Joseph W Polli

List of Publications by Citations

51 papers	6,118 citations	34 h-index	55 g-index
55 ext. papers	6,562 ext. citations	6.2 avg, IF	4.68 L-index

#	Paper	IF	Citations
51	Membrane transporters in drug development. *Nature Reviews Drug Discovery*, **2010**, 9, 215-36	64.1	2464
50	Passive permeability and P-glycoprotein-mediated efflux differentiate central nervous system (CNS) and non-CNS marketed drugs. *Journal of Pharmacology and Experimental Therapeutics*, **2002**, 303, 1029-37	4.7	512
49	In vitro p-glycoprotein inhibition assays for assessment of clinical drug interaction potential of new drug candidates: a recommendation for probe substrates. *Drug Metabolism and Disposition*, **2006**, 34, 786-92	4	235
48	An unexpected synergist role of P-glycoprotein and breast cancer resistance protein on the central nervous system penetration of the tyrosine kinase inhibitor lapatinib (N-{3-chloro-4-[(3-fluorobenzyl)oxy]phenyl}-6-[5-({[2-(methylsulfonyl)ethyl]amino}methyl)-2-furyl]-4-quinazolinamine; GW572016). *Drug Metabolism and Disposition*, **2009**, 37, 439-42	4	214
47	The role of efflux and uptake transporters in [N-{3-chloro-4-[(3-fluorobenzyl)oxy]phenyl}-6-[5-({[2-(methylsulfonyl)ethyl]amino}methyl)-2-furyl]-4-quinazolinamine (GW572016, lapatinib) disposition and drug interactions. *Drug Metabolism and Disposition*, **2008**, 36, 695-701	4	211
46	Role of P-glycoprotein on the CNS disposition of amprenavir (141W94), an HIV protease inhibitor. *Pharmaceutical Research*, **1999**, 16, 1206-12	4.5	188
45	Vitamin E-TPGS increases absorption flux of an HIV protease inhibitor by enhancing its solubility and permeability. *Pharmaceutical Research*, **1999**, 16, 1812-7	4.5	170
44	Lapatinib distribution in HER2 overexpressing experimental brain metastases of breast cancer. *Pharmaceutical Research*, **2012**, 29, 770-81	4.5	163
43	In vitro investigations into the roles of drug transporters and metabolizing enzymes in the disposition and drug interactions of dolutegravir, a HIV integrase inhibitor. *Drug Metabolism and Disposition*, **2013**, 41, 353-61	4	155
42	Influence of passive permeability on apparent P-glycoprotein kinetics. *Pharmaceutical Research*, **2000**, 17, 1456-60	4.5	102
41	Predicting P-glycoprotein substrates by a quantitative structure-activity relationship model. *Journal of Pharmaceutical Sciences*, **2004**, 93, 957-68	3.9	92
40	Breast cancer resistance protein (ABCG2) in clinical pharmacokinetics and drug interactions: practical recommendations for clinical victim and perpetrator drug-drug interaction study design. *Drug Metabolism and Disposition*, **2015**, 43, 490-509	4	91
39	P-glycoprotein-mediated transport of morphine in brain capillary endothelial cells. *Biochemical Pharmacology*, **1999**, 58, 951-7	6	90
38	Biopharmaceutics classification system: validation and learnings of an in vitro permeability assay. *Molecular Pharmaceutics*, **2009**, 6, 11-8	5.6	75
37	P-glycoprotein influences the brain concentrations of cetirizine (Zyrtec), a second-generation non-sedating antihistamine. *Journal of Pharmaceutical Sciences*, **2003**, 92, 2082-9	3.9	70
36	Expression of the calmodulin-dependent protein phosphatase, calcineurin, in rat brain: developmental patterns and the role of nigrostriatal innervation. *Developmental Brain Research*, **1991**, 63, 105-19		68
35	Central nervous system disposition and metabolism of Fosdevirine (GSK2248761), a non-nucleoside reverse transcriptase inhibitor: an LC-MS and Matrix-assisted laser desorption/ionization imaging MS investigation into central nervous system toxicity. *Chemical Research in Toxicology*, **2013**, 26, 241-51	4	62

34	Multiple mechanisms are involved in the biliary excretion of acetaminophen sulfate in the rat: role of Mrp2 and Bcrp1. *Drug Metabolism and Disposition*, **2005**, 33, 1158-65	4	61
33	PhRMA white paper on ADME pharmacogenomics. *Journal of Clinical Pharmacology*, **2008**, 48, 849-89	2.9	58
32	Steady-state brain concentrations of antihistamines in rats: interplay of membrane permeability, P-glycoprotein efflux and plasma protein binding. *Pharmacology*, **2004**, 72, 92-8	2.3	58
31	Toxicity and toxicokinetics of metformin in rats. *Toxicology and Applied Pharmacology*, **2010**, 243, 340-7	4.6	57
30	The elementary mass action rate constants of P-gp transport for a confluent monolayer of MDCKII-hMDR1 cells. *Biophysical Journal*, **2005**, 88, 715-38	2.9	57
29	Exact kinetic analysis of passive transport across a polarized confluent MDCK cell monolayer modeled as a single barrier. *Journal of Pharmaceutical Sciences*, **2004**, 93, 2108-23	3.9	54
28	Midazolam exhibits characteristics of a highly permeable P-glycoprotein substrate. *Pharmaceutical Research*, **2003**, 20, 757-64	4.5	53
27	Disease-Associated Changes in Drug Transporters May Impact the Pharmacokinetics and/or Toxicity of Drugs: A White Paper From the International Transporter Consortium. *Clinical Pharmacology and Therapeutics*, **2018**, 104, 900-915	6.1	53
26	Kinetic identification of membrane transporters that assist P-glycoprotein-mediated transport of digoxin and loperamide through a confluent monolayer of MDCKII-hMDR1 cells. *Drug Metabolism and Disposition*, **2008**, 36, 452-60	4	51
25	The steady-state Michaelis-Menten analysis of P-glycoprotein mediated transport through a confluent cell monolayer cannot predict the correct Michaelis constant Km. *Pharmaceutical Research*, **2005**, 22, 1667-77	4.5	48
24	Oral sulfasalazine as a clinical BCRP probe substrate: pharmacokinetic effects of genetic variation (C421A) and pantoprazole coadministration. *Journal of Pharmaceutical Sciences*, **2010**, 99, 1046-62	3.9	44
23	Understanding the transport properties of metabolites: case studies and considerations for drug development. *Drug Metabolism and Disposition*, **2014**, 42, 650-64	4	42
22	Prospective CYP2D6 genotyping as an exclusion criterion for enrollment of a phase III clinical trial. *Pharmacogenetics and Genomics*, **2000**, 10, 583-90		39
21	Evaluation of drug interactions of GSK1292263 (a GPR119 agonist) with statins: from in vitro data to clinical study design. *Xenobiotica*, **2013**, 43, 498-508	2	38
20	The ABCG2 C421A polymorphism does not affect oral nitrofurantoin pharmacokinetics in healthy Chinese male subjects. *British Journal of Clinical Pharmacology*, **2008**, 66, 233-9	3.8	37
19	Use of cassette dosing in sandwich-cultured rat and human hepatocytes to identify drugs that inhibit bile acid transport. *Toxicology in Vitro*, **2010**, 24, 297-309	3.6	34
18	First human dose-escalation study with remogliflozin etabonate, a selective inhibitor of the sodium-glucose transporter 2 (SGLT2), in healthy subjects and in subjects with type 2 diabetes mellitus. *BMC Pharmacology & Toxicology*, **2013**, 14, 26	2.6	32
17	Drug interaction profile of the HIV integrase inhibitor cabotegravir: assessment from in vitro studies and a clinical investigation with midazolam. *Xenobiotica*, **2016**, 46, 445-56	2	31

16	The systemic exposure of an N-methyl-D-aspartate receptor antagonist is limited in mice by the P-glycoprotein and breast cancer resistance protein efflux transporters. *Drug Metabolism and Disposition*, **2004**, 32, 722-6	4	28
15	Developmental expression of calmodulin-dependent cyclic nucleotide phosphodiesterase in rat brain. *Developmental Brain Research*, **1990**, 53, 253-63		27
14	Safety, pharmacokinetics and pharmacodynamics of remogliflozin etabonate, a novel SGLT2 inhibitor, and metformin when co-administered in subjects with type 2 diabetes mellitus. *BMC Pharmacology & Toxicology*, **2013**, 14, 25	2.6	26
13	If the KI is defined by the free energy of binding to P-glycoprotein, which kinetic parameters define the IC50 for the Madin-Darby canine kidney II cell line overexpressing human multidrug resistance 1 confluent cell monolayer?. *Drug Metabolism and Disposition*, **2010**, 38, 260-9	4	26
12	Assessment of the drug interaction risk for remogliflozin etabonate, a sodium-dependent glucose cotransporter-2 inhibitor: evidence from in vitro, human mass balance, and ketoconazole interaction studies. *Drug Metabolism and Disposition*, **2012**, 40, 2090-101	4	24
11	P-Glycoprotein (P-gp) expressed in a confluent monolayer of hMDR1-MDCKII cells has more than one efflux pathway with cooperative binding sites. *Biochemistry*, **2006**, 45, 15505-19	3.2	24
10	In vitro absorption and secretory quotients: practical criteria derived from a study of 331 compounds to assess for the impact of P-glycoprotein-mediated efflux on drug candidates. *Journal of Pharmaceutical Sciences*, **2004**, 93, 2567-72	3.9	17
9	[53] Identification of calmodulin-binding proteins. *Methods in Enzymology*, **1990**, 184, 451-467	1.7	13
8	Developmental expression of neuronal calmodulin-binding proteins in rat brain. *Developmental Brain Research*, **1990**, 53, 62-70		9
7	Expression of calmodulin-dependent enzymes in developing rat striatum is not affected by perturbation of dopaminergic systems. *Synapse*, **1991**, 9, 136-43	2.4	6
6	Expression of calmodulin-dependent phosphodiesterase, calmodulin-dependent protein phosphatase, and other calmodulin-binding proteins in human SMS-KCNR neuroblastoma cells. *Journal of Neurochemistry*, **1989**, 52, 1438-48	6	6
5	Assessment of Remogliflozin Etabonate, a Sodium-Dependent Glucose Co-Transporter-2 Inhibitor, as a Perpetrator of Clinical Drug Interactions: A Study on Drug Transporters and Metabolic Enzymes. *Journal of Diabetes & Metabolism*, **2012**, 03,	0	6
4	Response from the International Transporter Consortium. *Nature Reviews Drug Discovery*, **2011**, 10, 75-76	4.1	4
3	Mechanistic Basis of Cabotegravir-Glucuronide Disposition in Humans. *Journal of Pharmacology and Experimental Therapeutics*, **2019**, 370, 269-277	4.7	3
2	ADME Pharmacogenomics in Drug Development **2013**, 13-37		3
1	Hepatobiliary Disposition of Atovaquone: A Case of Mechanistically Unusual Biliary Clearance. *Journal of Pharmacology and Experimental Therapeutics*, **2018**, 366, 37-45	4.7	1