Siobhan M Brady

List of Publications by Citations

99 papers	7,130 citations	40 h-index	84 g-index
117 ext. papers	9,052 ext. citations	11.1 avg, IF	5.7 L-index

#	Paper	IF	Citations
99	A high-resolution root spatiotemporal map reveals dominant expression patterns. *Science*, **2007**, 318, 801-6	33.3	876
98	The Botany Array Resource: e-Northerns, Expression Angling, and promoter analyses. *Plant Journal*, **2005**, 43, 153-63	6.9	587
97	Cell identity mediates the response of Arabidopsis roots to abiotic stress. *Science*, **2008**, 320, 942-5	33.3	572
96	An Arabidopsis gene regulatory network for secondary cell wall synthesis. *Nature*, **2015**, 517, 571-5	50.4	399
95	The plant vascular system: evolution, development and functions. *Journal of Integrative Plant Biology*, **2013**, 55, 294-388	8.3	388
94	Spatiotemporal regulation of cell-cycle genes by SHORTROOT links patterning and growth. *Nature*, **2010**, 466, 128-32	50.4	287
93	Comprehensive developmental profiles of gene activity in regions and subregions of the Arabidopsis seed. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, E435-44	11.5	282
92	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	11.5	260
91	The ABSCISIC ACID INSENSITIVE 3 (ABI3) gene is modulated by farnesylation and is involved in auxin signaling and lateral root development in Arabidopsis. *Plant Journal*, **2003**, 34, 67-75	6.9	255
90	Plant developmental responses to climate change. *Developmental Biology*, **2016**, 419, 64-77	3.1	224
89	Hairy root transformation using Agrobacterium rhizogenes as a tool for exploring cell type-specific gene expression and function using tomato as a model. *Plant Physiology*, **2014**, 166, 455-69	6.6	219
88	High-Throughput Single-Cell Transcriptome Profiling of Plant Cell Types. *Cell Reports*, **2019**, 27, 2241-2247.e4	10.6	141
87	50 years of Arabidopsis research: highlights and future directions. *New Phytologist*, **2016**, 209, 921-44	9.8	128
86	A stele-enriched gene regulatory network in the Arabidopsis root. *Molecular Systems Biology*, **2011**, 7, 459	12.2	127
85	Profiling of Accessible Chromatin Regions across Multiple Plant Species and Cell Types Reveals Common Gene Regulatory Principles and New Control Modules. *Plant Cell*, **2018**, 30, 15-36	11.6	116
84	High-resolution metabolic mapping of cell types in plant roots. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, E1232-41	11.5	102
83	PRC2 represses dedifferentiation of mature somatic cells in Arabidopsis. *Nature Plants*, **2015**, 1, 15089	11.5	101

82	Combining expression and comparative evolutionary analysis. The COBRA gene family. *Plant Physiology*, **2007**, 143, 172-87	6.6	101
81	Web-queryable large-scale data sets for hypothesis generation in plant biology. *Plant Cell*, **2009**, 21, 1034-41	11.6	98
80	Transcriptional regulation of nitrogen-associated metabolism and growth. *Nature*, **2018**, 563, 259-264	50.4	98
79	Protonophore- and pH-insensitive glucose and sucrose accumulation detected by FRET nanosensors in Arabidopsis root tips. *Plant Journal*, **2008**, 56, 948-62	6.9	97
78	Enhanced Y1H assays for Arabidopsis. *Nature Methods*, **2011**, 8, 1053-5	21.6	92
77	Systems approaches to identifying gene regulatory networks in plants. *Annual Review of Cell and Developmental Biology*, **2008**, 24, 81-103	12.6	85
76	Lateral root emergence in Arabidopsis is dependent on transcription factor LBD29 regulation of auxin influx carrier LAX3. *Development (Cambridge)*, **2016**, 143, 3340-9	6.6	78
75	Systems analysis of plant functional, transcriptional, physical interaction, and metabolic networks. *Plant Cell*, **2012**, 24, 3859-75	11.6	76
74	BEL1-LIKE HOMEODOMAIN6 and KNOTTED ARABIDOPSIS THALIANA7 interact and regulate secondary cell wall formation via repression of REVOLUTA. *Plant Cell*, **2014**, 26, 4843-61	11.6	75
73	Promoter-based integration in plant defense regulation. *Plant Physiology*, **2014**, 166, 1803-20	6.6	60
72	Molecular control of crop shade avoidance. *Current Opinion in Plant Biology*, **2016**, 30, 151-8	9.9	55
71	Identification of novel loci regulating interspecific variation in root morphology and cellular development in tomato. *Plant Physiology*, **2013**, 162, 755-68	6.6	50
70	A Gene Regulatory Network for Cellular Reprogramming in Plant Regeneration. *Plant and Cell Physiology*, **2018**, 59, 765-777	4.9	49
69	A brief history of the TDIF-PXY signalling module: balancing meristem identity and differentiation during vascular development. *New Phytologist*, **2016**, 209, 474-84	9.8	47
68	A tomato phloem-mobile protein regulates the shoot-to-root ratio by mediating the auxin response in distant organs. *Plant Journal*, **2015**, 83, 853-63	6.9	44
67	Hormone Cross-Talk in Seed Dormancy. *Journal of Plant Growth Regulation*, **2003**, 22, 25-31	4.7	44
66	A PXY-Mediated Transcriptional Network Integrates Signaling Mechanisms to Control Vascular Development in Arabidopsis. *Plant Cell*, **2020**, 32, 319-335	11.6	44
65	Transcriptional Regulation of Arabidopsis Polycomb Repressive Complex 2 Coordinates Cell-Type Proliferation and Differentiation. *Plant Cell*, **2016**, 28, 2616-2631	11.6	42

64	Establishment of Expression in the SHORTROOT-SCARECROW Transcriptional Cascade through Opposing Activities of Both Activators and Repressors. *Developmental Cell*, **2016**, 39, 585-596	10.2	42
63	RALFL34 regulates formative cell divisions in Arabidopsis pericycle during lateral root initiation. *Journal of Experimental Botany*, **2016**, 67, 4863-75	7	42
62	Evolutionary flexibility in flooding response circuitry in angiosperms. *Science*, **2019**, 365, 1291-1295	33.3	40
61	Reassess the t Test: Interact with All Your Data via ANOVA. *Plant Cell*, **2015**, 27, 2088-94	11.6	40
60	Reconstructing spatiotemporal gene expression data from partial observations. *Bioinformatics*, **2009**, 25, 2581-7	7.2	40
59	Manipulating large-scale Arabidopsis microarray expression data: identifying dominant expression patterns and biological process enrichment. *Methods in Molecular Biology*, **2009**, 553, 57-77	1.4	39
58	Mapping Transcriptional Networks in Plants: Data-Driven Discovery of Novel Biological Mechanisms. *Annual Review of Plant Biology*, **2016**, 67, 575-94	30.7	33
57	Molecular Mechanisms Driving Switch Behavior in Xylem Cell Differentiation. *Cell Reports*, **2019**, 28, 342-351.e4	8.6	31
56	Complete substitution of a secondary cell wall with a primary cell wall in Arabidopsis. *Nature Plants*, **2018**, 4, 777-783	11.5	30
55	Nuclear Transcriptomes at High Resolution Using Retooled INTACT. *Plant Physiology*, **2018**, 176, 270-281	6.6	29
54	Unraveling the dynamic transcriptome. *Plant Cell*, **2006**, 18, 2101-11	11.6	29
53	Systems biology update: cell type-specific transcriptional regulatory networks. *Plant Physiology*, **2010**, 152, 411-9	6.6	27
52	SUPPRESSOR OF GAMMA RESPONSE1 Links DNA Damage Response to Organ Regeneration. *Plant Physiology*, **2018**, 176, 1665-1675	6.6	26
51	Network-Guided Discovery of Extensive Epistasis between Transcription Factors Involved in Aliphatic Glucosinolate Biosynthesis. *Plant Cell*, **2018**, 30, 178-195	11.6	25
50	Omics and modelling approaches for understanding regulation of asymmetric cell divisions in arabidopsis and other angiosperm plants. *Annals of Botany*, **2014**, 113, 1083-1105	4.1	25
49	Proteome-wide, Structure-Based Prediction of Protein-Protein Interactions/New Molecular Interactions Viewer. *Plant Physiology*, **2019**, 179, 1893-1907	6.6	21
48	DNA methylation and gene expression regulation associated with vascularization in Sorghum bicolor. *New Phytologist*, **2017**, 214, 1213-1229	9.8	20
47	Novel biological insights revealed from cell type-specific expression profiling. *Current Opinion in Plant Biology*, **2011**, 14, 601-7	9.9	17

46	Specification and regulation of vascular tissue identity in the embryo. *Development (Cambridge)*, **2020**, 147,	6.6	16
45	A network of transcriptional repressors modulates auxin responses. *Nature*, **2021**, 589, 116-119	50.4	15
44	Integration of large-scale data for extraction of integrated Arabidopsis root cell-type specific models. *Scientific Reports*, **2018**, 8, 7919	4.9	15
43	Gene regulatory networks in the Arabidopsis root. *Current Opinion in Plant Biology*, **2013**, 16, 50-5	9.9	14
42	Extreme breeding: Leveraging genomics for crop improvement. *Journal of the Science of Food and Agriculture*, **2007**, 87, 925-929	4.3	14
41	The polyadenylation factor FIP1 is important for plant development and root responses to abiotic stresses. *Plant Journal*, **2019**, 99, 1203-1219	6.9	13
40	Single cell RNA sequencing and its promise in reconstructing plant vascular cell lineages. *Current Opinion in Plant Biology*, **2019**, 48, 47-56	9.9	11
39	Clustering and Differential Alignment Algorithm: Identification of Early Stage Regulators in the Arabidopsis thaliana Iron Deficiency Response. *PLoS ONE*, **2015**, 10, e0136591	3.7	11
38	Regulation of Root Angle and Gravitropism. *G3: Genes, Genomes, Genetics*, **2018**, 8, 3841-3855	3.2	11
37	The Next Generation of Training for Arabidopsis Researchers: Bioinformatics and Quantitative Biology. *Plant Physiology*, **2017**, 175, 1499-1509	6.6	10
36	Draft Genome Sequence of Rhizobium rhizogenes Strain ATCC 15834. *Genome Announcements*, **2014**, 2,		10
35	A Standardized Synthetic Eucalyptus Transcription Factor and Promoter Panel for Re-engineering Secondary Cell Wall Regulation in Biomass and Bioenergy Crops. *ACS Synthetic Biology*, **2019**, 8, 463-465	5.7	10
34	Innovation, conservation, and repurposing of gene function in root cell type development. *Cell*, **2021**, 184, 3333-3348.e19	56.2	9
33	Identification of Protein-DNA Interactions Using Enhanced Yeast One-Hybrid Assays and a Semiautomated Approach. *Methods in Molecular Biology*, **2017**, 1610, 187-215	1.4	8
32	Real-time whole-plant dynamics of heavy metal transport in and by gamma-ray imaging. *Plant Direct*, **2019**, 3, e00131	3.3	8
31	Epistatic Transcription Factor Networks Differentially Modulate Growth and Defense. *Genetics*, **2020**, 214, 529-541	4	7
30	FRS7 and FRS12 recruit NINJA to regulate expression of glucosinolate biosynthesis genes. *New Phytologist*, **2020**, 227, 1124-1137	9.8	7
29	Translational regulation contributes to the elevated CO response in two Solanum species. *Plant Journal*, **2020**, 102, 383-397	6.9	7

28	Anno genominis XX: 20 years of Arabidopsis genomics. *Plant Cell*, **2021**, 33, 832-845	11.6	5
27	Plant single-cell solutions for energy and the environment. *Communications Biology*, **2021**, 4, 962	6.7	5
26	Bioinformatic tools in Arabidopsis research. *Methods in Molecular Biology*, **2014**, 1062, 97-136	1.4	4
25	Gene Regulatory Networks during Arabidopsis Root Vascular Development. *International Journal of Plant Sciences*, **2013**, 174, 1090-1097	2.6	4
24	Detecting separate time scales in genetic expression data. *BMC Genomics*, **2010**, 11, 381	4.5	4
23	High-throughput single-cell transcriptome profiling of plant cell types		4
22	A bipartite transcription factor module controlling expression in the bundle sheath of Arabidopsis thaliana. *Nature Plants*, **2020**, 6, 1468-1479	11.5	4
21	Current status of the multinational Arabidopsis community. *Plant Direct*, **2020**, 4, e00248	3.3	4
20	Broadening the impact of plant science through innovative, integrative, and inclusive outreach. *Plant Direct*, **2021**, 5, e00316	3.3	4
19	A systems approach to understanding root development. *Canadian Journal of Botany*, **2006**, 84, 695-701		3
18	Isolation of Nuclei in Tagged Cell Types (INTACT), RNA Extraction and Ribosomal RNA Degradation to Prepare Material for RNA-Seq. *Bio-protocol*, **2018**, 8, e2458	0.9	3
17	Crowdsourcing biocuration: The Community Assessment of Community Annotation with Ontologies (CACAO). *PLoS Computational Biology*, **2021**, 17, e1009463	5	3
16	Indel Group in Genomes (IGG) Molecular Genetic Markers. *Plant Physiology*, **2016**, 172, 38-61	6.6	2
15	Toward Development of Fluorescence-Quenching-Based Biosensors for Drought Stress in Plants. *Analytical Chemistry*, **2019**, 91, 15644-15651	7.8	2
14	Innovation, conservation and repurposing of gene function in plant root cell type development		2
13	Bioinformatic Tools in Arabidopsis Research. *Methods in Molecular Biology*, **2021**, 2200, 25-89	1.4	2
12	Profiling of accessible chromatin regions across multiple plant species and cell types reveals common gene regulatory principles and new control modules		2
11	A Ratiometric Dual Color Luciferase Reporter for Fast Characterization of Transcriptional Regulatory Elements in Plants. *ACS Synthetic Biology*, **2021**, 10, 2763-2766	5.7	2

List of Publications

10	De novo stem cell establishment in meristems requires repression of organ boundary cell fate		1
9	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
8	When the time is ripe. *ELife*, **2013**, 2, e00958	8.9	1
7	Arabidopsis bioinformatics: tools and strategies. *Plant Journal*, **2021**,	6.9	1
6	Nuclear transcriptomes at high resolution using retooled INTACT		1
5	Characterization of growth and development of sorghum genotypes with differential susceptibility to Striga hermonthica. *Journal of Experimental Botany*, **2021**, 72, 7970-7983	7	1
4	GLRs: Mediating a defense-regeneration tradeoff in plants.. *Developmental Cell*, **2022**, 57, 417-418	10.2	0
3	Forming roots from shoot.. *Science*, **2022**, 375, 974-975	33.3	0
2	Development and Systems Biology: Riding the Genomics Wave towards a Systems Understanding of Root Development **2018**, 304-330		
1	Development and Systems Biology: Riding the Genomics Wave towards a Systems Understanding of Root Development304-330		