Michael J Tildesley

List of Publications by Year
in descending order

82 papers	3,027 citations	236833 25 h-index	223716 46 g-index
109 all docs	109 docs citations	109 times ranked	3374 citing authors

#	Article	IF	Citations
1	Vaccination and non-pharmaceutical interventions for COVID-19: a mathematical modelling study. Lancet Infectious Diseases, The, 2021, 21, 793-802.	4.6	453
2	Optimal reactive vaccination strategies for a foot-and-mouth outbreak in the UK. Nature, 2006, 440, 83-86.	13.7	216
3	Modelling optimal vaccination strategy for SARS-CoV-2 in the UK. PLoS Computational Biology, 2021, 17, e1008849.	1.5	142
4	Key questions for modelling COVID-19 exit strategies. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20201405.	1.2	106
5	Adaptive Management and the Value of Information: Learning Via Intervention in Epidemiology. PLoS Biology, 2014, 12, e1001970.	2.6	98
6	Possible future waves of SARS-CoV-2 infection generated by variants of concern with a range of characteristics. Nature Communications, 2021, 12, 5730.	5.8	90
7	Predictions of COVID-19 dynamics in the UK: Short-term forecasting and analysis of potential exit strategies. PLoS Computational Biology, 2021, 17, e1008619.	1.5	87
8	Impact of spatial clustering on disease transmission and optimal control. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 1041-1046.	3.3	85
9	The role of pre-emptive culling in the control of foot-and-mouth disease. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 3239-3248.	1.2	84
10	Decision-making for foot-and-mouth disease control: Objectives matter. Epidemics, 2016, 15, 10-19.	1.5	71
11	Accuracy of models for the 2001 foot-and-mouth epidemic. Proceedings of the Royal Society B: Biological Sciences, 2008, 275, 1459-1468.	1.2	68
12	Harnessing multiple models for outbreak management. Science, 2020, 368, 577-579.	6.0	64
13	The Impact of Movements and Animal Density on Continental Scale Cattle Disease Outbreaks in the United States. PLoS ONE, 2014, 9, e91724.	1.1	61
14	INFERENCE FOR INDIVIDUAL-LEVEL MODELS OF INFECTIOUS DISEASES IN LARGE POPULATIONS. Statistica Sinica, 2010, 20, 239-261.	0.2	57
15	Real-time decision-making during emergency disease outbreaks. PLoS Computational Biology, 2018, 14, e1006202.	1.5	46
16	Essential information: Uncertainty and optimal control of Ebola outbreaks. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5659-5664.	3.3	43
17	Is a good predictor of final epidemic size: Foot-and-mouth disease in the UK. Journal of Theoretical Biology, 2009, 258, 623-629.	0.8	42
18	Modeling the spread and control of foot-and-mouth disease in Pennsylvania following its discovery and options for control. Preventive Veterinary Medicine, 2012, 104, 224-239.	0.7	42

#	Article	IF	Citations
19	The impact of school reopening on the spread of COVID-19 in England. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20200261.	1.8	41
20	A Bayesian Ensemble Approach for Epidemiological Projections. PLoS Computational Biology, 2015, 11, e1004187.	1.5	40
21	Topographic determinants of foot and mouth disease transmission in the UK 2001 epidemic. BMC Veterinary Research, 2006, 2, 3.	0.7	37
22	Ensemble modelling and structured decision-making to support Emergency Disease Management. Preventive Veterinary Medicine, 2017, 138, 124-133.	0.7	36
23	Vaccination against Foot-And-Mouth Disease: Do Initial Conditions Affect Its Benefit?. PLoS ONE, 2013, 8, e77616.	1.1	32
24	Rapid in-country sequencing of whole virus genomes to inform rabies elimination programmes. Wellcome Open Research, 2020, 5, 3.	0.9	30
25	Challenges for modelling interventions for future pandemics. Epidemics, 2022, 38, 100546.	1.5	30
26	Modelling foot-and-mouth disease: A comparison between the UK and Denmark. Preventive Veterinary Medicine, 2008, 85, 107-124.	0.7	29
27	Epidemic predictions in an imperfect world: modelling disease spread with partial data. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20150205.	1.2	27
28	Rapid in-country sequencing of whole virus genomes to inform rabies elimination programmes. Wellcome Open Research, 2020, 5, 3.	0.9	26
29	Quantifying pupil-to-pupil SARS-CoV-2 transmission and the impact of lateral flow testing in English secondary schools. Nature Communications, 2022, 13, 1106.	5.8	24
30	On the origin of filamentary structure in sunspot penumbrae: non-linear results. Monthly Notices of the Royal Astronomical Society, 2004, 350, 657-670.	1.6	23
31	Disease Prevention versus Data Privacy: Using Landcover Maps to Inform Spatial Epidemic Models. PLoS Computational Biology, 2012, 8, e1002723.	1.5	22
32	Fitting to the UK COVID-19 outbreak, short-term forecasts and estimating the reproductive number. Statistical Methods in Medical Research, 2022, 31, 1716-1737.	0.7	22
33	Modelling H5N1 in Bangladesh across spatial scales: Model complexity and zoonotic transmission risk. Epidemics, 2017, 20, 37-55.	1.5	19
34	Disentangling the influence of livestock vs. farm density on livestock disease epidemics. Ecosphere, 2018, 9, e02294.	1.0	18
35	Effect of data quality on estimates of farm infectiousness trends in the UK 2001 foot-and-mouth disease epidemic. Journal of the Royal Society Interface, 2007, 4, 235-241.	1.5	17
36	The impact of surveillance and control on highly pathogenic avian influenza outbreaks in poultry in Dhaka division, Bangladesh. PLoS Computational Biology, 2018, 14, e1006439.	1.5	17

#	Article	IF	Citations
37	The role of movement restrictions in limiting the economic impact of livestock infections. Nature Sustainability, 2019, 2, 834-840.	11.5	17
38	An analysis of school absences in England during the COVID-19 pandemic. BMC Medicine, 2021, 19, 137.	2.3	17
39	Early warning signals of infectious disease transitions: a review. Journal of the Royal Society Interface, 2021, 18, 20210555.	1.5	17
40	Modelling SARS-CoV-2 transmission in a UK university setting. Epidemics, 2021, 36, 100476.	1.5	17
41	Context matters: using reinforcement learning to develop human-readable, state-dependent outbreak response policies. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20180277.	1.8	16
42	Quantifying the Value of Perfect Information in Emergency Vaccination Campaigns. PLoS Computational Biology, 2017, 13, e1005318.	1.5	16
43	Concurrent assessment of epidemiological and operational uncertainties for optimal outbreak control: Ebola as a case study. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20190774.	1.2	15
44	SARS-CoV-2 infection in UK university students: lessons from Septemberâ€"December 2020 and modelling insights for future student return. Royal Society Open Science, 2021, 8, 210310.	1.1	15
45	Could Changes in the Agricultural Landscape of Northeastern China Have Influenced the Long-Distance Transmission of Highly Pathogenic Avian Influenza H5Nx Viruses?. Frontiers in Veterinary Science, 2017, 4, 225.	0.9	14
46	The problem of detrending when analysing potential indicators of disease elimination. Journal of Theoretical Biology, 2019, 481, 183-193.	0.8	14
47	The performance of approximations of farm contiguity compared to contiguity defined using detailed geographical information in two sample areas in Scotland: implications for foot-and-mouth disease modelling. BMC Veterinary Research, 2013, 9, 198.	0.7	13
48	Prospects for detecting early warning signals in discrete event sequence data: Application to epidemiological incidence data. PLoS Computational Biology, 2020, 16, e1007836.	1.5	13
49	A network modelling approach to assess non-pharmaceutical disease controls in a worker population: An application to SARS-CoV-2. PLoS Computational Biology, 2021, 17, e1009058.	1.5	12
50	On the origin of filamentary structure in sunspot penumbrae: linear instabilities. Monthly Notices of the Royal Astronomical Society, 2003, 338, 497-507.	1.6	11
51	Assessing the impact of lateral flow testing strategies on within-school SARS-CoV-2 transmission and absences: A modelling study. PLoS Computational Biology, 2022, 18, e1010158.	1.5	11
52	Effects of regional differences and demography in modelling foot-and-mouth disease in cattle at the national scale. Interface Focus, 2020, 10, 20190054.	1.5	10
53	Strategic testing approaches for targeted disease monitoring can be used to inform pandemic decision-making. PLoS Biology, 2021, 19, e3001307.	2.6	9
54	Insights from quantitative and mathematical modelling on the proposed 2030 goals for Yaws. Gates Open Research, 2019, 3, 1576.	2.0	9

#	Article	IF	Citations
55	Modelling livestock infectious disease control policy under differing social perspectives on vaccination behaviour. PLoS Computational Biology, 2022, 18, e1010235.	1.5	9
56	Challenges and opportunities for using national animal datasets to support footâ€andâ€mouth disease control. Transboundary and Emerging Diseases, 2021, 68, 1800-1813.	1.3	8
57	Synergistic interventions to control COVID-19: Mass testing and isolation mitigates reliance on distancing. PLoS Computational Biology, 2021, 17, e1009518.	1.5	8
58	Precautionary breaks: Planned, limited duration circuit breaks to control the prevalence of SARS-CoV2 and the burden of COVID-19 disease. Epidemics, 2021, 37, 100526.	1.5	8
59	Epidemiological and Virological Characteristics of Pandemic Influenza A (H1N1) School Outbreaks in China in 2009. PLoS ONE, 2012, 7, e45898.	1.1	7
60	Rapid simulation of spatial epidemics: A spectral method. Journal of Theoretical Biology, 2015, 370, 121-134.	0.8	7
61	Preserving privacy whilst maintaining robust epidemiological predictions. Epidemics, 2016, 17, 35-41.	1.5	7
62	Evidence for history-dependence of influenza pandemic emergence. Scientific Reports, 2017, 7, 43623.	1.6	7
63	Need for speed: An optimized gridding approach for spatially explicit disease simulations. PLoS Computational Biology, 2018, 14, e1006086.	1.5	7
64	Quantitative impacts of incubation phase transmission of foot-and-mouth disease virus. Scientific Reports, 2019, 9, 2707.	1.6	7
65	Cattle farmer psychosocial profiles and their association with control strategies for bovine viral diarrhea. Journal of Dairy Science, 2022, 105, 3559-3573.	1.4	7
66	Vaccination strategies for foot-and-mouth disease (reply). Nature, 2007, 445, E12-E13.	13.7	6
67	Insights into mucosal innate responses to <i>Escherichia coli</i> O157 : H7 colonization of cattle by mathematical modelling of excretion dynamics. Journal of the Royal Society Interface, 2012, 9, 518-527.	1.5	6
68	Anticipating future learning affects current control decisions: A comparison between passive and active adaptive management in an epidemiological setting. Journal of Theoretical Biology, 2020, 506, 110380.	0.8	6
69	Modelling the persistence and control of Rift Valley fever virus in a spatially heterogeneous landscape. Nature Communications, 2021, 12, 5593.	5.8	6
70	Dynamics of the 2004 avian influenza H5N1 outbreak in Thailand: The role of duck farming, sequential model fitting and control. Preventive Veterinary Medicine, 2018, 159, 171-181.	0.7	5
71	Causes of delayed outbreak responses and their impacts on epidemic spread. Journal of the Royal Society Interface, 2021, 18, 20200933.	1.5	5
72	One Health Surveillance for Rabies: A Case Study of Integrated Bite Case Management in Albay Province, Philippines. Frontiers in Tropical Diseases, 2022, 3, .	0.5	5

#	Article	IF	Citations
73	Potential for epidemic take-off from the primary outbreak farm via livestock movements. BMC Veterinary Research, 2011, 7, 76.	0.7	4
74	Climate drivers of plague epidemiology in British India, 1898â€“1949. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20200538.	1.2	4
75	Point pattern simulation modelling of extensive and intensive chicken farming in Thailand: Accounting for clustering and landscape characteristics. Agricultural Systems, 2019, 173, 335-344.	3.2	3
76	Realistic assumptions about spatial locations and clustering of premises matter for models of foot-and-mouth disease spread in the United States. PLoS Computational Biology, 2020, 16, e1007641.	1.5	3
77	Developments in statistical inference when assessing spatiotemporal disease clustering with the tau statistic. Spatial Statistics, 2021, 42, 100438.	0.9	3
78	Reâ€parameterization of a mathematical model of African horse sickness virus using data from a systematic literature search. Transboundary and Emerging Diseases, 2022, 69, .	1.3	3
79	The effect of notification window length on the epidemiological impact of COVID-19 contact tracing mobile applications. Communications Medicine, 2022, 2, .	1.9	3
80	How predictable are flu pandemics?. Significance, 2017, 14, 28-33.	0.3	2
81	A model exploration of carrier and movement transmission as potential explanatory causes for the persistence of footâ€andâ€mouth disease in endemic regions. Transboundary and Emerging Diseases, 2021, , .	1.3	2
82	Inference for a spatio-temporal model with partial spatial data: African horse sickness virus in Morocco. Epidemics, 2022, 39, 100566.	1.5	1