Beata Wielgus-Kutrowska

List of Publications by Year
in descending order

44 papers	624 citations	687335 13 h-index	642715 23 g-index
45 all docs	45 docs citations	45 times ranked	643 citing authors

#	Article	IF	Citations
1	A Multilaboratory Comparison of Calibration Accuracy and the Performance of External References in Analytical Ultracentrifugation. PLoS ONE, 2015, 10, e0126420.	2.5	71
2	Open and closed conformation of the E. coli purine nucleoside phosphorylase active center and implications for the catalytic mechanism. Journal of Molecular Biology, 2002, 315, 351-371.	4.2	70
3	Crystal structure of the purine nucleoside phosphorylase (PNP) from Cellulomonas sp. and its implication for the mechanism of trimeric PNPs. Journal of Molecular Biology, 1999, 294, 1239-1255.	4.2	63
4	Validation of the catalytic mechanism of Escherichia coli purine nucleoside phosphorylase by structural and kinetic studies. Biochimie, 2011, 93, 1610-1622.	2.6	33
5	Nicotinamide Riboside, an Unusual, Non-Typical, Substrate of Purified Purine-Nucleoside Phosphorylases. FEBS Journal, 1997, 243, 408-414.	0.2	32
6	Crystal Structure of Calf Spleen Purine Nucleoside Phosphorylase with Two Full Trimers in the Asymmetric Unit: Important Implications for the Mechanism of Catalysis. Journal of Molecular Biology, 2004, 342, 1015-1032.	4.2	25
7	Probing the mechanism of purine nucleoside phosphorylase by steady-state kinetic studies and ligand binding characterization determined by fluorimetric titrations. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2006, 1764, 887-902.	2.3	25
8	Purine nucleoside phosphorylase from Cellulomonas sp.: physicochemical properties and binding of substrates determined by ligand-dependent enhancement of enzyme intrinsic fluorescence, and by protective effects of ligands on thermal inactivation of the enzyme. BBA - Proteins and Proteomics, 2002, 1597, 320-334.	2.1	20
9	Folding and unfolding of a non-fluorescent mutant of green fluorescent protein. Journal of Physics Condensed Matter, 2007, 19, 285223.	1.8	20
10	How can macromolecular crowding inhibit biological reactions? The enhanced formation of DNA nanoparticles. Scientific Reports, 2016, 6, 22033.	3.3	19
11	The comparison of aggregation and folding of enhanced green fluorescent protein (EGFP) by spectroscopic studies. Spectroscopy, 2010, 24, 343-348.	0.8	18
12	Enzymatic Synthesis of Highly Fluorescent 8-Azapurine Ribosides Using a Purine Nucleoside Phosphorylase Reverse Reaction: Variable Ribosylation Sites. Molecules, 2013, 18, 12587-12598.	3.8	15
13	Homooligomerization is needed for stability: a molecular modelling and solution study of EscherichiaÂcoli purine nucleoside phosphorylase. FEBS Journal, 2014, 281, 1860-1871.	4.7	14
14	Part-of-the-sites binding and reactivity in the homooligomeric enzymes â€“ facts and artifacts. Archives of Biochemistry and Biophysics, 2018, 642, 31-45.	3.0	14
15	Overexpression, purification and characterization of functional calf purine nucleoside phosphorylase (PNP). Protein Expression and Purification, 2008, 61, 122-130.	1.3	12
16	Trimeric purine nucleoside phosphorylase: Exploring postulated one-third-of-the-sites binding in the transition state. Bioorganic and Medicinal Chemistry, 2012, 20, 6758-6769.	3.0	12
17	HelicobacterÂpylori purine nucleoside phosphorylase shows new distribution patterns of open and closed active site conformations and unusual biochemical features. FEBS Journal, 2018, 285, 1305-1325.	4.7	11
18	9â€Deazaguanine derivatives connected by a linker to difluoromethylene phosphonic acid are slowâ€binding picomolar inhibitors of trimeric purine nucleoside phosphorylase. FEBS Journal, 2010, 277, 1747-1760.	4.7	10

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19	Interactions of Trimeric Purine Nucleoside Phosphorylases with Ground State Analoguesâ€"Calorimetric and Fluorimetric Studies. Nucleosides, Nucleotides and Nucleic Acids, 2003, 22, 1695-1698.	1.1	9
20	Two fluorogenic substrates for purine nucleoside phosphorylase, selective for mammalian and bacterial forms of the enzyme. Analytical Biochemistry, 2014, 446, 25-27.	2.4	9
21	cellulomonas sp. Purine Nucleoside Phosphorylase (PNP). Advances in Experimental Medicine and Biology, 1998, , 259-264.	1.6	9
22	1.45Ã... resolution crystal structure of recombinant PNP in complex with a pM multisubstrate analogue inhibitor bearing one feature of the postulated transition state. Biochemical and Biophysical Research Communications, 2010, 391, 703-708.	2.1	8
23	Overexpressed proteins may act as mops removing their ligands from the host cells: A case study of calf PNP. Biochemical and Biophysical Research Communications, 2010, 391, 1203-1209.	2.1	8
24	Nonâ€"fluorescent mutant of green fluorescent protein sheds light on the mechanism of chromophore formation. FEBS Letters, 2018, 592, 1516-1523.	2.8	8
25	Tricyclic nitrogen base 1,N⁶-ethenoadenine and its ribosides as substrates for purine-nucleoside phosphorylases: Spectroscopic and kinetic studies. Nucleosides, Nucleotides and Nucleic Acids, 2018, 37, 89-101.	1.1	8
26	In the quest for new targets for pathogen eradication: the adenylosuccinate synthetase from the bacteriumHelicobacter pylori. Journal of Enzyme Inhibition and Medicinal Chemistry, 2018, 33, 1405-1414.	5.2	8
27	New phosphate binding sites in the crystal structure of Escherichia coli purine nucleoside phosphorylase complexed with phosphate and formycin A. FEBS Letters, 2012, 586, 967-971.	2.8	7
28	Still a Long Way to Fully Understanding the Molecular Mechanism of Escherichia coli Purine Nucleoside Phosphorylase. Croatica Chemica Acta, 2013, 86, 117-127.	0.4	7
29	Purine nucleoside phosphorylase activity decline is linked to the decay of the trimeric form of the enzyme. Archives of Biochemistry and Biophysics, 2014, 549, 40-48.	3.0	7
30	Site-Selective Ribosylation of Fluorescent Nucleobase Analogs Using Purine-Nucleoside Phosphorylase as a Catalyst: Effects of Point Mutations. Molecules, 2016, 21, 44.	3.8	7
31	Î²2-Type Amyloidlike Fibrils of Poly-l-glutamic Acid Convert into Long, Highly Ordered Helices upon Dissolution in Dimethyl Sulfoxide. Journal of Physical Chemistry B, 2018, 122, 11895-11905.	2.6	7
32	Tri-Cyclic Nucleobase Analogs and their Ribosides as Substrates of Purine-Nucleoside Phosphorylases. II Guanine and Isoguanine Derivatives. Molecules, 2019, 24, 1493.	3.8	7
33	1,N6-ethenoadenine and other Fluorescent Nucleobase Analogs as Substrates for Purine-Nucleoside Phosphorylases: Spectroscopic and Kinetic Studies. Current Pharmaceutical Design, 2018, 23, 6948-6966.	1.9	6
34	Thermodynamic studies of interactions of calf spleen PNP with acyclic phosphonate inhibitors. Nucleic Acids Symposium Series, 2008, 52, 663-664.	0.3	5
35	Heterodimerizing helices as tools for nanoscale control of the organization of protein-protein and protein-quantum dots. Biochimie, 2019, 167, 93-105.	2.6	4
36	Chromophore of an Enhanced Green Fluorescent Protein Can Play a Photoprotective Role Due to Photobleaching. International Journal of Molecular Sciences, 2021, 22, 8565.	4.1	4

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37	Cloning, Expression, Purification, and Some Properties of Calf Purine Nucleoside Phosphorylase. Nucleosides, Nucleotides and Nucleic Acids, 2007, 26, 855-859.	1.1	3
38	Tricyclic Nucleobase Analogs and Their Ribosides as Substrates and Inhibitors of Purine-Nucleoside Phosphorylases III. Aminopurine Derivatives. Molecules, 2020, 25, 681.	3.8	3
39	Single tryptophan Y160W mutant of homooligomeric E. coli purine nucleoside phosphorylase implies that dimers forming the hexamer are functionally not equivalent. Scientific Reports, 2021, 11, 11144.	3.3	3
40	Searching for Hydrodynamic Orienting Effects in the Association of Tri-N-acetylglucosamine with Hen Egg-White Lysozyme. Journal of Physical Chemistry B, 2021, 125, 10701-10709.	2.6	2
41	Analytical ultracentrifugation as a tool in the studies of aggregation of the fluorescent marker, Enhanced Green Fluorescent Protein. Acta Biochimica Polonica, 2020, 67, 85-91.	0.5	1
42	KINETIC PROPERTIES OF CELLULOMONAS SP. PURINE NUCLEOSIDE PHOSPHORYLASE WITH TYPICAL AND NON-TYPICAL SUBSTRATES: IMPLICATIONS FOR THE REACTION MECHANISM. Nucleosides, Nucleotides and Nucleic Acids, 2005, 24, 471-476.	1.1	0
43	Kinetics of Binding of Multisubstrate Analogue Inhibitor (2-Amino-9-[2-(Phosphonomethoxy)Ethyl]-6-Sulfanylpurine) with Trimeric Purine Nucleoside Phosphorylase. Nucleosides, Nucleotides and Nucleic Acids, 2007, 26, 969-974.	1.1	0
44	Spectroscopic properties of two single-cysteine mutants of EGFP: C48S-EGFP and C70S-EGFP. Biomedical Spectroscopy and Imaging, 2014, 3, 231-236.	1.2	0