Robert D Guy

List of Publications by Year
in descending order

79 papers	4,380 citations	116194 36 h-index	129628 63 g-index
81 all docs	81 docs citations	81 times ranked	4994 citing authors

#	Article	IF	Citations
1	Genotypic variation in C and N isotope discrimination suggests local adaptation of heart-leaved willow. Tree Physiology, 2022, 42, 32-43.	1.4	10
2	Enlightening the Pathway of Phytoremediation: Ecophysiology and X-ray Fluorescence Visualization of Two Chilean Hardwoods Exposed to Excess Copper. Toxics, 2022, 10, 237.	1.6	2
3	Effects of Fruit Shading on Gene and Protein Expression During Starch and Oil Accumulation in Developing Styrax tonkinensis Kernels. Frontiers in Plant Science, 2022, 13, .	1.7	2
4	Growth response, uptake and mobilization of metals in native plant species on tailings at a Chilean copper mine. International Journal of Phytoremediation, 2021, 23, 539-547.	1.7	10
5	Proteomic analysis of metabolic mechanisms associated with fatty acid biosynthesis during Styrax tonkinensis kernel development. Journal of the Science of Food and Agriculture, 2021, 101, 6053-6063.	1.7	5
6	Seasonal progression of photoprotection responses in different aged savin juniper plants under shade and sun. Trees - Structure and Function, 2021, 35, 1601-1612.	0.9	2
7	Leaf morphology, photosynthesis and pigments change with age and light regime in savin juniper. Plant Biology, 2021, 23, 1097-1108.	1.8	9
8	Emerging roles for carbonic anhydrase in mesophyll conductance and photosynthesis. Plant Journal, 2020, 101, 831-844.	2.8	65
9	Physiological Response of Populus balsamifera and Salix eriocephala to Salinity and Hydraulic Fracturing Wastewater: Potential for Phytoremediation Applications. International Journal of Environmental Research and Public Health, 2020, 17, 7641.	1.2	5
10	Isotopic composition and concentration of total nitrogen and nitrate in xylem sap under near steadyâ€state hydroponics. Plant, Cell and Environment, 2020, 43, 2112-2123.	2.8	11
11	A comparative study of seed reserve accumulationÂin five Styrax species with potential for biofuel production. Trees - Structure and Function, 2020, 34, 891-902.	0.9	4
12	Transcriptome analysis of metabolic pathways associated with oil accumulation in developing seed kernels of Styrax tonkinensis, a woody biodiesel species. BMC Plant Biology, 2020, 20, 121.	1.6	21
13	Differences in growth and physiological and metabolic responses among Canadian native and hybrid willows (Salix spp.) under salinity stress. Tree Physiology, 2020, 40, 652-666.	1.4	14
14	A role for <scp>SPEECHLESS</scp> in the integration of leaf stomatal patterning with the growth vs disease tradeâ€off in poplar. New Phytologist, 2019, 223, 1888-1903.	3.5	25
15	Exogenous 24-Epibrassinolide Alleviates Effects of Salt Stress on Chloroplasts and Photosynthesis in Robinia pseudoacacia L. Seedlings. Journal of Plant Growth Regulation, 2019, 38, 669-682.	2.8	33
16	Concomitant effects of mercuric chloride on mesophyll conductance and carbonic anhydrase activity in Populus trichocarpa Torr. & Gray. Trees - Structure and Function, 2018, 32, 301-309.	0.9	12
17	Phosphorus storage and resorption in riparian tree species: Environmental applications of poplar and willow. Environmental and Experimental Botany, 2018, 149, 1-8.	2.0	20
18	Hybrid vigour â€“ poplars play it cool. Tree Physiology, 2018, 38, 785-788.	1.4	20

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19	Ecological genomics of variation in budâ€break phenology and mechanisms of response to climate warming in Populus trichocarpa. New Phytologist, 2018, 220, 300-316.	3.5	40
20	Sexual homomorphism in dioecious trees: extensive tests fail to detect sexual dimorphism in Populus. Scientific Reports, 2017, 7, 1831.	1.6	54
21	Blue light differentially represses mesophyll conductance in high vs low latitude genotypes of Populus trichocarpa Torr. & Gray. Journal of Plant Physiology, 2017, 213, 122-128.	1.6	14
22	Substantial role for carbonic anhydrase in latitudinal variation in mesophyll conductance of Populus trichocarpa Torr. & Gray. Plant, Cell and Environment, 2017, 40, 138-149.	2.8	52
23	Variation in fluxes estimated from nitrogen isotope discrimination corresponds with independent measures of nitrogen flux in Populus balsamifera L.. Plant, Cell and Environment, 2016, 39, 310-319.	2.8	15
24	Impacts of bud set and lammas phenology on root:shoot biomass partitioning and carbon gain physiology in poplar. Trees - Structure and Function, 2016, 30, 2131-2141.	0.9	5
25	Genotypic variation in nitrogen isotope discrimination in Populus balsamifera L . clones grown with either nitrate or ammonium. Journal of Plant Physiology, 2016, 201, 54-61.	1.6	7
26	Leaf mass per area predicts palisade structural properties linked to mesophyll conductance in balsam poplar (Populus balsamifera L.). Botany, 2016, 94, 225-239.	0.5	39
27	Recent Y chromosome divergence despite ancient origin of dioecy in poplars (Populus). Molecular Ecology, 2015, 24, 3243-3256.	2.0	121
28	Evolutionary Quantitative Genomics of Populus trichocarpa. PLoS ONE, 2015, 10, e0142864.	1.1	31
29	Comparative physiology of allopatric Populus species: geographic clines in photosynthesis, height growth, and carbon isotope discrimination in common gardens. Frontiers in Plant Science, 2015, 6, 528.	1.7	31
30	Interspecific variation in leafâ€“root differences in Î´15N among three tree species grown with either nitrate or ammonium. Trees - Structure and Function, 2015, 29, 1069-1078.	0.9	25
31	Investigating the drought-stress response of hybrid poplar genotypes by metabolite profiling. Tree Physiology, 2014, 34, 1203-1219.	1.4	84
32	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.	1.1	88
33	Comparative resource-use efficiencies and growth of Populus trichocarpa and Populus balsamifera under glasshouse conditions. Botany, 2014, 92, 443-451.	0.5	10
34	Association genetics, geography and ecophysiology link stomatal patterning in <scp>P</scp>opulus trichocarpa with carbon gain and disease resistance tradeâ€offs. Molecular Ecology, 2014, 23, 5771-5790.	2.0	103
35	The early bud gets to warm. New Phytologist, 2014, 202, 7-9.	3.5	16
36	Extensive Functional Pleiotropy of REVOLUTA Substantiated through Forward Genetics Â Â. Plant Physiology, 2014, 164, 548-554.	2.3	17

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37	Geographical and environmental gradients shape phenotypic trait variation and genetic structure in <scp>P</scp>opulus trichocarpa. New Phytologist, 2014, 201, 1263-1276.	3.5	185
38	Nitrogen isotope discrimination as an integrated measure of nitrogen fluxes, assimilation and allocation in plants. Physiologia Plantarum, 2014, 151, 293-304.	2.6	60
39	Genomeâ€wide association implicates numerous genes underlying ecological trait variation in natural populations of Populus trichocarpa. New Phytologist, 2014, 203, 535-553.	3.5	171
40	Timing of photoperiodic competency causes phenological mismatch in balsam poplar (Populus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.8	68
41	Quantifying remobilization of pre-existing nitrogen from cuttings to new growth of woody plants using 15N at natural abundance. Plant Methods, 2013, 9, 27.	1.9	14
42	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.	3.5	158
43	A 34K <scp>SNP</scp> genotyping array for Populus trichocarpa: Design, application to the study of natural populations and transferability to other Populus species. Molecular Ecology Resources, 2013, 13, 306-323.	2.2	92
44	The adaptive potential of <scp>P</scp>opulus balsamifera <scp>L</scp>. to phenology requirements in a warmer global climate. Molecular Ecology, 2013, 22, 1214-1230.	2.0	91
45	Seasonality and phenology alter functional leaf traits. Oecologia, 2013, 172, 653-665.	0.9	67
46	Wholeâ€plant and organâ€level nitrogen isotope discrimination indicates modification of partitioning of assimilation, fluxes and allocation of nitrogen in knockout lines of Arabidopsis thaliana. Physiologia Plantarum, 2013, 149, 249-259.	2.6	25
47	Association Analysis Identifies Melampsora Ã—columbiana Poplar Leaf Rust Resistance SNPs. PLoS ONE, 2013, 8, e78423.	1.1	31
48	Comparative Nucleotide Diversity Across North American and European Populus Species. Journal of Molecular Evolution, 2012, 74, 257-272.	0.8	25
49	Climateâ€driven local adaptation of ecophysiology and phenology in balsam poplar, Populus balsamifera L. (Salicaceae). American Journal of Botany, 2011, 98, 99-108.	0.8	103
50	Carbon isotope discrimination in western hemlock and its relationship to mineral nutrition and growth. Tree Physiology, 2010, 30, 728-740.	1.4	15
51	Simulating gross primary production across a chronosequence of coastal Douglas-fir forest stands with a production efficiency model. Agricultural and Forest Meteorology, 2010, 150, 238-253.	1.9	14
52	Access to mycorrhizal networks and roots of trees: importance for seedling survival and resource transfer. Ecology, 2009, 90, 2808-2822.	1.5	124
53	Enhanced assimilation rate and water use efficiency with latitude through increased photosynthetic capacity and internal conductance in balsam poplar (Populus balsamifera L.). Plant, Cell and Environment, 2009, 32, 1821-1832.	2.8	140
54	Geographic variation in ecophysiological traits of black cottonwood (Populus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 67 Td (trichocarp Research in Canada.. Canadian Journal of Botany, 2007, 85, 1202-1213.	1.2	62

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55	Tree proximity, soil pathways and common mycorrhizal networks: their influence on the utilization of redistributed water by understory seedlings. Oecologia, 2007, 154, 455-466.	0.9	44
56	Partitioning of respiratory electrons in the dark in leaves of transgenic tobacco with modified levels of alternative oxidase. Physiologia Plantarum, 2005, 125, 171-180.	2.6	58
57	Nitrogen isotope discrimination in white spruce fed with low concentrations of ammonium and nitrate. Trees - Structure and Function, 2005, 19, 89-98.	0.9	53
58	Population differences in stable carbon isotope ratio of Pinus contorta Dougl. ex Loud.: relationship to environment, climate of origin, and growth potential. Canadian Journal of Botany, 2001, 79, 274-283.	1.2	25
59	Population differences in stable carbon isotope ratio of Pinus contorta Dougl. eÃ— Loud.: relationship to environment, climate of origin, and growth potential. Canadian Journal of Botany, 2001, 79, 274-283.	1.2	49
60	Geographic pattern of genetic variation in photosynthetic capacity and growth in two hardwood species from British Columbia. Oecologia, 2000, 123, 168-174.	0.9	36
61	The effects of nitrogen stress on the stable carbon isotope composition, productivity and water use efficiency of white spruce (Picea glauca (Moench) Voss) seedlings. Plant, Cell and Environment, 1999, 22, 281-289.	2.8	189
62	A comparative study of fluxes and compartmentation of nitrate and ammonium in early-successional tree species. Plant, Cell and Environment, 1999, 22, 821-830.	2.8	67
63	Induction of nitrate uptake and nitrate reductase activity in trembling aspen and lodgepole pine. Plant, Cell and Environment, 1998, 21, 1039-1046.	2.8	80
64	Influence of the carbon concentrating mechanism on carbon stable isotope discrimination by the marine diatom Thalassiosira pseudonana. Canadian Journal of Botany, 1998, 76, 1098-1103.	1.2	7
65	Whole-plant nitrogen- and water-relations traits, and their associated trade-offs, in adjacent muskeg and upland boreal spruce species. Oecologia, 1997, 110, 160-168.	0.9	109
66	Effects of N addition rates on the productivity ofPicea Sitchensis,Thuja plicata, andTsuga heterophylla seedlings. Trees - Structure and Function, 1996, 10, 198-205.	0.9	46
67	Stable carbon isotopes as indicators of increased water use efficiency and productivity in white spruce (Picea glauca (Moench) Voss) seedlings. Plant, Cell and Environment, 1996, 19, 887-894.	2.8	126
68	Effects of N addition rates on the productivity of Picea Sitchensis, Thuja plicata, and Tsuga heterophylla seedlings. Trees - Structure and Function, 1996, 10, 198-205.	0.9	9
69	Photosynthetic Fractionation of the Stable Isotopes of Oxygen and Carbon. Plant Physiology, 1993, 101, 37-47.	2.3	401
70	Cytochrome and Alternative Pathway Respiration in Green Algae. Plant Physiology, 1990, 93, 356-360.	2.3	39
71	Cytochrome and Alternative Pathway Respiration during Transient Ammonium Assimilation by N-Limited Chlamydomonas reinhardtii. Plant Physiology, 1990, 94, 1131-1136.	2.3	16
72	Significance of Phosphoenolpyruvate Carboxylase during Ammonium Assimilation. Plant Physiology, 1989, 89, 1150-1157.	2.3	74

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73	Differential fractionation of oxygen isotopes by cyanide-resistant and cyanide-sensitive respiration in plants. Planta, 1989, 177, 483-491.	1.6	198
74	Stable Carbon Isotope Ratio as an Index of Water-Use Efficiency in C3 Halophytesâ€"Possible Relationship to Strategies for Osmotic Adjustment. Ecological Studies, 1989, , 55-75.	0.4	26
75	Photosynthesis and the influence of CO2 -enrichment on delta13C values in a C3 halophyte.. Plant, Cell and Environment, 1986, 9, 65-72.	2.8	36
76	Factors affecting ¹³C/¹²C ratios of inland halophytes. I. Controlled studies on growth and isotopic composition of Puccinellia nuttalliana. Canadian Journal of Botany, 1986, 64, 2693-2699.	1.2	46
77	Glycinebetaine content of halophytes: Improved analysis by liquid chromatography and interpretations of results. Physiologia Plantarum, 1984, 61, 195-202.	2.6	27
78	Stable carbon isotope ratios of flooded and nonflooded sunflowers (Helianthus annuus). Canadian Journal of Botany, 1984, 62, 1770-1774.	1.2	25
79	Shifts in carbon isotope ratios of two C3 halophytes under natural and artificial conditions. Oecologia, 1980, 44, 241-247.	0.9	126