

# Bryan T Grenfell

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8725856/publications.pdf>

Version: 2024-02-01

230  
papers

29,030  
citations

11651

70  
h-index

6131

159  
g-index

255  
all docs

255  
docs citations

255  
times ranked

31474  
citing authors

#	ARTICLE	IF	CITATIONS
1	Global trends in antimicrobial use in food animals. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 5649-5654.	7.1	2,521
2	Global antibiotic consumption 2000 to 2010: an analysis of national pharmaceutical sales data. Lancet Infectious Diseases, The, 2014, 14, 742-750.	9.1	1,719
3	An investigation of transmission control measures during the first 50 days of the COVID-19 epidemic in China. Science, 2020, 368, 638-642.	12.6	1,554
4	Inverse density dependence and the Allee effect. Trends in Ecology and Evolution, 1999, 14, 405-410.	8.7	1,429
5	Unifying the Epidemiological and Evolutionary Dynamics of Pathogens. Science, 2004, 303, 327-332.	12.6	1,159
6	Dynamics of the 2001 UK Foot and Mouth Epidemic: Stochastic Dispersal in a Heterogeneous Landscape. Science, 2001, 294, 813-817.	12.6	765
7	Synchrony, Waves, and Spatial Hierarchies in the Spread of Influenza. Science, 2006, 312, 447-451.	12.6	726
8	A Simple Model for Complex Dynamical Transitions in Epidemics. Science, 2000, 287, 667-670.	12.6	584
9	When individual behaviour matters: homogeneous and network models in epidemiology. Journal of the Royal Society Interface, 2007, 4, 879-891.	3.4	557
10	Epidemic Dynamics at the Human-Animal Interface. Science, 2009, 326, 1362-1367.	12.6	554
11	Absolute Humidity and the Seasonal Onset of Influenza in the Continental United States. PLoS Biology, 2010, 8, e1000316.	5.6	513
12	Noisy Clockwork: Time Series Analysis of Population Fluctuations in Animals. Science, 2001, 293, 638-643.	12.6	507
13	Host densities as determinants of abundance in parasite communities. Proceedings of the Royal Society B: Biological Sciences, 1998, 265, 1283-1289.	2.6	451
14	Reducing antimicrobial use in food animals. Science, 2017, 357, 1350-1352.	12.6	448
15	Epochal Evolution Shapes the Phylodynamics of Interpandemic Influenza A (H3N2) in Humans. Science, 2006, 314, 1898-1903.	12.6	423
16	Host Species Barriers to Influenza Virus Infections. Science, 2006, 312, 394-397.	12.6	413
17	DYNAMICS OF MEASLES EPIDEMICS: ESTIMATING SCALING OF TRANSMISSION RATES USING A TIME SERIES SIR MODEL. Ecological Monographs, 2002, 72, 169-184.	5.4	382
18	Disease and healthcare burden of COVID-19 in the United States. Nature Medicine, 2020, 26, 1212-1217.	30.7	358

#	ARTICLE	IF	CITATIONS
19	Whole-Genome Analysis of Human Influenza A Virus Reveals Multiple Persistent Lineages and Reassortment among Recent H3N2 Viruses. <i>PLoS Biology</i> , 2005, 3, e300.	5.6	340
20	The impact of COVID-19 nonpharmaceutical interventions on the future dynamics of endemic infections. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 30547-30553.	7.1	325
21	Planning for smallpox outbreaks. <i>Nature</i> , 2003, 425, 681-685.	27.8	324
22	Long-term measles-induced immunomodulation increases overall childhood infectious disease mortality. <i>Science</i> , 2015, 348, 694-699.	12.6	319
23	The dynamics of measles in sub-Saharan Africa. <i>Nature</i> , 2008, 451, 679-684.	27.8	305
24	Opposite Patterns of Synchrony in Sympatric Disease Metapopulations. <i>Science</i> , 1999, 286, 968-971.	12.6	282
25	Urbanization and humidity shape the intensity of influenza epidemics in U.S. cities. <i>Science</i> , 2018, 362, 75-79.	12.6	272
26	Dynamics and selection of many-strain pathogens. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 17209-17214.	7.1	255
27	Susceptible supply limits the role of climate in the early SARS-CoV-2 pandemic. <i>Science</i> , 2020, 369, 315-319.	12.6	253
28	The use of mobile phone data to inform analysis of COVID-19 pandemic epidemiology. <i>Nature Communications</i> , 2020, 11, 4961.	12.8	246
29	Does multiple infection select for raised virulence?. <i>Trends in Microbiology</i> , 2002, 10, 401-405.	7.7	233
30	DYNAMICS OF MEASLES EPIDEMICS: SCALING NOISE, DETERMINISM, AND PREDICTABILITY WITH THE TSIR MODEL. <i>Ecological Monographs</i> , 2002, 72, 185-202.	5.4	225
31	Seasonally forced disease dynamics explored as switching between attractors. <i>Physica D: Nonlinear Phenomena</i> , 2001, 148, 317-335.	2.8	217
32	Optimal reactive vaccination strategies for a foot-and-mouth outbreak in the UK. <i>Nature</i> , 2006, 440, 83-86.	27.8	216
33	Use of serological surveys to generate key insights into the changing global landscape of infectious disease. <i>Lancet, The</i> , 2016, 388, 728-730.	13.7	213
34	Persistence, chaos and synchrony in ecology and epidemiology. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 1998, 265, 7-10.	2.6	211
35	Demographic Variability, Vaccination, and the Spatiotemporal Dynamics of Rotavirus Epidemics. <i>Science</i> , 2009, 325, 290-294.	12.6	210
36	Immune life history, vaccination, and the dynamics of SARS-CoV-2 over the next 5 years. <i>Science</i> , 2020, 370, 811-818.	12.6	210

#	ARTICLE	IF	CITATIONS
37	Cetacean Morbillivirus: Current Knowledge and Future Directions. <i>Viruses</i> , 2014, 6, 5145-5181.	3.3	195
38	Epidemiological and evolutionary considerations of SARS-CoV-2 vaccine dosing regimes. <i>Science</i> , 2021, 372, 363-370.	12.6	185
39	Characterizing superspreading events and age-specific infectiousness of SARS-CoV-2 transmission in Georgia, USA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 22430-22435.	7.1	178
40	Global Patterns in Seasonal Activity of Influenza A/H3N2, A/H1N1, and B from 1997 to 2005: Viral Coexistence and Latitudinal Gradients. <i>PLoS ONE</i> , 2007, 2, e1296.	2.5	176
41	Individual-based Perspectives on R0. <i>Journal of Theoretical Biology</i> , 2000, 203, 51-61.	1.7	174
42	The Genesis and Spread of Reassortment Human Influenza A/H3N2 Viruses Conferring Adamantane Resistance. <i>Molecular Biology and Evolution</i> , 2007, 24, 1811-1820.	8.9	174
43	Human mobility and the spatial transmission of influenza in the United States. <i>PLoS Computational Biology</i> , 2017, 13, e1005382.	3.2	174
44	Stochastic Processes Are Key Determinants of Short-Term Evolution in Influenza A Virus. <i>PLoS Pathogens</i> , 2006, 2, e125.	4.7	173
45	Dynamics of Influenza Virus Infection and Pathology. <i>Journal of Virology</i> , 2010, 84, 3974-3983.	3.4	172
46	Avian influenza H5N1 viral and bird migration networks in Asia. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 172-177.	7.1	169
47	Reduced vaccination and the risk of measles and other childhood infections post-Ebola. <i>Science</i> , 2015, 347, 1240-1242.	12.6	169
48	Spatial and temporal dynamics of superspreading events in the 2014-2015 West Africa Ebola epidemic. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 2337-2342.	7.1	151
49	Spatial Transmission of 2009 Pandemic Influenza in the US. <i>PLoS Computational Biology</i> , 2014, 10, e1003635.	3.2	139
50	Foot-and-mouth disease under control in the UK. <i>Nature</i> , 2001, 411, 258-259.	27.8	125
51	Quantifying seasonal population fluxes driving rubella transmission dynamics using mobile phone data. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 11114-11119.	7.1	124
52	Environmental Drivers of the Spatiotemporal Dynamics of Respiratory Syncytial Virus in the United States. <i>PLoS Pathogens</i> , 2015, 11, e1004591.	4.7	119
53	Phocine Distemper Virus: Current Knowledge and Future Directions. <i>Viruses</i> , 2014, 6, 5093-5134.	3.3	114
54	Impact of immunisation on pertussis transmission in England and Wales. <i>Lancet</i> , The, 2000, 355, 285-286.	13.7	107

#	ARTICLE	IF	CITATIONS
55	Hand, Foot, and Mouth Disease in China: Modeling Epidemic Dynamics of Enterovirus Serotypes and Implications for Vaccination. <i>PLoS Medicine</i> , 2016, 13, e1001958.	8.4	106
56	Anthelmintic resistance revisited: under-dosing, chemoprophylactic strategies, and mating probabilities. <i>International Journal for Parasitology</i> , 1999, 29, 77-91.	3.1	105
57	Multipack dynamics and the Allee effect in the African wild dog, <i>Lycaon pictus</i> . <i>Animal Conservation</i> , 2000, 3, 277-285.	2.9	105
58	Population dynamics of rapid fixation in cytotoxic T lymphocyte escape mutants of influenza A. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 11143-11147.	7.1	103
59	Reconciling early-outbreak estimates of the basic reproductive number and its uncertainty: framework and applications to the novel coronavirus (SARS-CoV-2) outbreak. <i>Journal of the Royal Society Interface</i> , 2020, 17, 20200144.	3.4	103
60	Discovering the Phylodynamics of RNA Viruses. <i>PLoS Computational Biology</i> , 2009, 5, e1000505.	3.2	100
61	Prolonged persistence of measles virus RNA is characteristic of primary infection dynamics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 14989-14994.	7.1	99
62	Multiannual forecasting of seasonal influenza dynamics reveals climatic and evolutionary drivers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 9538-9542.	7.1	98
63	Intra- and Interhost Evolutionary Dynamics of Equine Influenza Virus. <i>Journal of Virology</i> , 2010, 84, 6943-6954.	3.4	97
64	Quantifying the Impact of Immune Escape on Transmission Dynamics of Influenza. <i>Science</i> , 2009, 326, 726-728.	12.6	96
65	Predictive Modeling of Influenza Shows the Promise of Applied Evolutionary Biology. <i>Trends in Microbiology</i> , 2018, 26, 102-118.	7.7	95
66	Accelerated viral dynamics in bat cell lines, with implications for zoonotic emergence. <i>ELife</i> , 2020, 9, .	6.0	91
67	Seasonality and comparative dynamics of six childhood infections in pre-vaccination Copenhagen. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2009, 276, 4111-4118.	2.6	90
68	Predicting the Impact of Vaccination on the Transmission Dynamics of Typhoid in South Asia: A Mathematical Modeling Study. <i>PLoS Neglected Tropical Diseases</i> , 2014, 8, e2642.	3.0	88
69	An unlikely partnership: parasites, concomitant immunity and host defence. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2001, 268, 2543-2549.	2.6	87
70	The seasonality of nonpolio enteroviruses in the United States: Patterns and drivers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 3078-3083.	7.1	81
71	Vaccine nationalism and the dynamics and control of SARS-CoV-2. <i>Science</i> , 2021, 373, eabj7364.	12.6	80
72	Evolution of an Eurasian Avian-like Influenza Virus in Naïve and Vaccinated Pigs. <i>PLoS Pathogens</i> , 2012, 8, e1002730.	4.7	79

#	ARTICLE	IF	CITATIONS
73	The path of least resistance: aggressive or moderate treatment?. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2014, 281, 20140566.	2.6	79
74	Epidemic dynamics of respiratory syncytial virus in current and future climates. <i>Nature Communications</i> , 2019, 10, 5512.	12.8	78
75	Variation in SARS-CoV-2 outbreaks across sub-Saharan Africa. <i>Nature Medicine</i> , 2021, 27, 447-453.	30.7	77
76	A stochastic model for extinction and recurrence of epidemics: estimation and inference for measles outbreaks. <i>Biostatistics</i> , 2002, 3, 493-510.	1.5	76
77	The Shifting Demographic Landscape of Pandemic Influenza. <i>PLoS ONE</i> , 2010, 5, e9360.	2.5	76
78	Modeling rotavirus strain dynamics in developed countries to understand the potential impact of vaccination on genotype distributions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 19353-19358.	7.1	74
79	Influence of birth rates and transmission rates on the global seasonality of rotavirus incidence. <i>Journal of the Royal Society Interface</i> , 2011, 8, 1584-1593.	3.4	73
80	Seroepidemiologic Study Designs for Determining SARS-COV-2 Transmission and Immunity. <i>Emerging Infectious Diseases</i> , 2020, 26, 1978-1986.	4.3	71
81	Seasonality and the persistence and invasion of measles. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2007, 274, 1133-1141.	2.6	69
82	Intracellular Demography and the Dynamics of <i>Salmonella enterica</i> Infections. <i>PLoS Biology</i> , 2006, 4, e349.	5.6	68
83	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
84	Immunogenicity of a Meningococcal B Vaccine during a University Outbreak. <i>New England Journal of Medicine</i> , 2016, 375, 220-228.	27.0	67
85	Forecasting Epidemiological and Evolutionary Dynamics of Infectious Diseases. <i>Trends in Ecology and Evolution</i> , 2016, 31, 776-788.	8.7	66
86	Multipack dynamics and the Allee effect in the African wild dog, <i>Lycaon pictus</i> . <i>Animal Conservation</i> , 2000, 3, 277-285.	2.9	66
87	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
88	Mean-field-type equations for spread of epidemics: the "small world" model. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1999, 274, 355-360.	2.6	63
89	Identifying Hotspots of Multidrug-Resistant Tuberculosis Transmission Using Spatial and Molecular Genetic Data. <i>Journal of Infectious Diseases</i> , 2016, 213, 287-294.	4.0	62
90	Estimating Drivers of Autochthonous Transmission of Chikungunya Virus in its Invasion of the Americas. <i>PLOS Currents</i> , 2015, 7, .	1.4	62

#	ARTICLE	IF	CITATIONS
91	Hospital-Community Interactions Foster Coexistence between Methicillin-Resistant Strains of <i>Staphylococcus aureus</i> . <i>PLoS Pathogens</i> , 2013, 9, e1003134.	4.7	61
92	Vaccination and the dynamics of immune evasion. <i>Journal of the Royal Society Interface</i> , 2007, 4, 143-153.	3.4	60
93	Impact of cross-protective vaccines on epidemiological and evolutionary dynamics of influenza. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 3173-3177.	7.1	60
94	Empirical determinants of measles metapopulation dynamics in England and Wales. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 1998, 265, 211-220.	2.6	59
95	Demonstrating the Use of High-Volume Electronic Medical Claims Data to Monitor Local and Regional Influenza Activity in the US. <i>PLoS ONE</i> , 2014, 9, e102429.	2.5	59
96	Synthesizing epidemiological and economic optima for control of immunizing infections. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 14366-14370.	7.1	57
97	Seasonal dynamics of bacterial meningitis: a time-series analysis. <i>The Lancet Global Health</i> , 2016, 4, e370-e377.	6.3	57
98	INFERENCE FOR INDIVIDUAL-LEVEL MODELS OF INFECTIOUS DISEASES IN LARGE POPULATIONS. <i>Statistica Sinica</i> , 2010, 20, 239-261.	0.3	57
99	Age Specific Patterns of Change in the Dynamics of <i>Wuchereria bancrofti</i> Infection in Papua New Guinea. <i>American Journal of Tropical Medicine and Hygiene</i> , 1991, 44, 518-527.	1.4	55
100	Measuring the Performance of Vaccination Programs Using Cross-Sectional Surveys: A Likelihood Framework and Retrospective Analysis. <i>PLoS Medicine</i> , 2011, 8, e1001110.	8.4	54
101	Forward-looking serial intervals correctly link epidemic growth to reproduction numbers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	54
102	Changes in Rodent Abundance and Weather Conditions Potentially Drive Hemorrhagic Fever with Renal Syndrome Outbreaks in Xi'an, China, 2005-2012. <i>PLoS Neglected Tropical Diseases</i> , 2015, 9, e0003530.	3.0	53
103	A Global Immunological Observatory to meet a time of pandemics. <i>ELife</i> , 2020, 9, .	6.0	52
104	Urban Cholera Transmission Hotspots and Their Implications for Reactive Vaccination: Evidence from Bissau City, Guinea Bissau. <i>PLoS Neglected Tropical Diseases</i> , 2012, 6, e1901.	3.0	51
105	Phylodynamics of Enterovirus A71-Associated Hand, Foot, and Mouth Disease in Viet Nam. <i>Journal of Virology</i> , 2015, 89, 8871-8879.	3.4	51
106	Persistent Chaos of Measles Epidemics in the Pre-vaccination United States Caused by a Small Change in Seasonal Transmission Patterns. <i>PLoS Computational Biology</i> , 2016, 12, e1004655.	3.2	49
107	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
108	Animal Reservoir, Natural and Socioeconomic Variations and the Transmission of Hemorrhagic Fever with Renal Syndrome in Chenzhou, China, 2006-2010. <i>PLoS Neglected Tropical Diseases</i> , 2014, 8, e2615.	3.0	47

#	ARTICLE	IF	CITATIONS
109	Pareto rules for malaria super-spreaders and super-spreading. <i>Nature Communications</i> , 2019, 10, 3939.	12.8	47
110	Rural-urban gradient in seasonal forcing of measles transmission in Niger. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2010, 277, 2775-2782.	2.6	45
111	Inferring the inter-host transmission of influenza A virus using patterns of intra-host genetic variation. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2013, 280, 20122173.	2.6	45
112	Modelling dynamics of the type I interferon response to in vitro viral infection. <i>Journal of the Royal Society Interface</i> , 2006, 3, 699-709.	3.4	43
113	Contact Heterogeneity, Rather Than Transmission Efficiency, Limits the Emergence and Spread of Canine Influenza Virus. <i>PLoS Pathogens</i> , 2014, 10, e1004455.	4.7	43
114	Preparing for uncertainty: endemic paediatric viral illnesses after COVID-19 pandemic disruption. <i>Lancet, The</i> , 2022, 400, 1663-1665.	13.7	43
115	Potential Role of Social Distancing in Mitigating Spread of Coronavirus Disease, South Korea. <i>Emerging Infectious Diseases</i> , 2020, 26, 2697-2700.	4.3	42
116	Epidemiological dynamics of enterovirus D68 in the United States and implications for acute flaccid myelitis. <i>Science Translational Medicine</i> , 2021, 13, .	12.4	41
117	Modelling vaccination strategies for COVID-19. <i>Nature Reviews Immunology</i> , 2022, 22, 139-141.	22.7	41
118	Host isolation and patterns of genetic variability in three populations of <i>Teladorsagia</i> from sheep. <i>International Journal for Parasitology</i> , 2004, 34, 1197-1204.	3.1	40
119	Protocols for sampling viral sequences to study epidemic dynamics. <i>Journal of the Royal Society Interface</i> , 2010, 7, 1119-1127.	3.4	40
120	Partially observed epidemics in wildlife hosts: modelling an outbreak of dolphin morbillivirus in the northwestern Atlantic, June 2013-2014. <i>Journal of the Royal Society Interface</i> , 2015, 12, 20150676.	3.4	40
121	tsiR: An R package for time-series Susceptible-Infected-Recovered models of epidemics. <i>PLoS ONE</i> , 2017, 12, e0185528.	2.5	40
122	Age-Specific Risks of Tuberculosis Infection From Household and Community Exposures and Opportunities for Interventions in a High-Burden Setting. <i>American Journal of Epidemiology</i> , 2014, 180, 853-861.	3.4	39
123	Routine Pediatric Enterovirus 71 Vaccination in China: a Cost-Effectiveness Analysis. <i>PLoS Medicine</i> , 2016, 13, e1001975.	8.4	39
124	Impact and longevity of measles-associated immune suppression: a matched cohort study using data from the THIN general practice database in the UK. <i>BMJ Open</i> , 2018, 8, e021465.	1.9	38
125	HIV-1/parasite co-infection and the emergence of new parasite strains. <i>Parasitology</i> , 2008, 135, 795-806.	1.5	37
126	Dynamics of Glycoprotein Charge in the Evolutionary History of Human Influenza. <i>PLoS ONE</i> , 2010, 5, e15674.	2.5	37



#	ARTICLE	IF	CITATIONS
127	Population viability analyses on a cycling population: a cautionary tale. <i>Biological Conservation</i> , 2001, 97, 61-69.	4.1	36
128	Integrating life history and cross-immunity into the evolutionary dynamics of pathogens. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2006, 273, 409-416.	2.6	36
129	The potential impact of coinfection on antimicrobial chemotherapy and drug resistance. <i>Trends in Microbiology</i> , 2015, 23, 537-544.	7.7	36
130	Persistence in Epidemic Metapopulations: Quantifying the Rescue Effects for Measles, Mumps, Rubella and Whooping Cough. <i>PLoS ONE</i> , 2013, 8, e74696.	2.5	35
131	Measles and the canonical path to elimination. <i>Science</i> , 2019, 364, 584-587.	12.6	35
132	Assessing the influence of climate on wintertime SARS-CoV-2 outbreaks. <i>Nature Communications</i> , 2021, 12, 846.	12.8	35
133	Evolution of Equine Influenza Virus in Vaccinated Horses. <i>Journal of Virology</i> , 2013, 87, 4768-4771.	3.4	34
134	Hazards, spatial transmission and timing of outbreaks in epidemic metapopulations. <i>Environmental and Ecological Statistics</i> , 2008, 15, 265-277.	3.5	33
135	High turnover drives prolonged persistence of influenza in managed pig herds. <i>Journal of the Royal Society Interface</i> , 2016, 13, 20160138.	3.4	33
136	Economic and Behavioral Influencers of Vaccination and Antimicrobial Use. <i>Frontiers in Public Health</i> , 2020, 8, 614113.	2.7	33
137	Epidemic cycling and immunity. <i>Nature</i> , 2005, 433, 366-367.	27.8	32
138	The impact of environmental and climatic variation on the spatiotemporal trends of hospitalized pediatric diarrhea in Ho Chi Minh City, Vietnam. <i>Health and Place</i> , 2015, 35, 147-154.	3.3	32
139	Disease dynamics in a dynamic social network. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2010, 389, 2663-2674.	2.6	31
140	Epidemiological impact of vaccination on the dynamics of two childhood diseases in rural Senegal. <i>Microbes and Infection</i> , 2005, 7, 593-599.	1.9	30
141	Measles on the Edge: Coastal Heterogeneities and Infection Dynamics. <i>PLoS ONE</i> , 2008, 3, e1941.	2.5	30
142	Bacillus Calmette-Guérin and Isoniazid Preventive Therapy Protect Contacts of Patients with Tuberculosis. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2014, 189, 853-859.	5.6	30
143	The immune response and within-host emergence of pandemic influenza virus. <i>Lancet, The</i> , 2014, 384, 2077-2081.	13.7	30
144	Unreported cases in the 2014-2016 Ebola epidemic: Spatiotemporal variation, and implications for estimating transmission. <i>PLoS Neglected Tropical Diseases</i> , 2018, 12, e0006161.	3.0	30

#	ARTICLE	IF	CITATIONS
145	Impact on Epidemic Measles of Vaccination Campaigns Triggered by Disease Outbreaks or Serosurveys: A Modeling Study. <i>PLoS Medicine</i> , 2016, 13, e1002144.	8.4	29
146	Deploying digital health data to optimize influenza surveillance at national and local scales. <i>PLoS Computational Biology</i> , 2018, 14, e1006020.	3.2	29
147	Dynamics in a simple evolutionary-epidemiological model for the evolution of an initial asymptomatic infection stage. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 11541-11550.	7.1	28
148	Epidemic dynamics, interactions and predictability of enteroviruses associated with hand, foot and mouth disease in Japan. <i>Journal of the Royal Society Interface</i> , 2018, 15, 20180507.	3.4	27
149	Universal or Specific? A Modeling-Based Comparison of Broad-Spectrum Influenza Vaccines against Conventional, Strain-Matched Vaccines. <i>PLoS Computational Biology</i> , 2016, 12, e1005204.	3.2	27
150	Demographic buffering: titrating the effects of birth rate and imperfect immunity on epidemic dynamics. <i>Journal of the Royal Society Interface</i> , 2015, 12, 20141245.	3.4	26
151	Geographic transmission hubs of the 2009 influenza pandemic in the United States. <i>Epidemics</i> , 2019, 26, 86-94.	3.0	26
152	Waning immunity and re-emergence of measles and mumps in the vaccine era. <i>Current Opinion in Virology</i> , 2020, 40, 48-54.	5.4	26
153	A mechanistic spatio-temporal framework for modelling individual-to-individual transmission—With an application to the 2014-2015 West Africa Ebola outbreak. <i>PLoS Computational Biology</i> , 2017, 13, e1005798.	3.2	26
154	Modeling the Impact of Interventions Along the HIV Continuum of Care in Newark, New Jersey. <i>Clinical Infectious Diseases</i> , 2014, 58, 274-284.	5.8	25
155	Factors Associated With Measles Transmission in the United States During the Postelimination Era. <i>JAMA Pediatrics</i> , 2020, 174, 56.	6.2	25
156	Asynchrony between virus diversity and antibody selection limits influenza virus evolution. <i>ELife</i> , 2020, 9, .	6.0	25
157	Quantifying the risk of pandemic influenza virus evolution by mutation and re-assortment. <i>Vaccine</i> , 2015, 33, 6955-6966.	3.8	24
158	The decline of malaria in Vietnam, 1991–2014. <i>Malaria Journal</i> , 2018, 17, 226.	2.3	24
159	Synthesizing within-host and population-level selective pressures on viral populations: the impact of adaptive immunity on viral immune escape. <i>Journal of the Royal Society Interface</i> , 2010, 7, 1311-1318.	3.4	23
160	Climate change suggests a shift of H5N1 risk in migratory birds. <i>Ecological Modelling</i> , 2015, 306, 6-15.	2.5	23
161	Impact of Public Health Responses During a Measles Outbreak in an Amish Community in Ohio: Modeling the Dynamics of Transmission. <i>American Journal of Epidemiology</i> , 2018, 187, 2002-2010.	3.4	22
162	Incentivizing hospital infection control. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 6221-6225.	7.1	22

#	ARTICLE	IF	CITATIONS
163	Impact of Birth Seasonality on Dynamics of Acute Immunizing Infections in Sub-Saharan Africa. PLoS ONE, 2013, 8, e75806.	2.5	22
164	Heading Off an Influenza Pandemic. Science, 2005, 309, 989-989.	12.6	19
165	Inferring population-level contact heterogeneity from common epidemic data. Journal of the Royal Society Interface, 2013, 10, 20120578.	3.4	19
166	Linking Time-Varying Symptomatology and Intensity of Infectiousness to Patterns of Norovirus Transmission. PLoS ONE, 2013, 8, e68413.	2.5	19
167	Beyond Ebola. Science, 2016, 351, 815-816.	12.6	19
168	Long term risks of recurrent seal plagues. Marine Pollution Bulletin, 1990, 21, 284-287.	5.0	18
169	Self-boosting vaccines and their implications for herd immunity. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20154-20159.	7.1	18
170	Dynamic Perspectives on the Search for a Universal Influenza Vaccine. Journal of Infectious Diseases, 2019, 219, S46-S56.	4.0	18
171	A spatial stochastic model simulating a scabies epidemic and coyote population dynamics. Ecological Modelling, 2003, 166, 41-52.	2.5	17
172	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.	3.4	17
173	Estimating enhanced prevaccination measles transmission hotspots in the context of cross-scale dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14595-14600.	7.1	17
174	Analysis of multi-level spatial data reveals strong synchrony in seasonal influenza epidemics across Norway, Sweden, and Denmark. PLoS ONE, 2018, 13, e0197519.	2.5	17
175	Drug-resistant parasites and aggregated infection - early-season dynamics. Journal of Mathematical Biology, 2000, 41, 341-360.	1.9	16
176	Self-enforcing regional vaccination agreements. Journal of the Royal Society Interface, 2016, 13, 20150907.	3.4	16
177	Fogarty International Center collaborative networks in infectious disease modeling: Lessons learnt in research and capacity building. Epidemics, 2019, 26, 116-127.	3.0	16
178	Modeling the effect of HIV coinfection on clearance and sustained virologic response during treatment for hepatitis C virus. Epidemics, 2015, 12, 1-10.	3.0	15
179	Hand, Foot, and Mouth Disease in China: Critical Community Size and Spatial Vaccination Strategies. Scientific Reports, 2016, 6, 25248.	3.3	15
180	Trajectory of individual immunity and vaccination required for SARS-CoV-2 community immunity: a conceptual investigation. Journal of the Royal Society Interface, 2021, 18, 20200683.	3.4	15

#	ARTICLE	IF	CITATIONS
181	The importance of the generation interval in investigating dynamics and control of new SARS-CoV-2 variants. <i>Journal of the Royal Society Interface</i> , 2022, 19, .	3.4	15
182	Directly transmitted viral diseases: modeling the dynamics of transmission. <i>Trends in Microbiology</i> , 2008, 16, 165-172.	7.7	14
183	Disentangling the dynamical underpinnings of differences in SARS-CoV-2 pathology using within-host ecological models. <i>PLoS Pathogens</i> , 2020, 16, e1009105.	4.7	14
184	Immuno-epidemiology and the predictability of viral evolution. <i>Science</i> , 2022, 376, 1161-1162.	12.6	13
185	Boosting understanding of pertussis outbreaks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 7279-7280.	7.1	12
186	Characterizing the dynamics of rubella relative to measles: the role of stochasticity. <i>Journal of the Royal Society Interface</i> , 2013, 10, 20130643.	3.4	12
187	Opportunities and challenges of a World Serum Bank – Authors' reply. <i>Lancet</i> , The, 2017, 389, 252.	13.7	12
188	Long-term dynamics of measles in London: Titrating the impact of wars, the 1918 pandemic, and vaccination. <i>PLoS Computational Biology</i> , 2019, 15, e1007305.	3.2	12
189	Changes in historical typhoid transmission across 16 U.S. cities, 1889-1931: Quantifying the impact of investments in water and sewer infrastructures. <i>PLoS Neglected Tropical Diseases</i> , 2020, 14, e0008048.	3.0	12
190	A competing-risks model explains hierarchical spatial coupling of measles epidemics en route to national elimination. <i>Nature Ecology and Evolution</i> , 2020, 4, 934-939.	7.8	12
191	Assessing Drivers of Full Adoption of Test and Treat Policy for Malaria in Senegal. <i>American Journal of Tropical Medicine and Hygiene</i> , 2015, 93, 159-167.	1.4	11
192	The impact of migration and antimicrobial resistance on the transmission dynamics of typhoid fever in Kathmandu, Nepal: A mathematical modelling study. <i>PLoS Neglected Tropical Diseases</i> , 2017, 11, e0005547.	3.0	11
193	Modeling the measles paradox reveals the importance of cellular immunity in regulating viral clearance. <i>PLoS Pathogens</i> , 2018, 14, e1007493.	4.7	11
194	Symbolic transfer entropy reveals the age structure of pandemic influenza transmission from high-volume influenza-like illness data. <i>Journal of the Royal Society Interface</i> , 2020, 17, 20190628.	3.4	11
195	Measles vaccine immune escape: Should we be concerned?. <i>European Journal of Epidemiology</i> , 2019, 34, 893-896.	5.7	10
196	Enterovirus D68: a test case for the use of immunological surveillance to develop tools to mitigate the pandemic potential of emerging pathogens. <i>Lancet Microbe</i> , The, 2022, 3, e83-e85.	7.3	10
197	Dynamics and epidemiological impact of microparasites. , 2001, , 33-52.		9
198	The impact of HCV therapy in a high HIV-HCV prevalence population: A modeling study on people who inject drugs in Ho Chi Minh City, Vietnam. <i>PLoS ONE</i> , 2017, 12, e0177195.	2.5	9

#	ARTICLE	IF	CITATIONS
199	Seasonality, stochasticity and population cycles. <i>Researches on Population Ecology</i> , 1998, 40, 141-143.	0.9	8
200	Rivers dam waves of rabies: Figure 1. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 3365-3367.	7.1	8
201	Mathematical Tools for Planning Effective Intervention Scenarios for Sexually Transmitted Diseases. <i>Sexually Transmitted Diseases</i> , 2003, 30, 388-394.	1.7	8
202	Climatological, virological and sociological drivers of current and projected dengue fever outbreak dynamics in Sri Lanka. <i>Journal of the Royal Society Interface</i> , 2020, 17, 20200075.	3.4	8
203	Tensor decomposition for infectious disease incidence data. <i>Methods in Ecology and Evolution</i> , 2020, 11, 1690-1700.	5.2	7
204	Using Serology with Models to Clarify the Trajectory of the SARS-CoV-2 Emerging Outbreak. <i>Trends in Immunology</i> , 2020, 41, 849-851.	6.8	7
205	Surveillance data confirm multiyear predictions of rotavirus dynamics in New York City. <i>Science Advances</i> , 2020, 6, eaax0586.	10.3	7
206	Why are there so few (or so many) circulating coronaviruses?. <i>Trends in Immunology</i> , 2021, 42, 751-763.	6.8	7
207	Response to Comment on "Long-term measles-induced immunomodulation increases overall childhood infectious disease mortality". <i>Science</i> , 2019, 365, .	12.6	7
208	Vaccination strategies for foot-and-mouth disease (reply). <i>Nature</i> , 2007, 445, E12-E13.	27.8	6
209	A few dollars more. <i>Trends in Ecology and Evolution</i> , 1994, 9, 31-32.	8.7	5
210	Measurement of vaccine-derived immunity: how do we use all the data?. <i>Expert Review of Vaccines</i> , 2012, 11, 747-749.	4.4	5
211	Integrating immune mechanisms to model nematode worm burden: an example in sheep. <i>Parasitology</i> , 2016, 143, 894-904.	1.5	5
212	Superinfection and the evolution of an initial asymptomatic stage. <i>Royal Society Open Science</i> , 2021, 8, 202212.	2.4	4
213	Trip duration drives shift in travel network structure with implications for the predictability of spatial disease spread. <i>PLoS Computational Biology</i> , 2021, 17, e1009127.	3.2	4
214	Biphasic pattern in the effect of severe measles infection; the difference between additive and multiplicative scale. <i>BMC Infectious Diseases</i> , 2021, 21, 1249.	2.9	4
215	Assessing the Effects of Measles Virus Infections on Childhood Infectious Disease Mortality in Brazil. <i>Journal of Infectious Diseases</i> , 2022, 227, 133-140.	4.0	4
216	Model diagnostics and refinement for phylodynamic models. <i>PLoS Computational Biology</i> , 2019, 15, e1006955.	3.2	3

#	ARTICLE	IF	CITATIONS
217	Structure, space and size: competing drivers of variation in urban and rural measles transmission. <i>Journal of the Royal Society Interface</i> , 2020, 17, 20200010.	3.4	3
218	Cyclic epidemics and extreme outbreaks induced by hydro-climatic variability and memory. <i>Journal of the Royal Society Interface</i> , 2020, 17, 20200521.	3.4	3
219	Implications of localized charge for human influenza A H1N1 hemagglutinin evolution: Insights from deep mutational scans. <i>PLoS Computational Biology</i> , 2020, 16, e1007892.	3.2	3
220	Coexisting attractors in the context of cross-scale population dynamics: measles in London as a case study. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2020, 287, 20191510.	2.6	3
221	Partial immunity and SARS-CoV-2 mutationsâ€™Response. <i>Science</i> , 2021, 372, 354-355.	12.6	2
222	Evolution of an asymptomatic first stage of infection in a heterogeneous population. <i>Journal of the Royal Society Interface</i> , 2021, 18, 20210175.	3.4	2
223	FMD control strategies. <i>Veterinary Record</i> , 2006, 158, 707-708.	0.3	1
224	A global system for the next generation of vaccines. <i>Science</i> , 2022, 376, 462-464.	12.6	1
225	Vaccination under uncertainty. <i>Nature Ecology and Evolution</i> , 2018, 2, 1350-1351.	7.8	0
226	Title is missing!. , 2020, 14, e0008048.		0
227	Title is missing!. , 2020, 14, e0008048.		0
228	Title is missing!. , 2020, 14, e0008048.		0
229	Title is missing!. , 2020, 14, e0008048.		0
230	Title is missing!. , 2020, 14, e0008048.		0