John B Bruning

List of Publications by Year
in descending order

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90 papers	3,615 citations	218677 26 h-index	144013 57 g-index
95 all docs	95 docs citations	95 times ranked	5280 citing authors

#	Article	IF	Citations
1	Different Geometric Requirements for Cytochrome P450-Catalyzed Aliphatic Versus Aromatic Hydroxylation Results in Chemoselective Oxidation. ACS Catalysis, 2022, 12, 1258-1267.	11.2	14
2	An Altered Heme Environment in an Engineered Cytochrome P450 Enzyme Enables the Switch from Monooxygenase to Peroxygenase Activity. ACS Catalysis, 2022, 12, 1614-1625.	11.2	29
3	Structural insights into the antifungal drug target guanosine monophosphate synthase from Aspergillus fumigatus. Acta Crystallographica Section D: Structural Biology, 2022, 78, 248-259.	2.3	2
4	A structural model of the human plasminogen and Aspergillus fumigatus enolase complex. Proteins: Structure, Function and Bioinformatics, 2022, 90, 1509-1520.	2.6	0
5	A comparison of the bacterial CYP51 cytochrome P450 enzymes from Mycobacterium marinum and Mycobacterium tuberculosis. Journal of Steroid Biochemistry and Molecular Biology, 2022, 221, 106097.	2.5	5
6	To Be, or Not to Be, an Inhibitor: A Comparison of Azole Interactions with and Oxidation by a Cytochrome P450 Enzyme. Inorganic Chemistry, 2022, 61, 236-245.	4.0	6
7	Nucleoside selectivity of Aspergillus fumigatus nucleosideâ€diphosphate kinase. FEBS Journal, 2021, 288, 2398-2417.	4.7	6
8	Vanishing white matter: Eukaryotic initiation factor 2B model and the impact of missense mutations. Molecular Genetics & Genomic Medicine, 2021, 9, e1593.	1.2	17
9	A cell permeable bimane-constrained PCNA-interacting peptide. RSC Chemical Biology, 2021, 2, 1499-1508.	4.1	5
10	Understanding the Mechanistic Requirements for Efficient and Stereoselective Alkene Epoxidation by a Cytochrome P450 Enzyme. ACS Catalysis, 2021, 11, 1995-2010.	11.2	30
11	TSC-insensitive Rheb mutations induce oncogenic transformation through a combination of constitutively active mTORC1 signalling and proteome remodelling. Cellular and Molecular Life Sciences, 2021, 78, 4035-4052.	5.4	5
12	Simplified heavy-atom derivatization of protein structures via co-crystallization with the MAD tetragon tetrabromoterephthalic acid. Acta Crystallographica Section F, Structural Biology Communications, 2021, 77, 156-162.	0.8	2
13	A turn-on fluorescent PCNA sensor. Bioorganic and Medicinal Chemistry Letters, 2021, 41, 128031.	2.2	0
14	Approaches to Introduce Helical Structure in Cysteineâ€Containing Peptides with a Bimane Group. ChemBioChem, 2021, 22, 2711-2720.	2.6	4
15	An antimony-phosphomolybdate microassay of ATPase activity through the detection of inorganic phosphate. Analytical Biochemistry, 2021, 623, 114170.	2.4	7
16	Immunogenicity study of engineered ferritins with C- and N-terminus insertion of Epstein-Barr nuclear antigen 1 epitope. Vaccine, 2021, 39, 4830-4841.	3.8	6
17	Engineering potassium activation into biosynthetic thiolase. Biochemical Journal, 2021, 478, 3047-3062.	3.7	1
18	Acquired JAK2 mutations confer resistance to JAK inhibitors in cell models of acute lymphoblastic leukemia. Npj Precision Oncology, 2021, 5, 75.	5.4	10

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19	Constitutive JAK/STAT signaling is the primary mechanism of resistance to JAKi in TYK2-rearranged acute lymphoblastic leukemia. Cancer Letters, 2021, 512, 28-37.	7.2	8
20	The Stereoselective Oxidation of para â€Substituted Benzenes by a Cytochrome P450 Biocatalyst. Chemistry - A European Journal, 2021, 27, 14765-14777.	3.3	6
21	The therapeutic potential of inhibiting PPARÎ³ phosphorylation to treat type 2 diabetes. Journal of Biological Chemistry, 2021, 297, 101030.	3.4	35
22	Inhibition of Mycobacterium tuberculosis Dethiobiotin Synthase (MtDTBS): Toward Next-Generation Antituberculosis Agents. ACS Chemical Biology, 2021, 16, 2339-2347.	3.4	6
23	Unlocking the PIP-box: A peptide library reveals interactions that drive high-affinity binding to human PCNA. Journal of Biological Chemistry, 2021, 296, 100773.	3.4	9
24	Derivatization of Protein Crystals with I3C using Random Microseed Matrix Screening. Journal of Visualized Experiments, 2021, , .	0.3	0
25	PPARÎ± and Î´ Ligand Design: Honing the Traditional Empirical Method with a More Holistic Overview. , 2021, , 111-178.		0
26	Targeting PCNA with Peptide Mimetics for Therapeutic Purposes. ChemBioChem, 2020, 21, 442-450.	2.6	24
27	Investigation of the requirements for efficient and selective cytochrome P450 monooxygenase catalysis across different reactions. Journal of Inorganic Biochemistry, 2020, 203, 110913.	3.5	22
28	Biophysical Techniques for Distinguishing Ligand Binding Modes in Cytochrome P450 Monooxygenases. Biochemistry, 2020, 59, 1038-1050.	2.5	20
29	Structural insights into the role of the acid-alcohol pair of residues required for dioxygen activation in cytochrome P450 enzymes. Journal of Biological Inorganic Chemistry, 2020, 25, 583-596.	2.6	26
30	d-Alanineâ€“d-alanine ligase as a model for the activation of ATP-grasp enzymes by monovalent cations. Journal of Biological Chemistry, 2020, 295, 7894-7904.	3.4	21
31	Targeting Unconventional Pathways in Pursuit of Novel Antifungals. Frontiers in Molecular Biosciences, 2020, 7, 621366.	3.5	12
32	A comparison of steroid and lipid binding cytochrome P450s from Mycobacterium marinum and Mycobacterium tuberculosis. Journal of Inorganic Biochemistry, 2020, 209, 111116.	3.5	12
33	Sulfonamide-Based Inhibitors of Biotin Protein Ligase as New Antibiotic Leads. ACS Chemical Biology, 2019, 14, 1990-1997.	3.4	5
34	An aldo-keto reductase with 2-keto-l-gulonate reductase activity functions in l-tartaric acid biosynthesis from vitamin C in Vitis vinifera. Journal of Biological Chemistry, 2019, 294, 15932-15946.	3.4	14
35	Obtaining Crystals of PPARÎ³ Ligand Binding Domain Bound to Small Molecules. Methods in Molecular Biology, 2019, 1966, 253-260.	0.9	3
36	The characterisation of two members of the cytochrome P450 CYP150 family: CYP150A5 and CYP150A6 from Mycobacterium marinum. Biochimica Et Biophysica Acta - General Subjects, 2019, 1863, 925-934.	2.4	4

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37	Unique Polypharmacology Nuclear Receptor Modulator Blocks Inflammatory Signaling Pathways. ACS Chemical Biology, 2019, 14, 1051-1062.	3.4	8
38	Shooting three inflammatory targets with a single bullet: Novel multi-targeting anti-inflammatory glitazones. European Journal of Medicinal Chemistry, 2019, 167, 562-582.	5.5	33
39	The role of N-terminal heterocycles in hydrogen bonding to Î±-chymotrypsin. Bioorganic and Medicinal Chemistry Letters, 2019, 29, 396-399.	2.2	2
40	Structure, Mechanism, and Inhibition of Aspergillus fumigatus Thioredoxin Reductase. Antimicrobial Agents and Chemotherapy, 2019, 63, .	3.2	28
41	Combining random microseed matrix screening and the magic triangle for the efficient structure solution of a potential lysin from bacteriophage P68. Acta Crystallographica Section D: Structural Biology, 2019, 75, 670-681.	2.3	3
42	Structural and functional characterisation of the cytochrome P450 enzyme CYP268A2 fromMycobacterium marinum. Biochemical Journal, 2018, 475, 705-722.	3.7	13
43	Structure ofAspergillus fumigatusCytosolic Thiolase: Trapped Tetrahedral Reaction Intermediates and Activation by Monovalent Cations. ACS Catalysis, 2018, 8, 1973-1989.	11.2	4
44	Crystal Structure of Bovine Alpha-Chymotrypsin in Space Group P65. Crystals, 2018, 8, 460.	2.2	4
45	Precipitantâ€“ligand exchange technique reveals the ADP binding mode inMycobacterium tuberculosisdethiobiotin synthetase. Acta Crystallographica Section D: Structural Biology, 2018, 74, 965-972.	2.3	5
46	Mycobacterium tuberculosis Dethiobiotin Synthetase Facilitates Nucleoside Triphosphate Promiscuity through Alternate Binding Modes. ACS Catalysis, 2018, 8, 10774-10783.	11.2	7
47	Chemical Crosslinking Mass Spectrometry Reveals the Conformational Landscape of the Activation Helix of PPARÎ³; a Model for Ligand-Dependent Antagonism. Structure, 2018, 26, 1431-1439.e6.	3.3	24
48	Cytochrome P450 CYP199A4 from Rhodopseudomonas palustris Catalyzes Heteroatom Dealkylations, Sulfoxidation, and Amide and Cyclic Hemiacetal Formation. ACS Catalysis, 2018, 8, 5915-5927.	11.2	27
49	Rational Design of a 310 -Helical PIP-Box Mimetic Targeting PCNA, the Human Sliding Clamp. Chemistry - A European Journal, 2018, 24, 11238-11238.	3.3	0
50	PPARÎ³ in Complex with an Antagonist and Inverse Agonist: a Tumble and Trap Mechanism of the Activation Helix. IScience, 2018, 5, 69-79.	4.1	40
51	Rational Design of a 3₁₀â€Helical PIPâ€Box Mimetic Targeting PCNA, the Human Sliding Clamp. Chemistry - A European Journal, 2018, 24, 11325-11331.	3.3	16
52	Structural and Dynamic Elucidation of a Non-acid PPARÎ³ Partial Agonist: SR1988. Nuclear Receptor Research, 2018, 5, .	2.5	5
53	Structure of the sliding clamp from the fungal pathogen Aspergillus fumigatus (Afum PCNA) and interactions with Human p21. FEBS Journal, 2017, 284, 985-1002.	4.7	11
54	Mechanisms Governing Precise Protein Biotinylation. Trends in Biochemical Sciences, 2017, 42, 383-394.	7.5	18

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55	X-ray crystal structure of rivoglitazone bound to PPARÎ³ and PPAR subtype selectivity of TZDs. Biochimica Et Biophysica Acta - General Subjects, 2017, 1861, 1981-1991.	2.4	15
56	Structureâ€“Activity Relationship of 2,4-Dichloro-N-(3,5-dichloro-4-(quinolin-3-yloxy)phenyl)benzenesulfonamide (INT131) Analogs for PPARÎ³-Targeted Antidiabetics. Journal of Medicinal Chemistry, 2017, 60, 4584-4593.	6.4	22
57	Expressing a moth abcc2 gene in transgenic Drosophila causes susceptibility to Bt Cry1Ac without requiring a cadherin-like protein receptor. Insect Biochemistry and Molecular Biology, 2017, 80, 61-70.	2.7	44
58	HDX reveals the conformational dynamics of DNA sequence specific VDR co-activator interactions. Nature Communications, 2017, 8, 923.	12.8	39
59	A mechanistic study on the inhibition of Î±-chymotrypsin by a macrocyclic peptidomimetic aldehyde. Organic and Biomolecular Chemistry, 2016, 14, 6970-6978.	2.8	11
60	PPARG Post-translational Modifications Regulate Bone Formation and Bone Resorption. EBioMedicine, 2016, 10, 174-184.	6.1	64
61	SR2067 Reveals a Unique Kinetic and Structural Signature for PPARÎ³ Partial Agonism. ACS Chemical Biology, 2016, 11, 273-283.	3.4	34
62	Review of the Structural and Dynamic Mechanisms of PPARÎ³Partial Agonism. PPAR Research, 2015, 2015, 1-15.	2.4	151
63	p21 Exploits Residue Tyr151 as a Tether for High-Affinity PCNA Binding. Biochemistry, 2015, 54, 3483-3493.	2.5	26
64	Pharmacological repression of PPARÎ³ promotes osteogenesis. Nature Communications, 2015, 6, 7443.	12.8	99
65	CYP199A4 catalyses the efficient demethylation and demethenylation of para-substituted benzoic acid derivatives. RSC Advances, 2015, 5, 52007-52018.	3.6	28
66	New insights into the evolutionary history of plant sorbitol dehydrogenase. BMC Plant Biology, 2015, 15, 101.	3.6	26
67	Structural mechanism for signal transduction in RXR nuclear receptor heterodimers. Nature Communications, 2015, 6, 8013.	12.8	101
68	Human Variants in the Neuronal Basic Helix-Loop-Helix/Per-Arnt-Sim (bHLH/PAS) Transcription Factor Complex NPAS4/ARNT2 Disrupt Function. PLoS ONE, 2014, 9, e85768.	2.5	22
69	Characterization of human variants in obesity-related SIM1 protein identifies a hot-spot for dimerization with the partner protein ARNT2. Biochemical Journal, 2014, 461, 403-412.	3.7	10
70	Structure, Activity, and Inhibition of the Carboxyltransferase Î²-Subunit of Acetyl Coenzyme A Carboxylase (AccD6) from Mycobacterium tuberculosis. Antimicrobial Agents and Chemotherapy, 2014, 58, 6122-6132.	3.2	18
71	Macrocyclic Protease Inhibitors with Reduced Peptide Character. Angewandte Chemie - International Edition, 2014, 53, 7828-7831.	13.8	26
72	Redefining the Role of the Quaternary Shift in Bacillus stearothermophilus Phosphofructokinase. Biochemistry, 2013, 52, 5421-5429.	2.5	5

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73	Rare variants in single-minded 1 (SIM1) are associated with severe obesity. Journal of Clinical Investigation, 2013, 123, 3042-3050.	8.2	135
74	Loss-of-function mutations in SIM1 contribute to obesity and Prader-Williâ€“like features. Journal of Clinical Investigation, 2013, 123, 3037-3041.	8.2	105
75	Structure of the Apo Form of Bacillus stearothermophilus Phosphofructokinase. Biochemistry, 2012, 51, 769-775.	2.5	8
76	Structure of the Mycobacterium tuberculosis <scp>d</scp> -Alanine: <scp>d</scp> -Alanine Ligase, a Target of the Antituberculosis Drug <scp>d</scp> -Cycloserine. Antimicrobial Agents and Chemotherapy, 2011, 55, 291-301.	3.2	121
77	Antidiabetic actions of a non-agonist PPARÎ³ ligand blocking Cdk5-mediated phosphorylation. Nature, 2011, 477, 477-481.	27.8	484
78	DNA binding alters coactivator interaction surfaces of the intact VDRâ€“RXR complex. Nature Structural and Molecular Biology, 2011, 18, 556-563.	8.2	185
79	The TB Structural Genomics Consortium: A decade of progress. Tuberculosis, 2011, 91, 155-172.	1.9	39
80	Coupling of receptor conformation and ligand orientation determine graded activity. Nature Chemical Biology, 2010, 6, 837-843.	8.0	121
81	Redefining the Role of the Quaternary Shift in the Allosteric Inhibition ofÂBacillus Stearothermophilus Phosphofructokinase. Biophysical Journal, 2010, 98, 39a.	0.5	0
82	Structural Insights into the Mechanism of the Allosteric Transitions of Mycobacterium tuberculosis cAMP Receptor Protein. Journal of Biological Chemistry, 2009, 284, 36581-36591.	3.4	39
83	NFÎºB selectivity of estrogen receptor ligands revealed by comparative crystallographic analyses. Nature Chemical Biology, 2008, 4, 241-247.	8.0	149
84	Prediction of the tissue-specificity of selective estrogen receptor modulators by using a single biochemical method. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 7171-7176.	7.1	87
85	Elemental Isomerism: A Boron-Nitrogen Surrogate for a Carbon-Carbon Double Bond Increases the Chemical Diversity of Estrogen Receptor Ligands. Chemistry and Biology, 2007, 14, 659-669.	6.0	66
86	Structural plasticity in the oestrogen receptor ligandâ€binding domain. EMBO Reports, 2007, 8, 563-568.	4.5	125
87	Structural plasticity in the oestrogen receptor ligandâ€binding domain. EMBO Reports, 2007, 8, 610-610.	4.5	1
88	Partial Agonists Activate PPARÎ³ Using a Helix 12 Independent Mechanism. Structure, 2007, 15, 1258-1271.	3.3	321
89	Structural and Thermodynamic Analysis of Human PCNA with Peptides Derived from DNA Polymerase-Î´ p66 Subunit and Flap Endonuclease-1. Structure, 2004, 12, 2209-2219.	3.3	190
90	JAK2 Alterations in Acute Lymphoblastic Leukemia: Molecular Insights for Superior Precision Medicine Strategies. Frontiers in Cell and Developmental Biology, 0, 10, .	3.7	11