Adriano Nunes Nesi

List of Publications by Year
in descending order

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206 papers	15,809 citations	13099 68 h-index	19190 118 g-index
209 all docs	209 docs citations	209 times ranked	15091 citing authors

#	Article	IF	Citations
1	Amino Acid Catabolism in Plants. Molecular Plant, 2015, 8, 1563-1579.	8.3	898
2	Not just a circle: flux modes in the plant TCA cycle. Trends in Plant Science, 2010, 15, 462-470.	8.8	713
3	Metabolic and Signaling Aspects Underpinning the Regulation of Plant Carbon Nitrogen Interactions. Molecular Plant, 2010, 3, 973-996.	8.3	616
4	Evolution and metabolic significance of the urea cycle in photosynthetic diatoms. Nature, 2011, 473, 203-207.	27.8	453
5	Integrated Analysis of Metabolite and Transcript Levels Reveals the Metabolic Shifts That Underlie Tomato Fruit Development and Highlight Regulatory Aspects of Metabolic Network Behavior. Plant Physiology, 2006, 142, 1380-1396.	4.8	432
6	Glycolysis and the Tricarboxylic Acid Cycle Are Linked by Alanine Aminotransferase during Hypoxia Induced by Waterlogging of Lotus japonicus. Plant Physiology, 2010, 152, 1501-1513.	4.8	346
7	Enhanced Photosynthetic Performance and Growth as a Consequence of Decreasing Mitochondrial Malate Dehydrogenase Activity in Transgenic Tomato Plants. Plant Physiology, 2005, 137, 611-622.	4.8	335
8	Metabolic Fluxes in an Illuminated Arabidopsis Rosette Â. Plant Cell, 2013, 25, 694-714.	6.6	303
9	Identification of the 2-Hydroxyglutarate and Isovaleryl-CoA Dehydrogenases as Alternative Electron Donors Linking Lysine Catabolism to the Electron Transport Chain of Arabidopsis Mitochondria Â. Plant Cell, 2010, 22, 1549-1563.	6.6	296
10	Deficiency of mitochondrial fumarase activity in tomato plants impairs photosynthesis via an effect on stomatal function. Plant Journal, 2007, 50, 1093-1106.	5.7	294
11	The role of amino acid metabolism during abiotic stress release. Plant, Cell and Environment, 2019, 42, 1630-1644.	5.7	278
12	Metabolic control and regulation of the tricarboxylic acid cycle in photosynthetic and heterotrophic plant tissues. Plant, Cell and Environment, 2012, 35, 1-21.	5.7	267
13	Silicon nutrition increases grain yield, which, in turn, exerts a feedâ€forward stimulation of photosynthetic rates via enhanced mesophyll conductance and alters primary metabolism in rice. New Phytologist, 2012, 196, 752-762.	7.3	239
14	Comparative analyses of C4 and C3 photosynthesis in developing leaves of maize and rice. Nature Biotechnology, 2014, 32, 1158-1165.	17.5	228
15	Malate Plays a Crucial Role in Starch Metabolism, Ripening, and Soluble Solid Content of Tomato Fruit and Affects Postharvest Softening Â. Plant Cell, 2011, 23, 162-184.	6.6	227
16	Mitochondrial uncoupling protein is required for efficient photosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 19587-19592.	7.1	226
17	RNA Interference of LIN5 in Tomato Confirms Its Role in Controlling Brix Content, Uncovers the Influence of Sugars on the Levels of Fruit Hormones, and Demonstrates the Importance of Sucrose Cleavage for Normal Fruit Development and Fertility Â Â. Plant Physiology, 2009, 150, 1204-1218.	4.8	226
18	Antisense Inhibition of the Iron-Sulphur Subunit of Succinate Dehydrogenase Enhances Photosynthesis and Growth in Tomato via an Organic Acidâ€“Mediated Effect on Stomatal Aperture Â. Plant Cell, 2011, 23, 600-627.	6.6	221

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19	Evolution, structure and function of mitochondrial carriers: a review with new insights. Plant Journal, 2011, 66, 161-181.	5.7	212
20	Reduced Expression of Aconitase Results in an Enhanced Rate of Photosynthesis and Marked Shifts in Carbon Partitioning in Illuminated Leaves of Wild Species Tomato. Plant Physiology, 2003, 133, 1322-1335.	4.8	210
21	Adjustment of growth and central metabolism to a mild but sustained nitrogenâ€limitation in Arabidopsis. Plant, Cell and Environment, 2009, 32, 300-318.	5.7	201
22	GDPâ€<scp>d</scp>â€mannose 3,5â€epimerase (GME) plays a key role at the intersection of ascorbate and nonâ€cellulosic cellâ€wall biosynthesis in tomato. Plant Journal, 2009, 60, 499-508.	5.7	197
23	A Cytosolic Pathway for the Conversion of Hydroxypyruvate to Glycerate during Photorespiration in Arabidopsis. Plant Cell, 2008, 20, 2848-2859.	6.6	193
24	Regulation of respiration in plants: A role for alternative metabolic pathways. Journal of Plant Physiology, 2011, 168, 1434-1443.	3.5	189
25	Silencing of the Mitochondrial Ascorbate Synthesizing Enzyme <scp>l</scp>-Galactono-1,4-Lactone Dehydrogenase Affects Plant and Fruit Development in Tomato. Plant Physiology, 2007, 145, 1408-1422.	4.8	184
26	Thioredoxin, a master regulator of the tricarboxylic acid cycle in plant mitochondria. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E1392-400.	7.1	179
27	Dynamic Plastid Redox Signals Integrate Gene Expression and Metabolism to Induce Distinct Metabolic States in Photosynthetic Acclimation inArabidopsisÂ. Plant Cell, 2009, 21, 2715-2732.	6.6	176
28	A mitochondrial GABA permease connects the GABA shunt and the TCA cycle, and is essential for normal carbon metabolism. Plant Journal, 2011, 67, 485-498.	5.7	160
29	Modifications in Organic Acid Profiles During Fruit Development and Ripening: Correlation or Causation?. Frontiers in Plant Science, 2018, 9, 1689.	3.6	152
30	Reduced Expression of Succinyl-Coenzyme A Ligase Can Be Compensated for by Up-Regulation of theÎ³-Aminobutyrate Shunt in Illuminated Tomato Leaves. Plant Physiology, 2007, 145, 626-639.	4.8	151
31	Molecular Identification and Functional Characterization of Arabidopsis thaliana Mitochondrial and Chloroplastic NAD+ Carrier Proteins. Journal of Biological Chemistry, 2009, 284, 31249-31259.	3.4	151
32	Regulation of the mitochondrial tricarboxylic acid cycle. Current Opinion in Plant Biology, 2013, 16, 335-343.	7.1	141
33	Altering Trehalose-6-Phosphate Content in Transgenic Potato Tubers Affects Tuber Growth and Alters Responsiveness to Hormones during Sprouting Â Â. Plant Physiology, 2011, 156, 1754-1771.	4.8	138
34	Cytosolic pyruvate,orthophosphate dikinase functions in nitrogen remobilization during leaf senescence and limits individual seed growth and nitrogen content. Plant Journal, 2010, 62, 641-652.	5.7	129
35	Inhibition of 2-Oxoglutarate Dehydrogenase in Potato Tuber Suggests the Enzyme Is Limiting for Respiration and Confirms Its Importance in Nitrogen Assimilation Â. Plant Physiology, 2008, 148, 1782-1796.	4.8	127
36	Multiple strategies to prevent oxidative stress in Arabidopsis plants lacking the malate valve enzyme NADP-malate dehydrogenase. Journal of Experimental Botany, 2012, 63, 1445-1459.	4.8	125

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37	Evolution and regulation of nitrogen flux through compartmentalized metabolic networks in a marine diatom. Nature Communications, 2019, 10, 4552.	12.8	116
38	Conversion of MapMan to Allow the Analysis of Transcript Data from Solanaceous Species: Effects of Genetic and Environmental Alterations in Energy Metabolism in the Leaf. Plant Molecular Biology, 2006, 60, 773-792.	3.9	115
39	Pore size regulates operating stomatal conductance, while stomatal densities drive the partitioning of conductance between leaf sides. Annals of Botany, 2015, 115, 555-565.	2.9	115
40	Induction of the AOX1D Isoform of Alternative Oxidase in A. thaliana T-DNA Insertion Lines Lacking Isoform AOX1A Is Insufficient to Optimize Photosynthesis when Treated with Antimycin A. Molecular Plant, 2009, 2, 284-297.	8.3	112
41	Targeted Enhancement of Glutamate-to-Î³-Aminobutyrate Conversion in Arabidopsis Seeds Affects Carbon-Nitrogen Balance and Storage Reserves in a Development-Dependent Manner Â Â. Plant Physiology, 2011, 157, 1026-1042.	4.8	111
42	Capsaicinoids: Pungency beyond Capsicum. Trends in Plant Science, 2019, 24, 109-120.	8.8	108
43	Vitamin B1 biosynthesis in plants requires the essential ironâ€“sulfur cluster protein, THIC. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 19637-19642.	7.1	106
44	TheArabidopsis onset of leaf death5Mutation of Quinolinate Synthase Affects Nicotinamide Adenine Dinucleotide Biosynthesis and Causes Early Ageing. Plant Cell, 2008, 20, 2909-2925.	6.6	106
45	Targeting Mitochondrial Metabolism and Machinery as a Means to Enhance Photosynthesis. Plant Physiology, 2011, 155, 101-107.	4.8	105
46	The enigmatic contribution of mitochondrial function in photosynthesis. Journal of Experimental Botany, 2007, 59, 1675-1684.	4.8	104
47	The Mitochondrion: An Integration Point of Cellular Metabolism and Signalling. Critical Reviews in Plant Sciences, 2007, 26, 17-43.	5.7	102
48	Methyl Jasmonate: An Alternative for Improving the Quality and Health Properties of Fresh Fruits. Molecules, 2016, 21, 567.	3.8	99
49	Orchestration of Thiamin Biosynthesis and Central Metabolism by Combined Action of the Thiamin Pyrophosphate Riboswitch and the Circadian Clock in Arabidopsis Â Â. Plant Cell, 2013, 25, 288-307.	6.6	98
50	Autophagy Deficiency Compromises Alternative Pathways of Respiration following Energy Deprivation in Arabidopsis thaliana. Plant Physiology, 2017, 175, 62-76.	4.8	98
51	Robin: An Intuitive Wizard Application for R-Based Expression Microarray Quality Assessment and Analysis Â Â. Plant Physiology, 2010, 153, 642-651.	4.8	96
52	Arabidopsis uses two gluconeogenic gateways for organic acids to fuel seedling establishment. Nature Communications, 2015, 6, 6659.	12.8	95
53	Control of stomatal aperture. Plant Signaling and Behavior, 2011, 6, 1305-1311.	2.4	92
54	Toward the Storage Metabolome: Profiling the Barley Vacuole Â Â. Plant Physiology, 2011, 157, 1469-1482.	4.8	92

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55	Transcriptomic Analysis of the Role of Carboxylic Acids in Metabolite Signaling in Arabidopsis Leaves Â Â. Plant Physiology, 2013, 162, 239-253.	4.8	90
56	Mild Reductions in Mitochondrial Citrate Synthase Activity Result in a Compromised Nitrate Assimilation and Reduced Leaf Pigmentation But Have No Effect on Photosynthetic Performance or Growth Â. Plant Physiology, 2008, 147, 115-127.	4.8	89
57	Antisense Inhibition of the 2-Oxoglutarate Dehydrogenase Complex in Tomato Demonstrates Its Importance for Plant Respiration and during Leaf Senescence and Fruit Maturation. Plant Cell, 2012, 24, 2328-2351.	6.6	88
58	The Plastidial Glyceraldehyde-3-Phosphate Dehydrogenase Is Critical for Viable Pollen Development in Arabidopsis. Plant Physiology, 2010, 152, 1830-1841.	4.8	87
59	Inhibition of de Novo Pyrimidine Synthesis in Growing Potato Tubers Leads to a Compensatory Stimulation of the Pyrimidine Salvage Pathway and a Subsequent Increase in Biosynthetic Performance. Plant Cell, 2005, 17, 2077-2088.	6.6	86
60	Decreased Mitochondrial Activities of Malate Dehydrogenase and Fumarase in Tomato Lead to Altered Root Growth and Architecture via Diverse Mechanisms Â Â. Plant Physiology, 2009, 149, 653-669.	4.8	85
61	The Hydroxypyruvate-Reducing System in Arabidopsis: Multiple Enzymes for the Same End Â. Plant Physiology, 2011, 155, 694-705.	4.8	82
62	Evolution and Functional Implications of the Tricarboxylic Acid Cycle as Revealed by Phylogenetic Analysis. Genome Biology and Evolution, 2014, 6, 2830-2848.	2.5	82
63	Metallic nanoparticles influence the structure and function of the photosynthetic apparatus in plants. Plant Physiology and Biochemistry, 2018, 130, 408-417.	5.8	82
64	Enhanced levels of vitamin B₆ increase aerial organ size and positively affect stress tolerance in Arabidopsis. Plant Journal, 2011, 66, 414-432.	5.7	81
65	<scp>TIME FOR COFFEE</scp> is an essential component in the maintenance of metabolic homeostasis in <scp>A</scp>rabidopsis thaliana. Plant Journal, 2013, 76, 188-200.	5.7	79
66	Operation and function of the tricarboxylic acid cycle in the illuminated leaf. Physiologia Plantarum, 2007, 129, 45-56.	5.2	77
67	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
68	Engineering Improved Photosynthesis in the Era of Synthetic Biology. Plant Communications, 2020, 1, 100032.	7.7	77
69	Fumarate: Multiple functions of a simple metabolite. Phytochemistry, 2011, 72, 838-843.	2.9	75
70	NAD⁺Biosynthesis and Signaling in Plants. Critical Reviews in Plant Sciences, 2018, 37, 259-307.	5.7	71
71	Mild Reductions in Mitochondrial NAD-Dependent Isocitrate Dehydrogenase Activity Result in Altered Nitrate Assimilation and Pigmentation But Do Not Impact Growth. Molecular Plant, 2010, 3, 156-173.	8.3	68
72	On the role of plant mitochondrial metabolism and its impact on photosynthesis in both optimal and sub-optimal growth conditions. Photosynthesis Research, 2014, 119, 141-156.	2.9	68

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73	Downregulation of the Î´-Subunit Reduces Mitochondrial ATP Synthase Levels, Alters Respiration, and Restricts Growth and Gametophyte Development in Arabidopsis. Plant Cell, 2012, 24, 2792-2811.	6.6	66
74	The complex role of mitochondrial metabolism in plant aluminum resistance. Trends in Plant Science, 2014, 19, 399-407.	8.8	66
75	From structure to dynamics of metabolic pathways: application to the plant mitochondrial TCA cycle. Bioinformatics, 2007, 23, 1378-1385.	4.1	65
76	Identification and Characterization of ADNT1, a Novel Mitochondrial Adenine Nucleotide Transporter from Arabidopsis. Plant Physiology, 2008, 148, 1797-1808.	4.8	64
77	Virus-Induced Gene Silencing of Plastidial Soluble Inorganic Pyrophosphatase Impairs Essential Leaf Anabolic Pathways and Reduces Drought Stress Tolerance inNicotiana benthamiana. Plant Physiology, 2010, 154, 55-66.	4.8	60
78	Osmosensitive Changes of Carbohydrate Metabolism in Response to Cellulose Biosynthesis Inhibition Â Â. Plant Physiology, 2012, 159, 105-117.	4.8	60
79	Metabolic and miRNA Profiling of TMV Infected Plants Reveals Biphasic Temporal Changes. PLoS ONE, 2011, 6, e28466.	2.5	59
80	The Central Carbon and Energy Metabolism of Marine Diatoms. Metabolites, 2013, 3, 325-346.	2.9	59
81	Flux profiling of photosynthetic carbon metabolism in intact plants. Nature Protocols, 2014, 9, 1803-1824.	12.0	59
82	The genetic architecture of photosynthesis and plant growthâ€related traits in tomato. Plant, Cell and Environment, 2018, 41, 327-341.	5.7	59
83	ci21A/Asr1 expression influences glucose accumulation in potato tubers. Plant Molecular Biology, 2007, 63, 719-730.	3.9	57
84	A Deficiency in the Flavoprotein of Arabidopsis Mitochondrial Complex II Results in Elevated Photosynthesis and Better Growth in Nitrogen-Limiting Conditions Â Â. Plant Physiology, 2011, 157, 1114-1127.	4.8	57
85	Inhibition of aconitase in citrus fruit callus results in a metabolic shift towards amino acid biosynthesis. Planta, 2011, 234, 501-513.	3.2	55
86	Natural genetic variation for morphological and molecular determinants of plant growth and yield. Journal of Experimental Botany, 2016, 67, 2989-3001.	4.8	55
87	Cyanobacterial nitrogenases: phylogenetic diversity, regulation and functional predictions. Genetics and Molecular Biology, 2017, 40, 261-275.	1.3	55
88	Tricarboxylic Acid Cycle Activity Regulates Tomato Root Growth via Effects on Secondary Cell Wall Production Â Â. Plant Physiology, 2010, 153, 611-621.	4.8	54
89	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
90	Biochemical and molecular changes in response to aluminium-stress in highbush blueberry (Vaccinium) Tj ETQq0 0 0 rgBT /Overlock 10 T	5.8	48

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91	Age-related mechanism and its relationship with secondary metabolism and abscisic acid in Aristotelia chilensis plants subjected to drought stress. Plant Physiology and Biochemistry, 2018, 124, 136-145.	5.8	45
92	Unraveling Interfaces between Energy Metabolism and Cell Cycle in Plants. Trends in Plant Science, 2018, 23, 731-747.	8.8	45
93	Coupling Virus-Induced Gene Silencing to Exogenous Green Fluorescence Protein Expression Provides a Highly Efficient System for Functional Genomics in Arabidopsis and across All Stages of Tomato Fruit Development Â Â. Plant Physiology, 2011, 156, 1278-1291.	4.8	44
94	How do vascular plants perform photosynthesis in extreme environments? An integrative ecophysiological and biochemical story. Plant Journal, 2020, 101, 979-1000.	5.7	42
95	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
96	A Redox-Mediated Modulation of Stem Bolting in TransgenicNicotiana sylvestrisDifferentially Expressing the External Mitochondrial NADPH Dehydrogenase Â Â. Plant Physiology, 2009, 150, 1248-1259.	4.8	40
97	In Vivo NADH/NAD⁺ Biosensing Reveals the Dynamics of Cytosolic Redox Metabolism in Plants. Plant Cell, 2020, 32, 3324-3345.	6.6	40
98	Analysis of a Range of Catabolic Mutants Provides Evidence That Phytanoyl-Coenzyme A Does Not Act as a Substrate of the Electron-Transfer Flavoprotein/Electron-Transfer Flavoprotein:Ubiquinone Oxidoreductase Complex in Arabidopsis during Dark-Induced Senescence Â Â. Plant Physiology, 2011, 157, 55-69.	4.8	39
99	Mesophyll conductance: the leaf corridors for photosynthesis. Biochemical Society Transactions, 2020, 48, 429-439.	3.4	37
100	Activation of <scp>R</scp>â€mediated innate immunity and disease susceptibility is affected by mutations in a cytosolic <scp>O</scp>â€acetylserine (thiol) lyase in <scp>A</scp>rabidopsis. Plant Journal, 2013, 73, 118-130.	5.7	36
101	Alterations in Cytosolic Glucose-Phosphate Metabolism Affect Structural Features and Biochemical Properties of Starch-Related Heteroglycans. Plant Physiology, 2008, 148, 1614-1629.	4.8	35
102	Boron: More Than an Essential Element for Land Plants?. Frontiers in Plant Science, 2020, 11, 610307.	3.6	35
103	Mild reductions in cytosolic NADP-dependent isocitrate dehydrogenase activity result in lower amino acid contents and pigmentation without impacting growth. Amino Acids, 2010, 39, 1055-1066.	2.7	34
104	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
105	Thioredoxin h2 contributes to the redox regulation of mitochondrial photorespiratory metabolism. Plant, Cell and Environment, 2020, 43, 188-208.	5.7	34
106	Exploring the metabolic and physiological diversity of native microalgal strains (Chlorophyta) isolated from tropical freshwater reservoirs. Algal Research, 2017, 28, 139-150.	4.6	33
107	Can stable isotope mass spectrometry replace â€Žradiolabelled approaches in metabolic studies?. Plant Science, 2016, 249, 59-69.	3.6	32
108	Phosphonate Analogs of 2-Oxoglutarate Perturb Metabolism and Gene Expression in Illuminated Arabidopsis Leaves. Frontiers in Plant Science, 2012, 3, 114.	3.6	30

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109	Different levels of UV-B resistance in Vaccinium corymbosum cultivars reveal distinct backgrounds of phenylpropanoid metabolites. Plant Physiology and Biochemistry, 2017, 118, 541-550.	5.8	28
110	Titanium dioxide nanoparticles provoke transient increase in photosynthetic performance and differential response in antioxidant system in Raphanus sativus L.. Scientia Horticulturae, 2020, 269, 109418.	3.6	28
111	The photosynthesis game is in the "inter-play": Mechanisms underlying CO2 diffusion in leaves. Environmental and Experimental Botany, 2020, 178, 104174.	4.2	28
112	Aluminum stress differentially affects physiological performance and metabolic compounds in cultivars of highbush blueberry. Scientific Reports, 2019, 9, 11275.	3.3	27
113	Nitrogen differentially modulates photosynthesis, carbon allocation and yield related traits in two contrasting Capsicum chinense cultivars. Plant Science, 2019, 283, 224-237.	3.6	26
114	The Mitochondrial Thioredoxin System Contributes to the Metabolic Responses Under Drought Episodes in Arabidopsis. Plant and Cell Physiology, 2019, 60, 213-229.	3.1	26
115	Arsenic hyperaccumulation induces metabolic reprogramming in Pityrogramma calomelanos to reduce oxidative stress. Physiologia Plantarum, 2016, 157, 135-146.	5.2	25
116	Physiological and biochemical responses to manganese toxicity in ryegrass (Lolium perenne L.) genotypes. Plant Physiology and Biochemistry, 2017, 113, 89-97.	5.8	25
117	The interplay between carbon availability and growth in different zones of the growing maize leaf. Plant Physiology, 2016, 172, pp.00994.2016.	4.8	24
118	The 2-oxoglutarate/malate translocator mediates amino acid and storage protein biosynthesis in pea embryos. Plant Journal, 2010, 61, 350-363.	5.7	22
119	Scenedesmus sp. cultivation using commercial-grade ammonium sources. Annals of Microbiology, 2018, 68, 35-45.	2.6	22
120	Identification and characterization of metabolite quantitative trait loci in tomato leaves and comparison with those reported for fruits and seeds. Metabolomics, 2019, 15, 46.	3.0	22
121	Abscisic acid deficiency of developing pea embryos achieved by immunomodulation attenuates developmental phase transition and storage metabolism. Plant Journal, 2010, 64, 715-730.	5.7	21
122	Identification of a novel heteroglycan-interacting protein, HIP 1.3, from Arabidopsis thaliana. Journal of Plant Physiology, 2011, 168, 1415-1425.	3.5	21
123	Integrated proteome and metabolite analysis of the deâ€etiolation process in plastids from rice (Oryza sativa L.). Proteomics, 2011, 11, 1751-1763.	2.2	21
124	Is There a Metabolic Requirement for Photorespiratory Enzyme Activities in Heterotrophic Tissues?. Molecular Plant, 2014, 7, 248-251.	8.3	21
125	Changes in intracellular NAD status affect stomatal development in an abscisic acidâ€dependent manner. Plant Journal, 2020, 104, 1149-1168.	5.7	21
126	Evaluation of morphological and metabolic responses to glyphosate exposure in two neotropical plant species. Ecological Indicators, 2020, 113, 106246.	6.3	21

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127	Pyrophosphate levels strongly influence ascorbate and starch content in tomato fruit. Frontiers in Plant Science, 2013, 4, 308.	3.6	20
128	Transcript and metabolic adjustments triggered by drought in Ilex paraguariensis leaves. Planta, 2019, 250, 445-462.	3.2	20
129	Exploring natural variation of photosynthetic, primary metabolism and growth parameters in a large panel of Capsicum chinense accessions. Planta, 2015, 242, 677-691.	3.2	19
130	Downregulation of a Mitochondrial NAD+ Transporter (NDT2) Alters Seed Production and Germination in Arabidopsis. Plant and Cell Physiology, 2020, 61, 897-908.	3.1	19
131	Extending the ecological distribution of Desmonostoc genus: proposal of Desmonostoc salinum sp. nov., a novel Cyanobacteria from a salineâ€“alkaline lake. International Journal of Systematic and Evolutionary Microbiology, 2018, 68, 2770-2782.	1.7	19
132	Distinct physiological and metabolic reprogramming by highbush blueberry (Vaccinium) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 547 Td Plantarum, 2017, 160, 46-64.	5.2	18
133	Eucalypt plants are physiologically and metabolically affected by infection with Ceratocystis fimbriata. Plant Physiology and Biochemistry, 2018, 123, 170-179.	5.8	17
134	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
135	On the role of the plant mitochondrial thioredoxin system during abiotic stress. Plant Signaling and Behavior, 2019, 14, 1592536.	2.4	17
136	Increased urea availability promotes adjustments in C/N metabolism and lipid content without impacting growth in Chlamydomonas reinhardtii. Metabolomics, 2019, 15, 31.	3.0	17
137	Metabolite Profiling in Arabidopsisthaliana with Moderately Impaired Photorespiration Reveals Novel Metabolic Links and Compensatory Mechanisms of Photorespiration. Metabolites, 2021, 11, 391.	2.9	17
138	Enhancing Vacuolar Sucrose Cleavage Within the Developing Potato Tuber has only Minor Effects on Metabolism. Plant and Cell Physiology, 2006, 47, 277-289.	3.1	16
139	Differential impact of amino acids on OXPHOS system activity following carbohydrate starvation in Arabidopsis cell suspensions. Physiologia Plantarum, 2017, 161, 451-467.	5.2	16
140	The Arabidopsis E1 subunit of the 2-oxoglutarate dehydrogenase complex modulates plant growth and seed production. Plant Molecular Biology, 2019, 101, 183-202.	3.9	16
141	Differential root and shoot responses in the metabolism of tomato plants exhibiting reduced levels of gibberellin. Environmental and Experimental Botany, 2019, 157, 331-343.	4.2	16
142	Impact of nanoparticles and their ionic counterparts derived from heavy metals on the physiology of food crops. Plant Physiology and Biochemistry, 2022, 172, 14-23.	5.8	16
143	To Bring Flowers or Do a Runner: Gibberellins Make the Decision. Molecular Plant, 2018, 11, 4-6.	8.3	15
144	Data-Mining Bioinformatics: Connecting Adenylate Transport and Metabolic Responses to Stress. Trends in Plant Science, 2018, 23, 961-974.	8.8	15

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145	Decreasing the Mitochondrial Synthesis of Malate in Potato Tubers Does Not Affect Plastidial Starch Synthesis, Suggesting That the Physiological Regulation of ADPglucose Pyrophosphorylase Is Context Dependent Â Â. Plant Physiology, 2012, 160, 2227-2238.	4.8	14
146	Starch accumulation does not lead to feedback photosynthetic downregulation in girdled coffee branches under varying source-to-sink ratios. Trees - Structure and Function, 2020, 34, 1-16.	1.9	14
147	Comprehensive metabolic reprograming in freshwater Nitzschia palea strains undergoing nitrogen starvation is likely associated with its ecological origin. Algal Research, 2016, 18, 116-126.	4.6	13
148	Current status of the multinational Arabidopsis community. Plant Direct, 2020, 4, e00248.	1.9	13
149	Biochemical and functional characterization of a mitochondrial citrate carrier in Arabidopsis thaliana. Biochemical Journal, 2020, 477, 1759-1777.	3.7	13
150	Physiological and metabolic bases of increased growth in the tomato ethylene-insensitive mutant Never ripe: extending ethylene signaling functions. Plant Cell Reports, 2021, 40, 1377-1393.	5.6	12
151	Validated MAGIC and GWAS population mapping reveals the link between vitamin E content and natural variation in chorismate metabolism in tomato. Plant Journal, 2021, 105, 907-923.	5.7	12
152	NAD meets ABA: connecting cellular metabolism and hormone signaling. Trends in Plant Science, 2022, 27, 16-28.	8.8	12
153	Swine wastewater treatment in high rate algal ponds: Effects of Cu and Zn on nutrient removal, productivity and biomass composition. Journal of Environmental Management, 2021, 299, 113668.	7.8	12
154	Metabolic Roles of Plant Mitochondrial Carriers. Biomolecules, 2020, 10, 1013.	4.0	11
155	Characterization of In Vivo Function(s) of Members of the Plant Mitochondrial Carrier Family. Biomolecules, 2020, 10, 1226.	4.0	11
156	Metabolic regulation of pathways of carbohydrate oxidation in potato (Solanum tuberosum) tubers. Physiologia Plantarum, 2008, 133, 744-754.	5.2	10
157	Hybrid embryos of Vicia faba develop enhanced sink strength, which is established during early development. Plant Journal, 2011, 65, 517-531.	5.7	10
158	Manganese toxicity amelioration by phosphorus supply in contrasting Mn resistant genotypes of ryegrass. Plant Physiology and Biochemistry, 2019, 144, 144-156.	5.8	10
159	Understanding photosynthetic and metabolic adjustments in iron hyperaccumulators grass. Theoretical and Experimental Plant Physiology, 2020, 32, 147-162.	2.4	10
160	Metabolomic analyses of highbush blueberry (Vaccinium corymbosum L.) cultivars revealed mechanisms of resistance to aluminum toxicity. Environmental and Experimental Botany, 2021, 183, 104338.	4.2	10
161	The effect of silicon supply on photosynthesis and carbohydrate metabolism in two wheat (Triticum) Tj ETQq1 1 0.784314 rgBT /Over Biochemistry, 2021, 169, 236-248.	5.8	10
162	CO2 enrichment and supporting material impact the primary metabolism and 20-hydroxyecdysone levels in Brazilian ginseng grown under photoautotrophy. Plant Cell, Tissue and Organ Culture, 2019, 139, 77-89.	2.3	9

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163	Analysis of Kinetic Labeling of Amino Acids and Organic Acids by GC-MS. Methods in Molecular Biology, 2014, 1090, 107-119.	0.9	9
164	Functional genomics tools applied to plant metabolism: a survey on plant respiration, its connections and the annotation of complex gene functions. Frontiers in Plant Science, 2012, 3, 210.	3.6	8
165	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
166	Alternative fertilizer-based growth media support high lipid contents without growth impairment in Scenedesmus obliquus BR003. Bioprocess and Biosystems Engineering, 2020, 43, 1123-1131.	3.4	8
167	Downregulation of the E2 Subunit of 2-Oxoglutarate Dehydrogenase Modulates Plant Growth by Impacting Carbonâ€“Nitrogen Metabolism inArabidopsis thaliana. Plant and Cell Physiology, 2021, 62, 798-814.	3.1	8
168	Tapping natural variation at functional level reveals allele specific molecular characteristics of potato invertase Painâ€1. Plant, Cell and Environment, 2012, 35, 2143-2154.	5.7	7
169	Metabolic diversity in tuber tissues of native ChiloÃ© potatoes and commercial cultivars of Solanum tuberosum ssp. tuberosum L.. Metabolomics, 2018, 14, 138.	3.0	7
170	Arsenic-contaminated sediment from mining areas as source of morphological and phylogenetic distinct cyanobacterial lineages. Algal Research, 2019, 42, 101589.	4.6	7
171	Differential mechanisms between traditionally established and new highbush blueberry (Vaccinium) Tj ETQq1 1 0.784314 rgBT /Overlo and Biochemistry, 2021, 158, 454-465.	5.8	7
172	Guard cell regulation: pulling the strings behind the scenes. Trends in Plant Science, 2021, 26, 1093-1095.	8.8	7
173	Exogenous ethylene reduces growth via alterations in central metabolism and cell wall composition in tomato (Solanum lycopersicum). Journal of Plant Physiology, 2021, 263, 153460.	3.5	7
174	Specific leaf area is modulated by nitrogen via changes in primary metabolism and parenchymal thickness in pepper. Planta, 2021, 253, 16.	3.2	7
175	Metabolic and DNA checkpoints for the enhancement of Al tolerance. Journal of Hazardous Materials, 2022, 430, 128366.	12.4	7
176	A long and stressful day: Photoperiod shapes aluminium tolerance in plants. Journal of Hazardous Materials, 2022, 432, 128704.	12.4	7
177	Measurement of Tricarboxylic Acid Cycle Enzyme Activities in Plants. Methods in Molecular Biology, 2017, 1670, 167-182.	0.9	6
178	How Does European Mistletoe Survive Without Complex I?. Trends in Plant Science, 2018, 23, 847-850.	8.8	6
179	Biochemical and physiological aspects of restinga herbaceous plants tolerance to iron ore tailing plume along the coastal region of EspÃrito Santo-Brazil. Environmental and Experimental Botany, 2021, 191, 104618.	4.2	6
180	The Arabidopsis electronâ€transfer flavoprotein:ubiquinone oxidoreductase is required during normal seed development and germination. Plant Journal, 2022, 109, 196-214.	5.7	6

#	Article	IF	Citations
181	Heterosis and reciprocal effects for agronomic and fruit traits in Capsicum pepper hybrids. Scientia Horticulturae, 2022, 295, 110821.	3.6	6
182	An L,L-diaminopimelate aminotransferase mutation leads to metabolic shifts and growth inhibition in Arabidopsis. Journal of Experimental Botany, 2018, 69, 5489-5506.	4.8	5
183	Source Strength Modulates Fruit Set by Starch Turnover and Export of Both Sucrose and Amino Acids in Pepper. Plant and Cell Physiology, 2019, 60, 2319-2330.	3.1	5
184	Insights into oleaginous phenotype of the yeast Papiliotrema laurentii. Fungal Genetics and Biology, 2020, 144, 103456.	2.1	5
185	Titanium Dioxide Nanoparticles Increase Tissue Ti Concentration and Activate Antioxidants in Solanum lycopersicum L.. Journal of Soil Science and Plant Nutrition, 2021, 21, 1881-1889.	3.4	5
186	Metabolic shifts during fruit development in pungent and non-pungent peppers. Food Chemistry, 2022, 375, 131850.	8.2	5
187	Spatio-temporal characterization of the fruit metabolism in contrasting accessions of Macauba (Acrocomia aculeata). Plant Physiology and Biochemistry, 2022, 171, 14-25.	5.8	5
188	Reserve mobilization and the role of primary metabolites during the germination and initial seedling growth of rubber tree genotypes. Acta Physiologiae Plantarum, 2022, 44, .	2.1	5
189	Mitochondrial Metabolism. , 0, , 212-277.		4
190	Gypsum application ameliorates morphological and photochemical damages provoked by Al toxicity in Vaccinium corymbosum L. cultivars. Journal of Berry Research, 2019, 9, 665-685.	1.4	4
191	Physiological and molecular insights involved in silicon uptake and transport in ryegrass. Plant Physiology and Biochemistry, 2021, 163, 308-316.	5.8	4
192	Differential physiological and metabolic responses in young and fully expanded leaves of Aristotelia chilensis plants subjected to drought stress. Environmental and Experimental Botany, 2022, 196, 104814.	4.2	4
193	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
194	Identification of metabolite traits from the current metabolomic approaches. Theoretical and Experimental Plant Physiology, 2019, 31, 1-19.	2.4	3
195	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
196	Metabolic responses of Vaccinium corymbosum L. cultivars to Al3+ toxicity and gypsum amendment. Environmental and Experimental Botany, 2020, 176, 104119.	4.2	3
197	The role of the electronâ€transfer flavoprotein: ubiquinone oxidoreductase following carbohydrate starvation in Arabidopsis cell cultures. Plant Cell Reports, 2022, 41, 431-446.	5.6	3
198	Exploiting Natural Variation to Discover Candidate Genes Involved in Photosynthesis-Related Traits. Methods in Molecular Biology, 2017, 1653, 125-135.	0.9	2

#	Article	IF	Citations
199	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
200	Physiological responses to light intensity and photoperiod of the halotolerant cyanobacterium Desmonostoc salinum CCM-UFV059. Bioresource Technology Reports, 2020, 11, 100443.	2.7	2
201	Mitochondrial and peroxisomal <scp>NAD</scp> ⁺ uptake are important for improved photosynthesis and seed yield under elevated <scp> CO ₂ </scp> concentrations. Plant Journal, 0, , .	5.7	2
202	Seasonal changes in carbon and nitrogen metabolism of Brachiaria decumbens in a longâ€term silvopastoral system. Grass and Forage Science, 0, , .	2.9	1
203	The physiological role of mitochondrial ADNT1 carrier during senescence in Arabidopsis. Plant Stress, 2021, 2, 100019.	5.5	1
204	The Multifaceted Connections Between Photosynthesis and Respiratory Metabolism. , 2020, , 55-107.		1
205	Metabolic stability of freshwater Nitzschia palea strains under silicon stress associated with triacylglycerol accumulation. Algal Research, 2021, 60, 102554.	4.6	0
206	Elevated carbon assimilation and metabolic reprogramming in tomato high pigment mutants support the increased production of pigments. Plant Cell Reports, 0, , .	5.6	0