David B Medeiros

List of Publications by Year in descending order

36 papers	1,265 citations	471509 17 h-index	395702 33 g-index
39 all docs	39 docs citations	39 times ranked	1809 citing authors

#	Article	IF	Citations
1	Modifications in Organic Acid Profiles During Fruit Development and Ripening: Correlation or Causation?. Frontiers in Plant Science, 2018, 9, 1689.	3.6	152
2	The chitosan affects severely the carbon metabolism in mango (Mangifera indica L. cv. Palmer) fruit during storage. Food Chemistry, 2017, 237, 372-378.	8.2	142
3	The influence of alternative pathways of respiration that utilize branchedâ€chain amino acids following water shortage in Arabidopsis. Plant, Cell and Environment, 2016, 39, 1304-1319.	5.7	139
4	Autophagy Deficiency Compromises Alternative Pathways of Respiration following Energy Deprivation in Arabidopsis thaliana. Plant Physiology, 2017, 175, 62-76.	4.8	98
5	Enhanced Photosynthesis and Growth in atquac1 Knockout Mutants Are Due to Altered Organic Acid Accumulation and an Increase in Both Stomatal and Mesophyll Conductance. Plant Physiology, 2016, 170, 86-101.	4.8	77
6	Metabolism within the specialized guard cells of plants. New Phytologist, 2017, 216, 1018-1033.	7.3	77
7	Sucrose breakdown within guard cells provides substrates for glycolysis and glutamine biosynthesis during lightâ€induced stomatal opening. Plant Journal, 2018, 94, 583-594.	5.7	61
8	Impaired Malate and Fumarate Accumulation Due to the Mutation of the Tonoplast Dicarboxylate Transporter Has Little Effects on Stomatal Behavior. Plant Physiology, 2017, 175, 1068-1081.	4.8	51
9	Metabolite profiles reveal interspecific variation in operation of the Calvinâ€“Benson cycle in both C4 and C3 plants. Journal of Experimental Botany, 2019, 70, 1843-1858.	4.8	47
10	Growth and metabolic adjustments in response to gibberellin deficiency in drought stressed tomato plants. Environmental and Experimental Botany, 2019, 159, 95-107.	4.2	41
11	Eating Away at ROS to Regulate Stomatal Opening. Trends in Plant Science, 2020, 25, 220-223.	8.8	36
12	The mitochondrial <scp>NAD</scp>⁺ transporter (<scp>NDT</scp>1) plays important roles in cellular <scp>NAD</scp>⁺ homeostasis in Arabidopsis thaliana. Plant Journal, 2019, 100, 487-504.	5.7	34
13	Utilizing systems biology to unravel stomatal function and the hierarchies underpinning its control. Plant, Cell and Environment, 2015, 38, 1457-1470.	5.7	31
14	Insights into ABA-mediated regulation of guard cell primary metabolism revealed by systems biology approaches. Progress in Biophysics and Molecular Biology, 2019, 146, 37-49.	2.9	26
15	Metabolic profiles in C3, C3â€“C4 intermediate, C4-like, and C4 species in the genus Flaveria. Journal of Experimental Botany, 2022, 73, 1581-1601.	4.8	25
16	The sucroseâ€toâ€malate ratio correlates with the faster <scp>CO</scp>₂ and light stomatal responses of angiosperms compared to ferns. New Phytologist, 2019, 223, 1873-1887.	7.3	22
17	Changes in intracellular NAD status affect stomatal development in an abscisic acidâ€dependent manner. Plant Journal, 2020, 104, 1149-1168.	5.7	21
18	Metabolomics for understanding stomatal movements. Theoretical and Experimental Plant Physiology, 2019, 31, 91-102.	2.4	18

#	Article	IF	Citations
19	Prunus Hexokinase 3 genes alter primary C-metabolism and promote drought and salt stress tolerance in Arabidopsis transgenic plants. Scientific Reports, 2021, 11, 7098.	3.3	18
20	Establishment of a GCâ€MSâ€based ¹³Câ€positional isotopomer approach suitable for investigating metabolic fluxes in plant primary metabolism. Plant Journal, 2021, 108, 1213-1233.	5.7	18
21	Modulation of auxin signalling through DIAGETROPICA and ENTIRE differentially affects tomato plant growth via changes in photosynthetic and mitochondrial metabolism. Plant, Cell and Environment, 2019, 42, 448-465.	5.7	17
22	The utility of metabolomics as a tool to inform maize biology. Plant Communications, 2021, 2, 100187.	7.7	17
23	Maize Field Study Reveals Covaried Microbiota and Metabolic Changes in Roots over Plant Growth. MBio, 2022, 13, e0258421.	4.1	15
24	The knowns and unknowns of intracellular partitioning of carbon and nitrogen, with focus on the organic acid-mediated interplay between mitochondrion and chloroplast. Journal of Plant Physiology, 2021, 266, 153521.	3.5	13
25	Discriminating the Function(s) of Guard Cell ALMT Channels. Trends in Plant Science, 2018, 23, 649-651.	8.8	12
26	13CO2 labeling kinetics in maize reveal impaired efficiency of C4 photosynthesis under low irradiance. Plant Physiology, 2022, 190, 280-304.	4.8	11
27	The significance of WRKY45 transcription factor in metabolic adjustments during darkâ€induced leaf senescence. Plant, Cell and Environment, 2022, 45, 2682-2695.	5.7	9
28	Transcriptome analysis reveals potential roles of a barley ASR gene that confers stress tolerance in transgenic rice. Journal of Plant Physiology, 2019, 238, 29-39.	3.5	8
29	Mild reductions in guard cell sucrose synthase 2 expression leads to slower stomatal opening and decreased whole plant transpiration in Nicotiana tabacum L. Environmental and Experimental Botany, 2021, 184, 104370.	4.2	8
30	Control of waterâ€use efficiency by florigen. Plant, Cell and Environment, 2020, 43, 76-86.	5.7	6
31	Non-aqueous Fractionation (NAF) for Metabolite Analysis in Subcellular Compartments of Arabidopsis Leaf Tissues. Bio-protocol, 2019, 9, e3399.	0.4	4
32	Reduced auxin signalling through the cyclophilin gene DIAGEOTROPICA impacts tomato fruit development and metabolism during ripening. Journal of Experimental Botany, 2022, 73, 4113-4128.	4.8	4
33	High Photosynthetic Rates in a Solanum pennellii Chromosome 2 QTL Is Explained by Biochemical and Photochemical Changes. Frontiers in Plant Science, 2020, 11, 794.	3.6	3
34	Commonalities and differences in plants deficient in autophagy and alternative pathways of respiration on response to extended darkness. Plant Signaling and Behavior, 2017, 12, e1377877.	2.4	2
35	Crop genetic diversity uncovers metabolites, elements, and gene networks predicted to be associated with high plant biomass yields in maize. , 2022, 1, .		2
36	Elevated carbon assimilation and metabolic reprogramming in tomato high pigment mutants support the increased production of pigments. Plant Cell Reports, 0, , .	5.6	0