Dolf Weijers

List of Publications by Year
in descending order

137 papers	17,022 citations	19655 61 h-index	16650 123 g-index
166 all docs	166 docs citations	166 times ranked	11833 citing authors

#	Article	IF	Citations
1	Efflux-dependent auxin gradients establish the apicalâ€“basal axis of Arabidopsis. Nature, 2003, 426, 147-153.	27.8	1,672
2	Plant Development Is Regulated by a Family of Auxin Receptor F Box Proteins. Developmental Cell, 2005, 9, 109-119.	7.0	865
3	A PINOID-Dependent Binary Switch in Apical-Basal PIN Polar Targeting Directs Auxin Efflux. Science, 2004, 306, 862-865.	12.6	703
4	Antagonistic Regulation of PIN Phosphorylation by PP2A and PINOID Directs Auxin Flux. Cell, 2007, 130, 1044-1056.	28.9	590
5	MONOPTEROS controls embryonic root initiation by regulating a mobile transcription factor. Nature, 2010, 464, 913-916.	27.8	532
6	miR390,<i>Arabidopsis TAS3</i>tasiRNAs, and Their<i>AUXIN RESPONSE FACTOR</i>Targets Define an Autoregulatory Network Quantitatively Regulating Lateral Root Growth. Plant Cell, 2010, 22, 1104-1117.	6.6	512
7	Cytokinins Act Directly on Lateral Root Founder Cells to Inhibit Root Initiation. Plant Cell, 2008, 19, 3889-3900.	6.6	498
8	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
9	The PINOID protein kinase regulates organ development in<i>Arabidopsis</i>by enhancing polar auxin transport. Development (Cambridge), 2001, 128, 4057-4067.	2.5	408
10	Transcriptional Responses to the Auxin Hormone. Annual Review of Plant Biology, 2016, 67, 539-574.	18.7	396
11	Reporters for sensitive and quantitative measurement of auxin response. Nature Methods, 2015, 12, 207-210.	19.0	382
12	A Mutually Inhibitory Interaction between Auxin and Cytokinin Specifies Vascular Pattern in Roots. Current Biology, 2011, 21, 917-926.	3.9	359
13	Developmental specificity of auxin response by pairs of ARF and Aux/IAA transcriptional regulators. EMBO Journal, 2005, 24, 1874-1885.	7.8	349
14	Structural Basis for DNA Binding Specificity by the Auxin-Dependent ARF Transcription Factors. Cell, 2014, 156, 577-589.	28.9	348
15	Organizer-Derived WOX5 Signal Maintains Root Columella Stem Cells through Chromatin-Mediated Repression of CDF4 Expression. Developmental Cell, 2015, 33, 576-588.	7.0	311
16	Auxin Triggers Transient Local Signaling for Cell Specification in Arabidopsis Embryogenesis. Developmental Cell, 2006, 10, 265-270.	7.0	303
17	Integration of growth and patterning during vascular tissue formation in <i>Arabidopsis</i>. Science, 2014, 345, 1255215.	12.6	286
18	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

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19	A bHLH Complex Controls Embryonic Vascular Tissue Establishment and Indeterminate Growth in Arabidopsis. Developmental Cell, 2013, 24, 426-437.	7.0	269
20	An<i>Arabidopsis</i>Minute-like phenotype caused by a semi-dominant mutation in a<i>RIBOSOMAL PROTEIN S5</i>gene. Development (Cambridge), 2001, 128, 4289-4299.	2.5	267
21	<i>RIdeogram</i>: drawing SVG graphics to visualize and map genome-wide data on the idiograms. PeerJ Computer Science, 2020, 6, e251.	4.5	265
22	Auxin Control of Embryo Patterning. Cold Spring Harbor Perspectives in Biology, 2009, 1, a001545-a001545.	5.5	228
23	Anthoceros genomes illuminate the origin of land plants and the unique biology of hornworts. Nature Plants, 2020, 6, 259-272.	9.3	225
24	Genetic Control of Plant Development by Overriding a Geometric Division Rule. Developmental Cell, 2014, 29, 75-87.	7.0	203
25	Plant vascular development: from early specification to differentiation. Nature Reviews Molecular Cell Biology, 2016, 17, 30-40.	37.0	195
26	Origin and evolution of the nuclear auxin response system. ELife, 2018, 7, .	6.0	195
27	A cellular expression map of the Arabidopsis <i>AUXIN RESPONSE FACTOR</i> gene family. Plant Journal, 2011, 68, 597-606.	5.7	192
28	Local Auxin Sources Orient the Apical-Basal Axis in Arabidopsis Embryos. Current Biology, 2013, 23, 2506-2512.	3.9	182
29	Building a plant: cell fate specification in the early <i>Arabidopsis</i> embryo. Development (Cambridge), 2015, 142, 420-430.	2.5	179
30	Different Auxin Response Machineries Control Distinct Cell Fates in the Early Plant Embryo. Developmental Cell, 2012, 22, 211-222.	7.0	176
31	Evolution of Plant Hormone Response Pathways. Annual Review of Plant Biology, 2020, 71, 327-353.	18.7	169
32	Auxin Response Factors: output control in auxin biology. Journal of Experimental Botany, 2018, 69, 179-188.	4.8	158
33	Cyclophilin 40 is required for microRNA activity in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 5424-5429.	7.1	156
34	<i>DORNROÌˆSCHEN</i>is a direct target of the auxin response factor MONOPTEROS in the<i>Arabidopsis</i>embryo. Development (Cambridge), 2009, 136, 1643-1651.	2.5	145
35	Maintenance of Embryonic Auxin Distribution for Apical-Basal Patterning by PIN-FORMEDâ€"Dependent Auxin Transport in Arabidopsis. Plant Cell, 2005, 17, 2517-2526.	6.6	135
36	Cell surface and intracellular auxin signalling for H+ fluxes in root growth. Nature, 2021, 599, 273-277.	27.8	128

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37	A noncanonical auxin-sensing mechanism is required for organ morphogenesis in <i>Arabidopsis</i>. Genes and Development, 2016, 30, 2286-2296.	5.9	122
38	The AP-3 adaptor complex is required for vacuolar function in Arabidopsis. Cell Research, 2011, 21, 1711-1722.	12.0	114
39	Diphtheria Toxin-Mediated Cell Ablation Reveals Interregional Communication during Arabidopsis Seed Development. Plant Physiology, 2003, 133, 1882-1892.	4.8	113
40	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
41	Cytokinin response factors regulate PIN-FORMED auxin transporters. Nature Communications, 2015, 6, 8717.	12.8	108
42	Mis-expression of the CLV3/ESR-like gene CLE19 in Arabidopsis leads to a consumption of root meristem. Gene, 2004, 327, 37-49.	2.2	107
43	Early paternal gene activity in Arabidopsis. Nature, 2001, 414, 709-710.	27.8	106
44	Auxin and embryo axis formation: the ends in sight?. Current Opinion in Plant Biology, 2005, 8, 32-37.	7.1	105
45	An integrative model of the control of ovule primordia formation. Plant Journal, 2013, 76, 446-455.	5.7	105
46	A PXY-Mediated Transcriptional Network Integrates Signaling Mechanisms to Control Vascular Development in Arabidopsis. Plant Cell, 2020, 32, 319-335.	6.6	103
47	Q&A: Auxin: the plant molecule that influences almost anything. BMC Biology, 2016, 14, 67.	3.8	101
48	A bHLH-Based Feedback Loop Restricts Vascular Cell Proliferation in Plants. Developmental Cell, 2015, 35, 432-443.	7.0	96
49	Plant embryogenesis requires AUX/LAX-mediated auxin influx. Development (Cambridge), 2015, 142, 702-11.	2.5	92
50	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
51	Boosting LPMO-driven lignocellulose degradation by polyphenol oxidase-activated lignin building blocks. Biotechnology for Biofuels, 2017, 10, 121.	6.2	86
52	Predicting gene regulatory networks by combining spatial and temporal gene expression data in <i>Arabidopsis</i> root stem cells. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E7632-E7640.	7.1	82
53	Transcriptome dynamics revealed by a gene expression atlas of the early Arabidopsis embryo. Nature Plants, 2017, 3, 894-904.	9.3	77
54	Auxin: small molecule, big impact. Journal of Experimental Botany, 2018, 69, 133-136.	4.8	77

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55	The <scp>A</scp>rabidopsis embryo as a miniature morphogenesis model. New Phytologist, 2013, 199, 14-25.	7.3	76
56	Auxin response cell-autonomously controls ground tissue initiation in the early <i>Arabidopsis</i> embryo. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E2533-E2539.	7.1	74
57	Tissue and Organ Initiation in the Plant Embryo: A First Time for Everything. Annual Review of Cell and Developmental Biology, 2016, 32, 47-75.	9.4	73
58	The role of auxin signaling in early embryo pattern formation. Current Opinion in Plant Biology, 2015, 28, 99-105.	7.1	71
59	A SOSEKI-based coordinate system interprets global polarity cues in Arabidopsis. Nature Plants, 2019, 5, 160-166.	9.3	71
60	Design principles of a minimal auxin response system. Nature Plants, 2020, 6, 473-482.	9.3	71
61	Funneling auxin action: specificity in signal transduction. Current Opinion in Plant Biology, 2004, 7, 687-693.	7.1	69
62	A roadmap to embryo identity in plants. Trends in Plant Science, 2014, 19, 709-716.	8.8	68
63	<i>AXL</i> and <i>AXR1</i> have redundant functions in RUB conjugation and growth and development in Arabidopsis. Plant Journal, 2007, 52, 114-123.	5.7	65
64	Auxin enters the matrixâ€"assembly of response machineries for specific outputs. Current Opinion in Plant Biology, 2009, 12, 520-526.	7.1	64
65	Plant transcription factors â€" being in the right place with the right company. Current Opinion in Plant Biology, 2022, 65, 102136.	7.1	63
66	In Vivo Identification of Plant Protein Complexes Using IP-MS/MS. Methods in Molecular Biology, 2017, 1497, 147-158.	0.9	62
67	Tightly controlled WRKY23 expression mediates Arabidopsis embryo development. EMBO Reports, 2013, 14, 1136-1142.	4.5	61
68	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
69	A Plausible Microtubule-Based Mechanism for Cell Division Orientation in Plant Embryogenesis. Current Biology, 2018, 28, 3031-3043.e2.	3.9	57
70	The Transcriptional Landscape of Polyploid Wheats and Their Diploid Ancestors during Embryogenesis and Grain Development. Plant Cell, 2019, 31, 2888-2911.	6.6	57
71	DIX Domain Polymerization Drives Assembly of Plant Cell Polarity Complexes. Cell, 2020, 180, 427-439.e12.	28.9	54
72	Evolution of nuclear auxin signaling: lessons from genetic studies with basal land plants. Journal of Experimental Botany, 2018, 69, 291-301.	4.8	53

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73	Architecture of DNA elements mediating ARF transcription factor binding and auxin-responsive gene expression in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 24557-24566.	7.1	53
74	Green Beginnings â€“ Pattern Formation in the Early Plant Embryo. Current Topics in Developmental Biology, 2010, 91, 1-27.	2.2	46
75	The anaphaseâ€promoting complex initiates zygote division in Arabidopsis through degradation of cyclin B1. Plant Journal, 2016, 86, 161-174.	5.7	46
76	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
77	Complete microviscosity maps of living plant cells and tissues with a toolbox of targeting mechanoprobes. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18110-18118.	7.1	46
78	Diversity of cis-regulatory elements associated with auxin response in Arabidopsis thaliana. Journal of Experimental Botany, 2018, 69, 329-339.	4.8	45
79	SnapShot: Auxin Signaling and Transport. Cell, 2009, 136, 1172-1172.e1.	28.9	44
80	The developmental and environmental regulation of gravitropic setpoint angle in Arabidopsis and bean. Scientific Reports, 2017, 7, 42664.	3.3	44
81	Rice microtubuleâ€associated protein IQ67â€DOMAIN14 regulates grain shape by modulating microtubule cytoskeleton dynamics. Plant Biotechnology Journal, 2020, 18, 1141-1152.	8.3	43
82	Transcriptomics approaches in the early Arabidopsis embryo. Trends in Plant Science, 2013, 18, 514-521.	8.8	42
83	Omics and modelling approaches for understanding regulation of asymmetric cell divisions in arabidopsis and other angiosperm plants. Annals of Botany, 2014, 113, 1083-1105.	2.9	38
84	Apicalâ€“basal polarity: why plant cells don't standon their heads. Trends in Plant Science, 2006, 11, 12-14.	8.8	37
85	A Robust Auxin Response Network Controls Embryo and Suspensor Development through a Basic Helix Loop Helix Transcriptional Module. Plant Cell, 2019, 31, 52-67.	6.6	37
86	Transcriptional repression of BODENLOS by HD-ZIP transcription factor HB5 in Arabidopsis thaliana. Journal of Experimental Botany, 2013, 64, 3009-3019.	4.8	35
87	Theoretical approaches to understanding root vascular patterning: a consensus between recent models. Journal of Experimental Botany, 2017, 68, 5-16.	4.8	35
88	Control of embryonic meristem initiation in <i>Arabidopsis</i> by PHD-finger protein complexes. Development (Cambridge), 2012, 139, 1391-1398.	2.5	34
89	Evolution, Initiation, and Diversity in Early Plant Embryogenesis. Developmental Cell, 2019, 50, 533-543.	7.0	34
90	Plant embryogenesis. Current Biology, 2017, 27, R870-R873.	3.9	32

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91	Pole position: How plant cells polarize along the axes. Plant Cell, 2022, 34, 174-192.	6.6	32
92	Centering the Organizing Center in the Arabidopsis thaliana Shoot Apical Meristem by a Combination of Cytokinin Signaling and Self-Organization. PLoS ONE, 2016, 11, e0147830.	2.5	28
93	Two-Component Nanoparticle Vaccine Displaying Glycosylated Spike S1 Domain Induces Neutralizing Antibody Response against SARS-CoV-2 Variants. MBio, 2021, 12, e0181321.	4.1	28
94	A toolkit for studying cellular reorganization during early embryogenesis in Arabidopsis thaliana. Plant Journal, 2018, 93, 963-976.	5.7	26
95	Specification and regulation of vascular tissue identity in the <i>Arabidopsis</i> embryo. Development (Cambridge), 2020, 147, .	2.5	24
96	Auxin-dependent control of cytoskeleton and cell shape regulates division orientation in the Arabidopsis embryo. Current Biology, 2021, 31, 4946-4955.e4.	3.9	24
97	Molecular characterization of Arabidopsis GAL4/UAS enhancer trap lines identifies novel cell type-specific promoters. Plant Physiology, 2016, 171, pp.00213.2016.	4.8	23
98	Prenatal plumbingâ€”vascular tissue formation in the plant embryo. Physiologia Plantarum, 2014, 151, 126-133.	5.2	22
99	Auxin responsiveness of the <scp>MONOPTEROS</scp>â€<scp>BODENLOS</scp> module in primary root initiation critically depends on the nuclear import kinetics of the Aux/<scp>IAA</scp> inhibitor <scp>BODENLOS</scp>. Plant Journal, 2016, 85, 269-277.	5.7	22
100	RIMA-Dependent Nuclear Accumulation of IYO Triggers Auxin-Irreversible Cell Differentiation in Arabidopsis. Plant Cell, 2017, 29, 575-588.	6.6	22
101	Alternative Splicing Generates a MONOPTEROS Isoform Required for Ovule Development. Current Biology, 2021, 31, 892-899.e3.	3.9	22
102	Conserved, divergent and heterochronic gene expression during Brachypodium and Arabidopsis embryo development. Plant Reproduction, 2021, 34, 207-224.	2.2	22
103	<i>POPCORN</i>Functions in the Auxin Pathway to Regulate Embryonic Body Plan and Meristem Organization in<i>Arabidopsis</i>Â Â. Plant Cell, 2011, 23, 4348-4367.	6.6	21
104	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
105	Plant cell polarity as the nexus of tissue mechanics and morphogenesis. Nature Plants, 2021, 7, 1548-1559.	9.3	21
106	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
107	Auxin Regulation of Embryonic Root Formation. Plant and Cell Physiology, 2013, 54, 325-332.	3.1	16
108	A set of domain-specific markers in the Arabidopsis embryo. Plant Reproduction, 2015, 28, 153-160.	2.2	16

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109	Regulation of intercellular TARGET OF MONOPTEROS 7 protein transport in the <i>Arabidopsis</i> root. Development (Cambridge), 2018, 145, .	2.5	16
110	Adapting INTACT to analyse cell-type-specific transcriptomes and nucleocytoplasmic mRNA dynamics in the Arabidopsis embryo. Plant Reproduction, 2019, 32, 113-121.	2.2	16
111	Ligation-Independent Cloning for Plant Research. Methods in Molecular Biology, 2015, 1284, 421-431.	0.9	14
112	Deep Evolutionary History of the Phox and Bem1 (PB1) Domain Across Eukaryotes. Scientific Reports, 2020, 10, 3797.	3.3	13
113	Control of oriented cell division in the Arabidopsis embryo. Current Opinion in Plant Biology, 2015, 23, 25-30.	7.1	12
114	FRET-FLIM for Visualizing and Quantifying Protein Interactions in Live Plant Cells. Methods in Molecular Biology, 2017, 1497, 135-146.	0.9	12
115	Suspensor-derived somatic embryogenesis in Arabidopsis. Development (Cambridge), 2020, 147, .	2.5	8
116	Plant Organogenesis: Rules of Order. Current Biology, 2016, 26, R157-R159.	3.9	7
117	A rich and bountiful harvest: Key discoveries in plant cell biology. Plant Cell, 2022, 34, 53-71.	6.6	7
118	A Female Identity Switch Helps Keep Only One Egg in the Basket. Developmental Cell, 2016, 37, 5-6.	7.0	5
119	The<i>Arabidopsis</i>embryo as a quantifiable model for studying pattern formation. Quantitative Plant Biology, 2021, 2, .	2.0	5
120	Auxin Response by the Numbers. Trends in Plant Science, 2021, 26, 442-451.	8.8	5
121	Flowering plant embryos: How did we end up here?. Plant Reproduction, 2021, 34, 365-371.	2.2	5
122	Genetic control of identity and growth in the early Arabidopsis embryo. Biochemical Society Transactions, 2014, 42, 346-351.	3.4	4
123	High-resolution and Deep Phylogenetic Reconstruction of Ancestral States from Large Transcriptomic Data Sets. Bio-protocol, 2020, 10, e3566.	0.4	4
124	Highly Specific Protein Identification by Immunoprecipitationâ€“Mass Spectrometry Using Antifouling Microbeads. ACS Applied Materials & Interfaces, 2022, 14, 23102-23116.	8.0	4
125	Cell Type-Specific Transcriptomics in the Plant Embryo Using an Adapted INTACT Protocol. Methods in Molecular Biology, 2020, 2122, 141-150.	0.9	2
126	Note from Editor-in-Chief. Plant Reproduction, 2013, 26, 63-63.	2.2	1

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127	Message from the new Editor-in-Chief. Plant Reproduction, 2013, 26, 1-1.	2.2	1
128	Auxin: Harnessing a loose cannon. Nature Plants, 2015, 1, 15024.	9.3	1
129	Phyllotaxis: A Matthew Effect in Auxin Action. Current Biology, 2016, 26, R1233-R1235.	3.9	1
130	Assorted Pastries at the South Pole. Developmental Cell, 2020, 52, 137-138.	7.0	1
131	Probing DNA â€•Transcription Factor Interactions Using Singleâ€Molecule Fluorescence Detection in Nanofluidic Devices. Advanced Biology, 2022, 6, e2100953.	2.5	1
132	Quiescent center initiation in the Arabidopsis lateral root primordia is dependent on the SCARECROW transcription factor. Journal of Cell Science, 2016, 129, e1.2-e1.2.	2.0	1
133	Analyzing Subcellular Reorganization During Early Arabidopsis Embryogenesis Using Fluorescent Markers. Methods in Molecular Biology, 2020, 2122, 49-61.	0.9	1
134	Back to the roots: A focus on plant cell biology. Plant Cell, 2022, 34, 1-3.	6.6	1
135	Editorial overview: Growth and development: Signals and communication in plant pluripotency, differentiation and growth. Current Opinion in Plant Biology, 2016, 29, v-ix.	7.1	0
136	Cell-Type-Specific Promoter Identification Using Enhancer Trap Lines. Methods in Molecular Biology, 2018, 1830, 127-139.	0.9	0
137	Quantitative analysis of 3D cellular geometry and modelling of the Arabidopsis embryo. Journal of Microscopy, 0, , .	1.8	0