Jitka Frbortov

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

29 papers	1,077 citations	15 h-index	29 g-index
29 ext. papers	1,261 ext. citations	5 avg, IF	3.94 L-index

#	Paper	IF	Citations
29	Evolution of cytokinin biosynthesis and degradation. *Journal of Experimental Botany*, **2011**, 62, 2431-52	7	259
28	Biochemical Characterization of Cytokinin Oxidases/Dehydrogenases from Arabidopsis thaliana Expressed in Nicotiana tabacum L.. *Journal of Plant Growth Regulation*, **2007**, 26, 255-267	4.7	121
27	Acetic acid bacteria: A group of bacteria with versatile biotechnological applications. *Biotechnology Advances*, **2015**, 33, 1260-71	17.8	88
26	Cytokinin oxidase/dehydrogenase genes in barley and wheat: cloning and heterologous expression. *FEBS Journal*, **2004**, 271, 3990-4002		77
25	Catalytic reaction of cytokinin dehydrogenase: preference for quinones as electron acceptors. *Biochemical Journal*, **2004**, 380, 121-30	3.8	67
24	Vacuolar and cytosolic cytokinin dehydrogenases of Arabidopsis thaliana: heterologous expression, purification and properties. *Phytochemistry*, **2010**, 71, 1970-8	4	64
23	Parasitic fungus Claviceps as a source for biotechnological production of ergot alkaloids. *Biotechnology Advances*, **2013**, 31, 79-89	17.8	47
22	Tissue localization of cytokinin dehydrogenase in maize: possible involvement of quinone species generated from plant phenolics by other enzymatic systems in the catalytic reaction. *Plant and Cell Physiology*, **2005**, 46, 716-28	4.9	43
21	Biochemical characterization of the maize cytokinin dehydrogenase family and cytokinin profiling in developing maize plantlets in relation to the expression of cytokinin dehydrogenase genes. *Plant Physiology and Biochemistry*, **2014**, 74, 283-93	5.4	33
20	Degradation of cytokinins by maize cytokinin dehydrogenase is mediated by free radicals generated by enzymatic oxidation of natural benzoxazinones. *Plant Journal*, **2010**, 61, 467-81	6.9	30
19	Intramolecular electron transport in quinoprotein alcohol dehydrogenase of Acetobacter methanolicus: a redox-titration study. *Biochimica Et Biophysica Acta - Bioenergetics*, **1998**, 1363, 24-34	4.6	30
18	Trace enrichment of chlorinated phenols from drinking water on chemically bonded sorbents for high-performance liquid chromatography. *Analyst, The*, **1994**, 119, 1519-23	5	24
17	Kinetic and chemical analyses of the cytokinin dehydrogenase-catalysed reaction: correlations with the crystal structure. *Biochemical Journal*, **2006**, 398, 113-24	3.8	21
16	Cytokinin metabolism in maize: Novel evidence of cytokinin abundance, interconversions and formation of a new trans-zeatin metabolic product with a weak anticytokinin activity. *Plant Science*, **2016**, 247, 127-37	5.3	20
15	Functional expression and purification of cytokinin dehydrogenase from Arabidopsis thaliana (AtCKX2) in Saccharomyces cerevisiae. *Biologia Plantarum*, **2007**, 51, 673-682	2.1	17
14	New insights into auxin metabolism in Bradyrhizobium japonicum. *Research in Microbiology*, **2018**, 169, 313-323	4	15
13	Light influences cytokinin biosynthesis and sensing in Nostoc (cyanobacteria). *Journal of Phycology*, **2017**, 53, 703-714	3	14

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12	Biochemical Characterization of Putative Adenylate Dimethylallyltransferase and Cytokinin Dehydrogenase from Nostoc sp. PCC 7120. *PLoS ONE*, **2015**, 10, e0138468	3.7	14
11	Xanthine dehydrogenase of pea seedlings: a member of the plant molybdenum oxidoreductase family. *Plant Physiology and Biochemistry*, **2002**, 40, 393-400	5.4	14
10	PqqE from Methylobacterium extorquens AM1: a radical S-adenosyl-l-methionine enzyme with an unusual tolerance to oxygen. *Journal of Biochemistry*, **2016**, 159, 87-99	3.1	12
9	Quinoprotein Alcohol Dehydrogenase of Acetic Acid Bacteria: Kinetic Study on the Enzyme Purified fromAcetobacter methanolicus. *Bioscience, Biotechnology and Biochemistry*, **1997**, 61, 459-465	2.1	12
8	Effect of growth substrates on formation of alcohol dehydrogenase in Acetobacter methanolicus and Acetobacter aceti. *Journal of Bioscience and Bioengineering*, **1997**, 83, 21-25		12
7	Characterization of auxiliary iron-sulfur clusters in a radical -adenosylmethionine enzyme PqqE from AM1. *FEBS Open Bio*, **2017**, 7, 1864-1879	2.7	10
6	Metabolism of plant hormones cytokinins and their function in signaling, cell differentiation and plant development. *Studies in Natural Products Chemistry*, **2008**, 203-264	1.5	10
5	Determination of Chlorophenols in Soils by a Method Involving Alkaline Extraction and Solid-phase Preconcentration Prior to High-performance Liquid Chromatography. *Bioscience, Biotechnology and Biochemistry*, **1995**, 59, 1930-1932	2.1	8
4	An improved in vivo deuterium labeling method for measuring the biosynthetic rate of cytokinins. *Molecules*, **2010**, 15, 9214-29	4.8	5
3	Overexpression of Trp-related genes in Claviceps purpurea leading to increased ergot alkaloid production. *New Biotechnology*, **2021**, 61, 69-79	6.4	4
2	Function of plant defense secondary metabolite in cytokinin degradation. *Plant Signaling and Behavior*, **2010**, 5, 523-5	2.5	3
1	Biochemical and Structural Aspects of Cytokinin Biosynthesis and Degradation in Bacteria. *Microorganisms*, **2021**, 9,	4.9	3