

Hemalatha Balaram

List of Publications by Year in descending order

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papers

672
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567281

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51
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889
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#	ARTICLE	IF	CITATIONS
1	Metabolic Fate of Fumarate, a Side Product of the Purine Salvage Pathway in the Intraerythrocytic Stages of <i>Plasmodium falciparum</i> . <i>Journal of Biological Chemistry</i> , 2011, 286, 9236-9245.	3.4	57
2	Synthetic peptides as inactivators of multimeric enzymes: inhibition of <i>Plasmodium falciparum</i> triosephosphate isomerase by interface peptides. <i>FEBS Letters</i> , 2001, 501, 19-23.	2.8	48
3	Biochemical characterization of <i>Plasmodium falciparum</i> Sir2, a NAD ⁺ -dependent deacetylase. <i>Molecular and Biochemical Parasitology</i> , 2008, 158, 139-151.	1.1	42
4	Elucidation of the substrate specificity, kinetic and catalytic mechanism of adenylosuccinate lyase from <i>Plasmodium falciparum</i> . <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2009, 1794, 642-654.	2.3	40
5	Kinetic and biochemical characterization of <i>Plasmodium falciparum</i> GMP synthetase. <i>Biochemical Journal</i> , 2008, 409, 263-273.	3.7	38
6	Purification and Characterization of Recombinant <i>Plasmodium falciparum</i> Adenylosuccinate Synthetase Expressed in <i>Escherichia coli</i> . <i>Protein Expression and Purification</i> , 2002, 25, 65-72.	1.3	32
7	Allosteric regulation and substrate activation in cytosolic nucleotidase <i>ScpII</i> from <i>Legionella pneumophila</i> . <i>FEBS Journal</i> , 2014, 281, 1613-1628.	4.7	29
8	Unusual Substrate Specificity of a Chimeric Hypoxanthine-Guanine Phosphoribosyltransferase Containing Segments from the <i>Plasmodium falciparum</i> and Human Enzymes. <i>Biochemical and Biophysical Research Communications</i> , 2000, 272, 596-602.	2.1	27
9	Unique kinetic mechanism of <i>Plasmodium falciparum</i> adenylosuccinate synthetase. <i>Molecular and Biochemical Parasitology</i> , 2004, 138, 1-8.	1.1	27
10	Reversible binding of zinc in <i>Plasmodium falciparum</i> Sir2: Structure and activity of the apoenzyme. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2010, 1804, 1743-1750.	2.3	25
11	Active site coupling in <i>Plasmodium falciparum</i> GMP synthetase is triggered by domain rotation. <i>Nature Communications</i> , 2015, 6, 8930.	12.8	24
12	Unexpected functional implication of a stable succinimide in the structural stability of <i>Methanocaldococcus jannaschii</i> glutaminase. <i>Nature Communications</i> , 2016, 7, 12798.	12.8	22
13	Evidence for Multiple Active States of <i>Plasmodium falciparum</i> Hypoxanthine-Guanine-Xanthine Phosphoribosyltransferase. <i>Biochemical and Biophysical Research Communications</i> , 2000, 279, 433-437.	2.1	21
14	<i>Plasmodium falciparum</i> hypoxanthine guanine phosphoribosyltransferase. <i>FEBS Journal</i> , 2005, 272, 1900-1911.	4.7	17
15	A Histidine Aspartate Ionic Lock Gates the Iron Passage in Miniferritins from <i>Mycobacterium smegmatis</i> . <i>Journal of Biological Chemistry</i> , 2014, 289, 11042-11058.	3.4	17
16	Ammonia Channeling in <i>Plasmodium falciparum</i> GMP Synthetase: Investigation by NMR Spectroscopy and Biochemical Assays. <i>Biochemistry</i> , 2011, 50, 3346-3356.	2.5	16
17	Biochemical characterization and essentiality of fumarate hydratase. <i>Journal of Biological Chemistry</i> , 2018, 293, 5878-5894.	3.4	16
18	Kinetic mechanism of <i>Plasmodium falciparum</i> hypoxanthine-guanine-xanthine phosphoribosyltransferase. <i>Molecular and Biochemical Parasitology</i> , 2015, 204, 111-120.	1.1	14

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19	A non-active site mutation in human hypoxanthine guanine phosphoribosyltransferase expands substrate specificity. <i>Archives of Biochemistry and Biophysics</i> , 2004, 427, 116-122.	3.0	13
20	A point mutation at the subunit interface of hypoxanthine-guanine-xanthine phosphoribosyltransferase impairs activity: role of oligomerization in catalysis. <i>FEBS Letters</i> , 2002, 521, 72-76.	2.8	12
21	Application of HPLC to study the kinetics of a branched bi-enzyme system consisting of hypoxanthine-guanine phosphoribosyltransferase and xanthine oxidase—“an important biochemical system to evaluate the efficiency of the anticancer drug 6-mercaptopurine in ALL cell line. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2007, 850, 7-14.	2.3	10
22	Hypoxanthine Guanine Phosphoribosyltransferase Distorts the Purine Ring of Nucleotide Substrates and Perturbs the K_a of Bound Xanthosine Monophosphate. <i>Biochemistry</i> , 2011, 50, 4184-4193.	2.5	10
23	Slow ligand-induced conformational switch increases the catalytic rate in <i>Plasmodium falciparum</i> hypoxanthine guanine xanthine phosphoribosyltransferase. <i>Molecular BioSystems</i> , 2015, 11, 1410-1424.	2.9	10
24	Connecting Active-Site Loop Conformations and Catalysis in Triosephosphate Isomerase: Insights from a Rare Variation at Residue 96 in the Plasmodial Enzyme. <i>ChemBioChem</i> , 2016, 17, 620-629.	2.6	9
25	Toward Developing Intuitive Rules for Protein Variant Effect Prediction Using Deep Mutational Scanning Data. <i>ACS Omega</i> , 2020, 5, 29667-29677.	3.5	9
26	ISN1 nucleotidases and HAD superfamily protein fold: in silico sequence and structure analysis. <i>In Silico Biology</i> , 2007, 7, 187-93.	0.9	9
27	Mechanism of growth inhibition of intraerythrocytic stages of <i>Plasmodium falciparum</i> by 5-aminoimidazole-4-carboxamide ribonucleoside (AICAR). <i>Molecular and Biochemical Parasitology</i> , 2011, 177, 1-11.	1.1	8
28	Solution Nuclear Magnetic Resonance Structure of the GATase Subunit and Structural Basis of the Interaction between GATase and ATPase Subunits in a two-subunit-type GMPS from <i>Methanocaldococcus jannaschii</i> . <i>Biochemistry</i> , 2013, 52, 4308-4323.	2.5	8
29	Differential Distortion of Purine Substrates by Human and <i>Plasmodium falciparum</i> Hypoxanthine-Guanine Phosphoribosyltransferase to Catalyze the Formation of Mononucleotides. <i>ChemPhysChem</i> , 2015, 16, 2172-2181.	2.1	8
30	Prediction of substrate specificity and preliminary kinetic characterization of the hypothetical protein PVX_123945 from <i>Plasmodium vivax</i> . <i>Experimental Parasitology</i> , 2015, 151-152, 56-63.	1.2	8
31	Helices on Interdomain Interface Couple Catalysis in the ATPase Domain with Allostery in <i>Plasmodium falciparum</i> GMP Synthetase. <i>ChemBioChem</i> , 2020, 21, 2805-2817.	2.6	7
32	Crystal structure of a chimera of human and <i>Plasmodium falciparum</i> hypoxanthine guanine phosphoribosyltransferases provides insights into oligomerization. <i>Proteins: Structure, Function and Bioinformatics</i> , 2008, 73, 1010-1020.	2.6	5
33	Structural basis for the hyperthermostability of an archaeal enzyme induced by succinimide formation. <i>Biophysical Journal</i> , 2021, 120, 3732-3746.	0.5	5
34	Studies on active site mutants of <i>P. falciparum</i> adenylosuccinate synthetase: Insights into enzyme catalysis and activation. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2010, 1804, 1996-2002.	2.3	4
35	Probing the role of highly conserved residues in triosephosphate isomerase—“Analysis of site specific mutants at positions 64 and 75 in the Plasmodial enzyme. <i>FEBS Journal</i> , 2015, 282, 3863-3882.	4.7	4
36	Product Release Pathways in Human and <i>Plasmodium falciparum</i> Phosphoribosyltransferase. <i>Journal of Chemical Information and Modeling</i> , 2016, 56, 1528-1538.	5.4	4

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37	Structure and catalytic regulation of Plasmodium falciparum IMP specific nucleotidase. Nature Communications, 2020, 11, 3228.	12.8	4
38	Structural and dynamical correlations in PfHGXPRT oligomers: A molecular dynamics simulation study. Journal of Biomolecular Structure and Dynamics, 2016, 34, 1590-1605.	3.5	3
39	Phosphoglycolate phosphatase is a metabolic proofreading enzyme essential for cellular function in Plasmodium berghei. Journal of Biological Chemistry, 2019, 294, 4997-5007.	3.4	3
40	Mutational analysis of cysteine 328 and cysteine 368 at the interface of Plasmodium falciparum adenylosuccinate synthetase. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2012, 1824, 589-597.	2.3	2
41	Role of W181 in modulating kinetic properties of <i>Plasmodium falciparum</i> hypoxanthine guanine xanthine phosphoribosyltransferase. Proteins: Structure, Function and Bioinformatics, 2016, 84, 1658-1669.	2.6	2
42	Tertiary and Quaternary Structure Organization in GMP Synthetases: Implications for Catalysis. Biomolecules, 2022, 12, 871.	4.0	2
43	Biochemical and physiological investigations on adenosine 5 ^Ê 1 monophosphate deaminase from <i>Plasmodium spp</i> .. Molecular Microbiology, 2019, 112, 699-717.	2.5	1
44	Exquisite Modulation of the Active Site of Methanocaldococcus jannaschii Adenylosuccinate Synthetase in Forward Reaction Complexes. Biochemistry, 2016, 55, 2491-2499.	2.5	0
45	How a purine salvage enzyme singles out the right base. Journal of Biological Chemistry, 2019, 294, 11992-11993.	3.4	0
46	Deciphering Differential Distortion of Purine Substrates by Human and Plasmodium falciparum HGPRT. FASEB Journal, 2015, 29, 721.19.	0.5	0