

Matt J Keeling

List of Publications by Year in descending order

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Version: 2024-02-01

231
papers

19,689
citations

20817

60
h-index

18130

120
g-index

308
all docs

308
docs citations

308
times ranked

17129
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Cattle farmer psychosocial profiles and their association with control strategies for bovine viral diarrhoea. <i>Journal of Dairy Science</i> , 2022, 105, 3559-3573. | 3.4 | 7 |
| 2 | Fitting to the UK COVID-19 outbreak, short-term forecasts and estimating the reproductive number. <i>Statistical Methods in Medical Research</i> , 2022, 31, 1716-1737. | 1.5 | 22 |
| 3 | Cost-effectiveness of sleeping sickness elimination campaigns in five settings of the Democratic Republic of Congo. <i>Nature Communications</i> , 2022, 13, 1051. | 12.8 | 7 |
| 4 | MetaWards: A flexible metapopulation framework for modelling disease spread. <i>Journal of Open Source Software</i> , 2022, 7, 3914. | 4.6 | 0 |
| 5 | Quantifying pupil-to-pupil SARS-CoV-2 transmission and the impact of lateral flow testing in English secondary schools. <i>Nature Communications</i> , 2022, 13, 1106. | 12.8 | 24 |
| 6 | Identifying regions for enhanced control of gambiense sleeping sickness in the Democratic Republic of Congo. <i>Nature Communications</i> , 2022, 13, 1448. | 12.8 | 3 |
| 7 | An assessment of the vaccination of school-aged children in England against SARS-CoV-2. <i>BMC Medicine</i> , 2022, 20, 196. | 5.5 | 9 |
| 8 | Assessing the impact of lateral flow testing strategies on within-school SARS-CoV-2 transmission and absences: A modelling study. <i>PLoS Computational Biology</i> , 2022, 18, e1010158. | 3.2 | 11 |
| 9 | The effect of notification window length on the epidemiological impact of COVID-19 contact tracing mobile applications. <i>Communications Medicine</i> , 2022, 2, . | 4.2 | 3 |
| 10 | Modelling livestock infectious disease control policy under differing social perspectives on vaccination behaviour. <i>PLoS Computational Biology</i> , 2022, 18, e1010235. | 3.2 | 9 |
| 11 | Coevolution fails to maintain genetic variation in a host-parasite model with constant finite population size. <i>Theoretical Population Biology</i> , 2021, 137, 10-21. | 1.1 | 4 |
| 12 | Biting midge dynamics and bluetongue transmission: a multiscale model linking catch data with climate and disease outbreaks. <i>Scientific Reports</i> , 2021, 11, 1892. | 3.3 | 8 |
| 13 | Predictions of COVID-19 dynamics in the UK: Short-term forecasting and analysis of potential exit strategies. <i>PLoS Computational Biology</i> , 2021, 17, e1008619. | 3.2 | 87 |
| 14 | Hospital bed capacity and usage across secondary healthcare providers in England during the first wave of the COVID-19 pandemic: a descriptive analysis. <i>BMJ Open</i> , 2021, 11, e042945. | 1.9 | 29 |
| 15 | Developing a Framework for Public Involvement in Mathematical and Economic Modelling: Bringing New Dynamism to Vaccination Policy Recommendations. <i>Patient</i> , 2021, 14, 435-445. | 2.7 | 24 |
| 16 | Predicting the impact of COVID-19 interruptions on transmission of <i>gambiense</i> human African trypanosomiasis in two health zones of the Democratic Republic of Congo. <i>Transactions of the Royal Society of Tropical Medicine and Hygiene</i> , 2021, 115, 245-252. | 1.8 | 28 |
| 17 | Modelling Sand Fly <i>Lutzomyia longipalpis</i> Attraction to Host Odour: Synthetic Sex-Aggregation Pheromone Dominates the Response. <i>Microorganisms</i> , 2021, 9, 602. | 3.6 | 4 |
| 18 | Cost-effectiveness modelling to optimise active screening strategy for gambiense human African trypanosomiasis in endemic areas of the Democratic Republic of Congo. <i>BMC Medicine</i> , 2021, 19, 86. | 5.5 | 8 |

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|----|---|------|-----------|
| 19 | The population attributable fraction of cases due to gatherings and groups with relevance to COVID-19 mitigation strategies. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2021, 376, 20200273. | 4.0 | 8 |
| 20 | Mapping social distancing measures to the reproduction number for COVID-19. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2021, 376, 20200276. | 4.0 | 24 |
| 21 | Modelling optimal vaccination strategy for SARS-CoV-2 in the UK. <i>PLoS Computational Biology</i> , 2021, 17, e1008849. | 3.2 | 142 |
| 22 | A spatial model of COVID-19 transmission in England and Wales: early spread, peak timing and the impact of seasonality. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2021, 376, 20200272. | 4.0 | 43 |
| 23 | The impact of school reopening on the spread of COVID-19 in England. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2021, 376, 20200261. | 4.0 | 41 |
| 24 | A network modelling approach to assess non-pharmaceutical disease controls in a worker population: An application to SARS-CoV-2. <i>PLoS Computational Biology</i> , 2021, 17, e1009058. | 3.2 | 12 |
| 25 | An analysis of school absences in England during the COVID-19 pandemic. <i>BMC Medicine</i> , 2021, 19, 137. | 5.5 | 17 |
| 26 | Vaccination and non-pharmaceutical interventions for COVID-19: a mathematical modelling study. <i>Lancet Infectious Diseases</i> , The, 2021, 21, 793-802. | 9.1 | 453 |
| 27 | Contrasting factors associated with COVID-19-related ICU admission and death outcomes in hospitalised patients by means of Shapley values. <i>PLoS Computational Biology</i> , 2021, 17, e1009121. | 3.2 | 10 |
| 28 | Modelling to Quantify the Likelihood that Local Elimination of Transmission has Occurred Using Routine Gambiense Human African Trypanosomiasis Surveillance Data. <i>Clinical Infectious Diseases</i> , 2021, 72, S146-S151. | 5.8 | 8 |
| 29 | Spatially resolved simulations of the spread of COVID-19 in three European countries. <i>PLoS Computational Biology</i> , 2021, 17, e1009090. | 3.2 | 5 |
| 30 | Impact of Strain Variation of <i>Dichelobacter nodosus</i> on Disease Severity and Presence in Sheep Flocks in England. <i>Frontiers in Veterinary Science</i> , 2021, 8, 713927. | 2.2 | 6 |
| 31 | Modelling to explore the potential impact of asymptomatic human infections on transmission and dynamics of African sleeping sickness. <i>PLoS Computational Biology</i> , 2021, 17, e1009367. | 3.2 | 13 |
| 32 | Modelling the persistence and control of Rift Valley fever virus in a spatially heterogeneous landscape. <i>Nature Communications</i> , 2021, 12, 5593. | 12.8 | 6 |
| 33 | Modelling SARS-CoV-2 transmission in a UK university setting. <i>Epidemics</i> , 2021, 36, 100476. | 3.0 | 17 |
| 34 | Possible future waves of SARS-CoV-2 infection generated by variants of concern with a range of characteristics. <i>Nature Communications</i> , 2021, 12, 5730. | 12.8 | 90 |
| 35 | Comparison between one and two dose SARS-CoV-2 vaccine prioritization for a fixed number of vaccine doses. <i>Journal of the Royal Society Interface</i> , 2021, 18, 20210214. | 3.4 | 13 |
| 36 | Feedback between coevolution and epidemiology can help or hinder the maintenance of genetic variation in host-parasite models. <i>Evolution; International Journal of Organic Evolution</i> , 2021, 75, 582-599. | 2.3 | 4 |

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|----|--|------|-----------|
| 37 | Quantifying epidemiological drivers of gambiense human African Trypanosomiasis across the Democratic Republic of Congo. <i>PLoS Computational Biology</i> , 2021, 17, e1008532. | 3.2 | 23 |
| 38 | COVID-19 transmission dynamics underlying epidemic waves in Kenya. <i>Science</i> , 2021, 374, 989-994. | 12.6 | 62 |
| 39 | Modelling <i>gambiense</i> human African trypanosomiasis infection in villages of the Democratic Republic of Congo using Kolmogorov forward equations. <i>Journal of the Royal Society Interface</i> , 2021, 18, 20210419. | 3.4 | 0 |
| 40 | Precautionary breaks: Planned, limited duration circuit breaks to control the prevalence of SARS-CoV2 and the burden of COVID-19 disease. <i>Epidemics</i> , 2021, 37, 100526. | 3.0 | 8 |
| 41 | Improving pairwise approximations for network models with susceptible-infected-susceptible dynamics. <i>Journal of Theoretical Biology</i> , 2020, 500, 110328. | 1.7 | 1 |
| 42 | Key questions for modelling COVID-19 exit strategies. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2020, 287, 20201405. | 2.6 | 106 |
| 43 | Policy implications of the potential use of a novel vaccine to prevent infection with <i>Schistosoma mansoni</i> with or without mass drug administration. <i>Vaccine</i> , 2020, 38, 4379-4386. | 3.8 | 12 |
| 44 | Climate drivers of plague epidemiology in British India, 1898â€“1949. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2020, 287, 20200538. | 2.6 | 4 |
| 45 | Detecting HLA-infectious disease associations for multi-strain pathogens. <i>Infection, Genetics and Evolution</i> , 2020, 83, 104344. | 2.3 | 3 |
| 46 | Towards personalized guidelines: using machine-learning algorithms to guide antimicrobial selection. <i>Journal of Antimicrobial Chemotherapy</i> , 2020, 75, 2677-2680. | 3.0 | 23 |
| 47 | Efficacy of contact tracing for the containment of the 2019 novel coronavirus (COVID-19). <i>Journal of Epidemiology and Community Health</i> , 2020, 74, jech-2020-214051. | 3.7 | 245 |
| 48 | Estimation of country-level basic reproductive ratios for novel Coronavirus (SARS-CoV-2/COVID-19) using synthetic contact matrices. <i>PLoS Computational Biology</i> , 2020, 16, e1008031. | 3.2 | 95 |
| 49 | Screening Strategies for a Sustainable Endpoint for Gambiense Sleeping Sickness. <i>Journal of Infectious Diseases</i> , 2020, 221, S539-S545. | 4.0 | 25 |
| 50 | Assessing the impact of aggregating disease stage data in model predictions of human African trypanosomiasis transmission and control activities in Bandundu province (DRC). <i>PLoS Neglected Tropical Diseases</i> , 2020, 14, e0007976. | 3.0 | 23 |
| 51 | The effectiveness of social bubbles as part of a Covid-19 lockdown exit strategy, a modelling study. <i>Wellcome Open Research</i> , 2020, 5, 213. | 1.8 | 33 |
| 52 | Estimating the distribution of time to extinction of infectious diseases in mean-field approaches. <i>Journal of the Royal Society Interface</i> , 2020, 17, 20200540. | 3.4 | 19 |
| 53 | The effectiveness of social bubbles as part of a Covid-19 lockdown exit strategy, a modelling study. <i>Wellcome Open Research</i> , 2020, 5, 213. | 1.8 | 35 |
| 54 | Reducing respiratory syncytial virus (RSV) hospitalization in a lower-income country by vaccinating mothers-to-be and their households. <i>ELife</i> , 2020, 9, . | 6.0 | 13 |

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|----|--|------|-----------|
| 55 | Incorporating Vector Ecology and Life History into Disease Transmission Models: Insights from Tsetse (<i>Glossina</i> spp.). , 2020, , 175-188. | | 1 |
| 56 | Optimising age coverage of seasonal influenza vaccination in England: A mathematical and health economic evaluation. PLoS Computational Biology, 2020, 16, e1008278. | 3.2 | 7 |
| 57 | Title is missing!. , 2020, 16, e1008031. | | 0 |
| 58 | Title is missing!. , 2020, 16, e1008031. | | 0 |
| 59 | Title is missing!. , 2020, 16, e1008031. | | 0 |
| 60 | Title is missing!. , 2020, 16, e1008031. | | 0 |
| 61 | Title is missing!. , 2020, 16, e1008278. | | 0 |
| 62 | Title is missing!. , 2020, 16, e1008278. | | 0 |
| 63 | Title is missing!. , 2020, 16, e1008278. | | 0 |
| 64 | Title is missing!. , 2020, 16, e1008278. | | 0 |
| 65 | The role of movement restrictions in limiting the economic impact of livestock infections. Nature Sustainability, 2019, 2, 834-840. | 23.7 | 17 |
| 66 | Seasonal influenza: Modelling approaches to capture immunity propagation. PLoS Computational Biology, 2019, 15, e1007096. | 3.2 | 35 |
| 67 | Village-scale persistence and elimination of gambiense human African trypanosomiasis. PLoS Neglected Tropical Diseases, 2019, 13, e0007838. | 3.0 | 31 |
| 68 | Vaccination or mass drug administration against schistosomiasis: a hypothetical cost-effectiveness modelling comparison. Parasites and Vectors, 2019, 12, 499. | 2.5 | 8 |
| 69 | Incorporating household structure and demography into models of endemic disease. Journal of the Royal Society Interface, 2019, 16, 20190317. | 3.4 | 23 |
| 70 | Correlations between stochastic endemic infection in multiple interacting subpopulations. Journal of Theoretical Biology, 2019, 483, 109991. | 1.7 | 2 |
| 71 | Assessing the cost-effectiveness of HPV vaccination strategies for adolescent girls and boys in the UK. BMC Infectious Diseases, 2019, 19, 552. | 2.9 | 38 |
| 72 | Correlations between stochastic epidemics in two interacting populations. Epidemics, 2019, 26, 58-67. | 3.0 | 6 |

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|----|---|-----|-----------|
| 73 | Conservation of pattern as a tool for inference on spatial snapshots in ecological data. <i>Scientific Reports</i> , 2018, 8, 132. | 3.3 | 3 |
| 74 | Disentangling the influence of livestock vs. farm density on livestock disease epidemics. <i>Ecosphere</i> , 2018, 9, e02294. | 2.2 | 18 |
| 75 | Capturing sexual contact patterns in modelling the spread of sexually transmitted infections: Evidence using Natsal-3. <i>PLoS ONE</i> , 2018, 13, e0206501. | 2.5 | 11 |
| 76 | Dynamics of the 2004 avian influenza H5N1 outbreak in Thailand: The role of duck farming, sequential model fitting and control. <i>Preventive Veterinary Medicine</i> , 2018, 159, 171-181. | 1.9 | 5 |
| 77 | Assessing Strategies Against Gambiense Sleeping Sickness Through Mathematical Modeling. <i>Clinical Infectious Diseases</i> , 2018, 66, S286-S292. | 5.8 | 37 |
| 78 | Concurrency of partnerships, consistency with data, and control of sexually transmitted infections. <i>Epidemics</i> , 2018, 25, 35-46. | 3.0 | 11 |
| 79 | Real-time decision-making during emergency disease outbreaks. <i>PLoS Computational Biology</i> , 2018, 14, e1006202. | 3.2 | 46 |
| 80 | Need for speed: An optimized gridding approach for spatially explicit disease simulations. <i>PLoS Computational Biology</i> , 2018, 14, e1006086. | 3.2 | 7 |
| 81 | Absence of Evidence of Rift Valley Fever Infection in <i>Eulemur fulvus</i> (Brown Lemur) in Mayotte During an Interepidemic Period. <i>Vector-Borne and Zoonotic Diseases</i> , 2017, 17, 358-360. | 1.5 | 4 |
| 82 | Mathematical modeling of ovine footrot in the UK: the effect of <i>Dichelobacter nodosus</i> and <i>Fusobacterium necrophorum</i> on the disease dynamics. <i>Epidemics</i> , 2017, 21, 13-20. | 3.0 | 7 |
| 83 | Invasion dynamics of Asian hornet, <i>Vespa velutina</i> (Hymenoptera: Vespidae): a case study of a commune in south-west France. <i>Applied Entomology and Zoology</i> , 2017, 52, 221-229. | 1.2 | 36 |
| 84 | Data-driven models to predict the elimination of sleeping sickness in former Equateur province of DRC. <i>Epidemics</i> , 2017, 18, 101-112. | 3.0 | 39 |
| 85 | The impact of temperature changes on vector-borne disease transmission: <i>Culicoides</i> midges and bluetongue virus. <i>Journal of the Royal Society Interface</i> , 2017, 14, 20160481. | 3.4 | 42 |
| 86 | Indirect effects of childhood pneumococcal conjugate vaccination on invasive pneumococcal disease: a systematic review and meta-analysis. <i>The Lancet Global Health</i> , 2017, 5, e51-e59. | 6.3 | 144 |
| 87 | Predicting the spread of the Asian hornet (<i>Vespa velutina</i>) following its incursion into Great Britain. <i>Scientific Reports</i> , 2017, 7, 6240. | 3.3 | 52 |
| 88 | Efficient use of sentinel sites: detection of invasive honeybee pests and diseases in the UK. <i>Journal of the Royal Society Interface</i> , 2017, 14, 20160908. | 3.4 | 6 |
| 89 | The impact of current infection levels on the cost-benefit of vaccination. <i>Epidemics</i> , 2017, 21, 56-62. | 3.0 | 5 |
| 90 | Predicting the Impact of Intervention Strategies for Sleeping Sickness in Two High-Endemicity Health Zones of the Democratic Republic of Congo. <i>PLoS Neglected Tropical Diseases</i> , 2017, 11, e0005162. | 3.0 | 53 |

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|-----|---|-----|-----------|
| 91 | Drivers for Rift Valley fever emergence in Mayotte: A Bayesian modelling approach. PLoS Neglected Tropical Diseases, 2017, 11, e0005767. | 3.0 | 21 |
| 92 | Quantifying the Value of Perfect Information in Emergency Vaccination Campaigns. PLoS Computational Biology, 2017, 13, e1005318. | 3.2 | 16 |
| 93 | Fractal measures of spatial pattern as a heuristic for return rate in vegetative systems. Royal Society Open Science, 2016, 3, 150519. | 2.4 | 11 |
| 94 | The Interaction between Vector Life History and Short Vector Life in Vector-Borne Disease Transmission and Control. PLoS Computational Biology, 2016, 12, e1004837. | 3.2 | 24 |
| 95 | Systematic Approximations to Susceptible-Infectious-Susceptible Dynamics on Networks. PLoS Computational Biology, 2016, 12, e1005296. | 3.2 | 20 |
| 96 | The Epidemiology of Rift Valley Fever in Mayotte: Insights and Perspectives from 11 Years of Data. PLoS Neglected Tropical Diseases, 2016, 10, e0004783. | 3.0 | 37 |
| 97 | Preserving privacy whilst maintaining robust epidemiological predictions. Epidemics, 2016, 17, 35-41. | 3.0 | 7 |
| 98 | Disease transmission promotes evolution of host spatial patterns. Journal of the Royal Society Interface, 2016, 13, 20160463. | 3.4 | 4 |
| 99 | UK support services for families of wounded, injured or sick Service personnel: the need for evaluation: Table A1. Journal of the Royal Army Medical Corps, 2016, 162, 324-325. | 0.8 | 4 |
| 100 | Aggregation dynamics explain vegetation patch-size distributions. Theoretical Population Biology, 2016, 108, 70-74. | 1.1 | 10 |
| 101 | Mental health stigmatisation in deployed UK Armed Forces: a principal components analysis. Journal of the Royal Army Medical Corps, 2015, 161, i69-i76. | 0.8 | 7 |
| 102 | Testing the hypothesis of preferential attachment in social network formation. EPJ Data Science, 2015, 4, 13. | 2.8 | 7 |
| 103 | Quantitative analyses and modelling to support achievement of the 2020 goals for nine neglected tropical diseases. Parasites and Vectors, 2015, 8, 630. | 2.5 | 80 |
| 104 | Quantitative evaluation of the strategy to eliminate human African trypanosomiasis in the Democratic Republic of Congo. Parasites and Vectors, 2015, 8, 532. | 2.5 | 86 |
| 105 | Mathematical Models of Human African Trypanosomiasis Epidemiology. Advances in Parasitology, 2015, 87, 53-133. | 3.2 | 27 |
| 106 | Rapid simulation of spatial epidemics: A spectral method. Journal of Theoretical Biology, 2015, 370, 121-134. | 1.7 | 7 |
| 107 | Age- and bite-structured models for vector-borne diseases. Epidemics, 2015, 12, 20-29. | 3.0 | 23 |
| 108 | Exact and approximate moment closures for non-Markovian network epidemics. Journal of Theoretical Biology, 2015, 382, 160-177. | 1.7 | 24 |

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|-----|---|------|-----------|
| 109 | Optimal prophylactic vaccination in segregated populations: When can we improve on the equalising strategy?. <i>Epidemics</i> , 2015, 11, 7-13. | 3.0 | 9 |
| 110 | The effects of demographic change on disease transmission and vaccine impact in a household structured population. <i>Epidemics</i> , 2015, 13, 56-64. | 3.0 | 50 |
| 111 | Eight challenges in modelling infectious livestock diseases. <i>Epidemics</i> , 2015, 10, 1-5. | 3.0 | 72 |
| 112 | The Impact of Movements and Animal Density on Continental Scale Cattle Disease Outbreaks in the United States. <i>PLoS ONE</i> , 2014, 9, e91724. | 2.5 | 61 |
| 113 | Strategies for Controlling Non-Transmissible Infection Outbreaks Using a Large Human Movement Data Set. <i>PLoS Computational Biology</i> , 2014, 10, e1003809. | 3.2 | 6 |
| 114 | Dynamics of infectious diseases. <i>Reports on Progress in Physics</i> , 2014, 77, 026602. | 20.1 | 103 |
| 115 | A dynamic model of bovine tuberculosis spread and control in Great Britain. <i>Nature</i> , 2014, 511, 228-231. | 27.8 | 186 |
| 116 | The effect of clumped population structure on the variability of spreading dynamics. <i>Journal of Theoretical Biology</i> , 2014, 359, 45-53. | 1.7 | 10 |
| 117 | Identification of 100 fundamental ecological questions. <i>Journal of Ecology</i> , 2013, 101, 58-67. | 4.0 | 605 |
| 118 | The role of spatial population structure on the evolution of parasites with acquired immunity and demography. <i>Journal of Theoretical Biology</i> , 2013, 324, 21-31. | 1.7 | 10 |
| 119 | Threats to an ecosystem service: pressures on pollinators. <i>Frontiers in Ecology and the Environment</i> , 2013, 11, 251-259. | 4.0 | 980 |
| 120 | A theoretical study of the role of spatial population structure in the evolution of parasite virulence. <i>Theoretical Population Biology</i> , 2013, 84, 36-45. | 1.1 | 7 |
| 121 | Social encounter networks: characterizing Great Britain. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2013, 280, 20131037. | 2.6 | 103 |
| 122 | Epidemiological consequences of household-based antiviral prophylaxis for pandemic influenza. <i>Journal of the Royal Society Interface</i> , 2013, 10, 20121019. | 3.4 | 32 |
| 123 | Modelling the spread of American foulbrood in honeybees. <i>Journal of the Royal Society Interface</i> , 2013, 10, 20130650. | 3.4 | 26 |
| 124 | Social encounter networks: collective properties and disease transmission. <i>Journal of the Royal Society Interface</i> , 2012, 9, 2826-2833. | 3.4 | 95 |
| 125 | Estimation of outbreak severity and transmissibility: Influenza A(H1N1)pdm09 in households. <i>BMC Medicine</i> , 2012, 10, 117. | 5.5 | 32 |
| 126 | Optimal but unequitable prophylactic distribution of vaccine. <i>Epidemics</i> , 2012, 4, 78-85. | 3.0 | 48 |

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|-----|---|-----|-----------|
| 127 | Modelling the future of the Hawaiian honeycreeper: An ecological and epidemiological problem. <i>Ecological Modelling</i> , 2012, 235-236, 26-35. | 2.5 | 6 |
| 128 | Modeling the spread and control of foot-and-mouth disease in Pennsylvania following its discovery and options for control. <i>Preventive Veterinary Medicine</i> , 2012, 104, 224-239. | 1.9 | 42 |
| 129 | Impact of regulatory perturbations to disease spread through cattle movements in Great Britain. <i>Preventive Veterinary Medicine</i> , 2012, 105, 110-117. | 1.9 | 22 |
| 130 | An Inter-Laboratory Validation of a Real Time PCR Assay to Measure Host Excretion of Bacterial Pathogens, Particularly of <i>Mycobacterium bovis</i> . <i>PLoS ONE</i> , 2011, 6, e27369. | 2.5 | 22 |
| 131 | Contact structure and <i>Salmonella</i> control in the network of pig movements in France. <i>Preventive Veterinary Medicine</i> , 2011, 102, 30-40. | 1.9 | 12 |
| 132 | Epidemic prediction and control in clustered populations. <i>Journal of Theoretical Biology</i> , 2011, 272, 1-7. | 1.7 | 38 |
| 133 | Endemic cattle diseases: comparative epidemiology and governance. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2011, 366, 1975-1986. | 4.0 | 43 |
| 134 | Modelling the impact of local reactive school closures on critical care provision during an influenza pandemic. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2011, 278, 2753-2760. | 2.6 | 62 |
| 135 | Targeting vaccination against novel infections: risk, age and spatial structure for pandemic influenza in Great Britain. <i>Journal of the Royal Society Interface</i> , 2011, 8, 661-670. | 3.4 | 42 |
| 136 | Insights from unifying modern approximations to infections on networks. <i>Journal of the Royal Society Interface</i> , 2011, 8, 67-73. | 3.4 | 153 |
| 137 | Networks and the Epidemiology of Infectious Disease. <i>Interdisciplinary Perspectives on Infectious Diseases</i> , 2011, 2011, 1-28. | 1.4 | 299 |
| 138 | Estimating the kernel parameters of premises-based stochastic models of farmed animal infectious disease epidemics using limited, incomplete, or ongoing data. <i>Theoretical Population Biology</i> , 2010, 78, 46-53. | 1.1 | 8 |
| 139 | Contingency planning for a deliberate release of smallpox in Great Britain - the role of geographical scale and contact structure. <i>BMC Infectious Diseases</i> , 2010, 10, 25. | 2.9 | 14 |
| 140 | Calculation of Disease Dynamics in a Population of Households. <i>PLoS ONE</i> , 2010, 5, e9666. | 2.5 | 40 |
| 141 | Resolving the impact of waiting time distributions on the persistence of measles. <i>Journal of the Royal Society Interface</i> , 2010, 7, 623-640. | 3.4 | 48 |
| 142 | Impact of spatial clustering on disease transmission and optimal control. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 1041-1046. | 7.1 | 85 |
| 143 | Individual identity and movement networks for disease metapopulations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 8866-8870. | 7.1 | 130 |
| 144 | The Impact of Contact Tracing in Clustered Populations. <i>PLoS Computational Biology</i> , 2010, 6, e1000721. | 3.2 | 75 |

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|-----|--|-----|-----------|
| 145 | INFERENCE FOR INDIVIDUAL-LEVEL MODELS OF INFECTIOUS DISEASES IN LARGE POPULATIONS. <i>Statistica Sinica</i> , 2010, 20, 239-261. | 0.3 | 57 |
| 146 | Implications of vaccination and waning immunity. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2009, 276, 2071-2080. | 2.6 | 89 |
| 147 | Mathematical modelling of infectious diseases. <i>British Medical Bulletin</i> , 2009, 92, 33-42. | 6.9 | 131 |
| 148 | Representing the UK's cattle herd as static and dynamic networks. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2009, 276, 469-476. | 2.6 | 117 |
| 149 | Integrating stochasticity and network structure into an epidemic model. <i>Journal of the Royal Society Interface</i> , 2009, 6, 761-774. | 3.4 | 56 |
| 150 | Predicting undetected infections during the 2007 foot-and-mouth disease outbreak. <i>Journal of the Royal Society Interface</i> , 2009, 6, 1145-1151. | 3.4 | 63 |
| 151 | The role of pre-emptive culling in the control of foot-and-mouth disease. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2009, 276, 3239-3248. | 2.6 | 84 |
| 152 | Herd size and bovine tuberculosis persistence in cattle farms in Great Britain. <i>Preventive Veterinary Medicine</i> , 2009, 92, 360-365. | 1.9 | 82 |
| 153 | Efficient methods for studying stochastic disease and population dynamics. <i>Theoretical Population Biology</i> , 2009, 75, 133-141. | 1.1 | 13 |
| 154 | A Motif-Based Approach to Network Epidemics. <i>Bulletin of Mathematical Biology</i> , 2009, 71, 1693-1706. | 1.9 | 48 |
| 155 | Is a good predictor of final epidemic size: Foot-and-mouth disease in the UK. <i>Journal of Theoretical Biology</i> , 2009, 258, 623-629. | 1.7 | 42 |
| 156 | The role of routine versus random movements on the spread of disease in Great Britain. <i>Epidemics</i> , 2009, 1, 250-258. | 3.0 | 41 |
| 157 | Household structure and infectious disease transmission. <i>Epidemiology and Infection</i> , 2009, 137, 654-661. | 2.1 | 77 |
| 158 | Can Reactive School Closures help critical care provision during the current influenza pandemic?. <i>PLOS Currents</i> , 2009, 1, RRN1119. | 1.4 | 8 |
| 159 | Modelling foot-and-mouth disease: A comparison between the UK and Denmark. <i>Preventive Veterinary Medicine</i> , 2008, 85, 107-124. | 1.9 | 29 |
| 160 | An in-host model of acute infection: Measles as a case study. <i>Theoretical Population Biology</i> , 2008, 73, 134-147. | 1.1 | 29 |
| 161 | On methods for studying stochastic disease dynamics. <i>Journal of the Royal Society Interface</i> , 2008, 5, 171-181. | 3.4 | 164 |
| 162 | Deterministic epidemic models with explicit household structure. <i>Mathematical Biosciences</i> , 2008, 213, 29-39. | 1.9 | 70 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 163 | Accuracy of models for the 2001 foot-and-mouth epidemic. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2008, 275, 1459-1468. | 2.6 | 68 |
| 164 | Chapter 7. Spatial Models. , 2008, , 232-290. | | 1 |
| 165 | Spatiotemporal patterns and risks of herd breakdowns in pigs with postweaning multisystemic wasting syndrome. <i>Veterinary Record</i> , 2007, 160, 751-762. | 0.3 | 38 |
| 166 | Spatially extended host-parasite interactions: The role of recovery and immunity. <i>Theoretical Population Biology</i> , 2007, 71, 251-266. | 1.1 | 20 |
| 167 | Effect of data quality on estimates of farm infectiousness trends in the UK 2001 foot-and-mouth disease epidemic. <i>Journal of the Royal Society Interface</i> , 2007, 4, 235-241. | 3.4 | 17 |
| 168 | Vaccination strategies for foot-and-mouth disease (reply). <i>Nature</i> , 2007, 445, E12-E13. | 27.8 | 6 |
| 169 | Stochasticity generates an evolutionary instability for infectious disease. <i>Ecology Letters</i> , 2007, 10, 818-827. | 6.4 | 12 |
| 170 | Host-parasite interactions between the local and the mean-field: How and when does spatial population structure matter?. <i>Journal of Theoretical Biology</i> , 2007, 249, 140-152. | 1.7 | 47 |
| 171 | A robustness metric integrating spatial and temporal information: application to coral reefs exposed to local and regional disturbances. <i>Marine Ecology - Progress Series</i> , 2007, 331, 101-108. | 1.9 | 6 |
| 172 | Disease evolution across a range of spatio-temporal scales. <i>Theoretical Population Biology</i> , 2006, 70, 201-213. | 1.1 | 30 |
| 173 | Topographic determinants of foot and mouth disease transmission in the UK 2001 epidemic. <i>BMC Veterinary Research</i> , 2006, 2, 3. | 1.9 | 37 |
| 174 | Silent spread of H5N1 in vaccinated poultry. <i>Nature</i> , 2006, 442, 757-757. | 27.8 | 121 |
| 175 | Optimal reactive vaccination strategies for a foot-and-mouth outbreak in the UK. <i>Nature</i> , 2006, 440, 83-86. | 27.8 | 216 |
| 176 | Modelling the many-wrongs principle: The navigational advantages of aggregation in nomadic foragers. <i>Journal of Theoretical Biology</i> , 2006, 240, 302-310. | 1.7 | 24 |
| 177 | Coexistence and Specialization of Pathogen Strains on Contact Networks. <i>American Naturalist</i> , 2006, 168, 230-241. | 2.1 | 22 |
| 178 | FMD control strategies. <i>Veterinary Record</i> , 2006, 158, 707-708. | 0.3 | 1 |
| 179 | An individual based model of bearded pig abundance. <i>Ecological Modelling</i> , 2005, 181, 123-137. | 2.5 | 14 |
| 180 | Models of foot-and-mouth disease. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2005, 272, 1195-1202. | 2.6 | 136 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 181 | Appropriate Models for the Management of Infectious Diseases. <i>PLoS Medicine</i> , 2005, 2, e174. | 8.4 | 407 |
| 182 | The implications of network structure for epidemic dynamics. <i>Theoretical Population Biology</i> , 2005, 67, 1-8. | 1.1 | 272 |
| 183 | Networks and epidemic models. <i>Journal of the Royal Society Interface</i> , 2005, 2, 295-307. | 3.4 | 1,403 |
| 184 | EXTENSIONS TO MASS-ACTION MIXING. , 2005, , 107-142. | | 5 |
| 185 | Using conservation of pattern to estimate spatial parameters from a single snapshot. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 9155-9160. | 7.1 | 40 |
| 186 | Metapopulation Dynamics of Infectious Diseases. , 2004, , 415-445. | | 59 |
| 187 | The colour of noise in short ecological time series data. <i>Mathematical Medicine and Biology</i> , 2004, 21, 63-72. | 1.2 | 11 |
| 188 | Monogamous networks and the spread of sexually transmitted diseases. <i>Mathematical Biosciences</i> , 2004, 189, 115-130. | 1.9 | 80 |
| 189 | Modelling vaccination strategies against foot-and-mouth disease. <i>Nature</i> , 2003, 421, 136-142. | 27.8 | 375 |
| 190 | Planning for smallpox outbreaks. <i>Nature</i> , 2003, 425, 681-685. | 27.8 | 324 |
| 191 | The invasion and coexistence of competing <i>Wolbachia</i> strains. <i>Heredity</i> , 2003, 91, 382-388. | 2.6 | 77 |
| 192 | Contact tracing and disease control. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2003, 270, 2565-2571. | 2.6 | 321 |
| 193 | Neighbourhood control policies and the spread of infectious diseases. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2003, 270, 1659-1666. | 2.6 | 39 |
| 194 | Disease evolution on networks: the role of contact structure. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2003, 270, 699-708. | 2.6 | 187 |
| 195 | Modeling dynamic and network heterogeneities in the spread of sexually transmitted diseases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 13330-13335. | 7.1 | 376 |
| 196 | The Interplay between Determinism and Stochasticity in Childhood Diseases. <i>American Naturalist</i> , 2002, 159, 469-481. | 2.1 | 174 |
| 197 | Deterministic Limits to Stochastic Spatial Models of Natural Enemies. <i>American Naturalist</i> , 2002, 159, 57-80. | 2.1 | 38 |
| 198 | Determination of the energy of the 1.75 MeV resonance in the $^{13}\text{C}(p,\hat{\text{A}})^{14}\text{N}$ reaction in terms of a one-volt standard. <i>Metrologia</i> , 2002, 39, 371-379. | 1.2 | 3 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 199 | Understanding the persistence of measles: reconciling theory, simulation and observation. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2002, 269, 335-343. | 2.6 | 129 |
| 200 | Using individual-based simulations to test the Levins metapopulation paradigm. <i>Journal of Animal Ecology</i> , 2002, 71, 270-279. | 2.8 | 37 |
| 201 | Estimating spatial coupling in epidemiological systems: a mechanistic approach. <i>Ecology Letters</i> , 2002, 5, 20-29. | 6.4 | 178 |
| 202 | Seasonally forced disease dynamics explored as switching between attractors. <i>Physica D: Nonlinear Phenomena</i> , 2001, 148, 317-335. | 2.8 | 217 |
| 203 | Foot-and-mouth disease under control in the UK. <i>Nature</i> , 2001, 411, 258-259. | 27.8 | 125 |
| 204 | Dynamics of the 2001 UK Foot and Mouth Epidemic: Stochastic Dispersal in a Heterogeneous Landscape. <i>Science</i> , 2001, 294, 813-817. | 12.6 | 765 |
| 205 | Spatial Correlations and Local Fluctuations in Host-Parasite Models. <i>NATO Science Series Series II, Mathematics, Physics and Chemistry</i> , 2001, , 5-57. | 0.1 | 2 |
| 206 | Individual-based Perspectives on R_0 . <i>Journal of Theoretical Biology</i> , 2000, 203, 51-61. | 1.7 | 174 |
| 207 | Multiplicative Moments and Measures of Persistence in Ecology. <i>Journal of Theoretical Biology</i> , 2000, 205, 269-281. | 1.7 | 100 |
| 208 | Metapopulation moments: coupling, stochasticity and persistence. <i>Journal of Animal Ecology</i> , 2000, 69, 725-736. | 2.8 | 106 |
| 209 | Metapopulation dynamics of bubonic plague. <i>Nature</i> , 2000, 407, 903-906. | 27.8 | 216 |
| 210 | Evolutionary Dynamics in Spatial Host-Parasite Systems. , 2000, , 271-291. | | 9 |
| 211 | Evolutionary trade-offs at two time-scales: competition versus persistence. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2000, 267, 385-391. | 2.6 | 36 |
| 212 | Bubonic plague: a metapopulation model of a zoonosis. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2000, 267, 2219-2230. | 2.6 | 122 |
| 213 | Simple Stochastic Models and Their Power-Law Type Behaviour. <i>Theoretical Population Biology</i> , 2000, 58, 21-31. | 1.1 | 56 |
| 214 | Reinterpreting Space, Time Lags, and Functional Responses in Ecological Models. , 2000, 290, 1758-1761. | | 82 |
| 215 | Correlation equations for endemic diseases: externally imposed and internally generated heterogeneity. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 1999, 266, 953-960. | 2.6 | 35 |
| 216 | The effects of local spatial structure on epidemiological invasions. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 1999, 266, 859-867. | 2.6 | 672 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 217 | Ocean-scale patterns of "biodiversity"™ of Atlantic asteroids determined from taxonomic distinctness and other measures. <i>Biological Journal of the Linnean Society</i> , 1999, 66, 187-203. | 1.6 | 24 |
| 218 | Ocean-scale patterns of "biodiversity" of Atlantic asteroids determined from taxonomic distinctness and other measures. <i>Biological Journal of the Linnean Society</i> , 1999, 66, 187-203. | 1.6 | 35 |
| 219 | Stochastic dynamics and a power law for measles variability. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 1999, 354, 769-776. | 4.0 | 64 |
| 220 | Effect of variability in infection period on the persistence and spatial spread of infectious diseases. <i>Mathematical Biosciences</i> , 1998, 147, 207-226. | 1.9 | 59 |
| 221 | Patterns of density dependence in measles dynamics. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 1998, 265, 753-762. | 2.6 | 42 |
| 222 | Correlation models for childhood epidemics. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 1997, 264, 1149-1156. | 2.6 | 184 |
| 223 | Characteristic length scales of spatial models in ecology via fluctuation analysis. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 1997, 352, 1589-1601. | 4.0 | 40 |
| 224 | Disease Extinction and Community Size: Modeling the Persistence of Measles. <i>Science</i> , 1997, 275, 65-67. | 12.6 | 383 |
| 225 | Modelling the persistence of measles. <i>Trends in Microbiology</i> , 1997, 5, 513-518. | 7.7 | 51 |
| 226 | A Spatial Mechanism for the Evolution and Maintenance of Sexual Reproduction. <i>Oikos</i> , 1995, 74, 414. | 2.7 | 28 |
| 227 | Invasion, stability and evolution to criticality in spatially extended, artificial host" pathogen ecologies. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 1995, 259, 55-63. | 2.6 | 160 |
| 228 | Accelerator beam energy calibration with the $^{27}\text{Al}(p, n)$ and $^{27}\text{Al}(p, \hat{1}^3)$ reactions. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1994, 340, 436-441. | 1.6 | 20 |
| 229 | Revealing the extent of the first wave of the COVID-19 pandemic in Kenya based on serological and PCR-test data. <i>Wellcome Open Research</i> , 0, 6, 127. | 1.8 | 8 |
| 230 | Economic Evaluation of <i>gambiense</i> Human African Trypanosomiasis Elimination Campaigns in Five Distinct Transmission Settings in the Democratic Republic of Congo. <i>SSRN Electronic Journal</i> , 0, , . | 0.4 | 4 |
| 231 | Revealing the extent of the first wave of the COVID-19 pandemic in Kenya based on serological and PCR-test data. <i>Wellcome Open Research</i> , 0, 6, 127. | 1.8 | 1 |