Brian G Miller

List of Publications by Year
in descending order

38 papers	1,269 citations	331670 21 h-index	361022 35 g-index
39 all docs	39 docs citations	39 times ranked	1660 citing authors

#	Article	IF	Citations
1	Probing the 14-3-3 Isoform-Specificity Profile of Proteinâ€“Protein Interactions Stabilized by Fusicoccin A. ACS Omega, 2020, 5, 25029-25035.	3.5	8
2	Nanosecond-Timescale Dynamics and Conformational Heterogeneity in Human GCK Regulation and Disease. Biophysical Journal, 2020, 118, 1109-1118.	0.5	7
3	Analysis of Interactions Stabilized by Fusicoccin A Reveals an Expanded Suite of Potential 14â€“3â€“3 Binding Partners. ACS Chemical Biology, 2020, 15, 305-310.	3.4	11
4	Selenolysine: A New Tool for Traceless Isopeptide Bond Formation. Chemistry - A European Journal, 2020, 26, 4952-4957.	3.3	8
5	Vertical Investigations of Enzyme Evolution Using Ancestral Sequence Reconstruction. , 2020, , 640-653.		1
6	Molecular and cellular regulation of human glucokinase. Archives of Biochemistry and Biophysics, 2019, 663, 199-213.	3.0	89
7	Mechanistic Origins of Enzyme Activation in Human Glucokinase Variants Associated with Congenital Hyperinsulinism. Biochemistry, 2018, 57, 1632-1639.	2.5	11
8	Short Total Synthesis of [¹⁵N₅]-Cylindrospermopsins from ¹⁵NH₄Cl Enables Precise Quantification of Freshwater Cyanobacterial Contamination. Journal of the American Chemical Society, 2018, 140, 6027-6032.	13.7	28
9	Biliverdin Reductase B Dynamics Are Coupled to Coenzyme Binding. Journal of Molecular Biology, 2018, 430, 3234-3250.	4.2	22
10	Antidiabetic Disruptors of the Glucokinaseâ^'Glucokinase Regulatory Protein Complex Reorganize a Coulombic Interface. Biochemistry, 2017, 56, 3150-3157.	2.5	5
11	Biochemical and biophysical investigations of the interaction between human glucokinase and pro-apoptotic BAD. PLoS ONE, 2017, 12, e0171587.	2.5	6
12	Kinetic Basis of Carbohydrate-Mediated Inhibition of Human Glucokinase by the Glucokinase Regulatory Protein. Biochemistry, 2016, 55, 2899-2902.	2.5	4
13	Kinetic Cooperativity in Human Pancreatic Glucokinase Originates from Millisecond Dynamics of the Small Domain. Angewandte Chemie, 2015, 127, 8247-8250.	2.0	7
14	Kinetic Cooperativity in Human Pancreatic Glucokinase Originates from Millisecond Dynamics of the Small Domain. Angewandte Chemie - International Edition, 2015, 54, 8129-8132.	13.8	29
15	Conformational heterogeneity and intrinsic disorder in enzyme regulation: Glucokinase as a case study. Intrinsically Disordered Proteins, 2015, 3, e1011008.	1.9	10
16	Dual allosteric activation mechanisms in monomeric human glucokinase. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11553-11558.	7.1	46
17	Role of connecting loop I in catalysis and allosteric regulation of human glucokinase. Protein Science, 2014, 23, 915-922.	7.6	11
18	Structural Basis for Regulation of Human Glucokinase by Glucokinase Regulatory Protein. Biochemistry, 2013, 52, 6232-6239.	2.5	41

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19	Enantioselective synthesis of tatanans Aâ€“C and reinvestigation of their glucokinase-activating properties. Nature Chemistry, 2013, 5, 410-416.	13.6	48
20	Small-Molecule Allosteric Activation of Human Glucokinase in the Absence of Glucose. ACS Medicinal Chemistry Letters, 2013, 4, 580-584.	2.8	24
21	Enzyme recruitment and the evolution of new metabolic potential. FASEB Journal, 2013, 27, 203.2.	0.5	0
22	Orderâ€“Disorder Transitions Govern Kinetic Cooperativity and Allostery of Monomeric Human Glucokinase. PLoS Biology, 2012, 10, e1001452.	5.6	51
23	Homotropic allosteric regulation in monomeric mammalian glucokinase. Archives of Biochemistry and Biophysics, 2012, 519, 103-111.	3.0	35
24	Cooperativity in monomeric enzymes with single ligand-binding sites. Bioorganic Chemistry, 2012, 43, 44-50.	4.1	90
25	Evolutionary Bases of Carbohydrate Recognition and Substrate Discrimination in the ROK Protein Family. Journal of Molecular Evolution, 2010, 70, 545-556.	1.8	40
26	l-Glyceraldehyde 3-phosphate reductase from Escherichia coli is a heme binding protein. Bioorganic Chemistry, 2010, 38, 37-41.	4.1	1
27	Direct Evidence of Conformational Heterogeneity in Human Pancreatic Glucokinase from High-Resolution Nuclear Magnetic Resonance. Biochemistry, 2010, 49, 7969-7971.	2.5	29
28	Global Fit Analysis of Glucose Binding Curves Reveals a Minimal Model for Kinetic Cooperativity in Human Glucokinase. Biochemistry, 2010, 49, 8902-8911.	2.5	23
29	Activating Mutations in the Human Glucokinase Gene Revealed by Genetic Selection. Biochemistry, 2009, 48, 814-816.	2.5	25
30	23-Residue C-Terminal Î±-Helix Governs Kinetic Cooperativity in Monomeric Human Glucokinase. Biochemistry, 2009, 48, 6157-6165.	2.5	23
31	A Metabolic Bypass of the Triosephosphate Isomerase Reaction. Biochemistry, 2008, 47, 7983-7985.	2.5	23
32	Divergent Evolution of Function in the ROK Sugar Kinase Superfamily:â€‰ Role of Enzyme Loops in Substrate Specificity. Biochemistry, 2007, 46, 13564-13572.	2.5	30
33	OMP decarboxylaseâ€”An enigma persists. Bioorganic Chemistry, 2007, 35, 465-469.	4.1	29
34	The mutability of enzyme activeâ€site shape determinants. Protein Science, 2007, 16, 1965-1968.	7.6	10
35	Reconstitution of a Defunct Glycolytic Pathway via Recruitment of Ambiguous Sugar Kinasesâ€. Biochemistry, 2005, 44, 10776-10783.	2.5	42
36	Identifying Latent Enzyme Activities:Â Substrate Ambiguity within Modern Bacterial Sugar Kinasesâ€. Biochemistry, 2004, 43, 6387-6392.	2.5	86

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37	Catalytic Proficiency: The Unusual Case of OMP Decarboxylase. Annual Review of Biochemistry, 2002, 71, 847-885.	11.1	266
38	Dissecting a Charged Network at the Active Site of Orotidine-5â€²-phosphate Decarboxylase. Journal of Biological Chemistry, 2001, 276, 15174-15176.	3.4	50