

Bryan T Grenfell

List of Publications by Year in descending order

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230
papers

29,030
citations

11639

70
h-index

6128

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.	3.3	2,521
2	Global antibiotic consumption 2000 to 2010: an analysis of national pharmaceutical sales data. Lancet Infectious Diseases, The, 2014, 14, 742-750.	4.6	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.	6.0	1,554
4	Inverse density dependence and the Allee effect. Trends in Ecology and Evolution, 1999, 14, 405-410.	4.2	1,429
5	Unifying the Epidemiological and Evolutionary Dynamics of Pathogens. Science, 2004, 303, 327-332.	6.0	1,159
6	Dynamics of the 2001 UK Foot and Mouth Epidemic: Stochastic Dispersal in a Heterogeneous Landscape. Science, 2001, 294, 813-817.	6.0	765
7	Synchrony, Waves, and Spatial Hierarchies in the Spread of Influenza. Science, 2006, 312, 447-451.	6.0	726
8	A Simple Model for Complex Dynamical Transitions in Epidemics. Science, 2000, 287, 667-670.	6.0	584
9	When individual behaviour matters: homogeneous and network models in epidemiology. Journal of the Royal Society Interface, 2007, 4, 879-891.	1.5	557
10	Epidemic Dynamics at the Human-Animal Interface. Science, 2009, 326, 1362-1367.	6.0	554
11	Absolute Humidity and the Seasonal Onset of Influenza in the Continental United States. PLoS Biology, 2010, 8, e1000316.	2.6	513
12	Noisy Clockwork: Time Series Analysis of Population Fluctuations in Animals. Science, 2001, 293, 638-643.	6.0	507
13	Host densities as determinants of abundance in parasite communities. Proceedings of the Royal Society B: Biological Sciences, 1998, 265, 1283-1289.	1.2	451
14	Reducing antimicrobial use in food animals. Science, 2017, 357, 1350-1352.	6.0	448
15	Epochal Evolution Shapes the Phylodynamics of Interpandemic Influenza A (H3N2) in Humans. Science, 2006, 314, 1898-1903.	6.0	423
16	Host Species Barriers to Influenza Virus Infections. Science, 2006, 312, 394-397.	6.0	413
17	DYNAMICS OF MEASLES EPIDEMICS: ESTIMATING SCALING OF TRANSMISSION RATES USING A TIME SERIES SIR MODEL. Ecological Monographs, 2002, 72, 169-184.	2.4	382
18	Disease and healthcare burden of COVID-19 in the United States. Nature Medicine, 2020, 26, 1212-1217.	15.2	358

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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.	2.6	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.	3.3	325
21	Planning for smallpox outbreaks. <i>Nature</i> , 2003, 425, 681-685.	13.7	324
22	Long-term measles-induced immunomodulation increases overall childhood infectious disease mortality. <i>Science</i> , 2015, 348, 694-699.	6.0	319
23	The dynamics of measles in sub-Saharan Africa. <i>Nature</i> , 2008, 451, 679-684.	13.7	305
24	Opposite Patterns of Synchrony in Sympatric Disease Metapopulations. <i>Science</i> , 1999, 286, 968-971.	6.0	282
25	Urbanization and humidity shape the intensity of influenza epidemics in U.S. cities. <i>Science</i> , 2018, 362, 75-79.	6.0	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.	3.3	255
27	Susceptible supply limits the role of climate in the early SARS-CoV-2 pandemic. <i>Science</i> , 2020, 369, 315-319.	6.0	253
28	The use of mobile phone data to inform analysis of COVID-19 pandemic epidemiology. <i>Nature Communications</i> , 2020, 11, 4961.	5.8	246
29	Does multiple infection select for raised virulence?. <i>Trends in Microbiology</i> , 2002, 10, 401-405.	3.5	233
30	DYNAMICS OF MEASLES EPIDEMICS: SCALING NOISE, DETERMINISM, AND PREDICTABILITY WITH THE TSIR MODEL. <i>Ecological Monographs</i> , 2002, 72, 185-202.	2.4	225
31	Seasonally forced disease dynamics explored as switching between attractors. <i>Physica D: Nonlinear Phenomena</i> , 2001, 148, 317-335.	1.3	217
32	Optimal reactive vaccination strategies for a foot-and-mouth outbreak in the UK. <i>Nature</i> , 2006, 440, 83-86.	13.7	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.	6.3	213
34	Persistence, chaos and synchrony in ecology and epidemiology. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 1998, 265, 7-10.	1.2	211
35	Demographic Variability, Vaccination, and the Spatiotemporal Dynamics of Rotavirus Epidemics. <i>Science</i> , 2009, 325, 290-294.	6.0	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.	6.0	210

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37	Cetacean Morbillivirus: Current Knowledge and Future Directions. <i>Viruses</i> , 2014, 6, 5145-5181.	1.5	195
38	Epidemiological and evolutionary considerations of SARS-CoV-2 vaccine dosing regimes. <i>Science</i> , 2021, 372, 363-370.	6.0	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.	3.3	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.	1.1	176
41	Individual-based Perspectives on R0. <i>Journal of Theoretical Biology</i> , 2000, 203, 51-61.	0.8	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.	3.5	174
43	Human mobility and the spatial transmission of influenza in the United States. <i>PLoS Computational Biology</i> , 2017, 13, e1005382.	1.5	174
44	Stochastic Processes Are Key Determinants of Short-Term Evolution in Influenza A Virus. <i>PLoS Pathogens</i> , 2006, 2, e125.	2.1	173
45	Dynamics of Influenza Virus Infection and Pathology. <i>Journal of Virology</i> , 2010, 84, 3974-3983.	1.5	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.	3.3	169
47	Reduced vaccination and the risk of measles and other childhood infections post-Ebola. <i>Science</i> , 2015, 347, 1240-1242.	6.0	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.	3.3	151
49	Spatial Transmission of 2009 Pandemic Influenza in the US. <i>PLoS Computational Biology</i> , 2014, 10, e1003635.	1.5	139
50	Foot-and-mouth disease under control in the UK. <i>Nature</i> , 2001, 411, 258-259.	13.7	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.	3.3	124
52	Environmental Drivers of the Spatiotemporal Dynamics of Respiratory Syncytial Virus in the United States. <i>PLoS Pathogens</i> , 2015, 11, e1004591.	2.1	119
53	Phocine Distemper Virus: Current Knowledge and Future Directions. <i>Viruses</i> , 2014, 6, 5093-5134.	1.5	114
54	Impact of immunisation on pertussis transmission in England and Wales. <i>Lancet</i> , The, 2000, 355, 285-286.	6.3	107

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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.	3.9	106
56	Anthelmintic resistance revisited: under-dosing, chemoprophylactic strategies, and mating probabilities. <i>International Journal for Parasitology</i> , 1999, 29, 77-91.	1.3	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.	1.5	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.	3.3	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.	1.5	103
60	Discovering the Phylodynamics of RNA Viruses. <i>PLoS Computational Biology</i> , 2009, 5, e1000505.	1.5	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.	3.3	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.	3.3	98
63	Intra- and Interhost Evolutionary Dynamics of Equine Influenza Virus. <i>Journal of Virology</i> , 2010, 84, 6943-6954.	1.5	97
64	Quantifying the Impact of Immune Escape on Transmission Dynamics of Influenza. <i>Science</i> , 2009, 326, 726-728.	6.0	96
65	Predictive Modeling of Influenza Shows the Promise of Applied Evolutionary Biology. <i>Trends in Microbiology</i> , 2018, 26, 102-118.	3.5	95
66	Accelerated viral dynamics in bat cell lines, with implications for zoonotic emergence. <i>ELife</i> , 2020, 9, .	2.8	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.	1.2	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.	1.3	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.	1.2	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.	3.3	81
71	Vaccine nationalism and the dynamics and control of SARS-CoV-2. <i>Science</i> , 2021, 373, eabj7364.	6.0	80
72	Evolution of an Eurasian Avian-like Influenza Virus in Naïve and Vaccinated Pigs. <i>PLoS Pathogens</i> , 2012, 8, e1002730.	2.1	79

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73	The path of least resistance: aggressive or moderate treatment?. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2014, 281, 20140566.	1.2	79
74	Epidemic dynamics of respiratory syncytial virus in current and future climates. <i>Nature Communications</i> , 2019, 10, 5512.	5.8	78
75	Variation in SARS-CoV-2 outbreaks across sub-Saharan Africa. <i>Nature Medicine</i> , 2021, 27, 447-453.	15.2	77
76	A stochastic model for extinction and recurrence of epidemics: estimation and inference for measles outbreaks. <i>Biostatistics</i> , 2002, 3, 493-510.	0.9	76
77	The Shifting Demographic Landscape of Pandemic Influenza. <i>PLoS ONE</i> , 2010, 5, e9360.	1.1	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.	3.3	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.	1.5	73
80	Seroepidemiologic Study Designs for Determining SARS-COV-2 Transmission and Immunity. <i>Emerging Infectious Diseases</i> , 2020, 26, 1978-1986.	2.0	71
81	Seasonality and the persistence and invasion of measles. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2007, 274, 1133-1141.	1.2	69
82	Intracellular Demography and the Dynamics of <i>Salmonella enterica</i> Infections. <i>PLoS Biology</i> , 2006, 4, e349.	2.6	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.	1.2	68
84	Immunogenicity of a Meningococcal B Vaccine during a University Outbreak. <i>New England Journal of Medicine</i> , 2016, 375, 220-228.	13.9	67
85	Forecasting Epidemiological and Evolutionary Dynamics of Infectious Diseases. <i>Trends in Ecology and Evolution</i> , 2016, 31, 776-788.	4.2	66
86	Multipack dynamics and the Allee effect in the African wild dog, <i>Lycaon pictus</i> . , 2000, 3, 277.		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.	1.8	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.	1.2	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.	1.9	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

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91	Hospital-Community Interactions Foster Coexistence between Methicillin-Resistant Strains of <i>Staphylococcus aureus</i> . <i>PLoS Pathogens</i> , 2013, 9, e1003134.	2.1	61
92	Vaccination and the dynamics of immune evasion. <i>Journal of the Royal Society Interface</i> , 2007, 4, 143-153.	1.5	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.	3.3	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.	1.2	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.	1.1	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.	3.3	57
97	Seasonal dynamics of bacterial meningitis: a time-series analysis. <i>The Lancet Global Health</i> , 2016, 4, e370-e377.	2.9	57
98	INFERENCE FOR INDIVIDUAL-LEVEL MODELS OF INFECTIOUS DISEASES IN LARGE POPULATIONS. <i>Statistica Sinica</i> , 2010, 20, 239-261.	0.2	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.	0.6	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.	3.9	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, .	3.3	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.	1.3	53
103	A Global Immunological Observatory to meet a time of pandemics. <i>ELife</i> , 2020, 9, .	2.8	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.	1.3	51
105	Phylodynamics of Enterovirus A71-Associated Hand, Foot, and Mouth Disease in Viet Nam. <i>Journal of Virology</i> , 2015, 89, 8871-8879.	1.5	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.	1.5	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.	1.5	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.	1.3	47

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109	Pareto rules for malaria super-spreaders and super-spreading. <i>Nature Communications</i> , 2019, 10, 3939.	5.8	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.	1.2	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.	1.2	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.	1.5	43
113	Contact Heterogeneity, Rather Than Transmission Efficiency, Limits the Emergence and Spread of Canine Influenza Virus. <i>PLoS Pathogens</i> , 2014, 10, e1004455.	2.1	43
114	Preparing for uncertainty: endemic paediatric viral illnesses after COVID-19 pandemic disruption. <i>Lancet, The</i> , 2022, 400, 1663-1665.	6.3	43
115	Potential Role of Social Distancing in Mitigating Spread of Coronavirus Disease, South Korea. <i>Emerging Infectious Diseases</i> , 2020, 26, 2697-2700.	2.0	42
116	Epidemiological dynamics of enterovirus D68 in the United States and implications for acute flaccid myelitis. <i>Science Translational Medicine</i> , 2021, 13, .	5.8	41
117	Modelling vaccination strategies for COVID-19. <i>Nature Reviews Immunology</i> , 2022, 22, 139-141.	10.6	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.	1.3	40
119	Protocols for sampling viral sequences to study epidemic dynamics. <i>Journal of the Royal Society Interface</i> , 2010, 7, 1119-1127.	1.5	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.	1.5	40
121	tsiR: An R package for time-series Susceptible-Infected-Recovered models of epidemics. <i>PLoS ONE</i> , 2017, 12, e0185528.	1.1	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.	1.6	39
123	Routine Pediatric Enterovirus 71 Vaccination in China: a Cost-Effectiveness Analysis. <i>PLoS Medicine</i> , 2016, 13, e1001975.	3.9	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.	0.8	38
125	HIV-1/parasite co-infection and the emergence of new parasite strains. <i>Parasitology</i> , 2008, 135, 795-806.	0.7	37
126	Dynamics of Glycoprotein Charge in the Evolutionary History of Human Influenza. <i>PLoS ONE</i> , 2010, 5, e15674.	1.1	37

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127	Population viability analyses on a cycling population: a cautionary tale. <i>Biological Conservation</i> , 2001, 97, 61-69.	1.9	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.	1.2	36
129	The potential impact of coinfection on antimicrobial chemotherapy and drug resistance. <i>Trends in Microbiology</i> , 2015, 23, 537-544.	3.5	36
130	Persistence in Epidemic Metapopulations: Quantifying the Rescue Effects for Measles, Mumps, Rubella and Whooping Cough. <i>PLoS ONE</i> , 2013, 8, e74696.	1.1	35
131	Measles and the canonical path to elimination. <i>Science</i> , 2019, 364, 584-587.	6.0	35
132	Assessing the influence of climate on wintertime SARS-CoV-2 outbreaks. <i>Nature Communications</i> , 2021, 12, 846.	5.8	35
133	Evolution of Equine Influenza Virus in Vaccinated Horses. <i>Journal of Virology</i> , 2013, 87, 4768-4771.	1.5	34
134	Hazards, spatial transmission and timing of outbreaks in epidemic metapopulations. <i>Environmental and Ecological Statistics</i> , 2008, 15, 265-277.	1.9	33
135	High turnover drives prolonged persistence of influenza in managed pig herds. <i>Journal of the Royal Society Interface</i> , 2016, 13, 20160138.	1.5	33
136	Economic and Behavioral Influencers of Vaccination and Antimicrobial Use. <i>Frontiers in Public Health</i> , 2020, 8, 614113.	1.3	33
137	Epidemic cycling and immunity. <i>Nature</i> , 2005, 433, 366-367.	13.7	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.	1.5	32
139	Disease dynamics in a dynamic social network. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2010, 389, 2663-2674.	1.2	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.	1.0	30
141	Measles on the Edge: Coastal Heterogeneities and Infection Dynamics. <i>PLoS ONE</i> , 2008, 3, e1941.	1.1	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.	2.5	30
143	The immune response and within-host emergence of pandemic influenza virus. <i>Lancet, The</i> , 2014, 384, 2077-2081.	6.3	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.	1.3	30

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145	Impact on Epidemic Measles of Vaccination Campaigns Triggered by Disease Outbreaks or Serosurveys: A Modeling Study. <i>PLoS Medicine</i> , 2016, 13, e1002144.	3.9	29
146	Deploying digital health data to optimize influenza surveillance at national and local scales. <i>PLoS Computational Biology</i> , 2018, 14, e1006020.	1.5	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.	3.3	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.	1.5	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.	1.5	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.	1.5	26
151	Geographic transmission hubs of the 2009 influenza pandemic in the United States. <i>Epidemics</i> , 2019, 26, 86-94.	1.5	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.	2.6	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.	1.5	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.	2.9	25
155	Factors Associated With Measles Transmission in the United States During the Postelimination Era. <i>JAMA Pediatrics</i> , 2020, 174, 56.	3.3	25
156	Asynchrony between virus diversity and antibody selection limits influenza virus evolution. <i>ELife</i> , 2020, 9, .	2.8	25
157	Quantifying the risk of pandemic influenza virus evolution by mutation and re-assortment. <i>Vaccine</i> , 2015, 33, 6955-6966.	1.7	24
158	The decline of malaria in Vietnam, 1991–2014. <i>Malaria Journal</i> , 2018, 17, 226.	0.8	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.	1.5	23
160	Climate change suggests a shift of H5N1 risk in migratory birds. <i>Ecological Modelling</i> , 2015, 306, 6-15.	1.2	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.	1.6	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.	3.3	22

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