

Thomas Schmä¹/₄lling

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/254808/publications.pdf>

Version: 2024-02-01

102
papers

12,910
citations

26630

56
h-index

31849

101
g-index

111
all docs

111
docs citations

111
times ranked

9282
citing authors

#	ARTICLE	IF	CITATIONS
1	The Photoperiod Stress Response in <i>Arabidopsis thaliana</i> Depends on Auxin Acting as an Antagonist to the Protectant Cytokinin. <i>International Journal of Molecular Sciences</i> , 2022, 23, 2936.	4.1	1
2	On the biological activity of cytokinin free bases and their ribosides. <i>Planta</i> , 2022, 255, 27.	3.2	16
3	Photoperiod Stress in <i>Arabidopsis thaliana</i> Induces a Transcriptional Response Resembling That of Pathogen Infection. <i>Frontiers in Plant Science</i> , 2022, 13, .	3.6	5
4	Light acts as a stressor and influences abiotic and biotic stress responses in plants. <i>Plant, Cell and Environment</i> , 2021, 44, 645-664.	5.7	115
5	Characterization of CHARK, an unusual cytokinin receptor of rice. <i>Scientific Reports</i> , 2021, 11, 1722.	3.3	5
6	The Cytokinin Status of the Epidermis Regulates Aspects of Vegetative and Reproductive Development in <i>Arabidopsis thaliana</i> . <i>Frontiers in Plant Science</i> , 2021, 12, 613488.	3.6	22
7	Opening Doors for Cytokinin Trafficking at the ER Membrane. <i>Trends in Plant Science</i> , 2021, 26, 305-308.	8.8	18
8	Root engineering in maize by increasing cytokinin degradation causes enhanced root growth and leaf mineral enrichment. <i>Plant Molecular Biology</i> , 2021, 106, 555-567.	3.9	18
9	Meeting at the DNA: Specifying Cytokinin Responses through Transcription Factor Complex Formation. <i>Plants</i> , 2021, 10, 1458.	3.5	8
10	Cytokinin regulates vegetative phase change in <i>Arabidopsis thaliana</i> through the miR172/TOE1-TOE2 module. <i>Nature Communications</i> , 2021, 12, 5816.	12.8	33
11	PPKL1 moonlights the role of cytokinin in regulating rice grain size. <i>Molecular Plant</i> , 2021, , .	8.3	1
12	The Photoperiod: Handling and Causing Stress in Plants. <i>Frontiers in Plant Science</i> , 2021, 12, 781988.	3.6	18
13	Photoperiod stress induces an oxidative burst-like response and is associated with increased apoplastic peroxidase and decreased catalase activities. <i>Journal of Plant Physiology</i> , 2020, 253, 153252.	3.5	18
14	Root-derived trans-zeatin cytokinin protects <i>Arabidopsis</i> plants against photoperiod stress. <i>Plant, Cell and Environment</i> , 2020, 43, 2637-2649.	5.7	26
15	Cytokinin regulates the activity of the inflorescence meristem and components of seed yield in oilseed rape. <i>Journal of Experimental Botany</i> , 2020, 71, 7146-7159.	4.8	39
16	Characterisation of the ERF102 to ERF105 genes of <i>Arabidopsis thaliana</i> and their role in the response to cold stress. <i>Plant Molecular Biology</i> , 2020, 103, 303-320.	3.9	41
17	Acclimation, priming and memory in the response of <i>Arabidopsis thaliana</i> seedlings to cold stress. <i>Scientific Reports</i> , 2020, 10, 689.	3.3	64
18	Anti-cancer activities of cytokinin ribosides. <i>Phytochemistry Reviews</i> , 2019, 18, 1101-1113.	6.5	12

#	ARTICLE	IF	CITATIONS
19	Root enhancement in cytokinin-deficient oilseed rape causes leaf mineral enrichment, increases the chlorophyll concentration under nutrient limitation and enhances the phytoremediation capacity. <i>BMC Plant Biology</i> , 2019, 19, 83.	3.6	30
20	Stress priming, memory, and signalling in plants. <i>Plant, Cell and Environment</i> , 2019, 42, 753-761.	5.7	187
21	Cytokinin action in response to abiotic and biotic stresses in plants. <i>Plant, Cell and Environment</i> , 2019, 42, 998-1018.	5.7	288
22	Ethylene-independent promotion of photomorphogenesis in the dark by cytokinin requires COP1 and the CDD complex. <i>Journal of Experimental Botany</i> , 2019, 70, 165-178.	4.8	16
23	Plasma membrane proteome analysis identifies a role of barley membrane steroid binding protein in root architecture response to salinity. <i>Plant, Cell and Environment</i> , 2018, 41, 1311-1330.	5.7	36
24	CHASEing Cytokinin Receptors in Plants, Bacteria, Fungi, and Beyond. <i>Trends in Plant Science</i> , 2018, 23, 179-181.	8.8	25
25	Cytokinin signaling: from the ER or from the PM? That is the question!. <i>New Phytologist</i> , 2018, 218, 41-53.	7.3	86
26	Studies of cytokinin receptor-phosphotransmitter interaction provide evidences for the initiation of cytokinin signalling in the endoplasmic reticulum. <i>Functional Plant Biology</i> , 2018, 45, 192.	2.1	40
27	Zn-fortified cereal grains in field-grown barley by enhanced root cytokinin breakdown. <i>Plant Signaling and Behavior</i> , 2018, 13, e1530023.	2.4	22
28	Root Engineering in Barley: Increasing Cytokinin Degradation Produces a Larger Root System, Mineral Enrichment in the Shoot and Improved Drought Tolerance. <i>Plant Physiology</i> , 2018, 177, 1078-1095.	4.8	122
29	Gain-of-Function Mutants of the Cytokinin Receptors AHK2 and AHK3 Regulate Plant Organ Size, Flowering Time and Plant Longevity. <i>Plant Physiology</i> , 2017, 173, 1783-1797.	4.8	94
30	Novel Stress in Plants by Altering the Photoperiod. <i>Trends in Plant Science</i> , 2017, 22, 913-916.	8.8	27
31	Divergent expression of cytokinin biosynthesis, signaling and catabolism genes underlying differences in feeding sites induced by cyst and root-knot nematodes. <i>Plant Journal</i> , 2017, 92, 211-228.	5.7	42
32	Analysis of CFB, a cytokinin-responsive gene of <i>Arabidopsis thaliana</i> encoding a novel F-box protein regulating sterol biosynthesis. <i>Journal of Experimental Botany</i> , 2017, 68, 2769-2785.	4.8	10
33	<i>ERF105</i> is a transcription factor gene of <i>Arabidopsis thaliana</i> required for freezing tolerance and cold acclimation. <i>Plant, Cell and Environment</i> , 2017, 40, 108-120.	5.7	102
34	Priming and memory of stress responses in organisms lacking a nervous system. <i>Biological Reviews</i> , 2016, 91, 1118-1133.	10.4	388
35	Cytokinin Regulates the Etioplast-Chloroplast Transition through the Two-Component Signaling System and Activation of Chloroplast-Related Genes. <i>Plant Physiology</i> , 2016, 172, 464-478.	4.8	85
36	Circadian Stress Regimes Affect the Circadian Clock and Cause Jasmonic Acid-Dependent Cell Death in Cytokinin-Deficient <i>Arabidopsis</i> Plants. <i>Plant Cell</i> , 2016, 28, tpc.00016.2016.	6.6	66

#	ARTICLE	IF	CITATIONS
37	Cytokinin determines thiol-mediated arsenic tolerance and accumulation in <i>Arabidopsis thaliana</i> . <i>Plant Physiology</i> , 2016, 171, pp.00372.2016.	4.8	43
38	Shoot- and root-borne cytokinin influences arbuscular mycorrhizal symbiosis. <i>Mycorrhiza</i> , 2016, 26, 709-720.	2.8	52
39	Plant membrane assays with cytokinin receptors underpin the unique role of free cytokinin bases as biologically active ligands. <i>Journal of Experimental Botany</i> , 2015, 66, 1851-1863.	4.8	138
40	Cytokinin as a positional cue regulating lateral root spacing in <i>Arabidopsis</i> . <i>Journal of Experimental Botany</i> , 2015, 66, 4759-4768.	4.8	87
41	Regulation of chloroplast development and function by cytokinin. <i>Journal of Experimental Botany</i> , 2015, 66, 4999-5013.	4.8	184
42	Summarizing and exploring data of a decade of cytokinin-related transcriptomics. <i>Frontiers in Plant Science</i> , 2015, 6, 29.	3.6	52
43	A parasitic nematode releases cytokinin that controls cell division and orchestrates feeding site formation in host plants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 12669-12674.	7.1	113
44	<i>Arabidopsis</i> ROCK1 transports UDP-GlcNAc/UDP-GalNAc and regulates ER protein quality control and cytokinin activity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 291-296.	7.1	45
45	Overexpression of the cytosolic cytokinin oxidase/dehydrogenase (CKX7) from <i>Arabidopsis</i> causes specific changes in root growth and xylem differentiation. <i>Plant Journal</i> , 2014, 78, 359-371.	5.7	141
46	Cytokinin as a mediator for regulating root system architecture in response to environmental cues. <i>Plant Signaling and Behavior</i> , 2014, 9, e27771.	2.4	45
47	A Novel Protective Function for Cytokinin in the Light Stress Response Is Mediated by the ARABIDOPSIS HISTIDINE KINASE2 and ARABIDOPSIS HISTIDINE KINASE3 Receptors. <i>Plant Physiology</i> , 2014, 164, 1470-1483.	4.8	96
48	Lateral root formation and growth of <i>Arabidopsis</i> is redundantly regulated by cytokinin metabolism and signalling genes. <i>Journal of Experimental Botany</i> , 2013, 64, 5021-5032.	4.8	102
49	In Planta Analysis of a cis-Regulatory Cytokinin Response Motif in <i>Arabidopsis</i> and Identification of a Novel Enhancer Sequence. <i>Plant and Cell Physiology</i> , 2013, 54, 1079-1092.	3.1	42
50	The <i>Arabidopsis</i> TUMOR PRONE5 Gene Encodes an Acetylornithine Aminotransferase Required for Arginine Biosynthesis and Root Meristem Maintenance in Blue Light. <i>Plant Physiology</i> , 2013, 161, 1127-1140.	4.8	48
51	Enhanced drought and heat stress tolerance of tobacco plants with ectopically enhanced cytokinin oxidase/dehydrogenase gene expression. <i>Journal of Experimental Botany</i> , 2013, 64, 2805-2815.	4.8	222
52	Transcript profiling of cytokinin action in <i>Arabidopsis</i> roots and shoots discovers largely similar but also organ-specific responses. <i>BMC Plant Biology</i> , 2012, 12, 112.	3.6	89
53	Programmed cell death induced by high levels of cytokinin in <i>Arabidopsis</i> cultured cells is mediated by the cytokinin receptor CRE1/AHK4. <i>Journal of Experimental Botany</i> , 2012, 63, 2825-2832.	4.8	34
54	Gene Regulation by Cytokinin in <i>Arabidopsis</i> . <i>Frontiers in Plant Science</i> , 2012, 3, 8.	3.6	142

#	ARTICLE	IF	CITATIONS
55	Properties, functions and evolution of cytokinin receptors. <i>European Journal of Cell Biology</i> , 2012, 91, 246-256.	3.6	90
56	Ectopic expression of different cytokinin-regulated transcription factor genes of <i>Arabidopsis thaliana</i> alters plant growth and development. <i>Journal of Plant Physiology</i> , 2011, 168, 1320-1327.	3.5	46
57	Enhanced cytokinin degradation in leaf primordia of transgenic <i>Arabidopsis</i> plants reduces leaf size and shoot organ primordia formation. <i>Journal of Plant Physiology</i> , 2011, 168, 1328-1334.	3.5	51
58	The Cytokinin Receptors of <i>Arabidopsis</i> Are Located Mainly to the Endoplasmic Reticulum. <i>Plant Physiology</i> , 2011, 156, 1808-1818.	4.8	184
59	The specificity of cytokinin signalling in <i>Arabidopsis thaliana</i> is mediated by differing ligand affinities and expression profiles of the receptors. <i>Plant Journal</i> , 2011, 67, 157-168.	5.7	137
60	Analysis of Cytokinin Mutants and Regulation of Cytokinin Metabolic Genes Reveals Important Regulatory Roles of Cytokinins in Drought, Salt and Abscisic Acid Responses, and Abscisic Acid Biosynthesis. <i>Plant Cell</i> , 2011, 23, 2169-2183.	6.6	647
61	<i>E. coli</i> -Based Cell-Free Expression, Purification and Characterization of the Membrane-Bound Ligand-Binding CHASE-TM Domain of the Cytokinin Receptor CRE1/AHK4 of <i>Arabidopsis thaliana</i> . <i>Molecular Biotechnology</i> , 2011, 47, 211-219.	2.4	8
62	Combining Enhanced Root and Shoot Growth Reveals Cross Talk between Pathways That Control Plant Organ Size in <i>Arabidopsis</i> . <i>Plant Physiology</i> , 2011, 155, 1339-1352.	4.8	75
63	Root-Specific Reduction of Cytokinin Causes Enhanced Root Growth, Drought Tolerance, and Leaf Mineral Enrichment in <i>Arabidopsis</i> and Tobacco. <i>Plant Cell</i> , 2011, 22, 3905-3920.	6.6	417
64	Cytokinin Regulates the Activity of Reproductive Meristems, Flower Organ Size, Ovule Formation, and Thus Seed Yield in <i>Arabidopsis thaliana</i> . <i>Plant Cell</i> , 2011, 23, 69-80.	6.6	566
65	<i>Rhodococcus fascians</i> Impacts Plant Development Through the Dynamic Fas-Mediated Production of a Cytokinin Mix. <i>Molecular Plant-Microbe Interactions</i> , 2010, 23, 1164-1174.	2.6	101
66	Identification of <i>Rhodococcus fascians</i> cytokinins and their modus operandi to reshape the plant. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 929-934.	7.1	193
67	Cytokinin action in plant development. <i>Current Opinion in Plant Biology</i> , 2009, 12, 527-538.	7.1	583
68	Developmental consequences of the tumorous shoot development1 mutation, a novel allele of the cellulose-synthesizing KORRIGAN1 gene. <i>Plant Molecular Biology</i> , 2009, 71, 641-655.	3.9	20
69	The purine derivative Plé55 blocks cytokinin action via receptor inhibition. <i>FEBS Journal</i> , 2009, 276, 244-253.	4.7	64
70	Does NO play a role in cytokinin signal transduction?. <i>FEBS Letters</i> , 2008, 582, 874-880.	2.8	26
71	Cytokinin deficiency causes distinct changes of sink and source parameters in tobacco shoots and roots. <i>Journal of Experimental Botany</i> , 2008, 59, 2659-2672.	4.8	150
72	Toward an Interaction Map of the Two-Component Signaling Pathway of <i>Arabidopsis thaliana</i> . <i>Journal of Proteome Research</i> , 2008, 7, 3649-3660.	3.7	89

#	ARTICLE	IF	CITATIONS
73	The Transcriptional Repressor ARR1-SRDX Suppresses Pleiotropic Cytokinin Activities in Arabidopsis. <i>Plant Physiology</i> , 2008, 147, 1380-1395.	4.8	81
74	Classical Anticytokinins Do Not Interact with Cytokinin Receptors but Inhibit Cyclin-dependent Kinases. <i>Journal of Biological Chemistry</i> , 2007, 282, 14356-14363.	3.4	20
75	The TUMOROUS SHOOT DEVELOPMENT2 gene of Arabidopsis encoding a putative methyltransferase is required for cell adhesion and co-ordinated plant development. <i>Plant Journal</i> , 2007, 50, 735-750.	5.7	113
76	Evolutionary proteomics identifies amino acids essential for ligand-binding of the cytokinin receptor CHASE domain. <i>BMC Evolutionary Biology</i> , 2007, 7, 62.	3.2	64
77	Biochemical Characterization of Cytokinin Oxidases/Dehydrogenases from Arabidopsis thaliana Expressed in Nicotiana tabacum L.. <i>Journal of Plant Growth Regulation</i> , 2007, 26, 255-267.	5.1	151
78	Transcriptome Analysis of Arabidopsis Clubroots Indicate a Key Role for Cytokinins in Disease Development. <i>Molecular Plant-Microbe Interactions</i> , 2006, 19, 480-494.	2.6	326
79	Analysis of protein interactions within the cytokinin-signaling pathway of Arabidopsis thaliana. <i>FEBS Journal</i> , 2006, 273, 4631-4644.	4.7	114
80	Biochemical characteristics and ligand-binding properties of Arabidopsis cytokinin receptor AHK3 compared to CRE1/AHK4 as revealed by a direct binding assay. <i>Journal of Experimental Botany</i> , 2006, 57, 4051-4058.	4.8	200
81	A live cell hormone-binding assay on transgenic bacteria expressing a eukaryotic receptor protein. <i>Analytical Biochemistry</i> , 2005, 347, 129-134.	2.4	78
82	Immediate-early and delayed cytokinin response genes of Arabidopsis thaliana identified by genome-wide expression profiling reveal novel cytokinin-sensitive processes and suggest cytokinin action through transcriptional cascades. <i>Plant Journal</i> , 2005, 44, 314-333.	5.7	358
83	Arabidopsis Cytokinin Receptor Mutants Reveal Functions in Shoot Growth, Leaf Senescence, Seed Size, Germination, Root Development, and Cytokinin Metabolism. <i>Plant Cell</i> , 2005, 18, 40-54.	6.6	851
84	Two Cytokinin Receptors of Arabidopsis thaliana, CRE1/AHK4 and AHK3, Differ in their Ligand Specificity in a Bacterial Assay. <i>Plant and Cell Physiology</i> , 2004, 45, 1299-1305.	3.1	262
85	Cytokinin oxidase/dehydrogenase genes in barley and wheat. <i>FEBS Journal</i> , 2004, 271, 3990-4002.	0.2	86
86	Cytokinin. , 2004, , 562-567.		11
87	Structure and function of cytokinin oxidase/dehydrogenase genes of maize, rice, Arabidopsis and other species. <i>Journal of Plant Research</i> , 2003, 116, 241-252.	2.4	328
88	Cytokinin signal perception and transduction. <i>Current Opinion in Plant Biology</i> , 2003, 6, 480-488.	7.1	214
89	Cytokinin-induced upregulation of cytokinin oxidase activity in tobacco includes changes in enzyme glycosylation and secretion. <i>Physiologia Plantarum</i> , 2003, 117, 11-21.	5.2	94
90	Cytokinin-Deficient Transgenic Arabidopsis Plants Show Multiple Developmental Alterations Indicating Opposite Functions of Cytokinins in the Regulation of Shoot and Root Meristem Activity. <i>Plant Cell</i> , 2003, 15, 2532-2550.	6.6	1,272

#	ARTICLE	IF	CITATIONS
91	A rapid cytokinin response assay in Arabidopsis indicates a role for phospholipase D in cytokinin signalling. <i>FEBS Letters</i> , 2002, 515, 39-43.	2.8	96
92	Cytokinin Oxidase/Cytokinin Dehydrogenase Assay: Optimized Procedures and Applications. <i>Analytical Biochemistry</i> , 2002, 306, 1-7.	2.4	91
93	New Insights into the Functions of Cytokinins in Plant Development. <i>Journal of Plant Growth Regulation</i> , 2002, 21, 40-49.	5.1	128
94	TUMOROUS SHOOT DEVELOPMENT (TSD) genes are required for co-ordinated plant shoot development. <i>Plant Journal</i> , 2002, 29, 73-85.	5.7	55
95	The CRK1 receptor-like kinase gene of tobacco is negatively regulated by cytokinin. <i>Plant Molecular Biology</i> , 2002, 50, 155-165.	3.9	18
96	CREam of cytokinin signalling: receptor identified. <i>Trends in Plant Science</i> , 2001, 6, 281-284.	8.8	42
97	Investigation of early cytokinin effects in a rapid <i>Amaranthus</i> seedling test. <i>Plant Growth Regulation</i> , 2000, 32, 337-344.	3.4	28
98	Increased steady state mRNA levels of the STM and KNAT1 homeobox genes in cytokinin overproducing <i>Arabidopsis thaliana</i> indicate a role for cytokinins in the shoot apical meristem. <i>Plant Journal</i> , 1999, 18, 557-563.	5.7	252
99	Expression of the bacterial <i>ipt</i> gene in <i>Physcomitrella</i> rescues mutations in budding and in plastid division. <i>Planta</i> , 1998, 206, 196-203.	3.2	59
100	Cytokinins as regulators of gene expression. <i>Physiologia Plantarum</i> , 1997, 100, 505-519.	5.2	19
101	Cytokinins as regulators of gene expression. <i>Physiologia Plantarum</i> , 1997, 100, 505-519.	5.2	126
102	Promoter tagging with a promoterless <i>ipt</i> gene leads to cytokinin-induced phenotypic variability in transgenic tobacco plants: implications of gene dosage effects. <i>Plant Journal</i> , 1994, 6, 879-891.	5.7	102