Tatiana Kulakovskaya

List of Publications by Year
in descending order

79 papers	1,545 citations	304368 22 h-index	360668 35 g-index
80 all docs	80 docs citations	80 times ranked	1248 citing authors

#	Article	IF	Citations
1	Polyphosphate and Phosphate Pump. Annual Review of Microbiology, 2000, 54, 709-734.	2.9	164
2	New aspects of inorganic polyphosphate metabolism and function. Journal of Bioscience and Bioengineering, 1999, 88, 111-129.	1.1	110
3	Inorganic polyphosphate in industry, agriculture and medicine: Modern state and outlook. Process Biochemistry, 2012, 47, 1-10.	1.8	97
4	Ustilagic acid secretion by strains. FEMS Yeast Research, 2005, 5, 919-923.	1.1	64
5	Inorganic Polyphosphates and Exopolyphosphatases in Cell Compartments of the Yeast Saccharomyces cerevisiae Under Inactivation of PPX1 and PPN1 Genes. Bioscience Reports, 2006, 26, 45-54.	1.1	49
6	Inorganic polyphosphates and heavy metal resistance in microorganisms. World Journal of Microbiology and Biotechnology, 2018, 34, 139.	1.7	49
7	ATP leakage from yeast cells treated by extracellular glycolipids of. FEMS Yeast Research, 2003, 3, 401-404.	1.1	39
8	Production of Antifungal Cellobiose Lipids by Trichosporon porosum. Mycopathologia, 2010, 169, 117-123.	1.3	39
9	Exopolyphosphatases of the yeast. FEMS Yeast Research, 2003, 3, 233-238.	1.1	38
10	Characterization of an antifungal glycolipid secreted by the yeast. FEMS Yeast Research, 2004, 5, 247-252.	1.1	38
11	Extracellular Cellobiose Lipid from Yeast and Their Analogues: Structures and Fungicidal Activities. Journal of Oleo Science, 2009, 58, 133-140.	0.6	38
12	Accumulation of phosphate and polyphosphate by Cryptococcus humicola and Saccharomyces cerevisiae in the absence of nitrogen. FEMS Yeast Research, 2012, 12, 617-624.	1.1	34
13	Inorganic polyphosphate in mitochondria of at phosphate limitation and phosphate excess. FEMS Yeast Research, 2004, 4, 643-648.	1.1	32
14	Polyphosphatase PPN1 of Saccharomyces cerevisiae: Switching of Exopolyphosphatase and Endopolyphosphatase Activities. PLoS ONE, 2015, 10, e0119594.	1.1	31
15	Purification and Properties of Exopolyphosphatase from the Cytosol of Saccharomyces cerevisiae Not Encoded by the PPX1 Gene. Biochemistry (Moscow), 2004, 69, 387-393.	0.7	30
16	Adaptation ofSaccharomyces cerevisiaeto toxic manganese concentration triggers changes in inorganic polyphosphates. FEMS Yeast Research, 2013, 13, 463-470.	1.1	30
17	Formation of insoluble magnesium phosphates during growth of the archaea Halorubrum distributum and Halobacterium salinarium and the bacterium Brevibacterium antiquum. FEMS Microbiology Ecology, 2005, 52, 129-137.	1.3	27
18	Synthesis of magneto-sensitive iron-containing nanoparticles by yeasts. Journal of Industrial Microbiology and Biotechnology, 2014, 41, 657-663.	1.4	27

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19	Effects of inactivation of the gene on exopolyphosphatases, inorganic polyphosphates and function of mitochondria in the yeast. FEMS Yeast Research, 2005, 5, 823-828.	1.1	26
20	Membrane-bound and soluble polyphosphatases of mitochondria of Saccharomyces cerevisiae: identification and comparative characterization. Biochimica Et Biophysica Acta - Biomembranes, 1998, 1372, 153-162.	1.4	24
21	Cytoplasmic inorganic polyphosphate participates in the heavy metal tolerance of Cryptococcus humicola. Folia Microbiologica, 2014, 59, 381-389.	1.1	24
22	Efflux of potassium ions from cells and spheroplasts of Saccharomyces cerevisiae yeast treated with silver and copper ions. Biochemistry (Moscow), 2008, 73, 1224-1227.	0.7	23
23	Polyphosphates and exopolyphosphatase activities in the yeast Saccharomyces cerevisiae under overexpression of homologous and heterologous PPN1 genes. Biochemistry (Moscow), 2013, 78, 946-953.	0.7	23
24	Inactivation of PPX1 and PPN1 genes encoding exopolyphosphatases of Saccharomyces cerevisiae does not prevent utilization of polyphosphates as phosphate reserve. Biochemistry (Moscow), 2008, 73, 985-989.	0.7	22
25	Inorganic polyphosphates in mitochondria. Biochemistry (Moscow), 2010, 75, 825-831.	0.7	22
26	Ppn2 endopolyphosphatase overexpressed in Saccharomyces cerevisiae: Comparison with Ppn1, Ppx1, and Ddp1 polyphosphatases. Biochimie, 2019, 163, 101-107.	1.3	22
27	High molecular mass exopolyphosphatase from the cytosol of the yeast Saccharomyces cerevisiae is encoded by the PPN1 gene. Biochemistry (Moscow), 2006, 71, 975-977.	0.7	21
28	Inorganic polyphosphate and exopolyphosphatase in the nuclei ofSaccharomyces cerevisiae: dependence on the growth phase and inactivation of thePPX1 andPPN1 genes. Yeast, 2006, 23, 735-740.	0.8	18
29	Triterpenoid saponins from the roots ofAcanthophyllum gypsophiloidesRegel. Beilstein Journal of Organic Chemistry, 2012, 8, 763-775.	1.3	18
30	Mannan and phosphomannan from Kuraishia capsulata yeast. Carbohydrate Polymers, 2018, 181, 624-632.	5.1	17
31	The Reduced Level of Inorganic Polyphosphate Mobilizes Antioxidant and Manganese-Resistance Systems in Saccharomyces cerevisiae. Cells, 2019, 8, 461.	1.8	17
32	Fungicidal activity of cellobiose lipids from culture broth of yeast Cryptococcus humicola and Pseudozyma fusiformata. Russian Journal of Bioorganic Chemistry, 2007, 33, 156-160.	0.3	16
33	Phosphate accumulation of Acetobacter xylinum. Archives of Microbiology, 2009, 191, 467-471.	1.0	16
34	Inorganic polyphosphates and exopolyphosphatases in different cell compartments of Saccharomyces cerevisiae. Biochemistry (Moscow), 2006, 71, 1171-1175.	0.7	15
35	Enzymes of Inorganic Polyphosphate Metabolism. Progress in Molecular and Subcellular Biology, 2013, 54, 39-63.	0.9	15
36	Transcriptome profile of yeast reveals the essential role of PMA2 and uncharacterized gene YBR056W-A (MNC1) in adaptation to toxic manganese concentration. Metallomics, 2017, 9, 175-182.	1.0	15

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37	Accumulation of Polyphosphates and Expression of High Molecular Weight Exopolyphosphatase in the Yeast Saccharomyces cerevisiae. Biochemistry (Moscow), 2005, 70, 980-985.	0.7	14
38	Diversity of phosphorus reserves in microorganisms. Biochemistry (Moscow), 2014, 79, 1602-1614.	0.7	14
39	Purification and properties of polyphosphatase fromSaccharomyces cerevisiae cytosol. , 1998, 14, 383-390.		13
40	PPX1 gene overexpression has no influence on polyphosphates in Saccharomyces cerevisiae. Biochemistry (Moscow), 2014, 79, 1211-1215.	0.7	13
41	The cadmium tolerance in Saccharomyces cerevisiae depends on inorganic polyphosphate. Journal of Basic Microbiology, 2017, 57, 982-986.	1.8	13
42	Inorganic polyphosphate in the yeast Saccharomyces cerevisiae with a mutation disturbing the function of vacuolar ATPase. Biochemistry (Moscow), 2010, 75, 1052-1054.	0.7	12
43	The biosorption of cadmium and cobalt and iron ions by yeast Cryptococcus humicola at nitrogen starvation. Folia Microbiologica, 2018, 63, 507-510.	1.1	12
44	Properties of Partially Purified Endopolyphosphatase of the Yeast Saccharomyces cerevisiae. Biochemistry (Moscow), 2010, 75, 1404-1407.	0.7	11
45	Nuclear exopolyphosphatase of is not encoded by the gene encoding the major yeast exopolyphosphatase. FEMS Yeast Research, 2003, 3, 113-117.	1.1	10
46	Two exopolyphosphatases in Saccharomyces cerevisiae cytosol at different culture conditions. Process Biochemistry, 2004, 39, 1625-1630.	1.8	10
47	V-ATPase dysfunction suppresses polyphosphate synthesis in Saccharomyces cerevisiae. Folia Microbiologica, 2013, 58, 437-441.	1.1	9
48	Inorganic Polyphosphate and Cancer. Biochemistry (Moscow), 2018, 83, 961-968.	0.7	9
49	The effect of inactivation of the exo-and endopolyphosphatase genes PPX1 and PPN1 on the level of different polyphosphates in the yeast Saccharomyces cerevisiae. Microbiology, 2006, 75, 25-28.	0.5	7
50	Effects of cellobiose lipid B on Saccharomyces cerevisiae cells: K+ leakage and inhibition of polyphosphate accumulation. Microbiology, 2008, 77, 288-292.	0.5	7
51	Polyphosphates and polyphosphatase activity in the yeast Saccharomyces cerevisiae during overexpression of the DDP1 gene. Biochemistry (Moscow), 2015, 80, 1312-1317.	0.7	7
52	Purification and properties of recombinant exopolyphosphatase PPN1 and effects of its overexpression on polyphosphate in Saccharomyces cerevisiae. Journal of Bioscience and Bioengineering, 2015, 119, 52-56.	1.1	7
53	Inorganic Polyphosphate and Physiological Properties of Saccharomyces cerevisiae Yeast Overexpressing Ppn2. Biochemistry (Moscow), 2020, 85, 516-522.	0.7	7
54	VTC4 Polyphosphate Polymerase Knockout Increases Stress Resistance of Saccharomyces cerevisiae Cells. Biology, 2021, 10, 487.	1.3	7

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55	Partial Purification and Characterization of Nuclear Exopolyphosphatase from Saccharomyces cerevisiae Strain with Inactivated PPX1 Gene Encoding a Major Yeast Exopolyphosphatase. Biochemistry (Moscow), 2004, 69, 270-274.	0.7	6
56	Manganese tolerance in yeasts involves polyphosphate, magnesium, and vacuolar alterations. Folia Microbiologica, 2016, 61, 311-317.	1.1	6
57	The early stage of polyphosphate accumulation in <i>saccharomyces cerevisiae</i>: comparative study by extraction and DAPI staining. Advances in Bioscience and Biotechnology (Print), 2011, 02, 293-297.	0.3	5
58	Decrease of phosphate concentration in the medium by Brevibacterium casei cells. Microbiology, 2007, 76, 663-668.	0.5	4
59	Inorganic polyphosphates and sensitivity of Saccharomyces cerevisiae cells to membrane-damaging agents. Microbiology, 2011, 80, 10-14.	0.5	4
60	Extracellular phosphomannan as a phosphate reserve in the yeast Kuraishia capsulata. Biochemistry (Moscow), 2013, 78, 674-677.	0.7	4
61	Metabolism of Yeast Extracellular Glycolipids. , 2014, , 65-74.		4
62	The role of mineral phosphorus compounds in naphthalene biodegradation by Pseudomonas putida. Applied Biochemistry and Microbiology, 2015, 51, 202-208.	0.3	4
63	The acid phosphatase Pho5 of Saccharomyces cerevisiae is not involved in polyphosphate breakdown. Folia Microbiologica, 2019, 64, 867-873.	1.1	4
64	Polyphosphatase PPX1 of <i>Saccharomyces cerevisiae</i> as a Tool for Polyphosphate Assay. Advances in Enzyme Research, 2015, 03, 93-100.	0.7	4
65	Specific Features of Metabolism and Functions of High-Molecular Inorganic Polyphosphates in Yeasts as Representatives of Lower Eukaryotes. Molecular Biology, 2005, 39, 482-494.	0.4	3
66	Inactivation of the PPN1 gene exerts different effects on the metabolism of inorganic polyphosphates in the cytosol and the vacuoles of the yeast Saccharomyces cerevisiae. Microbiology, 2006, 75, 253-258.	0.5	3
67	Polyphosphates as an energy source for growth of Saccharomyces cerevisiae. Biochemistry (Moscow), 2014, 79, 478-482.	0.7	3
68	Inorganic polyphosphate in methylotrophic yeasts. Applied Microbiology and Biotechnology, 2018, 102, 5235-5244.	1.7	3
69	Changes in cell wall structure and protein set in Candida maltosa grown on hexadecane. Folia Microbiologica, 2021, 66, 247-253.	1.1	3
70	Finding of endopolyphosphatase activity in the yeast Saccharomyces cerevisiae. Biochemistry (Moscow), 2009, 74, 842-845.	0.7	2
71	Effect of Fe on inorganic polyphosphate level in autotrophic and heterotrophic cells of Rhodospirillum rubrum. Archives of Microbiology, 2019, 201, 1307-1312.	1.0	2
72	Enzymes of Polyphosphate Metabolism in Yeast: Properties, Functions, Practical Significance. Biochemistry (Moscow), 2021, 86, S96-S108.	0.7	2

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73	Stress Resistance of Saccharomyces cerevisiae Strains Overexpressing Yeast Polyphosphatases. Stresses, 2022, 2, 17-25.	1.8	2
74	The patterns of utilization and accumulation of polyphosphates in the cytosol of the yeast Saccharomyces cerevisiae under inactivation of exopolyphosphatase genes PPX1 and PPN1. Microbiology, 2009, 78, 304-307.	0.5	1
75	Inorganic polyphosphates of different fractions in the mutant yeast Saccharomyces cerevisiae with impaired mitochondrial ATP synthesis. Microbiology, 2010, 79, 30-33.	0.5	1
76	The Role of Inorganic Polyphosphates in Stress Response and Regulation of Enzyme Activities in Yeast. , 2016, , 3-14.		1
77	Yeast Polyphosphatases PPX1 and PPN1: Properties, Functions, and Localization. , 2016, , 15-33.		1
78	Polyphosphatase PPN1 of <i>Saccharomyces cerevisiae</i> Is a Deoxyadenosine Triphosphate Phosphohydrolase. Advances in Enzyme Research, 2016, 04, 144-151.	0.7	1
79	Phosphate efflux as a test of plasma membrane leakage in Saccharomyces cerevisiae cells. Canadian Journal of Microbiology, 2021, 67, 226-230.	0.8	0