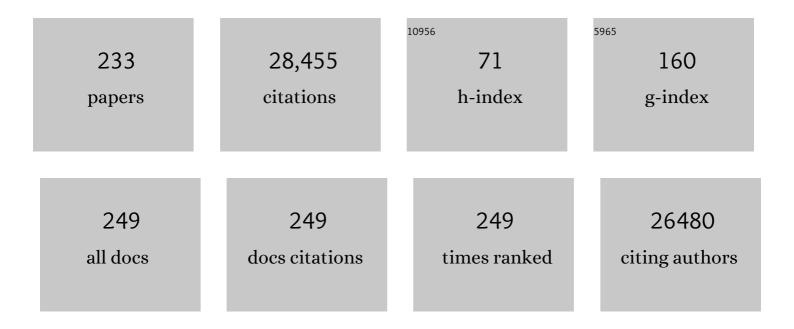
Gerald A Tuskan

List of Publications by Year in descending order

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CERALD & TUSKAN

#	Article	IF	CITATIONS
1	The Genome of Black Cottonwood, Populus trichocarpa (Torr. & Gray). Science, 2006, 313, 1596-1604.	6.0	3,945
2	Lignin Valorization: Improving Lignin Processing in the Biorefinery. Science, 2014, 344, 1246843.	6.0	2,994
3	Genome sequencing and analysis of the model grass Brachypodium distachyon. Nature, 2010, 463, 763-768.	13.7	1,685
4	The genome of Laccaria bicolor provides insights into mycorrhizal symbiosis. Nature, 2008, 452, 88-92.	13.7	1,003
5	Reference genome sequence of the model plant Setaria. Nature Biotechnology, 2012, 30, 555-561.	9.4	864
6	The genome of Eucalyptus grandis. Nature, 2014, 510, 356-362.	13.7	725
7	Genome of an arbuscular mycorrhizal fungus provides insight into the oldest plant symbiosis. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20117-20122.	3.3	717
8	Obligate biotrophy features unraveled by the genomic analysis of rust fungi. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9166-9171.	3.3	640
9	Poplar as a feedstock for biofuels: A review of compositional characteristics. Biofuels, Bioproducts and Biorefining, 2010, 4, 209-226.	1.9	558
10	Distinct Microbial Communities within the Endosphere and Rhizosphere of Populus deltoides Roots across Contrasting Soil Types. Applied and Environmental Microbiology, 2011, 77, 5934-5944.	1.4	524
11	Lignin content in natural <i>Populus</i> variants affects sugar release. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 6300-6305.	3.3	515
12	The pineapple genome and the evolution of CAM photosynthesis. Nature Genetics, 2015, 47, 1435-1442.	9.4	472
13	The <i>Physcomitrella patens</i> chromosomeâ€scale assembly reveals moss genome structure and evolution. Plant Journal, 2018, 93, 515-533.	2.8	406
14	<i>FLOWERING LOCUS T</i> duplication coordinates reproductive and vegetative growth in perennial poplar. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10756-10761.	3.3	370
15	Population genomics of Populus trichocarpa identifies signatures of selection and adaptive trait associations. Nature Genetics, 2014, 46, 1089-1096.	9.4	330
16	A Multifactor Analysis of Fungal and Bacterial Community Structure in the Root Microbiome of Mature Populus deltoides Trees. PLoS ONE, 2013, 8, e76382.	1.1	315
17	The transcriptome of the arbuscular mycorrhizal fungus <i>Glomus intraradices</i> (DAOM 197198) reveals functional tradeoffs in an obligate symbiont. New Phytologist, 2012, 193, 755-769.	3.5	305
18	Genomic insights into salt adaptation in a desert poplar. Nature Communications, 2013, 4, 2797.	5.8	286

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19	Plant host and soil origin influence fungal and bacterial assemblages in the roots of woody plants. Molecular Ecology, 2014, 23, 3356-3370.	2.0	285
20	Regulation of Lignin Biosynthesis and Its Role in Growth-Defense Tradeoffs. Frontiers in Plant Science, 2018, 9, 1427.	1.7	231
21	Genome-wide analysis of Aux/IAA and ARF gene families in Populus trichocarpa. BMC Plant Biology, 2007, 7, 59.	1.6	218
22	A roadmap for research on crassulacean acid metabolism (<scp>CAM</scp>) to enhance sustainable food and bioenergy production in a hotter, drier world. New Phytologist, 2015, 207, 491-504.	3.5	211
23	Engineering crassulacean acid metabolism to improve water-use efficiency. Trends in Plant Science, 2014, 19, 327-338.	4.3	206
24	Antisense Down-Regulation of <i>4CL</i> Expression Alters Lignification, Tree Growth, and Saccharification Potential of Field-Grown Poplar Â. Plant Physiology, 2010, 154, 874-886.	2.3	195
25	Involvement of auxin pathways in modulating root architecture during beneficial plant–microorganism interactions. Plant, Cell and Environment, 2013, 36, 909-919.	2.8	192
26	Divergence of the Dof Gene Families in Poplar, Arabidopsis, and Rice Suggests Multiple Modes of Gene Evolution after Duplication. Plant Physiology, 2006, 142, 820-830.	2.3	184
27	Specialized Microbiome of a Halophyte and its Role in Helping Non-Host Plants to Withstand Salinity. Scientific Reports, 2016, 6, 32467.	1.6	181
28	Genome structure and emerging evidence of an incipient sex chromosome in <i>Populus</i> . Genome Research, 2008, 18, 422-430.	2.4	177
29	Genome resequencing reveals multiscale geographic structure and extensive linkage disequilibrium in the forest tree <i>Populus trichocarpa</i> . New Phytologist, 2012, 196, 713-725.	3.5	173
30	Genomeâ€wide association implicates numerous genes underlying ecological trait variation in natural populations of <i>Populus trichocarpa</i> . New Phytologist, 2014, 203, 535-553.	3.5	171
31	The Kalanchoë genome provides insights into convergent evolution and building blocks of crassulacean acid metabolism. Nature Communications, 2017, 8, 1899.	5.8	159
32	Genomeâ€wide association mapping for wood characteristics in <i><scp>P</scp>opulus</i> identifies an array of candidate single nucleotide polymorphisms. New Phytologist, 2013, 200, 710-726.	3.5	158
33	Transcript, protein and metabolite temporal dynamics in the CAM plant Agave. Nature Plants, 2016, 2, 16178.	4.7	158
34	Phytosequestration: Carbon Biosequestration by Plants and the Prospects of Genetic Engineering. BioScience, 2010, 60, 685-696.	2.2	149
35	The willow genome and divergent evolution from poplar after the common genome duplication. Cell Research, 2014, 24, 1274-1277.	5.7	148
36	Characterization of microsatellites revealed by genomic sequencing ofPopulus trichocarpa. Canadian Journal of Forest Research, 2004, 34, 85-93.	0.8	145

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37	Plant Host-Associated Mechanisms for Microbial Selection. Frontiers in Plant Science, 2019, 10, 862.	1.7	139
38	Large-scale heterospecific segregation distortion in Populus revealed by a dense genetic map. Theoretical and Applied Genetics, 2004, 109, 451-463.	1.8	135
39	Variation of S/G Ratio and Lignin Content in a <i>Populus</i> Family Influences the Release of Xylose by Dilute Acid Hydrolysis. Applied Biochemistry and Biotechnology, 2006, 130, 427-435.	1.4	135
40	Accelerating Climate Resilient Plant Breeding by Applying Next-Generation Artificial Intelligence. Trends in Biotechnology, 2019, 37, 1217-1235.	4.9	134
41	The F-Box Gene Family Is Expanded in Herbaceous Annual Plants Relative to Woody Perennial Plants Â. Plant Physiology, 2008, 148, 1189-1200.	2.3	125
42	Plant-Derived Terpenes: A Feedstock for Specialty Biofuels. Trends in Biotechnology, 2017, 35, 227-240.	4.9	124
43	A Dual Role of Strigolactones in Phosphate Acquisition and Utilization in Plants. International Journal of Molecular Sciences, 2013, 14, 7681-7701.	1.8	117
44	Breeding progress and preparedness for massâ€scale deployment of perennial lignocellulosic biomass crops switchgrass, miscanthus, willow and poplar. GCB Bioenergy, 2019, 11, 118-151.	2.5	116
45	Limitations of molecular-marker-aided selection in forest tree breeding. Canadian Journal of Forest Research, 1992, 22, 1050-1061.	0.8	113
46	Two Poplar-Associated Bacterial Isolates Induce Additive Favorable Responses in a Constructed Plant-Microbiome System. Frontiers in Plant Science, 2016, 7, 497.	1.7	113
47	<scp>Genomeâ€wide association studies</scp> and expressionâ€based quantitative trait loci analyses reveal roles of <scp>HCT</scp> 2 in caffeoylquinic acid biosynthesis and its regulation by defenseâ€responsive transcription factors in <i>Populus</i> . New Phytologist, 2018, 220, 502-516.	3.5	112
48	Identification of Quantitative Trait Loci Influencing Wood Property Traits in Loblolly Pine (<i>Pinus) Tj ETQq0 0</i>	0 rgβT /Ov	erlock 10 Tf 5
49	Recent Advances in the Transcriptional Regulation of Secondary Cell Wall Biosynthesis in the Woody Plants. Frontiers in Plant Science, 2018, 9, 1535.	1.7	110
50	Poplar Genomics is Getting Popular: The Impact of the Poplar Genome Project on Tree Research. Plant Biology, 2004, 6, 2-4.	1.8	109
51	High-resolution genetic mapping of allelic variants associated with cell wall chemistry in Populus. BMC Genomics, 2015, 16, 24.	1.2	106
52	An Inâ€Đepth Understanding of Biomass Recalcitrance Using Natural Poplar Variants as the Feedstock. ChemSusChem, 2017, 10, 139-150.	3.6	106
53	Discovery and annotation of small proteins using genomics, proteomics, and computational approaches. Genome Research, 2011, 21, 634-641.	2.4	105
54	<i>Pseudomonas fluorescens</i> Induces Strain-Dependent and Strain-Independent Host Plant Responses in Defense Networks, Primary Metabolism, Photosynthesis, and Fitness. Molecular Plant-Microbe Interactions, 2012, 25, 765-778.	1.4	100

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55	<i><scp>P</scp>opulus trichocarpa</i> cell wall chemistry and ultrastructure trait variation, genetic control and genetic correlations. New Phytologist, 2013, 197, 777-790.	3.5	100
56	Significance of Lignin S/G Ratio in Biomass Recalcitrance of <i>Populus trichocarpa</i> Variants for Bioethanol Production. ACS Sustainable Chemistry and Engineering, 2018, 6, 2162-2168.	3.2	100
57	Genetic analysis of Physcomitrella patens identifies ABSCISIC ACID NON-RESPONSIVE (ANR), a regulator of ABA responses unique to basal land plants and required for desiccation tolerance. Plant Cell, 2016, 28, tpc.00091.2016.	3.1	98
58	Post-fire aspen seedling recruitment across the Yellowstone (USA) Landscape. Landscape Ecology, 2003, 18, 127-140.	1.9	97
59	Drought resistance of two hybrid Populus clones grown in a large-scale plantation. Tree Physiology, 1998, 18, 653-658.	1.4	96
60	Advances and perspectives on the use of CRISPR/Cas9 systems in plant genomics research. Current Opinion in Plant Biology, 2016, 30, 70-77.	3.5	94
61	Toward low-cost biological and hybrid biological/catalytic conversion of cellulosic biomass to fuels. Energy and Environmental Science, 2022, 15, 938-990.	15.6	93
62	A 34K <scp>SNP</scp> genotyping array for <i>Populus trichocarpa</i> : Design, application to the study of natural populations and transferability to other <i>Populus</i> species. Molecular Ecology Resources, 2013, 13, 306-323.	2.2	92
63	Abiotic Stresses Shift Belowground <i>Populus</i> -Associated Bacteria Toward a Core Stress Microbiome. MSystems, 2018, 3, .	1.7	89
64	Highly Efficient Isolation of Populus Mesophyll Protoplasts and Its Application in Transient Expression Assays. PLoS ONE, 2012, 7, e44908.	1.1	89
65	ESTABLISHMENT, PERSISTENCE, AND GROWTH OF ASPEN (POPULUS TREMULOIDES) SEEDLINGS IN YELLOWSTONE NATIONAL PARK. Ecology, 2005, 86, 404-418.	1.5	88
66	Poplar breeding and testing strategies in the north-central U.S.: Demonstration of potential yield and consideration of future research needs. Forestry Chronicle, 2001, 77, 245-253.	0.5	86
67	A study of poplar organosolv lignin after melt rheology treatment as carbon fiber precursors. Green Chemistry, 2016, 18, 5015-5024.	4.6	85
68	Multitrait genomeâ€wide association analysis of <i>Populus trichocarpa</i> identifies key polymorphisms controlling morphological and physiological traits. New Phytologist, 2019, 223, 293-309.	3.5	85
69	Insights of biomass recalcitrance in natural <i>Populus trichocarpa</i> variants for biomass conversion. Green Chemistry, 2017, 19, 5467-5478.	4.6	82
70	Genetic relatedness and female spatial organization in a solitary carnivore, the raccoon,Procyon lotor. Molecular Ecology, 2002, 11, 1115-1124.	2.0	80
71	A willow sex chromosome reveals convergent evolution of complex palindromic repeats. Genome Biology, 2020, 21, 38.	3.8	74
72	Genome-wide analysis of lectin receptor-like kinases in Populus. BMC Genomics, 2016, 17, 699.	1.2	72

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73	A physical map of the highly heterozygous Populus genome: integration with the genome sequence and genetic map and analysis of haplotype variation. Plant Journal, 2007, 50, 1063-1078.	2.8	70
74	<i>Populus trichocarpa</i> and <i>Populus deltoides</i> Exhibit Different Metabolomic Responses to Colonization by the Symbiotic Fungus <i>Laccaria bicolor</i> . Molecular Plant-Microbe Interactions, 2014, 27, 546-556.	1.4	69
75	Within tree variability of lignin composition in Populus. Wood Science and Technology, 2008, 42, 649-661.	1.4	68
76	Analysis of 4,664 high-quality sequence-finished poplar full-length cDNA clones and their utility for the discovery of genes responding to insect feeding. BMC Genomics, 2008, 9, 57.	1.2	68
77	Newly identified helper bacteria stimulate ectomycorrhizal formation in Populus. Frontiers in Plant Science, 2014, 5, 579.	1.7	68
78	A host plant genome (<i>Zizania latifolia</i>) after a centuryâ€long endophyte infection. Plant Journal, 2015, 83, 600-609.	2.8	67
79	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.	3.5	66
80	Short-rotation woody crop systems, atmospheric carbon dioxide and carbon management: A U.S. case study. Forestry Chronicle, 2001, 77, 259-264.	0.5	65
81	Knockdown of a laccase in <i>Populus deltoides</i> confers altered cell wall chemistry and increased sugar release. Plant Biotechnology Journal, 2016, 14, 2010-2020.	4.1	64
82	Diel rewiring and positive selection of ancient plant proteins enabled evolution of CAM photosynthesis in Agave. BMC Genomics, 2018, 19, 588.	1.2	64
83	Chemical, ultrastructural and supramolecular analysis of tension wood in Populus tremula x alba as a model substrate for reduced recalcitrance. Energy and Environmental Science, 2011, 4, 4962.	15.6	61
84	Revisiting the sequencing of the first tree genome: Populus trichocarpa. Tree Physiology, 2013, 33, 357-364.	1.4	61
85	Metabolic profiling reveals altered sugar and secondary metabolism in response to UGPase overexpression in Populus. BMC Plant Biology, 2014, 14, 265.	1.6	61
86	New technologies accelerate the exploration of non-coding RNAs in horticultural plants. Horticulture Research, 2017, 4, 17031.	2.9	61
87	Association mapping, transcriptomics, and transient expression identify candidate genes mediating plant–pathogen interactions in a tree. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11573-11578.	3.3	61
88	Characterization of a large sex determination region in Salix purpurea L. (Salicaceae). Molecular Genetics and Genomics, 2018, 293, 1437-1452.	1.0	61
89	Structural changes of lignins in natural Populus variants during different pretreatments. Bioresource Technology, 2020, 295, 122240.	4.8	61
90	Two High-Throughput Techniques for Determining Wood Properties as Part of a Molecular Genetics Analysis of Hybrid Poplar and Loblolly Pine. Applied Biochemistry and Biotechnology, 1999, 77, 55-66.	1.4	60

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91	Metabolic functions of Pseudomonas fluorescens strains from Populus deltoides depend on rhizosphere or endosphere isolation compartment. Frontiers in Microbiology, 2015, 6, 1118.	1.5	60
92	<scp><i>S</i></scp> <i>phagnum</i> physiology in the context of changing climate: emergent influences of genomics, modelling and host–microbiome interactions on understanding ecosystem function. Plant, Cell and Environment, 2015, 38, 1737-1751.	2.8	60
93	Climateâ€resilient agroforestry: physiological responses to climate change and engineering of crassulacean acid metabolism (<scp>CAM</scp>) as a mitigation strategy. Plant, Cell and Environment, 2015, 38, 1833-1849.	2.8	59
94	A 5-Enolpyruvylshikimate 3-Phosphate Synthase Functions as a Transcriptional Repressor in <i>Populus</i> . Plant Cell, 2018, 30, 1645-1660.	3.1	56
95	Network-based integration of systems genetics data reveals pathways associated with lignocellulosic biomass accumulation and processing. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 1195-1200.	3.3	55
96	Annotation and comparative analysis of the glycoside hydrolase genes in Brachypodium distachyon. BMC Genomics, 2010, 11, 600.	1.2	53
97	Challenges of the utilization of wood polymers: how can they be overcome?. Applied Microbiology and Biotechnology, 2011, 91, 1525-1536.	1.7	52
98	Fungal Endophytes of <i>Populus trichocarpa</i> Alter Host Phenotype, Gene Expression, and Rhizobiome Composition. Molecular Plant-Microbe Interactions, 2019, 32, 853-864.	1.4	52
99	Phenotypic variation and quantitative trait locus identification for osmotic potential in an interspecific hybrid inbred F2 poplar pedigree grown in contrasting environments. Tree Physiology, 2006, 26, 595-604.	1.4	50
100	Genome-wide identification of lineage-specific genes in Arabidopsis, Oryza and Populus. Genomics, 2009, 93, 473-480.	1.3	50
101	The obscure events contributing to the evolution of an incipient sex chromosome in Populus: a retrospective working hypothesis. Tree Genetics and Genomes, 2012, 8, 559-571.	0.6	50
102	Hardwood Tree Genomics: Unlocking Woody Plant Biology. Frontiers in Plant Science, 2018, 9, 1799.	1.7	50
103	Comparative analysis of the transcriptomes of <i>Populus trichocarpa</i> and <i>Arabidopsis thaliana </i> suggests extensive evolution of gene expression regulation in angiosperms. New Phytologist, 2008, 180, 408-420.	3.5	49
104	Synthetic biology as it relates to CAM photosynthesis: challenges and opportunities. Journal of Experimental Botany, 2014, 65, 3381-3393.	2.4	49
105	Phylogenetic Occurrence of the Phenylpropanoid Pathway and Lignin Biosynthesis in Plants. Frontiers in Plant Science, 2021, 12, 704697.	1.7	49
106	Identification of quantitative trait loci affecting ectomycorrhizal symbiosis in an interspecific F1 poplar cross and differential expression of genes in ectomycorrhizas of the two parents: Populus deltoides and Populus trichocarpa. Tree Genetics and Genomes, 2011, 7, 617-627.	0.6	48
107	Highly variable SSR markers in Douglas-fir: Mendelian inheritance and map locations. Theoretical and Applied Genetics, 2004, 108, 873-880.	1.8	47
108	Multiple levers for overcoming the recalcitrance of lignocellulosic biomass. Biotechnology for Biofuels, 2019, 12, 15.	6.2	47

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109	Clonal and seasonal differences in leaf osmotic potential and organic solutes of five hybrid poplar clones grown under field conditions. Tree Physiology, 1998, 18, 645-652.	1.4	46
110	MicroSyn: A user friendly tool for detection of microsynteny in a gene family. BMC Bioinformatics, 2011, 12, 79.	1.2	46
111	Genomic aspects of research involving polyploid plants. Plant Cell, Tissue and Organ Culture, 2011, 104, 387-397.	1.2	45
112	The nature of the progression of drought stress drives differential metabolomic responses in Populus deltoides. Annals of Botany, 2019, 124, 617-626.	1.4	45
113	Transgenic Poplar Designed for Biofuels. Trends in Plant Science, 2020, 25, 881-896.	4.3	45
114	Identification of candidate genes in Arabidopsis and Populus cell wall biosynthesis using text-mining, co-expression network analysis and comparative genomics. Plant Science, 2011, 181, 675-687.	1.7	44
115	Defining the Boundaries and Characterizing the Landscape of Functional Genome Expression in Vascular Tissues of <i>Populus</i> using Shotgun Proteomics. Journal of Proteome Research, 2012, 11, 449-460.	1.8	44
116	The Development of Two Flanking SCAR Markers Linked to a Sex Determination Locus in Salix viminalis L. , 2003, 94, 185-189.		42
117	Poplar Genomics: State of the Science. Critical Reviews in Plant Sciences, 2009, 28, 285-308.	2.7	42
118	Mediation of plant–mycorrhizal interaction by a lectin receptor-like kinase. Nature Plants, 2019, 5, 676-680.	4.7	42
119	Characterization of Transposable Elements in the Ectomycorrhizal Fungus Laccaria bicolor. PLoS ONE, 2012, 7, e40197.	1.1	38
120	Qualitative and quantitative resistances to leaf rust finely mapped within two nucleotideâ€binding site leucineâ€rich repeat (NBS‣RR)â€rich genomic regions of chromosome 19 in poplar. New Phytologist, 2011, 192, 151-163.	3.5	37
121	3D Chemical Image using TOFâ€SIMS Revealing the Biopolymer Component Spatial and Lateral Distributions in Biomass. Angewandte Chemie - International Edition, 2012, 51, 12005-12008.	7.2	36
122	Identification of quantitative trait loci and candidate genes for cadmium tolerance in Populus. Tree Physiology, 2012, 32, 626-638.	1.4	36
123	Populus trichocarpa encodes small, effector-like secreted proteins that are highly induced during mutualistic symbiosis. Scientific Reports, 2017, 7, 382.	1.6	36
124	Clonal differences in biomass characteristics, coppice ability, and biomass prediction equations among four <i>Populus</i> clones grown in eastern North Dakota. Canadian Journal of Forest Research, 1992, 22, 348-354.	0.8	34
125	Microsatellite primer resource for <i>Populus</i> developed from the mapped sequence scaffolds of the Nisquallyâ€I genome. New Phytologist, 2009, 181, 498-503.	3.5	34
126	Transcriptional and Post-transcriptional Regulation of Lignin Biosynthesis Pathway Genes in Populus. Frontiers in Plant Science, 2020, 11, 652.	1.7	34

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127	Prime Editing Technology and Its Prospects for Future Applications in Plant Biology Research. Biodesign Research, 2020, 2020, .	0.8	34
128	CRISPR/Cas9-mediated targeted mutagenesis for functional genomics research of crassulacean acid metabolism plants. Journal of Experimental Botany, 2019, 70, 6621-6629.	2.4	33
129	A genetic linkage map for the ectomycorrhizal fungus <i>Laccaria bicolor</i> and its alignment to the wholeâ€genome sequence assemblies. New Phytologist, 2008, 180, 316-328.	3.5	32
130	Down-Regulation of KORRIGAN-Like Endo-β-1,4-Glucanase Genes Impacts Carbon Partitioning, Mycorrhizal Colonization and Biomass Production in Populus. Frontiers in Plant Science, 2016, 7, 1455.	1.7	32
131	Pleiotropic and Epistatic Network-Based Discovery: Integrated Networks for Target Gene Discovery. Frontiers in Energy Research, 2018, 6, .	1.2	32
132	Can exascale computing and explainable artificial intelligence applied to plant biology deliver on the United Nations sustainable development goals?. Current Opinion in Biotechnology, 2020, 61, 217-225.	3.3	32
133	A New Calmodulin-Binding Protein Expresses in the Context of Secondary Cell Wall Biosynthesis and Impacts Biomass Properties in Populus. Frontiers in Plant Science, 2018, 9, 1669.	1.7	31
134	A microarrayâ€based genotyping and genetic mapping approach for highly heterozygous outcrossing species enables localization of a large fraction of the unassembled <i>Populus trichocarpa</i> genome sequence. Plant Journal, 2009, 58, 1054-1067.	2.8	30
135	Cytogenetic Analysis of <i>Populus trichocarpa</i> – Ribosomal DNA, Telomere Repeat Sequence, and Marker-selected BACs. Cytogenetic and Genome Research, 2009, 125, 74-80.	0.6	30
136	Comparative analysis of GT14/GT14-like gene family in Arabidopsis, Oryza, Populus, Sorghum and Vitis. Plant Science, 2011, 181, 688-695.	1.7	29
137	Natural genetic variability reduces recalcitrance in poplar. Biotechnology for Biofuels, 2016, 9, 106.	6.2	29
138	Micropropagation of Populus trichocarpa â€~Nisqually-1': the genotype deriving the Populus reference genome. Plant Cell, Tissue and Organ Culture, 2009, 99, 251-257.	1.2	28
139	High Throughput Screening Technologies in Biomass Characterization. Frontiers in Energy Research, 2018, 6, .	1.2	28
140	PdWND3A, a wood-associated NAC domain-containing protein, affects lignin biosynthesis and composition in Populus. BMC Plant Biology, 2019, 19, 486.	1.6	28
141	Morphophysiological traits as markers for the early selection of conifer genetic families. Canadian Journal of Forest Research, 1992, 22, 1001-1008.	0.8	27
142	Defining the genetic components of callus formation: A GWAS approach. PLoS ONE, 2018, 13, e0202519.	1.1	27
143	Overexpression of a serine hydroxymethyltransferase increases biomass production and reduces recalcitrance in the bioenergy crop <i>Populus</i> . Sustainable Energy and Fuels, 2019, 3, 195-207.	2.5	27
144	Technoeconomic and life-cycle analysis of single-step catalytic conversion of wet ethanol into fungible fuel blendstocks. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12576-12583.	3.3	27

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145	Putting the Pieces Together: High-performance LC-MS/MS Provides Network-, Pathway-, and Protein-level Perspectives in Populus. Molecular and Cellular Proteomics, 2013, 12, 106-119.	2.5	26
146	Characterization of DWARF14 Genes in Populus. Scientific Reports, 2016, 6, 21593.	1.6	26
147	Overexpression of a Domain of Unknown Function 231-containing protein increases O-xylan acetylation and cellulose biosynthesis in Populus. Biotechnology for Biofuels, 2017, 10, 311.	6.2	26
148	Mycorrhizal symbionts of Populus to be sequenced by the United States Department of Energy?s Joint Genome Institute. Mycorrhiza, 2004, 14, 63-64.	1.3	25
149	Bioinformatics-Based Identification of Candidate Genes from QTLs Associated with Cell Wall Traits in Populus. Bioenergy Research, 2010, 3, 172-182.	2.2	25
150	Initial characterization of shade avoidance response suggests functional diversity between <i>Populus</i> phytochrome B genes. New Phytologist, 2012, 196, 726-737.	3.5	25
151	Functional Genomics of Drought Tolerance in Bioenergy Crops. Critical Reviews in Plant Sciences, 2014, 33, 205-224.	2.7	25
152	Comparative sequence analysis between orthologous regions of theArabidopsisandPopulusgenomes reveals substantial synteny and microcollinearity. Canadian Journal of Forest Research, 2003, 33, 2245-2251.	0.8	24
153	Strigolactone-Regulated Proteins Revealed by iTRAQ-Based Quantitative Proteomics in <i>Arabidopsis</i> . Journal of Proteome Research, 2014, 13, 1359-1372.	1.8	24
154	Overexpression of an Agave Phosphoenolpyruvate Carboxylase Improves Plant Growth and Stress Tolerance. Cells, 2021, 10, 582.	1.8	24
155	Genetic variation in postfire aspen seedlings in Yellowstone National Park. Molecular Ecology, 1999, 8, 1769-1780.	2.0	23
156	Efficiency of gene silencing in Arabidopsis: direct inverted repeats vs. transitive RNAi vectors. Plant Biotechnology Journal, 2007, 5, 615-626.	4.1	23
157	Conservation and Diversification of Circadian Rhythmicity Between a Model Crassulacean Acid Metabolism Plant Kalanchoë fedtschenkoi and a Model C3 Photosynthesis Plant Arabidopsis thaliana. Frontiers in Plant Science, 2018, 9, 1757.	1.7	23
158	Characterization of MORE AXILLARY GROWTH Genes in Populus. PLoS ONE, 2014, 9, e102757.	1.1	23
159	Characterization of cellulose structure of Populus plants modified in candidate cellulose biosynthesis genes. Biomass and Bioenergy, 2016, 94, 146-154.	2.9	22
160	Overexpression of a Domain of Unknown Function 266-containing protein results in high cellulose content, reduced recalcitrance, and enhanced plant growth in the bioenergy crop Populus. Biotechnology for Biofuels, 2017, 10, 74.	6.2	22
161	Agronomic performance of Populus deltoides trees engineered for biofuel production. Biotechnology for Biofuels, 2017, 10, 253.	6.2	22
162	Marker-aided selection in a backcross breeding program for resistance to chestnut blight in the American chestnut. Canadian Journal of Forest Research, 1992, 22, 1031-1035.	0.8	21

#	Article	IF	CITATIONS
163	PtWOX11 acts as master regulator conducting the expression of key transcription factors to induce de novo shoot organogenesis in poplar. Plant Molecular Biology, 2018, 98, 389-406.	2.0	21
164	Comparative genomics can provide new insights into the evolutionary mechanisms and gene function in CAM plants. Journal of Experimental Botany, 2019, 70, 6539-6547.	2.4	21
165	Genome-Wide Association Study of Wood Anatomical and Morphological Traits in Populus trichocarpa. Frontiers in Plant Science, 2020, 11, 545748.	1.7	21
166	Differential Detection of Genetic Loci Underlying Stem and Root Lignin Content in Populus. PLoS ONE, 2010, 5, e14021.	1.1	20
167	Genome Anchored QTLs for Biomass Productivity in Hybrid Populus Grown under Contrasting Environments. PLoS ONE, 2013, 8, e54468.	1.1	20
168	An innovative platform for quick and flexible joining of assorted DNA fragments. Scientific Reports, 2016, 6, 19278.	1.6	20
169	Effects of Biomass Accessibility and Klason Lignin Contents during Consolidated Bioprocessing in <i>Populus trichocarpa</i> . ACS Sustainable Chemistry and Engineering, 2017, 5, 5075-5081.	3.2	20
170	Understanding the influences of different pretreatments on recalcitrance of Populus natural variants. Bioresource Technology, 2018, 265, 75-81.	4.8	20
171	Multi-Phenotype Association Decomposition: Unraveling Complex Gene-Phenotype Relationships. Frontiers in Genetics, 2019, 10, 417.	1.1	20
172	Population-level approaches reveal novel aspects of lignin biosynthesis, content, composition and structure. Current Opinion in Biotechnology, 2019, 56, 250-257.	3.3	20
173	Advances and perspectives in discovery and functional analysis of small secreted proteins in plants. Horticulture Research, 2021, 8, 130.	2.9	20
174	Genetic variation and spatial structure in sugar maple (Acer saccharumMarsh.) and implications for predicted global-scale environmental change. Global Change Biology, 2000, 6, 335-344.	4.2	19
175	Sequencing and Analysis of the Sex Determination Region of Populus trichocarpa. Genes, 2020, 11, 843.	1.0	19
176	An Improved Approach for Mapping Quantitative Trait Loci in a Pseudo-Testcross: Revisiting a Poplar Mapping Study. Bioinformatics and Biology Insights, 2010, 4, BBI.S4153.	1.0	18
177	Perspectives on the basic and applied aspects of crassulacean acid metabolism (CAM) research. Plant Science, 2018, 274, 394-401.	1.7	18
178	Investigating the correlation of biomass recalcitrance with pyrolysis oil using poplar as the feedstock. Bioresource Technology, 2019, 289, 121589.	4.8	18
179	Expanding the application of a UV-visible reporter for transient gene expression and stable transformation in plants. Horticulture Research, 2021, 8, 234.	2.9	18
180	Polymix breeding with paternity analysis in Populus: a test for differential reproductive success (DRS) among pollen donors. Tree Genetics and Genomes, 2006, 2, 53-60.	0.6	17

#	Article	IF	CITATIONS
181	Assessment of Populus wood chemistry following the introduction of a Bt toxin gene. Tree Physiology, 2006, 26, 557-564.	1.4	17
182	Quantitative proteome profile of water deficit stress responses in eastern cottonwood (Populus) Tj ETQq0 0 0 r	gBT_/Overl	ock 10 Tf 50
183	Identification of Populus Small RNAs Responsive to Mutualistic Interactions With Mycorrhizal Fungi, Laccaria bicolor and Rhizophagus irregularis. Frontiers in Microbiology, 2019, 10, 515.	1.5	17
184	Engineering Tree Seasonal Cycles of Growth Through Chromatin Modification. Frontiers in Plant Science, 2019, 10, 412.	1.7	17
185	Overexpression of a <i>Prefoldin \hat{l}^2</i> subunit gene reduces biomass recalcitrance in the bioenergy crop <i>Populus</i> . Plant Biotechnology Journal, 2020, 18, 859-871.	4.1	17
186	Arabidopsis Câ€ŧerminal binding protein ANGUSTIFOLIA modulates transcriptional coâ€≉egulation of <i>MYB46</i> and <i>WRKY33</i> . New Phytologist, 2020, 228, 1627-1639.	3.5	17
187	Potential applications of molecular markers for genetic analysis of host–pathogen systems in forest trees. Canadian Journal of Forest Research, 1992, 22, 1036-1043.	0.8	16
188	Biosystems Design to Accelerate C ₃ -to-CAM Progression. Biodesign Research, 2020, 2020, .	0.8	16
189	Plant Biosystems Design Research Roadmap 1.0. Biodesign Research, 2020, 2020, .	0.8	16
190	Data Integration in Poplar: â€~Omics Layers and Integration Strategies. Frontiers in Genetics, 2019, 10, 874.	1.1	15
191	Characterization of microsatellites in the coding regions of the Populus genome. Molecular Breeding, 2011, 27, 59-66.	1.0	14
192	Quantitative trait locus mapping of Populus bark features and stem diameter. BMC Plant Biology, 2017, 17, 224.	1.6	14
193	Towards engineering ectomycorrhization into switchgrass bioenergy crops via a lectin receptorâ€like kinase. Plant Biotechnology Journal, 2021, 19, 2454-2468.	4.1	14
194	Using marker-aided selection to improve tree growth response to abiotic stress. Canadian Journal of Forest Research, 1992, 22, 1018-1030.	0.8	13
195	From systems biology to photosynthesis and whole-plant physiology. Plant Signaling and Behavior, 2012, 7, 260-262.	1.2	13
196	Finding New Cell Wall Regulatory Genes in Populus trichocarpa Using Multiple Lines of Evidence. Frontiers in Plant Science, 2019, 10, 1249.	1.7	13
197	Genome-wide association studies of bark texture in Populus trichocarpa. Tree Genetics and Genomes, 2019, 15, 1.	0.6	13

198Economic impact of yield and composition variation in bioenergy crops: <scp><i>Populus
trichocarpa</i></scp>. Biofuels, Bioproducts and Biorefining, 2021, 15, 176-188.1.913

#	Article	IF	CITATIONS
199	Method of Extracting Genomic DNA from Non-Germinated Gymnosperm and Angiosperm Pollen. BioTechniques, 1997, 22, 390-394.	0.8	12
200	Evolution and divergence in the coding and promoter regions of the Populus gene family encoding xyloglucan endotransglycosylase/hydrolases. Tree Genetics and Genomes, 2012, 8, 177-194.	0.6	12
201	Simultaneous knockdown of six non-family genes using a single synthetic RNAi fragment in Arabidopsis thaliana. Plant Methods, 2016, 12, 16.	1.9	12
202	Poplar Genome Microarrays. , 2011, , 112-127.		12
203	Development of AFLP and RAPD markers linked to a locus associated with twisted growth in corkscrew willow (Salix matsudana 'Tortuosa'). Tree Physiology, 2007, 27, 1575-1583.	1.4	11
204	Wavelet-Based Genomic Signal Processing for Centromere Identification and Hypothesis Generation. Frontiers in Genetics, 2019, 10, 487.	1.1	11
205	Light-responsive expression atlas reveals the effects of light quality and intensity in Kalanchoë fedtschenkoi, a plant with crassulacean acid metabolism. GigaScience, 2020, 9, .	3.3	11
206	Report on the Forest Trees Workshop at the Plant and Animal Genome Conference. Comparative and Functional Genomics, 2003, 4, 229-238.	2.0	10
207	Solar input and energy storage in a five-year-old American sycamore plantation. Forest Ecology and Management, 1982, 4, 191-198.	1.4	9
208	Moving Away from the Reference Genome: Evaluating a Peptide Sequencing Tagging Approach for Single Amino Acid Polymorphism Identifications in the Genus <i>Populus</i> . Journal of Proteome Research, 2013, 12, 3642-3651.	1.8	9
209	A Variable Polyglutamine Repeat Affects Subcellular Localization and Regulatory Activity of a <i>Populus</i> ANGUSTIFOLIA Protein. G3: Genes, Genomes, Genetics, 2018, 8, 2631-2641.	0.8	9
210	The Ancient Salicoid Genome Duplication Event: A Platform for Reconstruction of De Novo Gene Evolution in Populus trichocarpa. Genome Biology and Evolution, 2021, 13, .	1.1	9
211	An Intein-Mediated Split–nCas9 System for Base Editing in Plants. ACS Synthetic Biology, 2022, 11, 2513-2517.	1.9	9
212	Comparative Genomics Analysis Provides New Insight Into Molecular Basis of Stomatal Movement in Kalanchoë fedtschenkoi. Frontiers in Plant Science, 2019, 10, 292.	1.7	8
213	Analysis of sex-linked, sequence-characterized amplified region markers in Salix eriocephala. Canadian Journal of Forest Research, 2003, 33, 1785-1790.	0.8	7
214	<i>Populus</i> Community Mega-Genomics: Coming of Age. Critical Reviews in Plant Sciences, 2009, 28, 282-284.	2.7	7
215	Evolutionary analyses of nonâ€family genes in plants. Plant Journal, 2013, 73, 788-797.	2.8	7
216	China–U.S. workshop on biotechnology of bioenergy plants. Ecotoxicology, 2010, 19, 1-3.	1.1	6

#	Article	IF	CITATIONS
217	Integrating mRNA and Protein Sequencing Enables the Detection and Quantitative Profiling of Natural Protein Sequence Variants of <i>Populus trichocarpa</i> . Journal of Proteome Research, 2015, 14, 5318-5326.	1.8	6
218	The unexpected malleability of lignin. Nature Plants, 2019, 5, 128-128.	4.7	6
219	Accurate determination of genotypic variance of cell wall characteristics of aÂPopulus trichocarpaÂpedigree using high-throughput pyrolysis-molecular beam mass spectrometry. Biotechnology for Biofuels, 2021, 14, 59.	6.2	6
220	Transcriptome and Degradome Profiling Reveals a Role of miR530 in the Circadian Regulation of Gene Expression in Kalanchoë marnieriana. Cells, 2021, 10, 1526.	1.8	5
221	Biological Parts for Plant Biodesign to Enhance Land-Based Carbon Dioxide Removal. Biodesign Research, 2021, 2021, .	0.8	5
222	Scaling nitrogen and carbon interactions: what are the consequences of biological buffering?. Ecology and Evolution, 2015, 5, 2839-2850.	0.8	4
223	Identification of functional single nucleotide polymorphism of Populus trichocarpa PtrEPSPâ€∢F and determination of its transcriptional effect. Plant Direct, 2020, 4, e00178.	0.8	4
224	Classification of Complete Proteomes of Different Organisms and Protein Sets Based on Their Protein Distributions in Terms of Some Key Attributes of Proteins. International Journal of Genomics, 2018, 2018, 1-12.	0.8	3
225	Auxin Signaling and Response Mechanisms and Roles in Plant Growth and Development. , 2011, , 231-254.		3
226	Heterospecific Neighbor Plants Impact Root Microbiome Diversity and Molecular Function of Root Fungi. Frontiers in Microbiology, 2021, 12, 680267.	1.5	3
227	Expression of Inoculum and Family Specific Responses in the Ponderosa Pine-Western Gall Rust Pathosystem. Plant Disease, 1997, 81, 57-62.	0.7	2
228	A Suggestion of Converting Protein Intrinsic Disorder to Structural Entropy Using Shannon's Information Theory. Entropy, 2019, 21, 591.	1.1	2
229	Inference of Gene Regulatory Network Uncovers the Linkage between Circadian Clock and Crassulacean Acid Metabolism in Kalanchoë fedtschenkoi. Cells, 2021, 10, 2217.	1.8	2
230	Extending the Arabidopsis flowering paradigm to a mass flowering phenomenon in the tropics. Molecular Ecology, 2013, 22, 4603-4605.	2.0	1
231	Diversity and conservation of plant small secreted proteins associated with arbuscular mycorrhizal symbiosis. Horticulture Research, 2022, 9, .	2.9	1
232	Cover Image, Volume 15, Issue 1. Biofuels, Bioproducts and Biorefining, 2021, 15, i.	1.9	0
233	The Populus Genome Sequence. , 2011, , 85-111.		0