Frances Jane Sharom

List of Publications by Year in Descending Order

78 papers	5,671 citations	43 h-index	75 g-index
80 ext. papers	5,958 ext. citations	4.5 avg, IF	6.34 L-index

#	Paper	IF	Citations
78	Interaction of the P-Glycoprotein Multidrug Transporter with Sterols. *Biochemistry*, **2015**, 54, 6586-97	3.2	30
77	Synthesis and evaluation of Strychnos alkaloids as MDR reversal agents for cancer cell eradication. *Bioorganic and Medicinal Chemistry*, **2014**, 22, 1148-55	3.4	27
76	Reversible dimers of the atypical antipsychotic quetiapine inhibit p-glycoprotein-mediated efflux in vitro with increased binding affinity and in situ at the blood-brain barrier. *ACS Chemical Neuroscience*, **2014**, 5, 305-17	5.7	21
75	Kinetic validation of the models for P-glycoprotein ATP hydrolysis and vanadate-induced trapping. Proposal for additional steps. *PLoS ONE*, **2014**, 9, e98804	3.7	3
74	Multidrug Resistance Protein **2014**, 141-160		3
73	Complex Interplay between the P-Glycoprotein Multidrug Efflux Pump and the Membrane: Its Role in Modulating Protein Function. *Frontiers in Oncology*, **2014**, 4, 41	5.3	164
72	Lipid bilayer properties control membrane partitioning, binding, and transport of p-glycoprotein substrates. *Biochemistry*, **2013**, 52, 343-54	3.2	58
71	Regulation of the ATP Hydrolysis and Transport Cycles of the P-Glycoprotein Multidrug Transporter by Sterols and Phospholipids. *FASEB Journal*, **2013**, 27, 1026.1	0.9	
70	Determining P-glycoprotein-drug interactions: evaluation of reconstituted P-glycoprotein in a liposomal system and LLC-MDR1 polarized cell monolayers. *Journal of Pharmacological and Toxicological Methods*, **2012**, 65, 64-74	1.7	27
69	Phenotypic variability in hyperphosphatasia with seizures and neurologic deficit (Mabry syndrome). *American Journal of Medical Genetics, Part A*, **2012**, 158A, 553-8	2.5	32
68	Proteins that bind and move lipids: MsbA and NPC1. *Critical Reviews in Biochemistry and Molecular Biology*, **2012**, 47, 75-95	8.7	25
67	The P-glycoprotein multidrug transporter. *Essays in Biochemistry*, **2011**, 50, 161-78	7.6	336
66	Effects of C7 substitutions in a high affinity microtubule-binding taxane on antitumor activity and drug transport. *Bioorganic and Medicinal Chemistry Letters*, **2011**, 21, 4852-6	2.9	8
65	Flipping and flopping--lipids on the move. *IUBMB Life*, **2011**, 63, 736-46	4.7	26
64	Fluorescence studies of drug binding and translocation by membrane transporters. *Methods in Molecular Biology*, **2010**, 637, 133-48	1.4	6
63	The reconstituted Escherichia coli MsbA protein displays lipid flippase activity. *Biochemical Journal*, **2010**, 429, 195-203	3.8	48
62	Lipid transporters and binding proteins; MsbA and NPC1. *FASEB Journal*, **2010**, 24, 408.1	0.9	

61	Characterization of fluorescent sterol binding to purified human NPC1. *Journal of Biological Chemistry*, **2009**, 284, 1840-52	5.4	54
60	Interaction of LDS-751 with the drug-binding site of P-glycoprotein: a Trp fluorescence steady-state and lifetime study. *Archives of Biochemistry and Biophysics*, **2009**, 492, 17-28	4.1	14
59	ABC efflux pump-based resistance to chemotherapy drugs. *Chemical Reviews*, **2009**, 109, 2989-3011	68.1	457
58	The ABC transporter MsbA interacts with lipid A and amphipathic drugs at different sites. *Biochemical Journal*, **2009**, 419, 317-28	3.8	43
57	ABC multidrug transporters: structure, function and role in chemoresistance. *Pharmacogenomics*, **2008**, 9, 105-27	2.6	734
56	Interaction of the P-glycoprotein multidrug efflux pump with cholesterol: effects on ATPase activity, drug binding and transport. *Biochemistry*, **2008**, 47, 13686-98	3.2	88
55	Functional characterization of Escherichia coli MsbA: interaction with nucleotides and substrates. *Journal of Biological Chemistry*, **2008**, 283, 12840-50	5.4	78
54	Overcoming tumor drug resistance with high-affinity taxanes: a SAR study of C2-modified 7-acyl-10-deacetyl cephalomannines. *ChemMedChem*, **2007**, 2, 691-701	3.7	36
53	Interaction of insecticides with mammalian P-glycoprotein and their effect on its transport function. *Biochimica Et Biophysica Acta - Biomembranes*, **2007**, 1768, 1750-7	3.8	45
52	Shedding light on drug transport: structure and function of the P-glycoprotein multidrug transporter (ABCB1). *Biochemistry and Cell Biology*, **2006**, 84, 979-92	3.6	83
51	P-glycoprotein (ABCB1) interacts directly with lipid-based anti-cancer drugs and platelet-activating factors. *Biochemistry and Cell Biology*, **2006**, 84, 1022-33	3.6	32
50	Combined chemical and enzymatic stable isotope labeling for quantitative profiling of detergent-insoluble membrane proteins isolated using Triton X-100 and Brij-96. *Journal of Proteome Research*, **2006**, 5, 349-60	5.6	50
49	Conformational and functional characterization of trapped complexes of the P-glycoprotein multidrug transporter. *Biochemical Journal*, **2006**, 399, 315-23	3.8	29
48	Interaction of LDS-751 and rhodamine 123 with P-glycoprotein: evidence for simultaneous binding of both drugs. *Biochemistry*, **2005**, 44, 14020-9	3.2	76
47	P-Glycoprotein is localized in intermediate-density membrane microdomains distinct from classical lipid rafts and caveolar domains. *FEBS Journal*, **2005**, 272, 4924-37	5.7	53
46	Interaction of LDS-751 with P-glycoprotein and mapping of the location of the R drug binding site. *Biochemistry*, **2005**, 44, 643-55	3.2	94
45	The reconstituted P-glycoprotein multidrug transporter is a flippase for glucosylceramide and other simple glycosphingolipids. *Biochemical Journal*, **2005**, 389, 517-26	3.8	130
44	New insights into the drug binding, transport and lipid flippase activities of the p-glycoprotein multidrug transporter. *Journal of Bioenergetics and Biomembranes*, **2005**, 37, 481-7	3.7	30

43	GPI-anchored protein cleavage in the regulation of transmembrane signals. *Sub-Cellular Biochemistry*, **2004**, 37, 285-315	5.5	34
42	Isolation and characterization of lipid rafts with different properties from RBL-2H3 (rat basophilic leukaemia) cells. *Biochemical Journal*, **2004**, 380, 219-30	3.8	80
41	Oligomerization of the E5 protein of human papillomavirus type 16 occurs through multiple hydrophobic regions. *Virology*, **2003**, 313, 415-26	3.6	24
40	Overexpression, purification, and structural analysis of the hydrophobic E5 protein from human papillomavirus type 16. *Protein Expression and Purification*, **2003**, 30, 1-10	2	13
39	PROBING OF CONFORMATIONAL CHANGES, CATALYTIC CYCLE AND ABC TRANSPORTER FUNCTION **2003**, 107-133		6
38	Transition state P-glycoprotein binds drugs and modulators with unchanged affinity, suggesting a concerted transport mechanism. *Biochemistry*, **2003**, 42, 1345-53	3.2	51
37	Stoichiometry and affinity of nucleotide binding to P-glycoprotein during the catalytic cycle. *Biochemistry*, **2003**, 42, 1170-7	3.2	65
36	Fluorescence techniques for studying membrane transport proteins: the P-glycoprotein multidrug transporter. *Methods in Molecular Biology*, **2003**, 227, 109-28	1.4	10
35	Reconstitution of membrane transporters. *Methods in Molecular Biology*, **2003**, 227, 129-54	1.4	5
34	Proximity of the protein moiety of a GPI-anchored protein to the membrane surface: a FRET study. *Biochemistry*, **2002**, 41, 8368-76	3.2	40
33	PI-specific phospholipase C cleavage of a reconstituted GPI-anchored protein: modulation by the lipid bilayer. *Biochemistry*, **2002**, 41, 1398-408	3.2	44
32	Proximity of bound Hoechst 33342 to the ATPase catalytic sites places the drug binding site of P-glycoprotein within the cytoplasmic membrane leaflet. *Biochemistry*, **2002**, 41, 4744-52	3.2	76
31	Glycosylphosphatidylinositol-anchored proteins: structure, function, and cleavage by phosphatidylinositol-specific phospholipase C. *Biochemistry and Cell Biology*, **2002**, 80, 535-49	3.6	105
30	Drug transport by reconstituted P-glycoprotein in proteoliposomes. *FEBS Journal*, **2001**, 268, 1687-1697		71
29	FRET analysis indicates that the two ATPase active sites of the P-glycoprotein multidrug transporter are closely associated. *Biochemistry*, **2001**, 40, 1413-22	3.2	89
28	Exploring the structure and function of the P-glycoprotein multidrug transporter using fluorescence spectroscopic tools. *Seminars in Cell and Developmental Biology*, **2001**, 12, 257-65	7.5	52
27	Phospholipid flippase activity of the reconstituted P-glycoprotein multidrug transporter. *Biochemistry*, **2001**, 40, 6937-47	3.2	133
26	Intrinsic fluorescence of the P-glycoprotein multidrug transporter: sensitivity of tryptophan residues to binding of drugs and nucleotides. *Biochemistry*, **2000**, 39, 14927-38	3.2	116

25	The membrane lipid environment modulates drug interactions with the P-glycoprotein multidrug transporter. *Biochemistry*, **1999**, 38, 6887-96	3.2	211
24	Insights into the structure and substrate interactions of the P-glycoprotein multidrug transporter from spectroscopic studies. *Biochimica Et Biophysica Acta - Biomembranes*, **1999**, 1461, 327-45	3.8	75
23	The ATPase and ATP-binding functions of P-glycoprotein--modulation by interaction with defined phospholipids. *FEBS Journal*, **1998**, 256, 170-8		70
22	Proximity of the nucleotide binding domains of the P-glycoprotein multidrug transporter to the membrane surface: a resonance energy transfer study. *Biochemistry*, **1998**, 37, 6503-12	3.2	43
21	Spectroscopic and biophysical approaches for studying the structure and function of the P-glycoprotein multidrug transporter. *Biochemistry and Cell Biology*, **1998**, 76, 695-708	3.6	35
20	Release of the glycosylphosphatidylinositol-anchored enzyme ecto-5X-nucleotidase by phospholipase C: catalytic activation and modulation by the lipid bilayer. *Biochemical Journal*, **1998**, 332 (Pt 1), 101-9	3.8	54
19	Linear and cyclic peptides as substrates and modulators of P-glycoprotein: peptide binding and effects on drug transport and accumulation. *Biochemical Journal*, **1998**, 333 (Pt 3), 621-30	3.8	73
18	Interaction of P-glycoprotein with defined phospholipid bilayers: a differential scanning calorimetric study. *Biochemistry*, **1997**, 36, 9807-15	3.2	45
17	Interaction of combinations of drugs, chemosensitizers, and peptides with the P-glycoprotein multidrug transporter. *Biochemical Pharmacology*, **1997**, 53, 1789-97	6	36
16	Fluorescence studies on the nucleotide binding domains of the P-glycoprotein multidrug transporter. *Biochemistry*, **1997**, 36, 2836-43	3.2	83
15	Site-directed fluorescence labeling of P-glycoprotein on cysteine residues in the nucleotide binding domains. *Biochemistry*, **1996**, 35, 11865-73	3.2	192
14	Modulation of the cleavage of glycosylphosphatidylinositol-anchored proteins by specific bacterial phospholipases. *Biochemistry and Cell Biology*, **1996**, 74, 701-13	3.6	12
13	Synthetic hydrophobic peptides are substrates for P-glycoprotein and stimulate drug transport. *Biochemical Journal*, **1996**, 320 (Pt 2), 421-8	3.8	96
12	Characterization and functional reconstitution of the multidrug transporter. *Journal of Bioenergetics and Biomembranes*, **1995**, 27, 15-22	3.7	48
11	Interaction of the P-glycoprotein multidrug transporter with peptides and ionophores. *Journal of Biological Chemistry*, **1995**, 270, 10334-41	5.4	85
10	The effects of lipids and detergents on ATPase-active P-glycoprotein. *Biochimica Et Biophysica Acta - Biomembranes*, **1993**, 1146, 65-72	3.8	152
9	ATPase activity of partially purified P-glycoprotein from multidrug-resistant Chinese hamster ovary cells. *Biochimica Et Biophysica Acta - Biomembranes*, **1992**, 1109, 149-60	3.8	123
8	Transport properties of P-glycoprotein in plasma membrane vesicles from multidrug-resistant Chinese hamster ovary cells. *Biochimica Et Biophysica Acta - Biomembranes*, **1992**, 1109, 161-71	3.8	92

7	Glycophorin A interacts with interleukin-2 and inhibits interleukin-2-dependent T-lymphocyte proliferation. *Cellular Immunology*, **1992**, 145, 223-39	4.4	13
6	Strategies for the purification of P-glycoprotein from multidrug-resistant Chinese hamster ovary cells. *Protein Expression and Purification*, **1991**, 2, 256-65	2	32
5	Multidrug resistance and chemosensitization: therapeutic implications for cancer chemotherapy. *Advances in Pharmacology*, **1990**, 21, 185-220	5.7	89
4	Interaction of concanavalin A and a divalent derivative with lymphocytes and reconstituted lymphocyte membrane glycoproteins. *Membrane Biochemistry*, **1989**, 8, 147-63		4
3	Reconstitution of lymphocyte 5Xnucleotidase in lipid bilayers: behaviour and interaction with concanavalin A. *Canadian Journal of Biochemistry and Cell Biology*, **1985**, 63, 1049-57		19
2	Lipid-protein interactions of the human erythrocyte concanavalin A receptor in phospholipid bilayers. *Biochimica Et Biophysica Acta - Biomembranes*, **1984**, 774, 110-8	3.8	19
1	Multidrug Resistance Protein: P-Glycoprotein223-262		13