Frances Jane Sharom

List of Publications by Year in descending order

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76 papers

6,389 citations

57758 44 h-index 79698 73 g-index

80 all docs 80 docs citations

80 times ranked

6273 citing authors

#	Article	IF	CITATIONS
1	ABC multidrug transporters: structure, function and role in chemoresistance. Pharmacogenomics, 2008, 9, 105-127.	1.3	854
2	ABC Efflux Pump-Based Resistance to Chemotherapy Drugs. Chemical Reviews, 2009, 109, 2989-3011.	47.7	529
3	The P-glycoprotein multidrug transporter. Essays in Biochemistry, 2011, 50, 161-178.	4.7	403
4	The Membrane Lipid Environment Modulates Drug Interactions with the P-Glycoprotein Multidrug Transporter. Biochemistry, 1999, 38, 6887-6896.	2.5	230
5	Complex Interplay between the P-Glycoprotein Multidrug Efflux Pump and the Membrane: Its Role in Modulating Protein Function. Frontiers in Oncology, 2014, 4, 41.	2.8	206
6	Site-Directed Fluorescence Labeling of P-Glycoprotein on Cysteine Residues in the Nucleotide Binding Domainsâ€. Biochemistry, 1996, 35, 11865-11873.	2.5	205
7	The effects of lipids and detergents on ATPase-active P-glycoprotein. Biochimica Et Biophysica Acta - Biomembranes, 1993, 1146, 65-72.	2.6	172
8	Phospholipid Flippase Activity of the Reconstituted P-Glycoprotein Multidrug Transporterâ€. Biochemistry, 2001, 40, 6937-6947.	2.5	145
9	The reconstituted P-glycoprotein multidrug transporter is a flippase for glucosylceramide and other simple glycosphingolipids. Biochemical Journal, 2005, 389, 517-526.	3.7	144
10	ATPase activity of partially purified P-glycoprotein from multidrug-resistant Chinese hamster ovary cells. Biochimica Et Biophysica Acta - Biomembranes, 1992, 1109, 149-160.	2.6	137
11	Intrinsic Fluorescence of the P-glycoprotein Multidrug Transporter:  Sensitivity of Tryptophan Residues to Binding of Drugs and Nucleotides. Biochemistry, 2000, 39, 14927-14938.	2.5	124
12	Glycosylphosphatidylinositol-anchored proteins: structure, function, and cleavage by phosphatidylinositol-specific phospholipase C. Biochemistry and Cell Biology, 2002, 80, 535-549.	2.0	115
13	Synthetic hydrophobic peptides are substrates for P-glycoprotein and stimulate drug transport. Biochemical Journal, 1996, 320, 421-428.	3.7	104
14	Multidrug Resistance and Chemosensitization: Therapeutic Implications for Cancer Chemotherapy. Advances in Pharmacology, 1990, 21, 185-220.	2.0	103
15	Transport properties of P-glycoprotein in plasma membrane vesicles from multidrug-resistant Chinese hamster ovary cells. Biochimica Et Biophysica Acta - Biomembranes, 1992, 1109, 161-171.	2.6	103
16	Interaction of the P-Glycoprotein Multidrug Efflux Pump with Cholesterol: Effects on ATPase Activity, Drug Binding and Transport. Biochemistry, 2008, 47, 13686-13698.	2.5	102
17	Interaction of LDS-751 with P-Glycoprotein and Mapping of the Location of the R Drug Binding Site. Biochemistry, 2005, 44, 643-655.	2.5	100
18	FRET Analysis Indicates That the Two ATPase Active Sites of the P-Glycoprotein Multidrug Transporter Are Closely Associatedâ€. Biochemistry, 2001, 40, 1413-1422.	2.5	96

#	Article	IF	CITATIONS
19	Shedding light on drug transport: structure and function of the P-glycoprotein multidrug transporter (ABCB1)This paper is one of a selection of papers published in this Special Issue, entitled CSBMCB — Membrane Proteins in Health and Disease Biochemistry and Cell Biology, 2006, 84, 979-992.	2.0	94
20	Interaction of the P-glycoprotein Multidrug Transporter with Peptides and Ionophores. Journal of Biological Chemistry, 1995, 270, 10334-10341.	3.4	93
21	Functional Characterization of Escherichia coli MsbA. Journal of Biological Chemistry, 2008, 283, 12840-12850.	3.4	87
22	Fluorescence Studies on the Nucleotide Binding Domains of the P-Glycoprotein Multidrug Transporter. Biochemistry, 1997, 36, 2836-2843.	2.5	86
23	Insights into the structure and substrate interactions of the P-glycoprotein multidrug transporter from spectroscopic studies. Biochimica Et Biophysica Acta - Biomembranes, 1999, 1461, 327-345.	2.6	85
24	Isolation and characterization of lipid rafts with different properties from RBL-2H3 (rat basophilic) Tj ETQq0 0 0 r	gBŢ /Over 3.7	lock 10 Tf 50
25	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, 4744-4752.	2.5	81
26	The ATPase and ATP-binding functions of P-glycoprotein. Modulation by interaction with defined phospholipids. FEBS Journal, 1998, 256, 170-178.	0.2	79
27	Linear and cyclic peptides as substrates and modulators of P-glycoprotein: peptide binding and effects on drug transport and accumulation. Biochemical Journal, 1998, 333, 621-630.	3.7	77
28	Interaction of LDS-751 and Rhodamine 123 with P-Glycoprotein: Evidence for Simultaneous Binding of Both Drugsâ€. Biochemistry, 2005, 44, 14020-14029.	2.5	77
29	Drug transport by reconstituted P-glycoprotein in proteoliposomes. FEBS Journal, 2001, 268, 1687-1697.	0.2	76
30	Stoichiometry and Affinity of Nucleotide Binding to P-Glycoprotein during the Catalytic Cycleâ€. Biochemistry, 2003, 42, 1170-1177.	2.5	68
31	Lipid Bilayer Properties Control Membrane Partitioning, Binding, and Transport of P-Glycoprotein Substrates. Biochemistry, 2013, 52, 343-354.	2.5	67
32	Release of the glycosylphosphatidylinositol-anchored enzyme ecto-5′-nucleotidase by phospholipase C: catalytic activation and modulation by the lipid bilayer. Biochemical Journal, 1998, 332, 101-109.	3.7	61
33	Characterization of Fluorescent Sterol Binding to Purified Human NPC1. Journal of Biological Chemistry, 2009, 284, 1840-1852.	3.4	59
34	Exploring the structure and function of the P-glycoprotein multidrug transporter using fluorescence spectroscopic tools. Seminars in Cell and Developmental Biology, 2001, 12, 257-265.	5.0	58
35	The reconstituted <i>Escherichia coli</i> MsbA protein displays lipid flippase activity. Biochemical Journal, 2010, 429, 195-203.	3.7	58
36	P-Glycoprotein is localized in intermediate-density membrane microdomains distinct from classical lipid rafts and caveolar domains. FEBS Journal, 2005, 272, 4924-4937.	4.7	57

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37	PI-Specific Phospholipase C Cleavage of a Reconstituted GPI-Anchored Protein:  Modulation by the Lipid Bilayer. Biochemistry, 2002, 41, 1398-1408.	2.5	54
38	The ABC transporter MsbA interacts with lipid A and amphipathic drugs at different sites. Biochemical Journal, 2009, 419, 317-328.	3.7	54
39	Transition State P-glycoprotein Binds Drugs and Modulators with Unchanged Affinity, Suggesting a Concerted Transport Mechanism. Biochemistry, 2003, 42, 1345-1353.	2.5	53
40	Characterization and functional reconstitution of the multidrug transporter. Journal of Bioenergetics and Biomembranes, 1995, 27, 15-22.	2.3	52
41	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, 349-360.	3.7	52
42	Interaction of insecticides with mammalian P-glycoprotein and their effect on its transport function. Biochimica Et Biophysica Acta - Biomembranes, 2007, 1768, 1750-1757.	2.6	50
43	Interaction of P-Glycoprotein with Defined Phospholipid Bilayers:Â A Differential Scanning Calorimetric Studyâ€. Biochemistry, 1997, 36, 9807-9815.	2.5	49
44	Proximity of the Protein Moiety of a GPI-Anchored Protein to the Membrane Surface: A FRET Studyâ€. Biochemistry, 2002, 41, 8368-8376.	2.5	47
45	Proximity of the Nucleotide Binding Domains of the P-glycoprotein Multidrug Transporter to the Membrane Surface: A Resonance Energy Transfer Studyâ€. Biochemistry, 1998, 37, 6503-6512.	2.5	45
46	Spectroscopic and biophysical approaches for studying the structure and function of the P-glycoprotein multidrug transporter. Biochemistry and Cell Biology, 1998, 76, 695-708.	2.0	40
47	Phenotypic variability in hyperphosphatasia with seizures and neurologic deficit (Mabry syndrome). American Journal of Medical Genetics, Part A, 2012, 158A, 553-558.	1.2	40
48	Overcoming Tumor Drug Resistance with High-Affinity Taxanes: A SAR Study of C2-Modified 7-Acyl-10-Deacetyl Cephalomannines. ChemMedChem, 2007, 2, 691-701.	3.2	39
49	GPI-anchored Protein Cleavage in the Regulation of Transmembrane Signals. Sub-Cellular Biochemistry, 2004, 37, 285-315.	2.4	38
50	P-glycoprotein (ABCB1) interacts directly with lipid-based anti-cancer drugs and platelet-activating factorsThis paper is one of a selection of papers published in this Special Issue, entitled CSBMCB — Membrane Proteins in Health and Disease Biochemistry and Cell Biology, 2006, 84, 1022-1033.	2.0	38
51	Interaction of combinations of drugs, chemosensitizers, and peptides with the P-glycoprotein multidrug transporter. Biochemical Pharmacology, 1997, 53, 1789-1797.	4.4	36
52	Interaction of the P-Glycoprotein Multidrug Transporter with Sterols. Biochemistry, 2015, 54, 6586-6597.	2.5	35
53	Strategies for the purification of P-glycoprotein from multidrug-resistant Chinese hamster ovary cells. Protein Expression and Purification, 1991, 2, 256-265.	1.3	34
54	Flipping and flopping-lipids on the move. IUBMB Life, 2011, 63, n/a-n/a.	3.4	34

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55	New Insights into the Drug Binding, Transport and Lipid Flippase Activities of the P-Glycoprotein Multidrug Transporter. Journal of Bioenergetics and Biomembranes, 2005, 37, 481-487.	2.3	33
56	Conformational and functional characterization of trapped complexes of the P-glycoprotein multidrug transporter. Biochemical Journal, 2006, 399, 315-323.	3.7	31
57	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.	0.7	30
58	Synthesis and evaluation of Strychnos alkaloids as MDR reversal agents for cancer cell eradication. Bioorganic and Medicinal Chemistry, 2014, 22, 1148-1155.	3.0	30
59	Oligomerization of the E5 protein of human papillomavirus type 16 occurs through multiple hydrophobic regions. Virology, 2003, 313, 415-426.	2.4	26
60	Proteins that bind and move lipids: MsbA and NPC1. Critical Reviews in Biochemistry and Molecular Biology, 2012, 47, 75-95.	5.2	26
61	Lipid-protein interactions of the human erythrocyte concanavalin a receptor in phospholipid bilayers. Biochimica Et Biophysica Acta - Biomembranes, 1984, 774, 110-118.	2.6	24
62	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, 305-317.	3.5	24
63	Reconstitution of lymphocyte 5′-nucleotidase in lipid bilayers: behaviour and interaction with concanavalin A. Canadian Journal of Biochemistry and Cell Biology, 1985, 63, 1049-1057.	1.3	21
64	Overexpression, purification, and structural analysis of the hydrophobic E5 protein from human papillomavirus type 16. Protein Expression and Purification, 2003, 30, 1-10.	1.3	18
65	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.	3.0	14
66	Glycophorin A interacts with interleukin-2 and inhibits interleukin-2-dependent T-lymphocyte proliferation. Cellular Immunology, 1992, 145, 223-239.	3.0	13
67	Modulation of the cleavage of glycosylphosphatidylinositol-anchored proteins by specific bacterial phospholipases. Biochemistry and Cell Biology, 1996, 74, 701-713.	2.0	13
68	Fluorescence Techniques for Studying Membrane Transport Proteins The P-Glycoprotein Multidrug Transporter., 2003, 227, 109-128.		10
69	Effects of C7 substitutions in a high affinity microtubule-binding taxane on antitumor activity and drug transport. Bioorganic and Medicinal Chemistry Letters, 2011, 21, 4852-4856.	2.2	10
70	PROBING OF CONFORMATIONAL CHANGES, CATALYTIC CYCLE AND ABC TRANSPORTER FUNCTION. , 2003, , 107-133.		7
71	Reconstitution of Membrane Transporters. , 2003, 227, 129-154.		7
72	Fluorescence Studies of Drug Binding and Translocation by Membrane Transporters. Methods in Molecular Biology, 2010, 637, 133-148.	0.9	7

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73	Kinetic Validation of the Models for P-Glycoprotein ATP Hydrolysis and Vanadate-Induced Trapping. Proposal for Additional Steps. PLoS ONE, 2014, 9, e98804.	2.5	5
74	Interaction of Concanavalin A and a Divalent Derivative with Lymphocytes and Reconstituted Lymphocyte Membrane Glycoproteins. Membrane Biochemistry, 1989, 8, 147-163.	0.6	4
75	Lipid transporters and binding proteins; MsbA and NPC1. FASEB Journal, 2010, 24, 408.1.	0.5	1
76	Regulation of the ATP Hydrolysis and Transport Cycles of the Pâ€Glycoprotein Multidrug Transporter by Sterols and Phospholipids. FASEB Journal, 2013, 27, 1026.1.	0.5	0