James M Mccaw

List of Publications by Year
in descending order

114 papers	3,150 citations	172457 29 h-index	214800 47 g-index
130 all docs	130 docs citations	130 times ranked	4423 citing authors

#	Article	IF	Citations
1	Targeting the Cell Stress Response of Plasmodium falciparum to Overcome Artemisinin Resistance. PLoS Biology, 2015, 13, e1002132.	5.6	254
2	Altered temporal response of malaria parasites determines differential sensitivity to artemisinin. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5157-5162.	7.1	172
3	Estimating the Fitness Advantage Conferred by Permissive Neuraminidase Mutations in Recent Oseltamivir-Resistant A(H1N1)pdm09 Influenza Viruses. PLoS Pathogens, 2014, 10, e1004065.	4.7	114
4	Clonally diverse CD38+HLA-DR+CD8+ T cells persist during fatal H7N9 disease. Nature Communications, 2018, 9, 824.	12.8	107
5	Key questions for modelling COVID-19 exit strategies. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20201405.	2.6	106
6	Investigating Viral Interference Between Influenza A Virus and Human Respiratory Syncytial Virus in a Ferret Model of Infection. Journal of Infectious Diseases, 2018, 218, 406-417.	4.0	90
7	Interval Between Infections and Viral Hierarchy Are Determinants of Viral Interference Following Influenza Virus Infection in a Ferret Model. Journal of Infectious Diseases, 2015, 212, 1701-1710.	4.0	88
8	A Biological Model for Influenza Transmission: Pandemic Planning Implications of Asymptomatic Infection and Immunity. PLoS ONE, 2007, 2, e1220.	2.5	76
9	Understanding influenza transmission, immunity and pandemic threats. Influenza and Other Respiratory Viruses, 2009, 3, 143-149.	3.4	72
10	Assessing the Viral Fitness of Oseltamivir-Resistant Influenza Viruses in Ferrets, Using a Competitive-Mixtures Model. Journal of Virology, 2010, 84, 9427-9438.	3.4	69
11	Infectious disease pandemic planning and response: Incorporating decision analysis. PLoS Medicine, 2020, 17, e1003018.	8.4	67
12	Early analysis of the Australian COVID-19 epidemic. ELife, 2020, 9, .	6.0	66
13	Antigenic Drift of the Pandemic 2009 A(H1N1) Influenza Virus in a Ferret Model. PLoS Pathogens, 2013, 9, e1003354.	4.7	62
14	Prophylaxis or treatment? Optimal use of an antiviral stockpile during an influenza pandemic. Mathematical Biosciences, 2007, 209, 336-360.	1.9	60
15	The effects of demographic change on disease transmission and vaccine impact in a household structured population. Epidemics, 2015, 13, 56-64.	3.0	50
16	Innate Immunity and the Inter-exposure Interval Determine the Dynamics of Secondary Influenza Virus Infection and Explain Observed Viral Hierarchies. PLoS Computational Biology, 2015, 11, e1004334.	3.2	50
17	Comparison of the Exposure Time Dependence of the Activities of Synthetic Ozonide Antimalarials and Dihydroartemisinin against K13 Wild-Type and Mutant Plasmodium falciparum Strains. Antimicrobial Agents and Chemotherapy, 2016, 60, 4501-4510.	3.2	49
18	Evidence for Viral Interference and Cross-reactive Protective Immunity Between Influenza B Virus Lineages. Journal of Infectious Diseases, 2018, 217, 548-559.	4.0	49

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19	Impact of Emerging Antiviral Drug Resistance on Influenza Containment and Spread: Influence of Subclinical Infection and Strategic Use of a Stockpile Containing One or Two Drugs. PLoS ONE, 2008, 3, e2362.	2.5	48
20	Synthetic Population Dynamics: A Model of Household Demography. Jasss, 2013, 16, .	1.8	48
21	Prior immunity helps to explain wave-like behaviour of pandemic influenza in 1918-9. BMC Infectious Diseases, 2010, 10, 128.	2.9	45
22	Heightened self-reactivity associated with selective survival, but not expansion, of naÃ¯ve virus-specific CD8 ⁺ T cells in aged mice. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1333-1338.	7.1	45
23	Comparison of three methods for ascertainment of contact information relevant to respiratory pathogen transmission in encounter networks. BMC Infectious Diseases, 2010, 10, 166.	2.9	43
24	Investigating the Efficacy of Triple Artemisinin-Based Combination Therapies for Treating Plasmodium falciparum Malaria Patients Using Mathematical Modeling. Antimicrobial Agents and Chemotherapy, 2018, 62, .	3.2	43
25	Assessing the utility of an anti-malarial pharmacokinetic-pharmacodynamic model for aiding drug clinical development. Malaria Journal, 2012, 11, 303.	2.3	42
26	Forecasting influenza outbreak dynamics in Melbourne from Internet search query surveillance data. Influenza and Other Respiratory Viruses, 2016, 10, 314-323.	3.4	40
27	Characterising pandemic severity and transmissibility from data collected during first few hundred studies. Epidemics, 2017, 19, 61-73.	3.0	36
28	Coronavirus Disease Model to Inform Transmission-Reducing Measures and Health System Preparedness, Australia. Emerging Infectious Diseases, 2020, 26, 2844-2853.	4.3	36
29	Modeling the dynamics of Plasmodium falciparum gametocytes in humans during malaria infection. ELife, 2019, 8, .	6.0	36
30	Reducing Uncertainty in Within-Host Parameter Estimates of Influenza Infection by Measuring Both Infectious and Total Viral Load. PLoS ONE, 2013, 8, e64098.	2.5	31
31	Evaluation of oseltamivir prophylaxis regimens for reducing influenza virus infection, transmission and disease severity in a ferret model of household contact. Journal of Antimicrobial Chemotherapy, 2014, 69, 2458-2469.	3.0	31
32	On the Role of CD8+ T Cells in Determining Recovery Time from Influenza Virus Infection. Frontiers in Immunology, 2016, 7, 611.	4.8	31
33	Influencing public health policy with data-informed mathematical models of infectious diseases: Recent developments and new challenges. Epidemics, 2020, 32, 100393.	3.0	31
34	Influenza: Accounting for Prior Immunity. Science, 2009, 325, 1071-1071.	12.6	29
35	The Mechanisms for Within-Host Influenza Virus Control Affect Model-Based Assessment and Prediction of Antiviral Treatment. Viruses, 2017, 9, 197.	3.3	29
36	Making the Most of Clinical Data: Reviewing the Role of Pharmacokinetic-Pharmacodynamic Models of Anti-malarial Drugs. AAPS Journal, 2014, 16, 962-974.	4.4	26

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37	Withinâ€host modeling of bloodâ€stage malaria. Immunological Reviews, 2018, 285, 168-193.	6.0	26
38	Accounting for Healthcare-Seeking Behaviours and Testing Practices in Real-Time Influenza Forecasts. Tropical Medicine and Infectious Disease, 2019, 4, 12.	2.3	26
39	H1N1 influenza and the Australian macroeconomy. Journal of the Asia Pacific Economy, 2012, 17, 22-51.	1.7	25
40	Defining long-term drivers of pertussis resurgence, and optimal vaccine control strategies. Vaccine, 2015, 33, 5794-5800.	3.8	25
41	Retrospective forecasting of the 2010â€“2014 Melbourne influenza seasons using multiple surveillance systems. Epidemiology and Infection, 2017, 145, 156-169.	2.1	25
42	Modelling cross-reactivity and memory in the cellular adaptive immune response to influenza infection in the host. Journal of Theoretical Biology, 2017, 413, 34-49.	1.7	24
43	Likely effectiveness of pharmaceutical and non-pharmaceutical interventions for mitigating influenza virus transmission in Mongolia. Bulletin of the World Health Organization, 2012, 90, 264-271.	3.3	23
44	Quantifying relative within-host replication fitness in influenza virus competition experiments. Journal of Theoretical Biology, 2015, 382, 259-271.	1.7	23
45	Epidemic forecasts as a tool for public health: interpretation and (re)calibration. Australian and New Zealand Journal of Public Health, 2018, 42, 69-76.	1.8	22
46	Incorporating population dynamics into household models of infectious disease transmission. Epidemics, 2011, 3, 152-158.	3.0	20
47	THE INFLUENCE OF INCREASING LIFE EXPECTANCY ON THE DYNAMICS OF SIRS SYSTEMS WITH IMMUNEÂBOOSTING. ANZIAM Journal, 2012, 54, 50-63.	0.2	20
48	Influenza as a trigger for cardiovascular disease: An investigation of serotype, subtype and geographic location. Environmental Research, 2017, 156, 688-696.	7.5	20
49	A biological model of scabies infection dynamics and treatment informs mass drug administration strategies to increase the likelihood of elimination. Mathematical Biosciences, 2019, 309, 163-173.	1.9	20
50	Diagnosis and Antiviral Intervention Strategies for Mitigating an Influenza Epidemic. PLoS ONE, 2011, 6, e14505.	2.5	19
51	A Mathematical Framework for Estimating Pathogen Transmission Fitness and Inoculum Size Using Data from a Competitive Mixtures Animal Model. PLoS Computational Biology, 2011, 7, e1002026.	3.2	18
52	Virus detection and its association with symptoms during influenza-like illness in a sample of healthy adults enrolled in a randomised controlled vaccine trial. Influenza and Other Respiratory Viruses, 2013, 7, 330-339.	3.4	18
53	Pandemic controllability: a concept to guide a proportionate and flexible operational response to future influenza pandemics. Journal of Public Health, 2014, 36, 5-12.	1.8	18
54	Population Pharmacokinetics of Intravenous Artesunate: A Pooled Analysis of Individual Data From Patients With Severe Malaria. CPT: Pharmacometrics and Systems Pharmacology, 2014, 3, 1-9.	2.5	18

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55	Modelling strategic use of the national antiviral stockpile during the CONTAIN and SUSTAIN phases of an Australian pandemic influenza response. Australian and New Zealand Journal of Public Health, 2010, 34, 113-119.	1.8	17
56	A new approach to estimating trends in chlamydia incidence. Sexually Transmitted Infections, 2015, 91, 513-519.	1.9	17
57	On the extinction probability in models of within-host infection: the role of latency and immunity. Journal of Mathematical Biology, 2016, 73, 787-813.	1.9	17
58	Characterization of Influenza B Virus Variants with Reduced Neuraminidase Inhibitor Susceptibility. Antimicrobial Agents and Chemotherapy, 2018, 62, .	3.2	17
59	Understanding mortality in the 1918â€“1919 influenza pandemic in England and Wales. Influenza and Other Respiratory Viruses, 2011, 5, 89-98.	3.4	16
60	Household transmission of respiratory viruses â€“ assessment of viral, individual and household characteristics in a population study of healthy Australian adults. BMC Infectious Diseases, 2012, 12, 345.	2.9	16
61	Social encounter profiles of greater Melbourne residents, by location â€“ a telephone survey. BMC Infectious Diseases, 2015, 15, 494.	2.9	15
62	Model selection for seasonal influenza forecasting. Infectious Disease Modelling, 2017, 2, 56-70.	1.9	15
63	Modelling within-host macrophage dynamics in influenza virus infection. Journal of Theoretical Biology, 2021, 508, 110492.	1.7	15
64	Optimal Dosing and Dynamic Distribution of Vaccines in an Influenza Pandemic. American Journal of Epidemiology, 2009, 169, 1517-1524.	3.4	14
65	Influence of Contact Definitions in Assessment of the Relative Importance of Social Settings in Disease Transmission Risk. PLoS ONE, 2012, 7, e30893.	2.5	14
66	Reducing disease burden in an influenza pandemic by targeted delivery of neuraminidase inhibitors: mathematical models in the Australian context. BMC Infectious Diseases, 2016, 16, 552.	2.9	13
67	A simple influenza model with complicated dynamics. Journal of Mathematical Biology, 2019, 78, 607-624.	1.9	12
68	The influence of changing host immunity on 1918â€“19 pandemic dynamics. Epidemics, 2014, 8, 18-27.	3.0	11
69	Prior Population Immunity Reduces the Expected Impact of CTL-Inducing Vaccines for Pandemic Influenza Control. PLoS ONE, 2015, 10, e0120138.	2.5	10
70	Hypnozoite dynamics for Plasmodium vivax malaria: The epidemiological effects of radical cure. Journal of Theoretical Biology, 2022, 537, 111014.	1.7	10
71	COVID-19 in low-tolerance border quarantine systems: Impact of the Delta variant of SARS-CoV-2. Science Advances, 2022, 8, eabm3624.	10.3	10
72	The dynamical consequences of seasonal forcing, immune boosting and demographic change in a model of disease transmission. Journal of Theoretical Biology, 2014, 361, 124-132.	1.7	9

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73	Factors associated with transmission of influenzaâ€like illness in a cohort of households containing multiple children. Influenza and Other Respiratory Viruses, 2015, 9, 247-254.	3.4	9
74	Pertussis models to inform vaccine policy. Human Vaccines and Immunotherapeutics, 2015, 11, 669-678.	3.3	9
75	A Dynamic Stress Model Explains the Delayed Drug Effect in Artemisinin Treatment of Plasmodium falciparum. Antimicrobial Agents and Chemotherapy, 2017, 61, .	3.2	9
76	A mechanistic model quantifies artemisinin-induced parasite growth retardation in blood-stage Plasmodium falciparum infection. Journal of Theoretical Biology, 2017, 430, 117-127.	1.7	9
77	Calculation of the age of the first infection for skin sores and scabies in five remote communities in northern Australia. Epidemiology and Infection, 2018, 146, 1194-1201.	2.1	9
78	Sequential infection experiments for quantifying innate and adaptive immunity during influenza infection. PLoS Computational Biology, 2019, 15, e1006568.	3.2	9
79	An Activation-Clearance Model for Plasmodium vivax Malaria. Bulletin of Mathematical Biology, 2020, 82, 32.	1.9	9
80	Constructing an ethical framework for priority allocation of pandemic vaccines. Vaccine, 2021, 39, 797-804.	3.8	9
81	Model-Informed Risk Assessment and Decision Making for an Emerging Infectious Disease in the Asia-Pacific Region. PLoS Neglected Tropical Diseases, 2016, 10, e0005018.	3.0	9
82	Dynamical crises, multistability and the influence of the duration of immunity in a seasonally-forced model of disease transmission. Theoretical Biology and Medical Modelling, 2014, 11, 43.	2.1	8
83	Infection-acquired versus vaccine-acquired immunity in an SIRWS model. Infectious Disease Modelling, 2018, 3, 118-135.	1.9	8
84	Antibody Dynamics for Plasmodium vivax Malaria: A Mathematical Model. Bulletin of Mathematical Biology, 2021, 83, 6.	1.9	8
85	Estimation of the probability of epidemic fade-out from multiple outbreak data. Epidemics, 2022, 38, 100539.	3.0	8
86	Understanding Australia's influenza pandemic policy on the strategic use of the antiviral drug stockpile. Medical Journal of Australia, 2009, 191, 136-137.	1.7	7
87	Periodic solutions in an SIRWS model with immune boosting and cross-immunity. Journal of Theoretical Biology, 2016, 410, 55-64.	1.7	7
88	Predicting the Outcomes of New Short-Course Regimens for Multidrug-Resistant Tuberculosis Using Intrahost and Pharmacokinetic-Pharmacodynamic Modeling. Antimicrobial Agents and Chemotherapy, 2018, 62, .	3.2	7
89	Anatomy of a seasonal influenza epidemic forecast. Communicable Diseases Intelligence (2018), 0, 43, .	0.7	7
90	Quantifying differences in the epidemic curves from three influenza surveillance systems: a nonlinear regression analysis. Epidemiology and Infection, 2015, 143, 427-439.	2.1	6

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91	Estimation of the force of infection and infectious period of skin sores in remote Australian communities using interval-censored data. PLoS Computational Biology, 2020, 16, e1007838.	3.2	6
92	From Climate Change to Pandemics: Decision Science Can Help Scientists Have Impact. Frontiers in Ecology and Evolution, 2022, 10, .	2.2	6
93	Drivers and consequences of influenza antiviral resistant-strain emergence in a capacity-constrained pandemic response. Epidemics, 2012, 4, 219-226.	3.0	5
94	Application of a caseâ€“control study design to investigate genotypic signatures of HIV-1 transmission. Retrovirology, 2012, 9, 54.	2.0	5
95	The distribution of the time taken for an epidemic to spread between two communities. Mathematical Biosciences, 2018, 303, 139-147.	1.9	5
96	Rapid assessment of the risk of SARS-CoV-2 importation: case study and lessons learned. Epidemics, 2022, 38, 100549.	3.0	5
97	Pure point spectrum for the time evolution of a periodically rank-N kicked Hamiltonian. Journal of Mathematical Physics, 2005, 46, 032108.	1.1	4
98	In Silico Investigation of the Decline in Clinical Efficacy of Artemisinin Combination Therapies Due to Increasing Artemisinin and Partner Drug Resistance. Antimicrobial Agents and Chemotherapy, 2018, 62, .	3.2	4
99	Coordinating the realâ€time use of global influenza activity data for better public health planning. Influenza and Other Respiratory Viruses, 2020, 14, 105-110.	3.4	4
100	Modelling the Effect of MUC1 on Influenza Virus Infection Kinetics and Macrophage Dynamics. Viruses, 2021, 13, 850.	3.3	4
101	Development of an influenza pandemic decision support tool linking situational analytics to national response policy. Epidemics, 2021, 36, 100478.	3.0	4
102	High conservation level of CD8⁺ T cell immunogenic regions within an unusual H1N2 human influenza variant. Journal of Medical Virology, 2016, 88, 1725-1732.	5.0	3
103	Anatomy of a seasonal influenza epidemic forecast. Communicable Diseases Intelligence (2018), 2019, 43, .	0.7	3
104	On the continuous spectral component of the Floquet operator for a periodically kicked quantum system. Journal of Mathematical Physics, 2005, 46, 103503.	1.1	2
105	Parasite Strain, Host Immunity, and Circulating Blood Cells with Dead Parasites: Why Predicting Malaria Parasite Clearance Is Not a Simple Task. Antimicrobial Agents and Chemotherapy, 2016, 60, 1172-1172.	3.2	2
106	Turnover of Village Chickens Undermines Vaccine Coverage to Control HPAI H5N1. Zoonoses and Public Health, 2017, 64, 53-62.	2.2	1
107	Development and Validation of an In Silico Decision Tool To Guide Optimization of Intravenous Artesunate Dosing Regimens for Severe Falciparum Malaria Patients. Antimicrobial Agents and Chemotherapy, 2021, 65, .	3.2	1
108	New Mathematical Models of Antimalarial Drug Action to Improve Drug Dosing Regimens. Mathematics for Industry, 2018, , 7-11.	0.4	0

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109	Title is missing!. , 2020, 16, e1007838.		0
110	Title is missing!. , 2020, 16, e1007838.		0
111	Title is missing!. , 2020, 16, e1007838.		0
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