Hidehiro Fukaki

List of Publications by Year
in descending order

55 papers	6,668 citations	117619 34 h-index	168376 53 g-index
58 all docs	58 docs citations	58 times ranked	6465 citing authors

#	Article	IF	Citations
1	ARF7 and ARF19 Regulate Lateral Root Formation via Direct Activation of LBD/ASL Genes in Arabidopsis. Plant Cell, 2007, 19, 118-130.	6.6	805
2	Lateral root formation is blocked by a gain-of-function mutation in the SOLITARY-ROOT/IAA14 gene of Arabidopsis. Plant Journal, 2002, 29, 153-168.	5.7	654
3	Auxin Control of Root Development. Cold Spring Harbor Perspectives in Biology, 2010, 2, a001537-a001537.	5.5	612
4	Lateral root development in Arabidopsis: fifty shades of auxin. Trends in Plant Science, 2013, 18, 450-458.	8.8	536
5	Hormone interactions during lateral root formation. Plant Molecular Biology, 2009, 69, 437-449.	3.9	390
6	Cell Cycle Progression in the Pericycle Is Not Sufficient for SOLITARY ROOT/IAA14-Mediated Lateral Root Initiation in Arabidopsis thaliana Â. Plant Cell, 2005, 17, 3035-3050.	6.6	309
7	The establishment of asymmetry in <i>Arabidopsis</i> lateral root founder cells is regulated by LBD16/ASL18 and related LBD/ASL proteins. Development (Cambridge), 2012, 139, 883-893.	2.5	253
8	Tissue-specific expression of stabilized SOLITARY-ROOT/IAA14 alters lateral root development in Arabidopsis. Plant Journal, 2005, 44, 382-395.	5.7	236
9	Multiple AUX/IAAâ€"ARF modules regulate lateral root formation: the role of<i>Arabidopsis</i>SHY2/IAA3-mediated auxin signalling. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 1461-1468.	4.0	180
10	Regulation of Root Greening by Light and Auxin/Cytokinin Signaling in <i>Arabidopsis</i>. Plant Cell, 2012, 24, 1081-1095.	6.6	180
11	Root branching toward water involves posttranslational modification of transcription factor ARF7. Science, 2018, 362, 1407-1410.	12.6	179
12	The Auxin-Regulated AP2/EREBP Gene<i>PUCHI</i>Is Required for Morphogenesis in the Early Lateral Root Primordium of<i>Arabidopsis</i>. Plant Cell, 2007, 19, 2156-2168.	6.6	168
13	Auxinâ€Mediated Lateral Root Formation in Higher Plants. International Review of Cytology, 2007, 256, 111-137.	6.2	166
14	PICKLE is required for SOLITARY-ROOT/IAA14-mediated repression of ARF7 and ARF19 activity during Arabidopsis lateral root initiation. Plant Journal, 2006, 48, 380-389.	5.7	156
15	Domain II Mutations in CRANE/IAA18 Suppress Lateral Root Formation and Affect Shoot Development in Arabidopsis thaliana. Plant and Cell Physiology, 2008, 49, 1025-1038.	3.1	123
16	The circadian clock rephases during lateral root organ initiation in Arabidopsis thaliana. Nature Communications, 2015, 6, 7641.	12.8	119
17	Lateral root emergence in <i>Arabidopsis</i> is dependent on transcription factor LBD29 regulating auxin influx carrier <i>LAX3</i>. Development (Cambridge), 2016, 143, 3340-9.	2.5	111
18	Inference of the Arabidopsis Lateral Root Gene Regulatory Network Suggests a Bifurcation Mechanism That Defines Primordia Flanking and Central Zones. Plant Cell, 2015, 27, 1368-1388.	6.6	105

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19	Cell-specific localization of alkaloids in <i>Catharanthus roseus</i> stem tissue measured with Imaging MS and Single-cell MS. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3891-3896.	7.1	99
20	Chloroplastic <scp>ATP</scp> synthase builds up a proton motive force preventing production of reactive oxygen species in photosystem I. Plant Journal, 2017, 91, 306-324.	5.7	96
21	Auxin-dependent compositional change in Mediator in ARF7- and ARF19-mediated transcription. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 6562-6567.	7.1	93
22	A Positive Regulator of Nodule Organogenesis, NODULE INCEPTION, Acts as a Negative Regulator of Rhizobial Infection in <i>Lotus japonicus</i> Â Â. Plant Physiology, 2014, 165, 747-758.	4.8	84
23	Involvement of auxin signaling mediated by IAA14 and ARF7/19 in membrane lipid remodeling during phosphate starvation. Plant Molecular Biology, 2010, 72, 533-544.	3.9	74
24	A coherent transcriptional feed-forward motif model for mediating auxin-sensitive PIN3 expression during lateral root development. Nature Communications, 2015, 6, 8821.	12.8	70
25	Lateral Inhibition by a Peptide Hormone-Receptor Cascade during Arabidopsis Lateral Root Founder Cell Formation. Developmental Cell, 2019, 48, 64-75.e5.	7.0	67
26	RALFL34 regulates formative cell divisions in Arabidopsis pericycle during lateral root initiation. Journal of Experimental Botany, 2016, 67, 4863-4875.	4.8	66
27	The complexity of intercellular localisation of alkaloids revealed by singleâ€cell metabolomics. New Phytologist, 2019, 224, 848-859.	7.3	65
28	Cytoskeleton Dynamics Are Necessary for Early Events of Lateral Root Initiation in Arabidopsis. Current Biology, 2019, 29, 2443-2454.e5.	3.9	63
29	A role for <i><scp>LATERAL ORGAN BOUNDARIES</scp>â€<scp>DOMAIN</scp> 16</i> during the interaction <scp>A</scp>rabidopsisâ€“<i><scp>M</scp>eloidogyne</i> spp. provides a molecular link between lateral root and rootâ€knot nematode feeding site development. New Phytologist, 2014, 203, 632-645.	7.3	61
30	Quiescent center initiation in the <i>Arabidopsis</i> lateral root primordia is dependent on the <i>SCARECROW</i> transcription factor. Development (Cambridge), 2016, 143, 3363-71.	2.5	61
31	Reactive oxygen species and reactive carbonyl species constitute a feedâ€forward loop in auxin signaling for lateral root formation. Plant Journal, 2019, 100, 536-548.	5.7	53
32	Lateral root initiation requires the sequential induction of transcription factors LBD16 and PUCHI in <i>Arabidopsis thaliana</i>. New Phytologist, 2019, 224, 749-760.	7.3	50
33	Jasmonic Acid Inhibits Auxin-Induced Lateral Rooting Independently of the CORONATINE INSENSITIVE1 Receptor. Plant Physiology, 2018, 177, 1704-1716.	4.8	48
34	GNOM/FEWER ROOTS is Required for the Establishment of an Auxin Response Maximum for Arabidopsis Lateral Root Initiation. Plant and Cell Physiology, 2013, 54, 406-417.	3.1	46
35	PUCHI regulates very long chain fatty acid biosynthesis during lateral root and callus formation. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 14325-14330.	7.1	46
36	Mitochondrial Pyruvate Dehydrogenase Contributes to Auxin-Regulated Organ Development. Plant Physiology, 2019, 180, 896-909.	4.8	41

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37	Rootâ€knot nematodes induce gall formation by recruiting developmental pathways of postâ€embryonic organogenesis and regeneration to promote transient pluripotency. New Phytologist, 2020, 227, 200-215.	7.3	41
38	Peptide-Receptor Signaling Controls Lateral Root Development. Plant Physiology, 2020, 182, 1645-1656.	4.8	20
39	Inositol Hexakis Phosphate is the Seasonal Phosphorus Reservoir in the Deciduous Woody Plant Populus alba L.. Plant and Cell Physiology, 2017, 58, 1477-1485.	3.1	19
40	RLF, a cytochromeâ€ƒb5-like heme/steroid binding domain protein, controls lateral root formation independently of ARF7/19-mediated auxin signaling in Arabidopsis thaliana. Plant Journal, 2010, 62, 865-875.	5.7	18
41	Molecular Transducers from Roots Are Triggered in Arabidopsis Leaves by Root-Knot Nematodes for Successful Feeding Site Formation: A Conserved Post-Embryogenic De novo Organogenesis Program?. Frontiers in Plant Science, 2017, 8, 875.	3.6	18
42	Altered levels of primary metabolites in response to exogenous indole-3-acetic acid in wild type and auxin signaling mutants of <i>Arabidopsis thaliana</i>: A capillary electrophoresis-mass spectrometry analysis. Plant Biotechnology, 2015, 32, 65-79.	1.0	12
43	Autophagy promotes organelle clearance and organized cell separation of living root cap cells in <i>Arabidopsis thaliana</i>. Development (Cambridge), 2022, 149, .	2.5	12
44	Molecular components of Arabidopsis intact vacuoles clarified with metabolomic and proteomic analyses. Plant and Cell Physiology, 2018, 59, 1353-1362.	3.1	11
45	Two phylogenetically unrelated peptideâ€receptor modules jointly regulate lateral root initiation via a partially shared signaling pathway in <i>Arabidopsis thaliana</i>. New Phytologist, 2022, 233, 1780-1796.	7.3	10
46	Plant Meristems and Organogenesis: The New Era of Plant Developmental Research. Plant and Cell Physiology, 2013, 54, 295-301.	3.1	8
47	Involvement of Ca²⁺in Vacuole Degradation Caused by a Rapid Temperature Decrease in<i>Saintpaulia</i>Palisade Cells: A Case of Gene Expression Analysis in a Specialized Small Tissue. Plant and Cell Physiology, 2015, 56, 1297-1305.	3.1	8
48	Tissue growth constrains root organ outlines into an isometrically scalable shape. Development (Cambridge), 2021, 148, .	2.5	8
49	Differential regulation of fluorescent alkaloid metabolism between idioblast and lacticifer cells during leaf development in Catharanthus roseus seedlings. Journal of Plant Research, 2022, 135, 473-483.	2.4	6
50	Visualization of phosphorus reâ€translocation and phosphate transporter expression profiles in a shortened annual cycle system of poplar. Plant, Cell and Environment, 2022, 45, 1749-1764.	5.7	5
51	Mutations in Plastidial 5-Aminolevulinic Acid Biosynthesis Genes Suppress a Pleiotropic Defect in Shoot Development of a Mitochondrial GABA Shunt Mutant in Arabidopsis. Plant and Cell Physiology, 2015, 56, 1229-1238.	3.1	2
52	Editorial: Root Branching: From Lateral Root Primordium Initiation and Morphogenesis to Function. Frontiers in Plant Science, 2019, 10, 1462.	3.6	2
53	Aerial (+)-borneol modulates root morphology, auxin signalling and meristematic activity in Arabidopsis roots. Biology Letters, 2022, 18, 20210629.	2.3	2
54	Localization of small molecules in plant tissues visualized by an imaging mass spectrometer. Plant Morphology, 2016, 28, 23-27.	0.1	0

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