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List of Publications by Year in descending order

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102
papers

12,910
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26630

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111
docs citations

111
times ranked

9282
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	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
3	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
4	Cytokinin action in plant development. <i>Current Opinion in Plant Biology</i> , 2009, 12, 527-538.	7.1	583
5	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
6	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
7	Priming and memory of stress responses in organisms lacking a nervous system. <i>Biological Reviews</i> , 2016, 91, 1118-1133.	10.4	388
8	Immediate-early and delayed cytokinin response genes of <i>Arabidopsis thaliana</i> 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
9	Structure and function of cytokinin oxidase/dehydrogenase genes of maize, rice, <i>Arabidopsis</i> and other species. <i>Journal of Plant Research</i> , 2003, 116, 241-252.	2.4	328
10	Transcriptome Analysis of <i>Arabidopsis</i> Clubroots Indicate a Key Role for Cytokinins in Disease Development. <i>Molecular Plant-Microbe Interactions</i> , 2006, 19, 480-494.	2.6	326
11	Cytokinin action in response to abiotic and biotic stresses in plants. <i>Plant, Cell and Environment</i> , 2019, 42, 998-1018.	5.7	288
12	Two Cytokinin Receptors of <i>Arabidopsis thaliana</i> , 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
13	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
14	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
15	Cytokinin signal perception and transduction. <i>Current Opinion in Plant Biology</i> , 2003, 6, 480-488.	7.1	214
16	Biochemical characteristics and ligand-binding properties of <i>Arabidopsis</i> 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
17	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
18	Stress priming, memory, and signalling in plants. <i>Plant, Cell and Environment</i> , 2019, 42, 753-761.	5.7	187

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19	The Cytokinin Receptors of Arabidopsis Are Located Mainly to the Endoplasmic Reticulum. <i>Plant Physiology</i> , 2011, 156, 1808-1818.	4.8	184
20	Regulation of chloroplast development and function by cytokinin. <i>Journal of Experimental Botany</i> , 2015, 66, 4999-5013.	4.8	184
21	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
22	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
23	Gene Regulation by Cytokinin in Arabidopsis. <i>Frontiers in Plant Science</i> , 2012, 3, 8.	3.6	142
24	Overexpression of the cytosolic cytokinin oxidase/dehydrogenase (CKX7) from Arabidopsis causes specific changes in root growth and xylem differentiation. <i>Plant Journal</i> , 2014, 78, 359-371.	5.7	141
25	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
26	The specificity of cytokinin signalling in Arabidopsis thaliana is mediated by differing ligand affinities and expression profiles of the receptors. <i>Plant Journal</i> , 2011, 67, 157-168.	5.7	137
27	New Insights into the Functions of Cytokinins in Plant Development. <i>Journal of Plant Growth Regulation</i> , 2002, 21, 40-49.	5.1	128
28	Cytokinins as regulators of gene expression. <i>Physiologia Plantarum</i> , 1997, 100, 505-519.	5.2	126
29	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
30	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
31	Analysis of protein interactions within the cytokinin-signaling pathway of Arabidopsis thaliana. <i>FEBS Journal</i> , 2006, 273, 4631-4644.	4.7	114
32	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
33	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
34	Promoter tagging with a promoterless ipt 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
35	Lateral root formation and growth of Arabidopsis is redundantly regulated by cytokinin metabolism and signalling genes. <i>Journal of Experimental Botany</i> , 2013, 64, 5021-5032.	4.8	102
36	ERF105 is a transcription factor gene of Arabidopsis thaliana required for freezing tolerance and cold acclimation. <i>Plant, Cell and Environment</i> , 2017, 40, 108-120.	5.7	102

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37	<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
38	A rapid cytokinin response assay in <i>Arabidopsis</i> indicates a role for phospholipase D in cytokinin signalling. <i>FEBS Letters</i> , 2002, 515, 39-43.	2.8	96
39	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
40	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
41	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
42	Cytokinin Oxidase/Cytokinin Dehydrogenase Assay: Optimized Procedures and Applications. <i>Analytical Biochemistry</i> , 2002, 306, 1-7.	2.4	91
43	Properties, functions and evolution of cytokinin receptors. <i>European Journal of Cell Biology</i> , 2012, 91, 246-256.	3.6	90
44	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
45	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
46	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
47	Cytokinin oxidase/dehydrogenase genes in barley and wheat. <i>FEBS Journal</i> , 2004, 271, 3990-4002.	0.2	86
48	Cytokinin signaling: from the ER or from the PM? That is the question!. <i>New Phytologist</i> , 2018, 218, 41-53.	7.3	86
49	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
50	The Transcriptional Repressor ARR1-SRDX Suppresses Pleiotropic Cytokinin Activities in <i>Arabidopsis</i> . <i>Plant Physiology</i> , 2008, 147, 1380-1395.	4.8	81
51	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
52	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
53	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
54	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

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55	The purine derivative Piê55 blocks cytokinin action via receptor inhibition. FEBS Journal, 2009, 276, 244-253.	4.7	64
56	Acclimation, priming and memory in the response of Arabidopsis thaliana seedlings to cold stress. Scientific Reports, 2020, 10, 689.	3.3	64
57	Expression of the bacterial ipt gene in Physcomitrella rescues mutations in budding and in plastid division. Planta, 1998, 206, 196-203.	3.2	59
58	TUMOROUS SHOOT DEVELOPMENT (TSD)genes are required for co-ordinated plant shoot development. Plant Journal, 2002, 29, 73-85.	5.7	55
59	Summarizing and exploring data of a decade of cytokinin-related transcriptomics. Frontiers in Plant Science, 2015, 6, 29.	3.6	52
60	Shoot- and root-borne cytokinin influences arbuscular mycorrhizal symbiosis. Mycorrhiza, 2016, 26, 709-720.	2.8	52
61	Enhanced cytokinin degradation in leaf primordia of transgenic Arabidopsis plants reduces leaf size and shoot organ primordia formation. Journal of Plant Physiology, 2011, 168, 1328-1334.	3.5	51
62	The Arabidopsis<i>TUMOR PRONE5</i> Gene Encodes an Acetylornithine Aminotransferase Required for Arginine Biosynthesis and Root Meristem Maintenance in Blue Light Å Å Å. Plant Physiology, 2013, 161, 1127-1140.	4.8	48
63	Ectopic expression of different cytokinin-regulated transcription factor genes of Arabidopsis thaliana alters plant growth and development. Journal of Plant Physiology, 2011, 168, 1320-1327.	3.5	46
64	Cytokinin as a mediator for regulating root system architecture in response to environmental cues. Plant Signaling and Behavior, 2014, 9, e27771.	2.4	45
65	<i>Arabidopsis</i> ROCK1 transports UDP-GlcNAc/UDP-GalNAc and regulates ER protein quality control and cytokinin activity. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 291-296.	7.1	45
66	Cytokinin determines thiol-mediated arsenic tolerance and accumulation in Arabidopsis thaliana. Plant Physiology, 2016, 171, pp.00372.2016.	4.8	43
67	CREam of cytokinin signalling: receptor identified. Trends in Plant Science, 2001, 6, 281-284.	8.8	42
68	In Planta Analysis of a cis-Regulatory Cytokinin Response Motif in Arabidopsis and Identification of a Novel Enhancer Sequence. Plant and Cell Physiology, 2013, 54, 1079-1092.	3.1	42
69	Divergent expression of cytokinin biosynthesis, signaling and catabolism genes underlying differences in feeding sites induced by cyst and rootâ€knot nematodes. Plant Journal, 2017, 92, 211-228.	5.7	42
70	Characterisation of the ERF102 to ERF105 genes of Arabidopsis thaliana and their role in the response to cold stress. Plant Molecular Biology, 2020, 103, 303-320.	3.9	41
71	Studies of cytokinin receptorâ€phosphotransmitter interaction provide evidences for the initiation of cytokinin signalling in the endoplasmic reticulum. Functional Plant Biology, 2018, 45, 192.	2.1	40
72	Cytokinin regulates the activity of the inflorescence meristem and components of seed yield in oilseed rape. Journal of Experimental Botany, 2020, 71, 7146-7159.	4.8	39

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73	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
74	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
75	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
76	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
77	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
78	Novel Stress in Plants by Altering the Photoperiod. <i>Trends in Plant Science</i> , 2017, 22, 913-916.	8.8	27
79	Does NO play a role in cytokinin signal transduction?. <i>FEBS Letters</i> , 2008, 582, 874-880.	2.8	26
80	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
81	CHASEing Cytokinin Receptors in Plants, Bacteria, Fungi, and Beyond. <i>Trends in Plant Science</i> , 2018, 23, 179-181.	8.8	25
82	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
83	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
84	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
85	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
86	Cytokinins as regulators of gene expression. <i>Physiologia Plantarum</i> , 1997, 100, 505-519.	5.2	19
87	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
88	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
89	Opening Doors for Cytokinin Trafficking at the ER Membrane. <i>Trends in Plant Science</i> , 2021, 26, 305-308.	8.8	18
90	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

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91	The Photoperiod: Handling and Causing Stress in Plants. <i>Frontiers in Plant Science</i> , 2021, 12, 781988.	3.6	18
92	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
93	On the biological activity of cytokinin free bases and their ribosides. <i>Planta</i> , 2022, 255, 27.	3.2	16
94	Anti-cancer activities of cytokinin ribosides. <i>Phytochemistry Reviews</i> , 2019, 18, 1101-1113.	6.5	12
95	Cytokinin. , 2004, , 562-567.		11
96	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
97	<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
98	Meeting at the DNA: Specifying Cytokinin Responses through Transcription Factor Complex Formation. <i>Plants</i> , 2021, 10, 1458.	3.5	8
99	Characterization of CHARK, an unusual cytokinin receptor of rice. <i>Scientific Reports</i> , 2021, 11, 1722.	3.3	5
100	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
101	PPKL1 moonlights the role of cytokinin in regulating rice grain size. <i>Molecular Plant</i> , 2021, , .	8.3	1
102	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