Bert De Rybel

List of Publications by Year
in descending order

63 papers	7,348 citations	76326 40 h-index	114465 63 g-index
76 all docs	76 docs citations	76 times ranked	7079 citing authors

#	Article	IF	Citations
1	Arabidopsis lateral root development: an emerging story. Trends in Plant Science, 2009, 14, 399-408.	8.8	681
2	A Novel Aux/IAA28 Signaling Cascade Activates GATA23-Dependent Specification of Lateral Root Founder Cell Identity. Current Biology, 2010, 20, 1697-1706.	3.9	431
3	A novel protein family mediates Casparian strip formation in the endodermis. Nature, 2011, 473, 380-383.	27.8	353
4	Receptor-Like Kinase ACR4 Restricts Formative Cell Divisions in the <i>Arabidopsis</i> Root. Science, 2008, 322, 594-597.	12.6	342
5	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
6	Integration of growth and patterning during vascular tissue formation in <i>Arabidopsis</i>. Science, 2014, 345, 1255215.	12.6	286
7	Bimodular auxin response controls organogenesis in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 2705-2710.	7.1	271
8	A bHLH Complex Controls Embryonic Vascular Tissue Establishment and Indeterminate Growth in Arabidopsis. Developmental Cell, 2013, 24, 426-437.	7.0	269
9	Chemical Inhibition of a Subset of Arabidopsis thaliana GSK3-like Kinases Activates Brassinosteroid Signaling. Chemistry and Biology, 2009, 16, 594-604.	6.0	240
10	Plant vascular development: from early specification to differentiation. Nature Reviews Molecular Cell Biology, 2016, 17, 30-40.	37.0	195
11	Mobile PEAR transcription factors integrate positional cues to prime cambial growth. Nature, 2019, 565, 490-494.	27.8	195
12	Cyclic programmed cell death stimulates hormone signaling and root development in <i>Arabidopsis</i>. Science, 2016, 351, 384-387.	12.6	186
13	Transcription factor WRKY23 assists auxin distribution patterns during <i>Arabidopsis</i> root development through local control on flavonol biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 1554-1559.	7.1	184
14	<i>Arabidopsis</i> NAC45/86 direct sieve element morphogenesis culminating in enucleation. Science, 2014, 345, 933-937.	12.6	173
15	Root Cap-Derived Auxin Pre-patterns the Longitudinal Axis of the Arabidopsis Root. Current Biology, 2015, 25, 1381-1388.	3.9	173
16	Vascular transcription factors guide plant epidermal responses to limiting phosphate conditions. Science, 2020, 370, .	12.6	173
17	SCFTIR1/AFB-auxin signalling regulates PIN vacuolar trafficking and auxin fluxes during root gravitropism. EMBO Journal, 2012, 32, 260-274.	7.8	152
18	Cytokinin â€“ A Developing Story. Trends in Plant Science, 2019, 24, 177-185.	8.8	150

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19	Auxin reflux between the endodermis and pericycle promotes lateral root initiation. EMBO Journal, 2012, 32, 149-158.	7.8	148
20	Cell surface and intracellular auxin signalling for H+ fluxes in root growth. Nature, 2021, 599, 273-277.	27.8	128
21	The Emerging Role of Reactive Oxygen Species Signaling during Lateral Root Development. Plant Physiology, 2014, 165, 1105-1119.	4.8	121
22	A role for the root cap in root branching revealed by the non-auxin probe naxillin. Nature Chemical Biology, 2012, 8, 798-805.	8.0	118
23	Arabidopsis RCD1 coordinates chloroplast and mitochondrial functions through interaction with ANAC transcription factors. ELife, 2019, 8, .	6.0	118
24	Developmental regulation of CYCA2s contributes to tissue-specific proliferation in<i>Arabidopsis</i>. EMBO Journal, 2011, 30, 3430-3441.	7.8	113
25	A Versatile Set of Ligation-Independent Cloning Vectors for Functional Studies in Plants Â Â Â. Plant Physiology, 2011, 156, 1292-1299.	4.8	112
26	Diffusible repression of cytokinin signalling produces endodermal symmetry and passage cells. Nature, 2018, 555, 529-533.	27.8	106
27	Advances and Opportunities in Single-Cell Transcriptomics for Plant Research. Annual Review of Plant Biology, 2021, 72, 847-866.	18.7	101
28	<i>Arabidopsis</i>Î± Aurora Kinases Function in Formative Cell Division Plane Orientation. Plant Cell, 2011, 23, 4013-4024.	6.6	97
29	A bHLH-Based Feedback Loop Restricts Vascular Cell Proliferation in Plants. Developmental Cell, 2015, 35, 432-443.	7.0	96
30	The CEP family in land plants: evolutionary analyses, expression studies, and role in Arabidopsis shoot development. Journal of Experimental Botany, 2013, 64, 5371-5381.	4.8	92
31	Multiple PPR protein interactions are involved in the RNA editing system in <i>Arabidopsis</i> mitochondria and plastids. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 8883-8888.	7.1	91
32	CEP5 and XIP1/CEPR1 regulate lateral root initiation in Arabidopsis. Journal of Experimental Botany, 2016, 67, 4889-4899.	4.8	81
33	DOF2.1 Controls Cytokinin-Dependent Vascular Cell Proliferation Downstream of TMO5/LHW. Current Biology, 2019, 29, 520-529.e6.	3.9	80
34	Auxin and Epigenetic Regulation of <i>SKP2B</i>, an F-Box That Represses Lateral Root Formation Â Â Â. Plant Physiology, 2012, 160, 749-762.	4.8	74
35	In Vivo Identification of Plant Protein Complexes Using IP-MS/MS. Methods in Molecular Biology, 2017, 1497, 147-158.	0.9	62
36	Tightly controlled WRKY23 expression mediates Arabidopsis embryo development. EMBO Reports, 2013, 14, 1136-1142.	4.5	61

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37	The Past, Present, and Future of Chemical Biology in Auxin Research. ACS Chemical Biology, 2009, 4, 987-998.	3.4	60
38	Cell-by-cell dissection of phloem development links a maturation gradient to cell specialization. Science, 2021, 374, eaba5531.	12.6	60
39	VisuaLRTC: A New View on Lateral Root Initiation by Combining Specific Transcriptome Data Sets Â. Plant Physiology, 2010, 153, 34-40.	4.8	56
40	Receptor kinase module targets PIN-dependent auxin transport during canalization. Science, 2020, 370, 550-557.	12.6	56
41	Framework for gradual progression of cell ontogeny in the <i>Arabidopsis</i> root meristem. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E8922-E8929.	7.1	46
42	Rice microtubuleâ€associated protein IQ67â€DOMAIN14 regulates grain shape by modulating microtubule cytoskeleton dynamics. Plant Biotechnology Journal, 2020, 18, 1141-1152.	8.3	43
43	Non-cell autonomous and spatiotemporal signalling from a tissue organizer orchestrates root vascular development. Nature Plants, 2021, 7, 1485-1494.	9.3	42
44	A single-cell morpho-transcriptomic map of brassinosteroid action in the Arabidopsis root. Molecular Plant, 2021, 14, 1985-1999.	8.3	40
45	Theoretical approaches to understanding root vascular patterning: a consensus between recent models. Journal of Experimental Botany, 2017, 68, 5-16.	4.8	35
46	Recent Trends in Plant Protein Complex Analysis in a Developmental Context. Frontiers in Plant Science, 2018, 9, 640.	3.6	32
47	Molecular architecture of the endocytic TPLATE complex. Science Advances, 2021, 7, .	10.3	31
48	AGC kinases and MAB4/MEL proteins maintain PIN polarity by limiting lateral diffusion in plant cells. Current Biology, 2021, 31, 1918-1930.e5.	3.9	28
49	Genetic and hormonal control of vascular tissue proliferation. Current Opinion in Plant Biology, 2016, 29, 50-56.	7.1	27
50	Seedling developmental defects upon blocking CINNAMATEâ€4â€HYDROXYLASE are caused by perturbations in auxin transport. New Phytologist, 2021, 230, 2275-2291.	7.3	27
51	Prenatal plumbingâ€"vascular tissue formation in the plant embryo. Physiologia Plantarum, 2014, 151, 126-133.	5.2	22
52	RIMA-Dependent Nuclear Accumulation of IYO Triggers Auxin-Irreversible Cell Differentiation in Arabidopsis. Plant Cell, 2017, 29, 575-588.	6.6	22
53	Evolution of vascular plants through redeployment of ancient developmental regulators. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 733-740.	7.1	21
54	Imaging of Phenotypes, Gene Expression, and Protein Localization During Embryonic Root Formation in Arabidopsis. Methods in Molecular Biology, 2013, 959, 137-148.	0.9	20

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55	Conditional destabilization of the TPLATE complex impairs endocytic internalization. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	17
56	A set of domain-specific markers in the Arabidopsis embryo. Plant Reproduction, 2015, 28, 153-160.	2.2	16
57	Regulation of intercellular TARGET OF MONOPTEROS 7 protein transport in the <i>Arabidopsis</i> root. Development (Cambridge), 2018, 145, .	2.5	16
58	Ligation-Independent Cloning for Plant Research. Methods in Molecular Biology, 2015, 1284, 421-431.	0.9	14
59	FRET-FLIM for Visualizing and Quantifying Protein Interactions in Live Plant Cells. Methods in Molecular Biology, 2017, 1497, 135-146.	0.9	12
60	Advancing root developmental research through single-cell technologies. Current Opinion in Plant Biology, 2022, 65, 102113.	7.1	10
61	Determination of Genetic Distance, Genome Size and Chromosome Numbers to Support Breeding in Ornamental Lavandula Species. Agronomy, 2021, 11, 2173.	3.0	8
62	Means to Quantify Vascular Cell File Numbers in Different Tissues. Methods in Molecular Biology, 2022, 2382, 155-179.	0.9	4
63	Multi-Parametric Screening in Arabidopsis thaliana Seedlings. Methods in Molecular Biology, 2018, 1795, 1-7.	0.9	0