Klaus Palme

List of Publications by Year
in descending order

198 papers	22,508 citations	15466 65 h-index	9073 144 g-index
209 all docs	209 docs citations	209 times ranked	16115 citing authors

#	Article	IF	Citations
1	The PIN auxin efflux facilitator network controls growth and patterning in Arabidopsis roots. Nature, 2005, 433, 39-44.	13.7	1,789
2	Lateral relocation of auxin efflux regulator PIN3 mediates tropism in Arabidopsis. Nature, 2002, 415, 806-809.	13.7	1,299
3	U-Net: deep learning for cell counting, detection, and morphometry. Nature Methods, 2019, 16, 67-70.	9.0	1,242
4	Auxin transport inhibitors block PIN1 cycling and vesicle trafficking. Nature, 2001, 413, 425-428.	13.7	1,174
5	Auxin in action: signalling, transport and the control of plant growth and development. Nature Reviews Molecular Cell Biology, 2006, 7, 847-859.	16.1	1,022
6	AtPIN2 defines a locus of Arabidopsis for root gravitropism control. EMBO Journal, 1998, 17, 6903-6911.	3.5	840
7	AtPIN4 Mediates Sink-Driven Auxin Gradients and Root Patterning in Arabidopsis. Cell, 2002, 108, 661-673.	13.5	763
8	Coordinated Polar Localization of Auxin Efflux Carrier PIN1 by GNOM ARF GEF. Science, 1999, 286, 316-318.	6.0	754
9	A PINOID-Dependent Binary Switch in Apical-Basal PIN Polar Targeting Directs Auxin Efflux. Science, 2004, 306, 862-865.	6.0	703
10	Localization of the auxin permease AUX1 suggests two functionally distinct hormone transport pathways operate in the Arabidopsis root apex. Genes and Development, 2001, 15, 2648-2653.	2.7	571
11	Gravity-regulated differential auxin transport from columella to lateral root cap cells. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 2987-2991.	3.3	509
12	The PIN auxin efflux facilitators: evolutionary and functional perspectives. Trends in Plant Science, 2005, 10, 170-177.	4.3	383
13	The Basic Helix-Loop-Helix Transcription Factor MYC2 Directly Represses<i>PLETHORA</i>Expression during Jasmonate-Mediated Modulation of the Root Stem Cell Niche in<i>Arabidopsis</i>Â Â. Plant Cell, 2011, 23, 3335-3352.	3.1	374
14	Sterol-dependent endocytosis mediates post-cytokinetic acquisition of PIN2 auxin efflux carrier polarity. Nature Cell Biology, 2008, 10, 237-244.	4.6	313
15	<i>Arabidopsis ASA1</i>Is Important for Jasmonate-Mediated Regulation of Auxin Biosynthesis and Transport during Lateral Root Formation Â. Plant Cell, 2009, 21, 1495-1511.	3.1	312
16	Comprehensive Transcriptome Analysis of Auxin Responses in Arabidopsis. Molecular Plant, 2008, 1, 321-337.	3.9	308
17	Mechanical induction of lateral root initiation in <i>Arabidopsis thaliana</i>. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18818-18823.	3.3	288
18	Cell Polarity and PIN Protein Positioning in Arabidopsis Require STEROL METHYLTRANSFERASE1 Function. Plant Cell, 2003, 15, 612-625.	3.1	260

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19	F-Actin-Dependent Endocytosis of Cell Wall Pectins in Meristematic Root Cells. Insights from Brefeldin A-Induced Compartments. Plant Physiology, 2002, 130, 422-431.	2.3	257
20	Polar auxin transport â€“ old questions and new concepts?. Plant Molecular Biology, 2002, 49, 273-284.	2.0	253
21	BIG: a calossin-like protein required for polar auxin transport in Arabidopsis. Genes and Development, 2001, 15, 1985-1997.	2.7	250
22	The Ectomycorrhizal Fungus<i>Laccaria bicolor</i>Stimulates Lateral Root Formation in Poplar and Arabidopsis through Auxin Transport and Signaling. Plant Physiology, 2009, 151, 1991-2005.	2.3	244
23	bus, a Bushy Arabidopsis CYP79F1 Knockout Mutant with Abolished Synthesis of Short-Chain Aliphatic Glucosinolates. Plant Cell, 2001, 13, 351-367.	3.1	235
24	Mutation of the Rice <i>Narrow leaf1</i> Gene, Which Encodes a Novel Protein, Affects Vein Patterning and Polar Auxin Transport. Plant Physiology, 2008, 147, 1947-1959.	2.3	232
25	Volatile signalling by sesquiterpenes from ectomycorrhizal fungi reprogrammes root architecture. Nature Communications, 2015, 6, 6279.	5.8	211
26	AtKC1, a silentArabidopsispotassium channel Î±-subunit modulates root hair K+influx. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 4079-4084.	3.3	207
27	Three-dimensional structure of glutathione S-transferase from Arabidopsis thaliana at 2.2 Ã... resolution: Structural characterization of herbicide-conjugating plant glutathione S-transferases and a novel active site architecture. Journal of Molecular Biology, 1996, 255, 289-309.	2.0	200
28	Perception of the auxin signal at the plasma membrane of tobacco mesophyll protoplasts. Plant Journal, 1991, 1, 83-93.	2.8	199
29	PIN-pointing the molecular basis of auxin transport. Current Opinion in Plant Biology, 1999, 2, 375-381.	3.5	193
30	hydra Mutants of Arabidopsis Are Defective in Sterol Profiles and Auxin and Ethylene Signaling. Plant Cell, 2002, 14, 1017-1031.	3.1	187
31	Patch-clamp analysis establishes a role for an auxin binding protein in the auxin stimulation of plasma membrane current in Zea mays protoplasts. Plant Journal, 1993, 4, 41-46.	2.8	186
32	Immunophilin-like TWISTED DWARF1 Modulates Auxin Efflux Activities of Arabidopsis P-glycoproteins*. Journal of Biological Chemistry, 2006, 281, 30603-30612.	1.6	181
33	SHORT-ROOT Regulates Primary, Lateral, and Adventitious Root Development in Arabidopsis Â Â Â. Plant Physiology, 2011, 155, 384-398.	2.3	163
34	AUX1-mediated root hair auxin influx governs SCFTIR1/AFB-type Ca2+ signaling. Nature Communications, 2018, 9, 1174.	5.8	160
35	Heteromeric AtKC1Â·AKT1 Channels in Arabidopsis Roots Facilitate Growth under K+-limiting Conditions. Journal of Biological Chemistry, 2009, 284, 21288-21295.	1.6	152
36	Auxin, Ethylene and Brassinosteroids: Tripartite Control of Growth in the Arabidopsis Hypocotyl. Plant and Cell Physiology, 2005, 46, 827-836.	1.5	146

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37	Vectorial Information for Arabidopsis Planar Polarity Is Mediated by Combined AUX1, EIN2, and GNOM Activity. Current Biology, 2006, 16, 2143-2149.	1.8	141
38	The endoplasmic reticulum localized PIN8 is a pollenâ€specific auxin carrier involved in intracellular auxin homeostasis. Plant Journal, 2012, 71, 860-870.	2.8	140
39	Small GTPases in vesicle trafficking. Current Opinion in Plant Biology, 2004, 7, 694-700.	3.5	132
40	Cell Polarity Signaling in Arabidopsis Involves a BFA-Sensitive Auxin Influx Pathway. Current Biology, 2002, 12, 329-334.	1.8	131
41	Jasmonate modulates endocytosis and plasma membrane accumulation of the Arabidopsis PIN2 protein. New Phytologist, 2011, 191, 360-375.	3.5	131
42	Protocol: an improved and universal procedure for whole-mount immunolocalization in plants. Plant Methods, 2015, 11, 50.	1.9	128
43	Automated whole mount localisation techniques for plant seedlings. Plant Journal, 2003, 34, 115-124.	2.8	126
44	Plastid-Localized Glutathione Reductase2-Regulated Glutathione Redox Status Is Essential for Arabidopsis Root Apical Meristem Maintenance. Plant Cell, 2013, 25, 4451-4468.	3.1	126
45	The AUXIN BINDING PROTEIN 1 Is Required for Differential Auxin Responses Mediating Root Growth. PLoS ONE, 2009, 4, e6648.	1.1	124
46	The Histidine Kinases CYTOKININ-INDEPENDENT1 and ARABIDOPSIS HISTIDINE KINASE2 and 3 Regulate Vascular Tissue Development in<i>Arabidopsis</i>Shoots. Plant Cell, 2009, 21, 2008-2021.	3.1	121
47	Rotation-Invariant HOG Descriptors Using Fourier Analysis in Polar and Spherical Coordinates. International Journal of Computer Vision, 2014, 106, 342-364.	10.9	119
48	The evolution of nuclear auxin signalling. BMC Evolutionary Biology, 2009, 9, 126.	3.2	115
49	Root gravitropism and root hair development constitute coupled developmental responses regulated by auxin homeostasis in the <i>Arabidopsis</i> root apex. New Phytologist, 2013, 197, 1130-1141.	3.5	115
50	Salicylic Acid Affects Root Meristem Patterning via Auxin Distribution in a Concentration-Dependent Manner. Plant Physiology, 2019, 180, 1725-1739.	2.3	114
51	The auxin signal for protoplast swelling is perceived by extracellular ABP1. Plant Journal, 2001, 27, 591-599.	2.8	106
52	Maternal Control of PIN1 Is Required for Female Gametophyte Development in Arabidopsis. PLoS ONE, 2013, 8, e66148.	1.1	106
53	The HALTED ROOT gene encoding the 26S proteasome subunit RPT2a is essential for the maintenance of Arabidopsis meristems. Development (Cambridge), 2004, 131, 2101-2111.	1.2	101
54	An Integrated View of Gene Expression and Solute Profiles of Arabidopsis Tumors: A Genome-Wide Approach. Plant Cell, 2007, 18, 3617-3634.	3.1	101

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55	Polar auxin transport--old questions and new concepts?. Plant Molecular Biology, 2002, 49, 273-84.	2.0	98
56	Auxin activatesKAT1andKAT2, two K+-channel genes expressed in seedlings ofArabidopsis thaliana. Plant Journal, 2004, 37, 815-827.	2.8	97
57	Ubiquitin Lysine 63 Chainâ€“Forming Ligases Regulate Apical Dominance in Arabidopsis. Plant Cell, 2007, 19, 1898-1911.	3.1	97
58	Naphthylphthalamic acid and the mechanism of polar auxin transport. Journal of Experimental Botany, 2018, 69, 303-312.	2.4	97
59	The TORNADO1 and TORNADO2 Genes Function in Several Patterning Processes during Early Leaf Development in Arabidopsis thaliana. Plant Cell, 2006, 18, 852-866.	3.1	96
60	The Arabidopsis Mutant alh1 Illustrates a Cross Talk between Ethylene and Auxin. Plant Physiology, 2003, 131, 1228-1238.	2.3	95
61	Salt-dependent regulation of a CNG channel subfamily in Arabidopsis. BMC Plant Biology, 2009, 9, 140.	1.6	95
62	Polar auxin transport â€” old questions and new concepts?. , 2002, , 273-284.		93
63	Auxin Immunolocalization Implicates Vesicular Neurotransmitter-Like Mode of Polar Auxin Transport in Root Apices. Plant Signaling and Behavior, 2006, 1, 122-133.	1.2	91
64	Localization of AtROP4 and AtROP6 and interaction with the guanine nucleotide dissociation inhibitor AtRhoGDI1 from Arabidopsis. Plant Molecular Biology, 2000, 42, 515-530.	2.0	88
65	Inactivation of Plasma Membraneâ€“Localized CDPK-RELATED KINASE5 Decelerates PIN2 Exocytosis and Root Gravitropic Response in <i>Arabidopsis</i> Â Â. Plant Cell, 2013, 25, 1592-1608.	3.1	87
66	Cytokinin metabolism: implications for regulation of plant growth and development. Plant Molecular Biology, 1994, 26, 1483-1497.	2.0	82
67	The <scp>iRoCS T</scp>oolbox â€“ 3<scp>D</scp> analysis of the plant root apical meristem at cellular resolution. Plant Journal, 2014, 77, 806-814.	2.8	80
68	A quantitative ratiometric sensor for time-resolved analysis of auxin dynamics. Scientific Reports, 2013, 3, 2052.	1.6	68
69	<i>ERECTA</i> Family Genes Regulate Auxin Transport in the Shoot Apical Meristem and Forming Leaf Primordia. Plant Physiology, 2013, 162, 1978-1991.	2.3	65
70	Expression and tissueâ€specific localization of nitrateâ€responsive miRNAs in roots of maize seedlings. Plant, Cell and Environment, 2012, 35, 1137-1155.	2.8	64
71	A protein from maize labeled with azidoâ€IAA has novel Î²â€glucosidase activity. Plant Journal, 1992, 2, 675-684.	2.8	61
72	Flavonolâ€mediated stabilization of PIN efflux complexes regulates polar auxin transport. EMBO Journal, 2021, 40, e104416.	3.5	61

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73	Spatioâ€temporal quantification of differential growth processes in root growth zones based on a novel combination of image sequence processing and refined concepts describing curvature production. New Phytologist, 2008, 177, 811-821.	3.5	59
74	A simple and general plant tissue extraction procedure for two-dimensional gel electrophoresis. Plant Cell Reports, 1987, 6, 77-81.	2.8	57
75	Hydrolases of the ILR1-like family of Arabidopsis thaliana modulate auxin response by regulating auxin homeostasis in the endoplasmic reticulum. Scientific Reports, 2016, 6, 24212.	1.6	57
76	KCO1 is a component of the slow-vacuolar (SV) ion channel. FEBS Letters, 2002, 511, 28-32.	1.3	56
77	A cysteineâ€rich receptorâ€like kinase NCRK and a pathogenâ€induced protein kinase RBK1 are Rop GTPase interactors. Plant Journal, 2008, 53, 909-923.	2.8	56
78	Subclass-specific sequence motifs identified in Rab GTPases. Trends in Biochemical Sciences, 1995, 20, 10-12.	3.7	55
79	Characterization of a new family of tobacco highly repetitive DNA, GRS, specific for theNicotiana tomentosiformis genomic component. Chromosome Research, 1995, 3, 245-254.	1.0	55
80	Auxin and the developing root of Arabidopsis thaliana. Physiologia Plantarum, 2005, 123, 130-138.	2.6	55
81	Hormonal modulation of plant growth: the role of auxin perception. Mechanisms of Development, 1991, 33, 97-106.	1.7	51
82	Coevolving <scp>MAPK</scp> and <scp>PID</scp> phosphosites indicate an ancient environmental control of <scp>PIN</scp> auxin transporters in land plants. FEBS Letters, 2018, 592, 89-102.	1.3	48
83	Molecular analysis of three maize 22 kDa auxin-binding protein genes - transient promoter expression and regulatory regions. Plant Journal, 1993, 4, 423-432.	2.8	47
84	Molecular Analysis of Plant Signaling Elements: Relevance of Eukaryotic Signal Transduction Models. International Review of Cytology, 1992, 132, 223-283.	6.2	45
85	Developmental regulation of the maize Zm-p60.1 gene encoding a Î²-glucosidase located to plastids. Planta, 2000, 210, 407-415.	1.6	45
86	Converging Light, Energy and Hormonal Signaling Control Meristem Activity, Leaf Initiation, and Growth. Plant Physiology, 2018, 176, 1365-1381.	2.3	45
87	Ethylene negatively regulates transcript abundance of ROP-GAP rheostat-encoding genes and affects apoplastic reactive oxygen species homeostasis in epicarps of cold stored apple fruits. Journal of Experimental Botany, 2015, 66, 7255-7270.	2.4	42
88	Characterization of auxin transporter <scp>PIN</scp>6 plasma membrane targeting reveals a function for <scp>PIN</scp>6 in plant bolting. New Phytologist, 2018, 217, 1610-1624.	3.5	39
89	The Systems Biology of Auxin in Developing Embryos. Trends in Plant Science, 2017, 22, 225-235.	4.3	37
90	NO VEIN Mediates Auxin-Dependent Specification and Patterning in the Arabidopsis Embryo, Shoot, and Root. Plant Cell, 2009, 21, 3133-3151.	3.1	36

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91	The DNA-binding activity of Gal4 is inhibited by methylation of the Gal4 binding site in plant chromatin. Plant Journal, 2000, 23, 143-157.	2.8	34
92	Seasonal and cell type specific expression of sulfate transporters in the phloem of Populus reveals tree specific characteristics for SO4 2âˆ’ storage and mobilization. Plant Molecular Biology, 2010, 72, 499-517.	2.0	34
93	Structure, expression, and phylogenetic relationships of a family of ypt genes encoding small G-proteins in the green alga Volvox carteri. Current Genetics, 1993, 24, 229-240.	0.8	33
94	Root Gravitropism Is Regulated by a Crosstalk between <i>para</i>-Aminobenzoic Acid, Ethylene, and Auxin. Plant Physiology, 2018, 178, 1370-1389.	2.3	33
95	3D analysis of mitosis distribution highlights the longitudinal zonation and diarch symmetry in proliferation activity of the <i>Arabidopsis thaliana</i> root meristem. Plant Journal, 2017, 92, 834-845.	2.8	32
96	At-GDI1 from Arabidopsis thaliana encodes a rab-specific GDP dissociation inhibitor that complements the sec19 mutation of Saccharomyces cerevisiae. FEBS Letters, 1997, 403, 303-308.	1.3	30
97	Blue shift of CdSe/ZnS nanocrystal-labels upon DNA-hybridization. Journal of Nanobiotechnology, 2008, 6, 7.	4.2	30
98	The Systems Architecture of Molecular Memory in Poplar after Abiotic Stress. Plant Cell, 2019, 31, 346-367.	3.1	29
99	The yptV1 gene encodes a small G-protein in the green alga Volvox carteri: gene structure and properties of the gene product. Gene, 1992, 118, 153-162.	1.0	27
100	BLOS1, a putative BLOC-1 subunit, interacts with SNX1 and modulates root growth in Arabidopsis. Journal of Cell Science, 2010, 123, 3727-3733.	1.2	27
101	Intracellular auxin transport in pollen. Plant Signaling and Behavior, 2012, 7, 1504-1505.	1.2	27
102	ROSY1, a novel regulator of gravitropic response is a stigmasterol binding protein. Journal of Plant Physiology, 2016, 196-197, 28-40.	1.6	27
103	Functional Analysis of the Arabidopsis thaliana CDPK-Related Kinase Family: AtCRK1 Regulates Responses to Continuous Light. International Journal of Molecular Sciences, 2018, 19, 1282.	1.8	27
104	Interplay of the two ancient metabolites auxin and MEcPP regulates adaptive growth. Nature Communications, 2018, 9, 2262.	5.8	27
105	Retrograde Induction of phyB Orchestrates Ethylene-Auxin Hierarchy to Regulate Growth. Plant Physiology, 2020, 183, 1268-1280.	2.3	27
106	Single mutations strongly alter the K+ -selective pore of the Kin channel KAT1. FEBS Letters, 1998, 430, 370-376.	1.3	26
107	Cell Dynamics in WOX5-Overexpressing Root Tips: The Impact of Local Auxin Biosynthesis. Frontiers in Plant Science, 2020, 11, 560169.	1.7	26
108	Data-Driven Modeling of Intracellular Auxin Fluxes Indicates a Dominant Role of the ER in Controlling Nuclear Auxin Uptake. Cell Reports, 2018, 22, 3044-3057.	2.9	25

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109	A 3D digital atlas of the <i>Nicotiana tabacum</i> root tip and its use to investigate changes in the root apical meristem induced by the <i>Agrobacterium 6b</i> oncogene. Plant Journal, 2017, 92, 31-42.	2.8	24
110	Auxin biosynthesis and cellular efflux act together to regulate leaf vein patterning. Journal of Experimental Botany, 2021, 72, 1151-1165.	2.4	24
111	Two members of the ERabp gene family are expressed differentially in reproductive organs but to similar levels in the coleoptile of maize. Plant Molecular Biology, 1993, 23, 57-66.	2.0	23
112	Purification of tobacco nuclear proteins binding to a CACGTG motif of the chalcone synthase promoter by DNA affinity chromatography. FEBS Journal, 1991, 199, 519-527.	0.2	22
113	From binding proteins to hormone receptors?. Journal of Plant Growth Regulation, 1993, 12, 171-178.	2.8	22
114	An upstream U-snRNA gene-like promoter is required for transcription of theArabidopsis thaliana7SL RNA gene. Nucleic Acids Research, 1995, 23, 1970-1976.	6.5	22
115	Retargeting a maize Î²-glucosidase to the vacuole â€" Evidence from intact plants that zeatin-O-glucoside is stored in the vacuole. Phytochemistry, 2012, 79, 67-77.	1.4	22
116	Natural Auxin Does Not Inhibit Brefeldin A Induced PIN1 and PIN2 Internalization in Root Cells. Frontiers in Plant Science, 2019, 10, 574.	1.7	22
117	The genes of plant signal transduction. Critical Reviews in Plant Sciences, 1996, 15, 425-454.	2.7	21
118	Sporophytic and gametophytic functions of the cell cycle-associated Mob1 gene in Arabidopsis thaliana L.. Gene, 2011, 484, 1-12.	1.0	21
119	The role of cysteine residues in structure and enzyme activity of a maize Î²-glucosidase. FEBS Journal, 1999, 266, 1056-1065.	0.2	20
120	A New Gene for Auxin Synthesis. Cell, 2008, 133, 31-32.	13.5	20
121	Gravitational Biology I. SpringerBriefs in Space Life Sciences, 2018, , .	0.1	20
122	Cloning and Biochemical Characterization of an Anionic Peroxidase from Zea Mays. FEBS Journal, 1997, 247, 826-832.	0.2	19
123	RNAi-mediated downregulation of poplar plasma membrane intrinsic proteins (PIPs) changes plasma membrane proteome composition and affects leaf physiology. Journal of Proteomics, 2015, 128, 321-332.	1.2	19
124	Protoplast Swelling and Hypocotyl Growth Depend on Different Auxin Signaling Pathways. Plant Physiology, 2017, 175, 982-994.	2.3	19
125	Auxin-Induced Plasma Membrane Depolarization Is Regulated by Auxin Transport and Not by AUXIN BINDING PROTEIN1. Frontiers in Plant Science, 2018, 9, 1953.	1.7	19
126	Signal Sequence Trap to Clone cDNAs Encoding Secreted or Membrane-Associated Plant Proteins. Analytical Biochemistry, 1996, 243, 127-132.	1.1	18

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127	The Arabidopsis thaliana Mob1A gene is required for organ growth and correct tissue patterning of the root tip. Annals of Botany, 2013, 112, 1803-1814.	1.4	18
128	Glutathione Enhances Auxin Sensitivity in Arabidopsis Roots. Biomolecules, 2020, 10, 1550.	1.8	18
129	Organogenic nodule development in hop (Humulus lupulus L.): Transcript and metabolic responses. BMC Genomics, 2008, 9, 445.	1.2	17
130	Intracellular FRET analysis of lipid/DNA complexes using flow cytometry and fluorescence imaging techniques. Journal of Controlled Release, 2010, 145, 289-296.	4.8	17
131	Arginine Decarboxylase expression, polyamines biosynthesis and reactive oxygen species during organogenic nodule formation in hop. Plant Signaling and Behavior, 2011, 6, 258-269.	1.2	17
132	3D Analysis of Mitosis Distribution Pattern in the Plant Root Tip with iRoCS Toolbox. Methods in Molecular Biology, 2020, 2094, 119-125.	0.4	16
133	The Ncypt1 gene from Neurospora crassa is located on chromosome 2: molecular cloning and structural analysis. Molecular Genetics and Genomics, 1992, 235, 413-421.	2.4	15
134	2-D Clinostat for Simulated Microgravity Experiments with Arabidopsis Seedlings. Microgravity Science and Technology, 2016, 28, 59-66.	0.7	15
135	An Auxin Binding Protein is Localized in the Symbiosome Membrane of Soybean Nodules. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1993, 48, 35-40.	0.6	14
136	The MKK7-MPK6 MAP Kinase Module Is a Regulator of Meristem Quiescence or Active Growth in Arabidopsis. Frontiers in Plant Science, 2019, 10, 202.	1.7	14
137	Mass spectrometric analysis reveals a cysteine bridge between residues 2 and 61 of the auxin-binding protein 1 from Zea mays L. FEBS Letters, 2001, 509, 446-450.	1.3	13
138	Towards Second Green Revolution: Engineering Nitrogen Use Efficiency. Journal of Genetics and Genomics, 2014, 41, 315-316.	1.7	12
139	Novel small molecule modulators of plant growth and development identified by high-content screening with plant pollen. BMC Plant Biology, 2016, 16, 192.	1.6	12
140	AtNSF regulates leaf serration by modulating intracellular trafficking of PIN1 in Arabidopsis thaliana. Journal of Integrative Plant Biology, 2021, 63, 737-755.	4.1	12
141	Fast Scalar and Vectorial Grayscale Based Invariant Features for 3D Cell Nuclei Localization and Classification. Lecture Notes in Computer Science, 2006, , 182-191.	1.0	12
142	A tobacco homolog of DCN1 is involved in pollen development and embryogenesis. Plant Cell Reports, 2014, 33, 1187-1202.	2.8	11
143	Identification of Guanine-Nucleotide Binding Proteins in Plants: Structural Analysis and Evolutionary Comparison of the Ras-Related Ypt-Gene Family from Zea Mays. , 1989, , 273-284.		10
144	Moving on up: auxin-induced K+ channel expression regulates gravitropism. Trends in Plant Science, 2000, 5, 85-86.	4.3	9

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145	Identification of the arabidopsis RAM/MOR signalling network: adding new regulatory players in plant stem cell maintenance and cell polarization. Annals of Botany, 2015, 116, 69-89.	1.4	9
146	Inhibition of Cell Expansion by Rapid ABP1-Mediated Auxin Effect on Microtubules? A Critical Comment. Plant Physiology, 2016, 170, 23-25.	2.3	9
147	Auxin-binding proteins of <i>Zea mays</i> identified by photoaffinity labelling. Biochemical Society Transactions, 1992, 20, 70-73.	1.6	8
148	Genes involved in the control of growth and differentiation in plants. Gene, 1993, 135, 245-249.	1.0	8
149	Modification of plant <scp>R</scp>ac/<scp>R</scp>op <scp>GTP</scp>ase signalling using bacterial toxin transgenes. Plant Journal, 2013, 73, 314-324.	2.8	8
150	Auxin receptors take shape. Current Biology, 1991, 1, 228-230.	1.8	7
151	The role of <i>AUX1</i> during lateral root development in the domestication of the model C4 grass <i>Setaria italica</i>. Journal of Experimental Botany, 2022, 73, 2021-2034.	2.4	7
152	Charge isomers of Simian Virus 40 T-antigen. FEBS Letters, 1980, 118, 229-232.	1.3	6
153	Modeling of Sparsely Sampled Tubular Surfaces Using Coupled Curves. Lecture Notes in Computer Science, 2012, , 83-92.	1.0	6
154	On plant growth regulators and their metabolites: a changing perspective. Seminars in Cell Biology, 1993, 4, 87-92.	3.5	5
155	Plant Signaling: HY5 Synchronizes Resource Supply. Current Biology, 2016, 26, R328-R329.	1.8	5
156	Butylated Hydroxytoluene (BHT) Inhibits PIN1 Exocytosis From BFA Compartments in Arabidopsis Roots. Frontiers in Plant Science, 2020, 11, 393.	1.7	5
157	Color recycling: metabolization of apocarotenoid degradation products suggests carbon regeneration via primary metabolic pathways. Plant Cell Reports, 2022, 41, 961-977.	2.8	5
158	CDC48B facilitates the intercellular trafficking of SHORTâ€ROOT during radial patterning in roots. Journal of Integrative Plant Biology, 2022, 64, 843-858.	4.1	5
159	A simple pipeline for cell cycle kinetic studies in the root apical meristem. Journal of Experimental Botany, 2022, 73, 4683-4695.	2.4	5
160	Phytohormones and Signal Transduction Pathways in Plants. , 2005, , 137-147.		4
161	Towards plant systems biology â€“ novel mathematical approaches to enable quantitative analysis of growth processes. New Phytologist, 2006, 171, 443-444.	3.5	4
162	Variational attenuation correction in two-view confocal microscopy. BMC Bioinformatics, 2013, 14, 366.	1.2	4

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163	Joint 3D cell segmentation and classification in the Arabidopsis root using energy minimization and shape priors. , 2013, , .		4
164	Striving Towards Abiotic Stresses: Role of the Plant CDPK Superfamily Members. , 2019, , 99-105.		4
165	Discriminative Detection and Alignment in Volumetric Data. Lecture Notes in Computer Science, 2013, , 205-214.	1.0	4
166	Molecular Control of Sporophyte-Gametophyte Ontogeny and Transition in Plants. Frontiers in Plant Science, 2021, 12, 789789.	1.7	4
167	<i>NO VEIN</i>facilitates auxin-mediated development in Arabidopsis. Plant Signaling and Behavior, 2010, 5, 1249-1251.	1.2	3
168	A method for characterizing phenotypic changes in highly variable cell populations and its application to high content screening of <i>Arabidopsis thaliana</i> protoplasts. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2017, 91, 326-335.	1.1	3
169	Molecular Approaches to the Study of the Mechanism of Action of Auxins. , 1995, , 354-371.		3
170	Purification and Characterization of a cAMP-Binding Protein of Volvox carteri f. nagariensis Iyengar. FEBS Journal, 1995, 228, 480-489.	0.2	3
171	Settling for Less: Do Statoliths Modulate Gravity Perception?. Plants, 2020, 9, 121.	1.6	3
172	3D Object Detection Using a Fast Voxel-Wise Local Spherical Fourier Tensor Transformation. Lecture Notes in Computer Science, 2010, , 412-421.	1.0	3
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