Daniel J Kliebenstein

List of Publications by Citations

188 papers	13,338 citations	66 h-index	113 g-index
209 ext. papers	16,185 ext. citations	8.8 avg, IF	6.78 L-index

#	Paper	IF	Citations
188	Genetic control of natural variation in Arabidopsis glucosinolate accumulation. *Plant Physiology*, **2001**, 126, 811-25	6.6	499
187	Superoxide dismutase in Arabidopsis: an eclectic enzyme family with disparate regulation and protein localization. *Plant Physiology*, **1998**, 118, 637-50	6.6	483
186	A UV-B-specific signaling component orchestrates plant UV protection. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 18225-30	11.5	426
185	Disarming the mustard oil bomb. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 11223-8	11.5	415
184	Gene duplication in the diversification of secondary metabolism: tandem 2-oxoglutarate-dependent dioxygenases control glucosinolate biosynthesis in Arabidopsis. *Plant Cell*, **2001**, 13, 681-93	11.6	381
183	The Arabidopsis epithiospecifier protein promotes the hydrolysis of glucosinolates to nitriles and influences Trichoplusia ni herbivory. *Plant Cell*, **2001**, 13, 2793-807	11.6	344
182	Retrograde signaling by the plastidial metabolite MEcPP regulates expression of nuclear stress-response genes. *Cell*, **2012**, 149, 1525-35	56.2	284
181	Global eQTL mapping reveals the complex genetic architecture of transcript-level variation in Arabidopsis. *Genetics*, **2007**, 175, 1441-50	4	284
180	Arabidopsis UVR8 regulates ultraviolet-B signal transduction and tolerance and contains sequence similarity to human regulator of chromatin condensation 1. *Plant Physiology*, **2002**, 130, 234-43	6.6	274
179	Secondary metabolites and plant/environment interactions: a view through Arabidopsis thaliana tinged glasses. *Plant, Cell and Environment*, **2004**, 27, 675-684	8.4	261
178	A systems biology approach identifies a R2R3 MYB gene subfamily with distinct and overlapping functions in regulation of aliphatic glucosinolates. *PLoS ONE*, **2007**, 2, e1322	3.7	255
177	Arabidopsis defense against Botrytis cinerea: chronology and regulation deciphered by high-resolution temporal transcriptomic analysis. *Plant Cell*, **2012**, 24, 3530-57	11.6	233
176	Linking metabolic QTLs with network and cis-eQTLs controlling biosynthetic pathways. *PLoS Genetics*, **2007**, 3, 1687-701	6	231
175	Secondary metabolites influence Arabidopsis/Botrytis interactions: variation in host production and pathogen sensitivity. *Plant Journal*, **2005**, 44, 25-36	6.9	225
174	The Arabidopsis Epithiospecifier Protein Promotes the Hydrolysis of Glucosinolates to Nitriles and Influences Trichoplusia ni Herbivory. *Plant Cell*, **2001**, 13, 2793-2807	11.6	221
173	Comparative analysis of quantitative trait loci controlling glucosinolates, myrosinase and insect resistance in Arabidopsis thaliana. *Genetics*, **2002**, 161, 325-32	4	213
172	Natural enemies drive geographic variation in plant defenses. *Science*, **2012**, 338, 116-9	33.3	207

171	Combining genome-wide association mapping and transcriptional networks to identify novel genes controlling glucosinolates in Arabidopsis thaliana. *PLoS Biology*, **2011**, 9, e1001125	9.7	205
170	Benzoic acid glucosinolate esters and other glucosinolates from Arabidopsis thaliana. *Phytochemistry*, **2002**, 59, 663-71	4	202
169	The gene controlling the quantitative trait locus EPITHIOSPECIFIER MODIFIER1 alters glucosinolate hydrolysis and insect resistance in Arabidopsis. *Plant Cell*, **2006**, 18, 1524-36	11.6	197
168	Identification of a flavin-monooxygenase as the S-oxygenating enzyme in aliphatic glucosinolate biosynthesis in Arabidopsis. *Plant Journal*, **2007**, 50, 902-10	6.9	186
167	Plant Secondary Metabolites as Defenses, Regulators, and Primary Metabolites: The Blurred Functional Trichotomy. *Plant Physiology*, **2020**, 184, 39-52	6.6	179
166	Biochemical networks and epistasis shape the Arabidopsis thaliana metabolome. *Plant Cell*, **2008**, 20, 1199-216	11.6	179
165	Comparative quantitative trait loci mapping of aliphatic, indolic and benzylic glucosinolate production in Arabidopsis thaliana leaves and seeds. *Genetics*, **2001**, 159, 359-70	4	178
164	A complex interplay of three R2R3 MYB transcription factors determines the profile of aliphatic glucosinolates in Arabidopsis. *Plant Physiology*, **2010**, 153, 348-63	6.6	174
163	High-density haplotyping with microarray-based expression and single feature polymorphism markers in Arabidopsis. *Genome Research*, **2006**, 16, 787-95	9.7	148
162	LSD1 regulates salicylic acid induction of copper zinc superoxide dismutase in Arabidopsis thaliana. *Molecular Plant-Microbe Interactions*, **1999**, 12, 1022-6	3.6	143
161	Understanding the evolution of defense metabolites in Arabidopsis thaliana using genome-wide association mapping. *Genetics*, **2010**, 185, 991-1007	4	142
160	Genetic architecture of plastic methyl jasmonate responses in Arabidopsis thaliana. *Genetics*, **2002**, 161, 1685-96	4	136
159	Quantitative genomics: analyzing intraspecific variation using global gene expression polymorphisms or eQTLs. *Annual Review of Plant Biology*, **2009**, 60, 93-114	30.7	130
158	Identification of Botrytis cinerea susceptibility loci in Arabidopsis thaliana. *Plant Journal*, **2004**, 38, 473-86	6.9	129
157	A Global Coexpression Network Approach for Connecting Genes to Specialized Metabolic Pathways in Plants. *Plant Cell*, **2017**, 29, 944-959	11.6	124
156	Subclade of flavin-monooxygenases involved in aliphatic glucosinolate biosynthesis. *Plant Physiology*, **2008**, 148, 1721-33	6.6	123
155	Network quantitative trait loci mapping of circadian clock outputs identifies metabolic pathway-to-clock linkages in Arabidopsis. *Plant Cell*, **2011**, 23, 471-85	11.6	112
154	The chromatin remodeler SPLAYED regulates specific stress signaling pathways. *PLoS Pathogens*, **2008**, 4, e1000237	7.6	112

153	The complex genetic architecture of the metabolome. *PLoS Genetics*, **2010**, 6, e1001198	6	108
152	Geographic and evolutionary diversification of glucosinolates among near relatives of Arabidopsis thaliana (Brassicaceae). *Phytochemistry*, **2005**, 66, 1321-33	4	108
151	The genetic basis of constitutive and herbivore-induced ESP-independent nitrile formation in Arabidopsis. *Plant Physiology*, **2009**, 149, 561-74	6.6	106
150	Deficiencies in jasmonate-mediated plant defense reveal quantitative variation in Botrytis cinerea pathogenesis. *PLoS Pathogens*, **2010**, 6, e1000861	7.6	103
149	Chapter five Glucosinolate hydrolysis and its impact on generalist and specialist insect herbivores. *Recent Advances in Phytochemistry*, **2003**, 101-125		103
148	Identification of QTLs controlling gene expression networks defined a priori. *BMC Bioinformatics*, **2006**, 7, 308	3.6	102
147	Distinct roles of jasmonates and aldehydes in plant-defense responses. *PLoS ONE*, **2008**, 3, e1904	3.7	101
146	Making new molecules - evolution of pathways for novel metabolites in plants. *Current Opinion in Plant Biology*, **2012**, 15, 415-23	9.9	99
145	A novel 2-oxoacid-dependent dioxygenase involved in the formation of the goiterogenic 2-hydroxybut-3-enyl glucosinolate and generalist insect resistance in Arabidopsis,. *Plant Physiology*, **2008**, 148, 2096-108	6.6	99
144	Differential levels of insect herbivory in the field associated with genotypic variation in glucosinolates in Arabidopsis thaliana. *Journal of Chemical Ecology*, **2008**, 34, 1026-37	2.7	99
143	Convergence, constraint and the role of gene expression during adaptive radiation: floral anthocyanins in Aquilegia. *Molecular Ecology*, **2006**, 15, 4645-57	5.7	99
142	Fatty acids and early detection of pathogens. *Current Opinion in Plant Biology*, **2013**, 16, 520-6	9.9	98
141	Genomic survey of gene expression diversity in Arabidopsis thaliana. *Genetics*, **2006**, 172, 1179-89	4	98
140	Transcriptional regulation of nitrogen-associated metabolism and growth. *Nature*, **2018**, 563, 259-264	50.4	98
139	Quantitative Resistance: More Than Just Perception of a Pathogen. *Plant Cell*, **2017**, 29, 655-665	11.6	94
138	Using knockout mutants to reveal the growth costs of defensive traits. *Proceedings of the Royal Society B: Biological Sciences*, **2011**, 278, 2598-603	4.4	94
137	Complex genetics control natural variation in Arabidopsis thaliana resistance to Botrytis cinerea. *Genetics*, **2008**, 180, 2237-50	4	89
136	Identifying the molecular basis of QTLs: eQTLs add a new dimension. *Trends in Plant Science*, **2008**, 13, 72-7	13.1	88

135	Natural variation among Arabidopsis thaliana accessions for transcriptome response to exogenous salicylic acid. *Plant Cell*, **2007**, 19, 2099-110	11.6	88
134	An ecological genomic approach challenging the paradigm of differential plant responses to specialist versus generalist insect herbivores. *Oecologia*, **2011**, 167, 677-89	2.9	87
133	Genotype, age, tissue, and environment regulate the structural outcome of glucosinolate activation. *Plant Physiology*, **2008**, 147, 415-28	6.6	85
132	Characterization of seed-specific benzoyloxyglucosinolate mutations in Arabidopsis thaliana. *Plant Journal*, **2007**, 51, 1062-76	6.9	84
131	A role for gene duplication and natural variation of gene expression in the evolution of metabolism. *PLoS ONE*, **2008**, 3, e1838	3.7	83
130	Pectin Biosynthesis Is Critical for Cell Wall Integrity and Immunity in Arabidopsis thaliana. *Plant Cell*, **2016**, 28, 537-56	11.6	79
129	Auxin-sensitive Aux/IAA proteins mediate drought tolerance in Arabidopsis by regulating glucosinolate levels. *Nature Communications*, **2019**, 10, 4021	17.4	78
128	The Plant Cell Introduces Breakthrough Reports: A New Forum for Cutting-Edge Plant Research. *Plant Cell*, **2015**, tpc.15.00862	11.6	78
127	Intronic T-DNA insertion renders Arabidopsis opr3 a conditional jasmonic acid-producing mutant. *Plant Physiology*, **2011**, 156, 770-8	6.6	78
126	Genomic analysis of QTLs and genes altering natural variation in stochastic noise. *PLoS Genetics*, **2011**, 7, e1002295	6	77
125	ESP and ESM1 mediate indol-3-acetonitrile production from indol-3-ylmethyl glucosinolate in Arabidopsis. *Phytochemistry*, **2008**, 69, 663-71	4	70
124	A new method for measuring relative growth rate can uncover the costs of defensive compounds in Arabidopsis thaliana. *New Phytologist*, **2010**, 187, 1102-1111	9.8	67
123	Competition, herbivory and genetics interact to determine the accumulation and fitness consequences of a defence metabolite. *Journal of Ecology*, **2009**, 97, 78-88	6	66
122	Regulatory networks of glucosinolates shape Arabidopsis thaliana fitness. *Current Opinion in Plant Biology*, **2010**, 13, 348-53	9.9	66
121	Natural genetic variation in Arabidopsis thaliana defense metabolism genes modulates field fitness. *ELife*, **2015**, 4,	8.9	64
120	Promoter-based integration in plant defense regulation. *Plant Physiology*, **2014**, 166, 1803-20	6.6	60
119	Biosynthesis and defensive function of N□acetylornithine, a jasmonate-induced Arabidopsis metabolite. *Plant Cell*, **2011**, 23, 3303-18	11.6	60
118	Ecological costs of biotrophic versus necrotrophic pathogen resistance, the hypersensitive response and signal transduction. *Plant Science*, **2008**, 174, 551-556	5.3	57

117	Advancing genetic theory and application by metabolic quantitative trait loci analysis. *Plant Cell*, **2009**, 21, 1637-46	11.6	56
116	Arctic mustard flower color polymorphism controlled by petal-specific downregulation at the threshold of the anthocyanin biosynthetic pathway. *PLoS ONE*, **2011**, 6, e18230	3.7	55
115	Postharvest circadian entrainment enhances crop pest resistance and phytochemical cycling. *Current Biology*, **2013**, 23, 1235-41	6.3	54
114	An evolutionarily young defense metabolite influences the root growth of plants via the ancient TOR signaling pathway. *ELife*, **2017**, 6,	8.9	53
113	The Glucosinolate Biosynthetic Gene AOP2 Mediates Feed-back Regulation of Jasmonic Acid Signaling in Arabidopsis. *Molecular Plant*, **2015**, 8, 1201-12	14.4	51
112	Cytoplasmic genetic variation and extensive cytonuclear interactions influence natural variation in the metabolome. *ELife*, **2013**, 2, e00776	8.9	51
111	Identification of novel loci regulating interspecific variation in root morphology and cellular development in tomato. *Plant Physiology*, **2013**, 162, 755-68	6.6	50
110	In planta variation of volatile biosynthesis: an alternative biosynthetic route to the formation of the pathogen-induced volatile homoterpene DMNT via triterpene degradation in Arabidopsis roots. *Plant Cell*, **2015**, 27, 874-90	11.6	49
109	Chemically mediated tritrophic interactions: opposing effects of glucosinolates on a specialist herbivore and its predators. *Journal of Applied Ecology*, **2011**, 48, 880-887	5.8	49
108	False idolatry of the mythical growth versus immunity tradeoff in molecular systems plant pathology. *Physiological and Molecular Plant Pathology*, **2016**, 95, 55-59	2.6	46
107	Elevated genetic variation within virulence-associated Botrytis cinerea polygalacturonase loci. *Molecular Plant-Microbe Interactions*, **2007**, 20, 1126-37	3.6	46
106	Molecular mechanisms governing differential robustness of development and environmental responses in plants. *Annals of Botany*, **2016**, 117, 795-809	4.1	45
105	MODIFIED VACUOLE PHENOTYPE1 is an Arabidopsis myrosinase-associated protein involved in endomembrane protein trafficking. *Plant Physiology*, **2010**, 152, 120-32	6.6	45
104	The Quantitative Basis of the Arabidopsis Innate Immune System to Endemic Pathogens Depends on Pathogen Genetics. *PLoS Genetics*, **2016**, 12, e1005789	6	44
103	Plastic Transcriptomes Stabilize Immunity to Pathogen Diversity: The Jasmonic Acid and Salicylic Acid Networks within the Arabidopsis/ Pathosystem. *Plant Cell*, **2017**, 29, 2727-2752	11.6	42
102	The bHLH transcription factor ILR3 modulates multiple stress responses in Arabidopsis. *Plant Molecular Biology*, **2018**, 97, 297-309	4.6	41
101	Reassess the t Test: Interact with All Your Data via ANOVA. *Plant Cell*, **2015**, 27, 2088-94	11.6	40
100	Plant defense compounds: systems approaches to metabolic analysis. *Annual Review of Phytopathology*, **2012**, 50, 155-73	10.8	40

99	Hierarchical nuclear and cytoplasmic genetic architectures for plant growth and defense within Arabidopsis. *Plant Cell*, **2013**, 25, 1929-45	11.6	40
98	Genome Wide Association Mapping in Arabidopsis thaliana Identifies Novel Genes Involved in Linking Allyl Glucosinolate to Altered Biomass and Defense. *Frontiers in Plant Science*, **2016**, 7, 1010	6.2	39
97	Making new molecules--evolution of structures for novel metabolites in plants. *Current Opinion in Plant Biology*, **2013**, 16, 112-7	9.9	38
96	Natural variation in cross-talk between glucosinolates and onset of flowering in Arabidopsis. *Frontiers in Plant Science*, **2015**, 6, 697	6.2	38
95	The Defense Metabolite, Allyl Glucosinolate, Modulates Arabidopsis thaliana Biomass Dependent upon the Endogenous Glucosinolate Pathway. *Frontiers in Plant Science*, **2016**, 7, 774	6.2	38
94	Antisense RNA inhibition of Rubisco activase expression. *Plant Journal*, **1994**, 5, 787-798	6.9	37
93	A quantitative genetics and ecological model system: understanding the aliphatic glucosinolate biosynthetic network via QTLs. *Phytochemistry Reviews*, **2009**, 8, 243-254	7.7	36
92	Macroevolutionary patterns of glucosinolate defense and tests of defense-escalation and resource availability hypotheses. *New Phytologist*, **2015**, 208, 915-27	9.8	32
91	Overexpression of Three Glucosinolate Biosynthesis Genes in Brassica napus Identifies Enhanced Resistance to Sclerotinia sclerotiorum and Botrytis cinerea. *PLoS ONE*, **2015**, 10, e0140491	3.7	32
90	The effect of rhizosphere microbes outweighs host plant genetics in reducing insect herbivory. *Molecular Ecology*, **2019**, 28, 1801-1811	5.7	32
89	Natural Variation of Plant Metabolism: Genetic Mechanisms, Interpretive Caveats, and Evolutionary and Mechanistic Insights. *Plant Physiology*, **2015**, 169, 1456-68	6.6	31
88	Genetic variation in the nuclear and organellar genomes modulates stochastic variation in the metabolome, growth, and defense. *PLoS Genetics*, **2015**, 11, e1004779	6	30
87	Keeping the rhythm: light/dark cycles during postharvest storage preserve the tissue integrity and nutritional content of leafy plants. *BMC Plant Biology*, **2015**, 15, 92	5.3	30
86	An integrated RNAseq-H NMR metabolomics approach to understand soybean primary metabolism regulation in response to Rhizoctonia foliar blight disease. *BMC Plant Biology*, **2017**, 17, 84	5.3	29
85	Viruses mobilize plant immunity to deter nonvector insect herbivores. *Science Advances*, **2019**, 5, eaav9801	14.3	27
84	Cofactome analyses reveal enhanced flux of carbon into oil for potential biofuel production. *Plant Journal*, **2011**, 67, 1018-28	6.9	27
83	Whole genome resequencing of Botrytis cinerea isolates identifies high levels of standing diversity. *Frontiers in Microbiology*, **2015**, 6, 996	5.7	26
82	Network-Guided Discovery of Extensive Epistasis between Transcription Factors Involved in Aliphatic Glucosinolate Biosynthesis. *Plant Cell*, **2018**, 30, 178-195	11.6	25

81	Transcriptional networks governing plant metabolism. *Current Plant Biology*, **2015**, 3-4, 56-64	3.3	24
80	The conserved transcription factors, MYB115 and MYB118, control expression of the newly evolved benzoyloxy glucosinolate pathway in Arabidopsis thaliana. *Frontiers in Plant Science*, **2015**, 6, 343	6.2	24
79	Genetic networks controlling structural outcome of glucosinolate activation across development. *PLoS Genetics*, **2008**, 4, e1000234	6	24
78	Determination of the absolute configuration of the glucosinolate methyl sulfoxide group reveals a stereospecific biosynthesis of the side chain. *Phytochemistry*, **2008**, 69, 2737-42	4	24
77	Identification and stacking of crucial traits required for the domestication of pennycress. *Nature Food*, **2020**, 1, 84-91	14.4	23
76	Systems biology uncovers the foundation of natural genetic diversity. *Plant Physiology*, **2010**, 152, 480-66.6		22
75	Plant-necrotroph co-transcriptome networks illuminate a metabolic battlefield. *ELife*, **2019**, 8,	8.9	22
74	Interactions of Tomato and Genetic Diversity: Parsing the Contributions of Host Differentiation, Domestication, and Pathogen Variation. *Plant Cell*, **2019**, 31, 502-519	11.6	22
73	Comparison of the Relative Potential for Epigenetic and Genetic Variation To Contribute to Trait Stability. *G3: Genes, Genomes, Genetics*, **2018**, 8, 1733-1746	3.2	21
72	Digital Imaging Combined with Genome-Wide Association Mapping Links Loci to Plant-Pathogen Interaction Traits. *Plant Physiology*, **2018**, 178, 1406-1422	6.6	21
71	Initiation of ER Body Formation and Indole Glucosinolate Metabolism by the Plastidial Retrograde Signaling Metabolite, MEcPP. *Molecular Plant*, **2017**, 10, 1400-1416	14.4	20
70	Expansive Phenotypic Landscape of Botrytis cinerea Shows Differential Contribution of Genetic Diversity and Plasticity. *Molecular Plant-Microbe Interactions*, **2016**, 29, 287-98	3.6	19
69	Acetylation of cell wall is required for structural integrity of the leaf surface and exerts a global impact on plant stress responses. *Frontiers in Plant Science*, **2015**, 6, 550	6.2	19
68	Synthetic biology of metabolism: using natural variation to reverse engineer systems. *Current Opinion in Plant Biology*, **2014**, 19, 20-6	9.9	18
67	What can causal networks tell us about metabolic pathways?. *PLoS Computational Biology*, **2012**, 8, e1002458	5	17
66	Mutation bias reflects natural selection in Arabidopsis thaliana.. *Nature*, **2022**,	50.4	17
65	Orchestration of plant defense systems: genes to populations. *Trends in Plant Science*, **2014**, 19, 250-5	13.1	16
64	An Integrative Genetic Study of Rice Metabolism, Growth and Stochastic Variation Reveals Potential C/N Partitioning Loci. *Scientific Reports*, **2016**, 6, 30143	4.9	16

63	PMR5, an acetylation protein at the intersection of pectin biosynthesis and defense against fungal pathogens. *Plant Journal*, **2019**, 100, 1022-1035	6.9	15
62	Plant Networks as Traits and Hypotheses: Moving Beyond Description. *Trends in Plant Science*, **2019**, 24, 840-852	13.1	15
61	All mold is not alike: the importance of intraspecific diversity in necrotrophic plant pathogens. *PLoS Pathogens*, **2010**, 6, e1000759	7.6	15
60	Glucosinolate survey of cultivated and feral mashua (Tropaeolum tuberosum Ruiz & Pavón) in the Cuzco region of Peru. *Economic Botany*, **2006**, 60, 254-264	1.7	15
59	Destabilization of rbcS sense transcripts by antisense RNA. *Plant Molecular Biology*, **1994**, 25, 569-76	4.6	15
58	Epistasis × environment interactions among Arabidopsis thaliana glucosinolate genes impact complex traits and fitness in the field. *New Phytologist*, **2017**, 215, 1249-1263	9.8	13
57	Exploring the shallow end; estimating information content in transcriptomics studies. *Frontiers in Plant Science*, **2012**, 3, 213	6.2	13
56	Quantification of variation in expression networks. *Methods in Molecular Biology*, **2009**, 553, 227-45	1.4	13
55	Meta-analysis of metabolome QTLs in Arabidopsis: trying to estimate the network size controlling genetic variation of the metabolome. *Frontiers in Plant Science*, **2014**, 5, 461	6.2	12
54	mGWAS Uncovers Gln-Glucosinolate Seed-Specific Interaction and its Role in Metabolic Homeostasis. *Plant Physiology*, **2020**, 183, 483-500	6.6	11
53	Quantitative Genetics and Genomics of Plant Resistance to Insects **2014**, 235-262		11
52	Regulation of Root Angle and Gravitropism. *G3: Genes, Genomes, Genetics*, **2018**, 8, 3841-3855	3.2	11
51	Metabolomics and Plant Quantitative Trait Locus Analysis × The Optimum Genetical Genomics Platform? **2007**, 29-44		11
50	Diverse Allyl Glucosinolate Catabolites Independently Influence Root Growth and Development. *Plant Physiology*, **2020**, 183, 1376-1390	6.6	10
49	Using RNA-Seq for Genomic Scaffold Placement, Correcting Assemblies, and Genetic Map Creation in a Common Mapping Population. *G3: Genes, Genomes, Genetics*, **2017**, 7, 2259-2270	3.2	10
48	Investigation of the multifunctional gene AOP3 expands the regulatory network fine-tuning glucosinolate production in Arabidopsis. *Frontiers in Plant Science*, **2015**, 6, 762	6.2	10
47	The AT-hook motif-encoding gene METABOLIC NETWORK MODULATOR 1 underlies natural variation in Arabidopsis primary metabolism. *Frontiers in Plant Science*, **2014**, 5, 415	6.2	10
46	Plant science. Anti-rust antitrust. *Science*, **2009**, 323, 1301-2	33.3	10

45	Genetic variation, environment and demography intersect to shape Arabidopsis defense metabolite variation across Europe. *ELife*, **2021**, 10,	8.9	10
44	Innovation, conservation, and repurposing of gene function in root cell type development. *Cell*, **2021**, 184, 3333-3348.e19	56.2	9
43	Isolate Dependency of Brassica rapa Resistance QTLs to Botrytis cinerea. *Frontiers in Plant Science*, **2016**, 7, 161	6.2	9
42	Quantitative Variation in Responses to Root Spatial Constraint within Arabidopsis thaliana. *Plant Cell*, **2015**, 27, 2227-43	11.6	8
41	A constitutive PR-1::luciferase expression screen identifies Arabidopsis mutants with differential disease resistance to both biotrophic and necrotrophic pathogens. *Molecular Plant Pathology*, **2005**, 6, 31-41	5.7	8
40	Red-light is an environmental effector for mutualism between begomovirus and its vector whitefly. *PLoS Pathogens*, **2021**, 17, e1008770	7.6	8
39	Epistatic Transcription Factor Networks Differentially Modulate Growth and Defense. *Genetics*, **2020**, 214, 529-541	4	7
38	FRS7 and FRS12 recruit NINJA to regulate expression of glucosinolate biosynthesis genes. *New Phytologist*, **2020**, 227, 1124-1137	9.8	7
37	The Arabidopsis Epithiospecifier Protein Promotes the Hydrolysis of Glucosinolates to Nitriles and Influences Trichoplusia ni Herbivory. *Plant Cell*, **2001**, 13, 2793	11.6	6
36	Use of Secondary Metabolite Variation in Crop Improvement **2009**, 83-95		6
35	Pathogen Genetic Control of Transcriptome Variation in the - Pathosystem. *Genetics*, **2020**, 215, 253-2664		5
34	New synthesis--regulatory evolution, the veiled world of chemical diversification. *Journal of Chemical Ecology*, **2013**, 39, 349	2.7	5
33	A novel Filamentous Flower mutant suppresses brevipedicellus developmental defects and modulates glucosinolate and auxin levels. *PLoS ONE*, **2017**, 12, e0177045	3.7	5
32	Using networks to identify and interpret natural variation. *Current Opinion in Plant Biology*, **2020**, 54, 122-126	9.9	4
31	Quantitative Genetics and Genomics of Plant Resistance to Insects **2017**, 235-262		4
30	Resequencing and association mapping of the generalist pathogen Botrytis cinerea		4
29	Genome size evolution is associated with climate seasonality and glucosinolates, but not life history, soil nutrients or range size, across a clade of mustards. *Annals of Botany*, **2021**, 127, 887-902	4.1	4
28	flasher, a novel mutation in a glucosinolate modifying enzyme, conditions changes in plant architecture and hormone homeostasis. *Plant Journal*, **2020**, 103, 1989-2006	6.9	3

27	Plant nutrient acquisition entices herbivore. *Science*, **2018**, 361, 642-643	33.3	3
26	Model Misinterpretation within Biology: Phenotypes, Statistics, Networks, and Inference. *Frontiers in Plant Science*, **2012**, 3, 13	6.2	3
25	A global co-expression network approach for connecting genes to specialized metabolic pathways in plants		3
24	Crop domestication and pathogen virulence: Interactions of tomato and Botrytis genetic diversity		3
23	Quantitative interactions drive Botrytis cinerea disease outcome across the plant kingdom		3
22	Fine mapping identifies NAD-ME1 as a candidate underlying a major locus controlling temporal variation in primary and specialized metabolism in Arabidopsis. *Plant Journal*, **2021**, 106, 454-467	6.9	3
21	The quantitative genetics of phenotypic error or uniformity. *Frontiers in Genetics*, **2011**, 2, 59	4.5	2
20	Innovation, conservation and repurposing of gene function in plant root cell type development		2
19	Auxin-sensitive Aux/IAA proteins mediate drought tolerance in Arabidopsis by regulating glucosinolate levels		2
18	Progress toward the identification and stacking of crucial domestication traits in pennycress		2
17	Response of Turnip to Botrytis cinerea Infection and Their Relationship with Glucosinolate Profiles. *Korean Journal of Plant Resources*, **2014**, 27, 371-379		2
16	The nucleotide sugar transporter GONST2 is a functional homolog of GONST1. *Plant Direct*, **2021**, 5, e00309	3.9	2
15	A keystone gene underlies the persistence of an experimental food web.. *Science*, **2022**, 376, 70-73	33.3	2
14	Observability of Plant Metabolic Networks Is Reflected in the Correlation of Metabolic Profiles. *Plant Physiology*, **2016**, 172, 1324-1333	6.6	1
13	A genome-scale TF-DNA interaction network of transcriptional regulation of Arabidopsis primary and specialized metabolism. *Molecular Systems Biology*, **2021**, 17, e10625	12.2	1
12	Rhizosphere microbes and host plant genotype influence the plant metabolome and reduce insect herbivory		1
11	GONST2 transports GDP-Mannose for sphingolipid glycosylation in the Golgi apparatus of Arabidopsis		1
10	Pathogen genetic control of transcriptome variation in the Arabidopsis thaliana Botrytis cinerea pathosystem		1

9	Genetic diversity increases food-web persistence in the face of climate warming		1
8	Quantitative interactions: the disease outcome of Botrytis cinerea across the plant kingdom. *G3: Genes, Genomes, Genetics*, **2021**, 11,	3.2	1
7	Exciting times in plant biotic interactions.. *Plant Cell*, **2022**,	11.6	1
6	The ease and complexity of identifying and using specialized metabolites for crop engineering.. *Emerging Topics in Life Sciences*, **2022**,	3.5	1
5	Plant Responses Underlying Timely Specialized Metabolites Induction of Crops.. *Frontiers in Plant Science*, **2021**, 12, 807710	6.2	0
4	A plant balancing act: Meshing new and existing metabolic pathways towards an optimized system.. *Current Opinion in Plant Biology*, **2022**, 66, 102173	9.9	0
3	Conducting Genome-Wide Association Mapping of Metabolites **2013**, 255-271		
2	Aphid Species and Feeding Location on Canola Influences the Impact of Glucosinolates on a Native Lady Beetle Predator.. *Environmental Entomology*, **2022**, 51, 52-62	2.1	
1	A reevaluation of the role of the trihelix transcription factors as repressors of the seed maturation program. *Plant Direct*, **2021**, 5, e345	3.3	