Andrew S Murkin

List of Publications by Year
in descending order

33	1,018	361413	414414
papers	citations	20 h-index	32 g-index

33	33	33	1374
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Covalent Adduct Formation in Methylthio-<scp>d</scp>-ribose-1-phosphate Isomerase: Reaction Intermediate or Artifact?. Biochemistry, 2022, 61, 1124-1135.	2.5	1
2	Î±-Ketol and Î±-iminol rearrangements in synthetic organic and biosynthetic reactions. Beilstein Journal of Organic Chemistry, 2021, 17, 2570-2584.	2.2	2
3	Inverse Solvent Isotope Effects in Enzyme-Catalyzed Reactions. Molecules, 2020, 25, 1933.	3.8	22
4	New Electrophiles and Strategies for Mechanism-Based and Targeted Covalent Inhibitor Design. Biochemistry, 2019, 58, 5234-5244.	2.5	64
5	The Nitro Group as a Masked Electrophile in Covalent Enzyme Inhibition. ACS Chemical Biology, 2018, 13, 1470-1473.	3.4	23
6	Mechanism-based inactivator of isocitrate lyases 1 and 2 from Mycobacterium tuberculosis. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7617-7622.	7.1	32
7	Commentary: Ohm's law as an analogy for enzyme kinetics. Biochemistry and Molecular Biology Education, 2015, 43, 139-141.	1.2	4
8	The Role of Phosphate in a Multistep Enzymatic Reaction: Reactions of the Substrate and Intermediate in Pieces. Journal of the American Chemical Society, 2015, 137, 2748-2756.	13.7	20
9	Alteration of the Flexible Loop in 1-Deoxy-<scp>d</scp>-xylulose-5-phosphate Reductoisomerase Boosts Enthalpy-Driven Inhibition by Fosmidomycin. Biochemistry, 2014, 53, 3423-3431.	2.5	10
10	Mechanism and inhibition of 1-deoxy-d-xylulose-5-phosphate reductoisomerase. Bioorganic Chemistry, 2014, 57, 171-185.	4.1	28
11	Cysteine Is the General Base That Serves in Catalysis by Isocitrate Lyase and in Mechanism-Based Inhibition by 3-Nitropropionate. Biochemistry, 2014, 53, 178-187.	2.5	28
12	Transition-State-Guided Drug Design for Treatment of Parasitic Neglected Tropical Diseases. Current Medicinal Chemistry, 2014, 21, 1781-1793.	2.4	5
13	DXP Reductoisomerase: Reaction of the Substrate in Pieces Reveals a Catalytic Role for the Nonreacting Phosphodianion Group. Biochemistry, 2013, 52, 2302-2308.	2.5	21
14	Pre-Steady-State Kinetic Analysis of 1-Deoxy-<scp>d</scp>-xylulose-5-phosphate Reductoisomerase from Mycobacterium tuberculosis Reveals Partially Rate-Limiting Product Release by Parallel Pathways. Biochemistry, 2012, 51, 5307-5319.	2.5	8
15	Highly Precise Measurement of Kinetic Isotope Effects Using ¹H-Detected 2D [¹³C,¹H]-HSQC NMR Spectroscopy. Journal of the American Chemical Society, 2012, 134, 20589-20592.	13.7	33
16	Arsenate and Phosphate as Nucleophiles at the Transition States of Human Purine Nucleoside Phosphorylase. Biochemistry, 2011, 50, 2701-2709.	2.5	14
17	Plasmodium falciparum Parasites Are Killed by a Transition State Analogue of Purine Nucleoside Phosphorylase in a Primate Animal Model. PLoS ONE, 2011, 6, e26916.	2.5	58
18	Femtosecond dynamics coupled to chemical barrier crossing in a Born-Oppenheimer enzyme. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 18661-18665.	7.1	106

#	Article	IF	Citations
19	Purine nucleoside phosphorylases as targets for transition-state analog design. , 2010, , 215-247.		2
20	Ribocation Transition State Capture and Rebound inÂHuman Purine Nucleoside Phosphorylase. Chemistry and Biology, 2009, 16, 971-979.	6.0	14
21	Third-Generation Immucillins: Syntheses and Bioactivities of Acyclic Immucillin Inhibitors of Human Purine Nucleoside Phosphorylase. Journal of Medicinal Chemistry, 2009, 52, 1126-1143.	6.4	68
22	Identification of Three Classes of Heteroaromatic Compounds with Activity against Intracellular Trypanosoma cruzi by Chemical Library Screening. PLoS Neglected Tropical Diseases, 2009, 3, e384.	3.0	63
23	Immucillins in custom catalytic-site cavities. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 5900-5903.	2.2	14
24	Azetidine Based Transition State Analogue Inhibitors of N-Ribosyl Hydrolases and Phosphorylases. Journal of Medicinal Chemistry, 2008, 51, 948-956.	6.4	78
25	A Î²-Fluoroamine Inhibitor of Purine Nucleoside Phosphorylase. Journal of Medicinal Chemistry, 2008, 51, 5880-5884.	6.4	47
26	<scp>l</scp>-Enantiomers of Transition State Analogue Inhibitors Bound to Human Purine Nucleoside Phosphorylase. Journal of the American Chemical Society, 2008, 130, 842-844.	13.7	23
27	Transition-State Interactions Revealed in Purine Nucleoside Phosphorylase by Binding Isotope Effects. Journal of the American Chemical Society, 2008, 130, 2166-2167.	13.7	21
28	Neighboring Group Participation in the Transition State of Human Purine Nucleoside Phosphorylase. Biochemistry, 2007, 46, 5038-5049.	2.5	53
29	Phosphate Activation in the Ground State of Purine Nucleoside Phosphorylase. Journal of the American Chemical Society, 2006, 128, 7765-7771.	13.7	12
30	Transition State Analogue Discrimination by Related Purine Nucleoside Phosphorylases. Journal of the American Chemical Society, 2006, 128, 7126-7127.	13.7	36
31	The NeuC Protein of Escherichia coli K1 Is a UDP N -Acetylglucosamine 2-Epimerase. Journal of Bacteriology, 2004, 186, 706-712.	2.2	46
32	Identification and Mechanism of a Bacterial Hydrolyzing UDP-N-Acetylglucosamine 2-Epimeraseâ€. Biochemistry, 2004, 43, 14290-14298.	2.5	34
33	Dehydroalanine-Based Inhibition of a Peptide Epimerase from Spider Venom. Journal of Organic Chemistry, 2002, 67, 8389-8394.	3.2	28