William M Atkins

List of Publications by Year
in descending order

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67 papers	2,262 citations	230014 27 h-index	263392 45 g-index
67 all docs	67 docs citations	67 times ranked	2710 citing authors

#	Article	IF	Citations
1	Long Range Communication between the Drug-Binding Sites and Nucleotide Binding Domains of the Efflux Transporter ABCB1. Biochemistry, 2022, 61, 730-740.	1.2	11
2	Probing interactions of therapeutic antibodies with serum via second virial coefficient measurements. Biophysical Journal, 2021, 120, 4067-4078.	0.2	3
3	Analytical and functional aspects of protein-ligand interactions: Beyond induced fit and conformational selection. Archives of Biochemistry and Biophysics, 2021, 714, 109064.	1.4	11
4	Cholesterol Asymmetrically Modulates the Conformational Ensemble of the Nucleotide-Binding Domains of P-Glycoprotein in Lipid Nanodiscs. Biochemistry, 2021, 60, 85-94.	1.2	15
5	Considerations for the Design of Antibody-Based Therapeutics. Journal of Pharmaceutical Sciences, 2020, 109, 74-103.	1.6	146
6	Design and characterization of novel dual Fc antibody with enhanced avidity for Fc receptors. Proteins: Structure, Function and Bioinformatics, 2020, 88, 689-697.	1.5	6
7	Mechanisms of promiscuity among drug metabolizing enzymes and drug transporters. FEBS Journal, 2020, 287, 1306-1322.	2.2	27
8	Multiple drug binding modes in Mycobacterium tuberculosis CYP51B1. Journal of Inorganic Biochemistry, 2020, 205, 110994.	1.5	3
9	Dynamics and Mechanism of Binding of Androstenedione to Membrane-Associated Aromatase. Biochemistry, 2020, 59, 2999-3009.	1.2	10
10	Dynamics and Location of the Allosteric Midazolam Site in Cytochrome P4503A4 in Lipid Nanodiscs. Biochemistry, 2020, 59, 766-779.	1.2	31
11	Hydrogen-deuterium exchange mass spectrometry of membrane proteins in lipid nanodiscs. Chemistry and Physics of Lipids, 2019, 220, 14-22.	1.5	25
12	Preparation of Lipid Nanodiscs with Lipid Mixtures. Current Protocols in Protein Science, 2019, 98, e100.	2.8	19
13	CW EPR parameters reveal cytochrome P450 ligand binding modes. Journal of Inorganic Biochemistry, 2018, 183, 157-164.	1.5	12
14	Conformational dynamics of P-glycoprotein in lipid nanodiscs and detergent micelles reveal complex motions on a wide time scale. Journal of Biological Chemistry, 2018, 293, 6297-6307.	1.6	40
15	Kinetic mechanism of controlled Fab-arm exchange for the formation of bispecific immunoglobulin G1 antibodies. Journal of Biological Chemistry, 2018, 293, 651-661.	1.6	10
16	Toward a Combinatorial Approach for the Prediction of IgG Half-Life and Clearance. Drug Metabolism and Disposition, 2018, 46, 1900-1907.	1.7	12
17	Human kidney on a chip assessment of polymyxin antibiotic nephrotoxicity. JCI Insight, 2018, 3, .	2.3	60
18	Diffusion of Soluble Aggregates of THIOMABs and Bispecific Antibodies in Serum. Biochemistry, 2017, 56, 2251-2260.	1.2	1

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19	Differential Coupling of Binding, ATP Hydrolysis, and Transport of Fluorescent Probes with P-Glycoprotein in Lipid Nanodiscs. Biochemistry, 2017, 56, 2506-2517.	1.2	21
20	Heme Binding Biguanides Target Cytochrome P450-Dependent Cancer Cell Mitochondria. Cell Chemical Biology, 2017, 24, 1259-1275.e6.	2.5	35
21	The Myeloablative Drug Busulfan Converts Cysteine to Dehydroalanine and Lanthionine in Redoxins. Biochemistry, 2016, 55, 4720-4730.	1.2	13
22	Membrane Fluidity Modulates Thermal Stability and Ligand Binding of Cytochrome P4503A4 in Lipid Nanodiscs. Biochemistry, 2016, 55, 6258-6268.	1.2	27
23	Membrane Interactions, Ligand-Dependent Dynamics, and Stability of Cytochrome P4503A4 in Lipid Nanodiscs. Biochemistry, 2016, 55, 1058-1069.	1.2	41
24	Supporting data for characterization of the busulfan metabolite EdAG and the Glutaredoxins that it adducts. Data in Brief, 2015, 5, 161-170.	0.5	8
25	Assembly and characterization of gp160-nanodiscs: A new platform for biochemical characterization of HIV envelope spikes. Journal of Virological Methods, 2015, 226, 15-24.	1.0	7
26	Applications of Lipid Nanodiscs for the Study of Membrane Proteins by Surface Plasmon Resonance. Current Protocols in Protein Science, 2015, 81, 29.13.1-29.13.16.	2.8	15
27	Comparison of epsilon- and delta-class glutathione<i>S</i>-transferases: the crystal structures of the glutathione<i>S</i>-transferases DmGSTE6 and DmGSTE7 from<i>Drosophila melanogaster</i>. Acta Crystallographica Section D: Biological Crystallography, 2015, 71, 2089-2098.	2.5	9
28	The busulfan metabolite EdAG irreversibly glutathionylates glutaredoxins. Archives of Biochemistry and Biophysics, 2015, 583, 96-104.	1.4	23
29	Biological messiness vs. biological genius: Mechanistic aspects and roles of protein promiscuity. Journal of Steroid Biochemistry and Molecular Biology, 2015, 151, 3-11.	1.2	40
30	Enzymatic Detoxication, Conformational Selection, and the Role of Molten Globule Active Sites. Journal of Biological Chemistry, 2013, 288, 18599-18611.	1.6	41
31	Impact of linker and conjugation chemistry on antigen binding, Fc receptor binding and thermal stability of model antibody-drug conjugates. MAbs, 2012, 4, 362-372.	2.6	101
32	Stochastic Ensembles, Conformationally Adaptive Teamwork, and Enzymatic Detoxification. Biochemistry, 2011, 50, 3866-3872.	1.2	7
33	Allosteric Activation of Cytochrome P450 3A4 by Î±-Naphthoflavone: Branch Point Regulation Revealed by Isotope Dilution Analysis. Biochemistry, 2011, 50, 10041-10051.	1.2	41
34	The Structural Basis for Homotropic and Heterotropic Cooperativity of Midazolam Metabolism by Human Cytochrome P450 3A4. Biochemistry, 2011, 50, 10804-10818.	1.2	60
35	Interactions of glutathione transferases with 4-hydroxynonenal. Drug Metabolism Reviews, 2011, 43, 165-178.	1.5	86
36	Catalytic versus Inhibitory Promiscuity in Cytochrome P450s: Implications for Evolution of New Function. Biochemistry, 2011, 50, 2387-2393.	1.2	26

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37	Ensemble Perspective for Catalytic Promiscuity. Journal of Biological Chemistry, 2011, 286, 42770-42776.	1.6	26
38	Substrate Specificity Combined with Stereopromiscuity in Glutathione Transferase A4-4-Dependent Metabolism of 4-Hydroxynonenal. Biochemistry, 2010, 49, 1541-1548.	1.2	36
39	Structural Analysis of a Glutathione Transferase A1-1 Mutant Tailored for High Catalytic Efficiency with Toxic Alkenals. Biochemistry, 2009, 48, 7698-7704.	1.2	24
40	Allosteric Effects on Substrate Dissociation from Cytochrome P450 3A4 in Nanodiscs Observed by Ensemble and Single-Molecule Fluorescence Spectroscopy. Journal of the American Chemical Society, 2008, 130, 15746-15747.	6.6	37
41	A Quantitative Index of Substrate Promiscuity. Biochemistry, 2008, 47, 157-166.	1.2	87
42	The Stereochemical Course of 4-Hydroxy-2-nonenal Metabolism by Glutathione S-Transferases. Journal of Biological Chemistry, 2008, 283, 16702-16710.	1.6	35
43	Stereochemical aspects regarding the detoxification of the 4â€hydroxynonenal enantiomers by human glutathione Sâ€transferase A4â€4. FASEB Journal, 2008, 22, 920.7.	0.2	0
44	Ligand Binding to Cytochrome P450 3A4 in Phospholipid Bilayer Nanodiscs. Journal of Biological Chemistry, 2007, 282, 28309-28320.	1.6	66
45	Functional Promiscuity Correlates with Conformational Heterogeneity in A-class Glutathione S-Transferases. Journal of Biological Chemistry, 2007, 282, 23264-23274.	1.6	62
46	Current views on the fundamental mechanisms of cytochrome P450 allosterism. Expert Opinion on Drug Metabolism and Toxicology, 2006, 2, 573-579.	1.5	40
47	NMR Studies of Ligand Binding to P450eryFProvides Insight into the Mechanism of Cooperativityâ€. Biochemistry, 2006, 45, 1673-1684.	1.2	25
48	NON-MICHAELIS-MENTEN KINETICS IN CYTOCHROME P450-CATALYZED REACTIONS. Annual Review of Pharmacology and Toxicology, 2005, 45, 291-310.	4.2	172
49	Implications of the allosteric kinetics of cytochrome P450s. Drug Discovery Today, 2004, 9, 478-484.	3.2	54
50	Is There a Toxicological Advantage for Non-hyperbolic Kinetics in Cytochrome P450 Catalysis?. Journal of Biological Chemistry, 2002, 277, 33258-33266.	1.6	27
51	Self-Assembly and Gelation of Oxidized Glutathione in Organic Solvents. Journal of the American Chemical Society, 2001, 123, 4408-4413.	6.6	90
52	The C-Terminus of GlutathioneS-Transferase A1-1 Is Required for Entropically-Driven Ligand Bindingâ€. Biochemistry, 2001, 40, 3536-3543.	1.2	27
53	Contribution of Aromaticâˆ'Aromatic Interactions to the Anomalous pKaof Tyrosine-9 and the C-Terminal Dynamics of GlutathioneS-Transferase A1-1â€. Biochemistry, 2001, 40, 10614-10624.	1.2	44
54	Allosteric Behavior in Cytochrome P450-Dependent in Vitro Drugâˆ'Drug Interactions:â€‰ A Prospective Based on Conformational Dynamics. Chemical Research in Toxicology, 2001, 14, 338-347.	1.7	105

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55	Localization of the C-terminus of rat glutathione S-transferase A1-1: Crystal structure of mutants W21F and W21F/F220Y. Proteins: Structure, Function and Bioinformatics, 2001, 42, 192-200.	1.5	28
56	The Catalytic Tyr-9 of Glutathione S-Transferase A1-1 Controls the Dynamics of the C terminus. Journal of Biological Chemistry, 2000, 275, 17447-17451.	1.6	34
57	Stress Survival of a Genetically Engineered Pseudomonas in Soil Slurries: Cytochrome P-450cam-Catalyzed Dehalogenation of Chlorinated Hydrocarbons. Biotechnology Progress, 1999, 15, 958-962.	1.3	9
58	Stopped-Flow Kinetic Analysis of the Ligand-Induced Coilâˆ'Helix Transition in Glutathione S-Transferase A1-1:â€‰ Evidence for a Persistent Denatured State. Biochemistry, 1999, 38, 6971-6980.	1.2	41
59	Engineering Out Motion:â€‰ Introduction of a de Novo Disulfide Bond and a Salt Bridge Designed To Close a Dynamic Cleft on the Surface of Cytochrome b5. Biochemistry, 1999, 38, 5054-5064.	1.2	21
60	Contribution of Linear Free Energy Relationships to Isozyme- and pH-Dependent Substrate Selectivity of Glutathione S-Transferases:Â Comparison of Model Studies and Enzymatic Reactions. Journal of the American Chemical Society, 1998, 120, 6651-6660.	6.6	14
61	Thiol Ester Hydrolysis Catalyzed by GlutathioneS-Transferase A1-1â€. Biochemistry, 1998, 37, 14948-14957.	1.2	17
62	The Locally Denatured State of Glutathione S-Transferase Al-1: Transition State Analysis of Ligand-dependent Formation of the C-Terminal Helix. , 1998, , 554-65.		1
63	Pressureâ€dependent ionization of Tyr 9 in glutathione Sâ€transferase A1â€1: Contribution of the Câ€terminal helix to a â€œsoftâ€active site. Protein Science, 1997, 6, 873-881.	3.1	21
64	Ligand Effects on the Fluorescence Properties of Tyrosine-9 in Alpha 1-1 GlutathioneS-Transferaseâ€. Biochemistry, 1996, 35, 6745-6753.	1.2	44
65	Luciferase-Dependent, Cytochrome P-450-Catalyzed Dehalogenation in Genetically Engineered Pseudomonas. Biotechnology Progress, 1996, 12, 474-479.	1.3	7
66	Timeâ€resolved fluorescence and computational studies of adenylylated glutamine synthetase: Analysis of intersubunit interactions. Protein Science, 1993, 2, 800-813.	3.1	5
67	Fluorescence characterization of Trp 21 in rat glutathione Sâ€transferase 1â€"1: Microconformational changes induced by Sâ€hexyl glutathione. Protein Science, 1993, 2, 2085-2094.	3.1	20