Grover P Miller

List of Publications by Year
in descending order

72 papers	1,989 citations	279487 23 h-index	264894 42 g-index
75 all docs	75 docs citations	75 times ranked	1954 citing authors

#	Article	IF	Citations
1	Elucidation of Distinct Ligand Binding Sites for Cytochrome P450 3A4. Biochemistry, 2000, 39, 5929-5939.	1.2	232
2	Rate-Determining Steps in Phenacetin Oxidations by Human Cytochrome P450 1A2 and Selected Mutants. Biochemistry, 2000, 39, 11319-11329.	1.2	135
3	Modeling Epoxidation of Drug-like Molecules with a Deep Machine Learning Network. ACS Central Science, 2015, 1, 168-180.	5.3	130
4	Characterization of Human Hepatic and Extrahepatic UDP-Glucuronosyltransferase Enzymes Involved in the Metabolism of Classic Cannabinoids. Drug Metabolism and Disposition, 2009, 37, 1496-1504.	1.7	129
5	Modeling Reactivity to Biological Macromolecules with a Deep Multitask Network. ACS Central Science, 2016, 2, 529-537.	5.3	76
6	Site of Reactivity Models Predict Molecular Reactivity of Diverse Chemicals with Glutathione. Chemical Research in Toxicology, 2015, 28, 797-809.	1.7	70
7	Diversity in the Oxidation of Substrates by Cytochrome P450 2D6:Â Lack of an Obligatory Role of Aspartate 301â^'Substrate Electrostatic Bondingâ€. Biochemistry, 2002, 41, 11025-11034.	1.2	69
8	Binding and Oxidation of Alkyl 4-Nitrophenyl Ethers by Rabbit Cytochrome P450 1A2:Â Evidence for Two Binding Sitesâ€. Biochemistry, 2001, 40, 7262-7272.	1.2	64
9	CYP2E1 Substrate Inhibition. Journal of Biological Chemistry, 2008, 283, 3487-3496.	1.6	64
10	Oxidation of Methoxyphenethylamines by Cytochrome P450 2D6. Journal of Biological Chemistry, 2002, 277, 33711-33719.	1.6	54
11	Oxidations ofp-Alkoxyacylanilides Catalyzed by Human Cytochrome P450 1A2: Structureâ^'Activity Relationships and Simulation of Rate Constants of Individual Steps in Catalysisâ€. Biochemistry, 2001, 40, 4521-4530.	1.2	41
12	Assessing Cytochrome P450 and UDP-Glucuronosyltransferase Contributions to Warfarin Metabolism in Humans. Chemical Research in Toxicology, 2009, 22, 1239-1245.	1.7	41
13	Novel multi-mode ultra performance liquid chromatographyâ€“tandem mass spectrometry assay for profiling enantiomeric hydroxywarfarins and warfarin in human plasma. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2011, 879, 1056-1062.	1.2	41
14	Glucuronidation of Monohydroxylated Warfarin Metabolites by Human Liver Microsomes and Human Recombinant UDP-Glucuronosyltransferases. Journal of Pharmacology and Experimental Therapeutics, 2008, 324, 139-148.	1.3	39
15	Oxidation of Phenethylamine Derivatives by Cytochrome P450 2D6:â€‰ The Issue of Substrate Protonation in Binding and Catalysis. Biochemistry, 2001, 40, 14215-14223.	1.2	37
16	Metabolism of R- and S-Warfarin by CYP2C19 into Four Hydroxywarfarins. Drug Metabolism Letters, 2013, 6, 157-164.	0.5	36
17	Hydroxywarfarin Metabolites Potently Inhibit CYP2C9 Metabolism of S-Warfarin. Chemical Research in Toxicology, 2010, 23, 939-945.	1.7	35
18	Machine learning liver-injuring drug interactions with non-steroidal anti-inflammatory drugs (NSAIDs) from a retrospective electronic health record (EHR) cohort. PLoS Computational Biology, 2021, 17, e1009053.	1.5	33

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19	Computational Approach to Structural Alerts: Furans, Phenols, Nitroaromatics, and Thiophenes. Chemical Research in Toxicology, 2017, 30, 1046-1059.	1.7	32
20	Global Analysis of Proteinâ˜'Protein Interactions Reveals Multiple CYP2E1â˜'Reductase Complexes. Biochemistry, 2007, 46, 10192-10201.	1.2	31
21	Computationally Assessing the Bioactivation of Drugs by N-Dealkylation. Chemical Research in Toxicology, 2018, 31, 68-80.	1.7	30
22	Advances in the interpretation and prediction of CYP2E1 metabolism from a biochemical perspective. Expert Opinion on Drug Metabolism and Toxicology, 2008, 4, 1053-1064.	1.5	29
23	Kynurenine Signaling Increases DNA Polymerase Kappa Expression and Promotes Genomic Instability in Glioblastoma Cells. Chemical Research in Toxicology, 2016, 29, 101-108.	1.7	27
24	CYP2E1 active site residues in substrate recognition sequence 5 identified by photoaffinity labeling and homology modeling. Archives of Biochemistry and Biophysics, 2007, 459, 59-69.	1.4	24
25	Warfarin and UDP-glucuronosyltransferases: writing a new chapter of metabolism. Drug Metabolism Reviews, 2010, 42, 55-61.	1.5	24
26	CYP2E1 hydroxylation of aniline involves negative cooperativity. Biochemical Pharmacology, 2014, 87, 523-533.	2.0	23
27	Assays and applications in warfarin metabolism: what we know, how we know it and what we need to know. Expert Opinion on Drug Metabolism and Toxicology, 2011, 7, 857-874.	1.5	22
28	4-Methyl-1,2,3-Triazoles as N-Acetyl-Lysine Mimics Afford Potent BET Bromodomain Inhibitors with Improved Selectivity. Journal of Medicinal Chemistry, 2021, 64, 10497-10511.	2.9	22
29	Beta sheet 2â€"alpha helix C loop of cytochrome P450 reductase serves as a docking site for redox partners. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2010, 1804, 1285-1293.	1.1	21
30	The Role of ERp44 in Maturation of Serotonin Transporter Protein. Journal of Biological Chemistry, 2012, 287, 17801-17811.	1.6	21
31	Toxicological implications of mitochondrial localization of CYP2E1. Toxicology Research, 2017, 6, 273-289.	0.9	21
32	CYP2E1 Metabolism of Styrene Involves Allostery. Drug Metabolism and Disposition, 2012, 40, 1976-1983.	1.7	19
33	Subcellular localization of rat CYP2E1 impacts metabolic efficiency toward common substrates. Toxicology, 2015, 338, 47-58.	2.0	18
34	1,3-Butadiene-induced mitochondrial dysfunction is correlated with mitochondrial CYP2E1 activity in Collaborative Cross mice. Toxicology, 2017, 378, 114-124.	2.0	18
35	Lamisil (terbinafine) toxicity: Determining pathways to bioactivation through computational and experimental approaches. Biochemical Pharmacology, 2018, 156, 10-21.	2.0	17
36	The First Aspartic Acid of the DQxD Motif for Human UDP-Glucuronosyltransferase 1A10 Interacts with UDP-Glucuronic Acid during Catalysis. Drug Metabolism and Disposition, 2008, 36, 517-522.	1.7	16

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37	Contribution of Three CYP3A Isoforms to Metabolism of R- and S-Warfarin. Drug Metabolism Letters, 2010, 4, 213-219.	0.5	16
38	Dual mechanisms suppress meloxicam bioactivation relative to sudoxicam. Toxicology, 2020, 440, 152478.	2.0	16
39	Thermal inactivation of the reductase domain of cytochrome P450 BM3. Archives of Biochemistry and Biophysics, 2005, 439, 165-174.	1.4	15
40	Structure of pyrazole derivatives impact their affinity, stoichiometry, and cooperative interactions for CYP2E1 complexes. Archives of Biochemistry and Biophysics, 2013, 537, 12-20.	1.4	14
41	Structural basis for cooperative binding of azoles to CYP2E1 as interpreted through guided molecular dynamics simulations. Journal of Molecular Graphics and Modelling, 2015, 56, 43-52.	1.3	14
42	Identification of Hydroxywarfarin Binding Site in Human UDP Glucuronosyltransferase 1A10: Phenylalanine90 Is Crucial for the Glucuronidation of 6- and 7-Hydroxywarfarin but Not 8-Hydroxywarfarin. Drug Metabolism and Disposition, 2008, 36, 2211-2218.	1.7	13
43	Comprehensive kinetic and modeling analyses revealed CYP2C9 and 3A4 determine terbinafine metabolic clearance and bioactivation. Biochemical Pharmacology, 2019, 170, 113661.	2.0	13
44	Cooperativity in CYP2E1 metabolism of acetaminophen and styrene mixtures. Biochemical Pharmacology, 2015, 97, 341-349.	2.0	12
45	Stereospecific Metabolism ofR- andS-Warfarin by Human Hepatic Cytosolic Reductases. Drug Metabolism and Disposition, 2017, 45, 1000-1007.	1.7	12
46	CYP2C19 and 3A4 Dominate Metabolic Clearance and Bioactivation of Terbinafine Based on Computational and Experimental Approaches. Chemical Research in Toxicology, 2019, 32, 1151-1164.	1.7	12
47	Meloxicam methyl group determines enzyme specificity for thiazole bioactivation compared to sudoxicam. Toxicology Letters, 2021, 338, 10-20.	0.4	12
48	Cooperative effects for CYP2E1 differ between styrene and its metabolites. Xenobiotica, 2013, 43, 755-764.	0.5	10
49	Biotransformation and bioactivation reactions â€“ 2017 literature highlights. Drug Metabolism Reviews, 2018, 50, 221-255.	1.5	9
50	Predicting CYP2C19 catalytic parameters for enantioselective oxidations using artificial neural networks and a chirality code. Bioorganic and Medicinal Chemistry, 2013, 21, 3749-3759.	1.4	8
51	Multiple UDP-glucuronosyltransferases in human liver microsomes glucuronidate both R- and S-7-hydroxywarfarin into two metabolites. Archives of Biochemistry and Biophysics, 2014, 564, 244-253.	1.4	8
52	Inhibitory potency of 4-carbon alkanes and alkenes toward CYP2E1 activity. Toxicology, 2014, 318, 51-58.	2.0	7
53	Significance of Multiple Bioactivation Pathways for Meclofenamate as Revealed through Modeling and Reaction Kinetics. Drug Metabolism and Disposition, 2021, 49, 133-141.	1.7	7
54	A Time-Embedding Network Models the Ontogeny of 23 Hepatic Drug Metabolizing Enzymes. Chemical Research in Toxicology, 2019, 32, 1707-1721.	1.7	6

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55	Biotransformation and bioactivation reactions â€“ 2018 literature highlights. Drug Metabolism Reviews, 2019, 51, 121-161.	1.5	6
56	Novel advances in biotransformation and bioactivation researchâ€”2019 year in review. Drug Metabolism Reviews, 2020, 52, 333-365.	1.5	5
57	Impacts of diphenylamine NSAID halogenation on bioactivation risks. Toxicology, 2021, 458, 152832.	2.0	5
58	CYP2C9 and 3A4 play opposing roles in bioactivation and detoxification of diphenylamine NSAIDs. Biochemical Pharmacology, 2021, 194, 114824.	2.0	5
59	Differences in butadiene adduct formation between rats and mice not due to selective inhibition of CYP2E1 by butadiene metabolites. Toxicology Letters, 2013, 223, 221-227.	0.4	4
60	Novel isomeric metabolite profiles correlate with warfarin metabolism phenotype during maintenance dosing in a pilot study of 29 patients. Blood Coagulation and Fibrinolysis, 2018, 29, 602-612.	0.5	4
61	Regioselectivity significantly impacts microsomal glucuronidation efficiency of R/S-6, 7-, and 8-hydroxywarfarin. Xenobiotica, 2019, 49, 397-403.	0.5	4
62	Novel advances in biotransformation and bioactivation research â€“ 2020 year in review. Drug Metabolism Reviews, 2021, 53, 384-433.	1.5	4
63	Bioactivation of Isoxazole-Containing Bromodomain and Extra-Terminal Domain (BET) Inhibitors. Metabolites, 2021, 11, 390.	1.3	3
64	Significance of Competing Metabolic Pathways for 5F-APINACA Based on Quantitative Kinetics. Molecules, 2020, 25, 4820.	1.7	2
65	The glucuronidation of native and oxidized estrogens can be effectively inhibited by compounds structurally related to UDPâ€glucuronic acid in human recombinant UGT1A10. FASEB Journal, 2009, 23, 750.2.	0.2	1
66	Discovery of Novel Reductive Elimination Pathway for 10-Hydroxywarfarin. Frontiers in Pharmacology, 2021, 12, 805133.	1.6	1
67	Erratum to â€œNovel multi-mode ultra performance liquid chromatographyâ€“tandem mass spectrometry assay for profiling enantiomeric hydroxywarfarins and warfarin in human plasmaâ€•[J. Chromatogr. B 879 (2011) 1056â€“1062]. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2013, 919-920, 61.	1.2	0
68	CYP2E1 substrate inhibition. MECHANISTIC INTERPRETATION THROUGH AN EFFECTOR SITE FOR MONOCYCLIC COMPOUNDS.. Journal of Biological Chemistry, 2013, 288, 32640.	1.6	0
69	P151 - Bioactivation of halogenated aromatic drugs into quinone metabolites as precursors to drug-induced hepatotoxicity. Drug Metabolism and Pharmacokinetics, 2020, 35, S68.	1.1	0
70	Formation of Multiple CYP2E1 Complexes Affects Activity. FASEB Journal, 2006, 20, A460.	0.2	0
71	Comparative characterization of UDPâ€glucuronic acid (UDPâ€GlcUA) bindingâ€site directed inhibitors with human UGT2B7 and 1A10.. FASEB Journal, 2009, 23, 750.4.	0.2	0
72	Characterization of mutation in the 395 DQxD 398 motif of the glucuronic acid binding site in human UGT1A6: Comparison to UGT1A10. FASEB Journal, 2009, 23, 750.5.	0.2	0