

# Penchit Chitnumsub

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/440444/publications.pdf>

Version: 2024-02-01

39  
papers

1,692  
citations

361413  
20  
h-index

315739  
38  
g-index

39  
all docs

39  
docs citations

39  
times ranked

1837  
citing authors

#	ARTICLE	IF	CITATIONS
1	Insights into antifolate resistance from malarial DHFR-TS structures. <i>Nature Structural and Molecular Biology</i> , 2003, 10, 357-365.	8.2	343
2	Malarial dihydrofolate reductase as a paradigm for drug development against a resistance-compromised target. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 16823-16828.	7.1	237
3	Three-dimensional structure of <i>M. tuberculosis</i> dihydrofolate reductase reveals opportunities for the design of novel tuberculosis drugs. <i>Journal of Molecular Biology</i> , 2000, 295, 307-323.	4.2	187
4	Crystal structure of dihydrofolate reductase from <i>Plasmodium vivax</i> : Pyrimethamine displacement linked with mutation-induced resistance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 13046-13051.	7.1	86
5	The nucleation of monomeric parallel $\beta$ -sheet-like structures and their self-assembly in aqueous solution. <i>Bioorganic and Medicinal Chemistry</i> , 1999, 7, 39-59.	3.0	77
6	Pyrimethamine analogs as strong inhibitors of double and quadruple mutants of dihydrofolate reductase in human malaria parasites. <i>Organic and Biomolecular Chemistry</i> , 2003, 1, 960-964.	2.8	54
7	Exploiting Structural Analysis, <i>in Silico</i> Screening, and Serendipity To Identify Novel Inhibitors of Drug-Resistant <i>Falciparum Malaria</i> . <i>ACS Chemical Biology</i> , 2009, 4, 29-40.	3.4	54
8	Characterization, crystallization and preliminary X-ray analysis of bifunctional dihydrofolate reductase-thymidylate synthase from <i>Plasmodium falciparum</i> . <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2004, 60, 780-783.	2.5	47
9	Inhibitors of Plasmodial Serine Hydroxymethyltransferase (SHMT): Cocrystal Structures of Pyrazolopyrans with Potent Blood- and Liver-Stage Activities. <i>Journal of Medicinal Chemistry</i> , 2015, 58, 3117-3130.	6.4	46
10	Mechanism-guided tunnel engineering to increase the efficiency of a flavin-dependent halogenase. <i>Nature Catalysis</i> , 2022, 5, 534-544.	34.4	46
11	Folate metabolism as a source of molecular targets for antimalarials. <i>Future Microbiology</i> , 2006, 1, 113-125.	2.0	44
12	Trypanosomal Dihydrofolate Reductase Reveals Natural Antifolate Resistance. <i>ACS Chemical Biology</i> , 2011, 6, 905-911.	3.4	42
13	Antimalarial Inhibitors Targeting Serine Hydroxymethyltransferase (SHMT) with <i>in Vivo</i> Efficacy and Analysis of their Binding Mode Based on X-ray Cocrystal Structures. <i>Journal of Medicinal Chemistry</i> , 2017, 60, 4840-4860.	6.4	40
14	Combined Spatial Limitation around Residues 16 and 108 of <i>Plasmodium falciparum</i> Dihydrofolate Reductase Explains Resistance to Cycloguanil. <i>Antimicrobial Agents and Chemotherapy</i> , 2012, 56, 3928-3935.	3.2	27
15	Structure-based protein engineering for thermostable and alkaliphilic enhancement of endo- $\beta$ -1,4-xylanase for applications in pulp bleaching. <i>Journal of Biotechnology</i> , 2017, 259, 95-102.	3.8	27
16	Identification of a Hotspot Residue for Improving the Thermostability of a Flavin-Dependent Monooxygenase. <i>ChemBioChem</i> , 2019, 20, 3020-3031.	2.6	27
17	Dissecting the low catalytic capability of flavin-dependent halogenases. <i>Journal of Biological Chemistry</i> , 2021, 296, 100068.	3.4	26
18	Preclinical Evaluation of the Antifolate QN254, 5-Chloro- <i>N</i> -(2,5-Dimethoxy-Benzyl)-Quinazoline-2,4,6-Triamine, as an Antimalarial Drug Candidate. <i>Antimicrobial Agents and Chemotherapy</i> , 2010, 54, 2603-2610.	3.2	25

#	ARTICLE	IF	CITATIONS
19	Role of Plasmodium vivax Dihydropteroate Synthase Polymorphisms in Sulfa Drug Resistance. Antimicrobial Agents and Chemotherapy, 2016, 60, 4453-4463.	3.2	24
20	The structure of Plasmodium falciparum hydroxymethyl-dihydropterin pyrophosphokinase-dihydropteroate synthase reveals the basis of sulfa resistance. FEBS Journal, 2020, 287, 3273-3297.	4.7	24
21	Structures of Plasmodium vivax serine hydroxymethyltransferase: implications for ligand-binding specificity and functional control. Acta Crystallographica Section D: Biological Crystallography, 2014, 70, 3177-3186.	2.5	23
22	The structure of Plasmodium falciparum serine hydroxymethyltransferase reveals a novel redox switch that regulates its activities. Acta Crystallographica Section D: Biological Crystallography, 2014, 70, 1517-1527.	2.5	22
23	Potent Inhibitors of Plasmodial Serine Hydroxymethyltransferase (SHMT) Featuring a Spirocyclic Scaffold. ChemMedChem, 2018, 13, 931-943.	3.2	21
24	Conformational Aspects in the Design of Inhibitors for Serine Hydroxymethyltransferase (SHMT): Biphenyl, Aryl Sulfonamide, and Aryl Sulfone Motifs. Chemistry - A European Journal, 2017, 23, 14345-14357.	3.3	20
25	Hybrid Inhibitors of Malarial Dihydrofolate Reductase with Dual Binding Modes That Can Forestall Resistance. ACS Medicinal Chemistry Letters, 2018, 9, 1235-1240.	2.8	19
26	Human and Plasmodium serine hydroxymethyltransferases differ in rate-limiting steps and pH-dependent substrate inhibition behavior. Archives of Biochemistry and Biophysics, 2017, 630, 91-100.	3.0	13
27	Enhancement of catalytic performance of a metagenome-derived thermophilic oligosaccharide-specific xylanase by binding module removal and random mutagenesis. Journal of Bioscience and Bioengineering, 2021, 131, 13-19.	2.2	13
28	A flap motif in human serine hydroxymethyltransferase is important for structural stabilization, ligand binding, and control of product release. Journal of Biological Chemistry, 2019, 294, 10490-10502.	3.4	11
29	Kinetic Mechanism and the Rate-limiting Step of Plasmodium vivax Serine Hydroxymethyltransferase. Journal of Biological Chemistry, 2015, 290, 8656-8665.	3.4	10
30	Subunit complementation of thymidylate synthase in Plasmodium falciparum bifunctional dihydrofolate reductase-thymidylate synthase. Molecular and Biochemical Parasitology, 2005, 139, 83-90.	1.1	9
31	The role of tryptophan-48 in catalysis and binding of inhibitors of Plasmodium falciparum dihydrofolate reductase. International Journal for Parasitology, 2007, 37, 787-793.	3.1	9
32	Improved Synthesis of the Boc and Fmoc Derivatives of 4-(2-Aminoethyl)-6-dibenzofuranpropionic Acid: An Unnatural Amino Acid That Nucleates $\beta$ -Sheet Folding. Journal of Organic Chemistry, 1997, 62, 2259-2262.	3.2	8
33	Crystallization and preliminary crystallographic studies of dihydrofolate reductase-thymidylate synthase from Trypanosoma cruzi, the Chagas disease pathogen. Acta Crystallographica Section F: Structural Biology Communications, 2009, 65, 1175-1178.	0.7	8
34	Structural insights into a flavin-dependent dehalogenase HadA explain catalysis and substrate inhibition via quadruple $\pi$ -stacking. Journal of Biological Chemistry, 2021, 297, 100952.	3.4	6
35	Catalytic and structural insights into a stereospecific and thermostable Class II aldolase HpaI from Acinetobacter baumannii. Journal of Biological Chemistry, 2021, 297, 101280.	3.4	6
36	Formation of catalytically active cross-species heterodimers of thymidylate synthase from Plasmodium falciparum and Plasmodium vivax. Molecular Biology Reports, 2011, 38, 1029-1037.	2.3	5

#	ARTICLE	IF	CITATIONS
37	Crystal structure of Plasmodium falciparum adenosine deaminase reveals a novel binding pocket for inosine. Archives of Biochemistry and Biophysics, 2019, 667, 6-13.	3.0	4
38	Structural dynamics and in silico design of pyrazolopyran-based inhibitors against Plasmodium serine hydroxymethyltransferases. Journal of Molecular Liquids, 2022, 362, 119737.	4.9	2
39	Real-time detection of changes in yeast plasma membrane potential using genetically encoded voltage indicator proteins. FEMS Yeast Research, 2020, 20, .	2.3	0