Carl J Douglas

List of Publications by Year in descending order

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92 papers	9,435 citations	30070 54 h-index	42399 92 g-index
94 all docs	94 docs citations	94 times ranked	9728 citing authors

#	Article	IF	Citations
1	Scale and direction of adaptive introgression between black cottonwood (Populus) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	3.9	25
2	Overexpression of AtGolS3 and CsRFS in poplar enhances ROS tolerance and represses defense response to leaf rust disease. Tree Physiology, 2018, 38, 457-470.	3.1	23
3	Introgression from Populus balsamifera underlies adaptively significant variation and range boundaries in P.Âtrichocarpa. New Phytologist, 2018, 217, 416-427.	7.3	36
4	Populus as a Model Tree. Plant Genetics and Genomics: Crops and Models, 2017, , 61-84.	0.3	5
5	Sexual epigenetics: gender-specific methylation of a gene in the sex determining region of Populus balsamifera. Scientific Reports, 2017, 7, 45388.	3.3	59
6	Sexual homomorphism in dioecious trees: extensive tests fail to detect sexual dimorphism in Populus. Scientific Reports, 2017, 7, 1831.	3.3	54
7	Role of Glycosyltransferases in Pollen Wall Primexine Formation and Exine Patterning. Plant Physiology, 2017, 173, 167-182.	4.8	44
8	Functional network analysis of genes differentially expressed during xylogenesis in soc1ful woody Arabidopsis plants. Plant Journal, 2016, 86, 376-390.	5.7	27
9	Genomic and functional approaches reveal a case of adaptive introgression from Populus balsamifera (balsam poplar) in P.Âtrichocarpa (black cottonwood). Molecular Ecology, 2016, 25, 2427-2442.	3.9	85
10	Gene Expression Patterns of Wood Decay Fungi Postia placenta and Phanerochaete chrysosporium Are Influenced by Wood Substrate Composition during Degradation. Applied and Environmental Microbiology, 2016, 82, 4387-4400.	3.1	35
11	Spatially and temporally restricted expression of PtrMYB021 regulates secondary cell wall formation in Arabidopsis. Journal of Plant Biology, 2016, 59, 16-23.	2.1	9
12	Genetic differentiation of the regional Plutella xylostella populations across the Taiwan Strait based on identification of microsatellite markers. Ecology and Evolution, 2015, 5, 5880-5891.	1.9	3
13	Evolutionary Quantitative Genomics of Populus trichocarpa. PLoS ONE, 2015, 10, e0142864.	2.5	31
14	Comparative interrogation of the developing xylem transcriptomes of two woodâ€forming species: <scp>P</scp>opulus trichocarpa and <scp>E</scp>ucalyptus grandis. New Phytologist, 2015, 206, 1391-1405.	7.3	47
15	A role for OVATE FAMILY PROTEIN1 (OFP1) and OFP4 in a BLH6-KNAT7 multi-protein complex regulating secondary cell wall formation in Arabidopsis thaliana. Plant Signaling and Behavior, 2015, 10, e1033126.	2.4	50
16	High-resolution genetic mapping of allelic variants associated with cell wall chemistry in Populus. BMC Genomics, 2015, 16, 24.	2.8	106
17	Comparative analysis of plant carbohydrate active enZymes and their role in xylogenesis. BMC Genomics, 2015, 16, 402.	2.8	23
18	BEL1-LIKE HOMEODOMAIN6 and KNOTTED ARABIDOPSIS THALIANA7 Interact and Regulate Secondary Cell Wall Formation via Repression of REVOLUTA Â Â. Plant Cell, 2015, 26, 4843-4861.	6.6	124

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19	The biosynthesis, composition and assembly of the outer pollen wall: A tough case to crack. Phytochemistry, 2015, 113, 170-182.	2.9	194
20	ABCG26-Mediated Polyketide Trafficking and Hydroxycinnamoyl Spermidines Contribute to Pollen Wall Exine Formation in Arabidopsis Â. Plant Cell, 2014, 26, 4483-4498.	6.6	84
21	LANDSCAPE GENOMICS OF POPULUS TRICHOCARPA : THE ROLE OF HYBRIDIZATION, LIMITED GENE FLOW, AND NATURAL SELECTION IN SHAPING PATTERNS OF POPULATION STRUCTURE. Evolution; International Journal of Organic Evolution, 2014, 68, 3260-3280.	2.3	88
22	New views of tapetum ultrastructure and pollen exine development in Arabidopsis thaliana. Annals of Botany, 2014, 114, 1189-1201.	2.9	117
23	Whole plastome sequencing reveals deep plastid divergence and cytonuclear discordance between closely related balsam poplars, <scp>P</scp>opulus balsamifera and <scp>P</scp>.Âtrichocarpa (<scp>S</scp>alicaceae). New Phytologist, 2014, 204, 693-703.	7.3	105
24	Extensive Functional Pleiotropy of REVOLUTA Substantiated through Forward Genetics Â Â. Plant Physiology, 2014, 164, 548-554.	4.8	17
25	Geographical and environmental gradients shape phenotypic trait variation and genetic structure in <scp>P</scp>opulus trichocarpa. New Phytologist, 2014, 201, 1263-1276.	7.3	185
26	Arabidopsis VASCULAR-RELATED UNKNOWN PROTEIN1 Regulates Xylem Development and Growth by a Conserved Mechanism That Modulates Hormone Signaling Â Â. Plant Physiology, 2014, 164, 1991-2010.	4.8	5
27	Manipulating lignin deposition. Canadian Journal of Plant Science, 2014, 94, 1043-1049.	0.9	2
28	Genomeâ€wide association implicates numerous genes underlying ecological trait variation in natural populations of Populus trichocarpa. New Phytologist, 2014, 203, 535-553.	7.3	171
29	Isolation, identification and cyfluthrin-degrading potential of a novel Lysinibacillus sphaericus strain, FLQ-11-1. Research in Microbiology, 2014, 165, 110-118.	2.1	37
30	Regulation of secondary cell wall biosynthesis by poplar R2R3 MYB transcription factor PtrMYB152 in Arabidopsis. Scientific Reports, 2014, 4, 5054.	3.3	106
31	Gene expression patterns underlying changes in xylem structure and function in response to increased nitrogen availability in hybrid poplar. Plant, Cell and Environment, 2013, 36, 186-199.	5.7	98
32	Genomeâ€wide association mapping for wood characteristics in <scp>P</scp>opulus identifies an array of candidate single nucleotide polymorphisms. New Phytologist, 2013, 200, 710-726.	7.3	158
33	The interacting MYB75 and KNAT7 transcription factors modulate secondary cell wall deposition both in stems and seed coat in Arabidopsis. Planta, 2013, 237, 1199-1211.	3.2	78
34	R2R3 MYB transcription factor PtrMYB192 regulates flowering time in Arabidopsis by activating FLOWERING LOCUS C. Journal of Plant Biology, 2013, 56, 243-250.	2.1	27
35	Sporopollenin monomer biosynthesis in arabidopsis. Journal of Plant Biology, 2013, 56, 1-6.	2.1	36
36	A heterozygous moth genome provides insights into herbivory and detoxification. Nature Genetics, 2013, 45, 220-225.	21.4	472

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37	<scp>P</scp>opulus trichocarpa cell wall chemistry and ultrastructure trait variation, genetic control and genetic correlations. New Phytologist, 2013, 197, 777-790.	7.3	100
38	Syringyl-Rich Lignin Renders Poplars More Resistant to Degradation by Wood Decay Fungi. Applied and Environmental Microbiology, 2013, 79, 2560-2571.	3.1	108
39	Network analysis reveals the relationship among wood properties, gene expression levels and genotypes of natural P opulus trichocarpa accessions. New Phytologist, 2013, 200, 727-742.	7.3	37
40	Abaxial Greening Phenotype in Hybrid Aspen. Plants, 2013, 2, 279-301.	3.5	0
41	Association Analysis Identifies Melampsora Ã—columbiana Poplar Leaf Rust Resistance SNPs. PLoS ONE, 2013, 8, e78423.	2.5	31
42	Antagonistic Interaction of BLADE-ON-PETIOLE1 and 2 with BREVIPEDICELLUS and PENNYWISE Regulates Arabidopsis Inflorescence Architecture Â Â Â. Plant Physiology, 2012, 158, 946-960.	4.8	65
43	Genome resequencing reveals multiscale geographic structure and extensive linkage disequilibrium in the forest tree Populus trichocarpa. New Phytologist, 2012, 196, 713-725.	7.3	173
44	SNP discovery, gene diversity, and linkage disequilibrium in wild populations of Populus tremuloides. Tree Genetics and Genomes, 2012, 8, 821-829.	1.6	86
45	AtMYB61, an R2R3â€MYB transcription factor, functions as a pleiotropic regulator via a small gene network. New Phytologist, 2012, 195, 774-786.	7.3	132
46	The Class II KNOX gene KNAT7 negatively regulates secondary wall formation in Arabidopsis and is functionally conserved in Populus. New Phytologist, 2012, 194, 102-115.	7.3	186
47	SNP discovery in black cottonwood (Populus trichocarpa) by population transcriptome resequencing. Molecular Ecology Resources, 2011, 11, 81-92.	4.8	104
48	LAP6/POLYKETIDE SYNTHASE AandLAP5/POLYKETIDE SYNTHASE BEncode Hydroxyalkyl Î±-Pyrone Synthases Required for Pollen Development and Sporopollenin Biosynthesis inArabidopsis thalianaÂ Â Â. Plant Cell, 2011, 22, 4045-4066.	6.6	188
49	OVATE FAMILY PROTEIN4 (OFP4) interaction with KNAT7 regulates secondary cell wall formation in Arabidopsis thaliana. Plant Journal, 2011, 67, 328-341.	5.7	151
50	PpASCL, a moss ortholog of antherâ€specific chalcone synthaseâ€like enzymes, is a hydroxyalkylpyrone synthase involved in an evolutionarily conserved sporopollenin biosynthesis pathway. New Phytologist, 2011, 192, 855-868.	7.3	48
51	Analysis of TETRAKETIDE Î±-PYRONE REDUCTASE Function in Arabidopsis thaliana Reveals a Previously Unknown, but Conserved, Biochemical Pathway in Sporopollenin Monomer Biosynthesis Â. Plant Cell, 2011, 22, 4067-4083.	6.6	181
52	ATP-Binding Cassette Transporter G26 Is Required for Male Fertility and Pollen Exine Formation in Arabidopsis Â Â. Plant Physiology, 2010, 154, 678-690.	4.8	161
53	Chromoplasts ultrastructure and estimated carotene content in root secondary phloem of different carrot varieties. Planta, 2010, 231, 549-558.	3.2	78
54	Over-expression of Arabidopsis thaliana carotenoid hydroxylases individually and in combination with a Î²-carotene ketolase provides insight into in vivo functions. Phytochemistry, 2010, 71, 168-178.	2.9	53

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55	MYB75 Functions in Regulation of Secondary Cell Wall Formation in the Arabidopsis Inflorescence Stem. Plant Physiology, 2010, 154, 1428-1438.	4.8	174
56	A Novel Fatty Acyl-CoA Synthetase Is Required for Pollen Development and Sporopollenin Biosynthesis inArabidopsisÂ Â. Plant Cell, 2009, 21, 507-525.	6.6	257
57	Genomeâ€wide analysis of a land plantâ€specific acyl:coenzymeA synthetase (ACS) gene family in Arabidopsis, poplar, rice and Physcomitrella. New Phytologist, 2008, 179, 987-1003.	7.3	72
58	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.	2.8	68
59	Genome structure and emerging evidence of an incipient sex chromosome in Populus. Genome Research, 2008, 18, 422-430.	5.5	177
60	Microarray gene expression profiling of developmental transitions in Sitka spruce (Picea sitchensis) apical shoots. Journal of Experimental Botany, 2007, 58, 593-614.	4.8	44
61	Populus trichocarpa MONOPTEROS/AUXIN RESPONSE FACTOR5(ARF5) genes: comparative structure, sub-functionalization, andPopulusâ€“ArabidopsismicrosyntenyThis article is one of a selection of papers published in the Special Issue on Poplar Research in Canada.. Canadian Journal of Botany, 2007, 85, 1058-1070.	1.1	18
62	Populus: A Model System for Plant Biology. Annual Review of Plant Biology, 2007, 58, 435-458.	18.7	549
63	Genome-wide analyses of phenylpropanoid-related genes in Populus trichocarpa, Arabidopsis thaliana, and Oryza sativa: the Populus lignin toolbox and conservation and diversification of angiosperm gene familiesThis article is one of a selection of papers published in the Special Issue on Poplar Research in Canada.. Canadian Journal of Botany, 2007, 85, 1182-1201.	1.1	132
64	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.	5.7	70
65	Genomics of hybrid poplar (Populus trichocarpaÃ— deltoides) interacting with forest tent caterpillars (Malacosoma disstria): normalized and full-length cDNA libraries, expressed sequence tags, and a cDNA microarray for the study of insect-induced defences. Molecular Ecology, 2006, 15, 1275-1297.	3.9	183
66	Use of Ecotilling as an efficient SNP discovery tool to survey genetic variation in wild populations of Populus trichocarpa. Molecular Ecology, 2006, 15, 1367-1378.	3.9	140
67	Conifer defence against insects: microarray gene expression profiling of Sitka spruce (Picea) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5 transcriptome. Plant, Cell and Environment, 2006, 29, 1545-1570.	5.7	221
68	Editorial: Plant biotechnology: Thoughts on the current scene. Biotechnology Journal, 2006, 1, 1041-1042.	3.5	0
69	Multiple cis-regulatory elements regulate distinct and complex patterns of developmental and wound-induced expression of Arabidopsis thaliana 4CL gene family members. Planta, 2006, 224, 1226-1238.	3.2	79
70	Global transcript profiling of primary stems from Arabidopsis thaliana identifies candidate genes for missing links in lignin biosynthesis and transcriptional regulators of fiber differentiation. Plant Journal, 2005, 42, 618-640.	5.7	254
71	Arabidopsis thaliana Full Genome Longmer Microarrays: A Powerful Gene Discovery Tool for Agriculture and Forestry. Transgenic Research, 2005, 14, 551-561.	2.4	19
72	Proteome analysis of early somatic embryogenesis inPicea glauca. Proteomics, 2005, 5, 461-473.	2.2	166

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73	Isolation of high-quality RNA from gymnosperm and angiosperm trees. BioTechniques, 2004, 36, 821-824.	1.8	148
74	Robust simple sequence repeat markers for spruce (Picea spp.) from expressed sequence tags. Theoretical and Applied Genetics, 2004, 109, 1283-1294.	3.6	181
75	Reconstitution of the Entry Point of Plant Phenylpropanoid Metabolism in Yeast (Saccharomyces) Tj ETQq1 1 0.784314 rgBT /Overloc	3.4	112
76	Cloning, Functional Expression, and Subcellular Localization of Multiple NADPH-Cytochrome P450 Reductases from Hybrid Poplar. Plant Physiology, 2002, 130, 1837-1851.	4.8	102
77	Identification of 4-coumarate:coenzyme A ligase (4CL) substrate recognition domains. Plant Journal, 2001, 27, 455-465.	5.7	61
78	Functional Characterization and Subcellular Localization of Poplar (Populus trichocarpa Ã— Populus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	4.8	123
79	A novel parsley 4CL1 cis-element is required for developmentally regulated expression and protein-DNA complex formation. Plant Journal, 1999, 18, 77-88.	5.7	21
80	Three 4-coumarate:coenzyme A ligases in Arabidopsis thaliana represent two evolutionarily divergent classes in angiosperms. Plant Journal, 1999, 19, 9-20.	5.7	402
81	Developmentally regulated patterns of expression directed by poplar PAL promoters in transgenic tobacco and poplar. Plant Molecular Biology, 1999, 39, 657-669.	3.9	51
82	4-Coumarate:Coenzyme A Ligase in Hybrid Poplar1. Plant Physiology, 1998, 116, 743-754.	4.8	116
83	Phenylpropanoid metabolism and lignin biosynthesis: from weeds to trees. Trends in Plant Science, 1996, 1, 171-178.	8.8	299
84	The Arabidopsis thaliana 4-coumarate:CoA ligase (4CL) gene: stress and developmentally regulated expression and nucleotide sequence of its cDNA. Plant Molecular Biology, 1995, 28, 871-884.	3.9	135
85	Combinatorial interactions between positive and negative cis-acting elements control spatial patterns of 4CL-1 expression in transgenic tobacco. Plant Journal, 1993, 4, 235-253.	5.7	91
86	Rapid Activation of Phenylpropanoid Metabolism in Elicitor-Treated Hybrid Poplar (<i>Populus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 227 Physiology, 1992, 98, 728-737.	4.8	39
87	Molecular signals in the interactions between plants and microbes. Cell, 1992, 71, 191-199.	28.9	54
88	A Parsley 4CL-1 Promoter Fragment Specifies Complex Expression Patterns in Transgenic Tobacco. Plant Cell, 1991, 3, 435.	6.6	15
89	Primary structures and catalytic properties of isoenzymes encoded by the two 4-coumarate: CoA ligase genes in parsley. FEBS Journal, 1988, 176, 661-667.	0.2	155
90	Flagella-specific bacteriophages of Agrobacterium tumefaciens: demonstration of virulence of nonmotile mutants. Canadian Journal of Microbiology, 1984, 30, 676-681.	1.7	31

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91	Factors Affecting Crown Gall Tumorigenesis in Tuber Slices of Jerusalem Artichoke (Helianthus) Tj ETQq1 1 0.784314 rgBT /Overlock 10	4.8	17
92	Early detection of octopine in crown-gall tumors of Jerusalem artichoke. Plant Science Letters, 1979, 15, 89-99.	1.8	4