

# Luke W Guddat

## List of Publications by Year in descending order

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Version: 2024-02-01

181  
papers

12,949  
citations

47006

47  
h-index

28297

105  
g-index

192  
all docs

192  
docs citations

192  
times ranked

15415  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | HERBICIDES THAT INHIBIT ACETOLACTATE SYNTHASE. <i>Frontiers of Agricultural Science and Engineering</i> , 2022, 9, 155.   | 1.4  | 2         |
| 2  | Stereo-Defined Acyclic Nucleoside Phosphonates are Selective and Potent Inhibitors of Parasite 6-Oxopurine Phosphoribosyltransferases. <i>Journal of Medicinal Chemistry</i> , 2022, 65, 4030-4057.   | 6.4  | 3         |
| 3  | Structural basis for replicase polyprotein cleavage and substrate specificity of main protease from SARS-CoV-2. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2117142119.  | 7.1  | 64        |
| 4  | Dihydroxy- $\alpha$ -Acid Dehydratases From Pathogenic Bacteria: Emerging Drug Targets to Combat Antibiotic Resistance. <i>Chemistry - A European Journal</i> , 2022, 28, .   | 3.3  | 5         |
| 5  | Structural basis of resistance to herbicides that target acetoxyacid synthase. <i>Nature Communications</i> , 2022, 13, .   | 12.8 | 17        |
| 6  | Cryo-EM Structure of an Extended SARS-CoV-2 Replication and Transcription Complex Reveals an Intermediate State in Cap Synthesis. <i>Cell</i> , 2021, 184, 184-193.e10.   | 28.9 | 201       |
| 7  | Discovery of a Pyrimidinedione Derivative with Potent Inhibitory Activity against <i>Mycobacterium tuberculosis</i> Ketol- $\alpha$ -Acid Reductoisomerase. <i>Chemistry - A European Journal</i> , 2021, 27, 3130-3141.  | 3.3  | 10        |
| 8  | Analogues of the Herbicide, <i>N</i> -Hydroxy- <i>N</i> -isopropylloxamate, Inhibit <i>Mycobacterium tuberculosis</i> Ketol- $\alpha$ -Acid Reductoisomerase and Their Prodrugs Are Promising Anti-TB Drug Leads. <i>Journal of Medicinal Chemistry</i> , 2021, 64, 1670-1684.              | 6.4  | 10        |
| 9  | High-throughput screening identifies established drugs as SARS-CoV-2 PLpro inhibitors. <i>Protein and Cell</i> , 2021, 12, 877-888.   | 11.0 | 95        |
| 10 | <i>Helicobacter pylori</i> Xanthine- $\alpha$ -Guanine- $\alpha$ -Hypoxanthine Phosphoribosyltransferase- $\alpha$ Putative Target for Drug Discovery against Gastrointestinal Tract Infections. <i>Journal of Medicinal Chemistry</i> , 2021, 64, 5710-5729.                               | 6.4  | 4         |
| 11 | Architecture of the mycobacterial succinate dehydrogenase with a membrane-embedded Rieske FeS cluster. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .  | 7.1  | 17        |
| 12 | Acyclic nucleoside phosphonates with adenine nucleobase inhibit <i>Trypanosoma brucei</i> adenine phosphoribosyltransferase in vitro. <i>Scientific Reports</i> , 2021, 11, 13317.  | 3.3  | 8         |
| 13 | Coupling of N7-methyltransferase and $5'$ exoribonuclease with SARS-CoV-2 polymerase reveals mechanisms for capping and proofreading. <i>Cell</i> , 2021, 184, 3474-3485.e11.   | 28.9 | 111       |
| 14 | Cryo-EM structure of mycobacterial cytochrome bd reveals two oxygen access channels. <i>Nature Communications</i> , 2021, 12, 4621.   | 12.8 | 24        |
| 15 | Nucleotide analogues containing a pyrrolidine, piperidine or piperazine ring: Synthesis and evaluation of inhibition of plasmodial and human 6-oxopurine phosphoribosyltransferases and in vitro antimalarial activity. <i>European Journal of Medicinal Chemistry</i> , 2021, 219, 113416. | 5.5  | 7         |
| 16 | Kinetic and Structural Characterization of the First B3 Metallo- $\beta$ -Lactamase with an Active-Site Glutamic Acid. <i>Antimicrobial Agents and Chemotherapy</i> , 2021, 65, e0093621.   | 3.2  | 7         |
| 17 | Rational Design of Potent Inhibitors of a Metallohydrolase Using a Fragment-Based Approach. <i>ChemMedChem</i> , 2021, 16, 3342-3359.   | 3.2  | 3         |
| 18 | Structure of <i>Mycobacterium tuberculosis</i> cytochrome bcc in complex with Q203 and TB47, two anti-TB drug candidates. <i>ELife</i> , 2021, 10, .  | 6.0  | 22        |

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|----|---|------|-----------|
| 19 | Conformational Changes in a Macrolide Antibiotic Binding Protein From <i>Mycobacterium smegmatis</i> Upon ADP Binding. <i>Frontiers in Microbiology</i> , 2021, 12, 780954.   | 3.5  | 0         |
| 20 | Structural insights into substrate recognition by the type VII secretion system. <i>Protein and Cell</i> , 2020, 11, 124-137.   | 11.0 | 25        |
| 21 | Herbicides That Target Acetohydroxyacid Synthase Are Potent Inhibitors of the Growth of Drug-Resistant <i>Candida auris</i> . <i>ACS Infectious Diseases</i> , 2020, 6, 2901-2912.  | 3.8  | 13        |
| 22 | Towards a sustainable generation of pseudopterosin-type bioactives. <i>Green Chemistry</i> , 2020, 22, 6033-6046.   | 9.0  | 9         |
| 23 | Inhibition studies of ketol-acid reductoisomerases from pathogenic microorganisms. <i>Archives of Biochemistry and Biophysics</i> , 2020, 692, 108516.  | 3.0  | 8         |
| 24 | Structure and mechanism of potent bifunctional $\beta$ -lactam- and homoserine lactone-degrading enzymes from marine microorganisms. <i>Scientific Reports</i> , 2020, 10, 12882.   | 3.3  | 13        |
| 25 | Structural basis of trehalose recycling by the ABC transporter LpqY-SugABC. <i>Science Advances</i> , 2020, 6, .  | 10.3 | 19        |
| 26 | Cryo-EM structure of trimeric <i>Mycobacterium smegmatis</i> succinate dehydrogenase with a membrane-anchor SdhF. <i>Nature Communications</i> , 2020, 11, 4245.  | 12.8 | 20        |
| 27 | Structures of fungal and plant acetohydroxyacid synthases. <i>Nature</i> , 2020, 586, 317-321.  | 27.8 | 37        |
| 28 | Cryo-EM snapshots of mycobacterial arabinosyltransferase complex EmbB2-AcpM2. <i>Protein and Cell</i> , 2020, 11, 505-517.  | 11.0 | 13        |
| 29 | Structural basis for the inhibition of SARS-CoV-2 main protease by antineoplastic drug carmofur. <i>Nature Structural and Molecular Biology</i> , 2020, 27, 529-532.  | 8.2  | 339       |
| 30 | Structure of Mpro from SARS-CoV-2 and discovery of its inhibitors. <i>Nature</i> , 2020, 582, 289-293.  | 27.8 | 3,133     |
| 31 | Broad spectrum antibiotic-degrading metallo- $\beta$ -lactamases are phylogenetically diverse. <i>Protein and Cell</i> , 2020, 11, 613-617.   | 11.0 | 21        |
| 32 | Structural Basis for the Inhibition of Mycobacterial MmpL3 by NITD-349 and SPIRO. <i>Journal of Molecular Biology</i> , 2020, 432, 4426-4434.   | 4.2  | 27        |
| 33 | Discovery, Synthesis and Evaluation of a Ketolâ€Acid Reductoisomerase Inhibitor. <i>Chemistry - A European Journal</i> , 2020, 26, 8958-8968.   | 3.3  | 15        |
| 34 | Structures of <i>Mycobacterium tuberculosis</i> Penicillin-Binding Protein 3 in Complex with Five $\beta$ -Lactam Antibiotics Reveal Mechanism of Inactivation. <i>Molecular Pharmacology</i> , 2020, 97, 287-294.            | 2.3  | 20        |
| 35 | Structural basis for the broad substrate specificity of two acyl-CoA dehydrogenases FadE5 from mycobacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 16324-16332. | 7.1  | 7         |
| 36 | Adaptation of a continuous, calorimetric kinetic assay to study the agmatinase-catalyzed hydrolytic reaction. <i>Analytical Biochemistry</i> , 2020, 595, 113618.   | 2.4  | 2         |

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|----|--|------|-----------|
| 37 | Structural elements that modulate the substrate specificity of plant purple acid phosphatases: Avenues for improved phosphorus acquisition in crops. <i>Plant Science</i> , 2020, 294, 110445.   | 3.6  | 37        |
| 38 | Design and development of ((4-methoxyphenyl)carbamoyl) (5-(5-nitrothiophen-2-yl)-1,3,4-thiadiazol-2-yl)amide analogues as <i>Mycobacterium tuberculosis</i> ketol-acid reductoisomerase inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2020, 193, 112178.  | 5.5  | 12        |
| 39 | Structure of the RNA-dependent RNA polymerase from COVID-19 virus. <i>Science</i> , 2020, 368, 779-782.  | 12.6 | 1,228     |
| 40 | Structures of cell wall arabinosyltransferases with the anti-tuberculosis drug ethambutol. <i>Science</i> , 2020, 368, 1211-1219.  | 12.6 | 82        |
| 41 | Structural Basis for RNA Replication by the SARS-CoV-2 Polymerase. <i>Cell</i> , 2020, 182, 417-428.e13.   | 28.9 | 672       |
| 42 | Crystal structures of <i>Trypanosoma brucei</i> hypoxanthine â€“ guanine â€“ xanthine phosphoribosyltransferase in complex with IMP, GMP and XMP. <i>FEBS Journal</i> , 2019, 286, 4721-4736.  | 4.7  | 9         |
| 43 | Sulfide, sulfoxide and sulfone bridged acyclic nucleoside phosphonates as inhibitors of the <i>Plasmodium falciparum</i> and human 6-oxopurine phosphoribosyltransferases: Synthesis and evaluation. <i>European Journal of Medicinal Chemistry</i> , 2019, 183, 111667. | 5.5  | 12        |
| 44 | Mycobacterial dynamin-like protein IniA mediates membrane fission. <i>Nature Communications</i> , 2019, 10, 3906.  | 12.8 | 30        |
| 45 | Synthesis, evaluation and structural investigations of potent purple acid phosphatase inhibitors as drug leads for osteoporosis. <i>European Journal of Medicinal Chemistry</i> , 2019, 182, 111611.   | 5.5  | 9         |
| 46 | Synthesis and evaluation of novel purple acid phosphatase inhibitors. <i>MedChemComm</i> , 2019, 10, 61-71.  | 3.4  | 6         |
| 47 | Discovery and evaluation of novel <i>Mycobacterium tuberculosis</i> ketol-acid reductoisomerase inhibitors as therapeutic drug leads. <i>Journal of Computer-Aided Molecular Design</i> , 2019, 33, 357-366.   | 2.9  | 38        |
| 48 | Crystal Structures of Membrane Transporter MmpL3, an Anti-TB Drug Target. <i>Cell</i> , 2019, 176, 636-648.e13.  | 28.9 | 172       |
| 49 | The Binding Mode of an ADP Analogue to a Metallohydrolase Mimics the Likely Transition State. <i>ChemBioChem</i> , 2019, 20, 1536-1540.  | 2.6  | 16        |
| 50 | Relative catalytic efficiencies and transcript levels of three <i>scpd</i> and two <i>scpl</i> lactate dehydrogenases for optically pure <i>scpd</i> lactate production in <i>Sporolactobacillus inulinus</i> . <i>MicrobiologyOpen</i> , 2019, 8, e00704.               | 3.0  | 3         |
| 51 | Synthesis of the <i>seco</i> Limonoid BCD Ring System Identifies a Hsp90 Chaperon Machinery (p23) Inhibitor. <i>Chemistry - A European Journal</i> , 2019, 25, 1451-1455.  | 3.3  | 14        |
| 52 | Structural insights into the mechanism of inhibition of AHAS by herbicides. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E1945-E1954.   | 7.1  | 44        |
| 53 | Discovery of the first macrolide antibiotic binding protein in <i>Mycobacterium tuberculosis</i> : a new antibiotic resistance drug target. <i>Protein and Cell</i> , 2018, 9, 971-975.  | 11.0 | 6         |
| 54 | Design of <i>Plasmodium vivax</i> Hypoxanthine-Guanine Phosphoribosyltransferase Inhibitors as Potential Antimalarial Therapeutics. <i>ACS Chemical Biology</i> , 2018, 13, 82-90.   | 3.4  | 22        |

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|----|---|------|-----------|
| 55 | Pyrrrolidine nucleoside bisphosphonates as antituberculosis agents targeting hypoxanthine-guanine phosphoribosyltransferase. <i>European Journal of Medicinal Chemistry</i> , 2018, 159, 10-22.   | 5.5  | 10        |
| 56 | Commercial AHAS-inhibiting herbicides are promising drug leads for the treatment of human fungal pathogenic infections. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E9649-E9658.  | 7.1  | 40        |
| 57 | An electron transfer path connects subunits of a mycobacterial respiratory supercomplex. <i>Science</i> , 2018, 362, .  | 12.6 | 117       |
| 58 | Engineering highly functional thermostable proteins using ancestral sequence reconstruction. <i>Nature Catalysis</i> , 2018, 1, 878-888.  | 34.4 | 106       |
| 59 | Purple acid phosphatase inhibitors as leads for osteoporosis chemotherapeutics. <i>European Journal of Medicinal Chemistry</i> , 2018, 157, 462-479.  | 5.5  | 15        |
| 60 | Processivity and enzymatic mechanism of a multifunctional family 5 endoglucanase from <i>Bacillus subtilis</i> BS-5 with potential applications in the saccharification of cellulosic substrates. <i>Biotechnology for Biofuels</i> , 2018, 11, 20.   | 6.2  | 43        |
| 61 | Acyclic nucleoside phosphonates with unnatural nucleobases, favipiravir and allopurinol, designed as potential inhibitors of the human and <i>Plasmodium falciparum</i> 6-oxopurine phosphoribosyltransferases. <i>Tetrahedron</i> , 2018, 74, 5886-5897.   | 1.9  | 11        |
| 62 | Evaluation of the <i>Trypanosoma brucei</i> 6-oxopurine salvage pathway as a potential target for drug discovery. <i>PLoS Neglected Tropical Diseases</i> , 2018, 12, e0006301.   | 3.0  | 28        |
| 63 | Oligomeric state of hypoxanthine-guanine phosphoribosyltransferase from <i>Mycobacterium tuberculosis</i> . <i>Biochimie</i> , 2017, 135, 6-14.   | 2.6  | 9         |
| 64 | Comprehensive understanding of acetohydroxyacid synthase inhibition by different herbicide families. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E1091-E1100.   | 7.1  | 102       |
| 65 | The Role of a FAD Cofactor in the Regulation of Acetohydroxyacid Synthase by Redox Signaling Molecules. <i>Journal of Biological Chemistry</i> , 2017, 292, 5101-5109.  | 3.4  | 11        |
| 66 | Visualization of the Reaction Trajectory and Transition State in a Hydrolytic Reaction Catalyzed by a Metalloenzyme. <i>Chemistry - A European Journal</i> , 2017, 23, 4778-4781.   | 3.3  | 27        |
| 67 | Acyclic Nucleoside Phosphonates Containing 9-Deazahypoxanthine and a Five-Membered Heterocycle as Selective Inhibitors of Plasmodial 6-Oxopurine Phosphoribosyltransferases. <i>ChemMedChem</i> , 2017, 12, 1133-1141.  | 3.2  | 18        |
| 68 | Synthesis and evaluation of symmetric acyclic nucleoside bisphosphonates as inhibitors of the <i>Plasmodium falciparum</i> , <i>Plasmodium vivax</i> and human 6-oxopurine phosphoribosyltransferases and the antimalarial activity of their prodrugs. <i>Bioorganic and Medicinal Chemistry</i> , 2017, 25, 4008-4030. | 3.0  | 20        |
| 69 | Novel nucleotide analogues bearing (1H-1,2,3-triazol-4-yl)phosphonic acid moiety as inhibitors of <i>Plasmodium</i> and human 6-oxopurine phosphoribosyltransferases. <i>Tetrahedron</i> , 2017, 73, 692-702.   | 1.9  | 12        |
| 70 | Crystal Structures of <i>Staphylococcus aureus</i> Ketolase Acid Reductoisomerase in Complex with Two Transition State Analogues that Have Biocidal Activity. <i>Chemistry - A European Journal</i> , 2017, 23, 18289-18295.  | 3.3  | 24        |
| 71 | Deacidification of grass silage press juice by continuous production of acetoin from its lactate via an immobilized enzymatic reaction cascade. <i>Bioresource Technology</i> , 2017, 245, 1084-1092.   | 9.6  | 9         |
| 72 | Structural Insight into the Activation of PknI Kinase from <i>M. tuberculosis</i> via Dimerization of the Extracellular Sensor Domain. <i>Structure</i> , 2017, 25, 1286-1294.e4.   | 3.3  | 5         |

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|----|--|------|-----------|
| 73 | High resolution crystal structure of a fluoride-inhibited organophosphate-degrading metallohydrolase. <i>Journal of Inorganic Biochemistry</i> , 2017, 177, 287-290.   | 3.5  | 9         |
| 74 | Synthesis and Evaluation of Asymmetric Acyclic Nucleoside Bisphosphonates as Inhibitors of <i>Plasmodium falciparum</i> and Human Hypoxanthineâ€“Guanineâ€“ (Xanthine) Phosphoribosyltransferase. <i>Journal of Medicinal Chemistry</i> , 2017, 60, 7539-7554.                                   | 6.4  | 18        |
| 75 | High Resolution Crystal Structures of the Acetohydroxyacid Synthaseâ€“Pyruvate Complex Provide New Insights into Its Catalytic Mechanism. <i>ChemistrySelect</i> , 2017, 2, 11981-11988.   | 1.5  | 6         |
| 76 | The 2.0 Å... X-ray structure for yeast acetohydroxyacid synthase provides new insights into its cofactor and quaternary structure requirements. <i>PLoS ONE</i> , 2017, 12, e0171443.  | 2.5  | 8         |
| 77 | Metal Ions Play an Essential Catalytic Role in the Mechanism of Ketolâ€“Acid Reductoisomerase. <i>Chemistry - A European Journal</i> , 2016, 22, 7427-7436.  | 3.3  | 30        |
| 78 | Crystal structure of <i>Mycobacterium tuberculosis</i> ketolâ€“acid reductoisomerase at 1.0 Å... resolution â€“ a potential target for antiâ€“tuberculosis drug discovery. <i>FEBS Journal</i> , 2016, 283, 1184-1196.   | 4.7  | 33        |
| 79 | Commercial Herbicides Can Trigger the Oxidative Inactivation of Acetohydroxyacid Synthase. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 4247-4251.   | 13.8 | 18        |
| 80 | Crystal structures and inhibition of <i>Trypanosoma brucei</i> hypoxanthineâ€“guanine phosphoribosyltransferase. <i>Scientific Reports</i> , 2016, 6, 35894.   | 3.3  | 15        |
| 81 | Crystal Structures of Acyclic Nucleoside Phosphonates in Complex with <i>Escherichia coli</i> Hypoxanthine Phosphoribosyltransferase. <i>ChemistrySelect</i> , 2016, 1, 6267-6276.   | 1.5  | 8         |
| 82 | AIMâ€“1: An Antibioticâ€“Degrading Metallohydrolase That Displays Mechanistic Flexibility. <i>Chemistry - A European Journal</i> , 2016, 22, 17704-17714.  | 3.3  | 28        |
| 83 | Commercial Herbicides Can Trigger the Oxidative Inactivation of Acetohydroxyacid Synthase. <i>Angewandte Chemie</i> , 2016, 128, 4319-4323.  | 2.0  | 2         |
| 84 | Characterization and structural analysis of a potent anticoagulant phospholipase A2 from <i>Pseudechis australis</i> snake venom. <i>Toxicon</i> , 2016, 111, 37-49.   | 1.6  | 10        |
| 85 | Synthesis and Evaluation of Novel Acyclic Nucleoside Phosphonates as Inhibitors of <i>Plasmodium falciparum</i> and Human 6â€“Oxopurine Phosphoribosyltransferases. <i>ChemMedChem</i> , 2015, 10, 1707-1723.  | 3.2  | 21        |
| 86 | Aza-acyclic Nucleoside Phosphonates Containing a Second Phosphonate Group As Inhibitors of the Human, <i>Plasmodium falciparum</i> and <i>vivax</i> 6-Oxopurine Phosphoribosyltransferases and Their Prodrugs As Antimalarial Agents. <i>Journal of Medicinal Chemistry</i> , 2015, 58, 827-846. | 6.4  | 49        |
| 87 | Synthesis, conformational studies, and biological properties of phosphonmethoxyethyl derivatives of nucleobases with a locked conformation via a pyrrolidine ring. <i>Organic and Biomolecular Chemistry</i> , 2015, 13, 4693-4705.  | 2.8  | 12        |
| 88 | First Crystal Structures of <i>Mycobacterium tuberculosis</i> 6-Oxopurine Phosphoribosyltransferase: Complexes with GMP and Pyrophosphate and with Acyclic Nucleoside Phosphonates Whose Prodrugs Have Antituberculosis Activity. <i>Journal of Medicinal Chemistry</i> , 2015, 58, 4822-4838.   | 6.4  | 36        |
| 89 | Antimalarial activity of prodrugs of N-branched acyclic nucleoside phosphonate inhibitors of 6-oxopurine phosphoribosyltransferases. <i>Bioorganic and Medicinal Chemistry</i> , 2015, 23, 5502-5510.  | 3.0  | 29        |
| 90 | Acyclic nucleoside phosphonates containing a second phosphonate group are potent inhibitors of the 6-oxopurine phosphoribosyltransferases and have antimalarial activity. <i>Malaria Journal</i> , 2014, 13, P91.  | 2.3  | 0         |

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|-----|--|------|-----------|
| 91  | International Year of Crystallography. Australian Journal of Chemistry, 2014, 67, 1718.  | 0.9  | 0         |
| 92  | The applications of binuclear metallohydrolases in medicine: Recent advances in the design and development of novel drug leads for purple acid phosphatases, metallo- $\beta$ -lactamases and arginases. European Journal of Medicinal Chemistry, 2014, 76, 132-144.                         | 5.5  | 44        |
| 93  | Determination of the catalytic activity of binuclear metallohydrolases using isothermal titration calorimetry. Journal of Biological Inorganic Chemistry, 2014, 19, 389-398.   | 2.6  | 14        |
| 94  | Acetohydroxyacid Synthase: A Target for Antimicrobial Drug Discovery. Current Pharmaceutical Design, 2014, 20, 740-753.  | 1.9  | 43        |
| 95  | The effect of novel [3-fluoro-(2-phosphonoethoxy)propyl]purines on the inhibition of Plasmodium falciparum, Plasmodium vivax and human hypoxanthine-guanine (xanthine) phosphoribosyltransferases. European Journal of Medicinal Chemistry, 2013, 67, 81-89.                                 | 5.5  | 19        |
| 96  | Inhibition of the <i>Escherichia coli</i> 6-Oxopurine Phosphoribosyltransferases by Nucleoside Phosphonates: Potential for New Antibacterial Agents. Journal of Medicinal Chemistry, 2013, 56, 6967-6984.  | 6.4  | 41        |
| 97  | Acyclic Nucleoside Phosphonates Containing a Second Phosphonate Group Are Potent Inhibitors of 6-Oxopurine Phosphoribosyltransferases and Have Antimalarial Activity. Journal of Medicinal Chemistry, 2013, 56, 2513-2526.   | 6.4  | 59        |
| 98  | Sulfonylureas Have Antifungal Activity and Are Potent Inhibitors of Candida albicans Acetohydroxyacid Synthase. Journal of Medicinal Chemistry, 2013, 56, 210-219.   | 6.4  | 64        |
| 99  | Role of Human Hypoxanthine Guanine Phosphoribosyltransferase in Activation of the Antiviral Agent T-705 (Favipiravir). Molecular Pharmacology, 2013, 84, 615-629.  | 2.3  | 94        |
| 100 | The structure of Human Microplasmin in Complex with Textilinin-1, an Aprotinin-like Inhibitor from the Australian Brown Snake. PLoS ONE, 2013, 8, e54104.  | 2.5  | 19        |
| 101 | Identification of Purple Acid Phosphatase Inhibitors by Fragment-Based Screening: Promising New Leads for Osteoporosis Therapeutics. Chemical Biology and Drug Design, 2012, 80, 665-674.  | 3.2  | 28        |
| 102 | Synthesis of Novel N- Branched Acyclic Nucleoside Phosphonates As Potent and Selective Inhibitors of Human, Plasmodium falciparum and Plasmodium vivax 6-Oxopurine Phosphoribosyltransferases. Journal of Medicinal Chemistry, 2012, 55, 6209-6223.  | 6.4  | 64        |
| 103 | Bacterial and Plant Ketol-Acid Reductoisomerases Have Different Mechanisms of Induced Fit during the Catalytic Cycle. Journal of Molecular Biology, 2012, 424, 168-179.  | 4.2  | 33        |
| 104 | A focused sulfated glycoconjugate Ugi library for probing heparan sulfate-binding angiogenic growth factors. Bioorganic and Medicinal Chemistry Letters, 2012, 22, 6190-6194.  | 2.2  | 14        |
| 105 | Binuclear Metallohydrolases: Complex Mechanistic Strategies for a Simple Chemical Reaction. Accounts of Chemical Research, 2012, 45, 1593-1603.  | 15.6 | 129       |
| 106 | The structure-activity relationship in herbicidal monosubstituted sulfonylureas. Pest Management Science, 2012, 68, 618-628.   | 3.4  | 20        |
| 107 | Synthesis of 9-phosphonoalkyl and 9-phosphonoalkoxyalkyl purines: Evaluation of their ability to act as inhibitors of Plasmodium falciparum, Plasmodium vivax and human hypoxanthine-guanine (xanthine) phosphoribosyltransferases. Bioorganic and Medicinal Chemistry, 2012, 20, 1076-1089. | 3.0  | 36        |
| 108 | Synthesis of purine N9-[2-hydroxy-3-O-(phosphonomethoxy)propyl] derivatives and their side-chain modified analogs as potential antimalarial agents. Bioorganic and Medicinal Chemistry, 2012, 20, 1222-1230.   | 3.0  | 25        |

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|-----|--|------|-----------|
| 109 | Penicillin inhibitors of purple acid phosphatase. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012, 22, 2555-2559.   | 2.2  | 13        |
| 110 | Phosphate-bound structure of an organophosphate-degrading enzyme from <i>Agrobacterium radiobacter</i> . <i>Journal of Inorganic Biochemistry</i> , 2012, 106, 19-22.  | 3.5  | 15        |
| 111 | Chemical Synthesis, in Vitro Acetohydroxyacid Synthase (AHAS) Inhibition, Herbicidal Activity, and Computational Studies of Isatin Derivatives. <i>Journal of Agricultural and Food Chemistry</i> , 2011, 59, 9892-9900.   | 5.2  | 39        |
| 112 | Editorial [Hot Topic:Drug Targets for the Treatment of Protozoan Parasitic Diseases (Guest Editor:)]   | 2.1  | 10        |
| 113 | 6-Oxopurine Phosphoribosyltransferase: A Target for the Development of Antimalarial Drugs. <i>Current Topics in Medicinal Chemistry</i> , 2011, 11, 2085-2102.   | 2.1  | 36        |
| 114 | The organophosphate-degrading enzyme from <i>Agrobacterium radiobacter</i> displays mechanistic flexibility for catalysis. <i>Biochemical Journal</i> , 2010, 432, 565-573.  | 3.7  | 74        |
| 115 | <i>Plasmodium vivax</i> hypoxanthine-guanine phosphoribosyltransferase: A target for anti-malarial chemotherapy. <i>Molecular and Biochemical Parasitology</i> , 2010, 173, 165-169.   | 1.1  | 35        |
| 116 | Crystal structures of two novel sulfonylurea herbicides in complex with <i>Arabidopsis thaliana</i> acetohydroxyacid synthase. <i>FEBS Journal</i> , 2009, 276, 1282-1290.   | 4.7  | 49        |
| 117 | Crystal structure of textilinin, a Kunitz-type serine protease inhibitor from the venom of the Australian common brown snake ( <i>Pseudonaja textilis</i> ). <i>FEBS Journal</i> , 2009, 276, 3163-3175.   | 4.7  | 46        |
| 118 | Inhibition of purple acid phosphatase with $\alpha$ -alkoxynaphthylmethylphosphonic acids. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009, 19, 163-166.  | 2.2  | 31        |
| 119 | Synthesis of branched 9-[2-(2-phosphonoethoxy)ethyl]purines as a new class of acyclic nucleoside phosphonates which inhibit <i>Plasmodium falciparum</i> hypoxanthine-guanine-xanthine phosphoribosyltransferase. <i>Bioorganic and Medicinal Chemistry</i> , 2009, 17, 6218-6232. | 3.0  | 82        |
| 120 | Conformational Changes in a Plant Ketol-Acid Reductoisomerase upon Mg <sup>2+</sup> and NADPH Binding as Revealed by Two Crystal Structures. <i>Journal of Molecular Biology</i> , 2009, 389, 167-182.   | 4.2  | 43        |
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