Hidehiro Fukaki

List of Publications by Year in Descending Order

52 papers	4,809 citations	30 h-index	58 g-index
58 ext. papers	5,955 ext. citations	8.1 avg, IF	5.43 L-index

#	Paper	IF	Citations
52	Differential regulation of fluorescent alkaloid metabolism between idioblast and lacticifer cells during leaf development in Catharanthus roseus seedlings.. *Journal of Plant Research*, **2022**, 1	2.6	1
51	Aerial (+)-borneol modulates root morphology, auxin signalling and meristematic activity in Arabidopsis roots.. *Biology Letters*, **2022**, 18, 20210629	3.6	0
50	Two phylogenetically unrelated peptide-receptor modules jointly regulate lateral root initiation via a partially shared signaling pathway in Arabidopsis thaliana.. *New Phytologist*, **2021**,	9.8	1
49	Tissue growth constrains root organ outlines into an isometrically scalable shape. *Development (Cambridge)*, **2021**, 148,	6.6	3
48	Root-knot nematodes induce gall formation by recruiting developmental pathways of post-embryonic organogenesis and regeneration to promote transient pluripotency. *New Phytologist*, **2020**, 227, 200-215	9.8	15
47	??????????????????????. *Kagaku To Seibutsu*, **2020**, 58, 322-324	0	
46	Peptide-Receptor Signaling Controls Lateral Root Development. *Plant Physiology*, **2020**, 182, 1645-1656	6.6	5
45	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	11.5	23
44	Mitochondrial Pyruvate Dehydrogenase Contributes to Auxin-Regulated Organ Development. *Plant Physiology*, **2019**, 180, 896-909	6.6	20
43	The complexity of intercellular localisation of alkaloids revealed by single-cell metabolomics. *New Phytologist*, **2019**, 224, 848-859	9.8	31
42	Lateral root initiation requires the sequential induction of transcription factors LBD16 and PUCHI in Arabidopsis thaliana. *New Phytologist*, **2019**, 224, 749-760	9.8	23
41	Cytoskeleton Dynamics Are Necessary for Early Events of Lateral Root Initiation in Arabidopsis. *Current Biology*, **2019**, 29, 2443-2454.e5	6.3	26
40	Reactive oxygen species and reactive carbonyl species constitute a feed-forward loop in auxin signaling for lateral root formation. *Plant Journal*, **2019**, 100, 536-548	6.9	26
39	Lateral Inhibition by a Peptide Hormone-Receptor Cascade during Arabidopsis Lateral Root Founder Cell Formation. *Developmental Cell*, **2019**, 48, 64-75.e5	10.2	37
38	Molecular Components of Arabidopsis Intact Vacuoles Clarified with Metabolomic and Proteomic Analyses. *Plant and Cell Physiology*, **2018**, 59, 1353-1362	4.9	3
37	Jasmonic Acid Inhibits Auxin-Induced Lateral Rooting Independently of the CORONATINE INSENSITIVE1 Receptor. *Plant Physiology*, **2018**, 177, 1704-1716	6.6	20
36	Root branching toward water involves posttranslational modification of transcription factor ARF7. *Science*, **2018**, 362, 1407-1410	33.3	96

35	Chloroplastic ATP synthase builds up a proton motive force preventing production of reactive oxygen species in photosystem I. *Plant Journal*, **2017**, 91, 306-324	6.9	68
34	Inositol Hexakis Phosphate is the Seasonal Phosphorus Reservoir in the Deciduous Woody Plant Populus alba L. *Plant and Cell Physiology*, **2017**, 58, 1477-1485	4.9	5
33	Molecular Transducers from Roots Are Triggered in Arabidopsis Leaves by Root-Knot Nematodes for Successful Feeding Site Formation: A Conserved Post-Embryogenic Organogenesis Program?. *Frontiers in Plant Science*, **2017**, 8, 875	6.2	13
32	Lateral root emergence in Arabidopsis is dependent on transcription factor LBD29 regulation of auxin influx carrier LAX3. *Development (Cambridge)*, **2016**, 143, 3340-9	6.6	78
31	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, 6562-7	11.5	53
30	Cell-specific localization of alkaloids in Catharanthus roseus 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, 3891-6	11.5	69
29	Localization of small molecules in plant tissues visualized by an imaging mass spectrometer. *Plant Morphology*, **2016**, 28, 23-27	0	
28	RALFL34 regulates formative cell divisions in Arabidopsis pericycle during lateral root initiation. *Journal of Experimental Botany*, **2016**, 67, 4863-75	7	42
27	Quiescent center initiation in the Arabidopsis lateral root primordia is dependent on the SCARECROW transcription factor. *Development (Cambridge)*, **2016**, 143, 3363-71	6.6	45
26	The circadian clock rephases during lateral root organ initiation in Arabidopsis thaliana. *Nature Communications*, **2015**, 6, 7641	17.4	83
25	Involvement of Ca2+ in Vacuole Degradation Caused by a Rapid Temperature Decrease in Saintpaulia Palisade Cells: A Case of Gene Expression Analysis in a Specialized Small Tissue. *Plant and Cell Physiology*, **2015**, 56, 1297-305	4.9	5
24	Inference of the Arabidopsis lateral root gene regulatory network suggests a bifurcation mechanism that defines primordia flanking and central zones. *Plant Cell*, **2015**, 27, 1368-88	11.6	69
23	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, 1229-38	4.9	1
22	A coherent transcriptional feed-forward motif model for mediating auxin-sensitive PIN3 expression during lateral root development. *Nature Communications*, **2015**, 6, 8821	17.4	45
21	Altered levels of primary metabolites in response to exogenous indole-3-acetic acid in wild type and auxin signaling mutants of Arabidopsis thaliana: A capillary electrophoresis-mass spectrometry analysis. *Plant Biotechnology*, **2015**, 32, 65-79	1.3	10
20	A Positive Regulator of Nodule Organogenesis, NODULE INCEPTION, Acts as a Negative Regulator of Rhizobial Infection in Lotus japonicus. *Plant Physiology*, **2014**, 165, 747-758	6.6	61
19	A role for LATERAL ORGAN BOUNDARIES-DOMAIN 16 during the interaction Arabidopsis-Meloidogyne spp. provides a molecular link between lateral root and root-knot nematode feeding site development. *New Phytologist*, **2014**, 203, 632-645	9.8	40
18	Lateral root development in Arabidopsis: fifty shades of auxin. *Trends in Plant Science*, **2013**, 18, 450-8	13.1	410

17	Plant meristems and organogenesis: the new era of plant developmental research. *Plant and Cell Physiology*, **2013**, 54, 295-301	4.9	6
16	GNOM/FEWER ROOTS is required for the establishment of an auxin response maximum for arabidopsis lateral root initiation. *Plant and Cell Physiology*, **2013**, 54, 406-17	4.9	31
15	Regulation of root greening by light and auxin/cytokinin signaling in Arabidopsis. *Plant Cell*, **2012**, 24, 1081-95	11.6	125
14	Multiple AUX/IAA-ARF modules regulate lateral root formation: the role of Arabidopsis SHY2/IAA3-mediated auxin signalling. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2012**, 367, 1461-8	5.8	126
13	The establishment of asymmetry in Arabidopsis lateral root founder cells is regulated by LBD16/ASL18 and related LBD/ASL proteins. *Development (Cambridge)*, **2012**, 139, 883-93	6.6	173
12	RLF, a cytochrome b(5)-like heme/steroid binding domain protein, controls lateral root formation independently of ARF7/19-mediated auxin signaling in Arabidopsis thaliana. *Plant Journal*, **2010**, 62, 865-75	6.9	13
11	Auxin control of root development. *Cold Spring Harbor Perspectives in Biology*, **2010**, 2, a001537	10.2	462
10	Involvement of auxin signaling mediated by IAA14 and ARF7/19 in membrane lipid remodeling during phosphate starvation. *Plant Molecular Biology*, **2010**, 72, 533-44	4.6	65
9	Hormone interactions during lateral root formation. *Plant Molecular Biology*, **2009**, 69, 437-49	4.6	314
8	Domain II mutations in CRANE/IAA18 suppress lateral root formation and affect shoot development in Arabidopsis thaliana. *Plant and Cell Physiology*, **2008**, 49, 1025-38	4.9	96
7	ARF7 and ARF19 regulate lateral root formation via direct activation of LBD/ASL genes in Arabidopsis. *Plant Cell*, **2007**, 19, 118-30	11.6	596
6	Auxin-mediated lateral root formation in higher plants. *International Review of Cytology*, **2007**, 256, 111-37		139
5	The auxin-regulated AP2/EREBP gene PUCHI is required for morphogenesis in the early lateral root primordium of Arabidopsis. *Plant Cell*, **2007**, 19, 2156-68	11.6	141
4	PICKLE is required for SOLITARY-ROOT/IAA14-mediated repression of ARF7 and ARF19 activity during Arabidopsis lateral root initiation. *Plant Journal*, **2006**, 48, 380-9	6.9	129
3	Tissue-specific expression of stabilized SOLITARY-ROOT/IAA14 alters lateral root development in Arabidopsis. *Plant Journal*, **2005**, 44, 382-95	6.9	193
2	Cell cycle progression in the pericycle is not sufficient for SOLITARY ROOT/IAA14-mediated lateral root initiation in Arabidopsis thaliana. *Plant Cell*, **2005**, 17, 3035-50	11.6	253
1	Lateral root formation is blocked by a gain-of-function mutation in the SOLITARY-ROOT/IAA14 gene of Arabidopsis. *Plant Journal*, **2002**, 29, 153-68	6.9	518