James H Mckerrow

List of Publications by Year
in descending order

103 papers	6,253 citations	76326 40 h-index	74163 75 g-index
112 all docs	112 docs citations	112 times ranked	7300 citing authors

#	Article	IF	Citations
1	Protease inhibitors targeting coronavirus and filovirus entry. Antiviral Research, 2015, 116, 76-84.	4.1	513
2	Tumour necrosis factor Î± restores granulomas and induces parasite egg-laying in schistosome-infected SCID mice. Nature, 1992, 356, 604-607.	27.8	442
3	Cysteine Protease Inhibitors Cure an Experimental Trypanosoma cruzi Infection. Journal of Experimental Medicine, 1998, 188, 725-734.	8.5	375
4	PROTEASES IN PARASITIC DISEASES. Annual Review of Pathology: Mechanisms of Disease, 2006, 1, 497-536.	22.4	341
5	Vinyl Sulfones as Antiparasitic Agents and a Structural Basis for Drug Design. Journal of Biological Chemistry, 2009, 284, 25697-25703.	3.4	234
6	Schistosomiasis Mansoni: Novel Chemotherapy Using a Cysteine Protease Inhibitor. PLoS Medicine, 2007, 4, e14.	8.4	229
7	Complementarity Between a Docking and a High-Throughput Screen in Discovering New Cruzain Inhibitors. Journal of Medicinal Chemistry, 2010, 53, 4891-4905.	6.4	199
8	A Cysteine Protease Inhibitor Cures Chagas' Disease in an Immunodeficient-Mouse Model of Infection. Antimicrobial Agents and Chemotherapy, 2007, 51, 3932-3939.	3.2	163
9	Peptide-fluoromethyl ketones arrest intracellular replication and intercellular transmission of Trypanosoma cruzi. Molecular and Biochemical Parasitology, 1993, 58, 17-24.	1.1	155
10	Active site mapping, biochemical properties and subcellular localization of rhodesain, the major cysteine protease of Trypanosoma brucei rhodesiense. Molecular and Biochemical Parasitology, 2001, 118, 61-73.	1.1	155
11	Development of cysteine protease inhibitors as chemotherapy for parasitic diseases: insights on safety, target validation, and mechanism of action. International Journal for Parasitology, 1999, 29, 833-837.	3.1	129
12	Development of protease inhibitors for protozoan infections. Current Opinion in Infectious Diseases, 2008, 21, 668-672.	3.1	108
13	Phase I Clinical Trial Results of Auranofin, a Novel Antiparasitic Agent. Antimicrobial Agents and Chemotherapy, 2017, 61, .	3.2	104
14	Identification and Optimization of Inhibitors of Trypanosomal Cysteine Proteases: Cruzain, Rhodesain, and TbCatB. Journal of Medicinal Chemistry, 2010, 53, 52-60.	6.4	103
15	A target within the target: probing cruzainâ€™s P1â€² site to define structural determinants for the Chagasâ€™ disease protease. Structure, 2000, 8, 831-840.	3.3	100
16	The Trypanosoma cruzi Protease Cruzain Mediates Immune Evasion. PLoS Pathogens, 2011, 7, e1002139.	4.7	98
17	Targeting Ergosterol Biosynthesis in Leishmania donovani: Essentiality of Sterol 14alpha-demethylase. PLoS Neglected Tropical Diseases, 2015, 9, e0003588.	3.0	90
18	Repurposing Auranofin as a Lead Candidate for Treatment of Lymphatic Filariasis and Onchocerciasis. PLoS Neglected Tropical Diseases, 2015, 9, e0003534.	3.0	88

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19	Cruzain. Advances in Experimental Medicine and Biology, 2011, 712, 100-115.	1.6	85
20	Divergent Modes of Enzyme Inhibition in a Homologous Structureâ"Activity Series. Journal of Medicinal Chemistry, 2009, 52, 5005-5008.	6.4	84
21	Potent second generation vinyl sulfonamide inhibitors of the trypanosomal cysteine protease cruzain. Bioorganic and Medicinal Chemistry Letters, 2001, 11, 2759-2762.	2.2	82
22	Aryl ureas represent a new class of anti-trypanosomal agents. Chemistry and Biology, 2000, 7, 733-742.	6.0	77
23	RNA Interference of Trypanosoma brucei Cathepsin B and L Affects Disease Progression in a Mouse Model. PLoS Neglected Tropical Diseases, 2008, 2, e298.	3.0	76
24	Machine Learning Models and Pathway Genome Data Base for Trypanosoma cruzi Drug Discovery. PLoS Neglected Tropical Diseases, 2015, 9, e0003878.	3.0	74
25	A Clinical-Stage Cysteine Protease Inhibitor blocks SARS-CoV-2 Infection of Human and Monkey Cells. ACS Chemical Biology, 2021, 16, 642-650.	3.4	74
26	Genome-Directed Lead Discovery: Biosynthesis, Structure Elucidation, and Biological Evaluation of Two Families of Polyene Macrolactams against Trypanosoma brucei. ACS Chemical Biology, 2015, 10, 2373-2381.	3.4	69
27	In Vitro and In Vivo Studies of the Trypanocidal Properties of WRR-483 against Trypanosoma cruzi. PLoS Neglected Tropical Diseases, 2010, 4, e825.	3.0	66
28	Identification of a cDNA encoding an active asparaginyl endopeptidase ofSchistosoma mansoniand its expression inPichia pastoris1. FEBS Letters, 2000, 466, 244-248.	2.8	64
29	Trypanosoma cruzi CYP51 Inhibitor Derived from a Mycobacterium tuberculosis Screen Hit. PLoS Neglected Tropical Diseases, 2009, 3, e372.	3.0	60
30	Structural Basis for Inhibition of Cathepsin B Drug Target from the Human Blood Fluke, Schistosoma mansoni. Journal of Biological Chemistry, 2011, 286, 35770-35781.	3.4	60
31	X-ray structures of thioredoxin and thioredoxin reductase from Entamoeba histolytica and prevailing hypothesis of the mechanism of Auranofin action. Journal of Structural Biology, 2016, 194, 180-190.	2.8	60
32	Determinants of disease phenotype in trypanosomatid parasites. Trends in Parasitology, 2014, 30, 342-349.	3.3	58
33	Synthesis of a Sugar-Based Thiosemicarbazone Series and Structure-Activity Relationship versus the Parasite Cysteine Proteases Rhodesain, Cruzain, and Schistosoma mansoni Cathepsin B1. Antimicrobial Agents and Chemotherapy, 2015, 59, 2666-2677.	3.2	57
34	Novel non-peptidic vinylsulfones targeting the S2 and S3 subsites of parasite cysteine proteases. Bioorganic and Medicinal Chemistry Letters, 2009, 19, 6218-6221.	2.2	56
35	A Nonazole CYP51 Inhibitor Cures Chagasâ€™ Disease in a Mouse Model of Acute Infection. Antimicrobial Agents and Chemotherapy, 2010, 54, 2480-2488.	3.2	56
36	Diverse Inhibitor Chemotypes Targeting Trypanosoma cruzi CYP51. PLoS Neglected Tropical Diseases, 2012, 6, e1736.	3.0	54

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37	A Cysteine Protease Inhibitor Rescues Mice from a Lethal Cryptosporidium parvum Infection. Antimicrobial Agents and Chemotherapy, 2013, 57, 6063-6073.	3.2	52
38	Utilizing Chemical Genomics to Identify Cytochrome b as a Novel Drug Target for Chagas Disease. PLoS Pathogens, 2015, 11, e1005058.	4.7	52
39	Design and synthesis of dipeptidyl Î±â€²,Î²â€²-epoxy ketones, potent irreversible inhibitors of the cysteine protease cruzain. Bioorganic and Medicinal Chemistry Letters, 1998, 8, 2809-2812.	2.2	47
40	Potent Anti-SARS-CoV-2 Activity by the Natural Product Gallinamide A and Analogues via Inhibition of Cathepsin L. Journal of Medicinal Chemistry, 2022, 65, 2956-2970.	6.4	46
41	CYP51 is an essential drug target for the treatment of primary amoebic meningoencephalitis (PAM). PLoS Neglected Tropical Diseases, 2017, 11, e0006104.	3.0	45
42	Rational Development of 4-Aminopyridyl-Based Inhibitors Targeting Trypanosoma cruzi CYP51 as Anti-Chagas Agents. Journal of Medicinal Chemistry, 2013, 56, 7651-7668.	6.4	43
43	4-Aminopyridyl-Based CYP51 Inhibitors as Anti-Trypanosoma cruzi Drug Leads with Improved Pharmacokinetic Profile and in Vivo Potency. Journal of Medicinal Chemistry, 2014, 57, 6989-7005.	6.4	43
44	The rule of five should not impede anti-parasitic drug development. International Journal for Parasitology: Drugs and Drug Resistance, 2017, 7, 248-249.	3.4	36
45	Expression and alteration of the S2 subsite of the Leishmania major cathepsin B-like cysteine protease. Biochemical Journal, 1999, 340, 113-117.	3.7	35
46	Mass Spectrometry-Based Chemical Cartography of a Cardiac Parasitic Infection. Analytical Chemistry, 2017, 89, 10414-10421.	6.5	35
47	Small-Molecule Thioesters as SARS-CoV-2 Main Protease Inhibitors: Enzyme Inhibition, Structureâ€“Activity Relationships, Antiviral Activity, and X-ray Structure Determination. Journal of Medicinal Chemistry, 2022, 65, 9376-9395.	6.4	35
48	Activation Route of the Schistosoma mansoni Cathepsin B1 Drug Target: Structural Map with a Glycosaminoglycan Switch. Structure, 2014, 22, 1786-1798.	3.3	34
49	Prolyl Oligopeptidase from the Blood Fluke Schistosoma mansoni: From Functional Analysis to Anti-schistosomal Inhibitors. PLoS Neglected Tropical Diseases, 2015, 9, e0003827.	3.0	34
50	In Vitro Efficacy of Ebselen and BAY 11-7082 Against Naegleria fowleri. Frontiers in Microbiology, 2018, 9, 414.	3.5	34
51	Tissue identification and histologic study of six lung specimens from Egyptian mummies. American Journal of Physical Anthropology, 1987, 72, 43-48.	2.1	33
52	Trypsin- and Chymotrypsin-Like Serine Proteases in Schistosoma mansoni â€“ â€˜The Undiscovered Countryâ€™. PLoS Neglected Tropical Diseases, 2014, 8, e2766.	3.0	31
53	Update on drug development targeting parasite cysteine proteases. PLoS Neglected Tropical Diseases, 2018, 12, e0005850.	3.0	31
54	Computer-aided design of 1,4-naphthoquinone-based inhibitors targeting cruzain and rhodesain cysteine proteases. Bioorganic and Medicinal Chemistry, 2021, 41, 116213.	3.0	31

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55	Location, Location, Location: Five Facts about Tissue Tropism and Pathogenesis. PLoS Pathogens, 2016, 12, e1005519.	4.7	31
56	Lead Identification to Clinical Candidate Selection: Drugs for Chagas Disease. Journal of Biomolecular Screening, 2015, 20, 101-111.	2.6	27
57	Synthesis and Evaluation of Oxyguanidine Analogues of the Cysteine Protease Inhibitor WRR-483 against Cruzain. ACS Medicinal Chemistry Letters, 2016, 7, 77-82.	2.8	26
58	Rapid Chagas Disease Drug Target Discovery Using Directed Evolution in Drug-Sensitive Yeast. ACS Chemical Biology, 2017, 12, 422-434.	3.4	26
59	4-aminopyridyl-based lead compounds targeting CYP51 prevent spontaneous parasite relapse in a chronic model and improve cardiac pathology in an acute model of Trypanosoma cruzi infection. PLoS Neglected Tropical Diseases, 2017, 11, e0006132.	3.0	24
60	Cathepsin B expression in colorectal cancer in a Middle East population: Potential value as a tumor biomarker for late disease stages. Oncology Reports, 2017, 37, 3175-3180.	2.6	23
61	The Antifungal Drug Isavuconazole Is both Amebicidal and Cysticidal against Acanthamoeba castellanii. Antimicrobial Agents and Chemotherapy, 2020, 64, .	3.2	23
62	A Phenylalanine Hydroxylase Gene from the Nematode C. Elegans is Expressed in the Hypodermis. Journal of Neurogenetics, 1999, 13, 157-180.	1.4	22
63	Why Funding for Neglected Tropical Diseases Should Be a Global Priority. Clinical Infectious Diseases, 2018, 67, 323-326.	5.8	21
64	Substrate inhibition of cruzipain is not affected by the C-terminal domain. FEBS Letters, 1998, 429, 129-133.	2.8	20
65	Recognition of the role of Natural Products as drugs to treat neglected tropical diseases by the 2015 Nobel prize in physiology or medicine. Natural Product Reports, 2015, 32, 1610-1611.	10.3	19
66	Peptidomimetic Vinyl Heterocyclic Inhibitors of Cruzain Effect Antitrypanosomal Activity. Journal of Medicinal Chemistry, 2020, 63, 3298-3316.	6.4	19
67	Structure-Based Optimization of Quinazolines as Cruzain and TbrCATL Inhibitors. Journal of Medicinal Chemistry, 2021, 64, 13054-13071.	6.4	19
68	Cruzain Inhibitory Activity of Leaf Essential Oils of Neotropical Lauraceae and Essential Oil Components. Natural Product Communications, 2007, 2, 1934578X0700201.	0.5	18
69	R-Configuration of 4-Aminopyridyl-Based Inhibitors of CYP51 Confers Superior Efficacy Against Trypanosoma cruzi. ACS Medicinal Chemistry Letters, 2014, 5, 434-439.	2.8	18
70	Identification of cysteine protease inhibitors as new drug leads against Naegleria fowleri. Experimental Parasitology, 2018, 188, 36-41.	1.2	18
71	First report on prevalence of SARS-CoV-2 infection among health-care workers in Nicaragua. PLoS ONE, 2021, 16, e0246084.	2.5	18
72	Spatial metabolomics identifies localized chemical changes in heart tissue during chronic cardiac Chagas Disease. PLoS Neglected Tropical Diseases, 2021, 15, e0009819.	3.0	18

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73	Recent Insights into the Structure and Function of a Larval Proteinase Involved in Host Infection by a Multicellular Parasite. Experimental Biology and Medicine, 1991, 197, 119-124.	2.4	17
74	Scaffold and Parasite Hopping: Discovery of New Protozoal Proliferation Inhibitors. ACS Medicinal Chemistry Letters, 2020, 11, 249-257.	2.8	17
75	Enzyme Histochemical Comparison of Biomphalaria glabrata Amebocytes With Human Granuloma Macrophages. Journal of Leukocyte Biology, 1985, 37, 341-347.	3.3	16
76	Drug Susceptibility of Genetically Engineered Trypanosoma cruzi Strains and Sterile Cure in Animal Models as a Criterion for Potential Clinical Efficacy of Anti-T. cruzi Drugs. Antimicrobial Agents and Chemotherapy, 2015, 59, 7923-7924.	3.2	16
77	An Integrated Approach to Identify New Anti-Filarial Leads to Treat River Blindness, a Neglected Tropical Disease. Pathogens, 2021, 10, 71.	2.8	16
78	Hormone receptors in hepatoblastoma: A demonstration of both estrogen and progesterone receptors. Cancer, 1982, 50, 1828-1832.	4.1	14
79	Macrofilaricidal Benzimidazoleâ€“Benzoxaborole Hybrids as an Approach to the Treatment of River Blindness: Part 2. Ketone Linked Analogs. ACS Infectious Diseases, 2020, 6, 180-185.	3.8	14
80	Acanthamoeba Keratitis: an update on amebicidal and cysticidal drug screening methodologies and potential treatment with azole drugs. Expert Review of Anti-Infective Therapy, 2021, 19, 1427-1441.	4.4	14
81	Two key cathepsins, TgCPB and TgCPL, are targeted by the vinyl sulfone inhibitor K11777 in in vitro and in vivo models of toxoplasmosis. PLoS ONE, 2018, 13, e0193982.	2.5	14
82	Heat shock protein 90 inhibitors repurposed against Entamoeba histolytica. Frontiers in Microbiology, 2015, 6, 368.	3.5	13
83	Murine embryonal carcinoma hybrids: Decreased ability to spontaneously differentiate as a dominant trait. Journal of Cellular Physiology, 1981, 109, 195-204.	4.1	12
84	Macrofilaricidal Benzimidazoleâ€“Benzoxaborole Hybrids as an Approach to the Treatment of River Blindness: Part 1. Amide Linked Analogs. ACS Infectious Diseases, 2020, 6, 173-179.	3.8	11
85	The diverse roles of cysteine proteases in parasites and their suitability as drug targets. PLoS Neglected Tropical Diseases, 2018, 12, e0005639.	3.0	10
86	Substrate Specificity of Cysteine Proteases Beyond the S2 Pocket: Mutagenesis and Molecular Dynamics Investigation of Fasciola hepatica Cathepsins L. Frontiers in Molecular Biosciences, 2018, 5, 40.	3.5	10
87	High-Throughput Screening of the ReFRAME Library Identifies Potential Drug Repurposing Candidates for Trypanosoma cruzi. Microorganisms, 2020, 8, 472.	3.6	10
88	Predictions of novel Schistosoma mansoni - human protein interactions consistent with experimental data. Scientific Reports, 2018, 8, 13092.	3.3	9
89	Molecular dissection of Chagas induced cardiomyopathy reveals central disease associated and druggable signaling pathways. PLoS Neglected Tropical Diseases, 2020, 14, e0007980.	3.0	9
90	Intramolecular Interactions Enhance the Potency of Gallinamide A Analogues against Trypanosoma cruzi. Journal of Medicinal Chemistry, 2022, 65, 4255-4269.	6.4	9

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91	Reversible inhibition of cathepsin L-like proteases by 4-mer pseudopeptides. FEBS Letters, 2001, 507, 362-366.	2.8	8
92	The high stability of cruzipain against pH-induced inactivation is not dependent on its C-terminal domain. FEBS Letters, 2000, 469, 29-32.	2.8	7
93	Polymorphisms of tumor necrosis factor alpha in Middle Eastern population with colorectal cancer. Tumor Biology, 2016, 37, 5529-5537.	1.8	7
94	Dysregulation of Glycerophosphocholines in the Cutaneous Lesion Caused by Leishmania major in Experimental Murine Models. Pathogens, 2021, 10, 593.	2.8	7
95	3-O-(3â€²-Hydroxytetradecanoyl)lupeol from Sorocea trophoides Inhibits Cruzain. Natural Product Communications, 2007, 2, 1934578X0700200.	0.5	6
96	Impact of Single Dose Praziquantel Treatment on Schistosoma haematobium Infection among School Children in an Endemic Nigerian Community. Korean Journal of Parasitology, 2018, 56, 577-581.	1.3	6
97	Identification of Four Amoebicidal Nontoxic Compounds by a Molecular Docking Screen of Naegleria fowleri Sterol Î”8â†’Î”7-Isomerase and Phenotypic Assays. ACS Infectious Diseases, 2019, 5, 2029-2038.	3.8	6
98	Inhibition of Cruzain by Triterpenoids Isolated from a Salacia Species from Monteverde, Costa Rica. Natural Product Communications, 2007, 2, 1934578X0700201.	0.5	5
99	Discovery of Triple Inhibitors of Both SARS-CoV-2 Proteases and Human Cathepsin L. Pharmaceuticals, 2022, 15, 744.	3.8	5
100	Chemical Composition and Cruzain Inhibitory Activity of Croton draco Bark Essential Oil from Monteverde, Costa Rica. Natural Product Communications, 2007, 2, 1934578X0700200.	0.5	4
101	Long term follow-up of Trypanosoma cruzi infection and Chagas disease manifestations in mice treated with benznidazole or posaconazole. PLoS Neglected Tropical Diseases, 2020, 14, e0008726.	3.0	4
102	Identification of Leucinostatins from Ophiocordyceps sp. as Antiparasitic Agents against Trypanosoma cruzi. ACS Omega, 2022, 7, 7675-7682.	3.5	3
103	Editorial: Drug Development for Parasite-Induced Diarrheal Diseases. Frontiers in Microbiology, 2017, 8, 577.	3.5	2