

# David A Baker

## List of Publications by Year in descending order

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79  
papers

5,086  
citations

101543

36  
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102487

66  
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87  
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87  
docs citations

87  
times ranked

3924  
citing authors

#	ARTICLE	IF	CITATIONS
1	A transcriptional switch underlies commitment to sexual development in malaria parasites. <i>Nature</i> , 2014, 507, 248-252.	27.8	430
2	The <i>Plasmodium falciparum</i> sexual development transcriptome: A microarray analysis using ontology-based pattern identification. <i>Molecular and Biochemical Parasitology</i> , 2005, 143, 67-79.	1.1	295
3	A Plant-Like Kinase in <i>Plasmodium falciparum</i> Regulates Parasite Egress from Erythrocytes. <i>Science</i> , 2010, 328, 910-912.	12.6	263
4	Malaria Parasite cGMP-dependent Protein Kinase Regulates Blood Stage Merozoite Secretory Organelle Discharge and Egress. <i>PLoS Pathogens</i> , 2013, 9, e1003344.	4.7	225
5	Gametogenesis in Malaria Parasites Is Mediated by the cGMP-Dependent Protein Kinase. <i>PLoS Biology</i> , 2008, 6, e139.	5.6	203
6	Improved synchronous production of <i>Plasmodium falciparum</i> gametocytes in vitro. <i>Molecular and Biochemical Parasitology</i> , 2007, 154, 119-123.	1.1	200
7	Malaria gametocytogenesis. <i>Molecular and Biochemical Parasitology</i> , 2010, 172, 57-65.	1.1	197
8	Phosphoinositide Metabolism Links cGMP-Dependent Protein Kinase G to Essential Ca <sup>2+</sup> Signals at Key Decision Points in the Life Cycle of Malaria Parasites. <i>PLoS Biology</i> , 2014, 12, e1001806.	5.6	185
9	The Malaria Parasite Cyclic GMP-Dependent Protein Kinase Plays a Central Role in Blood-Stage Schizogony. <i>Eukaryotic Cell</i> , 2010, 9, 37-45.	3.4	174
10	A Cyclic GMP Signalling Module That Regulates Gliding Motility in a Malaria Parasite. <i>PLoS Pathogens</i> , 2009, 5, e1000599.	4.7	171
11	Phosphoproteomics reveals malaria parasite Protein Kinase G as a signalling hub regulating egress and invasion. <i>Nature Communications</i> , 2015, 6, 7285.	12.8	153
12	Structure, function and evolution of microbial adenylyl and guanylyl cyclases. <i>Molecular Microbiology</i> , 2004, 52, 1229-1242.	2.5	116
13	A potent series targeting the malarial cGMP-dependent protein kinase clears infection and blocks transmission. <i>Nature Communications</i> , 2017, 8, 430.	12.8	110
14	Antimalarial activity of primaquine operates via a two-step biochemical relay. <i>Nature Communications</i> , 2019, 10, 3226.	12.8	94
15	Segmented $\alpha$ -helical coiled-coil structure of the protein giardin from the <i>Giardia</i> cytoskeleton. <i>Journal of Molecular Biology</i> , 1988, 204, 789-795.	4.2	89
16	Guanylyl Cyclase Activity Associated with Putative Bifunctional Integral Membrane Proteins in <i>Plasmodium falciparum</i> . <i>Journal of Biological Chemistry</i> , 2000, 275, 22147-22156.	3.4	84
17	The gametocyte-activating factor xanthurenic acid stimulates an increase in membrane-associated guanylyl cyclase activity in the human malaria parasite <i>Plasmodium falciparum</i> . <i>Molecular Microbiology</i> , 2001, 42, 553-560.	2.5	80
18	<i>Plasmodium falciparum</i> CRK4 directs continuous rounds of DNA replication during schizogony. <i>Nature Microbiology</i> , 2017, 2, 17017.	13.3	79

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19	Disruption of a <i>Plasmodium falciparum</i> cyclic nucleotide phosphodiesterase gene causes aberrant gametogenesis. <i>Molecular Microbiology</i> , 2008, 69, 110-118.	2.5	75
20	Cyclic AMP signalling controls key components of malaria parasite host cell invasion machinery. <i>PLoS Biology</i> , 2019, 17, e3000264.	5.6	64
21	A novel cyclic GMP-dependent protein kinase is expressed in the ring stage of the <i>Plasmodium falciparum</i> life cycle. <i>Molecular Microbiology</i> , 2002, 44, 1141-1151.	2.5	63
22	Programmed Transcription of the var Gene Family, but Not of stevor, in <i>Plasmodium falciparum</i> Gametocytes. <i>Eukaryotic Cell</i> , 2006, 5, 1206-1214.	3.4	63
23	The Actinomyosin Motor Drives Malaria Parasite Red Blood Cell Invasion but Not Egress. <i>MBio</i> , 2018, 9, .	4.1	63
24	Cyclic nucleotide signalling in malaria parasites. <i>Open Biology</i> , 2017, 7, 170213.	3.6	62
25	Multiple Splice Variants Encode a Novel Adenylyl Cyclase of Possible Plastid Origin Expressed in the Sexual Stage of the Malaria Parasite <i>Plasmodium falciparum</i> . <i>Journal of Biological Chemistry</i> , 2003, 278, 22014-22022.	3.4	61
26	Rapid and iterative genome editing in the malaria parasite <i>Plasmodium knowlesi</i> provides new tools for <i>P. vivax</i> research. <i>ELife</i> , 2019, 8, .	6.0	61
27	cAMP-Signalling Regulates Gametocyte-Infected Erythrocyte Deformability Required for Malaria Parasite Transmission. <i>PLoS Pathogens</i> , 2015, 11, e1004815.	4.7	60
28	Pfmrk, A MO15-Related Protein Kinase from <i>Plasmodium falciparum</i> . <i>Gene Cloning, Sequence, Stage-Specific Expression and Chromosome Localization</i> . <i>FEBS Journal</i> , 1996, 241, 805-813.	0.2	58
29	Imidazopyridazine Inhibitors of <i>Plasmodium falciparum</i> Calcium-Dependent Protein Kinase 1 Also Target Cyclic GMP-Dependent Protein Kinase and Heat Shock Protein 90 To Kill the Parasite at Different Stages of Intracellular Development. <i>Antimicrobial Agents and Chemotherapy</i> , 2016, 60, 1464-1475.	3.2	52
30	The role of two novel regulatory sites in the activation of the cGMP-dependent protein kinase from <i>Plasmodium falciparum</i> . <i>Biochemical Journal</i> , 2003, 374, 559-565.	3.7	50
31	Epistasis studies reveal redundancy among calcium-dependent protein kinases in motility and invasion of malaria parasites. <i>Nature Communications</i> , 2018, 9, 4248.	12.8	50
32	Evidence on the chromosomal location of centromeric DNA in <i>Plasmodium falciparum</i> from etoposide-mediated topoisomerase-II cleavage. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 6706-6711.	7.1	49
33	<i>Trypanosoma cruzi</i> adenylyl cyclase is encoded by a complex multigene family. <i>Molecular and Biochemical Parasitology</i> , 1999, 104, 205-217.	1.1	47
34	Sexual stage-specific expression of a third calcium-dependent protein kinase from <i>Plasmodium falciparum</i> . <i>Biochimica Et Biophysica Acta Gene Regulatory Mechanisms</i> , 2000, 1491, 341-349.	2.4	42
35	The Mu Subunit of <i>Plasmodium falciparum</i> Clathrin-Associated Adaptor Protein 2 Modulates <i>In Vitro</i> Parasite Response to Artemisinin and Quinine. <i>Antimicrobial Agents and Chemotherapy</i> , 2015, 59, 2540-2547.	3.2	42
36	A putative protein serine/threonine phosphatase from <i>Plasmodium falciparum</i> contains a large N-terminal extension and five unique inserts in the catalytic domain. <i>Molecular and Biochemical Parasitology</i> , 1998, 95, 287-295.	1.1	41

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37	The role of cGMP signalling in regulating life cycle progression of <i>Plasmodium</i> . <i>Microbes and Infection</i> , 2012, 14, 831-837.	1.9	40
38	High-throughput screening of the <i>Plasmodium falciparum</i> cGMP-dependent protein kinase identified a thiazole scaffold which kills erythrocytic and sexual stage parasites. <i>Scientific Reports</i> , 2019, 9, 7005.	3.3	40
39	Protein Phosphatase beta, a Putative Type-2A Protein Phosphatase from the Human Malaria Parasite <i>Plasmodium Falciparum</i> . <i>FEBS Journal</i> , 1997, 249, 98-106.	0.2	39
40	Probabilistic data integration identifies reliable gametocyte-specific proteins and transcripts in malaria parasites. <i>Scientific Reports</i> , 2018, 8, 410.	3.3	39
41	Phosphodiesterase beta is the master regulator of cAMP signalling during malaria parasite invasion. <i>PLoS Biology</i> , 2019, 17, e3000154.	5.6	38
42	A unique phosphatidylinositol 4-phosphate 5-kinase is activated by ADP-ribosylation factor in <i>Plasmodium falciparum</i> . <i>International Journal for Parasitology</i> , 2009, 39, 645-653.	3.1	35
43	Global genetic diversity of var2csa in <i>Plasmodium falciparum</i> with implications for malaria in pregnancy and vaccine development. <i>Scientific Reports</i> , 2018, 8, 15429.	3.3	35
44	Phosphoantigen Burst upon <i>Plasmodium falciparum</i> Schizont Rupture Can Distantly Activate $\gamma$ T Cells. <i>Infection and Immunity</i> , 2015, 83, 3816-3824.	2.2	34
45	Ca <sup>2+</sup> signals critical for egress and gametogenesis in malaria parasites depend on a multipass membrane protein that interacts with PKG. <i>Science Advances</i> , 2021, 7, .	10.3	34
46	Geographical distribution of a variant epitope of Pfs4845, a <i>Plasmodium falciparum</i> transmission-blocking vaccine candidate. <i>Molecular and Biochemical Parasitology</i> , 1996, 81, 253-257.	1.1	31
47	Cyclic nucleotide signalling in malaria parasites. <i>Cellular Microbiology</i> , 2011, 13, 331-339.	2.1	31
48	Structures of the cGMP-dependent protein kinase in malaria parasites reveal a unique structural relay mechanism for activation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 14164-14173.	7.1	30
49	Purine nucleotide cyclases in the malaria parasite. <i>Trends in Parasitology</i> , 2004, 20, 227-232.	3.3	27
50	Structure and non-essential function of glycerol kinase in <i>Plasmodium falciparum</i> blood stages. <i>Molecular Microbiology</i> , 2009, 71, 533-545.	2.5	27
51	The <i>Plasmodium falciparum</i> Artemisinin Susceptibility-Associated AP-2 Adaptin $\gamma$ Subunit is Clathrin Independent and Essential for Schizont Maturation. <i>MBio</i> , 2020, 11, .	4.1	27
52	Simultaneous multiple allelic replacement in the malaria parasite enables dissection of PKG function. <i>Life Science Alliance</i> , 2020, 3, e201900626.	2.8	27
53	Development of Chemical Entities Endowed with Potent Fast-Killing Properties against <i>Plasmodium falciparum</i> Malaria Parasites. <i>Journal of Medicinal Chemistry</i> , 2019, 62, 9217-9235.	6.4	26
54	Trisubstituted thiazoles as potent and selective inhibitors of <i>Plasmodium falciparum</i> protein kinase G (PfPKG). <i>Bioorganic and Medicinal Chemistry Letters</i> , 2018, 28, 3168-3173.	2.2	25

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55	Adenylyl and Guanylyl Cyclases from the Malaria Parasite <i>Plasmodium falciparum</i> . IUBMB Life, 2004, 56, 535-540.	3.4	24
56	Crystal Structures of the Carboxyl cGMP Binding Domain of the <i>Plasmodium falciparum</i> cGMP-dependent Protein Kinase Reveal a Novel Capping Triad Crucial for Merozoite Egress. PLoS Pathogens, 2015, 11, e1004639.	4.7	24
57	Use of a highly specific kinase inhibitor for rapid, simple and precise synchronization of <i>Plasmodium falciparum</i> and <i>Plasmodium knowlesi</i> asexual blood-stage parasites. PLoS ONE, 2020, 15, e0235798.	2.5	24
58	Sexual-stage-specific RNA expression of a new <i>Plasmodium falciparum</i> gene detected by in situ hybridisation. Molecular and Biochemical Parasitology, 1995, 72, 193-201.	1.1	23
59	An enhanced toolkit for the generation of knockout and marker-free fluorescent <i>Plasmodium chabaudi</i> . Wellcome Open Research, 2020, 5, 71.	1.8	23
60	Spatiotemporal and Functional Characterisation of the <i>Plasmodium falciparum</i> cGMP-Dependent Protein Kinase. PLoS ONE, 2012, 7, e48206.	2.5	22
61	Sequence coding for a sexual stage specific protein of <i>Plasmodium falciparum</i> . Nucleic Acids Research, 1990, 18, 3637-3637.	14.5	19
62	Cyclic GMP-dependent protein kinases in protozoa. Frontiers in Bioscience - Landmark, 2005, 10, 1229.	3.0	19
63	Primary structure and sexual stage-specific expression of a LAMMER protein kinase of <i>Plasmodium falciparum</i> . International Journal for Parasitology, 2001, 31, 387-392.	3.1	18
64	Genomic variation in two gametocyte non-producing <i>Plasmodium falciparum</i> clonal lines. Malaria Journal, 2016, 15, 229.	2.3	18
65	Malaria Parasite Schizont Egress Antigen-1 Plays an Essential Role in Nuclear Segregation during Schizogony. MBio, 2021, 12, .	4.1	17
66	Targeting the Malaria Parasite cGMP-Dependent Protein Kinase to Develop New Drugs. Frontiers in Microbiology, 2020, 11, 602803.	3.5	17
67	<i>Plasmodium falciparum</i> Guanylyl Cyclase-Alpha and the Activity of Its Appended P4-ATPase Domain Are Essential for cGMP Synthesis and Blood-Stage Egress. MBio, 2021, 12, .	4.1	15
68	cAMP signalling and its role in host cell invasion by malaria parasites. Current Opinion in Microbiology, 2020, 58, 69-74.	5.1	14
69	Potent inhibitors of malarial <i>P. Falciparum</i> protein kinase G: Improving the cell activity of a series of imidazopyridines. Bioorganic and Medicinal Chemistry Letters, 2019, 29, 509-514.	2.2	12
70	Potent bicyclic inhibitors of malarial cGMP-dependent protein kinase: approaches to combining improvements in cell potency, selectivity and structural novelty. Bioorganic and Medicinal Chemistry Letters, 2019, 29, 126610.	2.2	11
71	An enhanced toolkit for the generation of knockout and marker-free fluorescent <i>Plasmodium chabaudi</i> . Wellcome Open Research, 2020, 5, 71.	1.8	10
72	An analysis of large structural variation in global <i>Plasmodium falciparum</i> isolates identifies a novel duplication of the chloroquine resistance associated gene. Scientific Reports, 2019, 9, 8287.	3.3	8

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73	Targeting Plasmodium falciparum protein kinases with adenosine analogue "oligoarginine conjugates. Experimental Parasitology, 2014, 138, 55-62.	1.2	7
74	Development of a Transgenic Plasmodium berghei Line (Pbpfpkg) Expressing the P. falciparum cGMP-Dependent Protein Kinase, a Novel Antimalarial Drug Target. PLoS ONE, 2014, 9, e96923.	2.5	5
75	Differential IL-18 Dependence of Canonical and Adaptive NK Cells for Antibody Dependent Responses to P. falciparum. Frontiers in Immunology, 2020, 11, 533.	4.8	5
76	CDC50 Orthologues in Plasmodium falciparum Have Distinct Roles in Merozoite Egress and Trophozoite Maturation. MBio, 2022, 13, .	4.1	5
77	A Family of PP2 Phosphatases in Plasmodium falciparum and Parasitic Protozoa: Reply. Parasitology Today, 1999, 15, 124.	3.0	4
78	Malaria Parasite Epigenetics: When Virulence and Romance Collide. Cell Host and Microbe, 2014, 16, 148-150.	11.0	1
79	The role of the cGMP-dependent protein kinase in development of the malaria parasite. BMC Pharmacology, 2009, 9, S2.	0.4	0