Jurgen Sygusch

List of Publications by Year
in descending order

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59	1,768	236833	289141
papers	citations	25 h-index	40 g-index

60	60	60	2109
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Crystal Structures of DNA-Whirly Complexes and Their Role in Arabidopsis Organelle Genome Repair Â. Plant Cell, 2010, 22, 1849-1867.	3.1	116
2	Aldolase Is Essential for Energy Production and Bridging Adhesin-Actin Cytoskeletal Interactions during Parasite Invasion of Host Cells. Cell Host and Microbe, 2009, 5, 353-364.	5.1	110
3	Product binding and role of the C-terminal region in Class I D-fructose 1, 6-bisphosphate aldolase. Nature Structural and Molecular Biology, 1997, 4, 36-39.	3.6	108
4	A new family of plant transcription factors displays a novel ssDNA-binding surface. Nature Structural Biology, 2002, 9, 512-517.	9.7	90
5	Structureâ€"Function Profile of MmpL3, the Essential Mycolic Acid Transporter from Mycobacterium tuberculosis. ACS Infectious Diseases, 2016, 2, 702-713.	1.8	86
6	Novel active site in Escherichia coli fructose 1,6-bisphosphate aldolase. Nature Structural and Molecular Biology, 1996, 3, 856-862.	3.6	80
7	Glycolytic and Non-glycolytic Functions of Mycobacterium tuberculosis Fructose-1,6-bisphosphate Aldolase, an Essential Enzyme Produced by Replicating and Non-replicating Bacilli. Journal of Biological Chemistry, 2011, 286, 40219-40231.	1.6	69
8	Identification of the Binding Site of Brucella VirB8 Interaction Inhibitors. Chemistry and Biology, 2012, 19, 1041-1048.	6.2	62
9	High Resolution Reaction Intermediates of Rabbit Muscle Fructose-1,6-bisphosphate Aldolase. Journal of Biological Chemistry, 2005, 280, 27262-27270.	1.6	59
10	Crystal Structures of the Organomercurial Lyase MerB in Its Free and Mercury-bound Forms. Journal of Biological Chemistry, 2009, 284, 938-944.	1.6	49
11	A conserved lysine residue of plant Whirly proteins is necessary for higher order protein assembly and protection against DNA damage. Nucleic Acids Research, 2012, 40, 258-269.	6.5	48
12	Targeting a moonlighting function of aldolase induces apoptosis in cancer cells. Cell Death and Disease, 2019, 10, 712.	2.7	47
13	A Conserved Glutamate Residue Exhibits Multifunctional Catalytic Roles in d-Fructose-1,6-bisphosphate Aldolases. Journal of Biological Chemistry, 2002, 277, 9474-9483.	1.6	42
14	Expression, Purification, and Characterization of Natural Mutants of Human Aldolase B. Journal of Biological Chemistry, 2000, 275, 1145-1151.	1.6	40
15	MmpL3 as a Target for the Treatment of Drug-Resistant Nontuberculous Mycobacterial Infections. Frontiers in Microbiology, 2018, 9, 1547.	1.5	40
16	Inhibition of rabbit muscle aldolase by phosphorylated aromatic compounds. Biochemical Journal, 1997, 323, 71-77.	1.7	39
17	Structural Analysis and Inhibition of TraE from the pKM101 Type IV Secretion System. Journal of Biological Chemistry, 2016, 291, 23817-23829.	1.6	38
18	Selective Irreversible Inhibition of Fructose 1,6-Bisphosphate Aldolase fromTrypanosoma brucei. Journal of Medicinal Chemistry, 2006, 49, 1499-1502.	2.9	37

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19	Induced Fit Movements and Metal Cofactor Selectivity of Class II Aldolases. Journal of Biological Chemistry, 2004, 279, 11825-11833.	1.6	34
20	Mechanism of Aldolase Control of Sorting Nexin 9 Function in Endocytosis. Journal of Biological Chemistry, 2010, 285, 11983-11990.	1.6	32
21	Rational Design, Synthesis, and Evaluation of New Selective Inhibitors of Microbial Class II (Zinc) Tj ETQq1 1 0.784314 rgBT /Overlock	2.9	31
22	High resolution fast quantitative docking using fourier domain correlation techniques. Proteins: Structure, Function and Bioinformatics, 1997, 27, 493-506.	1.5	30
23	Crystal Structure of Reaction Intermediates in Pyruvate Class II Aldolase. Journal of Biological Chemistry, 2012, 287, 36208-36221.	1.6	30
24	Synthesis and Biochemical Evaluation of Selective Inhibitors of Classâ€...II Fructose Bisphosphate Aldolases: Towards New Synthetic Antibiotics. Chemistry - A European Journal, 2008, 14, 8521-8529.	1.7	28
25	Molecular Cloning, Expression, Purification, and Characterization of Fructose-1,6-bisphosphate Aldolase from Thermus aquaticus. Protein Expression and Purification, 2001, 21, 293-302.	0.6	27
26	Stereospecific Proton Transfer by a Mobile Catalyst in Mammalian Fructose-1,6-bisphosphate Aldolase. Journal of Biological Chemistry, 2007, 282, 31028-31037.	1.6	27
27	A Hydrophobic Pocket in the Active Site of Glycolytic Aldolase Mediates Interactions with Wiskott-Aldrich Syndrome Protein. Journal of Biological Chemistry, 2007, 282, 14309-14315.	1.6	26
28	Structure of a Class I Tagatose-1,6-bisphosphate Aldolase. Journal of Biological Chemistry, 2010, 285, 21143-21152.	1.6	22
29	Charge Stabilization and Entropy Reduction of Central Lysine Residues in Fructose-Bisphosphate Aldolase. Biochemistry, 2009, 48, 4528-4537.	1.2	21
30	Peptides Designed To Spatially Depict the Epstein-Barr Virus Major Virion Glycoprotein gp350 Neutralization Epitope Elicit Antibodies That Block Virus-Neutralizing Antibody 72A1 Interaction with the Native gp350 Molecule. Journal of Virology, 2015, 89, 4932-4941.	1.5	20
31	Analysis of Novel Interactions between Components of the Selenocysteine Biosynthesis Pathway, SEPHS1, SEPHS2, SEPSECS, and SECp43. Biochemistry, 2017, 56, 2261-2270.	1.2	20
32	Functional Characterization of an Extreme Thermophilic Class II Fructose-1,6-Bisphosphate Aldolase. FEBS Journal, 1996, 241, 243-248.	0.2	19
33	Protein crystallization in low gravity by step gradient diffusion method. Journal of Crystal Growth, 1996, 162, 167-172.	0.7	18
34	Hydroxynaphthaldehyde Phosphate Derivatives as Potent Covalent Schiff Base Inhibitors of Fructose-1,6-bisphosphate Aldolase. Biochemistry, 2005, 44, 5430-5443.	1.2	18
35	Active site remodeling during the catalytic cycle in metal-dependent fructose-1,6-bisphosphate aldolases. Journal of Biological Chemistry, 2018, 293, 7737-7753.	1.6	18
36	A family portrait: structural comparison of the Whirly proteins fromArabidopsis thalianaandSolanum tuberosum. Acta Crystallographica Section F: Structural Biology Communications, 2013, 69, 1207-1211.	0.7	17

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37	Fragment-based screening identifies inhibitors of ATPase activity and of hexamer formation of CagÎ± from the Helicobacter pylori type IV secretion system. Scientific Reports, 2019, 9, 6474.	1.6	16
38	Alteration of substrate specificity by a naturally-occurring aldolase B mutation (Ala337â†'Val) in fructose intolerance. Biochemical Journal, 1999, 340, 321-327.	1.7	15
39	Structural and Biochemical Characterization of a Copper-Binding Mutant of the Organomercurial Lyase MerB: Insight into the Key Role of the Active Site Aspartic Acid in Hgâ€"Carbon Bond Cleavage and Metal Binding Specificity. Biochemistry, 2016, 55, 1070-1081.	1.2	15
40	Allosteric communication in mammalian muscle aldolase. Biochemical Journal, 1997, 327, 717-720.	1.7	14
41	Separate synthesis and evaluation of glucitol bis-phosphate and mannitol bis-phosphate, as competitive inhibitors of fructose bis-phosphate aldolases. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 1735-1737.	1.0	12
42	Structural and Biochemical Characterization of Organotin and Organolead Compounds Binding to the Organomercurial Lyase MerB Provide New Insights into Its Mechanism of Carbonâ€"Metal Bond Cleavage. Journal of the American Chemical Society, 2017, 139, 910-921.	6.6	12
43	Carboxy-Terminus Recruitment Induced by Substrate Binding in Eukaryotic Fructose Bis-phosphate Aldolases,. Biochemistry, 2007, 46, 9533-9540.	1.2	11
44	A â€œDrug Sweepingâ€•State of the TriABC Triclosan Efflux Pump from Pseudomonas aeruginosa. Structure, 2021, 29, 261-274.e6.	1.6	11
45	Mosaic spread analysis of Canadian advanced protein crystallization experiment on the Russian space station, Mir. Journal of Crystal Growth, 2001, 232, 520-535.	0.7	8
46	Mannitol Bis-phosphate Based Inhibitors of Fructose 1,6-Bisphosphate Aldolases. ACS Medicinal Chemistry Letters, 2011, 2, 804-808.	1.3	8
47	Bisphosphonate Inhibitors of Mammalian Glycolytic Aldolase. Journal of Medicinal Chemistry, 2018, 61, 10558-10572.	2.9	8
48	Three-Dimensional Architecture of the L-Type Calcium Channel: Structural Insights into the CaVÎ±2Î´1 Auxiliary Protein. Biochemistry & Molecular Biology Journal, 2016, 02, .	0.3	7
49	Alteration of substrate specificity by a naturally-occurring aldolase B mutation (Ala337â†'Val) in fructose intolerance. Biochemical Journal, 1999, 340, 321.	1.7	6
50	Crystallization and preliminary X-ray crystallographic analysis of p24, a component of the potato nuclear factor PBF-2. Acta Crystallographica Section D: Biological Crystallography, 2002, 58, 296-298.	2.5	6
51	Isomer activation controls stereospecificity of class I fructose-1,6-bisphosphate aldolases. Journal of Biological Chemistry, 2017, 292, 19849-19860.	1.6	5
52	Crystallization and preliminary X-ray analysis of native and selenomethionine fructose-1,6-bisphosphate aldolase fromThermus aquaticus. Acta Crystallographica Section D: Biological Crystallography, 2001, 57, 310-313.	2.5	4
53	Purification, crystallization and preliminary X-ray diffraction analysis of the Whirly domain of StWhy2 in complex with single-stranded DNA. Acta Crystallographica Section F: Structural Biology Communications, 2008, 64, 1056-1059.	0.7	4
54	Subunit interaction in mammalian aldolases. Biochemical Journal, 1997, 323, 671-676.	1.7	3

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55	Magnetic space shuttle experiments. Journal of Magnetism and Magnetic Materials, 1999, 194, 96-101.	1.0	2
56	Purification, crystallization and preliminary X-ray analysis of native and selenomethionine class I tagatose-1,6-bisphosphate aldolase fromStreptococcus pyogenes. Acta Crystallographica Section D: Biological Crystallography, 2004, 60, 528-530.	2.5	2
57	Dramatic improvement of crystal quality for low-temperature-grown rabbit muscle aldolase. Acta Crystallographica Section F: Structural Biology Communications, 2010, 66, 595-600.	0.7	1
58	Maximal Activity of KcsA, Kirbac1.1 and Kir2.1 Channels are Differentially Regulated by Membrane Thickness. Biophysical Journal, 2014, 106, 543a.	0.2	0
59	Molecular Dynamics Simulations of Hydrophobic Matching in KcsA. Biophysical Journal, 2016, 110, 343a.	0.2	0