Andrew Merchant

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1906681/publications.pdf

Version: 2024-02-01

67 papers	2,491 citations	257357 24 h-index	214721 47 g-index
70 all docs	70 docs citations	70 times ranked	3805 citing authors

#	Article	IF	Citations
1	Root Exudation of Primary Metabolites: Mechanisms and Their Roles in Plant Responses to Environmental Stimuli. Frontiers in Plant Science, 2019, 10, 157.	1.7	540
2	Source-Sink Relationships in Crop Plants and Their Influence on Yield Development and Nutritional Quality. Frontiers in Plant Science, 2018, 9, 1889.	1.7	157
3	Non-invasive approaches for phenotyping of enhanced performance traits in bean. Functional Plant Biology, 2011, 38, 968.	1.1	120
4	Contrasting Physiological Responses of Six Eucalyptus Species to Water Deficit. Annals of Botany, 2007, 100, 1507-1515.	1.4	110
5	Effects of environmental parameters, leaf physiological properties and leaf water relations on leaf water Î´¹⁸O enrichment in different Eucalyptus species. Plant, Cell and Environment, 2008, 31, 738-751.	2.8	107
6	Cyclitols and carbohydrates in leaves and roots of 13 Eucalyptus species suggest contrasting physiological responses to water deficit. Plant, Cell and Environment, 2006, 29, 2017-2029.	2.8	96
7	Chloroplast genome analysis of Australian eucalypts â€“ Eucalyptus, Corymbia, Angophora, Allosyncarpia and Stockwellia (Myrtaceae). Molecular Phylogenetics and Evolution, 2013, 69, 704-716.	1.2	82
8	Phloem sap and leaf Î´13C, carbohydrates, and amino acid concentrations in Eucalyptus globulus change systematically according to flooding and water deficit treatment. Journal of Experimental Botany, 2010, 61, 1785-1793.	2.4	75
9	Drought effects on Helianthus annuus and Glycine max metabolites: from phloem to root exudates. Rhizosphere, 2016, 2, 85-97.	1.4	70
10	Rate of photosynthetic induction in fluctuating light varies widely among genotypes of wheat. Journal of Experimental Botany, 2019, 70, 2787-2796.	2.4	69
11	Targeted metabolite profiling provides a functional link among eucalypt taxonomy, physiology and evolution. Phytochemistry, 2006, 67, 402-408.	1.4	63
12	The preceding root system drives the composition and function of the rhizosphere microbiome. Genome Biology, 2020, 21, 89.	3.8	61
13	Quercitol and osmotic adaptation of fieldâ€grown Eucalyptus under seasonal drought stress. Plant, Cell and Environment, 2008, 31, 915-924.	2.8	59
14	Field drought conditions impact yield but not nutritional quality of the seed in common bean (Phaseolus vulgaris L.). PLoS ONE, 2019, 14, e0217099.	1.1	54
15	Effects of humic substances and indole-3-acetic acid on Arabidopsis sugar and amino acid metabolic profile. Plant and Soil, 2018, 426, 17-32.	1.8	40
16	Polyols as biomarkers and bioindicators for 21st century plant breeding. Functional Plant Biology, 2011, 38, 934.	1.1	38
17	Effects of open-air elevated atmospheric CO2 concentration on yield quality of soybean (Glycine max) Tj ETQq1 1 0.784314 rgBT /Ove	2.5	37
18	Physiological and biochemical responses of Eucalyptus seedlings to hypoxia. Annals of Forest Science, 2019, 76, 1.	0.8	37

#	Article	IF	Citations
19	Post photosynthetic carbon partitioning to sugar alcohols and consequences for plant growth. Phytochemistry, 2017, 144, 243-252.	1.4	33
20	Nitric oxide mitigates the effect of water deficit in Crambe abyssinica. Plant Physiology and Biochemistry, 2018, 129, 310-322.	2.8	33
21	Leaf osmotic potential of Eucalyptus hybrids responds differently to freezing and drought, with little clonal variation. Tree Physiology, 2008, 28, 1297-1304.	1.4	29
22	Ecophysiological responses to excess iron in lowland and upland rice cultivars. Chemosphere, 2017, 189, 123-133.	4.2	28
23	The Behavioural Responses of Beef Cattle (Bos taurus) to Declining Pasture Availability and the Use of GNSS Technology to Determine Grazing Preference. Agriculture (Switzerland), 2017, 7, 45.	1.4	28
24	Physiological and Biochemical Basis of Faba Bean Breeding for Drought Adaptationâ€”A Review. Agronomy, 2020, 10, 1345.	1.3	28
25	Quercitol links the physiology, taxonomy and evolution of 279 eucalypt species. Global Ecology and Biogeography, 2007, 16, 810-819.	2.7	27
26	Stable osmotica in Eucalyptus spathulata â€” responses to salt and water deficit stress. Functional Plant Biology, 2005, 32, 797.	1.1	21
27	Mineral-Associated Soil Carbon is Resistant to Drought but Sensitive to Legumes and Microbial Biomass in an Australian Grassland. Ecosystems, 2018, 21, 349-359.	1.6	21
28	Biochemical and physiological impacts of zinc sulphate, potassium phosphite and hydrogen sulphide in mitigating stress conditions in soybean. Physiologia Plantarum, 2020, 168, 456-472.	2.6	21
29	Variations saisonniÃ¨res des hydrates de carbone, des cyclitols et des relations hydriques chez 3 espÃ¨ces dâ€™Eucalyptus de taxonomie contrastÃ©e, en plein champ et poussant sur un site commun. Annals of Forest Science, 2010, 67, 104-104.	0.8	19
30	Differences in ascorbate and glutathione levels as indicators of resistance and susceptibility in Eucalyptus trees infected with Phytophthora cinnamomi. Tree Physiology, 2012, 32, 1148-1160.	1.4	19
31	The effects of global navigation satellite system (GNSS) collars on cattle (Bos taurus) behaviour. Applied Animal Behaviour Science, 2017, 187, 54-59.	0.8	19
32	Why some trees are more vulnerable during catastrophic cyclone events in the Sundarbans mangrove forest of Bangladesh?. Forest Ecology and Management, 2021, 490, 119117.	1.4	19
33	Compoundâ€specific differences in ¹³C of soluble carbohydrates in leaves and phloem of 6â€monthâ€old Eucalyptus globulus (Labill). Plant, Cell and Environment, 2011, 34, 1599-1608.	2.8	18
34	Estimation of drought-related limitations to mid-rotation aged plantation grown Eucalyptus globulus by phloem sap analysis. Forest Ecology and Management, 2008, 256, 844-848.	1.4	16
35	Medium term water deficit elicits distinct transcriptome responses in Eucalyptus species of contrasting environmental origin. BMC Genomics, 2017, 18, 284.	1.2	16
36	Nitric Oxide Increases the Physiological and Biochemical Stability of Soybean Plants under High Temperature. Agronomy, 2019, 9, 412.	1.3	16

#	Article	IF	Citations
37	Water Deficit Elicits a Transcriptional Response of Genes Governing d-pinitol Biosynthesis in Soybean (Glycine max). International Journal of Molecular Sciences, 2019, 20, 2411.	1.8	16
38	Relations of sugar composition and Î´¹³C in phloem sap to growth and physiological performance of Eucalyptus globulus (Labill). Plant, Cell and Environment, 2010, 33, 1361-1368.	2.8	14
39	Carbon Isotope Composition of Carbohydrates and Polyols in Leaf and Phloem Sap ofPhaseolus vulgarisL. Influences Predictions of Plant Water Use Efficiency. Plant and Cell Physiology, 2016, 57, 1756-1766.	1.5	14
40	Water availability preceding long-term drought defines the tolerance of Eucalyptus to water restriction. New Forests, 2018, 49, 173-195.	0.7	14
41	Shade does not ameliorate drought effects on the tree fern species Dicksonia antarctica and Cyathea australis. Trees - Structure and Function, 2010, 24, 351-362.	0.9	13
42	Edge type affects leaf-level water relations and estimated transpiration of Eucalyptus arenacea. Tree Physiology, 2012, 32, 280-293.	1.4	13
43	Inter-specific differences in the dynamics of water use and pulse-response of co-dominant canopy species in a dryland woodland. Journal of Arid Environments, 2016, 124, 332-340.	1.2	13
44	Developing Phloem Î´13C and Sugar Composition as Indicators of Water Deficit in Lupinus angustifolius. Hortscience: A Publication of the American Society for Hortcultural Science, 2012, 47, 691-696.	0.5	13
45	Siteâ€specific responses to shortâ€term environmental variation are reflected in leaf and phloemâ€sap carbon isotopic abundance of field grown Eucalyptus globulus. Physiologia Plantarum, 2012, 146, 448-459.	2.6	12
46	Investigating Nutrient Supply Effects on Plant Growth and Seed Nutrient Content in Common Bean. Plants, 2022, 11, 737.	1.6	11
47	Why not beans?. Functional Plant Biology, 2011, 38, iii.	1.1	10
48	Nutritional Efficiency of Eucalyptus Clones Under Water Stress. Revista Brasileira De Ciencia Do Solo, 2017, 41, .	0.5	10
49	Editorial: Towards a Functional Characterization of Plant Biostimulants. Frontiers in Plant Science, 2021, 12, 677772.	1.7	9
50	Wide variation in the suboptimal distribution of photosynthetic capacity in relation to light across genotypes of wheat. AoB PLANTS, 2020, 12, plaa039.	1.2	8
51	A physiological approach for pre-selection of Eucalyptus clones resistant to drought. IForest, 2020, 13, 16-23.	0.5	8
52	Effect of Drought and Low P on Yield and Nutritional Content in Common Bean. Frontiers in Plant Science, 2022, 13, 814325.	1.7	8
53	Quercitol plays a key role in stress tolerance of Eucalyptus leptophylla (F. Muell) in naturally occurring saline conditions. Environmental and Experimental Botany, 2009, 65, 296-303.	2.0	7
54	Stress-induced changes in carbon allocation among metabolite pools influence isotope-based predictions of water use efficiency in Phaseolus vulgaris. Functional Plant Biology, 2016, 43, 1149.	1.1	7

#	Article	IF	Citations
55	Chemical and isotopic markers detect water deficit and its influence on nutrient allocation in Phaseolus vulgaris. Physiologia Plantarum, 2019, 167, 391-403.	2.6	6
56	Chemical composition and reproductive functionality of contrasting faba bean genotypes in response to water deficit. Physiologia Plantarum, 2021, 172, 540-551.	2.6	6
57	The importance of storage and redistribution in vascular plants. Tree Physiology, 2016, 36, 533-535.	1.4	4
58	Limitations to using phloem sap to assess tree water and nutrient status. Tree Physiology, 2019, 39, 332-339.	1.4	4
59	Diagnostic tools for nutrition status in Eucalyptus globulus: changes in leaves, xylem and phloem sap compounds according to N-, P-, and K-withdrawal or salt application. Trees - Structure and Function, 2019, 33, 443-456.	0.9	4
60	Intra-specific patterns of Î´13C, growth and wood density variation at sites of contrasting precipitation with implications for modelling carbon sequestration of tropical tree species. Agroforestry Systems, 2021, 95, 1429.	0.9	3
61	Optimization of in vitro pollen germination and viability testing of some Australian selections of date palm (Phoenix dactylifera L.) and their xenic and metaxenic effects on the tissue cultureâ€“derived female cultivar â€œBarheeâ€• In Vitro Cellular and Developmental Biology - Plant, 2021, 57, 771.	0.9	3
62	Increasing leaf glutathione through stem feeding does not acclimate Eucalyptus camaldulensis seedlings towards high-light stress. Acta Physiologiae Plantarum, 2011, 33, 221-225.	1.0	2
63	PARbars: Cheap, Easy to Build Ceptometers for Continuous Measurement of Light Interception in Plant Canopies. Journal of Visualized Experiments, 2019, , .	0.2	2
64	The Regulation of Osmotic Potential in Trees. Plant Ecophysiology, 2014, , 83-97.	1.5	2
65	In situ pod growth rate reveals contrasting diurnal sensitivity to water deficit in Phaseolus vulgaris. Journal of Experimental Botany, 2022, , .	2.4	2
66	Quantification of Soluble Metabolites and Compound-Specific Î´13C in Response to Water Availability and Developmental Stages in Field Grown Chickpea (Cicer arietinum L.). Agronomy, 2018, 8, 115.	1.3	1
67	Phloem sap metabolites vary according to the interactive effects of nutrient supply and seasonal conditions in Eucalyptus globulus (Labill). Tree Physiology, 2021, 41, 1439-1449.	1.4	0