Dolf Weijers

List of Publications by Year
in descending order

137 papers	17,022 citations	22548 61 h-index	18944 123 g-index
166 all docs	166 docs citations	166 times ranked	12981 citing authors

#	Article	IF	Citations
1	Pole position: How plant cells polarize along the axes. Plant Cell, 2022, 34, 174-192.	3.1	32
2	A rich and bountiful harvest: Key discoveries in plant cell biology. Plant Cell, 2022, 34, 53-71.	3.1	7
3	Probing DNA â€•Transcription Factor Interactions Using Singleâ€Molecule Fluorescence Detection in Nanofluidic Devices. Advanced Biology, 2022, 6, e2100953.	1.4	1
4	Plant transcription factors â€" being in the right place with the right company. Current Opinion in Plant Biology, 2022, 65, 102136.	3.5	63
5	Back to the roots: A focus on plant cell biology. Plant Cell, 2022, 34, 1-3.	3.1	1
6	Highly Specific Protein Identification by Immunoprecipitationâ€"Mass Spectrometry Using Antifouling Microbeads. ACS Applied Materials & Interfaces, 2022, 14, 23102-23116.	4.0	4
7	Alternative Splicing Generates a MONOPTEROS Isoform Required for Ovule Development. Current Biology, 2021, 31, 892-899.e3.	1.8	22
8	The<i>Arabidopsis</i>embryo as a quantifiable model for studying pattern formation. Quantitative Plant Biology, 2021, 2, .	0.8	5
9	Conserved, divergent and heterochronic gene expression during Brachypodium and Arabidopsis embryo development. Plant Reproduction, 2021, 34, 207-224.	1.3	22
10	Auxin Response by the Numbers. Trends in Plant Science, 2021, 26, 442-451.	4.3	5
11	Flowering plant embryos: How did we end up here?. Plant Reproduction, 2021, 34, 365-371.	1.3	5
12	Two-Component Nanoparticle Vaccine Displaying Glycosylated Spike S1 Domain Induces Neutralizing Antibody Response against SARS-CoV-2 Variants. MBio, 2021, 12, e0181321.	1.8	28
13	Auxin-dependent control of cytoskeleton and cell shape regulates division orientation in the Arabidopsis embryo. Current Biology, 2021, 31, 4946-4955.e4.	1.8	24
14	Cell surface and intracellular auxin signalling for H+ fluxes in root growth. Nature, 2021, 599, 273-277.	13.7	128
15	Plant cell polarity as the nexus of tissue mechanics and morphogenesis. Nature Plants, 2021, 7, 1548-1559.	4.7	21
16	Rice microtubuleâ€associated protein IQ67â€DOMAIN14 regulates grain shape by modulating microtubule cytoskeleton dynamics. Plant Biotechnology Journal, 2020, 18, 1141-1152.	4.1	43
17	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.	3.3	21
18	A PXY-Mediated Transcriptional Network Integrates Signaling Mechanisms to Control Vascular Development in Arabidopsis. Plant Cell, 2020, 32, 319-335.	3.1	103

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19	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.	3.3	46
20	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.	3.3	53
21	Design principles of a minimal auxin response system. Nature Plants, 2020, 6, 473-482.	4.7	71
22	Suspensor-derived somatic embryogenesis in Arabidopsis. Development (Cambridge), 2020, 147, .	1.2	8
23	Specification and regulation of vascular tissue identity in the <i>Arabidopsis</i> embryo. Development (Cambridge), 2020, 147, .	1.2	24
24	Anthoceros genomes illuminate the origin of land plants and the unique biology of hornworts. Nature Plants, 2020, 6, 259-272.	4.7	225
25	Deep Evolutionary History of the Phox and Bem1 (PB1) Domain Across Eukaryotes. Scientific Reports, 2020, 10, 3797.	1.6	13
26	Assorted Pastries at the South Pole. Developmental Cell, 2020, 52, 137-138.	3.1	1
27	DIX Domain Polymerization Drives Assembly of Plant Cell Polarity Complexes. Cell, 2020, 180, 427-439.e12.	13.5	54
28	Evolution of Plant Hormone Response Pathways. Annual Review of Plant Biology, 2020, 71, 327-353.	8.6	169
29	High-resolution and Deep Phylogenetic Reconstruction of Ancestral States from Large Transcriptomic Data Sets. Bio-protocol, 2020, 10, e3566.	0.2	4
30	<i>RIdeogram</i>: drawing SVG graphics to visualize and map genome-wide data on the idiograms. PeerJ Computer Science, 2020, 6, e251.	2.7	265
31	Cell Type-Specific Transcriptomics in the Plant Embryo Using an Adapted INTACT Protocol. Methods in Molecular Biology, 2020, 2122, 141-150.	0.4	2
32	Analyzing Subcellular Reorganization During Early Arabidopsis Embryogenesis Using Fluorescent Markers. Methods in Molecular Biology, 2020, 2122, 49-61.	0.4	1
33	The Transcriptional Landscape of Polyploid Wheats and Their Diploid Ancestors during Embryogenesis and Grain Development. Plant Cell, 2019, 31, 2888-2911.	3.1	57
34	Evolution, Initiation, and Diversity in Early Plant Embryogenesis. Developmental Cell, 2019, 50, 533-543.	3.1	34
35	A SOSEKI-based coordinate system interprets global polarity cues in Arabidopsis. Nature Plants, 2019, 5, 160-166.	4.7	71
36	A Robust Auxin Response Network Controls Embryo and Suspensor Development through a Basic Helix Loop Helix Transcriptional Module. Plant Cell, 2019, 31, 52-67.	3.1	37

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37	Adapting INTACT to analyse cell-type-specific transcriptomes and nucleocytoplasmic mRNA dynamics in the Arabidopsis embryo. Plant Reproduction, 2019, 32, 113-121.	1.3	16
38	Regulation of intercellular TARGET OF MONOPTEROS 7 protein transport in the <i>Arabidopsis</i> root. Development (Cambridge), 2018, 145, .	1.2	16
39	A toolkit for studying cellular reorganization during early embryogenesis in Arabidopsis thaliana. Plant Journal, 2018, 93, 963-976.	2.8	26
40	Auxin: small molecule, big impact. Journal of Experimental Botany, 2018, 69, 133-136.	2.4	77
41	Diversity of cis-regulatory elements associated with auxin response in Arabidopsis thaliana. Journal of Experimental Botany, 2018, 69, 329-339.	2.4	45
42	Auxin Response Factors: output control in auxin biology. Journal of Experimental Botany, 2018, 69, 179-188.	2.4	158
43	Evolution of nuclear auxin signaling: lessons from genetic studies with basal land plants. Journal of Experimental Botany, 2018, 69, 291-301.	2.4	53
44	A Plausible Microtubule-Based Mechanism for Cell Division Orientation in Plant Embryogenesis. Current Biology, 2018, 28, 3031-3043.e2.	1.8	57
45	Origin and evolution of the nuclear auxin response system. ELife, 2018, 7, .	2.8	195
46	Cell-Type-Specific Promoter Identification Using Enhancer Trap Lines. Methods in Molecular Biology, 2018, 1830, 127-139.	0.4	0
47	RIMA-Dependent Nuclear Accumulation of IYO Triggers Auxin-Irreversible Cell Differentiation in Arabidopsis. Plant Cell, 2017, 29, 575-588.	3.1	22
48	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.	3.3	74
49	The developmental and environmental regulation of gravitropic setpoint angle in Arabidopsis and bean. Scientific Reports, 2017, 7, 42664.	1.6	44
50	Boosting LPMO-driven lignocellulose degradation by polyphenol oxidase-activated lignin building blocks. Biotechnology for Biofuels, 2017, 10, 121.	6.2	86
51	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.	3.3	46
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.	3.3	82
53	Plant embryogenesis. Current Biology, 2017, 27, R870-R873.	1.8	32
54	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.	3.3	91

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55	Transcriptome dynamics revealed by a gene expression atlas of the early Arabidopsis embryo. Nature Plants, 2017, 3, 894-904.	4.7	77
56	Theoretical approaches to understanding root vascular patterning: a consensus between recent models. Journal of Experimental Botany, 2017, 68, 5-16.	2.4	35
57	FRET-FLIM for Visualizing and Quantifying Protein Interactions in Live Plant Cells. Methods in Molecular Biology, 2017, 1497, 135-146.	0.4	12
58	In Vivo Identification of Plant Protein Complexes Using IP-MS/MS. Methods in Molecular Biology, 2017, 1497, 147-158.	0.4	62
59	The anaphaseâ€promoting complex initiates zygote division in Arabidopsis through degradation of cyclin B1. Plant Journal, 2016, 86, 161-174.	2.8	46
60	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.	2.8	22
61	Phyllotaxis: A Matthew Effect in Auxin Action. Current Biology, 2016, 26, R1233-R1235.	1.8	1
62	A Female Identity Switch Helps Keep Only One Egg in the Basket. Developmental Cell, 2016, 37, 5-6.	3.1	5
63	Molecular characterization of Arabidopsis GAL4/UAS enhancer trap lines identifies novel cell type-specific promoters. Plant Physiology, 2016, 171, pp.00213.2016.	2.3	23
64	Tissue and Organ Initiation in the Plant Embryo: A First Time for Everything. Annual Review of Cell and Developmental Biology, 2016, 32, 47-75.	4.0	73
65	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.	1.2	61
66	Q&A: Auxin: the plant molecule that influences almost anything. BMC Biology, 2016, 14, 67.	1.7	101
67	A noncanonical auxin-sensing mechanism is required for organ morphogenesis in <i>Arabidopsis</i>. Genes and Development, 2016, 30, 2286-2296.	2.7	122
68	Editorial overview: Growth and development: Signals and communication in plant pluripotency, differentiation and growth. Current Opinion in Plant Biology, 2016, 29, v-ix.	3.5	0
69	Plant Organogenesis: Rules of Order. Current Biology, 2016, 26, R157-R159.	1.8	7
70	Transcriptional Responses to the Auxin Hormone. Annual Review of Plant Biology, 2016, 67, 539-574.	8.6	396
71	Plant vascular development: from early specification to differentiation. Nature Reviews Molecular Cell Biology, 2016, 17, 30-40.	16.1	195
72	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.	1.2	1

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73	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.	1.1	28
74	Auxin: Harnessing a loose cannon. Nature Plants, 2015, 1, 15024.	4.7	1
75	Organizer-Derived WOX5 Signal Maintains Root Columella Stem Cells through Chromatin-Mediated Repression of CDF4 Expression. Developmental Cell, 2015, 33, 576-588.	3.1	311
76	Reporters for sensitive and quantitative measurement of auxin response. Nature Methods, 2015, 12, 207-210.	9.0	382
77	Plant embryogenesis requires AUX/LAX-mediated auxin influx. Development (Cambridge), 2015, 142, 702-11.	1.2	92
78	Building a plant: cell fate specification in the early <i>Arabidopsis</i> embryo. Development (Cambridge), 2015, 142, 420-430.	1.2	179
79	The role of auxin signaling in early embryo pattern formation. Current Opinion in Plant Biology, 2015, 28, 99-105.	3.5	71
80	Cytokinin response factors regulate PIN-FORMED auxin transporters. Nature Communications, 2015, 6, 8717.	5.8	108
81	A set of domain-specific markers in the Arabidopsis embryo. Plant Reproduction, 2015, 28, 153-160.	1.3	16
82	A bHLH-Based Feedback Loop Restricts Vascular Cell Proliferation in Plants. Developmental Cell, 2015, 35, 432-443.	3.1	96
83	Control of oriented cell division in the Arabidopsis embryo. Current Opinion in Plant Biology, 2015, 23, 25-30.	3.5	12
84	Ligation-Independent Cloning for Plant Research. Methods in Molecular Biology, 2015, 1284, 421-431.	0.4	14
85	Genetic control of identity and growth in the early Arabidopsis embryo. Biochemical Society Transactions, 2014, 42, 346-351.	1.6	4
86	Omics and modelling approaches for understanding regulation of asymmetric cell divisions in arabidopsis and other angiosperm plants. Annals of Botany, 2014, 113, 1083-1105.	1.4	38
87	Prenatal plumbingâ€"vascular tissue formation in the plant embryo. Physiologia Plantarum, 2014, 151, 126-133.	2.6	22
88	Structural Basis for DNA Binding Specificity by the Auxin-Dependent ARF Transcription Factors. Cell, 2014, 156, 577-589.	13.5	348
89	Integration of growth and patterning during vascular tissue formation in <i>Arabidopsis</i>. Science, 2014, 345, 1255215.	6.0	286
90	A roadmap to embryo identity in plants. Trends in Plant Science, 2014, 19, 709-716.	4.3	68

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91	Genetic Control of Plant Development by Overriding a Geometric Division Rule. Developmental Cell, 2014, 29, 75-87.	3.1	203
92	Note from Editor-in-Chief. Plant Reproduction, 2013, 26, 63-63.	1.3	1
93	Message from the new Editor-in-Chief. Plant Reproduction, 2013, 26, 1-1.	1.3	1
94	An integrative model of the control of ovule primordia formation. Plant Journal, 2013, 76, 446-455.	2.8	105
95	Tightly controlled WRKY23 expression mediates Arabidopsis embryo development. EMBO Reports, 2013, 14, 1136-1142.	2.0	61
96	Local Auxin Sources Orient the Apical-Basal Axis in Arabidopsis Embryos. Current Biology, 2013, 23, 2506-2512.	1.8	182
97	A bHLH Complex Controls Embryonic Vascular Tissue Establishment and Indeterminate Growth in Arabidopsis. Developmental Cell, 2013, 24, 426-437.	3.1	269
98	Imaging of Phenotypes, Gene Expression, and Protein Localization During Embryonic Root Formation in Arabidopsis. Methods in Molecular Biology, 2013, 959, 137-148.	0.4	20
99	Transcriptomics approaches in the early Arabidopsis embryo. Trends in Plant Science, 2013, 18, 514-521.	4.3	42
100	The <scp>A</scp>rabidopsis embryo as a miniature morphogenesis model. New Phytologist, 2013, 199, 14-25.	3.5	76
101	Transcriptional repression of BODENLOS by HD-ZIP transcription factor HB5 in Arabidopsis thaliana. Journal of Experimental Botany, 2013, 64, 3009-3019.	2.4	35
102	Auxin Regulation of Embryonic Root Formation. Plant and Cell Physiology, 2013, 54, 325-332.	1.5	16
103	Control of embryonic meristem initiation in <i>Arabidopsis</i> by PHD-finger protein complexes. Development (Cambridge), 2012, 139, 1391-1398.	1.2	34
104	Different Auxin Response Machineries Control Distinct Cell Fates in the Early Plant Embryo. Developmental Cell, 2012, 22, 211-222.	3.1	176
105	A cellular expression map of the Arabidopsis <i>AUXIN RESPONSE FACTOR</i> gene family. Plant Journal, 2011, 68, 597-606.	2.8	192
106	A Mutually Inhibitory Interaction between Auxin and Cytokinin Specifies Vascular Pattern in Roots. Current Biology, 2011, 21, 917-926.	1.8	359
107	A Versatile Set of Ligation-Independent Cloning Vectors for Functional Studies in Plants Â Â Â. Plant Physiology, 2011, 156, 1292-1299.	2.3	112
108	The AP-3 adaptor complex is required for vacuolar function in Arabidopsis. Cell Research, 2011, 21, 1711-1722.	5.7	114

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109	<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.	3.1	21
110	A Novel Aux/IAA28 Signaling Cascade Activates GATA23-Dependent Specification of Lateral Root Founder Cell Identity. Current Biology, 2010, 20, 1697-1706.	1.8	431
111	MONOPTEROS controls embryonic root initiation by regulating a mobile transcription factor. Nature, 2010, 464, 913-916.	13.7	532
112	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.	3.1	512
113	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.	3.3	271
114	Green Beginnings â€" Pattern Formation in the Early Plant Embryo. Current Topics in Developmental Biology, 2010, 91, 1-27.	1.0	46
115	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.	3.3	156
116	Auxin Control of Embryo Patterning. Cold Spring Harbor Perspectives in Biology, 2009, 1, a001545-a001545.	2.3	228
117	<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.	1.2	145
118	Auxin enters the matrixâ€"assembly of response machineries for specific outputs. Current Opinion in Plant Biology, 2009, 12, 520-526.	3.5	64
119	SnapShot: Auxin Signaling and Transport. Cell, 2009, 136, 1172-1172.e1.	13.5	44
120	Cytokinins Act Directly on Lateral Root Founder Cells to Inhibit Root Initiation. Plant Cell, 2008, 19, 3889-3900.	3.1	498
121	Antagonistic Regulation of PIN Phosphorylation by PP2A and PINOID Directs Auxin Flux. Cell, 2007, 130, 1044-1056.	13.5	590
122	<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.	2.8	65
123	Auxin Triggers Transient Local Signaling for Cell Specification in Arabidopsis Embryogenesis. Developmental Cell, 2006, 10, 265-270.	3.1	303
124	Apicalâ€"basal polarity: why plant cells don't standon their heads. Trends in Plant Science, 2006, 11, 12-14.	4.3	37
125	Developmental specificity of auxin response by pairs of ARF and Aux/IAA transcriptional regulators. EMBO Journal, 2005, 24, 1874-1885.	3.5	349
126	Auxin and embryo axis formation: the ends in sight?. Current Opinion in Plant Biology, 2005, 8, 32-37.	3.5	105

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127	Maintenance of Embryonic Auxin Distribution for Apical-Basal Patterning by PIN-FORMEDâ€“Dependent Auxin Transport in Arabidopsis. Plant Cell, 2005, 17, 2517-2526.	3.1	135
128	Plant Development Is Regulated by a Family of Auxin Receptor F Box Proteins. Developmental Cell, 2005, 9, 109-119.	3.1	865
129	A PINOID-Dependent Binary Switch in Apical-Basal PIN Polar Targeting Directs Auxin Efflux. Science, 2004, 306, 862-865.	6.0	703
130	Funneling auxin action: specificity in signal transduction. Current Opinion in Plant Biology, 2004, 7, 687-693.	3.5	69
131	Mis-expression of the CLV3/ESR-like gene CLE19 in Arabidopsis leads to a consumption of root meristem. Gene, 2004, 327, 37-49.	1.0	107
132	Efflux-dependent auxin gradients establish the apicalâ€“basal axis of Arabidopsis. Nature, 2003, 426, 147-153.	13.7	1,672
133	Diphtheria Toxin-Mediated Cell Ablation Reveals Interregional Communication during Arabidopsis Seed Development. Plant Physiology, 2003, 133, 1882-1892.	2.3	113
134	Early paternal gene activity in Arabidopsis. Nature, 2001, 414, 709-710.	13.7	106
135	The PINOID protein kinase regulates organ development in<i>Arabidopsis</i>by enhancing polar auxin transport. Development (Cambridge), 2001, 128, 4057-4067.	1.2	408
136	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.	1.2	267
137	Quantitative analysis of 3D cellular geometry and modelling of the Arabidopsis embryo. Journal of Microscopy, 0, , .	0.8	0