

Alisdair R Fernie

List of Publications by Year in descending order

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Version: 2024-02-01

619
papers

60,764
citations

704

125
h-index

2018

212
g-index

704
all docs

704
docs citations

704
times ranked

42140
citing authors

#	ARTICLE	IF	CITATIONS
1	The nutritional profile and human health benefit of pigmented rice and the impact of post-harvest processes and product development on the nutritional components: A review. <i>Critical Reviews in Food Science and Nutrition</i> , 2023, 63, 3867-3894.	5.4	10
2	Development of a widely targeted volatilomics method for profiling volatilomes in plants. <i>Molecular Plant</i> , 2022, 15, 189-202.	3.9	49
3	Corrigendum to: Posttranslational Modification of the NADP-Malic Enzyme Involved in C4 Photosynthesis Modulates the Enzymatic Activity during the Day. <i>Plant Cell</i> , 2022, 34, 698-699.	3.1	0
4	Genome-wide association of the metabolic shifts underpinning dark-induced senescence in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2022, 34, 557-578.	3.1	29
5	Rice metabolic regulatory network spanning the entire life cycle. <i>Molecular Plant</i> , 2022, 15, 258-275.	3.9	49
6	A Chimeric TGA Repressor Slows Down Fruit Maturation and Ripening in Tomato. <i>Plant and Cell Physiology</i> , 2022, 63, 120-134.	1.5	9
7	Combining novel technologies with interdisciplinary basic research to enhance horticultural crops. <i>Plant Journal</i> , 2022, 109, 35-46.	2.8	17
8	Unravelling the molecular networks that regulate kiwifruit flavor. <i>New Phytologist</i> , 2022, 233, 8-10.	3.5	1
9	Environmentally-driven metabolite and lipid variations correspond to altered bioactivities of black wolfberry fruit. <i>Food Chemistry</i> , 2022, 372, 131342.	4.2	14
10	The <i>Arabidopsis</i> electron transfer flavoprotein:ubiquinone oxidoreductase is required during normal seed development and germination. <i>Plant Journal</i> , 2022, 109, 196-214.	2.8	6
11	Genetic variation in <i>YIG1</i> contributes to ear length and grain yield in maize. <i>New Phytologist</i> , 2022, 234, 513-526.	3.5	38
12	Metabolism-mediated mechanisms underpin the differential stomatal speediness regulation among ferns and angiosperms. <i>Plant, Cell and Environment</i> , 2022, 45, 296-311.	2.8	11
13	Pathways to de novo domestication of crop wild relatives. <i>Plant Physiology</i> , 2022, 188, 1746-1756.	2.3	27
14	Genome-wide association studies of <i>Arabidopsis</i> dark-induced senescence reveals signatures of autophagy in metabolic reprogramming. <i>Autophagy</i> , 2022, 18, 457-458.	4.3	2
15	The reliance of phytohormone biosynthesis on primary metabolite precursors. <i>Journal of Plant Physiology</i> , 2022, 268, 153589.	1.6	15
16	The AtMYB60 transcription factor regulates stomatal opening by modulating oxylipin synthesis in guard cells. <i>Scientific Reports</i> , 2022, 12, 533.	1.6	12
17	Diversity: current and prospective secondary metabolites for nutrition and medicine. <i>Current Opinion in Biotechnology</i> , 2022, 74, 164-170.	3.3	27
18	Metabolic shifts during fruit development in pungent and non-pungent peppers. <i>Food Chemistry</i> , 2022, 375, 131850.	4.2	5

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19	The metabolic changes that effect fruit quality during tomato fruit ripening. <i>Molecular Horticulture</i> , 2022, 2, .	2.3	15
20	The <i>Bacillus subtilis</i> glutamate anti-metabolon. <i>Nature Metabolism</i> , 2022, 4, 161-162.	5.1	3
21	Enhancing crop diversity for food security in the face of climate uncertainty. <i>Plant Journal</i> , 2022, 109, 402-414.	2.8	60
22	Understanding carotenoid biosynthetic pathway control points using metabolomic analysis and natural genetic variation. <i>Methods in Enzymology</i> , 2022, , .	0.4	0
23	A Comparative Study of the Antihypertensive and Cardioprotective Potentials of Hot and Cold Aqueous Extracts of <i>Hibiscus sabdariffa</i> L. in Relation to Their Metabolic Profiles. <i>Frontiers in Pharmacology</i> , 2022, 13, 840478.	1.6	7
24	Chloroplast translational regulation uncovers nonessential photosynthesis genes as key players in plant cold acclimation. <i>Plant Cell</i> , 2022, 34, 2056-2079.	3.1	25
25	Metabolomic selection-based machine learning improves fruit taste prediction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	5
26	Potential Valorization of Edible Nuts By-Products: Exploring the Immune-Modulatory and Antioxidants Effects of Selected Nut Shells Extracts in Relation to Their Metabolic Profiles. <i>Antioxidants</i> , 2022, 11, 462.	2.2	27
27	Towards the Development, Maintenance and Standardized Phenotypic Characterization of Single-seed Descent Genetic Resources for Chickpea. <i>Current Protocols</i> , 2022, 2, e371.	1.3	6
28	Past accomplishments and future challenges of the multi-omics characterization of leaf growth. <i>Plant Physiology</i> , 2022, 189, 473-489.	2.3	6
29	Plant metabolic gene clusters in the multi-omics era. <i>Trends in Plant Science</i> , 2022, 27, 981-1001.	4.3	41
30	Regulation of Plant Primary Metabolism – How Results From Novel Technologies Are Extending Our Understanding From Classical Targeted Approaches. <i>Critical Reviews in Plant Sciences</i> , 2022, 41, 32-51.	2.7	3
31	Convergent selection of a WD40 protein that enhances grain yield in maize and rice. <i>Science</i> , 2022, 375, eabg7985.	6.0	110
32	Diverse roles of MYB transcription factors in regulating secondary metabolite biosynthesis, shoot development, and stress responses in tea plants (<i>Camellia sinensis</i>). <i>Plant Journal</i> , 2022, 110, 1144-1165.	2.8	42
33	Auxin boosts energy generation pathways to fuel pollen maturation in barley. <i>Current Biology</i> , 2022, 32, 1798-1811.e8.	1.8	16
34	Maize Field Study Reveals Covaried Microbiota and Metabolic Changes in Roots over Plant Growth. <i>MBio</i> , 2022, 13, e0258421.	1.8	15
35	CsMYB184 regulates caffeine biosynthesis in tea plants. <i>Plant Biotechnology Journal</i> , 2022, 20, 1012-1014.	4.1	18
36	Reduced auxin signalling through the cyclophilin gene <i>DIAGEOTROPICA</i> impacts tomato fruit development and metabolism during ripening. <i>Journal of Experimental Botany</i> , 2022, 73, 4113-4128.	2.4	4

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37	A reactive oxygen species burst causes haploid induction in maize. <i>Molecular Plant</i> , 2022, 15, 943-955.	3.9	39
38	Bringing more players into play: Leveraging stress in genome wide association studies. <i>Journal of Plant Physiology</i> , 2022, 271, 153657.	1.6	11
39	Natural variance at the interface of plant primary and specialized metabolism. <i>Current Opinion in Plant Biology</i> , 2022, 67, 102201.	3.5	19
40	Metabolic profiles in C3, C3&C4 intermediate, C4-like, and C4 species in the genus <i>Flaveria</i> . <i>Journal of Experimental Botany</i> , 2022, 73, 1581-1601.	2.4	25
41	Jujube metabolome selection determined the edible properties acquired during domestication. <i>Plant Journal</i> , 2022, 109, 1116-1133.	2.8	25
42	Rising rates of starch degradation during daytime and trehalose 6-phosphate optimize carbon availability. <i>Plant Physiology</i> , 2022, 189, 1976-2000.	2.3	18
43	A <i>Solanum lycopersicoides</i> reference genome facilitates insights into tomato specialized metabolism and immunity. <i>Plant Journal</i> , 2022, 110, 1791-1810.	2.8	16
44	Measurement of Flower Metabolite Concentrations Using Gas Chromatography&Mass Spectrometry and High-Performance Liquid Chromatography&Mass Spectrometry. <i>Methods in Molecular Biology</i> , 2022, 2484, 3-12.	0.4	0
45	<i>A. thaliana</i> Hybrids Develop Growth Abnormalities through Integration of Stress, Hormone and Growth Signaling. <i>Plant and Cell Physiology</i> , 2022, 63, 944-954.	1.5	1
46	Strawberry fruit FanCXE1 carboxylesterase is involved in the catabolism of volatile esters during the ripening process. <i>Horticulture Research</i> , 2022, 9, .	2.9	11
47	A comparative transcriptomics and eQTL approach identifies <i>SlWD40</i> as a tomato fruit ripening regulator. <i>Plant Physiology</i> , 2022, 190, 250-266.	2.3	9
48	High-energy-level metabolism and transport occur at the transition from closed to open flowers. <i>Plant Physiology</i> , 2022, 190, 319-339.	2.3	2
49	Metabolomics-based profiling for quality assessment and revealing the impact of drying of Turmeric (<i>Curcuma longa</i> L.). <i>Scientific Reports</i> , 2022, 12, .	1.6	14
50	Dynamically regulating metabolic fluxes with synthetic metabolons. <i>Trends in Biotechnology</i> , 2022, 40, 1019-1020.	4.9	3
51	Azacytidine arrests ripening in cultivated strawberry (<i>Fragaria Å— ananassa</i>) by repressing key genes and altering hormone contents. <i>BMC Plant Biology</i> , 2022, 22, .	1.6	7
52	The Key to the Future Lies in the Past: Insights from Grain Legume Domestication and Improvement Should Inform Future Breeding Strategies. <i>Plant and Cell Physiology</i> , 2022, 63, 1554-1572.	1.5	13
53	Metabolomics based inferences to unravel phenolic compound diversity in cereals and its implications for human gut health. <i>Trends in Food Science and Technology</i> , 2022, 127, 14-25.	7.8	26
54	Point mutations that boost aromatic amino acid production and CO ₂ assimilation in plants. <i>Science Advances</i> , 2022, 8, .	4.7	7

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55	13CO ₂ labeling kinetics in maize reveal impaired efficiency of C ₄ photosynthesis under low irradiance. <i>Plant Physiology</i> , 2022, 190, 280-304.	2.3	11
56	Natural alleles of the abscisic acid catabolism gene <i>ZmAbh4</i> modulate water use efficiency and carbon isotope discrimination in maize. <i>Plant Cell</i> , 2022, 34, 3860-3872.	3.1	5
57	Crop genetic diversity uncovers metabolites, elements, and gene networks predicted to be associated with high plant biomass yields in maize. , 2022, 1, .		2
58	Stable and Temporary Enzyme Complexes and Metabolons Involved in Energy and Redox Metabolism. <i>Antioxidants and Redox Signaling</i> , 2021, 35, 788-807.	2.5	14
59	Crop breeding “ From experience-based selection to precision design. <i>Journal of Plant Physiology</i> , 2021, 256, 153313.	1.6	19
60	Auto-deconvolution and molecular networking of gas chromatography–mass spectrometry data. <i>Nature Biotechnology</i> , 2021, 39, 169-173.	9.4	78
61	Metabolons, enzyme–enzyme assemblies that mediate substrate channeling, and their roles in plant metabolism. <i>Plant Communications</i> , 2021, 2, 100081.	3.6	78
62	SWATH-MS-Based Proteomics: Strategies and Applications in Plants. <i>Trends in Biotechnology</i> , 2021, 39, 433-437.	4.9	38
63	<i>Camellia sinensis</i> (Tea). <i>Trends in Genetics</i> , 2021, 37, 201-202.	2.9	10
64	Long-distance stress and developmental signals associated with abscisic acid signaling in environmental responses. <i>Plant Journal</i> , 2021, 105, 477-488.	2.8	23
65	Validated MAGIC and GWAS population mapping reveals the link between vitamin E content and natural variation in chorismate metabolism in tomato. <i>Plant Journal</i> , 2021, 105, 907-923.	2.8	12
66	Integrating multi-omics data for crop improvement. <i>Journal of Plant Physiology</i> , 2021, 257, 153352.	1.6	78
67	A phased genome based on single sperm sequencing reveals crossover pattern and complex relatedness in tea plants. <i>Plant Journal</i> , 2021, 105, 197-208.	2.8	15
68	Decreased Levels of Thioredoxin $\alpha 1$ Influences Stomatal Development and Aperture but Not Photosynthesis under Non-Stress and Saline Conditions. <i>International Journal of Molecular Sciences</i> , 2021, 22, 1063.	1.8	8
69	Global mapping of protein–metabolite interactions in <i>Saccharomyces cerevisiae</i> reveals that Ser-Leu dipeptide regulates phosphoglycerate kinase activity. <i>Communications Biology</i> , 2021, 4, 181.	2.0	32
70	Evolutionary gain of oligosaccharide hydrolysis and sugar transport enhanced carbohydrate partitioning in sweet watermelon fruits. <i>Plant Cell</i> , 2021, 33, 1554-1573.	3.1	57
71	The NAC transcription factor FaRIF controls fruit ripening in strawberry. <i>Plant Cell</i> , 2021, 33, 1574-1593.	3.1	95
72	Thioredoxin-mediated regulation of (photo)respiration and central metabolism. <i>Journal of Experimental Botany</i> , 2021, 72, 5987-6002.	2.4	22

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73	Phytochromes control metabolic flux, and their action at the seedling stage determines adult plant biomass. <i>Journal of Experimental Botany</i> , 2021, 72, 3263-3278.	2.4	6
74	Cross-Species Metabolic Profiling of Floral Specialized Metabolism Facilitates Understanding of Evolutional Aspects of Metabolism Among Brassicaceae Species. <i>Frontiers in Plant Science</i> , 2021, 12, 640141.	1.7	1
75	Several geranylgeranyl diphosphate synthase isoforms supply metabolic substrates for carotenoid biosynthesis in tomato. <i>New Phytologist</i> , 2021, 231, 255-272.	3.5	50
76	The genetics underlying metabolic signatures in a brown rice diversity panel and their vital role in human nutrition. <i>Plant Journal</i> , 2021, 106, 507-525.	2.8	22
77	Meeting human dietary vitamin requirements in the staple rice via strategies of biofortification and post-harvest fortification. <i>Trends in Food Science and Technology</i> , 2021, 109, 65-82.	7.8	32
78	Downregulation of the E2 Subunit of 2-Oxoglutarate Dehydrogenase Modulates Plant Growth by Impacting Carbon-15 Nitrogen Metabolism in <i>Arabidopsis thaliana</i> . <i>Plant and Cell Physiology</i> , 2021, 62, 798-814.	1.5	8
79	Using landrace transcription factor alleles to increase yield in modern rice under low input agriculture. <i>Journal of Plant Physiology</i> , 2021, 258-259, 153362.	1.6	2
80	Multimiomics-based dissection of citrus flavonoid metabolism using a <i>Citrus reticulata</i> – Poncirus trifoliata population. <i>Horticulture Research</i> , 2021, 8, 56.	2.9	24
81	Multi-omics analysis of early leaf development in <i>Arabidopsis thaliana</i> . <i>Patterns</i> , 2021, 2, 100235.	3.1	24
82	Using precision phenotyping to inform de novo domestication. <i>Plant Physiology</i> , 2021, 186, 1397-1411.	2.3	7
83	Mild reductions in guard cell sucrose synthase 2 expression leads to slower stomatal opening and decreased whole plant transpiration in <i>Nicotiana tabacum</i> L. <i>Environmental and Experimental Botany</i> , 2021, 184, 104370.	2.0	8
84	Diversity of Chemical Structures and Biosynthesis of Polyphenols in Nut-Bearing Species. <i>Frontiers in Plant Science</i> , 2021, 12, 642581.	1.7	16
85	Associating primary and specialized metabolism with salt induced osmotic stress tolerance in maize. <i>New Phytologist</i> , 2021, 230, 2091-2093.	3.5	2
86	Differential responses of three <i>Urochloa</i> species to low phosphorus availability. <i>Annals of Applied Biology</i> , 2021, 179, 216-230.	1.3	4
87	From flowers to seeds: how the metabolism of flowers frames plant reproduction. <i>Biochemist</i> , 2021, 43, 14-18.	0.2	0
88	Phosphoglycerate dehydrogenase genes differentially affect <i>Arabidopsis</i> metabolism and development. <i>Plant Science</i> , 2021, 306, 110863.	1.7	10
89	The phosphorylated pathway of serine biosynthesis links plant growth with nitrogen metabolism. <i>Plant Physiology</i> , 2021, 186, 1487-1506.	2.3	20
90	Towards the Development, Maintenance, and Standardized Phenotypic Characterization of Single-Seed-Descent Genetic Resources for Common Bean. <i>Current Protocols</i> , 2021, 1, e133.	1.3	13

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91	Overexpression of thioredoxin m in chloroplasts alters carbon and nitrogen partitioning in tobacco. <i>Journal of Experimental Botany</i> , 2021, 72, 4949-4964.	2.4	9
92	Ultra-high-performance liquid chromatography high-resolution mass spectrometry variants for metabolomics research. <i>Nature Methods</i> , 2021, 18, 733-746.	9.0	143
93	CsbZIP1-CsMYB12 mediates the production of bitter-tasting flavonols in tea plants (<i>Camellia sinensis</i>) through a coordinated activator–repressor network. <i>Horticulture Research</i> , 2021, 8, 110.	2.9	49
94	Metabolite Profiling in <i>Arabidopsis thaliana</i> with Moderately Impaired Photorespiration Reveals Novel Metabolic Links and Compensatory Mechanisms of Photorespiration. <i>Metabolites</i> , 2021, 11, 391.	1.3	17
95	Domestication of Crop Metabolomes: Desired and Unintended Consequences. <i>Trends in Plant Science</i> , 2021, 26, 650-661.	4.3	60
96	When a Crop Goes Back to the Wild: Feralization. <i>Trends in Plant Science</i> , 2021, 26, 543-545.	4.3	10
97	Tyr–Asp inhibition of glyceraldehyde 3-phosphate dehydrogenase affects plant redox metabolism. <i>EMBO Journal</i> , 2021, 40, e106800.	3.5	29
98	Plant biotechnology for sustainable agriculture and food safety. <i>Journal of Plant Physiology</i> , 2021, 261, 153416.	1.6	7
99	Multomics analyses reveal the roles of the ASR1 transcription factor in tomato fruits. <i>Journal of Experimental Botany</i> , 2021, 72, 6490-6509.	2.4	4
100	Two mitochondrial phosphatases, PP2c63 and Sal2, are required for posttranslational regulation of the TCA cycle in <i>Arabidopsis</i> . <i>Molecular Plant</i> , 2021, 14, 1104-1118.	3.9	31
101	Mass spectrometry-based metabolomics: a guide for annotation, quantification and best reporting practices. <i>Nature Methods</i> , 2021, 18, 747-756.	9.0	403
102	Exploring the genic resources underlying metabolites through mGWAS and mQTL in wheat: From large-scale gene identification and pathway elucidation to crop improvement. <i>Plant Communications</i> , 2021, 2, 100216.	3.6	15
103	Plasticity of rosette size in response to nitrogen availability is controlled by an <i>RCC1</i> family protein. <i>Plant, Cell and Environment</i> , 2021, 44, 3398-3411.	2.8	11
104	The utility of metabolomics as a tool to inform maize biology. <i>Plant Communications</i> , 2021, 2, 100187.	3.6	17
105	Genome-wide association studies: assessing trait characteristics in model and crop plants. <i>Cellular and Molecular Life Sciences</i> , 2021, 78, 5743-5754.	2.4	54
106	Towards Development, Maintenance, and Standardized Phenotypic Characterization of Single-Seed-Descent Genetic Resources for Lupins. <i>Current Protocols</i> , 2021, 1, e191.	1.3	9
107	From Affinity to Proximity Techniques to Investigate Protein Complexes in Plants. <i>International Journal of Molecular Sciences</i> , 2021, 22, 7101.	1.8	10
108	OsGF14b modulates defense signaling pathways in rice panicle blast response. <i>Crop Journal</i> , 2021, 9, 725-738.	2.3	16

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109	The genomes of <i>Taxus</i> species unveil novel candidates in the biosynthesis of taxoids. <i>Molecular Plant</i> , 2021, 14, 1773-1775.	3.9	3
110	Sulfur deficiency-induced genes affect seed protein accumulation and composition under sulfate deprivation. <i>Plant Physiology</i> , 2021, 187, 2419-2434.	2.3	20
111	Plant cell cultures as heterologous bio-factories for secondary metabolite production. <i>Plant Communications</i> , 2021, 2, 100235.	3.6	40
112	Establishment of a GCâ€MSâ€b-based ¹³Câ€positional isotopomer approach suitable for investigating metabolic fluxes in plant primary metabolism. <i>Plant Journal</i> , 2021, 108, 1213-1233.	2.8	18
113	Genomic basis underlying the metabolome-mediated drought adaptation of maize. <i>Genome Biology</i> , 2021, 22, 260.	3.8	44
114	Plant metabolism paves the way for breeding crops with high nutritional value and stable yield. <i>Science China Life Sciences</i> , 2021, 64, 2202-2205.	2.3	6
115	Will <i>Casuarina glauca</i> Stress Resilience Be Maintained in the Face of Climate Change?. <i>Metabolites</i> , 2021, 11, 593.	1.3	3
116	The INCREASE project: Intelligent Collections of foodâ€legume genetic resources for European agrofood systems. <i>Plant Journal</i> , 2021, 108, 646-660.	2.8	29
117	The integration of MS-based metabolomics and multivariate data analysis allows for improved quality assessment of <i>Zingiber officinale</i> Roscoe. <i>Phytochemistry</i> , 2021, 190, 112843.	1.4	18
118	Plants upcycle gene functions to suit their roots. <i>Trends in Plant Science</i> , 2021, 26, 996-998.	4.3	1
119	The knowns and unknowns of intracellular partitioning of carbon and nitrogen, with focus on the organic acid-mediated interplay between mitochondrion and chloroplast. <i>Journal of Plant Physiology</i> , 2021, 266, 153521.	1.6	13
120	Acclimation in plants â€ the Green Hub consortium. <i>Plant Journal</i> , 2021, 106, 23-40.	2.8	44
121	Ancestral sequence reconstruction - An underused approach to understand the evolution of gene function in plants?. <i>Computational and Structural Biotechnology Journal</i> , 2021, 19, 1579-1594.	1.9	10
122	Pod indehiscence in common bean is associated with the fine regulation of <i>PvMYB26</i> . <i>Journal of Experimental Botany</i> , 2021, 72, 1617-1633.	2.4	29
123	The cytosolic invertase NI6 affects vegetative growth, flowering, fruit set, and yield in tomato. <i>Journal of Experimental Botany</i> , 2021, 72, 2525-2543.	2.4	16
124	Multi-omics approach reveals the contribution of KLU to leaf longevity and drought tolerance. <i>Plant Physiology</i> , 2021, 185, 352-368.	2.3	24
125	Kingdom-wide analysis of the evolution of the plant type III polyketide synthase superfamily. <i>Plant Physiology</i> , 2021, 185, 857-875.	2.3	20
126	Multi-omics approaches explain the growth-promoting effect of the apocarotenoid growth regulator zaxinone in rice. <i>Communications Biology</i> , 2021, 4, 1222.	2.0	18

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127	High-quality reference genome sequences of two coconut cultivars provide insights into evolution of monocot chromosomes and differentiation of fiber content and plant height. <i>Genome Biology</i> , 2021, 22, 304.	3.8	32
128	Different Metabolic Roles for Alternative Oxidase in Leaves of Palustrine and Terrestrial Species. <i>Frontiers in Plant Science</i> , 2021, 12, 752795.	1.7	1
129	The interface of central metabolism with hormone signaling in plants. <i>Current Biology</i> , 2021, 31, R1535-R1548.	1.8	22
130	The Assembly of Super-Complexes in the Plant Chloroplast. <i>Biomolecules</i> , 2021, 11, 1839.	1.8	5
131	Comparative Molecular and Metabolic Profiling of Two Contrasting Wheat Cultivars under Drought Stress. <i>International Journal of Molecular Sciences</i> , 2021, 22, 13287.	1.8	4
132	The role of nitrite and nitric oxide under low oxygen conditions in plants. <i>New Phytologist</i> , 2020, 225, 1143-1151.	3.5	49
133	Multifaceted regulatory function of tomato SITAF1 in the response to salinity stress. <i>New Phytologist</i> , 2020, 225, 1681-1698.	3.5	42
134	Characterizing the involvement of <i>FaMADS9</i> in the regulation of strawberry fruit receptacle development. <i>Plant Biotechnology Journal</i> , 2020, 18, 929-943.	4.1	25
135	Cytochrome respiration pathway and sulphur metabolism sustain stress tolerance to low temperature in the Antarctic species <i>Colobanthus quitensis</i> . <i>New Phytologist</i> , 2020, 225, 754-768.	3.5	32
136	Thioredoxin <i>h2</i> contributes to the redox regulation of mitochondrial photorespiratory metabolism. <i>Plant, Cell and Environment</i> , 2020, 43, 188-208.	2.8	34
137	Manipulation of Î²-carotene levels in tomato fruits results in increased ABA content and extended shelf life. <i>Plant Biotechnology Journal</i> , 2020, 18, 1185-1199.	4.1	81
138	Construction and applications of a B vitamin genetic resource for investigation of vitamin-dependent metabolism in maize. <i>Plant Journal</i> , 2020, 101, 442-454.	2.8	9
139	Genome-wide Dissection of Co-selected UV-B Responsive Pathways in the UV-B Adaptation of Qingke. <i>Molecular Plant</i> , 2020, 13, 112-127.	3.9	106
140	Metabolomics should be deployed in the identification and characterization of gene-edited crops. <i>Plant Journal</i> , 2020, 102, 897-902.	2.8	30
141	The Acetate Pathway Supports Flavonoid and Lipid Biosynthesis in Arabidopsis. <i>Plant Physiology</i> , 2020, 182, 857-869.	2.3	35
142	Wasteful, essential, evolutionary stepping stone? The multiple personalities of the photorespiratory pathway. <i>Plant Journal</i> , 2020, 102, 666-677.	2.8	44
143	Assessing durum wheat ear and leaf metabolomes in the field through hyperspectral data. <i>Plant Journal</i> , 2020, 102, 615-630.	2.8	35
144	A genetically validated approach for detecting inorganic polyphosphates in plants. <i>Plant Journal</i> , 2020, 102, 507-516.	2.8	15

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145	The Past, Present, and Future of Maize Improvement: Domestication, Genomics, and Functional Genomic Routes toward Crop Enhancement. <i>Plant Communications</i> , 2020, 1, 100010.	3.6	68
146	Full-Length Transcript-Based Proteogenomics of Rice Improves Its Genome and Proteome Annotation. <i>Plant Physiology</i> , 2020, 182, 1510-1526.	2.3	53
147	Changes in intracellular NAD status affect stomatal development in an abscisic acid-dependent manner. <i>Plant Journal</i> , 2020, 104, 1149-1168.	2.8	21
148	Mobile Transposable Elements Shape Plant Genome Diversity. <i>Trends in Plant Science</i> , 2020, 25, 1062-1064.	4.3	9
149	Model-assisted identification of metabolic engineering strategies for <i>Jatropha curcas</i> lipid pathways. <i>Plant Journal</i> , 2020, 104, 76-95.	2.8	11
150	How do wheat plants cope with <i>Pyricularia oryzae</i> infection? A physiological and metabolic approach. <i>Planta</i> , 2020, 252, 24.	1.6	6
151	Born to revive: molecular and physiological mechanisms of double tolerance in a paleotropical and resurrection plant. <i>New Phytologist</i> , 2020, 226, 741-759.	3.5	34
152	Plant Single-Cell Metabolomics—Challenges and Perspectives. <i>International Journal of Molecular Sciences</i> , 2020, 21, 8987.	1.8	42
153	Role of Raf-like kinases in SnRK2 activation and osmotic stress response in plants. <i>Nature Communications</i> , 2020, 11, 6184.	5.8	59
154	On the Detection and Functional Significance of the Protein-Protein Interactions of Mitochondrial Transport Proteins. <i>Biomolecules</i> , 2020, 10, 1107.	1.8	8
155	Dissection of the domestication-shaped genetic architecture of lettuce primary metabolism. <i>Plant Journal</i> , 2020, 104, 613-630.	2.8	24
156	Genome assembly of wild tea tree DASZ reveals pedigree and selection history of tea varieties. <i>Nature Communications</i> , 2020, 11, 3719.	5.8	108
157	Metabolic Roles of Plant Mitochondrial Carriers. <i>Biomolecules</i> , 2020, 10, 1013.	1.8	11
158	Developmentally controlled changes during Arabidopsis leaf development indicate causes for loss of stress tolerance with age. <i>Journal of Experimental Botany</i> , 2020, 71, 6340-6354.	2.4	18
159	Differences in Metabolic and Physiological Responses between Local and Widespread Grapevine Cultivars under Water Deficit Stress. <i>Agronomy</i> , 2020, 10, 1052.	1.3	11
160	Working day and night: plastid casein kinase 2 catalyses phosphorylation of proteins with diverse functions in light- and dark-adapted plastids. <i>Plant Journal</i> , 2020, 104, 546-558.	2.8	4
161	Coordinating Sulfur Pools under Sulfate Deprivation. <i>Trends in Plant Science</i> , 2020, 25, 1227-1239.	4.3	62
162	Tomato multiomics at aPEELing resolution. <i>Nature Plants</i> , 2020, 6, 1394-1395.	4.7	1

#	ARTICLE	IF	CITATIONS
163	Multi-gene metabolic engineering of tomato plants results in increased fruit yield up to 23%. <i>Scientific Reports</i> , 2020, 10, 17219.	1.6	15
164	Adenine Nucleotide and Nicotinamide Adenine Dinucleotide Measurements in Plants. <i>Current Protocols in Plant Biology</i> , 2020, 5, e20115.	2.8	16
165	Characterization of In Vivo Function(s) of Members of the Plant Mitochondrial Carrier Family. <i>Biomolecules</i> , 2020, 10, 1226.	1.8	11
166	A moonlighting role for enzymes of glycolysis in the co-localization of mitochondria and chloroplasts. <i>Nature Communications</i> , 2020, 11, 4509.	5.8	47
167	Decoding altitude-activated regulatory mechanisms occurring during apple peel ripening. <i>Horticulture Research</i> , 2020, 7, 120.	2.9	30
168	Synthetic conversion of leaf chloroplasts into carotenoid-rich plastids reveals mechanistic basis of natural chromoplast development. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 21796-21803.	3.3	77
169	Selection of a subspecies-specific diterpene gene cluster implicated in rice disease resistance. <i>Nature Plants</i> , 2020, 6, 1447-1454.	4.7	66
170	Co-regulation of Clustered and Neo-functionalized Genes in Plant-Specialized Metabolism. <i>Plants</i> , 2020, 9, 622.	1.6	17
171	An improved extraction method enables the comprehensive analysis of lipids, proteins, metabolites and phytohormones from a single sample of leaf tissue under water-deficit stress. <i>Plant Journal</i> , 2020, 103, 1614-1632.	2.8	55
172	An Abundance and Interaction Encyclopedia of Plant Protein Function. <i>Trends in Plant Science</i> , 2020, 25, 627-630.	4.3	10
173	A NAC transcription factor and its interaction protein hinder abscisic acid biosynthesis by synergistically repressing NCED5 in <i>Citrus reticulata</i> . <i>Journal of Experimental Botany</i> , 2020, 71, 3613-3625.	2.4	39
174	The Kernel Size-Related Quantitative Trait Locus <i>qKW9</i> Encodes a Pentatricopeptide Repeat Protein That Affects Photosynthesis and Grain Filling. <i>Plant Physiology</i> , 2020, 183, 1696-1709.	2.3	29
175	Phytochrome-Dependent Temperature Perception Modulates Isoprenoid Metabolism. <i>Plant Physiology</i> , 2020, 183, 869-882.	2.3	21
176	Network-based strategies in metabolomics data analysis and interpretation: from molecular networking to biological interpretation. <i>Expert Review of Proteomics</i> , 2020, 17, 243-255.	1.3	70
177	PlantaSyst: Teaming up for Systems Biology and Biotechnology. <i>Trends in Plant Science</i> , 2020, 25, 621-624.	4.3	2
178	Quantitative trait loci analysis of seed-specialized metabolites reveals seed-specific flavonols and differential regulation of glycoalkaloid content in tomato. <i>Plant Journal</i> , 2020, 103, 2007-2024.	2.8	32
179	The <i>genomes uncoupled</i> -dependent signalling pathway coordinates plastid biogenesis with the synthesis of anthocyanins. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2020, 375, 20190403.	1.8	24
180	The Cassava Source-Sink project: opportunities and challenges for crop improvement by metabolic engineering. <i>Plant Journal</i> , 2020, 103, 1655-1665.	2.8	33

#	ARTICLE	IF	CITATIONS
181	MicroTom Metabolic Network: Rewiring Tomato Metabolic Regulatory Network throughout the Growth Cycle. <i>Molecular Plant</i> , 2020, 13, 1203-1218.	3.9	107
182	Single-Cell Genomics and Epigenomics: Technologies and Applications in Plants. <i>Trends in Plant Science</i> , 2020, 25, 1030-1040.	4.3	37
183	The evolution of metabolism: How to test evolutionary hypotheses at the genomic level. <i>Computational and Structural Biotechnology Journal</i> , 2020, 18, 482-500.	1.9	36
184	Manipulation of ZDS in tomato exposes carotenoid and ABA specific effects on fruit development and ripening. <i>Plant Biotechnology Journal</i> , 2020, 18, 2210-2224.	4.1	44
185	Systems-Based Approaches to Unravel Networks and Individual Elements Involved in Apple Superficial Scald. <i>Frontiers in Plant Science</i> , 2020, 11, 8.	1.7	24
186	Type I H ⁺ -pyrophosphatase regulates the vacuolar storage of sucrose in citrus fruit. <i>Journal of Experimental Botany</i> , 2020, 71, 5935-5947.	2.4	9
187	A push, and a pull, to enhance nitrogen use efficiency in rice. <i>Plant Journal</i> , 2020, 103, 5-6.	2.8	5
188	Towards model-driven characterization and manipulation of plant lipid metabolism. <i>Progress in Lipid Research</i> , 2020, 80, 101051.	5.3	28
189	A Highly Efficient Agrobacterium-Mediated Method for Transient Gene Expression and Functional Studies in Multiple Plant Species. <i>Plant Communications</i> , 2020, 1, 100028.	3.6	85
190	Low temperature tolerance of the Antarctic species <i>Deschampsia antarctica</i> : A complex metabolic response associated with nutrient remobilization. <i>Plant, Cell and Environment</i> , 2020, 43, 1376-1393.	2.8	21
191	Synchronization of developmental, molecular and metabolic aspects of source-sink interactions. <i>Nature Plants</i> , 2020, 6, 55-66.	4.7	107
192	Downregulation of a Mitochondrial NAD ⁺ Transporter (NDT2) Alters Seed Production and Germination in Arabidopsis. <i>Plant and Cell Physiology</i> , 2020, 61, 897-908.	1.5	19
193	Synthetic analogues of 2-oxo acids discriminate metabolic contribution of the 2-oxoglutarate and 2-oxoadipate dehydrogenases in mammalian cells and tissues. <i>Scientific Reports</i> , 2020, 10, 1886.	1.6	21
194	Metabolomics analysis and metabolite agronomic trait associations using kernels of wheat (<i>Triticum aestivum</i>) recombinant inbred lines. <i>Plant Journal</i> , 2020, 103, 279-292.	2.8	69
195	Targeting Key Genes to Tailor Old and New Crops for a Greener Agriculture. <i>Molecular Plant</i> , 2020, 13, 354-356.	3.9	9
196	Metabolite-based genome-wide association study enables dissection of the flavonoid decoration pathway of wheat kernels. <i>Plant Biotechnology Journal</i> , 2020, 18, 1722-1735.	4.1	94
197	Metabolic profiles of six African cultivars of cassava (<i>Manihot esculenta</i> Crantz) highlight bottlenecks of root yield. <i>Plant Journal</i> , 2020, 102, 1202-1219.	2.8	27
198	How do vascular plants perform photosynthesis in extreme environments? An integrative ecophysiological and biochemical story. <i>Plant Journal</i> , 2020, 101, 979-1000.	2.8	42

#	ARTICLE	IF	CITATIONS
199	Expression Atlas of <i>Selaginella moellendorffii</i> Provides Insights into the Evolution of Vasculature, Secondary Metabolism, and Roots. <i>Plant Cell</i> , 2020, 32, 853-870.	3.1	39
200	Flux balance analysis of metabolism during growth by osmotic cell expansion and its application to tomato fruits. <i>Plant Journal</i> , 2020, 103, 68-82.	2.8	26
201	Metabolomics in the Context of Plant Natural Products Research: From Sample Preparation to Metabolite Analysis. <i>Metabolites</i> , 2020, 10, 37.	1.3	147
202	Plant Mitochondrial Carriers: Molecular Gatekeepers That Help to Regulate Plant Central Carbon Metabolism. <i>Plants</i> , 2020, 9, 117.	1.6	23
203	A Biostimulant Obtained from the Seaweed <i>Ascophyllum nodosum</i> Protects <i>Arabidopsis thaliana</i> from Severe Oxidative Stress. <i>International Journal of Molecular Sciences</i> , 2020, 21, 474.	1.8	62
204	Eating Away at ROS to Regulate Stomatal Opening. <i>Trends in Plant Science</i> , 2020, 25, 220-223.	4.3	36
205	Dissection of flag leaf metabolic shifts and their relationship with those occurring simultaneously in developing seed by application of non-targeted metabolomics. <i>PLoS ONE</i> , 2020, 15, e0227577.	1.1	6
206	Ascorbate and Thiamin: Metabolic Modulators in Plant Acclimation Responses. <i>Plants</i> , 2020, 9, 101.	1.6	21
207	Lipidomic and transcriptomic analysis reveals reallocation of carbon flux from cuticular wax into plastid membrane lipids in a glossy <i>Newhall</i> navel orange mutant. <i>Horticulture Research</i> , 2020, 7, 41.	2.9	23
208	Nano and Micro Unmanned Aerial Vehicles (UAVs): A New Grand Challenge for Precision Agriculture?. <i>Current Protocols in Plant Biology</i> , 2020, 5, e20103.	2.8	13
209	The style and substance of plant flavonoid decoration; towards defining both structure and function. <i>Phytochemistry</i> , 2020, 174, 112347.	1.4	138
210	Metabolome Profiling Supports the Key Role of the Spike in Wheat Yield Performance. <i>Cells</i> , 2020, 9, 1025.	1.8	20
211	High-Throughput CRISPR/Cas9 Mutagenesis Streamlines Trait Gene Identification in Maize. <i>Plant Cell</i> , 2020, 32, 1397-1413.	3.1	148
212	Analysis of Tomato Post-Harvest Properties: Fruit Color, Shelf Life, and Fungal Susceptibility. <i>Current Protocols in Plant Biology</i> , 2020, 5, e20108.	2.8	28
213	Exploiting Natural Variation in Tomato to Define Pathway Structure and Metabolic Regulation of Fruit Polyphenolics in the <i>Lycopersicon</i> Complex. <i>Molecular Plant</i> , 2020, 13, 1027-1046.	3.9	56
214	Annotation of Specialized Metabolites from High-Throughput and High-Resolution Mass Spectrometry Metabolomics. <i>Methods in Molecular Biology</i> , 2020, 2104, 209-225.	0.4	4
215	The <i>Penium margaritaceum</i> Genome: Hallmarks of the Origins of Land Plants. <i>Cell</i> , 2020, 181, 1097-1111.e12.	13.5	153
216	Conservation and diversification of flavonoid metabolism in the plant kingdom. <i>Current Opinion in Plant Biology</i> , 2020, 55, 100-108.	3.5	137

#	ARTICLE	IF	CITATIONS
217	Outstanding questions in flower metabolism. <i>Plant Journal</i> , 2020, 103, 1275-1288.	2.8	14
218	Resolving the metabolon: is the proof in the metabolite?. <i>EMBO Reports</i> , 2020, 21, e50774.	2.0	8
219	Title is missing!. , 2020, 15, e0227577.		0
220	Title is missing!. , 2020, 15, e0227577.		0
221	Title is missing!. , 2020, 15, e0227577.		0
222	Title is missing!. , 2020, 15, e0227577.		0
223	Modulation of auxin signalling through <i>DIAGETROPICA</i> and <i>ENTIRE</i> differentially affects tomato plant growth via changes in photosynthetic and mitochondrial metabolism. <i>Plant, Cell and Environment</i> , 2019, 42, 448-465.	2.8	17
224	Impairment of hormone pathways results in a general disturbance of fruit primary metabolism in tomato. <i>Food Chemistry</i> , 2019, 274, 170-179.	4.2	19
225	The Lack of Mitochondrial Thioredoxin TRXo1 Affects In Vivo Alternative Oxidase Activity and Carbon Metabolism under Different Light Conditions. <i>Plant and Cell Physiology</i> , 2019, 60, 2369-2381.	1.5	35
226	The mitochondrial NAD^+ transporter ($\text{NDT}1$) plays important roles in cellular NAD^+ homeostasis in <i>Arabidopsis thaliana</i> . <i>Plant Journal</i> , 2019, 100, 487-504.	2.8	34
227	Evolution: An Early Role for Flavonoids in Defense against Oomycete Infection. <i>Current Biology</i> , 2019, 29, R688-R690.	1.8	15
228	Posttranslational Modification of the NADP-Malic Enzyme Involved in C_4 Photosynthesis Modulates the Enzymatic Activity during the Day. <i>Plant Cell</i> , 2019, 31, 2525-2539.	3.1	20
229	Flowers and climate change: a metabolic perspective. <i>New Phytologist</i> , 2019, 224, 1425-1441.	3.5	90
230	Rapid Identification of Protein-Protein Interactions in Plants. <i>Current Protocols in Plant Biology</i> , 2019, 4, e20099.	2.8	22
231	Redox-Regulation of Photorespiration through Mitochondrial Thioredoxin o1. <i>Plant Physiology</i> , 2019, 181, 442-457.	2.3	51
232	Pan-Genomic Illumination of Tomato Identifies Novel Gene-Trait Interactions. <i>Trends in Plant Science</i> , 2019, 24, 882-884.	4.3	10
233	Nitrate nutrition influences multiple factors in order to increase energy efficiency under hypoxia in <i>Arabidopsis</i> . <i>Annals of Botany</i> , 2019, 123, 691-705.	1.4	30
234	Metabolomics for understanding stomatal movements. <i>Theoretical and Experimental Plant Physiology</i> , 2019, 31, 91-102.	1.1	18

#	ARTICLE	IF	CITATIONS
235	The apoplastic antioxidant system and altered cell wall dynamics influence mesophyll conductance and the rate of photosynthesis. <i>Plant Journal</i> , 2019, 99, 1031-1046.	2.8	60
236	The Structure and Function of Major Plant Metabolite Modifications. <i>Molecular Plant</i> , 2019, 12, 899-919.	3.9	250
237	An allele of <i>ZmPORB2</i> encoding a protochlorophyllide oxidoreductase promotes tocopherol accumulation in both leaves and kernels of maize. <i>Plant Journal</i> , 2019, 100, 114-127.	2.8	21
238	Revisiting the Basal Role of ABA Roles Outside of Stress. <i>Trends in Plant Science</i> , 2019, 24, 625-635.	4.3	189
239	The sucrose-to-malate ratio correlates with the faster CO_2 and light stomatal responses of angiosperms compared to ferns. <i>New Phytologist</i> , 2019, 223, 1873-1887.	3.5	22
240	De Novo Domestication: An Alternative Route toward New Crops for the Future. <i>Molecular Plant</i> , 2019, 12, 615-631.	3.9	267
241	A Subsidiary Cell-Localized Glucose Transporter Promotes Stomatal Conductance and Photosynthesis. <i>Plant Cell</i> , 2019, 31, 1328-1343.	3.1	63
242	Large-scale metabolite quantitative trait locus analysis provides new insights for high-quality maize improvement. <i>Plant Journal</i> , 2019, 99, 216-230.	2.8	37
243	Appropriate Thiamin Pyrophosphate Levels Are Required for Acclimation to Changes in Photoperiod. <i>Plant Physiology</i> , 2019, 180, 185-197.	2.3	24
244	Identification and characterization of metabolite quantitative trait loci in tomato leaves and comparison with those reported for fruits and seeds. <i>Metabolomics</i> , 2019, 15, 46.	1.4	22
245	Branched-Chain Amino Acid Catabolism Impacts Triacylglycerol Homeostasis in <i>Chlamydomonas reinhardtii</i> . <i>Plant Physiology</i> , 2019, 179, 1502-1514.	2.3	26
246	Extensive Variations in Diurnal Growth Patterns and Metabolism Among <i>Ulva</i> spp. Strains. <i>Plant Physiology</i> , 2019, 180, 109-123.	2.3	37
247	Metabolite profiles reveal interspecific variation in operation of the Calvin-Benson cycle in both C4 and C3 plants. <i>Journal of Experimental Botany</i> , 2019, 70, 1843-1858.	2.4	47
248	Deficiency in the Phosphorylated Pathway of Serine Biosynthesis Perturbs Sulfur Assimilation. <i>Plant Physiology</i> , 2019, 180, 153-170.	2.3	19
249	A MYB Triad Controls Primary and Phenylpropanoid Metabolites for Pollen Coat Patterning. <i>Plant Physiology</i> , 2019, 180, 87-108.	2.3	59
250	Kingdom-wide comparison reveals the evolution of diurnal gene expression in Archaeplastida. <i>Nature Communications</i> , 2019, 10, 737.	5.8	52
251	NTRC Plays a Crucial Role in Starch Metabolism, Redox Balance, and Tomato Fruit Growth. <i>Plant Physiology</i> , 2019, 181, 976-992.	2.3	18
252	Mass Spectrometry-Based Untargeted Plant Metabolomics. <i>Current Protocols in Plant Biology</i> , 2019, 4, e20100.	2.8	65

#	ARTICLE	IF	CITATIONS
253	The Hot and the Colorful: Understanding the Metabolism, Genetics and Evolution of Consumer Preferred Metabolic Traits in Pepper and Related Species. <i>Critical Reviews in Plant Sciences</i> , 2019, 38, 339-381.	2.7	19
254	Cassava Metabolomics and Starch Quality. <i>Current Protocols in Plant Biology</i> , 2019, 4, e20102.	2.8	16
255	The Role of Abscisic Acid Signaling in Maintaining the Metabolic Balance Required for Arabidopsis Growth under Nonstress Conditions. <i>Plant Cell</i> , 2019, 31, 84-105.	3.1	84
256	<i>In vivo</i> detection of protein cysteine sulfenylation in plastids. <i>Plant Journal</i> , 2019, 97, 765-778.	2.8	46
257	Multi-tissue integration of transcriptomic and specialized metabolite profiling provides tools for assessing the common bean (<i>Phaseolus vulgaris</i>) metabolome. <i>Plant Journal</i> , 2019, 97, 1132-1153.	2.8	33
258	Insights into ABA-mediated regulation of guard cell primary metabolism revealed by systems biology approaches. <i>Progress in Biophysics and Molecular Biology</i> , 2019, 146, 37-49.	1.4	26
259	From genome to phenome: genome-wide association studies and other approaches that bridge the genotype to phenotype gap. <i>Plant Journal</i> , 2019, 97, 5-7.	2.8	25
260	Rice Grain Quality Benchmarking Through Profiling of Volatiles and Metabolites in Grains Using Gas Chromatography Mass Spectrometry. <i>Methods in Molecular Biology</i> , 2019, 1892, 187-199.	0.4	4
261	The Mitochondrial Thioredoxin System Contributes to the Metabolic Responses Under Drought Episodes in Arabidopsis. <i>Plant and Cell Physiology</i> , 2019, 60, 213-229.	1.5	26
262	The Plastidic Sugar Transporter pSuT Influences Flowering and Affects Cold Responses. <i>Plant Physiology</i> , 2019, 179, 569-587.	2.3	77
263	MetNet: Metabolite Network Prediction from High-Resolution Mass Spectrometry Data in R Aiding Metabolite Annotation. <i>Analytical Chemistry</i> , 2019, 91, 1768-1772.	3.2	32
264	A <i>Solanum neorickii</i> introgression population providing a powerful complement to the extensively characterized <i>Solanum pennellii</i> population. <i>Plant Journal</i> , 2019, 97, 391-403.	2.8	18
265	Exploring the Diversity of Plant Metabolism. <i>Trends in Plant Science</i> , 2019, 24, 83-98.	4.3	203
266	Two bifunctional inositol pyrophosphate kinases/phosphatases control plant phosphate homeostasis. <i>ELife</i> , 2019, 8, .	2.8	118
267	Transcription factor <i>RD26</i> is a key regulator of metabolic reprogramming during dark-induced senescence. <i>New Phytologist</i> , 2018, 218, 1543-1557.	3.5	65
268	Characterization of maize leaf pyruvate orthophosphate dikinase using high throughput sequencing. <i>Journal of Integrative Plant Biology</i> , 2018, 60, 670-690.	4.1	12
269	The natural variance of the Arabidopsis floral secondary metabolites. <i>Scientific Data</i> , 2018, 5, 180051.	2.4	14
270	Comprehensive Metabolomics Studies of Plant Developmental Senescence. <i>Methods in Molecular Biology</i> , 2018, 1744, 339-358.	0.4	19

#	ARTICLE	IF	CITATIONS
271	Uncoupling proteins 1 and 2 (UCP1 and UCP2) from <i>Arabidopsis thaliana</i> are mitochondrial transporters of aspartate, glutamate, and dicarboxylates. <i>Journal of Biological Chemistry</i> , 2018, 293, 4213-4227.	1.6	81
272	An integrated multi-layered analysis of the metabolic networks of different tissues uncovers key genetic components of primary metabolism in maize. <i>Plant Journal</i> , 2018, 93, 1116-1128.	2.8	38
273	Next-generation strategies for understanding and influencing source-sink relations in crop plants. <i>Current Opinion in Plant Biology</i> , 2018, 43, 63-70.	3.5	119
274	Rewiring of the Fruit Metabolome in Tomato Breeding. <i>Cell</i> , 2018, 172, 249-261.e12.	13.5	606
275	To Bring Flowers or Do a Runner: Gibberellins Make the Decision. <i>Molecular Plant</i> , 2018, 11, 4-6.	3.9	15
276	An In Vivo Perspective of the Role(s) of the Alternative Oxidase Pathway. <i>Trends in Plant Science</i> , 2018, 23, 206-219.	4.3	118
277	More to NAD ⁺ than meets the eye: A regulator of metabolic pools and gene expression in <i>Arabidopsis</i> . <i>Free Radical Biology and Medicine</i> , 2018, 122, 86-95.	1.3	49
278	Inhibition of plastid PPase and NTT leads to major changes in starch and tuber formation in potato. <i>Journal of Experimental Botany</i> , 2018, 69, 1913-1924.	2.4	11
279	Sucrose breakdown within guard cells provides substrates for glycolysis and glutamine biosynthesis during light-induced stomatal opening. <i>Plant Journal</i> , 2018, 94, 583-594.	2.8	61
280	On the natural diversity of phenylacylated-flavonoid and their in planta function under conditions of stress. <i>Phytochemistry Reviews</i> , 2018, 17, 279-290.	3.1	48
281	Mapping the <i>Arabidopsis</i> Metabolic Landscape by Untargeted Metabolomics at Different Environmental Conditions. <i>Molecular Plant</i> , 2018, 11, 118-134.	3.9	116
282	Dose-dependent interactions between two loci trigger altered shoot growth in BC ₅ Krotzenburg (Kro) hybrids of <i>Arabidopsis thaliana</i> . <i>New Phytologist</i> , 2018, 217, 392-406.	3.5	12
283	Inheritance patterns in metabolism and growth in diallel crosses of <i>Arabidopsis thaliana</i> from a single growth habitat. <i>Heredity</i> , 2018, 120, 463-473.	1.2	9
284	NAD ⁺ Biosynthesis and Signaling in Plants. <i>Critical Reviews in Plant Sciences</i> , 2018, 37, 259-307.	2.7	71
285	Overexpression of the vascular brassinosteroid receptor BRL3 confers drought resistance without penalizing plant growth. <i>Nature Communications</i> , 2018, 9, 4680.	5.8	189
286	Advances in metabolic flux analysis toward genome-scale profiling of higher organisms. <i>Bioscience Reports</i> , 2018, 38, .	1.1	36
287	The Role of Persulfide Metabolism During <i>Arabidopsis</i> Seed Development Under Light and Dark Conditions. <i>Frontiers in Plant Science</i> , 2018, 9, 1381.	1.7	8
288	A Tomato Tocopherol Binding Protein Sheds Light on Intracellular δ^8 -tocopherol Metabolism in Plants. <i>Plant and Cell Physiology</i> , 2018, 59, 2188-2203.	1.5	19

#	ARTICLE	IF	CITATIONS
289	Genetic diversity of strawberry germplasm using metabolomic biomarkers. <i>Scientific Reports</i> , 2018, 8, 14386.	1.6	46
290	Metabolic diversity in tuber tissues of native Chilo [®] potatoes and commercial cultivars of <i>Solanum tuberosum</i> ssp. <i>tuberosum</i> L.. <i>Metabolomics</i> , 2018, 14, 138.	1.4	7
291	Crop metabolomics: from diagnostics to assisted breeding. <i>Metabolomics</i> , 2018, 14, 148.	1.4	35
292	The arginine decarboxylase gene <i>ADC1</i> , associated to the putrescine pathway, plays an important role in potato cold-acclimated freezing tolerance as revealed by transcriptome and metabolome analyses. <i>Plant Journal</i> , 2018, 96, 1283-1298.	2.8	80
293	Quantitative Trait Loci Analysis Identifies a Prominent Gene Involved in the Production of Fatty Acid-Derived Flavor Volatiles in Tomato. <i>Molecular Plant</i> , 2018, 11, 1147-1165.	3.9	63
294	Extending the cascade: identification of a mitogen-activated protein kinase phosphatase playing a key role in rice yield. <i>Plant Journal</i> , 2018, 95, 935-936.	2.8	1
295	Metabolome and Lipidome Profiles of <i>Populus alba</i> Twig Tissues During Annual Growth Show Phospholipid-Linked Storage and Mobilization of C, N, and S. <i>Frontiers in Plant Science</i> , 2018, 9, 1292.	1.7	18
296	Acquisition of Volatile Compounds by Gas Chromatography-Mass Spectrometry (GC-MS). <i>Methods in Molecular Biology</i> , 2018, 1778, 225-239.	0.4	20
297	Guidelines for Sample Normalization to Minimize Batch Variation for Large-Scale Metabolic Profiling of Plant Natural Genetic Variance. <i>Methods in Molecular Biology</i> , 2018, 1778, 33-46.	0.4	13
298	Molecular Mechanisms Preventing Senescence in Response to Prolonged Darkness in a Desiccation-Tolerant Plant. <i>Plant Physiology</i> , 2018, 177, 1319-1338.	2.3	26
299	Carbon Atomic Survey for Identification of Selected Metabolic Fluxes. <i>Methods in Molecular Biology</i> , 2018, 1778, 59-67.	0.4	2
300	The role of dynamic enzyme assemblies and substrate channelling in metabolic regulation. <i>Nature Communications</i> , 2018, 9, 2136.	5.8	290
301	The Integration of Metabolomics and Next-Generation Sequencing Data to Elucidate the Pathways of Natural Product Metabolism in Medicinal Plants. <i>Planta Medica</i> , 2018, 84, 855-873.	0.7	47
302	The NAC Transcription Factor SINAP2 Regulates Leaf Senescence and Fruit Yield in Tomato. <i>Plant Physiology</i> , 2018, 177, 1286-1302.	2.3	140
303	Targeted LC-MS Analysis for Plant Secondary Metabolites. <i>Methods in Molecular Biology</i> , 2018, 1778, 171-181.	0.4	33
304	Gas Chromatography-Mass Spectrometry-Based ¹³ C-Labeling Studies in Plant Metabolomics. <i>Methods in Molecular Biology</i> , 2018, 1778, 47-58.	0.4	15
305	The Extra-Pathway Interactome of the TCA Cycle: Expected and Unexpected Metabolic Interactions. <i>Plant Physiology</i> , 2018, 177, 966-979.	2.3	81
306	Discriminating the Function(s) of Guard Cell ALMT Channels. <i>Trends in Plant Science</i> , 2018, 23, 649-651.	4.3	12

#	ARTICLE	IF	CITATIONS
307	Cucumber ovaries inhibited by dominant fruit express a dynamic developmental program, distinct from either senescence-determined or fruit-setting ovaries. <i>Plant Journal</i> , 2018, 96, 651-669.	2.8	8
308	The Effect of Single and Multiple SERAT Mutants on Serine and Sulfur Metabolism. <i>Frontiers in Plant Science</i> , 2018, 9, 702.	1.7	9
309	Inhibition of TOR Represses Nutrient Consumption, Which Improves Greening after Extended Periods of Etiolation. <i>Plant Physiology</i> , 2018, 178, 101-117.	2.3	27
310	Interorganelle Communication: Peroxisomal MALATE DEHYDROGENASE2 Connects Lipid Catabolism to Photosynthesis through Redox Coupling in <i>Chlamydomonas</i> . <i>Plant Cell</i> , 2018, 30, 1824-1847.	3.1	51
311	Metabolomics 20 years on: what have we learned and what hurdles remain?. <i>Plant Journal</i> , 2018, 94, 933-942.	2.8	166
312	Metabolome Analysis of Multi-Connected Biparental Chromosome Segment Substitution Line Populations. <i>Plant Physiology</i> , 2018, 178, 612-625.	2.3	25
313	<i>Tecia solanivora</i> infestation increases tuber starch accumulation in Pastusa Suprema potatoes. <i>Journal of Integrative Plant Biology</i> , 2018, 60, 1083-1096.	4.1	5
314	On the role of the tricarboxylic acid cycle in plant productivity. <i>Journal of Integrative Plant Biology</i> , 2018, 60, 1199-1216.	4.1	112
315	T-protein is present in large excess over the other proteins of the glycine cleavage system in leaves of <i>Arabidopsis</i> . <i>Planta</i> , 2018, 247, 41-51.	1.6	24
316	Passing the Baton: Substrate Channelling in Respiratory Metabolism. <i>Research</i> , 2018, 2018, 1539325.	2.8	22
317	High serine:glyoxylate aminotransferase activity lowers leaf daytime serine levels, inducing the phosphoserine pathway in <i>Arabidopsis</i> . <i>Journal of Experimental Botany</i> , 2017, 68, erw467.	2.4	37
318	Integrated genomics-based mapping reveals the genetics underlying maize flavonoid biosynthesis. <i>BMC Plant Biology</i> , 2017, 17, 17.	1.6	34
319	The Unprecedented Versatility of the Plant Thioredoxin System. <i>Trends in Plant Science</i> , 2017, 22, 249-262.	4.3	192
320	The Sexual Advantage of Looking, Smelling, and Tasting Good: The Metabolic Network that Produces Signals for Pollinators. <i>Trends in Plant Science</i> , 2017, 22, 338-350.	4.3	67
321	Leveraging Natural Variance towards Enhanced Understanding of Phytochemical Sunscreens. <i>Trends in Plant Science</i> , 2017, 22, 308-315.	4.3	46
322	Proteogenomic analysis reveals alternative splicing and translation as part of the abscisic acid response in <i>Arabidopsis</i> seedlings. <i>Plant Journal</i> , 2017, 91, 518-533.	2.8	156
323	Growth rate correlates negatively with protein turnover in <i>Arabidopsis</i> accessions. <i>Plant Journal</i> , 2017, 91, 416-429.	2.8	58
324	Protein-protein interactions and metabolite channelling in the plant tricarboxylic acid cycle. <i>Nature Communications</i> , 2017, 8, 15212.	5.8	103

#	ARTICLE	IF	CITATIONS
325	From chromatogram to analyte to metabolite. How to pick horses for courses from the massive web resources for mass spectral plant metabolomics. <i>GigaScience</i> , 2017, 6, 1-20.	3.3	59
326	Current understanding of the pathways of flavonoid biosynthesis in model and crop plants. <i>Journal of Experimental Botany</i> , 2017, 68, 4013-4028.	2.4	328
327	Engineering central metabolism – a grand challenge for plant biologists. <i>Plant Journal</i> , 2017, 90, 749-763.	2.8	78
328	Canalization of Tomato Fruit Metabolism. <i>Plant Cell</i> , 2017, 29, 2753-2765.	3.1	47
329	Floral Metabolism of Sugars and Amino Acids: Implications for Pollinators's Preferences and Seed and Fruit Set. <i>Plant Physiology</i> , 2017, 175, 1510-1524.	2.3	90
330	Metabolism within the specialized guard cells of plants. <i>New Phytologist</i> , 2017, 216, 1018-1033.	3.5	77
331	The Photorespiratory Metabolite 2-Phosphoglycolate Regulates Photosynthesis and Starch Accumulation in Arabidopsis. <i>Plant Cell</i> , 2017, 29, 2537-2551.	3.1	132
332	De Novo Assembly of a New <i>Solanum pennellii</i> Accession Using Nanopore Sequencing. <i>Plant Cell</i> , 2017, 29, 2336-2348.	3.1	192
333	Resolving the central metabolism of Arabidopsis guard cells. <i>Scientific Reports</i> , 2017, 7, 8307.	1.6	48
334	Transcriptomic and metabolomics responses to elevated cell wall invertase activity during tomato fruit set. <i>Journal of Experimental Botany</i> , 2017, 68, 4263-4279.	2.4	45
335	Measurements of Electron Partitioning Between Cytochrome and Alternative Oxidase Pathways in Plant Tissues. <i>Methods in Molecular Biology</i> , 2017, 1670, 203-217.	0.4	10
336	Impaired Malate and Fumarate Accumulation Due to the Mutation of the Tonoplast Dicarboxylate Transporter Has Little Effects on Stomatal Behavior. <i>Plant Physiology</i> , 2017, 175, 1068-1081.	2.3	51
337	Commonalities and differences in plants deficient in autophagy and alternative pathways of respiration on response to extended darkness. <i>Plant Signaling and Behavior</i> , 2017, 12, e1377877.	1.2	2
338	Haplotype-resolved sweet potato genome traces back its hexaploidization history. <i>Nature Plants</i> , 2017, 3, 696-703.	4.7	228
339	Measurement of Tricarboxylic Acid Cycle Enzyme Activities in Plants. <i>Methods in Molecular Biology</i> , 2017, 1670, 167-182.	0.4	6
340	Coupling Radiotracer Experiments with Chemical Fractionation for the Estimation of Respiratory Fluxes. <i>Methods in Molecular Biology</i> , 2017, 1670, 17-30.	0.4	8
341	The Genetics of Plant Metabolism. <i>Annual Review of Genetics</i> , 2017, 51, 287-310.	3.2	118
342	The polyketide synthase OsPKS2 is essential for pollen exine and Ubisch body patterning in rice. <i>Journal of Integrative Plant Biology</i> , 2017, 59, 612-628.	4.1	47

#	ARTICLE	IF	CITATIONS
343	Differentially evolved glucosyltransferases determine natural variation of rice flavone accumulation and UV-tolerance. <i>Nature Communications</i> , 2017, 8, 1975.	5.8	233
344	A Novel Mechanism, Linked to Cell Density, Largely Controls Cell Division in <i>Synechocystis</i> . <i>Plant Physiology</i> , 2017, 174, 2166-2182.	2.3	15
345	The SAL-PAP Chloroplast Retrograde Pathway Contributes to Plant Immunity by Regulating Glucosinolate Pathway and Phytohormone Signaling. <i>Molecular Plant-Microbe Interactions</i> , 2017, 30, 829-841.	1.4	50
346	Autophagy Deficiency Compromises Alternative Pathways of Respiration following Energy Deprivation in <i>Arabidopsis thaliana</i> . <i>Plant Physiology</i> , 2017, 175, 62-76.	2.3	98
347	GC-TOF-MS analysis reveals salt stress-responsive primary metabolites in <i>Casuarina glauca</i> tissues. <i>Metabolomics</i> , 2017, 13, 1.	1.4	36
348	Metabolite pools and carbon flow during C ₄ photosynthesis in maize: ¹³ CO ₂ labeling kinetics and cell type fractionation. <i>Journal of Experimental Botany</i> , 2017, 68, 283-298.	2.4	104
349	Photorespiration Is Crucial for Dynamic Response of Photosynthetic Metabolism and Stomatal Movement to Altered CO ₂ Availability. <i>Molecular Plant</i> , 2017, 10, 47-61.	3.9	91
350	<i>Arabidopsis</i> NAC Transcription Factor JUNGBRUNNEN1 Exerts Conserved Control Over Gibberellin and Brassinosteroid Metabolism and Signaling Genes in Tomato. <i>Frontiers in Plant Science</i> , 2017, 8, 214.	1.7	27
351	Transcriptomic Analysis in Strawberry Fruits Reveals Active Auxin Biosynthesis and Signaling in the Ripe Receptacle. <i>Frontiers in Plant Science</i> , 2017, 8, 889.	1.7	55
352	Integrative field scale phenotyping for investigating metabolic components of water stress within a vineyard. <i>Plant Methods</i> , 2017, 13, 90.	1.9	37
353	An Overview of Compounds Derived from the Shikimate and Phenylpropanoid Pathways and Their Medicinal Importance. <i>Mini-Reviews in Medicinal Chemistry</i> , 2017, 17, 1013-1027.	1.1	58
354	The genome and phenome of the green alga <i>Chloroidium</i> sp. UTEX 3007 reveal adaptive traits for desert acclimatization. <i>ELife</i> , 2017, 6, .	2.8	16
355	Photorespiratory Bypasses Lead to Increased Growth in <i>Arabidopsis thaliana</i> : Are Predictions Consistent with Experimental Evidence?. <i>Frontiers in Bioengineering and Biotechnology</i> , 2016, 4, 31.	2.0	17
356	Combined Use of Genome-Wide Association Data and Correlation Networks Unravels Key Regulators of Primary Metabolism in <i>Arabidopsis thaliana</i> . <i>PLoS Genetics</i> , 2016, 12, e1006363.	1.5	67
357	Identification of a <i>Solanum pennellii</i> Chromosome 4 Fruit Flavor and Nutritional Quality-Associated Metabolite QTL. <i>Frontiers in Plant Science</i> , 2016, 7, 1671.	1.7	35
358	Salinity tolerance is related to cyanide-resistant alternative respiration in <i>Medicago truncatula</i> under sudden severe stress. <i>Plant, Cell and Environment</i> , 2016, 39, 2361-2369.	2.8	46
359	Unravelling the <i>in vivo</i> regulation and metabolic role of the alternative oxidase pathway in C ₃ species under photoinhibitory conditions. <i>New Phytologist</i> , 2016, 212, 66-79.	3.5	36
360	Roles of sucrose in guard cell regulation. <i>New Phytologist</i> , 2016, 211, 809-818.	3.5	90

#	ARTICLE	IF	CITATIONS
361	Characterization of a recently evolved flavonol-phenylacyltransferase gene provides signatures of natural light selection in Brassicaceae. <i>Nature Communications</i> , 2016, 7, 12399.	5.8	145
362	Evolutionary Metabolomics Reveals Domestication-Associated Changes in Tetraploid Wheat Kernels. <i>Molecular Biology and Evolution</i> , 2016, 33, 1740-1753.	3.5	99
363	Broadening Our Portfolio in the Genetic Improvement of Maize Chemical Composition. <i>Trends in Genetics</i> , 2016, 32, 459-469.	2.9	25
364	Can stable isotope mass spectrometry replace $\delta^{13}C$ -radiolabelled approaches in metabolic studies?. <i>Plant Science</i> , 2016, 249, 59-69.	1.7	32
365	On the metabolic interactions of (photo)respiration. <i>Journal of Experimental Botany</i> , 2016, 67, 3003-3014.	2.4	59
366	Observability of plant metabolic networks is reflected in the correlation of metabolic profiles.. <i>Plant Physiology</i> , 2016, 172, pp.00900.2016.	2.3	2
367	The interplay between carbon availability and growth in different zones of the growing maize leaf. <i>Plant Physiology</i> , 2016, 172, pp.00994.2016.	2.3	24
368	Specialized Metabolites of the Flavonol Class Mediate Root Phototropism and Growth. <i>Molecular Plant</i> , 2016, 9, 1554-1555.	3.9	18
369	Systems biology: A new CAM era. <i>Nature Plants</i> , 2016, 2, 16190.	4.7	2
370	Identification of Conserved and Diverse Metabolic Shifts during Rice Grain Development. <i>Scientific Reports</i> , 2016, 6, 20942.	1.6	64
371	Flavonoids are determinants of freezing tolerance and cold acclimation in <i>Arabidopsis thaliana</i> . <i>Scientific Reports</i> , 2016, 6, 34027.	1.6	209
372	Sulfur deficiency-induced repressor proteins optimize glucosinolate biosynthesis in plants. <i>Science Advances</i> , 2016, 2, e1601087.	4.7	127
373	Rapid identification of causal mutations in tomato EMS populations via mapping-by-sequencing. <i>Nature Protocols</i> , 2016, 11, 2401-2418.	5.5	62
374	Transcriptomic, proteomic and metabolic changes in <i>Arabidopsis thaliana</i> leaves after the onset of illumination. <i>BMC Plant Biology</i> , 2016, 16, 43.	1.6	39
375	Allelic differences in a vacuolar invertase affect <i>Arabidopsis</i> growth at early plant development. <i>Journal of Experimental Botany</i> , 2016, 67, 4091-4103.	2.4	20
376	Guard cell-specific upregulation of sucrose synthase 3 reveals that the role of sucrose in stomatal function is primarily energetic. <i>New Phytologist</i> , 2016, 209, 1470-1483.	3.5	63
377	Regulation of Primary Metabolism in Response to Low Oxygen Availability as Revealed by Carbon and Nitrogen Isotope Redistribution. <i>Plant Physiology</i> , 2016, 170, 43-56.	2.3	105
378	FamNet: A Framework to Identify Multiplied Modules Driving Pathway Expansion in Plants. <i>Plant Physiology</i> , 2016, 170, 1878-1894.	2.3	63

#	ARTICLE	IF	CITATIONS
379	Combining Quantitative Genetics Approaches with Regulatory Network Analysis to Dissect the Complex Metabolism of the Maize Kernel. <i>Plant Physiology</i> , 2016, 170, 136-146.	2.3	62
380	Relationships of Leaf Net Photosynthesis, Stomatal Conductance, and Mesophyll Conductance to Primary Metabolism: A Multispecies Meta-Analysis Approach. <i>Plant Physiology</i> , 2016, 171, 265-279.	2.3	142
381	The Role of SWI/SNF Chromatin Remodeling Complexes in Hormone Crosstalk. <i>Trends in Plant Science</i> , 2016, 21, 594-608.	4.3	95
382	Natural variation in flavonol accumulation in Arabidopsis is determined by the flavonol glucosyltransferase BGLU6. <i>Journal of Experimental Botany</i> , 2016, 67, 1505-1517.	2.4	67
383	The regulatory interplay between photorespiration and photosynthesis. <i>Journal of Experimental Botany</i> , 2016, 67, 2923-2929.	2.4	74
384	Can cyanobacteria serve as a model of plant photorespiration? â€œ a comparative meta-analysis of metabolite profiles. <i>Journal of Experimental Botany</i> , 2016, 67, 2941-2952.	2.4	20
385	Manipulating photorespiration to increase plant productivity: recent advances and perspectives for crop improvement. <i>Journal of Experimental Botany</i> , 2016, 67, 2977-2988.	2.4	127
386	The Regulation of Essential Amino Acid Synthesis and Accumulation in Plants. <i>Annual Review of Plant Biology</i> , 2016, 67, 153-178.	8.6	254
387	Enhanced Photosynthesis and Growth in <i>atqac1</i> Knockout Mutants Are Due to Altered Organic Acid Accumulation and an Increase in Both Stomatal and Mesophyll Conductance. <i>Plant Physiology</i> , 2016, 170, 86-101.	2.3	77
388	Central role of <i>FaGAMYB</i> in the transition of the strawberry receptacle from development to ripening. <i>New Phytologist</i> , 2015, 208, 482-496.	3.5	62
389	Tobacco guard cells fix CO_2 by both <i>Rubisco</i> and <i>PEP</i> case while sucrose acts as a substrate during light-induced stomatal opening. <i>Plant, Cell and Environment</i> , 2015, 38, 2353-2371.	2.8	95
390	Ectopic expression of snapdragon transcription factors facilitates the identification of genes encoding enzymes of anthocyanin decoration in tomato. <i>Plant Journal</i> , 2015, 83, 686-704.	2.8	62
391	Impacts of high ATP supply from chloroplasts and mitochondria on the leaf metabolism of Arabidopsis thaliana. <i>Frontiers in Plant Science</i> , 2015, 6, 922.	1.7	43
392	Exploring natural variation of photosynthetic, primary metabolism and growth parameters in a large panel of Capsicum chinense accessions. <i>Planta</i> , 2015, 242, 677-691.	1.6	19
393	Quantifying Protein Synthesis and Degradation in Arabidopsis by Dynamic $^{13}CO_2$ Labeling and Analysis of Enrichment in Individual Amino Acids in Their Free Pools and in Protein. <i>Plant Physiology</i> , 2015, 168, 74-93.	2.3	132
394	Complete Mitochondrial Complex I Deficiency Induces an Up-Regulation of Respiratory Fluxes That Is Abolished by Traces of Functional Complex I. <i>Plant Physiology</i> , 2015, 168, 1537-1549.	2.3	113
395	Global Analysis of the Role of Autophagy in Cellular Metabolism and Energy Homeostasis in Arabidopsis Seedlings under Carbon Starvation. <i>Plant Cell</i> , 2015, 27, 306-322.	3.1	166
396	Thioredoxin, a master regulator of the tricarboxylic acid cycle in plant mitochondria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E1392-400.	3.3	179

#	ARTICLE	IF	CITATIONS
397	An integrated functional approach to dissect systemic responses in maize to arbuscular mycorrhizal symbiosis. <i>Plant, Cell and Environment</i> , 2015, 38, 1591-1612.	2.8	53
398	Liquid chromatography high-resolution mass spectrometry for fatty acid profiling. <i>Plant Journal</i> , 2015, 81, 529-536.	2.8	54
399	Natural variation in flavonol and anthocyanin metabolism during cold acclimation in <i>Arabidopsis thaliana</i> accessions. <i>Plant, Cell and Environment</i> , 2015, 38, 1658-1672.	2.8	126
400	Utilizing systems biology to unravel stomatal function and the hierarchies underpinning its control. <i>Plant, Cell and Environment</i> , 2015, 38, 1457-1470.	2.8	31
401	Intracellular and cell-to-apoplast compartmentation of carbohydrate metabolism. <i>Trends in Plant Science</i> , 2015, 20, 490-497.	4.3	33
402	Salt-Related MYB1 Coordinates Abscisic Acid Biosynthesis and Signaling during Salt Stress in <i>Arabidopsis</i> . <i>Plant Physiology</i> , 2015, 169, 1027-1041.	2.3	66
403	Mitochondrial Dihydrolipoyl Dehydrogenase Activity Shapes Photosynthesis and Photorespiration of <i>Arabidopsis thaliana</i> . <i>Plant Cell</i> , 2015, 27, 1968-1984.	3.1	139
404	Genetic Determinants of the Network of Primary Metabolism and Their Relationships to Plant Performance in a Maize Recombinant Inbred Line Population. <i>Plant Cell</i> , 2015, 27, 1839-1856.	3.1	149
405	Differential metabolic and coexpression networks of plant metabolism. <i>Trends in Plant Science</i> , 2015, 20, 266-268.	4.3	35
406	Metabolomic profiling in tomato reveals diel compositional changes in fruit affected by source-sink relationships. <i>Journal of Experimental Botany</i> , 2015, 66, 3391-3404.	2.4	62
407	Identification and Mode of Inheritance of Quantitative Trait Loci for Secondary Metabolite Abundance in Tomato. <i>Plant Cell</i> , 2015, 27, 485-512.	3.1	188
408	Metabolic analyses of interspecific tomato recombinant inbred lines for fruit quality improvement. <i>Metabolomics</i> , 2015, 11, 1416-1431.	1.4	35
409	Multi-level engineering facilitates the production of phenylpropanoid compounds in tomato. <i>Nature Communications</i> , 2015, 6, 8635.	5.8	303
410	<i>Arabidopsis</i> uses two gluconeogenic gateways for organic acids to fuel seedling establishment. <i>Nature Communications</i> , 2015, 6, 6659.	5.8	95
411	Integrative Approaches to Enhance Understanding of Plant Metabolic Pathway Structure and Regulation. <i>Plant Physiology</i> , 2015, 169, 1499-1511.	2.3	40
412	Metabolomics-Inspired Insight into Developmental, Environmental and Genetic Aspects of Tomato Fruit Chemical Composition and Quality: Fig. 1. <i>Plant and Cell Physiology</i> , 2015, 56, 1681-1696.	1.5	66
413	Metabolite profiles of maize leaves in drought, heat and combined stress field trials reveal the relationship between metabolism and grain yield. <i>Plant Physiology</i> , 2015, 169, pp.01164.2015.	2.3	233
414	Analysis of knockout mutants reveals non-redundant functions of poly(ADP-ribose)polymerase isoforms in <i>Arabidopsis</i> . <i>Plant Molecular Biology</i> , 2015, 89, 319-338.	2.0	21

#	ARTICLE	IF	CITATIONS
415	Combined correlation-based network and mQTL analyses efficiently identified loci for branched-chain amino acid, serine to threonine, and proline metabolism in tomato seeds. <i>Plant Journal</i> , 2015, 81, 121-133.	2.8	55
416	A cross-kingdom history. <i>ELife</i> , 2015, 4, .	2.8	3
417	Decreased Nucleotide and Expression Diversity and Modified Coexpression Patterns Characterize Domestication in the Common Bean. <i>Plant Cell</i> , 2014, 26, 1901-1912.	3.1	103
418	Variability of Metabolite Levels Is Linked to Differential Metabolic Pathways in Arabidopsis's Responses to Abiotic Stresses. <i>PLoS Computational Biology</i> , 2014, 10, e1003656.	1.5	17
419	Virus-Induced Alterations in Primary Metabolism Modulate Susceptibility to Tobacco rattle virus in Arabidopsis. <i>Plant Physiology</i> , 2014, 166, 1821-1838.	2.3	52
420	Metabolomics-assisted refinement of the pathways of steroidal glycoalkaloid biosynthesis in the tomato clade. <i>Journal of Integrative Plant Biology</i> , 2014, 56, 864-875.	4.1	60
421	Transcript and Metabolite Profiling for the Evaluation of Tobacco Tree and Poplar as Feedstock for the Bio-based Industry. <i>Journal of Visualized Experiments</i> , 2014, , .	0.2	3
422	2-Oxoglutarate: linking TCA cycle function with amino acid, glucosinolate, flavonoid, alkaloid, and gibberellin biosynthesis. <i>Frontiers in Plant Science</i> , 2014, 5, 552.	1.7	91
423	Silencing of the tomato Sugar Partitioning Affecting protein (SPA) modifies sink strength through a shift in leaf sugar metabolism. <i>Plant Journal</i> , 2014, 77, 676-687.	2.8	28
424	Genome-enabled plant metabolomics. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2014, 966, 7-20.	1.2	47
425	Conserved Changes in the Dynamics of Metabolic Processes during Fruit Development and Ripening across Species. <i>Plant Physiology</i> , 2014, 164, 55-68.	2.3	50
426	Mercator: a fast and simple web server for genome scale functional annotation of plant sequence data. <i>Plant, Cell and Environment</i> , 2014, 37, 1250-1258.	2.8	575
427	Comparative analyses of C4 and C3 photosynthesis in developing leaves of maize and rice. <i>Nature Biotechnology</i> , 2014, 32, 1158-1165.	9.4	228
428	Metabolic Control of Redox and Redox Control of Metabolism in Plants. <i>Antioxidants and Redox Signaling</i> , 2014, 21, 1389-1421.	2.5	143
429	Metabolic efficiency underpins performance trade-offs in growth of Arabidopsis thaliana. <i>Nature Communications</i> , 2014, 5, 3537.	5.8	23
430	Heterologous expression of AtPAP2 in transgenic potato influences carbon metabolism and tuber development. <i>FEBS Letters</i> , 2014, 588, 3726-3731.	1.3	29
431	Flux profiling of photosynthetic carbon metabolism in intact plants. <i>Nature Protocols</i> , 2014, 9, 1803-1824.	5.5	59
432	The genome of the stress-tolerant wild tomato species Solanum pennellii. <i>Nature Genetics</i> , 2014, 46, 1034-1038.	9.4	391

#	ARTICLE	IF	CITATIONS
433	Dissecting the Subcellular Compartmentation of Proteins and Metabolites in Arabidopsis Leaves Using Non-aqueous Fractionation. <i>Molecular and Cellular Proteomics</i> , 2014, 13, 2246-2259.	2.5	58
434	Genome-Wide Association in Tomato Reveals 44 Candidate Loci for Fruit Metabolic Traits. <i>Plant Physiology</i> , 2014, 165, 1120-1132.	2.3	187
435	The complex role of mitochondrial metabolism in plant aluminum resistance. <i>Trends in Plant Science</i> , 2014, 19, 399-407.	4.3	66
436	Natural occurring epialleles determine vitamin E accumulation in tomato fruits. <i>Nature Communications</i> , 2014, 5, 3027.	5.8	179
437	The life of plant mitochondrial complex I. <i>Mitochondrion</i> , 2014, 19, 295-313.	1.6	103
438	Opportunities for improving leaf water use efficiency under climate change conditions. <i>Plant Science</i> , 2014, 226, 108-119.	1.7	124
439	Metabolic variation between japonica and indica rice cultivars as revealed by non-targeted metabolomics. <i>Scientific Reports</i> , 2014, 4, 5067.	1.6	129
440	Molecular mechanisms of desiccation tolerance in the resurrection glacial relic <i>Haberlea rhodopensis</i> . <i>Cellular and Molecular Life Sciences</i> , 2013, 70, 689-709.	2.4	168
441	Comparative transcriptomics reveals patterns of selection in domesticated and wild tomato. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, E2655-62.	3.3	325
442	Functional Characterization of the Plastidial 3-Phosphoglycerate Dehydrogenase Family in Arabidopsis. <i>Plant Physiology</i> , 2013, 163, 1164-1178.	2.3	70
443	<i>TIME FOR COFFEE</i> is an essential component in the maintenance of metabolic homeostasis in <i>Arabidopsis thaliana</i> . <i>Plant Journal</i> , 2013, 76, 188-200.	2.8	79
444	Transcriptional regulation of tocopherol biosynthesis in tomato. <i>Plant Molecular Biology</i> , 2013, 81, 309-325.	2.0	83
445	On the regulation and function of secondary metabolism during fruit development and ripening. <i>Journal of Experimental Botany</i> , 2013, 65, 4599-4611.	2.4	92
446	Resolution by recombination: breaking up <i>Solanum pennellii</i> introgressions. <i>Trends in Plant Science</i> , 2013, 18, 536-538.	4.3	74
447	The flavonoid biosynthetic pathway in Arabidopsis: Structural and genetic diversity. <i>Plant Physiology and Biochemistry</i> , 2013, 72, 21-34.	2.8	637
448	Regulation of the mitochondrial tricarboxylic acid cycle. <i>Current Opinion in Plant Biology</i> , 2013, 16, 335-343.	3.5	141
449	Systemic analysis of inducible target of rapamycin mutants reveal a general metabolic switch controlling growth in <i>Arabidopsis thaliana</i> . <i>Plant Journal</i> , 2013, 73, 897-909.	2.8	205
450	The Spatial Organization of Metabolism Within the Plant Cell. <i>Annual Review of Plant Biology</i> , 2013, 64, 723-746.	8.6	191

#	ARTICLE	IF	CITATIONS
451	The evolution of phenylpropanoid metabolism in the green lineage. <i>Critical Reviews in Biochemistry and Molecular Biology</i> , 2013, 48, 123-152.	2.3	228
452	Diurnal Changes of Polysome Loading Track Sucrose Content in the Rosette of Wild-Type Arabidopsis and the Starchless <i>pgm</i> Mutant. <i>Plant Physiology</i> , 2013, 162, 1246-1265.	2.3	133
453	Ethylene is involved in strawberry fruit ripening in an organ-specific manner. <i>Journal of Experimental Botany</i> , 2013, 64, 4421-4439.	2.4	111
454	Comprehensive Dissection of Spatiotemporal Metabolic Shifts in Primary, Secondary, and Lipid Metabolism during Developmental Senescence in Arabidopsis. <i>Plant Physiology</i> , 2013, 162, 1290-1310.	2.3	278
455	Chloroplast-localized 6-phosphogluconate dehydrogenase is critical for maize endosperm starch accumulation. <i>Journal of Experimental Botany</i> , 2013, 64, 2231-2242.	2.4	38
456	ASR1 Mediates Glucose-Hormone Cross Talk by Affecting Sugar Trafficking in Tobacco Plants. <i>Plant Physiology</i> , 2013, 161, 1486-1500.	2.3	53
457	The form of nitrogen nutrition affects resistance against <i>Pseudomonas syringae</i> pv. <i>phaseolicola</i> in tobacco. <i>Journal of Experimental Botany</i> , 2013, 64, 553-568.	2.4	116
458	Shikimate and Phenylalanine Biosynthesis in the Green Lineage. <i>Frontiers in Plant Science</i> , 2013, 4, 62.	1.7	288
459	Comparative metabolic profiling of <i>Haberlea rhodopensis</i> , <i>Thellungiella halophylla</i> , and <i>Arabidopsis thaliana</i> exposed to low temperature. <i>Frontiers in Plant Science</i> , 2013, 4, 499.	1.7	57
460	Serine Acts as a Metabolic Signal for the Transcriptional Control of Photorespiration-Related Genes in Arabidopsis. <i>Plant Physiology</i> , 2013, 162, 379-389.	2.3	97
461	Integration of Genome-Scale Modeling and Transcript Profiling Reveals Metabolic Pathways Underlying Light and Temperature Acclimation in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2013, 25, 1197-1211.	3.1	61
462	Pyrophosphate levels strongly influence ascorbate and starch content in tomato fruit. <i>Frontiers in Plant Science</i> , 2013, 4, 308.	1.7	20
463	The Phosphorylated Pathway of Serine Biosynthesis Is Essential Both for Male Gametophyte and Embryo Development and for Root Growth in Arabidopsis. <i>Plant Cell</i> , 2013, 25, 2084-2101.	3.1	80
464	Impact of the Carbon and Nitrogen Supply on Relationships and Connectivity between Metabolism and Biomass in a Broad Panel of Arabidopsis Accessions. <i>Plant Physiology</i> , 2013, 162, 347-363.	2.3	87
465	Metabolic analysis of kiwifruit (<i>Actinidia deliciosa</i>) berries from extreme genotypes reveals hallmarks for fruit starch metabolism. <i>Journal of Experimental Botany</i> , 2013, 64, 5049-5063.	2.4	124
466	<i>PLGG1</i> , a plastidic glycolate glycerate transporter, is required for photorespiration and defines a unique class of metabolite transporters. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 3185-3190.	3.3	141
467	Orchestration of Thiamin Biosynthesis and Central Metabolism by Combined Action of the Thiamin Pyrophosphate Riboswitch and the Circadian Clock in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2013, 25, 288-307.	3.1	98
468	Galacturonosyltransferase 4 silencing alters pectin composition and carbon partitioning in tomato. <i>Journal of Experimental Botany</i> , 2013, 64, 2449-2466.	2.4	34

#	ARTICLE	IF	CITATIONS
469	Metabolic Fluxes in an Illuminated <i>Arabidopsis</i> Rosette. <i>Plant Cell</i> , 2013, 25, 694-714.	3.1	303
470	Molecular regulation of fruit ripening. <i>Frontiers in Plant Science</i> , 2013, 4, 198.	1.7	200
471	Metabolic Profiling of a Mapping Population Exposes New Insights in the Regulation of Seed Metabolism and Seed, Fruit, and Plant Relations. <i>PLoS Genetics</i> , 2012, 8, e1002612.	1.5	115
472	Downregulation of the $\hat{\gamma}$ -Subunit Reduces Mitochondrial ATP Synthase Levels, Alters Respiration, and Restricts Growth and Gametophyte Development in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2012, 24, 2792-2811.	3.1	66
473	Integrative Comparative Analyses of Transcript and Metabolite Profiles from Pepper and Tomato Ripening and Development Stages Uncovers Species-Specific Patterns of Network Regulatory Behavior. <i>Plant Physiology</i> , 2012, 159, 1713-1729.	2.3	174
474	Antisense Inhibition of the 2-Oxoglutarate Dehydrogenase Complex in Tomato Demonstrates Its Importance for Plant Respiration and during Leaf Senescence and Fruit Maturation. <i>Plant Cell</i> , 2012, 24, 2328-2351.	3.1	88
475	Metabolic Engineering of Tomato Fruit Organic Acid Content Guided by Biochemical Analysis of an Introgression Line. <i>Plant Physiology</i> , 2012, 161, 397-407.	2.3	42
476	Action of Gibberellins on Growth and Metabolism of <i>Arabidopsis</i> Plants Associated with High Concentration of Carbon Dioxide. <i>Plant Physiology</i> , 2012, 160, 1781-1794.	2.3	45
477	Catabolism of Branched Chain Amino Acids Supports Respiration but Not Volatile Synthesis in Tomato Fruits. <i>Molecular Plant</i> , 2012, 5, 366-375.	3.9	85
478	On the Discordance of Metabolomics with Proteomics and Transcriptomics: Coping with Increasing Complexity in Logic, Chemistry, and Network Interactions Scientific Correspondence. <i>Plant Physiology</i> , 2012, 158, 1139-1145.	2.3	176
479	The sensitive to freezing ³ mutation of <i>Arabidopsis thaliana</i> is a cold-sensitive allele of homomeric acetyl-CoA carboxylase that results in cold-induced cuticle deficiencies. <i>Journal of Experimental Botany</i> , 2012, 63, 5289-5299.	2.4	29
480	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. <i>Plant Physiology</i> , 2012, 160, 2227-2238.	2.3	14
481	Vitamin Deficiencies in Humans: Can Plant Science Help?. <i>Plant Cell</i> , 2012, 24, 395-414.	3.1	212
482	Glycine decarboxylase controls photosynthesis and plant growth. <i>FEBS Letters</i> , 2012, 586, 3692-3697.	1.3	144
483	Multiple strategies to prevent oxidative stress in <i>Arabidopsis</i> plants lacking the malate valve enzyme NADP-malate dehydrogenase. <i>Journal of Experimental Botany</i> , 2012, 63, 1445-1459.	2.4	125
484	Metabolic and Phenotypic Responses of Greenhouse-Grown Maize Hybrids to Experimentally Controlled Drought Stress. <i>Molecular Plant</i> , 2012, 5, 401-417.	3.9	251
485	AtABCG29 Is a Monolignol Transporter Involved in Lignin Biosynthesis. <i>Current Biology</i> , 2012, 22, 1207-1212.	1.8	265
486	Sucrose Efflux Mediated by SWEET Proteins as a Key Step for Phloem Transport. <i>Science</i> , 2012, 335, 207-211.	6.0	1,085

#	ARTICLE	IF	CITATIONS
487	Molecular regulation of seed and fruit set. <i>Trends in Plant Science</i> , 2012, 17, 656-665.	4.3	331
488	The use of metabolomics to dissect plant responses to abiotic stresses. <i>Cellular and Molecular Life Sciences</i> , 2012, 69, 3225-3243.	2.4	680
489	Structured patterns in geographic variability of metabolic phenotypes in <i>Arabidopsis thaliana</i> . <i>Nature Communications</i> , 2012, 3, 1319.	5.8	31
490	OPTIMAS-DW: A comprehensive transcriptomics, metabolomics, ionomics, proteomics and phenomics data resource for maize. <i>BMC Plant Biology</i> , 2012, 12, 245.	1.6	47
491	<i>JUNGBRUNNEN1</i> , a Reactive Oxygen Species-Responsive NAC Transcription Factor, Regulates Longevity in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2012, 24, 482-506.	3.1	512
492	Metabolic control and regulation of the tricarboxylic acid cycle in photosynthetic and heterotrophic plant tissues. <i>Plant, Cell and Environment</i> , 2012, 35, 1-21.	2.8	267
493	High-to-Low CO ₂ Acclimation Reveals Plasticity of the Photorespiratory Pathway and Indicates Regulatory Links to Cellular Metabolism of <i>Arabidopsis</i> . <i>PLoS ONE</i> , 2012, 7, e42809.	1.1	88
494	Metabolic priming by a secreted fungal effector. <i>Nature</i> , 2011, 478, 395-398.	13.7	509
495	Recommendations for Reporting Metabolite Data. <i>Plant Cell</i> , 2011, 23, 2477-2482.	3.1	326
496	Genetic dissection of vitamin E biosynthesis in tomato. <i>Journal of Experimental Botany</i> , 2011, 62, 3781-3798.	2.4	66
497	Antisense Inhibition of the Iron-Sulphur Subunit of Succinate Dehydrogenase Enhances Photosynthesis and Growth in Tomato via an Organic Acid-Mediated Effect on Stomatal Aperture. <i>Plant Cell</i> , 2011, 23, 600-627.	3.1	221
498	On the origins of nitric oxide. <i>Trends in Plant Science</i> , 2011, 16, 160-168.	4.3	528
499	Protein degradation – an alternative respiratory substrate for stressed plants. <i>Trends in Plant Science</i> , 2011, 16, 489-498.	4.3	367
500	From models to crop species: caveats and solutions for translational metabolomics. <i>Frontiers in Plant Science</i> , 2011, 2, 61.	1.7	33
501	Antisense Suppression of the Small Chloroplast Protein CP12 in Tobacco Alters Carbon Partitioning and Severely Restricts Growth. <i>Plant Physiology</i> , 2011, 157, 620-631.	2.3	39
502	The specific overexpression of a cyclin-dependent kinase inhibitor in tomato fruit mesocarp cells uncouples endoreduplication and cell growth. <i>Plant Journal</i> , 2011, 65, 543-556.	2.8	46
503	Evolution, structure and function of mitochondrial carriers: a review with new insights. <i>Plant Journal</i> , 2011, 66, 161-181.	2.8	212
504	High-density kinetic analysis of the metabolomic and transcriptomic response of <i>Arabidopsis</i> to eight environmental conditions. <i>Plant Journal</i> , 2011, 67, 869-884.	2.8	251

#	ARTICLE	IF	CITATIONS
505	Combined transcription factor profiling, microarray analysis and metabolite profiling reveals the transcriptional control of metabolic shifts occurring during tomato fruit development. <i>Plant Journal</i> , 2011, 68, 999-1013.	2.8	118
506	Gibberellin biosynthesis and signalling during development of the strawberry receptacle. <i>New Phytologist</i> , 2011, 191, 376-390.	3.5	110
507	Alteration of mitochondrial protein complexes in relation to metabolic regulation under short-term oxidative stress in <i>Arabidopsis</i> seedlings. <i>Phytochemistry</i> , 2011, 72, 1081-1091.	1.4	66
508	Fumarate: Multiple functions of a simple metabolite. <i>Phytochemistry</i> , 2011, 72, 838-843.	1.4	75
509	Transcriptome and Metabolite Profiling Show That APETALA2a Is a Major Regulator of Tomato Fruit Ripening. <i>Plant Cell</i> , 2011, 23, 923-941.	3.1	324
510	Metabolic Profiling during Peach Fruit Development and Ripening Reveals the Metabolic Networks That Underpin Each Developmental Stage. <i>Plant Physiology</i> , 2011, 157, 1696-1710.	2.3	254
511	Targeted Enhancement of Glutamate-to- β -Aminobutyrate Conversion in <i>Arabidopsis</i> Seeds Affects Carbon-Nitrogen Balance and Storage Reserves in a Development-Dependent Manner. <i>Plant Physiology</i> , 2011, 157, 1026-1042.	2.3	111
512	Identification of Enzyme Activity Quantitative Trait Loci in a <i>Solanum lycopersicum</i> — <i>Solanum pennellii</i> Introgression Line Population. <i>Plant Physiology</i> , 2011, 157, 998-1014.	2.3	36
513	The genetic architecture of branched-chain amino acid accumulation in tomato fruits. <i>Journal of Experimental Botany</i> , 2011, 62, 3895-3906.	2.4	31
514	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 <i>Arabidopsis</i> during Dark-Induced Senescence. <i>Plant Physiology</i> , 2011, 157, 55-69.	2.3	39
515	Tomato Fruit Photosynthesis Is Seemingly Unimportant in Primary Metabolism and Ripening But Plays a Considerable Role in Seed Development. <i>Plant Physiology</i> , 2011, 157, 1650-1663.	2.3	150
516	The Hydroxypyruvate-Reducing System in <i>Arabidopsis</i> : Multiple Enzymes for the Same End. <i>Plant Physiology</i> , 2011, 155, 694-705.	2.3	82
517	Targeting Mitochondrial Metabolism and Machinery as a Means to Enhance Photosynthesis. <i>Plant Physiology</i> , 2011, 155, 101-107.	2.3	105
518	Identification of Genes in the Phenylalanine Metabolic Pathway by Ectopic Expression of a MYB Transcription Factor in Tomato Fruit. <i>Plant Cell</i> , 2011, 23, 2738-2753.	3.1	97
519	Malate Plays a Crucial Role in Starch Metabolism, Ripening, and Soluble Solid Content of Tomato Fruit and Affects Postharvest Softening. <i>Plant Cell</i> , 2011, 23, 162-184.	3.1	227
520	Systems Biology of Tomato Fruit Development: Combined Transcript, Protein, and Metabolite Analysis of Tomato Transcription Factor (<i>rin</i>) and Ethylene Receptor (<i>Nr</i>) Mutants Reveals Novel Regulatory Interactions. <i>Plant Physiology</i> , 2011, 157, 405-425.	2.3	303
521	Tissue- and Cell-Type Specific Transcriptome Profiling of Expanding Tomato Fruit Provides Insights into Metabolic and Regulatory Specialization and Cuticle Formation. <i>Plant Cell</i> , 2011, 23, 3893-3910.	3.1	193
522	Toward the Storage Metabolome: Profiling the Barley Vacuole. <i>Plant Physiology</i> , 2011, 157, 1469-1482.	2.3	92

#	ARTICLE	IF	CITATIONS
523	PlaNet: Combined Sequence and Expression Comparisons across Plant Networks Derived from Seven Species <i>Å</i> . <i>Plant Cell</i> , 2011, 23, 895-910.	3.1	297
524	Altering Trehalose-6-Phosphate Content in Transgenic Potato Tubers Affects Tuber Growth and Alters Responsiveness to Hormones during Sprouting <i>Å</i> <i>Å</i> . <i>Plant Physiology</i> , 2011, 156, 1754-1771.	2.3	138
525	Profiling Primary Metabolites of Tomato Fruit with Gas Chromatography/Mass Spectrometry. <i>Methods in Molecular Biology</i> , 2011, 860, 101-109.	0.4	40
526	A Topological Map of the Compartmentalized <i>Arabidopsis thaliana</i> Leaf Metabolome. <i>PLoS ONE</i> , 2011, 6, e17806.	1.1	101
527	Virus-Induced Gene Silencing of Plastidial Soluble Inorganic Pyrophosphatase Impairs Essential Leaf Anabolic Pathways and Reduces Drought Stress Tolerance in <i>Nicotiana benthamiana</i> . <i>Plant Physiology</i> , 2010, 154, 55-66.	2.3	60
528	Analysis of PRODUCTION OF FLAVONOL GLYCOSIDES-dependent flavonol glycoside accumulation in <i>Arabidopsis thaliana</i> plants reveals MYB11, MYB12 and MYB111-independent flavonol glycoside accumulation. <i>New Phytologist</i> , 2010, 188, 985-1000.	3.5	285
529	Cytosolic pyruvate, orthophosphate dikinase functions in nitrogen remobilization during leaf senescence and limits individual seed growth and nitrogen content. <i>Plant Journal</i> , 2010, 62, 641-652.	2.8	129
530	Pleiotropic physiological consequences of feedback-insensitive phenylalanine biosynthesis in <i>Arabidopsis thaliana</i> . <i>Plant Journal</i> , 2010, 63, 823-835.	2.8	69
531	Complex Assembly and Metabolic Profiling of <i>Arabidopsis thaliana</i> Plants Overexpressing Vitamin B6 Biosynthesis Proteins. <i>Molecular Plant</i> , 2010, 3, 890-903.	3.9	30
532	Genomic Analysis of Wild Tomato Introgressions Determining Metabolism- and Yield-Associated Traits. <i>Plant Physiology</i> , 2010, 152, 1772-1786.	2.3	57
533	Tricarboxylic Acid Cycle Activity Regulates Tomato Root Growth via Effects on Secondary Cell Wall Production <i>Å</i> <i>Å</i> . <i>Plant Physiology</i> , 2010, 153, 611-621.	2.3	54
534	Robin: An Intuitive Wizard Application for R-Based Expression Microarray Quality Assessment and Analysis <i>Å</i> <i>Å</i> . <i>Plant Physiology</i> , 2010, 153, 642-651.	2.3	96
535	Characterization of the Branched-Chain Amino Acid Aminotransferase Enzyme Family in Tomato <i>Å</i> <i>Å</i> . <i>Plant Physiology</i> , 2010, 153, 925-936.	2.3	80
536	The Influence of Fruit Load on the Tomato Pericarp Metabolome in a <i>Solanum chmielewskii</i> Introgression Line Population. <i>Plant Physiology</i> , 2010, 154, 1128-1142.	2.3	80
537	Network Analysis of Enzyme Activities and Metabolite Levels and Their Relationship to Biomass in a Large Panel of <i>Arabidopsis</i> Accessions <i>Å</i> <i>Å</i> . <i>Plant Cell</i> , 2010, 22, 2872-2893.	3.1	131
538	Combining genetic diversity, informatics and metabolomics to facilitate annotation of plant gene function. <i>Nature Protocols</i> , 2010, 5, 1210-1227.	5.5	202
539	Mild Reductions in Mitochondrial NAD-Dependent Isocitrate Dehydrogenase Activity Result in Altered Nitrate Assimilation and Pigmentation But Do Not Impact Growth. <i>Molecular Plant</i> , 2010, 3, 156-173.	3.9	68
540	Photorespiration: players, partners and origin. <i>Trends in Plant Science</i> , 2010, 15, 330-336.	4.3	540

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541	Not just a circle: flux modes in the plant TCA cycle. <i>Trends in Plant Science</i> , 2010, 15, 462-470.	4.3	713
542	Seed desiccation: a bridge between maturation and germination. <i>Trends in Plant Science</i> , 2010, 15, 211-218.	4.3	262
543	Metabolic and Signaling Aspects Underpinning the Regulation of Plant Carbon Nitrogen Interactions. <i>Molecular Plant</i> , 2010, 3, 973-996.	3.9	616
544	Enzyme Activity Profiles during Fruit Development in Tomato Cultivars and <i>Solanum pennellii</i> . <i>Plant Physiology</i> , 2010, 153, 80-98.	2.3	92
545	Identification of the 2-Hydroxyglutarate and Isovaleryl-CoA Dehydrogenases as Alternative Electron Donors Linking Lysine Catabolism to the Electron Transport Chain of <i>Arabidopsis</i> Mitochondria. <i>Plant Cell</i> , 2010, 22, 1549-1563.	3.1	296
546	An <i>Orange Ripening</i> Mutant Links Plastid NAD(P)H Dehydrogenase Complex Activity to Central and Specialized Metabolism during Tomato Fruit Maturation. <i>Plant Cell</i> , 2010, 22, 1977-1997.	3.1	61
547	Molecular Identification and Functional Characterization of <i>Arabidopsis thaliana</i> Mitochondrial and Chloroplastic NAD ⁺ Carrier Proteins. <i>Journal of Biological Chemistry</i> , 2009, 284, 31249-31259.	1.6	151
548	Starch as a major integrator in the regulation of plant growth. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 10348-10353.	3.3	467
549	Deciphering Transcriptional and Metabolic Networks Associated with Lysine Metabolism during <i>Arabidopsis</i> Seed Development. <i>Plant Physiology</i> , 2009, 151, 2058-2072.	2.3	89
550	Decreased Mitochondrial Activities of Malate Dehydrogenase and Fumarase in Tomato Lead to Altered Root Growth and Architecture via Diverse Mechanisms. <i>Plant Physiology</i> , 2009, 149, 653-669.	2.3	85
551	A Redox-Mediated Modulation of Stem Bolting in Transgenic <i>Nicotiana glauca</i> Differentially Expressing the External Mitochondrial NADPH Dehydrogenase. <i>Plant Physiology</i> , 2009, 150, 1248-1259.	2.3	40
552	Induction of the AOX1D Isoform of Alternative Oxidase in <i>A. thaliana</i> T-DNA Insertion Lines Lacking Isoform AOX1A Is Insufficient to Optimize Photosynthesis when Treated with Antimycin A. <i>Molecular Plant</i> , 2009, 2, 284-297.	3.9	112
553	Regulatory Features Underlying Pollination-Dependent and -Independent Tomato Fruit Set Revealed by Transcript and Primary Metabolite Profiling. <i>Plant Cell</i> , 2009, 21, 1428-1452.	3.1	258
554	Dynamic Plastid Redox Signals Integrate Gene Expression and Metabolism to Induce Distinct Metabolic States in Photosynthetic Acclimation in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2009, 21, 2715-2732.	3.1	176
555	Developmental Stage Specificity and the Role of Mitochondrial Metabolism in the Response of <i>Arabidopsis</i> Leaves to Prolonged Mild Osmotic Stress. <i>Plant Physiology</i> , 2009, 152, 226-244.	2.3	269
556	Metabolomics-assisted breeding: a viable option for crop improvement?. <i>Trends in Genetics</i> , 2009, 25, 39-48.	2.9	451
557	Adjustment of growth and central metabolism to a mild but sustained nitrogen limitation in <i>Arabidopsis</i> . <i>Plant, Cell and Environment</i> , 2009, 32, 300-318.	2.8	201
558	ADP-Glucose Pyrophosphorylase-Deficient Pea Embryos Reveal Specific Transcriptional and Metabolic Changes of Carbon-Nitrogen Metabolism and Stress Responses. <i>Plant Physiology</i> , 2009, 149, 395-411.	2.3	78

#	ARTICLE	IF	CITATIONS
559	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. <i>Plant Physiology</i> , 2009, 150, 1204-1218.	2.3	226
560	Highway or byway: the metabolic role of the GABA shunt in plants. <i>Trends in Plant Science</i> , 2008, 13, 14-19.	4.3	583
561	Mode of Inheritance of Primary Metabolic Traits in Tomato. <i>Plant Cell</i> , 2008, 20, 509-523.	3.1	208
562	Metabolic and Developmental Adaptations of Growing Potato Tubers in Response to Specific Manipulations of the Adenylate Energy Status. <i>Plant Physiology</i> , 2008, 146, 1579-1598.	2.3	32
563	A Cytosolic Pathway for the Conversion of Hydroxypyruvate to Glycerate during Photorespiration in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2008, 20, 2848-2859.	3.1	193
564	Reconfiguration of the Achene and Receptacle Metabolic Networks during Strawberry Fruit Development. <i>Plant Physiology</i> , 2008, 148, 730-750.	2.3	276
565	The <i>Arabidopsis</i> onset of leaf death5 Mutation of Quinolinate Synthase Affects Nicotinamide Adenine Dinucleotide Biosynthesis and Causes Early Ageing. <i>Plant Cell</i> , 2008, 20, 2909-2925.	3.1	106
566	Vitamin B1 biosynthesis in plants requires the essential iron-sulfur cluster protein, THIC. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 19637-19642.	3.3	106
567	Two <i>Arabidopsis</i> Threonine Aldolases Are Nonredundant and Compete with Threonine Deaminase for a Common Substrate Pool. <i>Plant Cell</i> , 2007, 18, 3564-3575.	3.1	80
568	Alteration of Organic Acid Metabolism in <i>Arabidopsis</i> Overexpressing the Maize C4 NADP-Malic Enzyme Causes Accelerated Senescence during Extended Darkness. <i>Plant Physiology</i> , 2007, 145, 640-652.	2.3	105
569	Reduced Expression of Succinyl-Coenzyme A Ligase Can Be Compensated for by Up-Regulation of the ¹³ C-Aminobutyrate Shunt in Illuminated Tomato Leaves. <i>Plant Physiology</i> , 2007, 145, 626-639.	2.3	151
570	NAD-Dependent Isocitrate Dehydrogenase Mutants of <i>Arabidopsis</i> Suggest the Enzyme Is Not Limiting for Nitrogen Assimilation. <i>Plant Physiology</i> , 2007, 144, 1546-1558.	2.3	78
571	Silencing of the Mitochondrial Ascorbate Synthesizing Enzyme Galactono-1,4-Lactone Dehydrogenase Affects Plant and Fruit Development in Tomato. <i>Plant Physiology</i> , 2007, 145, 1408-1422.	2.3	184
572	Nonsupervised Construction and Application of Mass Spectral and Retention Time Index Libraries From Time-of-Flight Gas Chromatography-Mass Spectrometry Metabolite Profiles. <i>Methods in Molecular Biology</i> , 2007, 358, 19-38.	0.4	116
573	Glycolytic Enzymes Associate Dynamically with Mitochondria in Response to Respiratory Demand and Support Substrate Channeling. <i>Plant Cell</i> , 2007, 19, 3723-3738.	3.1	249
574	Deficiency of mitochondrial fumarase activity in tomato plants impairs photosynthesis via an effect on stomatal function. <i>Plant Journal</i> , 2007, 50, 1093-1106.	2.8	294
575	ci21A/Asr1 expression influences glucose accumulation in potato tubers. <i>Plant Molecular Biology</i> , 2007, 63, 719-730.	2.0	57
576	Integrated Analysis of Metabolite and Transcript Levels Reveals the Metabolic Shifts That Underlie Tomato Fruit Development and Highlight Regulatory Aspects of Metabolic Network Behavior. <i>Plant Physiology</i> , 2006, 142, 1380-1396.	2.3	432

#	ARTICLE	IF	CITATIONS
577	Metabolic regulation underlying tomato fruit development. <i>Journal of Experimental Botany</i> , 2006, 57, 1883-1897.	2.4	308
578	Plant metabolomics: towards biological function and mechanism. <i>Trends in Plant Science</i> , 2006, 11, 508-516.	4.3	370
579	Sucrose transporter LeSUT1 and LeSUT2 inhibition affects tomato fruit development in different ways. <i>Plant Journal</i> , 2006, 45, 180-192.	2.8	234
580	The mitochondrial electron transfer flavoprotein complex is essential for survival of <i>Arabidopsis</i> in extended darkness. <i>Plant Journal</i> , 2006, 47, 751-760.	2.8	128
581	Gas chromatography mass spectrometry-based metabolite profiling in plants. <i>Nature Protocols</i> , 2006, 1, 387-396.	5.5	1,808
582	Comprehensive metabolic profiling and phenotyping of interspecific introgression lines for tomato improvement. <i>Nature Biotechnology</i> , 2006, 24, 447-454.	9.4	707
583	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. <i>Plant Molecular Biology</i> , 2006, 60, 773-792.	2.0	115
584	Subcellular pyrophosphate metabolism in developing tubers of potato (<i>Solanum tuberosum</i>). <i>Plant Molecular Biology</i> , 2006, 62, 165-179.	2.0	23
585	Natural genetic variation for improving crop quality. <i>Current Opinion in Plant Biology</i> , 2006, 9, 196-202.	3.5	214
586	PageMan: An interactive ontology tool to generate, display, and annotate overview graphs for profiling experiments. <i>BMC Bioinformatics</i> , 2006, 7, 535.	1.2	309
587	Combined Transcript and Metabolite Profiling of <i>Arabidopsis</i> Leaves Reveals Fundamental Effects of the Thiol-Disulfide Status on Plant Metabolism. <i>Plant Physiology</i> , 2006, 141, 412-422.	2.3	93
588	Mitochondrial uncoupling protein is required for efficient photosynthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 19587-19592.	3.3	226
589	Tomato aromatic amino acid decarboxylases participate in synthesis of the flavor volatiles 2-phenylethanol and 2-phenylacetaldehyde. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 8287-8292.	3.3	367
590	<i>Arabidopsis</i> Seed Development and Germination Is Associated with Temporally Distinct Metabolic Switches. <i>Plant Physiology</i> , 2006, 142, 839-854.	2.3	387
591	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. <i>Plant Cell</i> , 2005, 17, 2077-2088.	3.1	86
592	The Critical Role of <i>Arabidopsis</i> Electron-Transfer Flavoprotein:Ubiquinone Oxidoreductase during Dark-Induced Starvation. <i>Plant Cell</i> , 2005, 17, 2587-2600.	3.1	211
593	Deficiency of a Plastidial Adenylate Kinase in <i>Arabidopsis</i> Results in Elevated Photosynthetic Amino Acid Biosynthesis and Enhanced Growth. <i>Plant Physiology</i> , 2005, 137, 70-82.	2.3	66
594	Fruit Carbohydrate Metabolism in an Introgression Line of Tomato with Increased Fruit Soluble Solids. <i>Plant and Cell Physiology</i> , 2005, 46, 425-437.	1.5	135

#	ARTICLE	IF	CITATIONS
595	Enhanced Photosynthetic Performance and Growth as a Consequence of Decreasing Mitochondrial Malate Dehydrogenase Activity in Transgenic Tomato Plants. <i>Plant Physiology</i> , 2005, 137, 611-622.	2.3	335
596	GMD@CSB.DB: the Golm Metabolome Database. <i>Bioinformatics</i> , 2005, 21, 1635-1638.	1.8	1,247
597	GC-MS libraries for the rapid identification of metabolites in complex biological samples. <i>FEBS Letters</i> , 2005, 579, 1332-1337.	1.3	596
598	Zooming In on a Quantitative Trait for Tomato Yield Using Interspecific Introgressions. <i>Science</i> , 2004, 305, 1786-1789.	6.0	452
599	Kinetics of labelling of organic and amino acids in potato tubers by gas chromatography-mass spectrometry following incubation in ¹³ C labelled isotopes. <i>Plant Journal</i> , 2004, 39, 668-679.	2.8	118
600	Developmental analysis of carbohydrate metabolism in tomato (<i>Lycopersicon esculentum</i> cv.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542	2.6	51
601	Metabolite profiling: from diagnostics to systems biology. <i>Nature Reviews Molecular Cell Biology</i> , 2004, 5, 763-769.	16.1	711
602	Metabolic profiling of leaves and fruit of wild species tomato: a survey of the <i>Solanum lycopersicum</i> complex. <i>Journal of Experimental Botany</i> , 2004, 56, 297-307.	2.4	240
603	Heard it through the grapevine? ABA and sugar cross-talk: the ASR story. <i>Trends in Plant Science</i> , 2004, 9, 57-59.	4.3	104
604	Metabolic Profiling of Transgenic Tomato Plants Overexpressing Hexokinase Reveals That the Influence of Hexose Phosphorylation Diminishes during Fruit Development. <i>Plant Physiology</i> , 2003, 133, 84-99.	2.3	331
605	Reduced Expression of Aconitase Results in an Enhanced Rate of Photosynthesis and Marked Shifts in Carbon Partitioning in Illuminated Leaves of Wild Species Tomato. <i>Plant Physiology</i> , 2003, 133, 1322-1335.	2.3	210
606	Enzymes of Glycolysis Are Functionally Associated with the Mitochondrion in Arabidopsis Cells. <i>Plant Cell</i> , 2003, 15, 2140-2151.	3.1	345
607	A Bypass of Sucrose Synthase Leads to Low Internal Oxygen and Impaired Metabolic Performance in Growing Potato Tubers. <i>Plant Physiology</i> , 2003, 132, 2058-2072.	2.3	135
608	De Novo Amino Acid Biosynthesis in Potato Tubers Is Regulated by Sucrose Levels. <i>Plant Physiology</i> , 2003, 133, 683-692.	2.3	71
609	Antisense repression of cytosolic phosphoglucomutase in potato (<i>Solanum tuberosum</i>) results in severe growth retardation, reduction in tuber number and altered carbon metabolism. <i>Planta</i> , 2002, 214, 510-520.	1.6	76
610	Starch content and yield increase as a result of altering adenylate pools in transgenic plants. <i>Nature Biotechnology</i> , 2002, 20, 1256-1260.	9.4	176
611	Molecular and Biochemical Triggers of Potato Tuber Development. <i>Plant Physiology</i> , 2001, 127, 1459-1465.	2.3	256
612	Fructose 2,6-bisphosphate activates pyrophosphate: fructose-6-phosphate 1-phosphotransferase and increases triose phosphate to hexose phosphate cycling in heterotrophic cells. <i>Planta</i> , 2001, 212, 250-263.	1.6	223

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613	The contribution of plastidial phosphoglucomutase to the control of starch synthesis within the potato tuber. <i>Planta</i> , 2001, 213, 418-426.	1.6	91
614	High-Resolution Metabolic Phenotyping of Genetically and Environmentally Diverse Potato Tuber Systems. Identification of Phenocopies. <i>Plant Physiology</i> , 2001, 127, 749-764.	2.3	173
615	Metabolic Profiling Allows Comprehensive Phenotyping of Genetically or Environmentally Modified Plant Systems. <i>Plant Cell</i> , 2001, 13, 11-29.	3.1	984
616	Antisense inhibition of plastidial phosphoglucomutase provides compelling evidence that potato tuber amyloplasts import carbon from the cytosol in the form of glucose-6-phosphate. <i>Plant Journal</i> , 2000, 23, 43-53.	2.8	144
617	Sugarcane cell suspension reveals major metabolic changes under different nitrogen starvation regimes. <i>Bragantia</i> , 0, 80, .	1.3	2
618	Mitochondrial and peroxisomal NAD^+ uptake are important for improved photosynthesis and seed yield under elevated CO_2 concentrations. <i>Plant Journal</i> , 0, , .	2.8	2
619	Genetic architecture of seed glycerolipids in Asian cultivated rice. <i>Plant, Cell and Environment</i> , 0, , .	2.8	9