John Schiefelbein

List of Publications by Year
in descending order

61 papers	7,389 citations	87888 38 h-index	128289 60 g-index
64 all docs	64 docs citations	64 times ranked	5598 citing authors

#	Article	IF	Citations
1	Identification of new marker genes from plant singleâ€cell RNAâ€seq data using interpretable machine learning methods. New Phytologist, 2022, 234, 1507-1520.	7.3	11
2	Single-nucleus RNA and ATAC sequencing reveals the impact of chromatin accessibility on gene expression in Arabidopsis roots at the single-cell level. Molecular Plant, 2021, 14, 372-383.	8.3	153
3	Plant Cell Identity in the Era of Single-Cell Transcriptomics. Annual Review of Genetics, 2021, 55, 479-496.	7.6	19
4	Nitrate regulation of lateral root and root hair development in plants. Journal of Experimental Botany, 2020, 71, 4405-4414.	4.8	45
5	Molecular Basis for a Cell Fate Switch in Response to Impaired Ribosome Biogenesis in the Arabidopsis Root Epidermis. Plant Cell, 2020, 32, 2402-2423.	6.6	15
6	Novel TTG1 Mutants Modify Root-Hair Pattern Formation in Arabidopsis. Frontiers in Plant Science, 2020, 11, 383.	3.6	19
7	QUIRKY regulates root epidermal cell patterning through stabilizing SCRAMBLED to control CAPRICE movement in Arabidopsis. Nature Communications, 2019, 10, 1744.	12.8	23
8	Single-Cell RNA Sequencing Resolves Molecular Relationships Among Individual Plant Cells. Plant Physiology, 2019, 179, 1444-1456.	4.8	348
9	Root Epidermal Cell Patterning Is Modulated by a Critical Residue in the WEREWOLF Transcription Factor. Plant Physiology, 2019, 181, 1239-1256.	4.8	26
10	Diversification of Root Hair Development Genes in Vascular Plants. Plant Physiology, 2017, 174, 1697-1712.	4.8	39
11	Plant Systems Biology at the Single-Cell Level. Trends in Plant Science, 2017, 22, 949-960.	8.8	102
12	Positioning of the SCRAMBLED receptor requires UDP-Glc:sterol glucosyltransferase 80B1 in Arabidopsis roots. Scientific Reports, 2017, 7, 5714.	3.3	17
13	Multiple phytohormones promote root hair elongation by regulating a similar set of genes in the root epidermis in Arabidopsis. Journal of Experimental Botany, 2016, 67, 6363-6372.	4.8	78
14	A single amino acid substitution in the R3 domain of GLABRA1 leads to inhibition of trichome formation in Arabidopsis without affecting its interaction with GLABRA3. Plant, Cell and Environment, 2016, 39, 897-907.	5.7	53
15	Molecular phenotyping of plant single cell-types enhances forward genetic analyses. Frontiers in Plant Science, 2015, 6, 509.	3.6	8
16	TORNADO1 regulates root epidermal patterning through the<i>WEREWOLF</i>pathway in<i>Arabidopsis thaliana</i>. Plant Signaling and Behavior, 2015, 10, e1103407.	2.4	23
17	WEREWOLF and ENHANCER of GLABRA3 are interdependent regulators of the spatial expression pattern of GLABRA2 in Arabidopsis. Biochemical and Biophysical Research Communications, 2015, 467, 94-100.	2.1	4
18	Conserved Gene Expression Programs in Developing Roots from Diverse Plants. Plant Cell, 2015, 27, 2119-2132.	6.6	92

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19	ANGUSTIFOLIA mediates one of the multiple SCRAMBLED signaling pathways regulating cell growth pattern in Arabidopsis thaliana. Biochemical and Biophysical Research Communications, 2015, 465, 587-593.	2.1	5
20	Regulation of cell fate determination in plants. Frontiers in Plant Science, 2014, 5, 368.	3.6	7
21	Regulation of epidermal cell fate in Arabidopsis roots: the importance of multiple feedback loops. Frontiers in Plant Science, 2014, 5, 47.	3.6	112
22	Root Hairs. The Arabidopsis Book, 2014, 12, e0172.	0.5	179
23	Distinct Signaling Mechanisms in Multiple Developmental Pathways by the SCRAMBLED Receptor of Arabidopsis. Plant Physiology, 2014, 166, 976-987.	4.8	15
24	TRIPTYCHON, not CAPRICE, participates in feedback regulation ofSCMexpression in theArabidopsisroot epidermis. Plant Signaling and Behavior, 2014, 9, e973815.	2.4	11
25	Involvement of C2H2 zinc finger proteins in the regulation of epidermal cell fate determination in <i>Arabidopsis</i>. Journal of Integrative Plant Biology, 2014, 56, 1112-1117.	8.5	39
26	Tissue-Specific Profiling Reveals Transcriptome Alterations in <i>Arabidopsis</i> Mutants Lacking Morphological Phenotypes Â. Plant Cell, 2013, 25, 3175-3185.	6.6	29
27	Nuclear Trapping Controls the Position-Dependent Localization of CAPRICE in the Root Epidermis of Arabidopsis. Plant Physiology, 2013, 163, 193-204.	4.8	50
28	A Gene Regulatory Network for Root Epidermis Cell Differentiation in Arabidopsis. PLoS Genetics, 2012, 8, e1002446.	3.5	306
29	Nuclear Ribosome Biogenesis Mediated by the DIM1A rRNA Dimethylase Is Required for Organized Root Growth and Epidermal Patterning in <i>Arabidopsis</i>. Plant Cell, 2012, 24, 2839-2856.	6.6	32
30	A zinc finger protein gene <i>ZFP5</i> integrates phytohormone signaling to control root hair development in Arabidopsis. Plant Journal, 2012, 72, 474-490.	5.7	79
31	Cell Fate in the Arabidopsis Root Epidermis Is Determined by Competition between WEREWOLF and CAPRICE Â Â. Plant Physiology, 2011, 157, 1196-1208.	4.8	86
32	Distinct relationships between GLABRA2 and singleâ€repeat R3 MYB transcription factors in the regulation of trichome and root hair patterning in Arabidopsis. New Phytologist, 2010, 185, 387-400.	7.3	52
33	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
34	The gene regulatory network for root epidermal cell-type pattern formation in <i>Arabidopsis</i>. Journal of Experimental Botany, 2009, 60, 1515-1521.	4.8	129
35	Regulated accumulation of the SCRAMBLED receptor and position-dependent cell type patterning in Arabidopsis. Plant Signaling and Behavior, 2009, 4, 332-335.	2.4	3
36	The<i>MYB23</i>Gene Provides a Positive Feedback Loop for Cell Fate Specification in the<i>Arabidopsis</i>Root Epidermis Â. Plant Cell, 2009, 21, 1080-1094.	6.6	130

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37	Comprehensive analysis of single-repeat R3 MYB proteins in epidermal cell patterning and their transcriptional regulation in Arabidopsis. BMC Plant Biology, 2008, 8, 81.	3.6	119
38	A Feedback Mechanism Controlling SCRAMBLED Receptor Accumulation and Cell-Type Pattern in Arabidopsis. Current Biology, 2008, 18, 1949-1954.	3.9	89
39	Cell Identity Mediates the Response of <i>Arabidopsis</i> Roots to Abiotic Stress. Science, 2008, 320, 942-945.	12.6	700
40	A Mutual Support Mechanism through Intercellular Movement of CAPRICE and GLABRA3 Can Pattern the Arabidopsis Root Epidermis. PLoS Biology, 2008, 6, e235.	5.6	78
41	TRICHOMELESS1 regulates trichome patterning by suppressing<i>GLABRA1</i>in<i>Arabidopsis</i>. Development (Cambridge), 2007, 134, 3873-3882.	2.5	158
42	The role of the SCRAMBLED receptor-like kinase in patterning the Arabidopsis root epidermis. Developmental Biology, 2007, 302, 118-131.	2.0	121
43	Distinct and overlapping roles of single-repeat MYB genes in root epidermal patterning. Developmental Biology, 2007, 311, 566-578.	2.0	157
44	A novel regulatory circuit specifies cell fate in the Arabidopsis root epidermis. Physiologia Plantarum, 2006, 126, 060127022051002-???.	5.2	9
45	2004 SIVB Congress Symposium Proceeding: Cell fate specification during development of the Arabidopsis root epidermis. In Vitro Cellular and Developmental Biology - Plant, 2005, 41, 1-5.	2.1	0
46	Positional Signaling Mediated by a Receptor-like Kinase in Arabidopsis. Science, 2005, 307, 1111-1113.	12.6	231
47	The bHLH genes GL3 and EGL3 participate in an intercellular regulatory circuit that controls cell patterning in the Arabidopsis root epidermis. Development (Cambridge), 2005, 132, 291-298.	2.5	253
48	The WEREWOLF MYB protein directly regulates CAPRICEtranscription during cell fate specification in the Arabidopsis root epidermis. Development (Cambridge), 2005, 132, 4765-4775.	2.5	105
49	Functional diversification of MYB23 and GL1 genes in trichome morphogenesis and initiation. Development (Cambridge), 2005, 132, 1477-1485.	2.5	186
50	ENHANCER of TRYand CPC 2(ETC2) reveals redundancy in the region-specific control of trichome development of Arabidopsis. Plant Molecular Biology, 2004, 55, 389-398.	3.9	206
51	The ENHANCER OF TRY AND CPC1 gene acts redundantly with TRIPTYCHON and CAPRICE in trichome and root hair cell patterning in Arabidopsis. Developmental Biology, 2004, 268, 506-513.	2.0	367
52	Cell-fate specification in the epidermis: a common patterning mechanism in the root and shoot. Current Opinion in Plant Biology, 2003, 6, 74-78.	7.1	236
53	HOWDOCELLSKNOWWHATTHEYWANT TO BEWHENTHEYGROWUP? Lessons from Epidermal Patterning in Arabidopsis. Annual Review of Plant Biology, 2003, 54, 403-430.	18.7	197
54	The bHLH genes GLABRA3 (GL3) andENHANCER OF GLABRA3(EGL3) specify epidermal cell fate in the Arabidopsis root. Development (Cambridge), 2003, 130, 6431-6439.	2.5	375

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55	Cell Pattern in the Arabidopsis Root Epidermis Determined by Lateral Inhibition with Feedback. Plant Cell, 2002, 14, 611-618.	6.6	221
56	Cloning and characterization of an actin depolymerizing factor gene from grape (Vitis vinifera L.) expressed during rooting in stem cuttings. Plant Science, 2002, 162, 283-288.	3.6	27
57	Embryonic control of epidermal cell patterning in the root and hypocotyl of<i>Arabidopsis</i>. Development (Cambridge), 2001, 128, 3697-3705.	2.5	90
58	WEREWOLF, a MYB-Related Protein in Arabidopsis, Is a Position-Dependent Regulator of Epidermal Cell Patterning. Cell, 1999, 99, 473-483.	28.9	543
59	Positional information in root epidermis is defined during embryogenesis and acts in domains with strict boundaries. Current Biology, 1998, 8, 421-430.	3.9	162
60	Control of Cell Division in the Root Epidermis ofArabidopsis thaliana. Developmental Biology, 1998, 194, 235-245.	2.0	166
61	A Common Position-Dependent Mechanism Controls Cell-Type Patterning and GLABRA2 Regulation in the Root and Hypocotyl Epidermis of Arabidopsis1. Plant Physiology, 1998, 117, 73-84.	4.8	162