Jonathan Dushoff

List of Publications by Citations

80 papers	3,203 citations	31 h-index	56 g-index
91 ext. papers	4,452 ext. citations	6.8 avg, IF	5.79 L-index

#	Paper	IF	Citations
80	Transmission dynamics and prospects for the elimination of canine rabies. *PLoS Biology*, **2009**, 7, e53	9.7	300
79	Robust estimation of microbial diversity in theory and in practice. *ISME Journal*, **2013**, 7, 1092-101	11.9	231
78	Mortality due to influenza in the United States--an annualized regression approach using multiple-cause mortality data. *American Journal of Epidemiology*, **2006**, 163, 181-7	3.8	207
77	Ecology and evolution of the flu. *Trends in Ecology and Evolution*, **2002**, 17, 334-340	10.9	196
76	Increased risk of SARS-CoV-2 reinfection associated with emergence of the Omicron variant in South Africa		143
75	Effects of school closure on incidence of pandemic influenza in Alberta, Canada. *Annals of Internal Medicine*, **2012**, 156, 173-81	8	138
74	Modeling shield immunity to reduce COVID-19 epidemic spread. *Nature Medicine*, **2020**, 26, 849-854	50.5	135
73	Native bees buffer the negative impact of climate warming on honey bee pollination of watermelon crops. *Global Change Biology*, **2013**, 19, 3103-10	11.4	95
72	Increased risk of SARS-CoV-2 reinfection associated with emergence of Omicron in South Africa.. *Science*, **2022**, 376, eabn4947	33.3	89
71	The time scale of asymptomatic transmission affects estimates of epidemic potential in the COVID-19 outbreak. *Epidemics*, **2020**, 31, 100392	5.1	82
70	The origins and potential future of SARS-CoV-2 variants of concern in the evolving COVID-19 pandemic. *Current Biology*, **2021**, 31, R918-R929	6.3	79
69	Modeling post-death transmission of Ebola: challenges for inference and opportunities for control. *Scientific Reports*, **2015**, 5, 8751	4.9	75
68	Estimating initial epidemic growth rates. *Bulletin of Mathematical Biology*, **2014**, 76, 245-60	2.1	75
67	Alternative stable states in host–phage dynamics. *Theoretical Ecology*, **2008**, 1, 13-19	1.6	72
66	Reconciling early-outbreak estimates of the basic reproductive number and its uncertainty: framework and applications to the novel coronavirus (SARS-CoV-2) outbreak. *Journal of the Royal Society Interface*, **2020**, 17, 20200144	4.1	71
65	Agricultural antibiotics and human health. *PLoS Medicine*, **2005**, 2, e232	11.6	64
64	Ebola control: effect of asymptomatic infection and acquired immunity. *Lancet, The*, **2014**, 384, 1499-500	40	63

63	The effects of population heterogeneity on disease invasion. *Mathematical Biosciences*, **1995**, 128, 25-40	3.9	61
62	Vaccinating to protect a vulnerable subpopulation. *PLoS Medicine*, **2007**, 4, e174	11.6	61
61	I can see clearly now: Reinterpreting statistical significance. *Methods in Ecology and Evolution*, **2019**, 10, 756-759	7.7	60
60	Host-pathogen interactions, insect outbreaks, and natural selection for disease resistance. *American Naturalist*, **2008**, 172, 829-42	3.7	54
59	Reconstructing influenza incidence by deconvolution of daily mortality time series. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 21825-9	11.5	52
58	Incorporating immunological ideas in epidemiological models. *Journal of Theoretical Biology*, **1996**, 180, 181-7	2.3	51
57	Awareness-driven behavior changes can shift the shape of epidemics away from peaks and toward plateaus, shoulders, and oscillations. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 32764-32771	11.5	49
56	Equivalence of the Erlang-Distributed SEIR Epidemic Model and the Renewal Equation. *SIAM Journal on Applied Mathematics*, **2018**, 78, 3258-3278	1.8	45
55	Intrinsic and realized generation intervals in infectious-disease transmission. *Proceedings of the Royal Society B: Biological Sciences*, **2015**, 282, 20152026	4.4	41
54	Evolution and persistence of influenza A and other diseases. *Mathematical Biosciences*, **2004**, 188, 17-28	3.9	41
53	A conceptual guide to measuring species diversity. *Oikos*, **2021**, 130, 321-338	4	40
52	A practical generation-interval-based approach to inferring the strength of epidemics from their speed. *Epidemics*, **2019**, 27, 12-18	5.1	35
51	On the use of hemagglutination-inhibition for influenza surveillance: surveillance data are predictive of influenza vaccine effectiveness. *Vaccine*, **2009**, 27, 2447-52	4.1	34
50	Functional biogeography of ocean microbes revealed through non-negative matrix factorization. *PLoS ONE*, **2012**, 7, e43866	3.7	32
49	Reconciling early-outbreak estimates of the basic reproductive number and its uncertainty: framework and applications to the novel coronavirus (SARS-CoV-2) outbreak		30
48	A non-negative matrix factorization framework for identifying modular patterns in metagenomic profile data. *Journal of Mathematical Biology*, **2012**, 64, 697-711	2	26
47	A double-edged sword: does highly active antiretroviral therapy contribute to syphilis incidence by impairing immunity to ?. *Sexually Transmitted Infections*, **2017**, 93, 374-378	2.8	25
46	Male and female bees show large differences in floral preference. *PLoS ONE*, **2019**, 14, e0214909	3.7	23

45	The odds of duplicate gene persistence after polyploidization. *BMC Genomics*, **2011**, 12, 599	4.5	22
44	Forward-looking serial intervals correctly link epidemic growth to reproduction numbers. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	21
43	Potential roles of social distancing in mitigating the spread of coronavirus disease 2019 (COVID-19) in South Korea **2020**,		20
42	Mangrove filtration of anthropogenic nutrients in the Rio Coco Solo, Panama. *Management of Environmental Quality*, **2004**, 15, 131-142	3.6	19
41	Host heterogeneity and disease endemicity: a moment-based approach. *Theoretical Population Biology*, **1999**, 56, 325-35	1.2	19
40	The time scale of asymptomatic transmission affects estimates of epidemic potential in the COVID-19 outbreak **2020**,		18
39	Modeling the population-level effects of male circumcision as an HIV-preventive measure: a gendered perspective. *PLoS ONE*, **2011**, 6, e28608	3.7	17
38	Inferring generation-interval distributions from contact-tracing data. *Journal of the Royal Society Interface*, **2020**, 17, 20190719	4.1	16
37	Population-level effects of clinical immunity to malaria. *BMC Infectious Diseases*, **2013**, 13, 428	4	15
36	Bounding the levels of transmissibility & immune evasion of the Omicron variant in South Africa		15
35	Carrying capacity and demographic stochasticity: scaling behavior of the stochastic logistic model. *Theoretical Population Biology*, **2000**, 57, 59-65	1.2	13
34	On the accessibility of adaptive phenotypes of a bacterial metabolic network. *PLoS Computational Biology*, **2009**, 5, e1000472	5	11
33	Roles of generation-interval distributions in shaping relative epidemic strength, speed, and control of new SARS-CoV-2 variants		11
32	Stochasticity and the limits to confidence when estimating R0 of Ebola and other emerging infectious diseases. *Journal of Theoretical Biology*, **2016**, 408, 145-154	2.3	10
31	Ebola virus vaccine trials: the ethical mandate for a therapeutic safety net. *BMJ, The*, **2014**, 349, g7518	5.9	10
30	Calibration of individual-based models to epidemiological data: A systematic review. *PLoS Computational Biology*, **2020**, 16, e1007893	5	9
29	Two approaches to forecast Ebola synthetic epidemics. *Epidemics*, **2018**, 22, 36-42	5.1	9
28	The Hayflick Limit May Determine the Effective Clonal Diversity of Naive T Cells. *Journal of Immunology*, **2016**, 196, 4999-5004	5.3	9

27	Acceleration of plague outbreaks in the second pandemic. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 27703-27711	11.5	7
26	Speed and strength of an epidemic intervention. *Proceedings of the Royal Society B: Biological Sciences*, **2021**, 288, 20201556	4.4	7
25	The Role of Floral Density in Determining Bee Foraging Behavior: A Natural Experiment. *Natural Areas Journal*, **2016**, 36, 392-399	0.8	6
24	Effects of mixing in threshold models of social behavior. *Physical Review E*, **2013**, 88, 012816	2.4	6
23	Fluctuation domains in adaptive evolution. *Theoretical Population Biology*, **2010**, 77, 6-13	1.2	5
22	Cohort-based approach to understanding the roles of generation and serial intervals in shaping epidemiological dynamics		5
21	Equivalence of the Erlang Seir Epidemic Model and the Renewal Equation		5
20	How much do rare and crop-pollinating bees overlap in identity and flower preferences?. *Journal of Applied Ecology*, **2020**, 57, 413-423	5.8	5
19	Human ectoparasite transmission of the plague during the Second Pandemic is only weakly supported by proposed mathematical models. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E7892-E7893	11.5	3
18	Transmission dynamics are crucial to COVID-19 vaccination policy. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	3
17	Analytic calculation of finite-population reproductive numbers for direct- and vector-transmitted diseases with homogeneous mixing. *Bulletin of Mathematical Biology*, **2014**, 76, 1143-54	2.1	2
16	Quantifying ethical tradeoffs for vaccine efficacy trials during severe epidemics		2
15	Speed and strength of an epidemic intervention		1
14	A practical generation interval-based approach to inferring the strength of epidemics from their speed		1
13	Inferring generation-interval distributions from contact-tracing data		1
12	Male and female bees show large differences in floral preference		1
11	Many bee species, including rare species, are important for function of entire plant-pollinator networks.. *Proceedings of the Royal Society B: Biological Sciences*, **2022**, 289, 20212689	4.4	1
10	The need for linked genomic surveillance of SARS-CoV-2.. *Canada Communicable Disease Report*, **2022**, 48, 131-139	3.1	1

9	Testing and Isolation Efficacy: Insights from a Simple Epidemic Model.. *Bulletin of Mathematical Biology*, **2022**, 84, 66	2.1	0
8	Finding Attractors on a Folding Energy Landscape **2011**, 572-582		
7	Does Counting Different Life Stages Impact Estimates for Extinction Probabilities for Tsetse (Glossina spp)?. *Bulletin of Mathematical Biology*, **2021**, 83, 94	2.1	
6	Calibration of individual-based models to epidemiological data: A systematic review **2020**, 16, e1007893		
5	Calibration of individual-based models to epidemiological data: A systematic review **2020**, 16, e1007893		
4	Calibration of individual-based models to epidemiological data: A systematic review **2020**, 16, e1007893		
3	Calibration of individual-based models to epidemiological data: A systematic review **2020**, 16, e1007893		
2	Calibration of individual-based models to epidemiological data: A systematic review **2020**, 16, e1007893		
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