# Christian S Hardtke

List of Publications by Year
in descending order



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

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Auxin transport in developing protophloem: A case study in canalization. Journal of Plant Physiology, 2022, 269, 153594. | 3.5 | 12 |
| 2 | A conserved module regulates receptor kinase signalling in immunity and development. Nature Plants, 2022, 8, 356-365. | 9.3 | 27 |
| 3 | Mapping and engineering of auxin-induced plasma membrane dissociation in BRX family proteins. Plant Cell, 2021, 33, 1945-1960. | 6.6 | 19 |
| 4 | Metaphloem development in the <i>Arabidopsis</i> root tip. Development (Cambridge), 2021, 148, . | 2.5 | 17 |
| 5 | A single-cell morpho-transcriptomic map of brassinosteroid action in the Arabidopsis root. Molecular Plant, 2021, 14, 1985-1999. | 8.3 | 40 |
| 6 | Plasma Membrane Domain Patterning and Self-Reinforcing Polarity in Arabidopsis. Developmental Cell, 2020, 52, 223-235.e5. | 7.0 | 67 |
| 7 | Local auxin competition explains fragmented differentiation patterns. Nature Communications, 2020, 11, 2965. | 12.8 | 19 |
| 8 | 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 |
| 9 | Plant Biology: Brassinosteroids and the Intracellular Auxin Shuttle. Current Biology, 2020, 30, R407-R409. | 3.9 | 5 |
| 10 | 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 |
| 11 | Local and Systemic Effects of Brassinosteroid Perception in Developing Phloem. Current Biology, 2020, 30, 1626-1638.e3. | 3.9 | 34 |
| 12 | The transcription and export complex THO/TREX contributes to transcription termination in plants. PLoS Genetics, 2020, 16, e1008732. | 3.5 | 11 |
| 13 | Peptide Signaling Pathways in Vascular Differentiation. Plant Physiology, 2020, 182, 1636-1644. | 4.8 | 30 |
| 14 | A Cellular Insulator against CLE45 Peptide Signaling. Current Biology, 2019, 29, 2501-2508.e3. | 3.9 | 49 |
| 15 | Conditional effects of the epigenetic regulator JUMONJI 14 in <i>Arabidopsis</i> root growth. Development (Cambridge), 2019, 146, . | 2.5 | 9 |
| 16 | Phloem function and development â€" biophysics meets genetics. Current Opinion in Plant Biology, 2018, 43, 22-28. | 7.1 | 51 |
| 17 | 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 |
| 18 | Broad spectrum developmental role of Brachypodium <scp>AUX</scp>1. New Phytologist, 2018, 219, 1216-1223. | 7.3 | 18 |

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|---|---|---|---|
| 19 | Brassinosteroid signaling directs formative cell divisions and protophloem differentiation in <i>Arabidopsis</i> root meristems. Development (Cambridge), 2017, 144, 272-280. | 2.5 | 95 |
| 20 | 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 |
| 21 | 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 |
| 22 | 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 |
| 23 | Low number of fixed somatic mutations in a long-lived oak tree. Nature Plants, 2017, 3, 926-929. | 9.3 | 120 |
| 24 | 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 |
| 25 | BIG BROTHER Uncouples Cell Proliferation from Elongation in the Arabidopsis Primary Root. Plant and Cell Physiology, 2017, 58, 1519-1527. | 3.1 | 11 |
| 26 | 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 |
| 27 | The Effects of High Steady State Auxin Levels on Root Cell Elongation in Brachypodium. Plant Cell, 2016, 28, 1009-1024. | 6.6 | 65 |
| 28 | <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 |
| 29 | Polarly localized kinase SGN1 is required for Casparian strip integrity and positioning. Nature Plants, 2016, 2, 16113. | 9.3 | 105 |
| 30 | CLAVATA 1-type receptors in plant development. Journal of Experimental Botany, 2016, 67, 4827-4833. | 4.8 | 60 |
| 31 | Secondary growth of the Arabidopsis hypocotyl â€” vascular development in dimensions. Current Opinion in Plant Biology, 2016, 29, 9-15. | 7.1 | 20 |
| 32 | Antagonistic peptide technology for functional dissection of CLE peptides revisited. Journal of Experimental Botany, 2015, 66, 5367-5374. | 4.8 | 27 |
| 33 | 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 |
| 34 | 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 |
| 35 | 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 |
| 36 | Small but thick enoughÂâ€“Âthe Arabidopsis hypocotyl as a model to study secondary growth. Physiologia Plantarum, 2014, 151, 164-171. | 5.2 | 31 |

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|---|---|---|---|
| 37 | 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 |
| 38 | Auxin and Its Henchmen: Hormonal Cross Talk in Root Growth and Development. , 2014, , 245-264. | | 5 |
| 39 | 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 |
| 40 | Automated quantitative histology reveals vascular morphodynamics during Arabidopsis hypocotyl secondary growth. ELife, 2014, 3, e01567. | 6.0 | 37 |
| 41 | Small Ubiquitinâ€Like Modifier Conjugating Enzyme with Active Site Mutation Acts as Dominant Negative Inhibitor of SUMO Conjugation in <i>Arabidopsis</i><sup>F</sup>. Journal of Integrative Plant Biology, 2013, 55, 75-82. | 8.5 | 16 |
| 42 | 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 |
| 43 | 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 |
| 44 | 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 |
| 45 | Context-Dependent Dual Role of SKI8 Homologs in mRNA Synthesis and Turnover. PLoS Genetics, 2012, 8, e1002652. | 3.5 | 28 |
| 46 | 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 |
| 47 | Advances in identifying and exploiting natural genetic variation. , 2012, , 195-205. | | 0 |
| 48 | Natural Arabidopsis brx Loss-of-Function Alleles Confer Root Adaptation to Acidic Soil. Current Biology, 2012, 22, 1962-1968. | 3.9 | 66 |
| 49 | Hormone Signalling Crosstalk in Plant Growth Regulation. Current Biology, 2011, 21, R365-R373. | 3.9 | 408 |
| 50 | Positional Information by Differential Endocytosis Splits Auxin Response to Drive Arabidopsis Root Meristem Growth. Current Biology, 2011, 21, 1918-1923. | 3.9 | 52 |
| 51 | A direct stimulatory role of mobile gibberellin in Arabidopsishypocotyl xylem expansion. BMC Proceedings, 2011, 5, . | 1.6 | 0 |
| 52 | A qualitative continuous model of cellular auxin and brassinosteroid signaling and their crosstalk. Bioinformatics, 2011, 27, 1404-1412. | 4.1 | 44 |
| 53 | Mobile Gibberellin Directly Stimulates<i>Arabidopsis</i>Hypocotyl Xylem Expansion Â. Plant Cell, 2011, 23, 1322-1336. | 6.6 | 196 |
| 54 | <i>BRX</i> promotes Arabidopsis shoot growth. New Phytologist, 2010, 188, 23-29. | 7.3 | 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 | 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 |
| 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 | 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 |
| 59 | Comprehensive analysis of <i>Arabidopsis</i> expression level polymorphisms with simple inheritance. Molecular Systems Biology, 2009, 5, 242. | 7.2 | 21 |
| 60 | 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 |
| 61 | Dynamic, auxin-responsive plasma membrane-to-nucleus movement of<i>Arabidopsis</i>BRX. Development (Cambridge), 2009, 136, 2059-2067. | 2.5 | 92 |
| 62 | The Roundtable on Sustainable Biofuels: plant scientist input needed. Trends in Plant Science, 2009, 14, 409-412. | 8.8 | 8 |
| 63 | 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 |
| 64 | Flowering as a Condition for Xylem Expansion in Arabidopsis Hypocotyl and Root. Current Biology, 2008, 18, 458-463. | 3.9 | 102 |
| 65 | The topless plant developmental phenotype explained!. Genome Biology, 2008, 9, 219. | 9.6 | 6 |
| 66 | Natural Genetic Variation in Arabidopsis: Tools, Traits and Prospects for Evolutionary Ecology. Annals of Botany, 2007, 99, 1043-1054. | 2.9 | 83 |
| 67 | Transcriptional auxinâ€"brassinosteroid crosstalk: Who's talking?. BioEssays, 2007, 29, 1115-1123. | 2.5 | 71 |
| 68 | Phytohormone collaboration: zooming in on auxinâ€"brassinosteroid interactions. Trends in Cell Biology, 2007, 17, 485-492. | 7.9 | 96 |
| 69 | Hidden Branches: Developments in Root System Architecture. Annual Review of Plant Biology, 2007, 58, 93-113. | 18.7 | 474 |
| 70 | Unequal genetic redundancies in Arabidopsis â€" a neglected phenomenon?. Trends in Plant Science, 2006, 11, 492-498. | 8.8 | 103 |
| 71 | BRX mediates feedback between brassinosteroid levels and auxin signalling in root growth. Nature, 2006, 443, 458-461. | 27.8 | 256 |
| 72 | Root development â€" branching into novel spheres. Current Opinion in Plant Biology, 2006, 9, 66-71. | 7.1 | 29 |

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|---|---|---|---|
| 73 | Opposite Root Growth Phenotypes of hy5 versus hy5 hyh Mutants Correlate with Increased Constitutive Auxin Signaling. PLoS Genetics, 2006, 2, e202. | 3.5 | 186 |
| 74 | 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 |
| 75 | 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 |
| 76 | 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 |
| 77 | TheArabidopsistranscription factor HY5 integrates light and hormone signaling pathways. Plant Journal, 2004, 38, 332-347. | 5.7 | 255 |
| 78 | Gibberellin Signaling: GRASs Growing Roots Dispatch. Current Biology, 2003, 13, R366-R367. | 3.9 | 8 |
| 79 | Evaluation and classification of RING-finger domains encoded by the Arabidopsis genome. Genome Biology, 2002, 3, research0016.1. | 9.6 | 137 |
| 80 | Biochemical evidence for ubiquitin ligase activity of the Arabidopsis COP1 interacting protein 8 (CIP8). Plant Journal, 2002, 30, 385-394. | 5.7 | 101 |
| 81 | 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 |
| 82 | Targeted destabilization of HY5 during light-regulated development of Arabidopsis. Nature, 2000, 405, 462-466. | 27.8 | 1,227 |
| 83 | Vascular continuity, cell axialisation and auxin. Plant Growth Regulation, 2000, 32, 173-185. | 3.4 | 17 |
| 84 | The Cell Biology of the COP/DET/FUS Proteins. Regulating Proteolysis in Photomorphogenesis and Beyond?. Plant Physiology, 2000, 124, 1548-1557. | 4.8 | 88 |
| 85 | Vascular continuity and auxin signals. Trends in Plant Science, 2000, 5, 387-393. | 8.8 | 201 |
| 86 | The Arabidopsis gene MONOPTEROS encodes a transcription factor mediating embryo axis formation and vascular development. EMBO Journal, 1998, 17, 1405-1411. | 7.8 | 938 |
| 87 | 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 |
| 88 | Mutational analysis of root initiation in theArabidopsis embryo. Plant and Soil, 1996, 187, 1-9. | 3.7 | 13 |
| 89 | Genetic similarity among Arabidopsis thaliana ecotypes estimated by DNA sequence comparison. Plant Molecular Biology, 1996, 32, 915-922. | 3.9 | 29 |
| 90 | Studies on the role of the Arabidopsis gene MONOPTEROS in vascular development and plant cell axialization. Planta, 1996, 200, 229-37. | 3.2 | 434 |