JÃ¼rgen Kleine-Vehn

List of Publications by Year
in descending order

80 papers	8,744 citations	53794 45 h-index	66911 78 g-index
97 all docs	97 docs citations	97 times ranked	6850 citing authors

#	Article	IF	Citations
1	Auxin inhibits endocytosis and promotes its own efflux from cells. Nature, 2005, 435, 1251-1256.	27.8	712
2	Differential degradation of PIN2 auxin efflux carrier by retromer-dependent vacuolar targeting. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17812-17817.	7.1	389
3	ABP1 Mediates Auxin Inhibition of Clathrin-Dependent Endocytosis in Arabidopsis. Cell, 2010, 143, 111-121.	28.9	386
4	A novel putative auxin carrier family regulates intracellular auxin homeostasis in plants. Nature, 2012, 485, 119-122.	27.8	345
5	PIN Polarity Maintenance by the Cell Wall in Arabidopsis. Current Biology, 2011, 21, 338-343.	3.9	336
6	Light-mediated polarization of the PIN3 auxin transporter for the phototropic response in Arabidopsis. Nature Cell Biology, 2011, 13, 447-452.	10.3	295
7	Gravity-induced PIN transcytosis for polarization of auxin fluxes in gravity-sensing root cells. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 22344-22349.	7.1	287
8	Auxin: simply complicated. Journal of Experimental Botany, 2013, 64, 2565-2577.	4.8	269
9	Cytokinin Modulates Endocytic Trafficking of PIN1 Auxin Efflux Carrier to Control Plant Organogenesis. Developmental Cell, 2011, 21, 796-804.	7.0	268
10	Polar Targeting and Endocytic Recycling in Auxin-Dependent Plant Development. Annual Review of Cell and Developmental Biology, 2008, 24, 447-473.	9.4	252
11	ARF GEF-Dependent Transcytosis and Polar Delivery of PIN Auxin Carriers in Arabidopsis. Current Biology, 2008, 18, 526-531.	3.9	250
12	Subcellular Trafficking of the Arabidopsis Auxin Influx Carrier AUX1 Uses a Novel Pathway Distinct from PIN1. Plant Cell, 2006, 18, 3171-3181.	6.6	239
13	Recycling, clustering, and endocytosis jointly maintain PIN auxin carrier polarity at the plasma membrane. Molecular Systems Biology, 2011, 7, 540.	7.2	232
14	Cell wall constrains lateral diffusion of plant plasma-membrane proteins. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12805-12810.	7.1	224
15	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
16	GOLVEN Secretory Peptides Regulate Auxin Carrier Turnover during Plant Gravitropic Responses. Developmental Cell, 2012, 22, 678-685.	7.0	182
17	The Clathrin Adaptor Complex AP-2 Mediates Endocytosis of BRASSINOSTEROID INSENSITIVE1 in<i>Arabidopsis</i>Â. Plant Cell, 2013, 25, 2986-2997.	6.6	171
18	PIN Auxin Efflux Carrier Polarity Is Regulated by PINOID Kinase-Mediated Recruitment into GNOM-Independent Trafficking in<i>Arabidopsis</i>Â Â. Plant Cell, 2010, 21, 3839-3849.	6.6	165

#	Article	IF	Citations
19	Extracellular matrix sensing by <scp>FERONIA</scp> and Leucineâ€Rich Repeat Extensins controls vacuolar expansion during cellular elongation in <i>Arabidopsis thaliana</i>. EMBO Journal, 2019, 38, .	7.8	158
20	SCFTIR1/AFB-auxin signalling regulates PIN vacuolar trafficking and auxin fluxes during root gravitropism. EMBO Journal, 2012, 32, 260-274.	7.8	152
21	Cellular Auxin Homeostasis: Gatekeeping Is Housekeeping. Molecular Plant, 2012, 5, 772-786.	8.3	148
22	An Auxin Transport Mechanism Restricts Positive Orthogravitropism in Lateral Roots. Current Biology, 2013, 23, 817-822.	3.9	134
23	Actin-dependent vacuolar occupancy of the cell determines auxin-induced growth repression. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 452-457.	7.1	130
24	ADP-ribosylation factor machinery mediates endocytosis in plant cells. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 21890-21895.	7.1	129
25	The AP-3 Î² Adaptin Mediates the Biogenesis and Function of Lytic Vacuoles in<i>Arabidopsis</i>Â Â. Plant Cell, 2010, 22, 2812-2824.	6.6	128
26	Emergence of tissue polarization from synergy of intracellular and extracellular auxin signaling. Molecular Systems Biology, 2010, 6, 447.	7.2	126
27	Cellular and Molecular Requirements for Polar PIN Targeting and Transcytosis in Plants. Molecular Plant, 2008, 1, 1056-1066.	8.3	124
28	Inositol Trisphosphate-Induced Ca2+ Signaling Modulates Auxin Transport and PIN Polarity. Developmental Cell, 2011, 20, 855-866.	7.0	121
29	The AP-3 adaptor complex is required for vacuolar function in Arabidopsis. Cell Research, 2011, 21, 1711-1722.	12.0	114
30	Probing plant membranes with FM dyes: tracking, dragging or blocking?. Plant Journal, 2010, 61, 883-892.	5.7	104
31	Sequential induction of auxin efflux and influx carriers regulates lateral root emergence. Molecular Systems Biology, 2013, 9, 699.	7.2	104
32	AUXIN BINDING PROTEIN1: The Outsider. Plant Cell, 2011, 23, 2033-2043.	6.6	99
33	PIN-FORMED and PIN-LIKES auxin transport facilitators. Development (Cambridge), 2019, 146, .	2.5	95
34	Auxin regulates SNARE-dependent vacuolar morphology restricting cell size. ELife, 2015, 4, .	6.0	95
35	PILS6 is a temperature-sensitive regulator of nuclear auxin input and organ growth in <i>Arabidopsis thaliana</i>. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3893-3898.	7.1	90
36	Auxin and Cellular Elongation. Plant Physiology, 2016, 170, 1206-1215.	4.8	87

#	ARTICLE	IF	CITATIONS
37	Trafficking to the Outer Polar Domain Defines the Root-Soil Interface. Current Biology, 2010, 20, 904-908.	3.9	80
38	Leucine-Rich Repeat Extensin Proteins and Their Role in Cell Wall Sensing. Current Biology, 2019, 29, R851-R858.	3.9	78
39	Evolution and structural diversification of PILS putative auxin carriers in plants. Frontiers in Plant Science, 2012, 3, 227.	3.6	76
40	Cytokinin functions as an asymmetric and anti-gravitropic signal in lateral roots. Nature Communications, 2019, 10, 3540.	12.8	76
41	Light triggers PILS-dependent reduction in nuclear auxin signalling for growth transition. Nature Plants, 2017, 3, 17105.	9.3	64
42	Same same, but different: growth responses of primary and lateral roots. Journal of Experimental Botany, 2020, 71, 2397-2411.	4.8	61
43	PIN-LIKES Coordinate Brassinosteroid Signaling with Nuclear Auxin Input in Arabidopsis thaliana. Current Biology, 2020, 30, 1579-1588.e6.	3.9	58
44	Histochemical Staining of Î²-Glucuronidase and Its Spatial Quantification. Methods in Molecular Biology, 2017, 1497, 73-80.	0.9	57
45	PID/WAG-mediated phosphorylation of the Arabidopsis PIN3 auxin transporter mediates polarity switches during gravitropism. Scientific Reports, 2018, 8, 10279.	3.3	56
46	BEX1/ARF1A1C is Required for BFA-Sensitive Recycling of PIN Auxin Transporters and Auxin-Mediated Development in Arabidopsis. Plant and Cell Physiology, 2014, 55, 737-749.	3.1	52
47	Differential growth regulation in plants â€" the acid growth balloon theory. Current Opinion in Plant Biology, 2015, 28, 55-59.	7.1	51
48	Divide Et Imperaâ€"cellular auxin compartmentalization. Current Opinion in Plant Biology, 2013, 16, 78-84.	7.1	50
49	Posttranslational modification and trafficking of PIN auxin efflux carriers. Mechanisms of Development, 2013, 130, 82-94.	1.7	50
50	Vacuolar Staining Methods in Plant Cells. Methods in Molecular Biology, 2015, 1242, 83-92.	0.9	50
51	Prototype cell-to-cell auxin transport mechanism by intracellular auxin compartmentalization. Trends in Plant Science, 2011, 16, 468-475.	8.8	45
52	Regulation of immune receptor kinase plasma membrane nanoscale organization by a plant peptide hormone and its receptors. ELife, 2022, 11, .	6.0	44
53	The Road to Auxin-Dependent Growth Repression andÂPromotion in Apical Hooks. Current Biology, 2018, 28, R519-R525.	3.9	43
54	Feedback models for polarized auxin transport: an emerging trend. Molecular BioSystems, 2011, 7, 2352.	2.9	42

#	Article	IF	Citations
55	PIN7 Auxin Carrier Has a Preferential Role in Terminating Radial Root Expansion in Arabidopsis thaliana. International Journal of Molecular Sciences, 2018, 19, 1238.	4.1	36
56	2,4-D and IAA Amino Acid Conjugates Show Distinct Metabolism in Arabidopsis. PLoS ONE, 2016, 11, e0159269.	2.5	31
57	Single-cell-based system to monitor carrier driven cellular auxin homeostasis. BMC Plant Biology, 2013, 13, 20.	3.6	28
58	A glossary of plant cell structures: Current insights and future questions. Plant Cell, 2022, 34, 10-52.	6.6	27
59	Getting to the root of belowground high temperature responses in plants. Journal of Experimental Botany, 2021, , .	4.8	23
60	Cell polarity, auxin transport, and cytoskeleton-mediated division planes: who comes first?. Protoplasma, 2005, 226, 67-73.	2.1	21
61	Epidermal Patterning Genes Impose Nonâ€cell Autonomous Cell Size Determination and have Additional Roles in Root Meristem Size Control. Journal of Integrative Plant Biology, 2013, 55, 864-875.	8.5	21
62	NET4 Modulates the Compactness of Vacuoles in Arabidopsis thaliana. International Journal of Molecular Sciences, 2019, 20, 4752.	4.1	18
63	Identification of Novel Inhibitors of Auxin-Induced Ca²⁺ Signaling via a Plant-Based Chemical Screen. Plant Physiology, 2019, 180, 480-496.	4.8	18
64	Halotropism: Turning Down the Salty Date. Current Biology, 2013, 23, R927-R929.	3.9	17
65	Tricho- and atrichoblast cell files show distinct PIN2 auxin efflux carrier exploitations and are jointly required for defined auxin-dependent root organ growth. Journal of Experimental Botany, 2015, 66, 5103-5112.	4.8	17
66	Asymmetric cytokinin signaling opposes gravitropism in roots. Journal of Integrative Plant Biology, 2020, 62, 882-886.	8.5	16
67	Xyloglucan Remodeling Defines Auxin-Dependent Differential Tissue Expansion in Plants. International Journal of Molecular Sciences, 2021, 22, 9222.	4.1	9
68	Endocytic trafficking promotes vacuolar enlargements for fast cell expansion rates in plants. ELife, 0, 11, .	6.0	8
69	Auxin Carrier and Signaling Dynamics During Gravitropic Root Growth. Methods in Molecular Biology, 2015, 1309, 71-80.	0.9	6
70	PILS proteins provide a homeostatic feedback on auxin signaling output. Development (Cambridge), 2022, 149, .	2.5	6
71	Intracellular Auxin Transport. , 2014, , 61-73.		4
72	Cortical Cell Length Analysis During Gravitropic Root Growth. Methods in Molecular Biology, 2018, 1761, 191-197.	0.9	4

#	Article	IF	Citations
73	FRUITFULL Is a Repressor of Apical Hook Opening in Arabidopsis thaliana. International Journal of Molecular Sciences, 2020, 21, 6438.	4.1	4
74	Growth Rate Normalization Method to Assess Gravitropic Root Growth. Methods in Molecular Biology, 2018, 1761, 199-208.	0.9	3
75	On the discovery of an endomembrane compartment in plants. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 10623-10624.	7.1	3
76	Cell Polarity and Development. Journal of Integrative Plant Biology, 2013, 55, 786-788.	8.5	2
77	Immunoprecipitation of Membrane Proteins from Arabidopsis thaliana Root Tissue. Methods in Molecular Biology, 2018, 1761, 209-220.	0.9	2
78	Cell biology: Zipping the Casparian strip. Nature Plants, 2016, 2, 16118.	9.3	0
79	Staging of Emerged in Arabidopsis thaliana. Methods in Molecular Biology, 2022, 2368, 111-115.	0.9	0
80	Low-Cost Microprocessor-Controlled Rotating Stage for Medium-Throughput Time-Lapse Plant Phenotyping. Methods in Molecular Biology, 2017, 1497, 37-45.	0.9	0