Philip N Benfey

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/144741/publications.pdf

Version: 2024-02-01

191 papers 27,111 citations

7096 78 h-index 157 g-index

294 all docs

294 docs citations

times ranked

294

18333 citing authors

#	Article	IF	CITATIONS
1	An Auxin-Dependent Distal Organizer of Pattern and Polarity in the Arabidopsis Root. Cell, 1999, 99, 463-472.	28.9	1,233
2	A Gene Expression Map of the Arabidopsis Root. Science, 2003, 302, 1956-1960.	12.6	1,161
3	A High-Resolution Root Spatiotemporal Map Reveals Dominant Expression Patterns. Science, 2007, 318, 801-806.	12.6	1,048
4	The SHORT-ROOT Gene Controls Radial Patterning of the Arabidopsis Root through Radial Signaling. Cell, 2000, 101, 555-567.	28.9	1,007
5	The SCARECROW Gene Regulates an Asymmetric Cell Division That Is Essential for Generating the Radial Organization of the Arabidopsis Root. Cell, 1996, 86, 423-433.	28.9	998
6	Transcriptional Regulation of ROS Controls Transition from Proliferation to Differentiation in the Root. Cell, 2010, 143, 606-616.	28.9	926
7	Intercellular movement of the putative transcription factor SHR in root patterning. Nature, 2001, 413, 307-311.	27.8	766
8	Cell signalling by microRNA165/6 directs gene dose-dependent root cell fate. Nature, 2010, 465, 316-321.	27.8	739
9	The auxin influx carrier LAX3 promotes lateral root emergence. Nature Cell Biology, 2008, 10, 946-954.	10.3	715
10	Cell Identity Mediates the Response of <i>Arabidopsis</i> Roots to Abiotic Stress. Science, 2008, 320, 942-945.	12.6	700
11	The GRAS gene family in Arabidopsis: sequence characterization and basic expression analysis of the SCARECROW-LIKE genes. Plant Journal, 1999, 18, 111-119.	5 . 7	572
12	The bHLH Transcription Factor POPEYE Regulates Response to Iron Deficiency in <i>Arabidopsis</i> Roots Â. Plant Cell, 2010, 22, 2219-2236.	6.6	561
13	Control of <i>Arabidopsis</i> Root Development. Annual Review of Plant Biology, 2012, 63, 563-590.	18.7	558
14	Oscillating Gene Expression Determines Competence for Periodic <i>Arabidopsis</i> Root Branching. Science, 2010, 329, 1306-1311.	12.6	532
15	An Evolutionarily Conserved Mechanism Delimiting SHR Movement Defines a Single Layer of Endodermis in Plants. Science, 2007, 316, 421-425.	12.6	522
16	A novel two-component hybrid molecule regulates vascular morphogenesis of the Arabidopsis root. Genes and Development, 2000, 14, 2938-2943.	5.9	499
17	An Auxin Gradient and Maximum in the <i> Arabidopsis < /i > Root Apex Shown by High-Resolution Cell-Specific Analysis of IAA Distribution and Synthesis. Plant Cell, 2009, 21, 1659-1668.</i>	6.6	439
18	Regulation of plant root system architecture: implications for crop advancement. Current Opinion in Biotechnology, 2015, 32, 93-98.	6.6	351

#	Article	IF	CITATIONS
19	Receptor-Like Kinase ACR4 Restricts Formative Cell Divisions in the <i>Arabidopsis</i> Root. Science, 2008, 322, 594-597.	12.6	342
20	COBRA encodes a putative GPI-anchored protein, which is polarly localized and necessary for oriented cell expansion in Arabidopsis. Genes and Development, 2001, 15, 1115-1127.	5.9	335
21	Genetic evidence that the endodermis is essential for shoot gravitropism inArabidopsis thaliana. Plant Journal, 1998, 14, 425-430.	5 . 7	334
22	COBRA, an Arabidopsis Extracellular Glycosyl-Phosphatidyl Inositol-Anchored Protein, Specifically Controls Highly Anisotropic Expansion through Its Involvement in Cellulose Microfibril Orientation. Plant Cell, 2005, 17, 1749-1763.	6.6	321
23	Imaging and Analysis Platform for Automatic Phenotyping and Trait Ranking of Plant Root Systems. Plant Physiology, 2010, 152, 1148-1157.	4.8	306
24	A Gene Regulatory Network for Root Epidermis Cell Differentiation in Arabidopsis. PLoS Genetics, 2012, 8, e1002446.	3.5	306
25	Transcriptional Profile of the Arabidopsis Root Quiescent Center. Plant Cell, 2005, 17, 1908-1925.	6.6	288
26	Whole-Genome Analysis of the SHORT-ROOT Developmental Pathway in Arabidopsis. PLoS Biology, 2006, 4, e143.	5.6	283
27	GiA Roots: software for the high throughput analysis of plant root system architecture. BMC Plant Biology, 2012, 12, 116.	3.6	279
28	Cell type–specific expression profiling in plants via cell sorting of protoplasts from fluorescent reporter lines. Nature Methods, 2005, 2, 615-619.	19.0	276
29	A Bistable Circuit Involving SCARECROW-RETINOBLASTOMA Integrates Cues to Inform Asymmetric Stem Cell Division. Cell, 2012, 150, 1002-1015.	28.9	273
30	Bimodular auxin response controls organogenesis in <i>Arabidopsis</i> . Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 2705-2710.	7.1	271
31	3D phenotyping and quantitative trait locus mapping identify core regions of the rice genome controlling root architecture. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E1695-704.	7.1	261
32	Transcriptional and posttranscriptional regulation of transcription factor expression in Arabidopsis roots. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6055-6060.	7.1	257
33	High-Resolution Expression Map of the Arabidopsis Root Reveals Alternative Splicing and lincRNA Regulation. Developmental Cell, 2016, 39, 508-522.	7.0	245
34	From lab to field, new approaches to phenotyping root system architecture. Current Opinion in Plant Biology, 2011, 14, 310-317.	7.1	235
35	Super-resolution ribosome profiling reveals unannotated translation events in <i>Arabidopsis</i> Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E7126-E7135.	7.1	222
36	Mechanisms Regulating SHORT-ROOT Intercellular Movement. Current Biology, 2004, 14, 1847-1851.	3.9	203

#	Article	IF	Citations
37	Auxin minimum triggers the developmental switch from cell division to cell differentiation in the $\langle i \rangle$ Arabidopsis $\langle i \rangle$ root. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E7641-E7649.	7.1	193
38	Cell Identity Regulators Link Development and Stress Responses in the Arabidopsis Root. Developmental Cell, 2011, 21, 770-782.	7.0	178
39	From Genotype to Phenotype: Systems Biology Meets Natural Variation. Science, 2008, 320, 495-497.	12.6	170
40	Regulation of Plant Stem Cell Quiescence by a Brassinosteroid Signaling Module. Developmental Cell, 2014, 30, 36-47.	7.0	164
41	Unique cell-type-specific patterns of DNA methylation in the root meristem. Nature Plants, 2016, 2, 16058.	9.3	159
42	Down and out in Arabidopsis: the formation of lateral roots. Trends in Plant Science, 1997, 2, 390-396.	8.8	149
43	A steleâ€enriched gene regulatory network in the Arabidopsis root. Molecular Systems Biology, 2011, 7, 459.	7.2	145
44	MYB36 regulates the transition from proliferation to differentiation in the <i>Arabidopsis</i> root. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12099-12104.	7.1	145
45	The COBRA Family of Putative GPI-Anchored Proteins in Arabidopsis. A New Fellowship in Expansion. Plant Physiology, 2002, 130, 538-548.	4.8	143
46	The protein expression landscape of the <i>Arabidopsis</i> root. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 6811-6818.	7.1	140
47	High-resolution experimental and computational profiling of tissue-specific known and novel miRNAs in <i>Arabidopsis</i> . Genome Research, 2012, 22, 163-176.	5.5	140
48	Periodic root branching in <i>Arabidopsis</i> requires synthesis of an uncharacterized carotenoid derivative. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E1300-9.	7.1	139
49	Root development. Current Biology, 2000, 10, R813-R815.	3.9	138
50	To branch or not to branch: the role of pre-patterning in lateral root formation. Development (Cambridge), 2013, 140, 4301-4310.	2.5	137
51	Plant Stem Cell Niches: Standing the Test of Time. Cell, 2008, 132, 553-557.	28.9	132
52	Omics meet networksâ€"using systems approaches to infer regulatory networks in plants. Current Opinion in Plant Biology, 2010, 13, 126-131.	7.1	132
53	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.	7.1	131
54	Transcriptional control of tissue formation throughout root development. Science, 2015, 350, 426-430.	12.6	128

#	Article	IF	CITATIONS
55	RGF1 controls root meristem size through ROS signalling. Nature, 2020, 577, 85-88.	27.8	128
56	Combining Expression and Comparative Evolutionary Analysis. The COBRA Gene Family. Plant Physiology, 2007, 143, 172-187.	4.8	125
57	Analyzing Lateral Root Development: How to Move Forward. Plant Cell, 2012, 24, 15-20.	6.6	125
58	MicroRNA miR396 Regulates the Switch between Stem Cells and Transit-Amplifying Cells in Arabidopsis Roots. Plant Cell, 2015, 27, 3354-3366.	6.6	125
59	A broad competence to respond to SHORT ROOT revealed by tissue-specific ectopic expression. Development (Cambridge), 2004, 131, 2817-2826.	2.5	124
60	Genotypic recognition and spatial responses by rice roots. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2670-2675.	7.1	124
61	The AUXIN BINDING PROTEIN 1 Is Required for Differential Auxin Responses Mediating Root Growth. PLoS ONE, 2009, 4, e6648.	2.5	124
62	Both the conserved GRAS domain and nuclear localization are required for SHORTâ€ROOT movement. Plant Journal, 2009, 57, 785-797.	5.7	123
63	Intercellular Communication during Plant Development. Plant Cell, 2011, 23, 855-864.	6.6	119
64	ASYMMETRIC CELL DIVISION IN PLANTS. Annual Review of Plant Biology, 1999, 50, 505-537.	14.3	117
65	Protonophore―and pHâ€insensitive glucose and sucrose accumulation detected by FRET nanosensors in Arabidopsis root tips. Plant Journal, 2008, 56, 948-962.	5.7	116
66	Spatial Coordination between Stem Cell Activity and Cell Differentiation in the Root Meristem. Developmental Cell, 2013, 26, 405-415.	7.0	113
67	Paired-End Analysis of Transcription Start Sites in <i>Arabidopsis</i> Reveals Plant-Specific Promoter Signatures Â. Plant Cell, 2014, 26, 2746-2760.	6.6	112
68	\hat{l}^2 -Cyclocitral is a conserved root growth regulator. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 10563-10567.	7.1	111
69	Genes and networks regulating root anatomy and architecture. New Phytologist, 2015, 208, 26-38.	7.3	108
70	A single-cell Arabidopsis root atlas reveals developmental trajectories in wild-type and cell identity mutants. Developmental Cell, 2022, 57, 543-560.e9.	7.0	106
71	Maturation of the Ground Tissue of the Root Is Regulated by Gibberellin and SCARECROW and Requires SHORT-ROOT. Plant Physiology, 2005, 138, 636-640.	4.8	103
72	Interplay between SCARECROW, GA and LIKE HETEROCHROMATIN PROTEIN 1 in ground tissue patterning in the Arabidopsis root. Plant Journal, 2009, 58, 1016-1027.	5.7	103

#	Article	IF	CITATIONS
73	The Genetic and Molecular Basis of Root Development. Annual Review of Plant Biology, 1994, 45, 25-45.	14.3	101
74	A microfluidic device and computational platform for high-throughput live imaging of gene expression. Nature Methods, 2012, 9, 1101-1106.	19.0	100
75	Systems Approaches to Identifying Gene Regulatory Networks in Plants. Annual Review of Cell and Developmental Biology, 2008, 24, 81-103.	9.4	96
76	Molecular Analysis of the SCARECROW Gene in Maize Reveals a Common Basis for Radial Patterning in Diverse Meristems. Plant Cell, 2000, 12, 1307-1318.	6.6	95
77	X-Ray Computed Tomography Reveals the Response of Root System Architecture to Soil Texture. Plant Physiology, 2016, 171, 2028-2040.	4.8	87
78	Spatiotemporal signalling in plant development. Nature Reviews Genetics, 2013, 14, 631-644.	16.3	84
79	Not just another hole in the wall: understanding intercellular protein trafficking. Genes and Development, 2005, 19, 189-195.	5.9	82
80	Tracking transcription factor mobility and interaction in Arabidopsis roots with fluorescence correlation spectroscopy. ELife, $2016, 5, \ldots$	6.0	79
81	Conservation and Diversification of SCARECROW in Maize. Plant Molecular Biology, 2005, 59, 619-630.	3.9	73
82	Cell wall remodeling and vesicle trafficking mediate the root clock in <i>Arabidopsis</i> . Science, 2020, 370, 819-823.	12.6	73
83	Advanced imaging techniques for the study of plant growth and development. Trends in Plant Science, 2014, 19, 304-310.	8.8	72
84	Regulation of Division and Differentiation of Plant Stem Cells. Annual Review of Cell and Developmental Biology, 2018, 34, 289-310.	9.4	72
85	The Lateral Root Cap Acts as an Auxin Sink that Controls Meristem Size. Current Biology, 2019, 29, 1199-1205.e4.	3.9	72
86	Plant immune system activation is necessary for efficient root colonization by auxin-secreting beneficial bacteria. Cell Host and Microbe, 2021, 29, 1507-1520.e4.	11.0	70
87	Getting to the root of plant biology: impact of the Arabidopsis genome sequence on root research. Plant Journal, 2010, 61, 992-1000.	5.7	67
88	G-quadruplex structures trigger RNA phase separation. Nucleic Acids Research, 2019, 47, 11746-11754.	14.5	67
89	Anchorene is a carotenoid-derived regulatory metabolite required for anchor root formation in <i>Arabidopsis</i> . Science Advances, 2019, 5, eaaw6787.	10.3	67
90	Control of Arabidopsis lateral root primordium boundaries by <scp>MYB</scp> 36. New Phytologist, 2017, 213, 105-112.	7.3	65

#	Article	IF	Citations
91	Novel technologies for emission reduction complement conservation agriculture to achieve negative emissions from row-crop production. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	64
92	GTL1 and DF1 regulate root hair growth through transcriptional repression of <i>ROOT HAIR DEFECTIVE 6-LIKE 4</i> in <i>Arabidopsis</i> Development (Cambridge), 2018, 145, .	2.5	63
93	Small but Mighty: Functional Peptides Encoded by Small ORFs in Plants. Proteomics, 2018, 18, e1700038.	2.2	63
94	Getting to the root of plant development: the genetics of Arabidopsis root formation. Trends in Genetics, 1994, 10, 84-88.	6.7	61
95	Integrated detection of natural antisense transcripts using strand-specific RNA sequencing data. Genome Research, 2013, 23, 1730-1739.	5.5	58
96	Quantitative Trait Locus Mapping Reveals Regions of the Maize Genome Controlling Root System Architecture. Plant Physiology, 2015, 167, 1487-1496.	4.8	58
97	Signals that regulate stem cell activity during plant development. Current Opinion in Genetics and Development, 2005, 15, 388-394.	3.3	57
98	Cell typeâ€specific transcriptional profiling: implications for metabolite profiling. Plant Journal, 2012, 70, 5-17.	5.7	57
99	High-throughput imaging and analysis of root system architecture in <i>Brachypodium distachyon</i> under differential nutrient availability. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 1559-1569.	4.0	54
100	Establishment of Expression in the SHORTROOT-SCARECROW Transcriptional Cascade through Opposing Activities of Both Activators and Repressors. Developmental Cell, 2016, 39, 585-596.	7.0	54
101	Two New Loci, PLEIADE and HYADE, Implicate Organ-Specific Regulation of Cytokinesis in Arabidopsis. Plant Physiology, 2002, 130, 312-324.	4.8	50
102	A SIMPLE Pipeline for Mapping Point Mutations. Plant Physiology, 2017, 174, 1307-1313.	4.8	50
103	Root layers: complex regulation of developmental patterning. Current Opinion in Genetics and Development, 2008, 18, 354-361.	3.3	49
104	Stem cells:. Current Biology, 1999, 9, R171-R172.	3.9	48
105	Functional genomics of root growth and development in Arabidopsis. Current Opinion in Plant Biology, 2009, 12, 165-171.	7.1	48
106	Uncovering Gene Regulatory Networks Controlling Plant Cell Differentiation. Trends in Genetics, 2017, 33, 529-539.	6.7	47
107	Framework for gradual progression of cell ontogeny in the <i>Arabidopsis</i> root meristem. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E8922-E8929.	7.1	46
108	An auxin-regulable oscillatory circuit drives the root clock in <i>Arabidopsis</i> . Science Advances, 2021, 7, .	10.3	46

#	Article	IF	Citations
109	Reconstructing spatiotemporal gene expression data from partial observations. Bioinformatics, 2009, 25, 2581-2587.	4.1	45
110	Mechanism and function of root circumnutation. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118 , .	7.1	45
111	Symmetry Breaking in Plants: Molecular Mechanisms Regulating Asymmetric Cell Divisions in Arabidopsis. Cold Spring Harbor Perspectives in Biology, 2009, 1, a000497-a000497.	5.5	40
112	Shootward and rootward: peak terminology for plant polarity. Trends in Plant Science, 2010, 15, 593-594.	8.8	39
113	Information processing without brains – the power of intercellular regulators in plants. Development (Cambridge), 2010, 137, 1215-1226.	2.5	38
114	Integrative systems biology: an attempt to describe a simple weed. Current Opinion in Plant Biology, 2012, 15, 162-167.	7.1	38
115	Fluorescence-Activated Cell Sorting in Plant Developmental Biology. Methods in Molecular Biology, 2010, 655, 313-319.	0.9	38
116	Analysis of SCARECROW expression using a rapid system for assessing transgene expression in Arabidopsis roots. Plant Journal, 1997, 12, 957-963.	5.7	37
117	Apical–basal polarity: why plant cells don't standon their heads. Trends in Plant Science, 2006, 11, 12-14.	8.8	37
118	A Lin28 homologue reprograms differentiated cells to stem cells in the moss Physcomitrella patens. Nature Communications, 2017, 8, 14242.	12.8	37
119	Minimum requirements for changing and maintaining endodermis cell identity in the Arabidopsis root. Nature Plants, 2018, 4, 586-595.	9.3	37
120	Network building: transcriptional circuits in the root. Current Opinion in Plant Biology, 2004, 7, 582-588.	7.1	36
121	Mechanism of Dual Targeting of the Phytochrome Signaling Component HEMERA/pTAC12 to Plastids and the Nucleus. Plant Physiology, 2017, 173, 1953-1966.	4.8	36
122	Transcription factors and hormones: new insights into plant cell differentiation. Current Opinion in Cell Biology, 2006, 18, 710-714.	5.4	35
123	Unraveling the Dynamic Transcriptome. Plant Cell, 2006, 18, 2101-2111.	6.6	35
124	Arabidopsis <i>thaliana</i> as a model organism in systems biology. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2009, 1, 372-379.	6.6	35
125	Transcriptional networks in root cell fate specification. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2009, 1789, 315-325.	1.9	34
126	Evolution, Interactions, and Biological Networks. PLoS Biology, 2007, 5, e11.	5.6	33

#	Article	IF	Citations
127	Trait-to-Gene. Current Biology, 2003, 13, 129-133.	3.9	32
128	A plant lipocalin promotes retinal-mediated oscillatory lateral root initiation. Science, 2021, 373, 1532-1536.	12.6	32
129	Distinct sensitivities to phosphate deprivation suggest that <scp>RGF</scp> peptides play disparate roles in <i>Arabidopsis thaliana</i> root development. New Phytologist, 2015, 207, 683-691.	7.3	31
130	Patterning the primary root in $\langle i \rangle$ Arabidopsis $\langle i \rangle$. Wiley Interdisciplinary Reviews: Developmental Biology, 2012, 1, 675-691.	5.9	30
131	The $\langle i \rangle$ Arabidopsis $\langle i \rangle$ GRAS-type SCL28 transcription factor controls the mitotic cell cycle and division plane orientation. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	30
132	Using Cauliflower to Find Conserved Non-Coding Regions in Arabidopsis. Plant Physiology, 2002, 129, 451-454.	4.8	29
133	Single-cell analysis of cell identity in the Arabidopsis root apical meristem: insights and opportunities. Journal of Experimental Botany, 2021, 72, 6679-6686.	4.8	28
134	Is the shoot a root with a view?. Current Opinion in Plant Biology, 1999, 2, 39-43.	7.1	26
135	Beyond Arabidopsis. Translational Biology Meets Evolutionary Developmental Biology. Plant Physiology, 2004, 135, 611-614.	4.8	26
136	Reconstructing regulatory network transitions. Trends in Cell Biology, 2011, 21, 442-451.	7.9	26
137	Plant science decadal vision 2020–2030: Reimagining the potential of plants for a healthy and sustainable future. Plant Direct, 2020, 4, e00252.	1.9	26
138	Time-based patterning in development. Transcription, 2011, 2, 124-129.	3.1	25
139	Detailed reconstruction of 3D plant root shape. , 2011, , .		24
140	High-Throughput RNA Isolation Technologies. New Tools for High-Resolution Gene Expression Profiling in Plant Systems. Plant Physiology, 2005, 138, 585-590.	4.8	23
141	Intergenic and Genic Sequence Lengths Have Opposite Relationships with Respect to Gene Expression. PLoS ONE, 2008, 3, e3670.	2.5	23
142	Sequence Requirements of the 5-Enolpyruvylshikimate-3-Phosphate Synthase 5'-Upstream Region for Tissue-Specific Expression in Flowers and Seedlings. Plant Cell, 1990, 2, 849.	6.6	22
143	Quantification of transcription factor expression from Arabidopsis images. Bioinformatics, 2006, 22, e323-e331.	4.1	21
144	Integrated functional networks of process, tissue, and developmental stage specific interactions in Arabidopsis thaliana. BMC Systems Biology, 2010, 4, 180.	3.0	21

#	Article	IF	Citations
145	Transcriptional Switches Direct Plant Organ Formation and Patterning. Current Topics in Developmental Biology, 2012, 98, 229-257.	2.2	19
146	Systems biology. Current Biology, 2004, 14, R179-R180.	3.9	18
147	Cortex proliferation. Plant Signaling and Behavior, 2009, 4, 551-553.	2.4	18
148	Spatiotemporal analysis identifies ABF2 and ABF3 as key hubs of endodermal response to nitrate. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	17
149	Transcriptional Networks Controlling Plant Development: Fig. 1 Plant Physiology, 2001, 125, 109-111.	4.8	16
150	Physiological mechanisms contributing to the QTL qDTY3.2 effects on improved performance of rice Moroberekan x Swarna BC2F3:4 lines under drought. Rice, 2018, 11, 43.	4.0	15
151	Axis formation and polarity in plants. Current Opinion in Genetics and Development, 2001, 11, 405-409.	3.3	13
152	Histone Deacetylase HDA19 Affects Root Cortical Cell Fate by Interacting with SCARECROW. Plant Physiology, 2019, 180, 276-288.	4.8	13
153	Auxin Action: Slogging out of the Swamp. Current Biology, 2002, 12, R389-R390.	3.9	12
154	Integrating gene flow, crop biology, and farm management in onâ€farm conservation of avocado (<i>Persea americana</i> , Lauraceae). American Journal of Botany, 2003, 90, 1619-1627.	1.7	11
155	Stem Cell Research Goes Underground: The RETINOBLASTOMA-RELATED Gene in Root Development. Cell, 2005, 123, 1180-1182.	28.9	10
156	Defining the Path from Stem Cells to Differentiated Tissue. Current Topics in Developmental Biology, 2016, 116, 35-43.	2.2	10
157	Genes that regulate plant development. Plant Science, 1992, 83, 115-126.	3.6	9
158	Toward a Systems Analysis of the Root. Cold Spring Harbor Symposia on Quantitative Biology, 2012, 77, 91-96.	1.1	9
159	Capturing in-field root system dynamics with RootTracker. Plant Physiology, 2021, 187, 1117-1130.	4.8	9
160	POWRS: Position-Sensitive Motif Discovery. PLoS ONE, 2012, 7, e40373.	2.5	9
161	Arabidopsis Functional Genomics. Plant Physiology, 2002, 129, 393-393.	4.8	8
162	Optimizing root system architecture in biofuel crops for sustainable energy production and soil carbon sequestration. F1000 Biology Reports, 2010, 2, 65.	4.0	8

#	Article	IF	CITATIONS
163	Large Cellular Inclusions Accumulate in Arabidopsis Roots Exposed to Low-Sulfur Conditions. Plant Physiology, 2015, 168, 1573-1589.	4.8	7
164	Growth control of root architecture. , 2012, , 373-386.		6
165	A Friend in Need (of Nutrients) Is a…. Cell, 2016, 165, 269-271.	28.9	5
166	Tissue-Specific Transcriptome Profiling in Arabidopsis Roots. Methods in Molecular Biology, 2017, 1610, 107-122.	0.9	5
167	Phage-Resistant Bacteria Reveal a Role for Potassium in Root Colonization. MBio, 2021, 12, e0140321.	4.1	5
168	A Common Switch used by Plants and Animals. Cell, 2004, 116, 4-5.	28.9	4
169	A Co-opted Regulator of Lateral Root Development Controls Nodule Organogenesis in Lotus. Developmental Cell, 2020, 52, 6-7.	7.0	4
170	Root development: Signaling down and around. BioEssays, 1997, 19, 959-965.	2.5	3
171	Development and Ecology in the Time of Systems Biology. Developmental Cell, 2004, 7, 329-330.	7.0	3
172	A systems approach to understanding root development. Canadian Journal of Botany, 2006, 84, 695-701.	1.1	3
173	Studying Root Development Using a Genomic Approach. , 0, , 325-351.		3
174	HEC of a Job Regulating Stem Cells. Developmental Cell, 2014, 28, 349-350.	7.0	3
175	Single-cell genomics revolutionizes plant development studies across scales. Development (Cambridge), 2022, 149, .	2.5	3
176	managedpop: a computer simulation to project allelic diversity in managed populations with overlapping generations. Molecular Ecology Notes, 2002, 2, 615-617.	1.7	2
177	Developmental Networks. Plant Physiology, 2005, 138, 548-549.	4.8	2
178	Taking a Developmental Perspective on Systems Biology. Developmental Cell, 2011, 21, 27-28.	7.0	2
179	Arabidopsis as a Model for Systems Biology. , 2013, , 391-406.		2
180	VAP-RELATED SUPPRESSORS OF TOO MANY MOUTHS (VST) family proteins are regulators of root system architecture. Plant Physiology, 2021, 185, 457-468.	4.8	2

#	Article	IF	CITATIONS
181	Polarized Radicals. Cell, 2013, 153, 285-286.	28.9	1
182	Identifying Gene Regulatory Networks in Arabidopsis by In Silico Prediction, Yeast-1-Hybrid, and Inducible Gene Profiling Assays. Methods in Molecular Biology, 2016, 1370, 29-50.	0.9	1
183	Lateral Root Initiation: The Emergence of New Primordia Following Cell Death. Current Biology, 2020, 30, R121-R122.	3.9	1
184	Appointments and awards. Plant Molecular Biology Reporter, 1992, 10, 4-4.	1.8	0
185	International Symposium on the Molecular Genetics of Root Development. Plant Molecular Biology Reporter, 1993, 11, 60-64.	1.8	0
186	Signaling the tips: Regulation of stem cell function in plants. Differentiation, 2001, 68, 155-158.	1.9	0
187	Additions and corrections: A systems approach to understanding root development. Canadian Journal of Botany, 2006, 84, 1508.	1.1	O
188	Promoting Collaborative Interdisciplinary Research at the Duke Center for Systems Biology. ACS Synthetic Biology, 2012, 1, 153-155.	3.8	0
189	Arabidopsis Root. , 2013, , 2-1-2-17.		O
190	Reply to Amundson: Time to go to work. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2122842119.	7.1	0
191	Development and Systems Biology: Riding the Genomics Wave towards a Systems Understanding of Root Development., 0,, 304-330.		O