Ari Pekka MÃ¤hÃ¶nen

List of Publications by Year
in descending order

60 papers	7,698 citations	94433 37 h-index	114465 63 g-index
72 all docs	72 docs citations	72 times ranked	7029 citing authors

#	Article	IF	Citations
1	Means to Quantify Vascular Cell File Numbers in Different Tissues. Methods in Molecular Biology, 2022, 2382, 155-179.	0.9	4
2	Analysis of exocyst function in endodermis reveals its widespread contribution and specificity of action. Plant Physiology, 2022, 189, 557-566.	4.8	11
3	The Making of Plant Armor: The Periderm. Annual Review of Plant Biology, 2022, 73, 405-432.	18.7	30
4	Rootâ€type <scp>ferredoxinâ€NADP</scp>⁺ oxidoreductase isoforms in <scp><i>Arabidopsis thaliana</i></scp>: Expression patterns, location and stress responses. Plant, Cell and Environment, 2021, 44, 548-558.	5.7	3
5	A network of transcriptional repressors modulates auxin responses. Nature, 2021, 589, 116-119.	27.8	56
6	What is quantitative plant biology?. Quantitative Plant Biology, 2021, 2, .	2.0	43
7	Cytokinins initiate secondary growth in the Arabidopsis root through a set of LBD genes. Current Biology, 2021, 31, 3365-3373.e7.	3.9	46
8	Vision, challenges and opportunities for a Plant Cell Atlas. ELife, 2021, 10, .	6.0	31
9	Cell-by-cell dissection of phloem development links a maturation gradient to cell specialization. Science, 2021, 374, eaba5531.	12.6	60
10	A PXY-Mediated Transcriptional Network Integrates Signaling Mechanisms to Control Vascular Development in Arabidopsis. Plant Cell, 2020, 32, 319-335.	6.6	103
11	Peptide encoding <i>Populus CLV3/ESRâ€RELATED 47</i> (<i>PttCLE47</i>) promotes cambial development and secondary xylem formation in hybrid aspen. New Phytologist, 2020, 226, 75-85.	7.3	13
12	A bipartite transcription factor module controlling expression in the bundle sheath of Arabidopsis thaliana. Nature Plants, 2020, 6, 1468-1479.	9.3	20
13	Plant Biology: Storage Root Growth through Thick and Thin. Current Biology, 2020, 30, R880-R883.	3.9	0
14	A coherent feed forward loop drives vascular regeneration in damaged aerial organs growing in normal developmental-context. Development (Cambridge), 2020, 147, .	2.5	24
15	An inducible genome editing system for plants. Nature Plants, 2020, 6, 766-772.	9.3	77
16	ELIMÃ„KI Locus Is Required for Vertical Proprioceptive Response in Birch Trees. Current Biology, 2020, 30, 589-599.e5.	3.9	24
17	Growth-mediated sensing of long-term cold in plants. Nature, 2020, 583, 690-691.	27.8	3
18	Transcriptional regulatory framework for vascular cambium development in Arabidopsis roots. Nature Plants, 2019, 5, 1033-1042.	9.3	81

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19	Gradient Expression of Transcription Factor Imposes a Boundary on Organ Regeneration Potential in Plants. Cell Reports, 2019, 29, 453-463.e3.	6.4	33
20	A core mechanism for specifying root vascular pattern can replicate the anatomical variation seen in diverse plant species. Development (Cambridge), 2019, 146, .	2.5	8
21	High levels of auxin signalling define the stem-cell organizer of the vascular cambium. Nature, 2019, 565, 485-489.	27.8	213
22	Mobile PEAR transcription factors integrate positional cues to prime cambial growth. Nature, 2019, 565, 490-494.	27.8	195
23	Transcription factors <scp>PRE</scp>3 and <scp>WOX</scp>11 are involved in the formation of new lateral roots from secondary growth taproot in <i>A.Âthaliana</i>. Plant Biology, 2018, 20, 426-432.	3.8	38
24	A Gene Regulatory Network for Cellular Reprogramming in Plant Regeneration. Plant and Cell Physiology, 2018, 59, 770-782.	3.1	81
25	Editorial Overview: Growth and development. Current Opinion in Plant Biology, 2018, 41, iii-v.	7.1	1
26	Complete substitution of a secondary cell wall with a primary cell wall in Arabidopsis. Nature Plants, 2018, 4, 777-783.	9.3	63
27	Transcriptional regulation of nitrogen-associated metabolism and growth. Nature, 2018, 563, 259-264.	27.8	222
28	A cellular passage to the root interior. Nature, 2018, 555, 454-455.	27.8	2
29	Genome sequencing and population genomic analyses provide insights into the adaptive landscape of silver birch. Nature Genetics, 2017, 49, 904-912.	21.4	221
30	Theoretical approaches to understanding root vascular patterning: a consensus between recent models. Journal of Experimental Botany, 2017, 68, 5-16.	4.8	35
31	The PLETHORA Gene Regulatory Network Guides Growth and Cell Differentiation in Arabidopsis Roots. Plant Cell, 2016, 28, 2937-2951.	6.6	127
32	Cytokinin and Auxin Display Distinct but Interconnected Distribution and Signaling Profiles to Stimulate Cambial Activity. Current Biology, 2016, 26, 1990-1997.	3.9	170
33	Protocol: a method to study the direct reprogramming of lateral root primordia to fertile shoots. Plant Methods, 2016, 12, 27.	4.3	22
34	MultiSite Gateway-Compatible Cell Type-Specific Gene-Inducible System for Plants. Plant Physiology, 2016, 170, 627-641.	4.8	119
35	Plant vascular development: from early specification to differentiation. Nature Reviews Molecular Cell Biology, 2016, 17, 30-40.	37.0	195
36	Integration of photosynthesis, development and stress as an opportunity for plant biology. New Phytologist, 2015, 208, 647-655.	7.3	25

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37	Parsimonious Model of Vascular Patterning Links Transverse Hormone Fluxes to Lateral Root Initiation: Auxin Leads the Way, while Cytokinin Levels Out. PLoS Computational Biology, 2015, 11, e1004450.	3.2	38
38	Auxin Influx Carriers Control Vascular Patterning and Xylem Differentiation in Arabidopsis thaliana. PLoS Genetics, 2015, 11, e1005183.	3.5	70
39	Root Cap-Derived Auxin Pre-patterns the Longitudinal Axis of the Arabidopsis Root. Current Biology, 2015, 25, 1381-1388.	3.9	173
40	Arabidopsis BIRD Zinc Finger Proteins Jointly Stabilize Tissue Boundaries by Confining the Cell Fate Regulator SHORT-ROOT and Contributing to Fate Specification. Plant Cell, 2015, 27, 1185-1199.	6.6	121
41	<i>AINTEGUMENTA</i> and the D-type cyclin <i>CYCD3;1</i> regulate root secondary growth and respond to cytokinins. Biology Open, 2015, 4, 1229-1236.	1.2	89
42	Vascular Cambium Development. The Arabidopsis Book, 2015, 13, e0177.	0.5	108
43	The Arabidopsis thaliana cysteine-rich receptor-like kinases CRK6 and CRK7 protect against apoplastic oxidative stress. Biochemical and Biophysical Research Communications, 2014, 445, 457-462.	2.1	121
44	PLETHORA gradient formation mechanism separates auxin responses. Nature, 2014, 515, 125-129.	27.8	329
45	A Bistable Circuit Involving SCARECROW-RETINOBLASTOMA Integrates Cues to Inform Asymmetric Stem Cell Division. Cell, 2012, 150, 1002-1015.	28.9	273
46	Callose Biosynthesis Regulates Symplastic Trafficking during Root Development. Developmental Cell, 2011, 21, 1144-1155.	7.0	394
47	A Mutually Inhibitory Interaction between Auxin and Cytokinin Specifies Vascular Pattern in Roots. Current Biology, 2011, 21, 917-926.	3.9	359
48	Phloem-Transported Cytokinin Regulates Polar Auxin Transport and Maintains Vascular Pattern in the Root Meristem. Current Biology, 2011, 21, 927-932.	3.9	231
49	Arabidopsis PLETHORA Transcription Factors Control Phyllotaxis. Current Biology, 2011, 21, 1123-1128.	3.9	124
50	Bisymmetry in the embryonic root is dependent on cotyledon number and position. Plant Signaling and Behavior, 2011, 6, 1837-1840.	2.4	12
51	Plasma membrane-bound AGC3 kinases phosphorylate PIN auxin carriers at TPRXS(N/S) motifs to direct apical PIN recycling. Development (Cambridge), 2010, 137, 3245-3255.	2.5	201
52	Generation of cell polarity in plants links endocytosis, auxin distribution and cell fate decisions. Nature, 2008, 456, 962-966.	27.8	228
53	Signs of change: hormone receptors that regulate plant development. Development (Cambridge), 2006, 133, 1857-1869.	2.5	85
54	Cytokinin Signaling and Its Inhibitor AHP6 Regulate Cell Fate During Vascular Development. Science, 2006, 311, 94-98.	12.6	530

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55	Cytokinins Regulate a Bidirectional Phosphorelay Network in Arabidopsis. Current Biology, 2006, 16, 1116-1122.	3.9	194
56	In planta functions of the Arabidopsis cytokinin receptor family. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 8821-8826.	7.1	610
57	APL regulates vascular tissue identity in Arabidopsis. Nature, 2003, 426, 181-186.	27.8	425
58	A novel two-component hybrid molecule regulates vascular morphogenesis of the Arabidopsis root. Genes and Development, 2000, 14, 2938-2943.	5.9	499
59	Gradient Expression of Transcription Factor Imposes a Boundary on Organ Regenerative Potential in Plant. SSRN Electronic Journal, 0, , .	0.4	1
60	A Functionally Conserved Regulatory Module Confers Universal Regeneration Potential to Plant Tissues in Response to Injury. SSRN Electronic Journal, 0, , .	0.4	0