Kazuki Saito

List of Publications by Citations

561 papers	36,252 citations	99 h-index	169 g-index
600 ext. papers	42,926 ext. citations	5.8 avg, IF	7.3 L-index

#	Paper	IF	Citations
561	MassBank: a public repository for sharing mass spectral data for life sciences. *Journal of Mass Spectrometry*, **2010**, 45, 703-14	2.2	1321
560	Functional genomics by integrated analysis of metabolome and transcriptome of Arabidopsis plants over-expressing an MYB transcription factor. *Plant Journal*, **2005**, 42, 218-35	6.9	747
559	Integration of transcriptomics and metabolomics for understanding of global responses to nutritional stresses in Arabidopsis thaliana. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 10205-10	11.5	637
558	Potential of metabolomics as a functional genomics tool. *Trends in Plant Science*, **2004**, 9, 418-25	13.1	627
557	Enhancement of oxidative and drought tolerance in Arabidopsis by overaccumulation of antioxidant flavonoids. *Plant Journal*, **2014**, 77, 367-79	6.9	573
556	Omics-based identification of Arabidopsis Myb transcription factors regulating aliphatic glucosinolate biosynthesis. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 6478-83	11.5	556
555	Sulfur assimilation in photosynthetic organisms: molecular functions and regulations of transporters and assimilatory enzymes. *Annual Review of Plant Biology*, **2011**, 62, 157-84	30.7	553
554	Metabolomics for functional genomics, systems biology, and biotechnology. *Annual Review of Plant Biology*, **2010**, 61, 463-89	30.7	521
553	The flavonoid biosynthetic pathway in Arabidopsis: structural and genetic diversity. *Plant Physiology and Biochemistry*, **2013**, 72, 21-34	5.4	440
552	Characterization of the ABA-regulated global responses to dehydration in Arabidopsis by metabolomics. *Plant Journal*, **2009**, 57, 1065-78	6.9	427
551	The roles of three functional sulphate transporters involved in uptake and translocation of sulphate in Arabidopsis thaliana. *Plant Journal*, **2000**, 23, 171-82	6.9	422
550	Sulfate transport and assimilation in plants. *Plant Physiology*, **1999**, 120, 637-44	6.6	395
549	The AtGenExpress hormone and chemical treatment data set: experimental design, data evaluation, model data analysis and data access. *Plant Journal*, **2008**, 55, 526-542	6.9	383
548	Elucidation of gene-to-gene and metabolite-to-gene networks in arabidopsis by integration of metabolomics and transcriptomics. *Journal of Biological Chemistry*, **2005**, 280, 25590-5	5.4	380
547	Can sub-Saharan Africa feed itself?. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 14964-14969	11.5	379
546	Members of the LBD family of transcription factors repress anthocyanin synthesis and affect additional nitrogen responses in Arabidopsis. *Plant Cell*, **2009**, 21, 3567-84	11.6	365
545	KNApSAcK family databases: integrated metabolite-plant species databases for multifaceted plant research. *Plant and Cell Physiology*, **2012**, 53, e1	4.9	356

544	Sulphur starvation induces the expression of microRNA-395 and one of its target genes but in different cell types. *Plant Journal*, **2009**, 57, 313-21	6.9	328
543	ATTED-II: a database of co-expressed genes and cis elements for identifying co-regulated gene groups in Arabidopsis. *Nucleic Acids Research*, **2007**, 35, D863-9	20.1	319
542	Comprehensive flavonol profiling and transcriptome coexpression analysis leading to decoding gene-metabolite correlations in Arabidopsis. *Plant Cell*, **2008**, 20, 2160-76	11.6	308
541	Sulfur assimilatory metabolism. The long and smelling road. *Plant Physiology*, **2004**, 136, 2443-50	6.6	305
540	Hydrogen Rearrangement Rules: Computational MS/MS Fragmentation and Structure Elucidation Using MS-FINDER Software. *Analytical Chemistry*, **2016**, 88, 7946-58	7.8	292
539	Coordinated activation of metabolic pathways for antioxidants and defence compounds by jasmonates and their roles in stress tolerance in Arabidopsis. *Plant Journal*, **2005**, 44, 653-68	6.9	292
538	Decoding genes with coexpression networks and metabolomics - 'majority report by precogs'. *Trends in Plant Science*, **2008**, 13, 36-43	13.1	281
537	Licorice beta-amyrin 11-oxidase, a cytochrome P450 with a key role in the biosynthesis of the triterpene sweetener glycyrrhizin. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 14204-9	11.5	280
536	Recent advances in the biosynthesis and accumulation of anthocyanins. *Natural Product Reports*, **2003**, 20, 288-303	15.1	276
535	Arabidopsis SLIM1 is a central transcriptional regulator of plant sulfur response and metabolism. *Plant Cell*, **2006**, 18, 3235-51	11.6	274
534	Two distinct high-affinity sulfate transporters with different inducibilities mediate uptake of sulfate in Arabidopsis roots. *Plant Journal*, **2002**, 29, 465-73	6.9	273
533	Metabolic pathways involved in cold acclimation identified by integrated analysis of metabolites and transcripts regulated by DREB1A and DREB2A. *Plant Physiology*, **2009**, 150, 1972-80	6.6	261
532	Global expression profiling of sulfur-starved Arabidopsis by DNA macroarray reveals the role of O-acetyl-l-serine as a general regulator of gene expression in response to sulfur nutrition. *Plant Journal*, **2003**, 33, 651-63	6.9	261
531	A proposed framework for the description of plant metabolomics experiments and their results. *Nature Biotechnology*, **2004**, 22, 1601-6	44.5	260
530	UGT73C6 and UGT78D1, glycosyltransferases involved in flavonol glycoside biosynthesis in Arabidopsis thaliana. *Journal of Biological Chemistry*, **2003**, 278, 43910-8	5.4	244
529	Recommendations for reporting metabolite data. *Plant Cell*, **2011**, 23, 2477-82	11.6	238
528	The AtGenExpress hormone and chemical treatment data set: experimental design, data evaluation, model data analysis and data access. *Plant Journal*, **2008**, 55, 526-42	6.9	238
527	RIKEN tandem mass spectral database (ReSpect) for phytochemicals: a plant-specific MS/MS-based data resource and database. *Phytochemistry*, **2012**, 82, 38-45	4	214

526	Pause-and-stop: the effects of osmotic stress on cell proliferation during early leaf development in Arabidopsis and a role for ethylene signaling in cell cycle arrest. *Plant Cell*, **2011**, 23, 1876-88	11.6	212
525	Triterpene functional genomics in licorice for identification of CYP72A154 involved in the biosynthesis of glycyrrhizin. *Plant Cell*, **2011**, 23, 4112-23	11.6	211
524	Identification of a flavonol 7-O-rhamnosyltransferase gene determining flavonoid pattern in Arabidopsis by transcriptome coexpression analysis and reverse genetics. *Journal of Biological Chemistry*, **2007**, 282, 14932-41	5.4	206
523	Widely targeted metabolomics based on large-scale MS/MS data for elucidating metabolite accumulation patterns in plants. *Plant and Cell Physiology*, **2009**, 50, 37-47	4.9	205
522	Transcript profiling of an Arabidopsis PSEUDO RESPONSE REGULATOR arrhythmic triple mutant reveals a role for the circadian clock in cold stress response. *Plant and Cell Physiology*, **2009**, 50, 447-62	4.9	203
521	Impact of clock-associated Arabidopsis pseudo-response regulators in metabolic coordination. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 7251-6	11.5	200
520	Integrated metabolomics for abiotic stress responses in plants. *Current Opinion in Plant Biology*, **2015**, 24, 10-6	9.9	198
519	MS/MS spectral tag-based annotation of non-targeted profile of plant secondary metabolites. *Plant Journal*, **2009**, 57, 555-77	6.9	191
518	CYP716A subfamily members are multifunctional oxidases in triterpenoid biosynthesis. *Plant and Cell Physiology*, **2011**, 52, 2050-61	4.9	190
517	Metabolomics reveals comprehensive reprogramming involving two independent metabolic responses of Arabidopsis to UV-B light. *Plant Journal*, **2011**, 67, 354-69	6.9	186
516	A chloroplastic UDP-glucose pyrophosphorylase from Arabidopsis is the committed enzyme for the first step of sulfolipid biosynthesis. *Plant Cell*, **2009**, 21, 892-909	11.6	174
515	Phloem-localizing sulfate transporter, Sultr1;3, mediates re-distribution of sulfur from source to sink organs in Arabidopsis. *Plant Physiology*, **2003**, 131, 1511-7	6.6	174
514	Integrated analysis of the effects of cold and dehydration on rice metabolites, phytohormones, and gene transcripts. *Plant Physiology*, **2014**, 164, 1759-71	6.6	172
513	Integrated omics approaches in plant systems biology. *Current Opinion in Chemical Biology*, **2009**, 13, 532-8	9.7	172
512	Integrating genomics and metabolomics for engineering plant metabolic pathways. *Current Opinion in Biotechnology*, **2005**, 16, 174-9	11.4	172
511	beta-Cyanoalanine synthase is a mitochondrial cysteine synthase-like protein in spinach and Arabidopsis. *Plant Physiology*, **2000**, 123, 1163-71	6.6	164
510	Direct evidence for anthocyanidin synthase as a 2-oxoglutarate-dependent oxygenase: molecular cloning and functional expression of cDNA from a red forma of Perilla frutescens. *Plant Journal*, **1999**, 17, 181-9	6.9	164
509	Isoform-dependent differences in feedback regulation and subcellular localization of serine acetyltransferase involved in cysteine biosynthesis from Arabidopsis thaliana. *Journal of Biological Chemistry*, **1998**, 273, 32739-45	5.4	161

508	Interplay of SLIM1 and miR395 in the regulation of sulfate assimilation in Arabidopsis. *Plant Journal* , **2011**, 66, 863-76	6.9	159
507	Disruption of adenosine-5'-phosphosulfate kinase in Arabidopsis reduces levels of sulfated secondary metabolites. *Plant Cell*, **2009**, 21, 910-27	11.6	159
506	Roles of lipids as signaling molecules and mitigators during stress response in plants. *Plant Journal*, **2014**, 79, 584-96	6.9	158
505	Sterol side chain reductase 2 is a key enzyme in the biosynthesis of cholesterol, the common precursor of toxic steroidal glycoalkaloids in potato. *Plant Cell*, **2014**, 26, 3763-74	11.6	155
504	Dissection of genotype-phenotype associations in rice grains using metabolome quantitative trait loci analysis. *Plant Journal*, **2012**, 70, 624-36	6.9	155
503	Metabolomic approaches toward understanding nitrogen metabolism in plants. *Journal of Experimental Botany*, **2011**, 62, 1439-53	7	155
502	Convergent evolution in the BAHD family of acyl transferases: identification and characterization of anthocyanin acyl transferases from Arabidopsis thaliana. *Plant Journal*, **2007**, 50, 678-95	6.9	153
501	Metabolomic correlation-network modules in Arabidopsis based on a graph-clustering approach. *BMC Systems Biology*, **2011**, 5, 1	3.5	150
500	AtMetExpress development: a phytochemical atlas of Arabidopsis development. *Plant Physiology*, **2010**, 152, 566-78	6.6	149
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498	Dual biosynthetic pathways to phytosterol via cycloartenol and lanosterol in Arabidopsis. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 725-30	11.5	148
497	Modern plant metabolomics: advanced natural product gene discoveries, improved technologies, and future prospects. *Natural Product Reports*, **2015**, 32, 212-29	15.1	147
496	Camptothecin biosynthetic genes in hairy roots of Ophiorrhiza pumila: cloning, characterization and differential expression in tissues and by stress compounds. *Plant and Cell Physiology*, **2003**, 44, 395-403	4.9	144
495	A lipidome atlas in MS-DIAL 4. *Nature Biotechnology*, **2020**, 38, 1159-1163	44.5	141
494	PRIMe: a Web site that assembles tools for metabolomics and transcriptomics. *In Silico Biology*, **2008**, 8, 339-45	2	141
493	Mechanistic studies on three 2-oxoglutarate-dependent oxygenases of flavonoid biosynthesis: anthocyanidin synthase, flavonol synthase, and flavanone 3beta-hydroxylase. *Journal of Biological Chemistry*, **2004**, 279, 1206-16	5.4	140
492	KaPPA-view: a web-based analysis tool for integration of transcript and metabolite data on plant metabolic pathway maps. *Plant Physiology*, **2005**, 138, 1289-300	6.6	140
491	Physiological roles of the beta-substituted alanine synthase gene family in Arabidopsis. *Plant Physiology*, **2008**, 146, 310-20	6.6	138

490	Application of a metabolomic method combining one-dimensional and two-dimensional gas chromatography-time-of-flight/mass spectrometry to metabolic phenotyping of natural variants in rice. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2007**, 855, 71-9	3.2	136
489	A new class of plant lipid is essential for protection against phosphorus depletion. *Nature Communications*, **2013**, 4, 1510	17.4	135
488	Role of camalexin, indole glucosinolates, and side chain modification of glucosinolate-derived isothiocyanates in defense of Arabidopsis against Sclerotinia sclerotiorum. *Plant Journal*, **2011**, 67, 81-93	6.9	130
487	Acetate-mediated novel survival strategy against drought in plants. *Nature Plants*, **2017**, 3, 17097	11.5	129
486	Metabolic activation of mutagenic N-hydroxyarylamines by O-acetyltransferase in Salmonella typhimurium TA98. *Archives of Biochemistry and Biophysics*, **1985**, 239, 286-95	4.1	128
485	Triterpenoid biosynthesis and engineering in plants. *Frontiers in Plant Science*, **2011**, 2, 25	6.2	126
484	Compensation for systematic cross-contribution improves normalization of mass spectrometry based metabolomics data. *Analytical Chemistry*, **2009**, 81, 7974-80	7.8	125
483	Two glycosyltransferases involved in anthocyanin modification delineated by transcriptome independent component analysis in Arabidopsis thaliana. *Plant Journal*, **2012**, 69, 154-67	6.9	124
482	Phosphoenolpyruvate carboxylase intrinsically located in the chloroplast of rice plays a crucial role in ammonium assimilation. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 5226-31	11.5	119
481	OsATG7 is required for autophagy-dependent lipid metabolism in rice postmeiotic anther development. *Autophagy*, **2014**, 10, 878-88	10.2	117
480	Posttranscriptional regulation of high-affinity sulfate transporters in Arabidopsis by sulfur nutrition. *Plant Physiology*, **2007**, 145, 378-88	6.6	117
479	Heavy metal tolerance of transgenic tobacco plants over-expressing cysteine synthase. *Biotechnology Letters*, **2004**, 26, 153-7	3	115
478	Metabolome-genome-wide association study dissects genetic architecture for generating natural variation in rice secondary metabolism. *Plant Journal*, **2015**, 81, 13-23	6.9	114
477	Sulfur availability regulates plant growth via glucose-TOR signaling. *Nature Communications*, **2017**, 8, 1174	17.4	113
476	A gamma-glutamyl transpeptidase-independent pathway of glutathione catabolism to glutamate via 5-oxoproline in Arabidopsis. *Plant Physiology*, **2008**, 148, 1603-13	6.6	113
475	Landscape of the lipidome and transcriptome under heat stress in Arabidopsis thaliana. *Scientific Reports*, **2015**, 5, 10533	4.9	112
474	Reaction mechanism from leucoanthocyanidin to anthocyanidin 3-glucoside, a key reaction for coloring in anthocyanin biosynthesis. *Journal of Biological Chemistry*, **2001**, 276, 25797-803	5.4	110
473	Cysteine synthase overexpression in tobacco confers tolerance to sulfur-containing environmental pollutants. *Plant Physiology*, **2001**, 126, 973-80	6.6	109

472	Statistical indices for simultaneous large-scale metabolite detections for a single NMR spectrum. *Analytical Chemistry*, **2010**, 82, 1653-8	7.8	108
471	Characterization and expression analysis of a serine acetyltransferase gene family involved in a key step of the sulfur assimilation pathway in Arabidopsis. *Plant Physiology*, **2005**, 137, 220-30	6.6	108
470	Metabolite profiling of alkaloids and strictosidine synthase activity in camptothecin producing plants. *Phytochemistry*, **2003**, 62, 461-70	4	107
469	From field to atlas: Upscaling of location-specific yield gap estimates. *Field Crops Research*, **2015**, 177, 98-108	5.5	105
468	Metabolomics-oriented isolation and structure elucidation of 37 compounds including two anthocyanins from Arabidopsis thaliana. *Phytochemistry*, **2009**, 70, 1017-29	4	105
467	Functional genomics for plant natural product biosynthesis. *Natural Product Reports*, **2009**, 26, 1466-87	15.1	104
466	Recent advances of metabolomics in plant biotechnology. *Plant Biotechnology Reports*, **2012**, 6, 1-15	2.5	102
465	Molecular cloning and biochemical characterization of a novel anthocyanin 5-O-glucosyltransferase by mRNA differential display for plant forms regarding anthocyanin. *Journal of Biological Chemistry*, **1999**, 274, 7405-11	5.4	102
464	Increased bioplastic production with an RNA polymerase sigma factor SigE during nitrogen starvation in Synechocystis sp. PCC 6803. *DNA Research*, **2013**, 20, 525-35	4.5	100
463	A cheminformatics approach to characterize metabolomes in stable-isotope-labeled organisms. *Nature Methods*, **2019**, 16, 295-298	21.6	99
462	Metabolomics data reveal a crucial role of cytosolic glutamine synthetase 1;1 in coordinating metabolic balance in rice. *Plant Journal*, **2011**, 66, 456-66	6.9	99
461	Comparative genomics and reverse genetics analysis reveal indispensable functions of the serine acetyltransferase gene family in Arabidopsis. *Plant Cell*, **2008**, 20, 2484-96	11.6	98
460	Plant lipidomics based on hydrophilic interaction chromatography coupled to ion trap time-of-flight mass spectrometry. *Metabolomics*, **2013**, 9, 121-131	4.7	97
459	Combinatorial biosynthesis of legume natural and rare triterpenoids in engineered yeast. *Plant and Cell Physiology*, **2013**, 54, 740-9	4.9	97
458	Cloning and molecular analysis of structural genes involved in anthocyanin biosynthesis and expressed in a forma-specific manner in Perilla frutescens. *Plant Molecular Biology*, **1997**, 35, 915-27	4.6	97
457	Structure and expression analyses of the S-adenosylmethionine synthetase gene family in Arabidopsis thaliana. *Gene*, **1989**, 84, 359-69	3.8	95
456	Draft genome assembly and annotation of Glycyrrhiza uralensis, a medicinal legume. *Plant Journal*, **2017**, 89, 181-194	6.9	94
455	Unbiased characterization of genotype-dependent metabolic regulations by metabolomic approach in Arabidopsis thaliana. *BMC Systems Biology*, **2007**, 1, 53	3.5	94

454	Biosynthesis of camptothecin. In silico and in vivo tracer study from [1-13C]glucose. *Plant Physiology*, **2004**, 134, 161-70	6.6	92
453	Deficiency of Starch Synthase IIIa and IVb Alters Starch Granule Morphology from Polyhedral to Spherical in Rice Endosperm. *Plant Physiology*, **2016**, 170, 1255-70	6.6	91
452	Covering chemical diversity of genetically-modified tomatoes using metabolomics for objective substantial equivalence assessment. *PLoS ONE*, **2011**, 6, e16989	3.7	91
451	Mechanism of activation of proximate mutagens in Ames' tester strains: the acetyl-CoA dependent enzyme in Salmonella typhimurium TA98 deficient in TA98/1,8-DNP6 catalyzes DNA-binding as the cause of mutagenicity. *Biochemical and Biophysical Research Communications*, **1983**, 116, 141-7	3.4	90
450	Characterization of a recently evolved flavonol-phenylacyltransferase gene provides signatures of natural light selection in Brassicaceae. *Nature Communications*, **2016**, 7, 12399	17.4	90
449	Lysine decarboxylase catalyzes the first step of quinolizidine alkaloid biosynthesis and coevolved with alkaloid production in leguminosae. *Plant Cell*, **2012**, 24, 1202-16	11.6	89
448	Molecular cloning and characterization of a plant serine acetyltransferase playing a regulatory role in cysteine biosynthesis from watermelon. *Journal of Biological Chemistry*, **1995**, 270, 16321-6	5.4	89
447	Mechanisms of resistance to self-produced toxic secondary metabolites in plants. *Phytochemistry Reviews*, **2008**, 7, 467-477	7.7	88
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445	Generation of □solanine-free hairy roots of potato by CRISPR/Cas9 mediated genome editing of the St16DOX gene. *Plant Physiology and Biochemistry*, **2018**, 131, 70-77	5.4	86
444	Transgenic medicinal plants: Agrobacterium-mediated foreign gene transfer and production of secondary metabolites. *Journal of Natural Products*, **1992**, 55, 149-62	4.9	86
443	Genetic engineering of group 2 sigma factor SigE widely activates expressions of sugar catabolic genes in Synechocystis species PCC 6803. *Journal of Biological Chemistry*, **2011**, 286, 30962-30971	5.4	85
442	Mass spectrometry-based metabolomics: a guide for annotation, quantification and best reporting practices. *Nature Methods*, **2021**, 18, 747-756	21.6	83
441	Using metabolomic approaches to explore chemical diversity in rice. *Molecular Plant*, **2015**, 8, 58-67	14.4	82
440	Phytochemical genomics--a new trend. *Current Opinion in Plant Biology*, **2013**, 16, 373-80	9.9	82
439	Molecular cloning and characterization of the genes encoding two isoforms of cysteine synthase in the enteric protozoan parasite Entamoeba histolytica. *Molecular and Biochemical Parasitology*, **1998**, 97, 33-44	1.9	82
438	Jasmonate-Responsive ERF Transcription Factors Regulate Steroidal Glycoalkaloid Biosynthesis in Tomato. *Plant and Cell Physiology*, **2016**, 57, 961-75	4.9	81
437	Alternation of flavonoid accumulation under drought stress in Arabidopsis thaliana. *Plant Signaling and Behavior*, **2014**, 9, e29518	2.5	78

436	A WD-repeat-containing putative regulatory protein in anthocyanin biosynthesis in Perilla frutescens. *Plant Molecular Biology*, **2002**, 50, 485-95	4.6	77
435	Mutations in topoisomerase I as a self-resistance mechanism coevolved with the production of the anticancer alkaloid camptothecin in plants. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 6782-6	11.5	76
434	Phytochemical genomics in Arabidopsis thaliana: A case study for functional identification of flavonoid biosynthesis genes. *Pure and Applied Chemistry*, **2007**, 79, 811-823	2.1	76
433	Metabolomics for unknown plant metabolites. *Analytical and Bioanalytical Chemistry*, **2013**, 405, 5005-11	4.4	75
432	Arabidopsis bile acid:sodium symporter family protein 5 is involved in methionine-derived glucosinolate biosynthesis. *Plant and Cell Physiology*, **2009**, 50, 1579-86	4.9	75
431	Overexpression of an Arabidopsis thaliana galactinol synthase gene improves drought tolerance in transgenic rice and increased grain yield in the field. *Plant Biotechnology Journal*, **2017**, 15, 1465-1477	11.6	74
430	Two flavonoid glucosyltransferases from Petunia hybrida: molecular cloning, biochemical properties and developmentally regulated expression. *Plant Molecular Biology*, **2002**, 48, 401-11	4.6	74
429	Evaluation of sixteen reference evapotranspiration methods under sahelian conditions in the Senegal River Valley. *Journal of Hydrology: Regional Studies*, **2015**, 3, 139-159	3.6	72
428	Leaf oil body functions as a subcellular factory for the production of a phytoalexin in Arabidopsis. *Plant Physiology*, **2014**, 164, 105-18	6.6	72
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426	Omics-based approaches to methionine side chain elongation in Arabidopsis: characterization of the genes encoding methylthioalkylmalate isomerase and methylthioalkylmalate dehydrogenase. *Plant and Cell Physiology*, **2009**, 50, 1181-90	4.9	72
425	Functional characterization of a gene encoding a fourth ATP sulfurylase isoform from Arabidopsis thaliana. *Gene*, **2000**, 248, 51-8	3.8	72
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422	Biochemistry and molecular biology of the late-stage of biosynthesis of anthocyanin: lessons from Perilla frutescens as a model plant. *New Phytologist*, **2002**, 155, 9-23	9.8	70
421	Bioreactor production of camptothecin by hairy root cultures of Ophiorrhiza pumila. *Biotechnology Letters*, **2002**, 24, 359-363	3	70
420	Metabolomics and differential gene expression in anthocyanin chemo-varietal forms of Perilla frutescens. *Phytochemistry*, **2003**, 62, 987-95	4	70
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417	Metabolic profiling and cytological analysis of proanthocyanidins in immature seeds of Arabidopsis thaliana flavonoid accumulation mutants. *Plant Journal*, **2010**, 62, 549-59	6.9	66
416	Metabolic profiling of flavonoids in Lotus japonicus using liquid chromatography Fourier transform ion cyclotron resonance mass spectrometry. *Phytochemistry*, **2008**, 69, 99-111	4	66
415	Differential expression of two cytochrome P450s involved in the biosynthesis of flavones and anthocyanins in chemo-varietal forms of Perilla frutescens. *Plant and Cell Physiology*, **2001**, 42, 1338-44	4.9	66
414	A flavonoid 3-O-glucoside:2"-O-glucosyltransferase responsible for terminal modification of pollen-specific flavonols in Arabidopsis thaliana. *Plant Journal*, **2014**, 79, 769-82	6.9	65
413	Proteomic and transcriptomic analysis of Arabidopsis seeds: molecular evidence for successive processing of seed proteins and its implication in the stress response to sulfur nutrition. *Plant Journal*, **2006**, 48, 557-71	6.9	64
412	Regulation of serine biosynthesis in Arabidopsis. Crucial role of plastidic 3-phosphoglycerate dehydrogenase in non-photosynthetic tissues. *Journal of Biological Chemistry*, **1999**, 274, 397-402	5.4	64
411	Capillary electrophoresis-mass spectrometry reveals the distribution of carbon metabolites during nitrogen starvation in Synechocystis sp. PCC 6803. *Environmental Microbiology*, **2014**, 16, 512-24	5.2	63
410	Metabolomic screening applied to rice FOX Arabidopsis lines leads to the identification of a gene-changing nitrogen metabolism. *Molecular Plant*, **2010**, 3, 125-42	14.4	63
409	Glycyrrhiza uralensis transcriptome landscape and study of phytochemicals. *Plant and Cell Physiology*, **2013**, 54, 697-710	4.9	62
408	Occurrence of .OMEGA.-cyclohexyl fatty acids in Curtobacterium pusillum strains.. *Journal of General and Applied Microbiology*, **1981**, 27, 261-266	1.5	62
407	RiceAtlas, a spatial database of global rice calendars and production. *Scientific Data*, **2017**, 4, 170074	8.2	61
406	A stress-inducible sulphotransferase sulphonates salicylic acid and confers pathogen resistance in Arabidopsis. *Plant, Cell and Environment*, **2010**, 33, 1383-92	8.4	61
405	Toward better annotation in plant metabolomics: isolation and structure elucidation of 36 specialized metabolites from (rice) by using MS/MS and NMR analyses. *Metabolomics*, **2014**, 10, 543-555	4.7	60
404	Variability and determinants of yields in rice production systems of West Africa. *Field Crops Research*, **2017**, 207, 1-12	5.5	59
403	Sulfur deficiency-induced repressor proteins optimize glucosinolate biosynthesis in plants. *Science Advances*, **2016**, 2, e1601087	14.3	59
402	Pathway-level acceleration of glycogen catabolism by a response regulator in the cyanobacterium Synechocystis species PCC 6803. *Plant Physiology*, **2014**, 164, 1831-41	6.6	59
401	KaPPA-View4: a metabolic pathway database for representation and analysis of correlation networks of gene co-expression and metabolite co-accumulation and omics data. *Nucleic Acids Research*, **2011**, 39, D677-84	20.1	59

400	Network analysis for gene discovery in plant-specialized metabolism. *Plant, Cell and Environment*, **2013**, 36, 1597-606	8.4	58
399	A constitutively expressed Myc-like gene involved in anthocyanin biosynthesis from Perilla frutescens: molecular characterization, heterologous expression in transgenic plants and transactivation in yeast cells. *Plant Molecular Biology*, **1999**, 41, 33-44	4.6	58
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396	Quinolizidine alkaloid biosynthesis: recent advances and future prospects. *Frontiers in Plant Science*, **2012**, 3, 239	6.2	57
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394	Complete blockage of the mevalonate pathway results in male gametophyte lethality. *Journal of Experimental Botany*, **2009**, 60, 2055-64	7	56
393	Yield-limiting macronutrients for rice in sub-Saharan Africa. *Geoderma*, **2019**, 338, 546-554	6.7	56
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