Christian S Hardtke

List of Publications by Year
in descending order

90 papers	9,386 citations	53794 45 h-index	48315 88 g-index
97 all docs	97 docs citations	97 times ranked	9114 citing authors

#	Article	IF	Citations
1	Targeted destabilization of HY5 during light-regulated development of Arabidopsis. Nature, 2000, 405, 462-466.	27.8	1,227
2	The Arabidopsis gene MONOPTEROS encodes a transcription factor mediating embryo axis formation and vascular development. EMBO Journal, 1998, 17, 1405-1411.	7.8	938
3	Hidden Branches: Developments in Root System Architecture. Annual Review of Plant Biology, 2007, 58, 93-113.	18.7	474
4	Studies on the role of the Arabidopsis gene MONOPTEROS in vascular development and plant cell axialization. Planta, 1996, 200, 229-37.	3.2	434
5	Hormone Signalling Crosstalk in Plant Growth Regulation. Current Biology, 2011, 21, R365-R373.	3.9	408
6	Overlapping and non-redundant functions of the Arabidopsis auxin response factors MONOPTEROS and NONPHOTOTROPIC HYPOCOTYL 4. Development (Cambridge), 2004, 131, 1089-1100.	2.5	302
7	BRX mediates feedback between brassinosteroid levels and auxin signalling in root growth. Nature, 2006, 443, 458-461.	27.8	256
8	TheArabidopsistranscription factor HY5 integrates light and hormone signaling pathways. Plant Journal, 2004, 38, 332-347.	5.7	255
9	Natural genetic variation in Arabidopsis identifies BREVIS RADIX, a novel regulator of cell proliferation and elongation in the root. Genes and Development, 2004, 18, 700-714.	5.9	217
10	Identification of a structural motif that confers specific interaction with the WD40 repeat domain of Arabidopsis COP1. EMBO Journal, 2001, 20, 118-127.	7.8	205
11	Vascular continuity and auxin signals. Trends in Plant Science, 2000, 5, 387-393.	8.8	201
12	Mobile Gibberellin Directly Stimulates<i>Arabidopsis</i>Hypocotyl Xylem Expansion Â. Plant Cell, 2011, 23, 1322-1336.	6.6	196
13	Strigolactone Promotes Degradation of DWARF14, an Î±/Î² Hydrolase Essential for Strigolactone Signaling in<i>Arabidopsis</i>Â. Plant Cell, 2014, 26, 1134-1150.	6.6	196
14	The Arabidopsis leucine-rich repeat receptor kinase MIK2/LRR-KISS connects cell wall integrity sensing, root growth and response to abiotic and biotic stresses. PLoS Genetics, 2017, 13, e1006832.	3.5	187
15	Opposite Root Growth Phenotypes of hy5 versus hy5 hyh Mutants Correlate with Increased Constitutive Auxin Signaling. PLoS Genetics, 2006, 2, e202.	3.5	186
16	Suppression of <i>Arabidopsis</i> protophloem differentiation and root meristem growth by CLE45 requires the receptor-like kinase BAM3. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7074-7079.	7.1	174
17	Molecular genetic framework for protophloem formation. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 11551-11556.	7.1	159
18	Evaluation and classification of RING-finger domains encoded by the Arabidopsis genome. Genome Biology, 2002, 3, research0016.1.	9.6	137

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19	Low number of fixed somatic mutations in a long-lived oak tree. Nature Plants, 2017, 3, 926-929.	9.3	120
20	Spatio-temporal sequence of cross-regulatory events in root meristem growth. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 22734-22739.	7.1	116
21	Polarly localized kinase SGN1 is required for Casparian strip integrity and positioning. Nature Plants, 2016, 2, 16113.	9.3	105
22	Unequal genetic redundancies in Arabidopsis â€“ a neglected phenomenon?. Trends in Plant Science, 2006, 11, 492-498.	8.8	103
23	Flowering as a Condition for Xylem Expansion in Arabidopsis Hypocotyl and Root. Current Biology, 2008, 18, 458-463.	3.9	102
24	Biochemical evidence for ubiquitin ligase activity of the Arabidopsis COP1 interacting protein 8 (CIP8). Plant Journal, 2002, 30, 385-394.	5.7	101
25	Primary root protophloem differentiation requires balanced phosphatidylinositol-4,5-biphosphate levels and systemically affects root branching. Development (Cambridge), 2015, 142, 1437-46.	2.5	99
26	Phytohormone collaboration: zooming in on auxinâ€“brassinosteroid interactions. Trends in Cell Biology, 2007, 17, 485-492.	7.9	96
27	Brassinosteroid signaling directs formative cell divisions and protophloem differentiation in <i>Arabidopsis</i> root meristems. Development (Cambridge), 2017, 144, 272-280.	2.5	95
28	Dynamic, auxin-responsive plasma membrane-to-nucleus movement of<i>Arabidopsis</i>BRX. Development (Cambridge), 2009, 136, 2059-2067.	2.5	92
29	The Cell Biology of the COP/DET/FUS Proteins. Regulating Proteolysis in Photomorphogenesis and Beyond?. Plant Physiology, 2000, 124, 1548-1557.	4.8	88
30	Natural Genetic Variation in Arabidopsis: Tools, Traits and Prospects for Evolutionary Ecology. Annals of Botany, 2007, 99, 1043-1054.	2.9	83
31	Perception of rootâ€active <scp>CLE</scp> peptides requires <scp>CORYNE</scp> function in the phloem vasculature. EMBO Reports, 2017, 18, 1367-1381.	4.5	80
32	Expression Quantitative Trait Locus Mapping across Water Availability Environments Reveals Contrasting Associations with Genomic Features in <i>Arabidopsis</i> Â Â Â. Plant Cell, 2013, 25, 3266-3279.	6.6	73
33	Transcriptional auxinâ€“brassinosteroid crosstalk: Who's talking?. BioEssays, 2007, 29, 1115-1123.	2.5	71
34	Plasma Membrane Domain Patterning and Self-Reinforcing Polarity in Arabidopsis. Developmental Cell, 2020, 52, 223-235.e5.	7.0	67
35	Natural Arabidopsis brx Loss-of-Function Alleles Confer Root Adaptation to Acidic Soil. Current Biology, 2012, 22, 1962-1968.	3.9	66
36	The Effects of High Steady State Auxin Levels on Root Cell Elongation in Brachypodium. Plant Cell, 2016, 28, 1009-1024.	6.6	65

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37	The Short-Rooted Phenotype of the<i>brevis radix</i>Mutant Partly Reflects Root Abscisic Acid Hypersensitivity Â Â Â. Plant Physiology, 2009, 149, 1917-1928.	4.8	63
38	CLERK is a novel receptor kinase required for sensing of root-active CLE peptides in <i>Arabidopsis</i>. Development (Cambridge), 2018, 145, .	2.5	61
39	Characterization of the Plant-Specific BREVIS RADIX Gene Family Reveals Limited Genetic Redundancy Despite High Sequence Conservation. Plant Physiology, 2006, 140, 1306-1316.	4.8	60
40	CLAVATA 1-type receptors in plant development. Journal of Experimental Botany, 2016, 67, 4827-4833.	4.8	60
41	Disturbed Local Auxin Homeostasis Enhances Cellular Anisotropy and Reveals Alternative Wiring of Auxin-ethylene Crosstalk in Brachypodium distachyon Seminal Roots. PLoS Genetics, 2013, 9, e1003564.	3.5	59
42	<i>Arabidopsis </i><scp>MAKR</scp>5 is a positive effector of <scp>BAM</scp>3â€dependent <scp>CLE</scp>45 signaling. EMBO Reports, 2016, 17, 1145-1154.	4.5	55
43	Natural genetic variation of root system architecture from Arabidopsis to Brachypodium : towards adaptive value. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 1552-1558.	4.0	54
44	Positional Information by Differential Endocytosis Splits Auxin Response to Drive Arabidopsis Root Meristem Growth. Current Biology, 2011, 21, 1918-1923.	3.9	52
45	Phloem function and development â€" biophysics meets genetics. Current Opinion in Plant Biology, 2018, 43, 22-28.	7.1	51
46	A Cellular Insulator against CLE45 Peptide Signaling. Current Biology, 2019, 29, 2501-2508.e3.	3.9	49
47	Arabidopsis Flippases Cooperate with ARF GTPase Exchange Factors to Regulate the Trafficking and Polarity of PIN Auxin Transporters. Plant Cell, 2020, 32, 1644-1664.	6.6	49
48	A qualitative continuous model of cellular auxin and brassinosteroid signaling and their crosstalk. Bioinformatics, 2011, 27, 1404-1412.	4.1	44
49	Phosphosite charge rather than shootward localization determines OCTOPUS activity in root protophloem. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E5721-E5730.	7.1	42
50	A single-cell morpho-transcriptomic map of brassinosteroid action in the Arabidopsis root. Molecular Plant, 2021, 14, 1985-1999.	8.3	40
51	BAM1/2 receptor kinase signaling drives CLE peptide-mediated formative cell divisions in <i>Arabidopsis</i> roots. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 32750-32756.	7.1	38
52	Automated quantitative histology reveals vascular morphodynamics during Arabidopsis hypocotyl secondary growth. ELife, 2014, 3, e01567.	6.0	37
53	<i>BRX</i> promotes Arabidopsis shoot growth. New Phytologist, 2010, 188, 23-29.	7.3	34
54	Local and Systemic Effects of Brassinosteroid Perception in Developing Phloem. Current Biology, 2020, 30, 1626-1638.e3.	3.9	34

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55	A hyperactive quantitative trait locus allele of <i>Arabidopsis BRX</i> contributes to natural variation in root growth vigor. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 8475-8480.	7.1	33
56	The <i><scp>IBO</scp></i> germination quantitative trait locus encodes a phosphatase 2<scp>C</scp>â€related variant with a nonsynonymous amino acid change that interferes with abscisic acid signaling. New Phytologist, 2015, 205, 1076-1082.	7.3	32
57	Substantial deletion overlap among divergent Arabidopsis genomes revealed by intersection of short reads and tiling arrays. Genome Biology, 2010, 11, R4.	9.6	31
58	Small but thick enoughÂâ€“Âthe Arabidopsis hypocotyl as a model to study secondary growth. Physiologia Plantarum, 2014, 151, 164-171.	5.2	31
59	Peptide Signaling Pathways in Vascular Differentiation. Plant Physiology, 2020, 182, 1636-1644.	4.8	30
60	Genetic similarity among Arabidopsis thaliana ecotypes estimated by DNA sequence comparison. Plant Molecular Biology, 1996, 32, 915-922.	3.9	29
61	Root development â€” branching into novel spheres. Current Opinion in Plant Biology, 2006, 9, 66-71.	7.1	29
62	Context-Dependent Dual Role of SKI8 Homologs in mRNA Synthesis and Turnover. PLoS Genetics, 2012, 8, e1002652.	3.5	28
63	Antagonistic peptide technology for functional dissection of CLE peptides revisited. Journal of Experimental Botany, 2015, 66, 5367-5374.	4.8	27
64	BEN3/BIG2 ARF GEF is Involved in Brefeldin A-Sensitive Trafficking at the trans-Golgi Network/Early Endosome in Arabidopsis thaliana. Plant and Cell Physiology, 2017, 58, 1801-1811.	3.1	27
65	A conserved module regulates receptor kinase signalling in immunity and development. Nature Plants, 2022, 8, 356-365.	9.3	27
66	Intraspecific competition reveals conditional fitness effects of single gene polymorphism at the <i>Arabidopsis</i> root growth regulator <i>BRX</i>. New Phytologist, 2008, 180, 71-80.	7.3	22
67	Comprehensive analysis of <i>Arabidopsis</i> expression level polymorphisms with simple inheritance. Molecular Systems Biology, 2009, 5, 242.	7.2	21
68	The co-chaperone p23 controls root development through the modulation of auxin distribution in the<i>Arabidopsis</i>root meristem. Journal of Experimental Botany, 2015, 66, 5113-5122.	4.8	20
69	Secondary growth of the Arabidopsis hypocotyl â€” vascular development in dimensions. Current Opinion in Plant Biology, 2016, 29, 9-15.	7.1	20
70	Local auxin competition explains fragmented differentiation patterns. Nature Communications, 2020, 11, 2965.	12.8	19
71	Mapping and engineering of auxin-induced plasma membrane dissociation in BRX family proteins. Plant Cell, 2021, 33, 1945-1960.	6.6	19
72	Broad spectrum developmental role of Brachypodium <scp>AUX</scp>1. New Phytologist, 2018, 219, 1216-1223.	7.3	18

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73	Vascular continuity, cell axialisation and auxin. Plant Growth Regulation, 2000, 32, 173-185.	3.4	17
74	Metaphloem development in the <i>Arabidopsis</i> root tip. Development (Cambridge), 2021, 148, .	2.5	17
75	Small Ubiquitinâ€Like Modifier Conjugating Enzyme with Active Site Mutation Acts as Dominant Negative Inhibitor of SUMO Conjugation in <i>Arabidopsis</i>^F. Journal of Integrative Plant Biology, 2013, 55, 75-82.	8.5	16
76	Mutational analysis of root initiation in theArabidopsis embryo. Plant and Soil, 1996, 187, 1-9.	3.7	13
77	Auxin transport in developing protophloem: A case study in canalization. Journal of Plant Physiology, 2022, 269, 153594.	3.5	12
78	BIG BROTHER Uncouples Cell Proliferation from Elongation in the Arabidopsis Primary Root. Plant and Cell Physiology, 2017, 58, 1519-1527.	3.1	11
79	The transcription and export complex THO/TREX contributes to transcription termination in plants. PLoS Genetics, 2020, 16, e1008732.	3.5	11
80	Genetic and contig map of a 2200-kb region encompassing 5.5â€,cM on chromosome 1 of Arabidopsis thaliana. Genome, 1996, 39, 1086-1092.	2.0	10
81	Conditional effects of the epigenetic regulator JUMONJI 14 in <i>Arabidopsis</i> root growth. Development (Cambridge), 2019, 146, .	2.5	9
82	Gibberellin Signaling: GRASs Growing Roots Dispatch. Current Biology, 2003, 13, R366-R367.	3.9	8
83	The Roundtable on Sustainable Biofuels: plant scientist input needed. Trends in Plant Science, 2009, 14, 409-412.	8.8	8
84	The topless plant developmental phenotype explained!. Genome Biology, 2008, 9, 219.	9.6	6
85	The case for resequencing studies of Arabidopsis thaliana accessions: mining the dark matter of natural genetic variation. F1000 Biology Reports, 2010, 2, 85.	4.0	6
86	Auxin and Its Henchmen: Hormonal Cross Talk in Root Growth and Development. , 2014, , 245-264.		5
87	Plant Biology: Brassinosteroids and the Intracellular Auxin Shuttle. Current Biology, 2020, 30, R407-R409.	3.9	5
88	A direct stimulatory role of mobile gibberellin in Arabidopsishypocotyl xylem expansion. BMC Proceedings, 2011, 5, .	1.6	0
89	Advances in identifying and exploiting natural genetic variation. , 2012, , 195-205.		0
90	Editorial overview: Developmental mechanisms, patterning and evolution: Developmental patterning: from stochasticity to plasticity. Current Opinion in Genetics and Development, 2017, 45, iv-v.	3.3	0