Alisdair R Fernie

List of Publications by Year
in descending order

619 papers	60,764 citations	587 125 h-index	1745 212 g-index
704 all docs	704 docs citations	704 times ranked	38391 citing authors

#	Article	IF	Citations
1	Gas chromatography mass spectrometryâ€"based metabolite profiling in plants. Nature Protocols, 2006, 1, 387-396.	5.5	1,808
2	GMD@CSB.DB: the Golm Metabolome Database. Bioinformatics, 2005, 21, 1635-1638.	1.8	1,247
3	Sucrose Efflux Mediated by SWEET Proteins as a Key Step for Phloem Transport. Science, 2012, 335, 207-211.	6.0	1,085
4	Metabolic Profiling Allows Comprehensive Phenotyping of Genetically or Environmentally Modified Plant Systems. Plant Cell, 2001, 13, 11-29.	3.1	984
5	Not just a circle: flux modes in the plant TCA cycle. Trends in Plant Science, 2010, 15, 462-470.	4.3	713
6	Metabolite profiling: from diagnostics to systems biology. Nature Reviews Molecular Cell Biology, 2004, 5, 763-769.	16.1	711
7	Comprehensive metabolic profiling and phenotyping of interspecific introgression lines for tomato improvement. Nature Biotechnology, 2006, 24, 447-454.	9.4	707
8	The use of metabolomics to dissect plant responses to abiotic stresses. Cellular and Molecular Life Sciences, 2012, 69, 3225-3243.	2.4	680
9	The flavonoid biosynthetic pathway in Arabidopsis: Structural and genetic diversity. Plant Physiology and Biochemistry, 2013, 72, 21-34.	2.8	637
10	Metabolic and Signaling Aspects Underpinning the Regulation of Plant Carbon Nitrogen Interactions. Molecular Plant, 2010, 3, 973-996.	3.9	616
11	Rewiring of the Fruit Metabolome in Tomato Breeding. Cell, 2018, 172, 249-261.e12.	13.5	606
12	GC-MS libraries for the rapid identification of metabolites in complex biological samples. FEBS Letters, 2005, 579, 1332-1337.	1.3	596
13	Highway or byway: the metabolic role of the GABA shunt in plants. Trends in Plant Science, 2008, 13, 14-19.	4.3	583
14	<scp>M</scp>ercator: a fast and simple web server for genome scale functional annotation of plant sequence data. Plant, Cell and Environment, 2014, 37, 1250-1258.	2.8	575
15	Photorespiration: players, partners and origin. Trends in Plant Science, 2010, 15, 330-336.	4.3	540
16	On the origins of nitric oxide. Trends in Plant Science, 2011, 16, 160-168.	4.3	528
17	<i>JUNGBRUNNEN1</i>, a Reactive Oxygen Speciesâ€"Responsive NAC Transcription Factor, Regulates Longevity in <i>Arabidopsis</i>. Plant Cell, 2012, 24, 482-506.	3.1	512
18	Metabolic priming by a secreted fungal effector. Nature, 2011, 478, 395-398.	13.7	509

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19	Starch as a major integrator in the regulation of plant growth. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 10348-10353.	3.3	467
20	Zooming In on a Quantitative Trait for Tomato Yield Using Interspecific Introgressions. Science, 2004, 305, 1786-1789.	6.0	452
21	Metabolomics-assisted breeding: a viable option for crop improvement?. Trends in Genetics, 2009, 25, 39-48.	2.9	451
22	Integrated Analysis of Metabolite and Transcript Levels Reveals the Metabolic Shifts That Underlie Tomato Fruit Development and Highlight Regulatory Aspects of Metabolic Network Behavior. Plant Physiology, 2006, 142, 1380-1396.	2.3	432
23	Mass spectrometry-based metabolomics: a guide for annotation, quantification and best reporting practices. Nature Methods, 2021, 18, 747-756.	9.0	403
24	The genome of the stress-tolerant wild tomato species Solanum pennellii. Nature Genetics, 2014, 46, 1034-1038.	9.4	391
25	Arabidopsis Seed Development and Germination Is Associated with Temporally Distinct Metabolic Switches. Plant Physiology, 2006, 142, 839-854.	2.3	387
26	Plant metabolomics: towards biological function and mechanism. Trends in Plant Science, 2006, 11, 508-516.	4.3	370
27	Tomato aromatic amino acid decarboxylases participate in synthesis of the flavor volatiles 2-phenylethanol and 2-phenylacetaldehyde. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 8287-8292.	3.3	367
28	Protein degradation â€“ an alternative respiratory substrate for stressed plants. Trends in Plant Science, 2011, 16, 489-498.	4.3	367
29	Enzymes of Glycolysis Are Functionally Associated with the Mitochondrion in Arabidopsis Cells. Plant Cell, 2003, 15, 2140-2151.	3.1	345
30	Enhanced Photosynthetic Performance and Growth as a Consequence of Decreasing Mitochondrial Malate Dehydrogenase Activity in Transgenic Tomato Plants. Plant Physiology, 2005, 137, 611-622.	2.3	335
31	Metabolic Profiling of Transgenic Tomato Plants Overexpressing Hexokinase Reveals That the Influence of Hexose Phosphorylation Diminishes during Fruit Development. Plant Physiology, 2003, 133, 84-99.	2.3	331
32	Molecular regulation of seed and fruit set. Trends in Plant Science, 2012, 17, 656-665.	4.3	331
33	Current understanding of the pathways of flavonoid biosynthesis in model and crop plants. Journal of Experimental Botany, 2017, 68, 4013-4028.	2.4	328
34	Recommendations for Reporting Metabolite Data. Plant Cell, 2011, 23, 2477-2482.	3.1	326
35	Comparative transcriptomics reveals patterns of selection in domesticated and wild tomato. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E2655-62.	3.3	325
36	Transcriptome and Metabolite Profiling Show That APETALA2a Is a Major Regulator of Tomato Fruit Ripening Â. Plant Cell, 2011, 23, 923-941.	3.1	324

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37	PageMan: An interactive ontology tool to generate, display, and annotate overview graphs for profiling experiments. BMC Bioinformatics, 2006, 7, 535.	1.2	309
38	Metabolic regulation underlying tomato fruit development. Journal of Experimental Botany, 2006, 57, 1883-1897.	2.4	308
39	Systems Biology of Tomato Fruit Development: Combined Transcript, Protein, and Metabolite Analysis of Tomato Transcription Factor (<i>nor, rin</i>) and Ethylene Receptor (<i>Nr</i>) Mutants Reveals Novel Regulatory Interactions Â Â. Plant Physiology, 2011, 157, 405-425.	2.3	303
40	Metabolic Fluxes in an Illuminated <i>Arabidopsis</i> Rosette Â. Plant Cell, 2013, 25, 694-714.	3.1	303
41	Multi-level engineering facilitates the production of phenylpropanoid compounds in tomato. Nature Communications, 2015, 6, 8635.	5.8	303
42	PlaNet: Combined Sequence and Expression Comparisons across Plant Networks Derived from Seven Species Â. Plant Cell, 2011, 23, 895-910.	3.1	297
43	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 Â. Plant Cell, 2010, 22, 1549-1563.	3.1	296
44	Deficiency of mitochondrial fumarase activity in tomato plants impairs photosynthesis via an effect on stomatal function. Plant Journal, 2007, 50, 1093-1106.	2.8	294
45	The role of dynamic enzyme assemblies and substrate channelling in metabolic regulation. Nature Communications, 2018, 9, 2136.	5.8	290
46	Shikimate and Phenylalanine Biosynthesis in the Green Lineage. Frontiers in Plant Science, 2013, 4, 62.	1.7	288
47	Analysis of PRODUCTION OF FLAVONOL GLYCOSIDESâ€•dependent flavonol glycoside accumulation in <i>Arabidopsis thaliana</i> plants reveals MYB11â€, MYB12â€•and MYB111â€•independent flavonol glycoside accumulation. New Phytologist, 2010, 188, 985-1000.	3.5	285
48	Comprehensive Dissection of Spatiotemporal Metabolic Shifts in Primary, Secondary, and Lipid Metabolism during Developmental Senescence in Arabidopsis Â. Plant Physiology, 2013, 162, 1290-1310.	2.3	278
49	Reconfiguration of the Achene and Receptacle Metabolic Networks during Strawberry Fruit Development Â. Plant Physiology, 2008, 148, 730-750.	2.3	276
50	Developmental Stage Specificity and the Role of Mitochondrial Metabolism in the Response of Arabidopsis Leaves to Prolonged Mild Osmotic Stress Â Â Â. Plant Physiology, 2009, 152, 226-244.	2.3	269
51	Metabolic control and regulation of the tricarboxylic acid cycle in photosynthetic and heterotrophic plant tissues. Plant, Cell and Environment, 2012, 35, 1-21.	2.8	267
52	De Novo Domestication: An Alternative Route toward New Crops for the Future. Molecular Plant, 2019, 12, 615-631.	3.9	267
53	AtABCG29 Is a Monolignol Transporter Involved in Lignin Biosynthesis. Current Biology, 2012, 22, 1207-1212.	1.8	265
54	Seed desiccation: a bridge between maturation and germination. Trends in Plant Science, 2010, 15, 211-218.	4.3	262

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55	Regulatory Features Underlying Pollination-Dependent and -Independent Tomato Fruit Set Revealed by Transcript and Primary Metabolite Profiling. Plant Cell, 2009, 21, 1428-1452.	3.1	258
56	Molecular and Biochemical Triggers of Potato Tuber Development. Plant Physiology, 2001, 127, 1459-1465.	2.3	256
57	Metabolic Profiling during Peach Fruit Development and Ripening Reveals the Metabolic Networks That Underpin Each Developmental Stage Â Â. Plant Physiology, 2011, 157, 1696-1710.	2.3	254
58	The Regulation of Essential Amino Acid Synthesis and Accumulation in Plants. Annual Review of Plant Biology, 2016, 67, 153-178.	8.6	254
59	Highâ€density kinetic analysis of the metabolomic and transcriptomic response of Arabidopsis to eight environmental conditions. Plant Journal, 2011, 67, 869-884.	2.8	251
60	Metabolic and Phenotypic Responses of Greenhouse-Grown Maize Hybrids to Experimentally Controlled Drought Stress. Molecular Plant, 2012, 5, 401-417.	3.9	251
61	The Structure and Function of Major Plant Metabolite Modifications. Molecular Plant, 2019, 12, 899-919.	3.9	250
62	Glycolytic Enzymes Associate Dynamically with Mitochondria in Response to Respiratory Demand and Support Substrate Channeling. Plant Cell, 2007, 19, 3723-3738.	3.1	249
63	Metabolic profiling of leaves and fruit of wild species tomato: a survey of the Solanum lycopersicum complex. Journal of Experimental Botany, 2004, 56, 297-307.	2.4	240
64	Sucrose transporter LeSUT1 and LeSUT2 inhibition affects tomato fruit development in different ways. Plant Journal, 2006, 45, 180-192.	2.8	234
65	Metabolite profiles of maize leaves in drought, heat and combined stress field trials reveal the relationship between metabolism and grain yield. Plant Physiology, 2015, 169, pp.01164.2015.	2.3	233
66	Differentially evolved glucosyltransferases determine natural variation of rice flavone accumulation and UV-tolerance. Nature Communications, 2017, 8, 1975.	5.8	233
67	The evolution of phenylpropanoid metabolism in the green lineage. Critical Reviews in Biochemistry and Molecular Biology, 2013, 48, 123-152.	2.3	228
68	Comparative analyses of C4 and C3 photosynthesis in developing leaves of maize and rice. Nature Biotechnology, 2014, 32, 1158-1165.	9.4	228
69	Haplotype-resolved sweet potato genome traces back its hexaploidization history. Nature Plants, 2017, 3, 696-703.	4.7	228
70	Malate Plays a Crucial Role in Starch Metabolism, Ripening, and Soluble Solid Content of Tomato Fruit and Affects Postharvest Softening Â. Plant Cell, 2011, 23, 162-184.	3.1	227
71	Mitochondrial uncoupling protein is required for efficient photosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 19587-19592.	3.3	226
72	RNA Interference of LIN5 in Tomato Confirms Its Role in Controlling Brix Content, Uncovers the Influence of Sugars on the Levels of Fruit Hormones, and Demonstrates the Importance of Sucrose Cleavage for Normal Fruit Development and Fertility Â Â. Plant Physiology, 2009, 150, 1204-1218.	2.3	226

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73	Fructose 2,6-bisphosphate activates pyrophosphate: fructose-6-phosphate 1-phosphotransferase and increases triose phosphate to hexose phosphate cycling in heterotrophic cells. Planta, 2001, 212, 250-263.	1.6	223
74	Antisense Inhibition of the Iron-Sulphur Subunit of Succinate Dehydrogenase Enhances Photosynthesis and Growth in Tomato via an Organic Acidâ€"Mediated Effect on Stomatal Aperture Â. Plant Cell, 2011, 23, 600-627.	3.1	221
75	Natural genetic variation for improving crop quality. Current Opinion in Plant Biology, 2006, 9, 196-202.	3.5	214
76	Evolution, structure and function of mitochondrial carriers: a review with new insights. Plant Journal, 2011, 66, 161-181.	2.8	212
77	Vitamin Deficiencies in Humans: Can Plant Science Help?. Plant Cell, 2012, 24, 395-414.	3.1	212
78	The Critical Role of Arabidopsis Electron-Transfer Flavoprotein:Ubiquinone Oxidoreductase during Dark-Induced Starvation. Plant Cell, 2005, 17, 2587-2600.	3.1	211
79	Reduced Expression of Aconitase Results in an Enhanced Rate of Photosynthesis and Marked Shifts in Carbon Partitioning in Illuminated Leaves of Wild Species Tomato. Plant Physiology, 2003, 133, 1322-1335.	2.3	210
80	Flavonoids are determinants of freezing tolerance and cold acclimation in Arabidopsis thaliana. Scientific Reports, 2016, 6, 34027.	1.6	209
81	Mode of Inheritance of Primary Metabolic Traits in Tomato Â. Plant Cell, 2008, 20, 509-523.	3.1	208
82	Systemic analysis of inducible target of rapamycin mutants reveal a general metabolic switch controlling growth in <i><scp>A</scp>rabidopsis thaliana</i>. Plant Journal, 2013, 73, 897-909.	2.8	205
83	Exploring the Diversity of Plant Metabolism. Trends in Plant Science, 2019, 24, 83-98.	4.3	203
84	Combining genetic diversity, informatics and metabolomics to facilitate annotation of plant gene function. Nature Protocols, 2010, 5, 1210-1227.	5.5	202
85	Adjustment of growth and central metabolism to a mild but sustained nitrogenâ€limitation in <i>Arabidopsis</i>. Plant, Cell and Environment, 2009, 32, 300-318.	2.8	201
86	Molecular regulation of fruit ripening. Frontiers in Plant Science, 2013, 4, 198.	1.7	200
87	A Cytosolic Pathway for the Conversion of Hydroxypyruvate to Glycerate during Photorespiration in <i>Arabidopsis</i>. Plant Cell, 2008, 20, 2848-2859.	3.1	193
88	Tissue- and Cell-Type Specific Transcriptome Profiling of Expanding Tomato Fruit Provides Insights into Metabolic and Regulatory Specialization and Cuticle Formation Â. Plant Cell, 2011, 23, 3893-3910.	3.1	193
89	The Unprecedented Versatility of the Plantâ€Ž Thioredoxin System. Trends in Plant Science, 2017, 22, 249-262.	4.3	192
90	De Novo Assembly of a New <i>Solanum pennellii</i> Accession Using Nanopore Sequencing. Plant Cell, 2017, 29, 2336-2348.	3.1	192

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91	The Spatial Organization of Metabolism Within the Plant Cell. Annual Review of Plant Biology, 2013, 64, 723-746.	8.6	191
92	Overexpression of the vascular brassinosteroid receptor BRL3 confers drought resistance without penalizing plant growth. Nature Communications, 2018, 9, 4680.	5.8	189
93	Revisiting the Basal Role of ABA â€" Roles Outside of Stress. Trends in Plant Science, 2019, 24, 625-635.	4.3	189
94	Identification and Mode of Inheritance of Quantitative Trait Loci for Secondary Metabolite Abundance in Tomato. Plant Cell, 2015, 27, 485-512.	3.1	188
95	Genome-Wide Association in Tomato Reveals 44 Candidate Loci for Fruit Metabolic Traits Â. Plant Physiology, 2014, 165, 1120-1132.	2.3	187
96	Silencing of the Mitochondrial Ascorbate Synthesizing Enzyme <scp>l</scp>-Galactono-1,4-Lactone Dehydrogenase Affects Plant and Fruit Development in Tomato. Plant Physiology, 2007, 145, 1408-1422.	2.3	184
97	Natural occurring epialleles determine vitamin E accumulation in tomato fruits. Nature Communications, 2014, 5, 3027.	5.8	179
98	Thioredoxin, a master regulator of the tricarboxylic acid cycle in plant mitochondria. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E1392-400.	3.3	179
99	Starch content and yield increase as a result of altering adenylate pools in transgenic plants. Nature Biotechnology, 2002, 20, 1256-1260.	9.4	176
100	Dynamic Plastid Redox Signals Integrate Gene Expression and Metabolism to Induce Distinct Metabolic States in Photosynthetic Acclimation in<i>Arabidopsis</i>Â. Plant Cell, 2009, 21, 2715-2732.	3.1	176
101	On the Discordance of Metabolomics with Proteomics and Transcriptomics: Coping with Increasing Complexity in Logic, Chemistry, and Network Interactions Scientific Correspondence. Plant Physiology, 2012, 158, 1139-1145.	2.3	176
102	Integrative Comparative Analyses of Transcript and Metabolite Profiles from Pepper and Tomato Ripening and Development Stages Uncovers Species-Specific Patterns of Network Regulatory Behavior Â. Plant Physiology, 2012, 159, 1713-1729.	2.3	174
103	High-Resolution Metabolic Phenotyping of Genetically and Environmentally Diverse Potato Tuber Systems. Identification of Phenocopies. Plant Physiology, 2001, 127, 749-764.	2.3	173
104	Molecular mechanisms of desiccation tolerance in the resurrection glacial relic Haberlea rhodopensis. Cellular and Molecular Life Sciences, 2013, 70, 689-709.	2.4	168
105	Global Analysis of the Role of Autophagy in Cellular Metabolism and Energy Homeostasis in Arabidopsis Seedlings under Carbon Starvation. Plant Cell, 2015, 27, 306-322.	3.1	166
106	Metabolomics 20Âyears on: what have we learned and what hurdles remain?. Plant Journal, 2018, 94, 933-942.	2.8	166
107	Proteogenomic analysis reveals alternative splicing and translation as part of the abscisic acid response in Arabidopsis seedlings. Plant Journal, 2017, 91, 518-533.	2.8	156
108	The Penium margaritaceum Genome: Hallmarks of the Origins of Land Plants. Cell, 2020, 181, 1097-1111.e12.	13.5	153

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109	Reduced Expression of Succinyl-Coenzyme A Ligase Can Be Compensated for by Up-Regulation of the<i>Î³</i>-Aminobutyrate Shunt in Illuminated Tomato Leaves. Plant Physiology, 2007, 145, 626-639.	2.3	151
110	Molecular Identification and Functional Characterization of Arabidopsis thaliana Mitochondrial and Chloroplastic NAD+ Carrier Proteins. Journal of Biological Chemistry, 2009, 284, 31249-31259.	1.6	151
111	Tomato Fruit Photosynthesis Is Seemingly Unimportant in Primary Metabolism and Ripening But Plays a Considerable Role in Seed Development Â Â. Plant Physiology, 2011, 157, 1650-1663.	2.3	150
112	Genetic Determinants of the Network of Primary Metabolism and Their Relationships to Plant Performance in a Maize Recombinant Inbred Line Population. Plant Cell, 2015, 27, 1839-1856.	3.1	149
113	High-Throughput CRISPR/Cas9 Mutagenesis Streamlines Trait Gene Identification in Maize. Plant Cell, 2020, 32, 1397-1413.	3.1	148
114	Metabolomics in the Context of Plant Natural Products Research: From Sample Preparation to Metabolite Analysis. Metabolites, 2020, 10, 37.	1.3	147
115	Characterization of a recently evolved flavonol-phenylacyltransferase gene provides signatures of natural light selection in Brassicaceae. Nature Communications, 2016, 7, 12399.	5.8	145
116	Antisense inhibition of plastidial phosphoglucomutase provides compelling evidence that potato tuber amyloplasts import carbon from the cytosol in the form of glucose-6-phosphate. Plant Journal, 2000, 23, 43-53.	2.8	144
117	Glycine decarboxylase controls photosynthesis and plant growth. FEBS Letters, 2012, 586, 3692-3697.	1.3	144
118	Metabolic Control of Redox and Redox Control of Metabolism in Plants. Antioxidants and Redox Signaling, 2014, 21, 1389-1421.	2.5	143
119	Ultra-high-performance liquid chromatography high-resolution mass spectrometry variants for metabolomics research. Nature Methods, 2021, 18, 733-746.	9.0	143
120	Relationships of Leaf Net Photosynthesis, Stomatal Conductance, and Mesophyll Conductance to Primary Metabolism: A Multispecies Meta-Analysis Approach. Plant Physiology, 2016, 171, 265-279.	2.3	142
121	Regulation of the mitochondrial tricarboxylic acid cycle. Current Opinion in Plant Biology, 2013, 16, 335-343.	3.5	141
122	<i>PLGG1</i> , a plastidic glycolate glycerate transporter, is required for photorespiration and defines a unique class of metabolite transporters. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 3185-3190.	3.3	141
123	The NAC Transcription Factor SlNAP2 Regulates Leaf Senescence and Fruit Yield in Tomato. Plant Physiology, 2018, 177, 1286-1302.	2.3	140
124	Mitochondrial Dihydrolipoyl Dehydrogenase Activity Shapes Photosynthesis and Photorespiration of <i>Arabidopsis thaliana</i>. Plant Cell, 2015, 27, 1968-1984.	3.1	139
125	Altering Trehalose-6-Phosphate Content in Transgenic Potato Tubers Affects Tuber Growth and Alters Responsiveness to Hormones during Sprouting Â Â. Plant Physiology, 2011, 156, 1754-1771.	2.3	138
126	The style and substance of plant flavonoid decoration; towards defining both structure and function. Phytochemistry, 2020, 174, 112347.	1.4	138

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127	Conservation and diversification of flavonoid metabolism in the plant kingdom. Current Opinion in Plant Biology, 2020, 55, 100-108.	3.5	137
128	A Bypass of Sucrose Synthase Leads to Low Internal Oxygen and Impaired Metabolic Performance in Growing Potato Tubers. Plant Physiology, 2003, 132, 2058-2072.	2.3	135
129	Fruit Carbohydrate Metabolism in an Introgression Line of Tomato with Increased Fruit Soluble Solids. Plant and Cell Physiology, 2005, 46, 425-437.	1.5	135
130	Diurnal Changes of Polysome Loading Track Sucrose Content in the Rosette of Wild-Type Arabidopsis and the Starchless <i>pgm</i> Mutant Â Â. Plant Physiology, 2013, 162, 1246-1265.	2.3	133
131	Quantifying Protein Synthesis and Degradation in Arabidopsis by Dynamic ¹³CO₂ Labeling and Analysis of Enrichment in Individual Amino Acids in Their Free Pools and in Protein. Plant Physiology, 2015, 168, 74-93.	2.3	132
132	The Photorespiratory Metabolite 2-Phosphoglycolate Regulates Photosynthesis and Starch Accumulation in Arabidopsis. Plant Cell, 2017, 29, 2537-2551.	3.1	132
133	Network Analysis of Enzyme Activities and Metabolite Levels and Their Relationship to Biomass in a Large Panel of<i>Arabidopsis</i>Accessions Â Â. Plant Cell, 2010, 22, 2872-2893.	3.1	131
134	Cytosolic pyruvate,orthophosphate dikinase functions in nitrogen remobilization during leaf senescence and limits individual seed growth and nitrogen content. Plant Journal, 2010, 62, 641-652.	2.8	129
135	Metabolic variation between japonica and indica rice cultivars as revealed by non-targeted metabolomics. Scientific Reports, 2014, 4, 5067.	1.6	129
136	The mitochondrial electron transfer flavoprotein complex is essential for survival of Arabidopsis in extended darkness. Plant Journal, 2006, 47, 751-760.	2.8	128
137	Sulfur deficiencyâ€"induced repressor proteins optimize glucosinolate biosynthesis in plants. Science Advances, 2016, 2, e1601087.	4.7	127
138	Manipulating photorespiration to increase plant productivity: recent advances and perspectives for crop improvement. Journal of Experimental Botany, 2016, 67, 2977-2988.	2.4	127
139	Natural variation in flavonol and anthocyanin metabolism during cold acclimation in <scp><i>A</i></scp><i>rabidopsis thaliana</i> accessions. Plant, Cell and Environment, 2015, 38, 1658-1672.	2.8	126
140	Multiple strategies to prevent oxidative stress in Arabidopsis plants lacking the malate valve enzyme NADP-malate dehydrogenase. Journal of Experimental Botany, 2012, 63, 1445-1459.	2.4	125
141	Metabolic analysis of kiwifruit (Actinidia deliciosa) berries from extreme genotypes reveals hallmarks for fruit starch metabolism. Journal of Experimental Botany, 2013, 64, 5049-5063.	2.4	124
142	Opportunities for improving leaf water use efficiency under climate change conditions. Plant Science, 2014, 226, 108-119.	1.7	124
143	Next-generation strategies for understanding and influencing sourceâ€"sink relations in crop plants. Current Opinion in Plant Biology, 2018, 43, 63-70.	3.5	119
144	Kinetics of labelling of organic and amino acids in potato tubers by gas chromatography-mass spectrometry following incubation in13C labelled isotopes. Plant Journal, 2004, 39, 668-679.	2.8	118

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145	Combined transcription factor profiling, microarray analysis and metabolite profiling reveals the transcriptional control of metabolic shifts occurring during tomato fruit development. Plant Journal, 2011, 68, 999-1013.	2.8	118
146	The Genetics of Plant Metabolism. Annual Review of Genetics, 2017, 51, 287-310.	3.2	118
147	An In Vivo Perspective of the Role(s) of the Alternative Oxidase Pathway. Trends in Plant Science, 2018, 23, 206-219.	4.3	118
148	Two bifunctional inositol pyrophosphate kinases/phosphatases control plant phosphate homeostasis. ELife, 2019, 8, .	2.8	118
149	Nonsupervised Construction and Application of Mass Spectral and Retention Time Index Libraries From Time-of-Flight Gas Chromatography-Mass Spectrometry Metabolite Profiles. Methods in Molecular Biology, 2007, 358, 19-38.	0.4	116
150	The form of nitrogen nutrition affects resistance against Pseudomonas syringae pv. phaseolicola in tobacco. Journal of Experimental Botany, 2013, 64, 553-568.	2.4	116
151	Mapping the Arabidopsis Metabolic Landscape by Untargeted Metabolomics at Different Environmental Conditions. Molecular Plant, 2018, 11, 118-134.	3.9	116
152	Conversion of MapMan to Allow the Analysis of Transcript Data from Solanaceous Species: Effects of Genetic and Environmental Alterations in Energy Metabolism in the Leaf. Plant Molecular Biology, 2006, 60, 773-792.	2.0	115
153	Metabolic Profiling of a Mapping Population Exposes New Insights in the Regulation of Seed Metabolism and Seed, Fruit, and Plant Relations. PLoS Genetics, 2012, 8, e1002612.	1.5	115
154	Complete Mitochondrial Complex I Deficiency Induces an Up-Regulation of Respiratory Fluxes That Is Abolished by Traces of Functional Complex I. Plant Physiology, 2015, 168, 1537-1549.	2.3	113
155	Induction of the AOX1D Isoform of Alternative Oxidase in A. thaliana T-DNA Insertion Lines Lacking Isoform AOX1A Is Insufficient to Optimize Photosynthesis when Treated with Antimycin A. Molecular Plant, 2009, 2, 284-297.	3.9	112
156	On the role of the tricarboxylic acid cycle in plant productivity. Journal of Integrative Plant Biology, 2018, 60, 1199-1216.	4.1	112
157	Targeted Enhancement of Glutamate-to-Î³-Aminobutyrate Conversion in Arabidopsis Seeds Affects Carbon-Nitrogen Balance and Storage Reserves in a Development-Dependent Manner Â Â. Plant Physiology, 2011, 157, 1026-1042.	2.3	111
158	Ethylene is involved in strawberry fruit ripening in an organ-specific manner. Journal of Experimental Botany, 2013, 64, 4421-4439.	2.4	111
159	Gibberellin biosynthesis and signalling during development of the strawberry receptacle. New Phytologist, 2011, 191, 376-390.	3.5	110
160	Convergent selection of a WD40 protein that enhances grain yield in maize and rice. Science, 2022, 375, eabg7985.	6.0	110
161	Genome assembly of wild tea tree DASZ reveals pedigree and selection history of tea varieties. Nature Communications, 2020, 11, 3719.	5.8	108
162	MicroTom Metabolic Network: Rewiring Tomato Metabolic Regulatory Network throughout the Growth Cycle. Molecular Plant, 2020, 13, 1203-1218.	3.9	107

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163	Synchronization of developmental, molecular and metabolic aspects of sourceâ€“sink interactions. Nature Plants, 2020, 6, 55-66.	4.7	107
164	Vitamin B1 biosynthesis in plants requires the essential ironâ€“sulfur cluster protein, THIC. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 19637-19642.	3.3	106
165	The<i>Arabidopsis onset of leaf death5</i>Mutation of Quinolinate Synthase Affects Nicotinamide Adenine Dinucleotide Biosynthesis and Causes Early Ageing. Plant Cell, 2008, 20, 2909-2925.	3.1	106
166	Genome-wide Dissection of Co-selected UV-B Responsive Pathways in the UV-B Adaptation of Qingke. Molecular Plant, 2020, 13, 112-127.	3.9	106
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