Paul D Roepe

List of Publications by Year
in descending order

92 papers	5,476 citations	81743 39 h-index	82410 72 g-index
131 all docs	131 docs citations	131 times ranked	4455 citing authors

#	Article	IF	Citations
1	Mutations in the P. falciparum Digestive Vacuole Transmembrane Protein PfCRT and Evidence for Their Role in Chloroquine Resistance. Molecular Cell, 2000, 6, 861-871.	4.5	1,268
2	Novel, Rapid, and Inexpensive Cell-Based Quantification of Antimalarial Drug Efficacy. Antimicrobial Agents and Chemotherapy, 2004, 48, 1807-1810.	1.4	234
3	Alternative Mutations at Position 76 of the Vacuolar Transmembrane Protein PfCRT Are Associated with Chloroquine Resistance and Unique Stereospecific Quinine and Quinidine Responses inPlasmodium falciparum. Molecular Pharmacology, 2002, 61, 35-42.	1.0	222
4	Solution Structures of Antimalarial Drugâˆ’Heme Complexesâ€. Biochemistry, 2002, 41, 10245-10255.	1.2	156
5	Quinoline Drugâ€“Heme Interactions and Implications for Antimalarial Cytostatic versus Cytocidal Activities. Journal of Medicinal Chemistry, 2013, 56, 5231-5246.	2.9	148
6	Lower electrical membrane potential and altered pHi homeostasis in multidrug-resistant (MDR) cells: Further characterization of a series of MDR cell lines expressing different levels of P-glycoprotein. Biochemistry, 1993, 32, 11042-11056.	1.2	128
7	Structure and drug resistance of the Plasmodium falciparum transporter PfCRT. Nature, 2019, 576, 315-320.	13.7	123
8	4-<i>N</i>-, 4-<i>S</i>-, and 4-<i>O</i>-Chloroquine Analogues: Influence of Side Chain Length and Quinolyl Nitrogen p<i>K</i>_a on Activity vs Chloroquine Resistant Malaria. Journal of Medicinal Chemistry, 2008, 51, 3466-3479.	2.9	120
9	Drug resistance-associated pfCRT mutations confer decreased Plasmodium falciparum digestive vacuolar pH. Molecular and Biochemical Parasitology, 2004, 133, 99-114.	0.5	119
10	Digestive vacuolar pH of intact intraerythrocytic P. falciparum either sensitive or resistant to chloroquine. Molecular and Biochemical Parasitology, 2000, 110, 107-124.	0.5	115
11	Analysis of the steady-state and initial rate of doxorubicin efflux from a series of multidrug resistant cells expressing different levels of P-glycoprotein. Biochemistry, 1992, 31, 12555-12564.	1.2	103
12	Chloroquine Resistance Modulated in Vitro by Expression Levels of the Plasmodium falciparum Chloroquine Resistance Transporter. Journal of Biological Chemistry, 2003, 278, 33593-33601.	1.6	103
13	Chloroquine resistance in the malarial parasite,Plasmodium falciparum. Medicinal Research Reviews, 2002, 22, 465-491.	5.0	97
14	High-throughput matrix screening identifies synergistic and antagonistic antimalarial drug combinations. Scientific Reports, 2015, 5, 13891.	1.6	92
15	Autophagy is a cell death mechanism in Toxoplasma gondii. Cellular Microbiology, 2012, 14, 589-607.	1.1	90
16	What is the Precise Role of Human MDR 1 Protein in Chemotherapeutic Drug Resistance. Current Pharmaceutical Design, 2000, 6, 241-260.	0.9	79
17	The Antimalarial Drug Resistance Protein Plasmodium falciparum Chloroquine Resistance Transporter Binds Chloroquine. Biochemistry, 2004, 43, 8290-8296.	1.2	79
18	Disruption of the Plasmodium falciparum PfPMT Gene Results in a Complete Loss of Phosphatidylcholine Biosynthesis via the Serine-Decarboxylase-Phosphoethanolamine-Methyltransferase Pathway and Severe Growth and Survival Defects. Journal of Biological Chemistry, 2008, 283, 27636-27643.	1.6	75

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19	Biophysical Aspects of P-Glycoprotein-Mediated Multidrug Resistance. International Review of Cytology, 1997, 171, 121-165.	6.2	74
20	Analysis of the Antimalarial Drug Resistance Protein Pfcrt Expressed in Yeast. Journal of Biological Chemistry, 2002, 277, 49767-49775.	1.6	70
21	Synthesis and antimalarial activity of new 4-amino-7-chloroquinolyl amides, sulfonamides, ureas and thioureas. Bioorganic and Medicinal Chemistry, 2009, 17, 270-283.	1.4	70
22	NMR Studies of Chloroquineâ^'Ferriprotoporphyrin IX Complex. Journal of Physical Chemistry A, 2003, 107, 5821-5825.	1.1	69
23	Plasmodium falciparum Na+/H+ exchanger activity and quinine resistance. Molecular and Biochemical Parasitology, 2007, 153, 48-58.	0.5	58
24	Spinning Disk Confocal Microscopy of Live, Intraerythrocytic Malarial Parasites. 2. Altered Vacuolar Volume Regulation in Drug Resistant Malaria. Biochemistry, 2006, 45, 12411-12423.	1.2	57
25	The effects of chloroquine and verapamil on digestive vacuolar pH of P. falciparum either sensitive or resistant to chloroquine. Molecular and Biochemical Parasitology, 2000, 110, 125-134.	0.5	56
26	Overcoming Drug Resistance to Heme-Targeted Antimalarials by Systematic Side Chain Variation of 7-Chloro-4-aminoquinolines. Journal of Medicinal Chemistry, 2008, 51, 1995-1998.	2.9	56
27	Spinning Disk Confocal Microscopy of Live, Intraerythrocytic Malarial Parasites. 1. Quantification of Hemozoin Development for Drug Sensitive versus Resistant Malaria. Biochemistry, 2006, 45, 12400-12410.	1.2	52
28	Molecular and physiologic basis of quinoline drug resistance in <i>Plasmodium falciparum</i> malaria. Future Microbiology, 2009, 4, 441-455.	1.0	50
29	Chloroquine susceptibility and reversibility in a <i>Plasmodium falciparum</i> genetic cross. Molecular Microbiology, 2010, 78, 770-787.	1.2	49
30	PfCRT-Mediated Drug Transport in Malarial Parasites. Biochemistry, 2011, 50, 163-171.	1.2	49
31	A Process Similar to Autophagy Is Associated with Cytocidal Chloroquine Resistance in Plasmodium falciparum. PLoS ONE, 2013, 8, e79059.	1.1	49
32	Antimalarial drugs influence the pH dependent solubility of heme via apparent nucleation phenomena. Molecular and Biochemical Parasitology, 2001, 112, 11-17.	0.5	48
33	Autophagy in Apicomplexa: a life sustaining death mechanism?. Trends in Parasitology, 2012, 28, 358-364.	1.5	46
34	Cytostatic versus Cytocidal Activities of Chloroquine Analogues and Inhibition of Hemozoin Crystal Growth. Antimicrobial Agents and Chemotherapy, 2013, 57, 356-364.	1.4	46
35	Altered drug translocation mediated by the MDR protein: Direct, indirect, or both?. Journal of Bioenergetics and Biomembranes, 1996, 28, 541-555.	1.0	45
36	Stage independent chloroquine resistance and chloroquine toxicity revealed via spinning disk confocal microscopy. Molecular and Biochemical Parasitology, 2008, 159, 7-23.	0.5	45

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37	Quinine and Chloroquine Differentially Perturb Heme Monomerâ˘'Dimer Equilibrium. Inorganic Chemistry, 2008, 47, 6077-6081.	1.9	44
38	Analysis of Ion Transport Perturbations Caused by hu MDR 1 Protein Overexpression. Biochemistry, 1997, 36, 11153-11168.	1.2	43
39	Antiproliferative and Antiplasmodial Dimeric Phloroglucinols from <i>Mallotus oppositifolius</i> from the Madagascar Dry Forest. Journal of Natural Products, 2013, 76, 388-393.	1.5	43
40	Investigating the activity of quinine analogues versus chloroquine resistant Plasmodium falciparum. Bioorganic and Medicinal Chemistry, 2012, 20, 3292-3297.	1.4	39
41	Function of Resistance Conferring <i>Plasmodium falciparum</i> Chloroquine Resistance Transporter Isoforms. Biochemistry, 2013, 52, 4242-4249.	1.2	39
42	The hydroxyl functionality and a rigid proximal N are required for forming a novel non-covalent quinine-heme complex. Journal of Inorganic Biochemistry, 2011, 105, 467-475.	1.5	38
43	Photoaffinity Labeling of the <i>Plasmodium falciparum</i> Chloroquine Resistance Transporter with a Novel Perfluorophenylazido Chloroquine. Biochemistry, 2008, 47, 10394-10406.	1.2	36
44	Structure of the Amodiaquineâ˘'FPIX Î¼ Oxo Dimer Solution Complex at Atomic Resolution. Inorganic Chemistry, 2004, 43, 8078-8084.	1.9	35
45	Reduced Digestive Vacuolar Accumulation of Chloroquine Is Not Linked to Resistance to Chloroquine Toxicity. Biochemistry, 2009, 48, 11152-11154.	1.2	35
46	Chloroquine Transport in<i>Plasmodium falciparum</i>. 2. Analysis of PfCRT-Mediated Drug Transport Using Proteoliposomes and a Fluorescent Chloroquine Probe. Biochemistry, 2009, 48, 9482-9491.	1.2	35
47	Evolution of Fitness Cost-Neutral Mutant PfCRT Conferring P. falciparum 4-Aminoquinoline Drug Resistance Is Accompanied by Altered Parasite Metabolism and Digestive Vacuole Physiology. PLoS Pathogens, 2016, 12, e1005976.	2.1	34
48	Plasmodium falciparum resistance to cytocidal versus cytostatic effects of chloroquine. Molecular and Biochemical Parasitology, 2011, 178, 1-6.	0.5	33
49	Functional Comparison of 45 Naturally Occurring Isoforms of the <i>Plasmodium falciparum</i> Chloroquine Resistance Transporter (PfCRT). Biochemistry, 2015, 54, 5083-5094.	1.2	33
50	Artemisinin-Based Antimalarial Drug Therapy: Molecular Pharmacology and Evolving Resistance. Tropical Medicine and Infectious Disease, 2019, 4, 89.	0.9	30
51	Analysis of Chloroquine Resistance Transporter (CRT) Isoforms and Orthologues in <i>S. cerevisiae</i> Yeast. Biochemistry, 2011, 50, 6701-6710.	1.2	28
52	Quantification of Free Ferriprotoporphyrin IX Heme and Hemozoin for Artemisinin Sensitive versus Delayed Clearance Phenotype <i>Plasmodium falciparum</i> Malarial Parasites. Biochemistry, 2018, 57, 6927-6934.	1.2	28
53	Cytostatic versus cytocidal profiling of quinoline drug combinations via modified fixed-ratio isobologram analysis. Malaria Journal, 2013, 12, 332.	0.8	26
54	Dihydroartemisininâ€"Ferriprotoporphyrin IX Adduct Abundance in <i>Plasmodium falciparum</i> Malarial Parasites and the Relationship to Emerging Artemisinin Resistance. Biochemistry, 2018, 57, 6935-6945.	1.2	25

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55	Analysis of Drug Transport Kinetics in Multidrug-Resistant Cells Using a Novel Coumarin-Vinblastine Compound. Biochemistry, 1994, 33, 12665-12675.	1.2	24
56	Quantification of perchloroethylene residues in dryâ€cleaned fabrics. Environmental Toxicology and Chemistry, 2011, 30, 2481-2487.	2.2	24
57	Evidence for Regulation of Hemoglobin Metabolism and Intracellular Ionic Flux by the Plasmodium falciparum Chloroquine Resistance Transporter. Scientific Reports, 2018, 8, 13578.	1.6	24
58	Antimalarial drugs and heme in detergent micelles: An NMR study. Journal of Inorganic Biochemistry, 2009, 103, 745-748.	1.5	22
59	Purified Plasmodium falciparum multi-drug resistance protein (PfMDR 1) binds a high affinity chloroquine analogue. Molecular and Biochemical Parasitology, 2010, 173, 158-161.	0.5	22
60	Heterologous Expression and ATPase Activity of Mutant versus Wild Type PfMDR1 Protein. Biochemistry, 2007, 46, 6060-6073.	1.2	21
61	Heterologous Expression, Purification, and Functional Analysis of <i>Plasmodium falciparum</i> Phosphatidylinositol 3â€²-Kinase. Biochemistry, 2017, 56, 4335-4345.	1.2	21
62	Chloroquine-resistant isoforms of the Plasmodium falciparum chloroquine resistance transporter acidify lysosomal pH in HEK293 cells more than chloroquine-sensitive isoforms. Molecular and Biochemical Parasitology, 2006, 150, 288-299.	0.5	20
63	An ortholog of Plasmodium falciparum chloroquine resistance transporter (PfCRT) plays a key role in maintaining the integrity of the endolysosomal system in Toxoplasma gondii to facilitate host invasion. PLoS Pathogens, 2019, 15, e1007775.	2.1	20
64	Origin and Spread of Evolving Artemisinin-Resistant Plasmodium falciparum Malarial Parasites in Southeast Asia. American Journal of Tropical Medicine and Hygiene, 2019, 101, 1204-1211.	0.6	20
65	Purified Human MDR 1 Modulates Membrane Potential in Reconstituted Proteoliposomes. Biochemistry, 2003, 42, 3544-3555.	1.2	19
66	Relative to Quinine and Quinidine, Their 9-Epimers Exhibit Decreased Cytostatic Activity and Altered Heme Binding but Similar Cytocidal Activity versus Plasmodium falciparum. Antimicrobial Agents and Chemotherapy, 2013, 57, 365-374.	1.4	19
67	Torin 2 Derivative, NCATS-SM3710, Has Potent Multistage Antimalarial Activity through Inhibition of <i>P. falciparum</i> Phosphatidylinositol 4-Kinase (<i>Pf</i>â€PI4KIIIÎ²). ACS Pharmacology and Translational Science, 2020, 3, 948-964.	2.5	19
68	Are ion-exchange processes central to understanding drug-resistance phenomena?. Trends in Pharmacological Sciences, 1999, 20, 62-65.	4.0	18
69	UV-triggered Affinity Capture Identifies Interactions between the Plasmodium falciparum Multidrug Resistance Protein 1 (PfMDR1) and Antimalarial Agents in Live Parasitized Cells. Journal of Biological Chemistry, 2013, 288, 22576-22583.	1.6	18
70	Ã¢â‚¬Å“Drug resistance associated membrane proteinsÃ¢â‚¬Â• Frontiers in Physiology, 2014, 5, 108.	1.3	18
71	To kill or not to kill, that is the question: cytocidal antimalarial drug resistance. Trends in Parasitology, 2014, 30, 130-135.	1.5	18
72	A single S1034C mutation confers altered drug sensitivity to PfMDR1 ATPase activity that is characteristic of the 7G8 isoform. Molecular and Biochemical Parasitology, 2008, 157, 107-111.	0.5	16

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73	Chloroquine Transport in Plasmodium falciparum. 1. Influx and Efflux Kinetics for Live Trophozoite Parasites Using a Novel Fluorescent Chloroquine Probe. Biochemistry, 2009, 48, 9471-9481.	1.2	16
74	Heterologous Expression, Purification, and Functional Analysis of the <i>Plasmodium falciparum</i> Phosphatidylinositol 4-Kinase IIIÎ². Biochemistry, 2020, 59, 2494-2506.	1.2	14
75	Artemisinin-Based Drugs Target the Plasmodium falciparum Heme Detoxification Pathway. Antimicrobial Agents and Chemotherapy, 2021, 65, .	1.4	13
76	PIK-ing New Malaria Chemotherapy. Trends in Parasitology, 2018, 34, 925-927.	1.5	13
77	Evidence for the early emergence of piperaquine-resistant Plasmodium falciparum malaria and modeling strategies to mitigate resistance. PLoS Pathogens, 2022, 18, e1010278.	2.1	13
78	The P-Glycoprotein Efflux Pump: How Does it Transport Drugs?. Journal of Membrane Biology, 1998, 166, 71-72.	1.0	11
79	Plasmodium falciparum chloroquine resistance transporter (PfCRT) isoforms PH1 and PH2 perturb vacuolar physiology. Malaria Journal, 2016, 15, 186.	0.8	11
80	Altered Drug Transport by <i>Plasmodium falciparum</i> Chloroquine Resistance Transporter Isoforms Harboring Mutations Associated with Piperaquine Resistance. Biochemistry, 2020, 59, 2484-2493.	1.2	11
81	Analysis ofPlasmodium vivaxChloroquine Resistance Transporter Mutant Isoforms. Biochemistry, 2017, 56, 5615-5622.	1.2	8
82	Inhibition of Human Class I vs Class III Phosphatidylinositol 3â€²-Kinases. Biochemistry, 2017, 56, 4326-4334.	1.2	7
83	In vitro growth competition experiments that suggest consequences of the substandard artemisinin epidemic that may be accelerating drug resistance in P. falciparum malaria. PLoS ONE, 2021, 16, e0248057.	1.1	7
84	Chloroquine Uptake, Altered Partitioning and the Basis of Drug Resistance: Evidence for Chlorideâ€Dependent Ionic Regulation. Novartis Foundation Symposium, 1999, 226, 265-280.	1.2	6
85	Plasmodium falciparum strain GC-03 exhibits hyper-gametocytogenesis in partially hemoglobin depleted red blood cells. Molecular and Biochemical Parasitology, 2005, 139, 261-265.	0.5	5
86	Artesunate activation by heme in an aqueous medium. Inorganica Chimica Acta, 2019, 496, 119029.	1.2	5
87	Determination of the Cytostatic and Cytocidal Activities of Antimalarial Compounds and Their Combination Interactions. Current Protocols in Chemical Biology, 2014, 6, 237-248.	1.7	4
88	A peptide needle in a signaling haystack. Nature Genetics, 2001, 27, 6-8.	9.4	3
89	P. falciparum Na+/H+ exchanger (PfNHE) function and quinine resistance (QNR). Molecular and Biochemical Parasitology, 2009, 166, 1-2.	0.5	2
90	Malarial parasite pathogenesis and drug targets. F1000 Biology Reports, 2009, 1, 18.	4.0	0

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91	The Biochemistry of Quinoline Antimalarial Drug Resistance. , 2014, , 1-20.		0
92	The Biochemistry of Quinoline Antimalarial Drug Resistance. , 2017, , 289-311.		0