngrass1 microRNA in poplar affects plant architecture and stem lignin content and composition. Biomass and Bioenergy, 2013, 54, 312-321.	5.7	43
32	Title is missing!. Molecular Breeding, 2003, 12, 119-132.	2.1	40
33	In situ micro-spectroscopic investigation of lignin in poplar cell walls pretreated by maleic acid. Biotechnology for Biofuels, 2015, 8, 126.	6.2	40
34	Transfer RNA Is the Source of Extracellular Isopentenyladenine in a Ti-Plasmidless Strain of Agrobacterium tumefaciens. Plant Physiology, 1996, 110, 431-438.	4.8	39
35	Activation tagging is an effective gene tagging system in Populus. Tree Genetics and Genomes, 2011, 7, 91-101.	1.6	38
36	Efficient and stable transgene suppression via RNAi in field-grown poplars. Transgenic Research, 2008, 17, 679-694.	2.4	37

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37	Overcoming cellulose recalcitrance in woody biomass for the lignin-first biorefinery. Biotechnology for Biofuels, 2019, 12, 171.	6.2	37
38	Improving disease resistance of butternut (Juglans cinerea), a threatened fine hardwood: a case for single-tree selection through genetic improvement and deployment. Tree Physiology, 2006, 26, 121-128.	3.1	35
39	Production of Cytokinins byErwinia herbicolapv.gypsophilaeand Isolation of a Locus Conferring Cytokinin Biosynthesis. Molecular Plant-Microbe Interactions, 1995, 8, 114.	2.6	31
40	Ecological and population genetics research imperatives for transgenic trees. Tree Genetics and Genomes, 2007, 3, 119-133.	1.6	30
41	Matrix attachment region elements have small and variable effects on transgene expression and stability in fieldâ€grown Populus. Plant Biotechnology Journal, 2008, 6, 887-896.	8.3	30
42	Bt-Cry3Aa transgene expression reduces insect damage and improves growth in field-grown hybrid poplar. Canadian Journal of Forest Research, 2014, 44, 28-35.	1.7	29
43	An early-flowering genotype ofPopulus. Journal of Plant Biology, 2004, 47, 52-56.	2.1	28
44	Stability of Herbicide Resistance over 8 Years of Coppice in Field-Grown, Genetically Engineered Poplars. Western Journal of Applied Forestry, 2008, 23, 89-93.	0.5	28
45	Promoting Ethically Responsible Use of Agricultural Biotechnology. Trends in Plant Science, 2021, 26, 546-559.	8.8	25
46	Rhamnogalacturonanâ€I is a determinant of cellâ€“cell adhesion in poplar wood. Plant Biotechnology Journal, 2020, 18, 1027-1040.	8.3	24
47	Transgenic sterility in Populus: expression properties of the poplar PTLF, Agrobacterium NOS and two minimal 35S promoters in vegetative tissues. Tree Physiology, 2006, 26, 401-410.	3.1	22
48	A tapetal ablation transgene induces stable male sterility and slows field growth in Populus. Tree Genetics and Genomes, 2014, 10, 1583-1593.	1.6	21
49	Bacterio-opsin gene overeÃ—pression fails to elevate fungal disease resistance in transgenic poplar (Populus). Canadian Journal of Forest Research, 2001, 31, 268-275.	1.7	19
50	A KNAT3-like homeobox gene from Juglans nigra L., JnKNAT3-like, highly expressed during heartwood formation. Plant Cell Reports, 2009, 28, 1717-1724.	5.6	18
51	Assessment of Populus wood chemistry following the introduction of a Bt toxin gene. Tree Physiology, 2006, 26, 557-564.	3.1	17
52	BIG LEAF is a regulator of organ size and adventitious root formation in poplar. PLoS ONE, 2017, 12, e0180527.	2.5	17
53	Enhancer trapping in woody plants: Isolation of the ET304 gene encoding a putative AT-hook motif transcription factor and characterization of the expression patterns conferred by its promoter in transgenic Populus and Arabidopsis. Plant Science, 2006, 171, 206-216.	3.6	15
54	A Cross-species Transcriptional Profile Analysis of Heartwood Formation in Black Walnut. Plant Molecular Biology Reporter, 2010, 28, 222-230.	1.8	13

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55	Improved growth and weed control of glyphosate-tolerant poplars. New Forests, 2016, 47, 653-667.	1.7	13
56	Modification of Flowering in Transgenic Trees. Progress in Biotechnology, 2001, 18, 247-256.	0.2	12
57	PHOTOPERIOD RESPONSE 1 (PHOR1)-like Genes Regulate Shoot/root Growth, Starch Accumulation, and Wood Formation in Populus. Journal of Experimental Botany, 2012, 63, 5623-5634.	4.8	11
58	Figured grain in aspen is heritable and not affected by graft-transmissible signals. Trees - Structure and Function, 2013, 27, 973-983.	1.9	10
59	Stochastic techno-economic analysis of electricity produced from poplar plantations in Indiana. Renewable Energy, 2020, 149, 189-197.	8.9	9
60	Bacterio-opsin gene overexpression fails to elevate fungal disease resistance in transgenic poplar (Populus). Canadian Journal of Forest Research, 2001, 31, 268-275.	1.7	7
61	Chinaâ€“U.S. workshop on biotechnology of bioenergy plants. Ecotoxicology, 2010, 19, 1-3.	2.4	6
62	Roles of JnRAP2.6-like from the Transition Zone of Black Walnut in Hormone Signaling. PLoS ONE, 2013, 8, e75857.	2.5	6
63	Assessment of risk, extinction, and threats to Himalayan yew in Pakistan. Saudi Journal of Biological Sciences, 2020, 27, 762-767.	3.8	6
64	Identification of the cytokinins in red pine seedlings. Plant Growth Regulation, 1993, 13, 169-178.	3.4	5
65	Challenges to Commercial Use of Transgenic Plants. Journal of Crop Improvement, 2006, 18, 433-450.	1.7	5
66	Genetic Modification of Lignin in Hybrid Poplar (Populus albaâ€‰Ã—â€‰Populus tremula) Does Not Substantially Alter Plant Defense or Arthropod Communities. Journal of Insect Science, 2017, 17, .	1.5	4
67	Fast Determination of the Lignin Monomer Compositions of Genetic Variants of Poplar via Fast Pyrolysis/Atmospheric Pressure Chemical Ionization Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2021, 32, 2546-2551.	2.8	4
68	Protecting Innovation: Genomics-Based Intellectual Property for the Development of Feedstock for Second-Generation Biofuels. Recent Patents on DNA & Gene Sequences, 2010, 4, 94-105.	0.7	3
69	Intellectual property rights of biotechnologically improved plants. , 2012, , 525-539.		1
70	The effect of a novel herbicide adjuvant in treating Amur honeysuckle (Lonicera maackii). Invasive Plant Science and Management, 2022, 15, 81-88.	1.1	1
71	635 Stability of Herbicide Resistance and GUS Expression in Transgenic Hybrid Poplars during Several Years of Field Trials and Vegetative Propagation. Hortscience: A Publication of the American Society for Hortcultural Science, 1999, 34, 557B-557.	1.0	0
72	Tailoring Biomass for Biochemical, Chemical or Thermochemical Catalytic Conversion. FASEB Journal, 2015, 29, 485.3.	0.5	0