

Karin Ljung

List of Publications by Year in descending order

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Version: 2024-02-01

98
papers

8,176
citations

44069

48
h-index

53230

85
g-index

113
all docs

113
docs citations

113
times ranked

9155
citing authors

#	ARTICLE	IF	CITATIONS
1	Sites and homeostatic control of auxin biosynthesis in Arabidopsis during vegetative growth. <i>Plant Journal</i> , 2002, 28, 465-474.	5.7	531
2	Auxin metabolism and homeostasis during plant development. <i>Development (Cambridge)</i> , 2013, 140, 943-950.	2.5	474
3	Sites and Regulation of Auxin Biosynthesis in Arabidopsis Roots. <i>Plant Cell</i> , 2005, 17, 1090-1104.	6.6	466
4	Cryptochromes Interact Directly with PIFs to Control Plant Growth in Limiting Blue Light. <i>Cell</i> , 2016, 164, 233-245.	28.9	445
5	Plant Hormonomics: Multiple Phytohormone Profiling by Targeted Metabolomics. <i>Plant Physiology</i> , 2018, 177, 476-489.	4.8	293
6	Auxin minimum triggers the developmental switch from cell division to cell differentiation in the <i>Arabidopsis</i> root. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E7641-E7649.	7.1	193
7	Biosynthesis, conjugation, catabolism and homeostasis of indole-3-acetic acid in <i>Arabidopsis thaliana</i> . <i>Plant Molecular Biology</i> , 2002, 50, 309-332.	3.9	191
8	Requirement of B2-Type <i>Cyclin-Dependent Kinases</i> for Meristem Integrity in <i>Arabidopsis thaliana</i> . <i>Plant Cell</i> , 2008, 20, 88-100.	6.6	181
9	New mechanistic links between sugar and hormone signalling networks. <i>Current Opinion in Plant Biology</i> , 2015, 25, 130-137.	7.1	179
10	Dioxygenase-encoding <i>AtDAO1</i> gene controls IAA oxidation and homeostasis in <i>Arabidopsis</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 11016-11021.	7.1	162
11	A mechanistic framework for auxin dependent <i>Arabidopsis</i> root hair elongation to low external phosphate. <i>Nature Communications</i> , 2018, 9, 1409.	12.8	146
12	Title is missing!. <i>Plant Molecular Biology</i> , 2002, 49, 249-272.	3.9	145
13	Plant roots sense soil compaction through restricted ethylene diffusion. <i>Science</i> , 2021, 371, 276-280.	12.6	145
14	Cell-Type-Specific Cytokinin Distribution within the <i>Arabidopsis</i> Primary Root Apex. <i>Plant Cell</i> , 2015, 27, 1955-1967.	6.6	143
15	Vectorial Information for <i>Arabidopsis</i> Planar Polarity Is Mediated by Combined AUX1, EIN2, and GNOM Activity. <i>Current Biology</i> , 2006, 16, 2143-2149.	3.9	141
16	Connective Auxin Transport in the Shoot Facilitates Communication between Shoot Apices. <i>PLoS Biology</i> , 2016, 14, e1002446.	5.6	133
17	Cotyledon-Generated Auxin Is Required for Shade-Induced Hypocotyl Growth in <i>Brassica rapa</i> . <i>Plant Physiology</i> , 2014, 165, 1285-1301.	4.8	128
18	An Intrinsic MicroRNA Timer Regulates Progressive Decline in Shoot Regenerative Capacity in Plants. <i>Plant Cell</i> , 2015, 27, 349-360.	6.6	128

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19	The PLETHORA Gene Regulatory Network Guides Growth and Cell Differentiation in Arabidopsis Roots. <i>Plant Cell</i> , 2016, 28, 2937-2951.	6.6	127
20	The AUXIN BINDING PROTEIN 1 Is Required for Differential Auxin Responses Mediating Root Growth. <i>PLoS ONE</i> , 2009, 4, e6648.	2.5	124
21	Local auxin metabolism regulates environment-induced hypocotyl elongation. <i>Nature Plants</i> , 2016, 2, 16025.	9.3	122
22	Transcriptional stimulation of rate-limiting components of the autophagic pathway improves plant fitness. <i>Journal of Experimental Botany</i> , 2018, 69, 1415-1432.	4.8	120
23	The circadian clock rephases during lateral root organ initiation in <i>Arabidopsis thaliana</i> . <i>Nature Communications</i> , 2015, 6, 7641.	12.8	119
24	Dynamic regulation of auxin oxidase and conjugating enzymes <i>AtDAO1</i> and <i>GH3</i> modulates auxin homeostasis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 11022-11027.	7.1	119
25	Root gravitropism and root hair development constitute coupled developmental responses regulated by auxin homeostasis in the <i>Arabidopsis</i> root apex. <i>New Phytologist</i> , 2013, 197, 1130-1141.	7.3	115
26	The <i>Arabidopsis</i> bZIP11 transcription factor links low-energy signalling to auxin-mediated control of primary root growth. <i>PLoS Genetics</i> , 2017, 13, e1006607.	3.5	115
27	Directional Auxin Transport Mechanisms in Early Diverging Land Plants. <i>Current Biology</i> , 2014, 24, 2786-2791.	3.9	113
28	Auxin and Strigolactone Signaling Are Required for Modulation of <i>Arabidopsis</i> Shoot Branching by Nitrogen Supply. <i>Plant Physiology</i> , 2014, 166, 384-395.	4.8	112
29	Rice auxin influx carrier OsAUX1 facilitates root hair elongation in response to low external phosphate. <i>Nature Communications</i> , 2018, 9, 1408.	12.8	110
30	Auxin Metabolism in Plants. <i>Cold Spring Harbor Perspectives in Biology</i> , 2021, 13, a039867.	5.5	110
31	Brassinosteroid signaling-dependent root responses to prolonged elevated ambient temperature. <i>Nature Communications</i> , 2017, 8, 309.	12.8	102
32	Contrasting growth responses in lamina and petiole during neighbor detection depend on differential auxin responsiveness rather than different auxin levels. <i>New Phytologist</i> , 2015, 208, 198-209.	7.3	100
33	Developmental Regulation of Indole-3-Acetic Acid Turnover in Scots Pine Seedlings. <i>Plant Physiology</i> , 2001, 125, 464-475.	4.8	99
34	The epidermis coordinates auxin-induced stem growth in response to shade. <i>Genes and Development</i> , 2016, 30, 1529-1541.	5.9	99
35	A MYC2/MYC3/MYC4-dependent transcription factor network regulates water spray-responsive gene expression and jasmonate levels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 23345-23356.	7.1	95
36	HISTONE DEACETYLASE 9 stimulates auxin-dependent thermomorphogenesis in <i>Arabidopsis thaliana</i> by mediating H2A.Z depletion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 25343-25354.	7.1	91

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37	Altered expression of maize PLASTOCHRON1 enhances biomass and seed yield by extending cell division duration. <i>Nature Communications</i> , 2017, 8, 14752.	12.8	89
38	Three ancient hormonal cues co-ordinate shoot branching in a moss. <i>ELife</i> , 2015, 4, .	6.0	84
39	Enhanced Secondary- and Hormone Metabolism in Leaves of Arbuscular Mycorrhizal <i>Medicago truncatula</i> . <i>Plant Physiology</i> , 2017, 175, 392-411.	4.8	81
40	Zooming In on Plant Hormone Analysis: Tissue- and Cell-Specific Approaches. <i>Annual Review of Plant Biology</i> , 2017, 68, 323-348.	18.7	74
41	Development of the Poplar <i>Laccaria bicolor</i> Ectomycorrhiza Modifies Root Auxin Metabolism, Signaling, and Response. <i>Plant Physiology</i> , 2015, 169, 890-902.	4.8	70
42	Biosynthesis, conjugation, catabolism and homeostasis of indole-3-acetic acid in <i>Arabidopsis thaliana</i> . <i>Plant Molecular Biology</i> , 2002, 49, 249-72.	3.9	70
43	Inhibited polar auxin transport results in aberrant embryo development in Norway spruce. <i>New Phytologist</i> , 2008, 177, 356-366.	7.3	69
44	A WOX/Auxin Biosynthesis Module Controls Growth to Shape Leaf Form. <i>Current Biology</i> , 2020, 30, 4857-4868.e6.	3.9	69
45	The Effects of High Steady State Auxin Levels on The Root Cell Elongation in <i>Brachypodium</i> . <i>Plant Cell</i> , 2016, 28, 1009-1024.	6.6	65
46	Ultra-rapid auxin metabolite profiling for high-throughput mutant screening in <i>Arabidopsis</i> . <i>Journal of Experimental Botany</i> , 2018, 69, 2569-2579.	4.8	60
47	Surveillance of cell wall diffusion barrier integrity modulates water and solute transport in plants. <i>Scientific Reports</i> , 2019, 9, 4227.	3.3	60
48	Quantification of indole-3-acetic acid from plant associated <i>Bacillus</i> spp. and their phytostimulatory effect on <i>Vigna radiata</i> (L.). <i>World Journal of Microbiology and Biotechnology</i> , 2009, 25, 519-526.	3.6	56
49	Regulating plant physiology with organic electronics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 4597-4602.	7.1	51
50	ADP1 Affects Plant Architecture by Regulating Local Auxin Biosynthesis. <i>PLoS Genetics</i> , 2014, 10, e1003954.	3.5	47
51	Cell-surface receptors enable perception of extracellular cytokinins. <i>Nature Communications</i> , 2020, 11, 4284.	12.8	47
52	PIN-driven auxin transport emerged early in streptophyte evolution. <i>Nature Plants</i> , 2019, 5, 1114-1119.	9.3	44
53	Type B Response Regulators Act As Central Integrators in Transcriptional Control of the Auxin Biosynthesis Enzyme TAA1. <i>Plant Physiology</i> , 2017, 175, 1438-1454.	4.8	43
54	The CEP5 Peptide Promotes Abiotic Stress Tolerance, As Revealed by Quantitative Proteomics, and Attenuates the AUX/IAA Equilibrium in <i>Arabidopsis</i> . <i>Molecular and Cellular Proteomics</i> , 2020, 19, 1248-1262.	3.8	35

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55	Contrasting patterns of cytokinins between years in senescing aspen leaves. <i>Plant, Cell and Environment</i> , 2017, 40, 622-634.	5.7	34
56	Implantable Organic Electronic Ion Pump Enables ABA Hormone Delivery for Control of Stomata in an Intact Tobacco Plant. <i>Small</i> , 2019, 15, e1902189.	10.0	33
57	Conifers exhibit a characteristic inactivation of auxin to maintain tissue homeostasis. <i>New Phytologist</i> , 2020, 226, 1753-1765.	7.3	33
58	Auxin export from proximal fruits drives arrest in temporally competent inflorescences. <i>Nature Plants</i> , 2020, 6, 699-707.	9.3	33
59	Combined transcriptome and translome analyses reveal a role for tryptophanâ€dependent auxin biosynthesis in the control of <i>DOG1</i> â€dependent seed dormancy. <i>New Phytologist</i> , 2018, 217, 1077-1085.	7.3	32
60	Broadening the roles of UDPâ€glycosyltransferases in auxin homeostasis and plant development. <i>New Phytologist</i> , 2021, 232, 642-654.	7.3	31
61	Auxin and cytokinin regulate each otherâ€™s levels via a metabolic feedback loop. <i>Plant Signaling and Behavior</i> , 2011, 6, 901-904.	2.4	30
62	Epigenetic Regulation of Auxin Homeostasis. <i>Biomolecules</i> , 2019, 9, 623.	4.0	29
63	HY5 and phytochrome activity modulate shoot-to-root coordination during thermomorphogenesis in <i>Arabidopsis</i> . <i>Development (Cambridge)</i> , 2020, 147, .	2.5	27
64	Auxin Function in the Brown Alga <i>Dictyota dichotoma</i> . <i>Plant Physiology</i> , 2019, 179, 280-299.	4.8	24
65	Vernalization shapes shoot architecture and ensures the maintenance of dormant buds in the perennial <i>Arabis alpina</i> . <i>New Phytologist</i> , 2020, 227, 99-115.	7.3	24
66	Studies of moss reproductive development indicate that auxin biosynthesis in apical stem cells may constitute an ancestral function for focal growth control. <i>New Phytologist</i> , 2021, 229, 845-860.	7.3	24
67	Cell-type specific metabolic profiling of <i>Arabidopsis thaliana</i> protoplasts as a tool for plant systems biology. <i>Metabolomics</i> , 2015, 11, 1679-1689.	3.0	23
68	Selective auxin agonists induce specific AUX/IAA protein degradation to modulate plant development. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 6463-6472.	7.1	23
69	Inactivation of the entire <i>Arabidopsis</i> group II GH3s confers tolerance to salinity and water deficit. <i>New Phytologist</i> , 2022, 235, 263-275.	7.3	23
70	SHADE AVOIDANCE 4 Is Required for Proper Auxin Distribution in the Hypocotyl. <i>Plant Physiology</i> , 2017, 173, 788-800.	4.8	22
71	Circadian clock components control daily growth activities by modulating cytokinin levels and cell divisionâ€associated gene expression in <i>Populus</i> trees. <i>Plant, Cell and Environment</i> , 2018, 41, 1468-1482.	5.7	22
72	Autoregulation of RCO by Low-Affinity Binding Modulates Cytokinin Action and Shapes Leaf Diversity. <i>Current Biology</i> , 2019, 29, 4183-4192.e6.	3.9	21

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73	Potassium transporter TRH1/KUP4 contributes to distinct auxin-mediated root system architecture responses. <i>Plant Physiology</i> , 2022, 188, 1043-1060.	4.8	21
74	Broad spectrum developmental role of Brachypodium <scp>AUX</scp>1. <i>New Phytologist</i> , 2018, 219, 1216-1223.	7.3	18
75	Best practices in plant cytometry. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2021, 99, 311-317.	1.5	16
76	Auxin boosts energy generation pathways to fuel pollen maturation in barley. <i>Current Biology</i> , 2022, 32, 1798-1811.e8.	3.9	16
77	Tissue-specific hormone profiles from woody poplar roots under bending stress. <i>Physiologia Plantarum</i> , 2019, 165, 101-113.	5.2	14
78	A bacterial assay for rapid screening of IAA catabolic enzymes. <i>Plant Methods</i> , 2019, 15, 126.	4.3	13
79	Fluorescence activated cell sorting "A selective tool for plant cell isolation and analysis. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2022, 101, 725-736.	1.5	13
80	Nitrogen represses haustoria formation through abscisic acid in the parasitic plant <i>Phtheirospermum japonicum</i> . <i>Nature Communications</i> , 2022, 13, .	12.8	13
81	Modelling of Arabidopsis LAX3 expression suggests auxin homeostasis. <i>Journal of Theoretical Biology</i> , 2015, 366, 57-70.	1.7	12
82	A role for the auxin precursor anthranilic acid in root gravitropism via regulation of <scp>PIN</scp> and <scp>FORMED</scp> protein polarity and relocalisation in <i>Arabidopsis</i> . <i>New Phytologist</i> , 2019, 223, 1420-1432.	7.3	12
83	Regulatory Diversification of INDEHISCENT in the Capsella Genus Directs Variation in Fruit Morphology. <i>Current Biology</i> , 2019, 29, 1038-1046.e4.	3.9	12
84	Reaction Wood Anatomical Traits and Hormonal Profiles in Poplar Bent Stem and Root. <i>Frontiers in Plant Science</i> , 2020, 11, 590985.	3.6	11
85	Nyctinastic thallus movement in the liverwort <i>Marchantia polymorpha</i> is regulated by a circadian clock. <i>Scientific Reports</i> , 2020, 10, 8658.	3.3	11
86	Alterations in hormonal signals spatially coordinate distinct responses to DNA double-strand breaks in <i>Arabidopsis</i> roots. <i>Science Advances</i> , 2021, 7, .	10.3	10
87	Control of root meristem establishment in conifers. <i>Physiologia Plantarum</i> , 2019, 165, 81-89.	5.2	9
88	KAI2 regulates seedling development by mediating light-induced remodelling of auxin transport. <i>New Phytologist</i> , 2022, 235, 126-140.	7.3	9
89	Natural Variation in Adventitious Rooting in the Alpine Perennial <i>Arabis alpina</i> . <i>Plants</i> , 2020, 9, 184.	3.5	7
90	Function of the pseudo phosphotransfer proteins has diverged between rice and <i>Arabidopsis</i> . <i>Plant Journal</i> , 2021, 106, 159-173.	5.7	7

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91	The chemical compound "Heatin"™ stimulates hypocotyl elongation and interferes with the Arabidopsis NIT1 subfamily of nitrilases. <i>Plant Journal</i> , 2021, 106, 1523-1540.	5.7	7
92	Quantitative Auxin Metabolite Profiling Using Stable Isotope Dilution UHPLC-MS/MS. <i>Current Protocols in Plant Biology</i> , 2016, 1, 419-430.	2.8	6
93	HEARTBREAK Controls Post-translational Modification of INDEHISCENT to Regulate Fruit Morphology in <i>Capsella</i> . <i>Current Biology</i> , 2020, 30, 3880-3888.e5.	3.9	5
94	Dynamics of Auxin and Cytokinin Metabolism during Early Root and Hypocotyl Growth in <i>Theobroma cacao</i> . <i>Plants</i> , 2021, 10, 967.	3.5	4
95	High-Resolution Cell-Type Specific Analysis of Cytokinins in Sorted Root Cell Populations of <i>Arabidopsis thaliana</i> . <i>Methods in Molecular Biology</i> , 2017, 1497, 231-248.	0.9	4
96	Inheritance pattern of five monoterpenes in Scots pine (<i>Pinus sylvestris</i> L.). <i>Hereditas</i> , 2008, 97, 261-272.	1.4	3
97	iP & OEIP " Cytokinin Micro Application Modulates Root Development with High Spatial Resolution. <i>Advanced Materials Technologies</i> , 2022, 7, .	5.8	3
98	Implantable Bioelectronics: Implantable Organic Electronic Ion Pump Enables ABA Hormone Delivery for Control of Stomata in an Intact Tobacco Plant (Small 43/2019). <i>Small</i> , 2019, 15, 1970233.	10.0	1