Agnieszka Bzowska

List of Publications by Year
in descending order

86 papers	1,887 citations	361296 20 h-index	360920 35 g-index
89 all docs	89 docs citations	89 times ranked	1437 citing authors

#	Article	IF	Citations
1	Purine nucleoside phosphorylases: properties, functions, and clinical aspects. , 2000, 88, 349-425.		400
2	Properties of two unusual, and fluorescent, substrates of purine-nucleoside phosphorylase: 7-methylguanosine and 7-methylinosine. BBA - Proteins and Proteomics, 1986, 874, 355-363.	2.1	85
3	Crystal structure of calf spleen purine nucleoside phosphorylase in a complex with hypoxanthine at 2.15 Ã… resolution. Journal of Molecular Biology, 1997, 265, 202-216.	2.0	82
4	Crystal structure of the ternary complex of E. coli purine nucleoside phosphorylase with formycin B, a structural analogue of the substrate inosine, and phosphate (sulphate) at 2.1 Ã… resolution. Journal of Molecular Biology, 1998, 280, 153-166.	2.0	81
5	Properties of Purine Nucleoside Phosphorylase (PNP) of Mammalian and Bacterial Origin. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1990, 45, 59-70.	0.6	73
6	A Multilaboratory Comparison of Calibration Accuracy and the Performance of External References in Analytical Ultracentrifugation. PLoS ONE, 2015, 10, e0126420.	1.1	71
7	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.	2.0	70
8	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.	2.0	63
9	FLUORESCENCE OF TYROSINE AND TRYPTOPHAN IN PROTEINS USING ONEâ€•AND TWOâ€PHOTON EXCITATION. Photochemistry and Photobiology, 1995, 61, 319-324.	1.3	60
10	Formycins A and B and some analogues: selective inhibitors of bacterial (Escherichia coli) purine nucleoside phosphorylase. BBA - Proteins and Proteomics, 1992, 1120, 239-247.	2.1	49
11	Calf spleen purine nucleoside phosphorylase: purification, sequence and crystal structure of its complex with anN(7)-acycloguanosine inhibitor. FEBS Letters, 1995, 367, 214-218.	1.3	49
12	Calf spleen purine nucleoside phosphorylase: complex kinetic mechanism, hydrolysis of 7-methylguanosine, and oligomeric state in solution. BBA - Proteins and Proteomics, 2002, 1596, 293-317.	2.1	45
13	Properties of the HtrA Protease From Bacterium Helicobacter pylori Whose Activity Is Indispensable for Growth Under Stress Conditions. Frontiers in Microbiology, 2019, 10, 961.	1.5	36
14	Structural-based design and synthesis of novel 9-deazaguanine derivatives having a phosphate mimic as multi-substrate analogue inhibitors for mammalian PNPs. Bioorganic and Medicinal Chemistry, 2010, 18, 2275-2284.	1.4	33
15	Validation of the catalytic mechanism of Escherichia coli purine nucleoside phosphorylase by structural and kinetic studies. Biochimie, 2011, 93, 1610-1622.	1.3	33
16	Nicotinamide Riboside, an Unusual, Non-Typical, Substrate of Purified Purine-Nucleoside Phosphorylases. FEBS Journal, 1997, 243, 408-414.	0.2	32
17	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.	2.0	25
18	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.	1.1	25

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19	Interactions of Calf Spleen Purine Nucleoside Phosphorylase with 8-Azaguanine, and a Bisubstrate Analogue Inhibitor: Implications for the Reaction Mechanism. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2004, 59, 713-725.	0.6	23
20	Synthesis and biological evaluation of 9-deazaguanine derivatives connected by a linker to difluoromethylene phosphonic acid as multi-substrate analogue inhibitors of PNP. Bioorganic and Medicinal Chemistry Letters, 2007, 17, 4173-4177.	1.0	23
21	Characterization of the molecular chaperone ClpB from the pathogenic spirochaete Leptospira interrogans. PLoS ONE, 2017, 12, e0181118.	1.1	22
22	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
23	Folding and unfolding of a non-fluorescent mutant of green fluorescent protein. Journal of Physics Condensed Matter, 2007, 19, 285223.	0.7	20
24	Calf spleen purine-nucleoside phosphorylase: crystal structure of the binary complex with a potent multisubstrate analogue inhibitor. Acta Crystallographica Section D: Biological Crystallography, 2004, 60, 1417-1424.	2.5	19
25	How can macromolecular crowding inhibit biological reactions? The enhanced formation of DNA nanoparticles. Scientific Reports, 2016, 6, 22033.	1.6	19
26	The comparison of aggregation and folding of enhanced green fluorescent protein (EGFP) by spectroscopic studies. Spectroscopy, 2010, 24, 343-348.	0.8	18
27	Linear Free Energy Relationships for N(7)-Substituted Guanosines as Substrates of Calf Spleen Purine Nucleoside Phosphorylase. Possible Role of N(7)-Protonation as an Intermediary in Phosphorolysis. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1993, 48, 803-811.	0.6	16
28	SPECTROSCOPIC AND KINETIC STUDIES OF INTERACTIONS OF CALF SPLEEN PURINE NUCLEOSIDE PHOSPHORYLASE WITH 8-AZAGUANINE, AND ITS 9-(2-PHOSPHONYLMETHOXYETHYL) DERIVATIVE. Nucleosides, Nucleotides and Nucleic Acids, 2005, 24, 459-464.	0.4	15
29	Interactions of Potent Multisubstrate Analogue Inhibitors with Purine Nucleoside Phosphorylase from Calf Spleenâ€"Kinetic and Spectrofluorimetric Studies. Nucleosides, Nucleotides and Nucleic Acids, 2003, 22, 1567-1570.	0.4	14
30	Homooligomerization is needed for stability: a molecular modelling and solution study of <i>EscherichiaÂcoli</i> purine nucleoside phosphorylase. FEBS Journal, 2014, 281, 1860-1871.	2.2	14
31	Part-of-the-sites binding and reactivity in the homooligomeric enzymes â€" facts and artifacts. Archives of Biochemistry and Biophysics, 2018, 642, 31-45.	1.4	14
32	Kinetics of Phosphorolysis of 3-(beta-d-Ribofuranosyl)Adenine and 3-(beta-d-Ribofuranosyl)Hypoxanthine, Non-Conventional Substrates of Purine-Nucleoside Phosphorylase. FEBS Journal, 1996, 239, 229-234.	0.2	13
33	2-Chloro-2' -deoxyadenosine (Cladribine) and its Analogues are Good Substrates and Potent Selective Inhibitors of Escherichia coli Purine-Nucleoside Phosphorylase. FEBS Journal, 1995, 233, 886-890.	0.2	12
34	Overexpression, purification and characterization of functional calf purine nucleoside phosphorylase (PNP). Protein Expression and Purification, 2008, 61, 122-130.	0.6	12
35	Trimeric purine nucleoside phosphorylase: Exploring postulated one-third-of-the-sites binding in the transition state. Bioorganic and Medicinal Chemistry, 2012, 20, 6758-6769.	1.4	12
36	Biochemical properties of the HtrA homolog from bacterium Stenotrophomonas maltophilia. International Journal of Biological Macromolecules, 2018, 109, 992-1005.	3.6	12

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37	Calf spleen purine nucleoside phosphorylase: structure of its ternary complex with an N(7)-acycloguanosine inhibitor and a phosphate anion. Acta Crystallographica Section D: Biological Crystallography, 2001, 57, 30-36.	2.5	11
38	Molecular architecture ofE. colipurine nucleoside phosphorylase studied by analytical ultracentrifugation and CD spectroscopy. Protein Science, 2006, 15, 1794-1800.	3.1	11
39	Structural characterization of purine nucleoside phosphorylase from human pathogen Helicobacter pylori. International Journal of Biological Macromolecules, 2017, 101, 518-526.	3.6	11
40	<i>HelicobacterÂpylori</i> purine nucleoside phosphorylase shows new distribution patterns of open and closed active site conformations and unusual biochemical features. FEBS Journal, 2018, 285, 1305-1325.	2.2	11
41	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.	2.2	10
42	Interactions of Trimeric Purine Nucleoside Phosphorylases with Ground State Analoguesâ€"Calorimetric and Fluorimetric Studies. Nucleosides, Nucleotides and Nucleic Acids, 2003, 22, 1695-1698.	0.4	9
43	Crystallographic snapshots of ligand binding to hexameric purine nucleoside phosphorylase and kinetic studies give insight into the mechanism of catalysis. Scientific Reports, 2018, 8, 15427.	1.6	9
44	cellulomonas sp. Purine Nucleoside Phosphorylase (PNP). Advances in Experimental Medicine and Biology, 1998, , 259-264.	0.8	9
45	Antiproliferative Activity of Purine Nucleoside Phosphorylase Multisubstrate Analogue Inhibitors Containing Difluoromethylene Phosphonic Acid against Leukaemia and Lymphoma Cells. Chemical Biology and Drug Design, 2010, 75, 392-399.	1.5	8
46	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.	1.0	8
47	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.	1.0	8
48	Nonâ€"fluorescent mutant of green fluorescent protein sheds light on the mechanism of chromophore formation. FEBS Letters, 2018, 592, 1516-1523.	1.3	8
49	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.	0.4	8
50	In the quest for new targets for pathogen eradication: the adenylosuccinate synthetase from the bacterium<i>Helicobacter pylori</i>. Journal of Enzyme Inhibition and Medicinal Chemistry, 2018, 33, 1405-1414.	2.5	8
51	Hierarchical approach for the rational construction of helix-containing nanofibrils using Î±,Î²-peptides. Nanoscale, 2021, 13, 4000-4015.	2.8	8
52	Phosphorylation of Coformycin and 2â€² -Deoxycoformycin, and Substrate and Inhibitor Properties of the Nucleosides and Nucleotides in Several Enzyme Systems. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1985, 40, 710-714.	0.6	7
53	New phosphate binding sites in the crystal structure of <i>Escherichia coli</i> purine nucleoside phosphorylase complexed with phosphate and formycin A. FEBS Letters, 2012, 586, 967-971.	1.3	7
54	Still a Long Way to Fully Understanding the Molecular Mechanism of Escherichia coli Purine Nucleoside Phosphorylase. Croatica Chemica Acta, 2013, 86, 117-127.	0.1	7

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55	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.	1.4	7
56	Site-Selective Ribosylation of Fluorescent Nucleobase Analogs Using Purine-Nucleoside Phosphorylase as a Catalyst: Effects of Point Mutations. Molecules, 2016, 21, 44.	1.7	7
57	New Insights into Active Site Conformation Dynamics of <i>E. coli</i> PNP Revealed by Combined H/D Exchange Approach and Molecular Dynamics Simulations. Journal of the American Society for Mass Spectrometry, 2016, 27, 73-82.	1.2	7
58	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.	1.2	7
59	Tri-Cyclic Nucleobase Analogs and their Ribosides as Substrates of Purine-Nucleoside Phosphorylases. II Guanine and Isoguanine Derivatives. Molecules, 2019, 24, 1493.	1.7	7
60	Oligomeric Structure of Mammalian Purine Nucleoside Phosphorylase in Solution Determined by Analytical Ultracentrifugation. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2005, 60, 927-931.	0.6	6
61	KINETIC MODEL OF OXIDATION CATALYZED BY XANTHINE OXIDASEâ€"THE FINAL ENZYME IN DEGRADATION OF PURINE NUCLEOSIDES AND NUCLEOTIDES. Nucleosides, Nucleotides and Nucleic Acids, 2005, 24, 465-469.	0.4	6
62	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.	0.9	6
63	Properties of 5â€²-AMP Deaminase and its Inhibitors with the Aid of a Continuous Fluorimetric Assay with Formycin-5â€²-phosphate as Substrate. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1989, 44, 581-589.	0.6	5
64	Synthesis of 6-Aryloxy- and 6-Arylalkoxy-2-chloropurines and Their Interactions with Purine Nucleoside Phosphorylase from Escherichia coli. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1999, 54, 1055-1067.	0.6	5
65	Fluorescence studies of calf spleen purine nucleoside phosphorylase (PNP) complexes with guanine and 9-deazaguanine. Nucleosides, Nucleotides and Nucleic Acids, 2007, 26, 841-847.	0.4	5
66	Thermodynamic studies of interactions of calf spleen PNP with acyclic phosphonate inhibitors. Nucleic Acids Symposium Series, 2008, 52, 663-664.	0.3	5
67	9-Deazaguanine derivatives: synthesis and inhibitory properties as multi-substrate analogue inhibitors of mammalian PNPs. Nucleic Acids Symposium Series, 2008, 52, 661-662.	0.3	5
68	Comparison of Acid- and Enzyme-Catalyzed Cleavage of the Glycosidic Bond of N(7)-Substituted Guanosines. Nucleosides & Nucleotides, 1990, 9, 439-440.	0.5	4
69	Electrochemical and enzymatic study of 2-chloro-2â€²-deoxyadenosine (antileukemic agent) and related compounds. Bioelectrochemistry, 1996, 39, 241-247.	1.0	4
70	Heterodimerizing helices as tools for nanoscale control of the organization of protein-protein and protein-quantum dots. Biochimie, 2019, 167, 93-105.	1.3	4
71	Chromophore of an Enhanced Green Fluorescent Protein Can Play a Photoprotective Role Due to Photobleaching. International Journal of Molecular Sciences, 2021, 22, 8565.	1.8	4
72	Cloning, Expression, Purification, and Some Properties of Calf Purine Nucleoside Phosphorylase. Nucleosides, Nucleotides and Nucleic Acids, 2007, 26, 855-859.	0.4	3

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73	Inhibitory Properties of Nucleotides with Difluoromethylenephosphonic Acid as a Phosphate Mimic versus Calf Spleen Purine Nucleoside Phosphorylase and Effect of These Analogues on the Viability of Human Blood Lymphocytes. Nucleosides, Nucleotides and Nucleic Acids, 2007, 26, 989-993.	0.4	3
74	Formycins and their Analogues: Purine Nucleoside Phosphorylase Inhibitors and their Potential Application in Immunosuppression and Cancer. , 0, , 473-510.		3
75	Tricyclic Nucleobase Analogs and Their Ribosides as Substrates and Inhibitors of Purine-Nucleoside Phosphorylases III. Aminopurine Derivatives. Molecules, 2020, 25, 681.	1.7	3
76	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.	1.6	3
77	Crystal Structure of Calf Spleen Purine Nucleoside Phosphorylase in a Complex with Multisubstrate Analogue Inhibitor with 2,6-Diaminopurine Aglycone. Nucleosides, Nucleotides and Nucleic Acids, 2003, 22, 1699-1702.	0.4	2
78	Is purine nucleoside phosphorylase an example of a morpheein?. Journal of Physics Condensed Matter, 2007, 19, 285219.	0.7	2
79	A comprehensive method for determining cellular uptake of purine nucleoside phosphorylase and adenylosuccinate synthetase inhibitors by H. pylori. Applied Microbiology and Biotechnology, 2021, 105, 7949-7967.	1.7	2
80	Interactions of 2,6-substituted purines with purine nucleoside phosphorylase from <i>Helicobacter pylori</i> in solution and in the crystal, and the effects of these compounds on cell cultures of this bacterium. Journal of Enzyme Inhibition and Medicinal Chemistry, 2022, 37, 1083-1097.	2.5	2
81	Interactions of Calf Spleen Purine Nucleoside Phosphorylase with Formycin B and its Aglyconeâ€"Spectroscopic and Kinetic Studies. Nucleosides, Nucleotides and Nucleic Acids, 2007, 26, 849-854.	0.4	1
82	Simple and universal method to determine dissociation constants for enzyme/ligand complexes. Nucleic Acids Symposium Series, 2008, 52, 669-670.	0.3	1
83	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.	0.4	0
84	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.	0.4	0
85	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
86	Molecular Mechanism of Thymidylate Synthase Inhibition by N4-Hydroxy-dCMP in View of Spectrophotometric and Crystallographic Studies. International Journal of Molecular Sciences, 2021, 22, 4758.	1.8	0