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	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
2	Azetidine Based Transition State Analogue Inhibitors of N-Ribosyl Hydrolases and Phosphorylases. Journal of Medicinal Chemistry, 2008, 51, 948-956.	6.4	78
3	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
4	New Electrophiles and Strategies for Mechanism-Based and Targeted Covalent Inhibitor Design. Biochemistry, 2019, 58, 5234-5244.	2.5	64
5	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
6	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
7	Neighboring Group Participation in the Transition State of Human Purine Nucleoside Phosphorylase. Biochemistry, 2007, 46, 5038-5049.	2.5	53
8	A Î²-Fluoroamine Inhibitor of Purine Nucleoside Phosphorylase. Journal of Medicinal Chemistry, 2008, 51, 5880-5884.	6.4	47
9	The NeuC Protein of Escherichia coli K1 Is a UDP N -Acetylglucosamine 2-Epimerase. Journal of Bacteriology, 2004, 186, 706-712.	2.2	46
10	Transition State Analogue Discrimination by Related Purine Nucleoside Phosphorylases. Journal of the American Chemical Society, 2006, 128, 7126-7127.	13.7	36
11	Identification and Mechanism of a Bacterial Hydrolyzing UDP-N-Acetylglucosamine 2-Epimeraseâ€. Biochemistry, 2004, 43, 14290-14298.	2.5	34
12	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
13	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
14	Dehydroalanine-Based Inhibition of a Peptide Epimerase from Spider Venom. Journal of Organic Chemistry, 2002, 67, 8389-8394.	3.2	28
15	Mechanism and inhibition of 1-deoxy-d-xylulose-5-phosphate reductoisomerase. Bioorganic Chemistry, 2014, 57, 171-185.	4.1	28
16	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
17	<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
18	The Nitro Group as a Masked Electrophile in Covalent Enzyme Inhibition. ACS Chemical Biology, 2018, 13, 1470-1473.	3.4	23

#	Article	IF	Citations
19	Inverse Solvent Isotope Effects in Enzyme-Catalyzed Reactions. Molecules, 2020, 25, 1933.	3.8	22
20	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
21	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
22	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
23	Immucillins in custom catalytic-site cavities. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 5900-5903.	2.2	14
24	Ribocation Transition State Capture and Rebound inÂHuman Purine Nucleoside Phosphorylase. Chemistry and Biology, 2009, 16, 971-979.	6.0	14
25	Arsenate and Phosphate as Nucleophiles at the Transition States of Human Purine Nucleoside Phosphorylase. Biochemistry, 2011, 50, 2701-2709.	2.5	14
26	Phosphate Activation in the Ground State of Purine Nucleoside Phosphorylase. Journal of the American Chemical Society, 2006, 128, 7765-7771.	13.7	12
27	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
28	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
29	Transition-State-Guided Drug Design for Treatment of Parasitic Neglected Tropical Diseases. Current Medicinal Chemistry, 2014, 21, 1781-1793.	2.4	5
30	Commentary: Ohm's law as an analogy for enzyme kinetics. Biochemistry and Molecular Biology Education, 2015, 43, 139-141.	1.2	4
31	Purine nucleoside phosphorylases as targets for transition-state analog design. , 2010, , 215-247.		2
32	Î±-Ketol and Î±-iminol rearrangements in synthetic organic and biosynthetic reactions. Beilstein Journal of Organic Chemistry, 2021, 17, 2570-2584.	2.2	2
33	Covalent Adduct Formation in Methylthio-<scp>d</scp>-ribose-1-phosphate Isomerase: Reaction Intermediate or Artifact?. Biochemistry, 2022, 61, 1124-1135.	2.5	1