C Jessica E Metcalf

List of Publications by Year
in descending order

195	12,240	31796 53	39236 95
papers	citations	h-index	g-index

260	260	260	20711
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Infectious disease in an era of global change. Nature Reviews Microbiology, 2022, 20, 193-205.	29.2	721
2	Modeling infectious disease dynamics in the complex landscape of global health. Science, 2015, 347, aaa4339.	20.9	522
3	Disease and healthcare burden of COVID-19 in the United States. Nature Medicine, 2020, 26, 1212-1217.	30.1	373
4	The impact of COVID-19 nonpharmaceutical interventions on the future dynamics of endemic infections. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30547-30553.	7.6	364
5	Evolutionary bet-hedging in the real world: empirical evidence and challenges revealed by plants. Proceedings of the Royal Society B: Biological Sciences, 2010, 277, 3055-3064.	2.8	336
6	Assessing the global threat from Zika virus. Science, 2016, 353, aaf8160.	20.9	320
7	Aggregated mobility data could help fight COVID-19. Science, 2020, 368, 145-146.	20.9	315
8	The use of mobile phone data to inform analysis of COVID-19 pandemic epidemiology. Nature Communications, 2020, 11, 4961.	13.2	268
9	Advancing population ecology with integral projection models: a practical guide. Methods in Ecology and Evolution, 2014, 5, 99-110.	5.3	242
10	The microbiome beyond the horizon of ecological and evolutionary theory. Nature Ecology and Evolution, 2017, 1, 1606-1615.	8.0	233
11	Use of serological surveys to generate key insights into the changing global landscape of infectious disease. Lancet, The, 2016, 388, 728-730.	12.1	226
12	Immune life history, vaccination, and the dynamics of SARS-CoV-2 over the next 5 years. Science, 2020, 370, 811-818.	20.9	222
13	Why evolutionary biologists should be demographers. Trends in Ecology and Evolution, 2007, 22, 205-212.	8.8	205
14	Epidemiological and evolutionary considerations of SARS-CoV-2 vaccine dosing regimes. Science, 2021, 372, 363-370.	20.9	204
15	Connecting Mobility to Infectious Diseases: The Promise and Limits of Mobile Phone Data. Journal of Infectious Diseases, 2016, 214, S414-S420.	3.9	164
16	Successive passaging of a plant-associated microbiome reveals robust habitat and host genotype-dependent selection. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1148-1159.	7.6	160
17	Spatial and temporal dynamics of superspreading events in the 2014â€“2015 West Africa Ebola epidemic. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2337-2342.	7.6	158
18	Thirteen challenges in modelling plant diseases. Epidemics, 2015, 10, 6-10.	3.0	151

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19	Environmental Drivers of the Spatiotemporal Dynamics of Respiratory Syncytial Virus in the United States. PLoS Pathogens, 2015, 11, e1004591.	4.1	129
20	Quantifying seasonal population fluxes driving rubella transmission dynamics using mobile phone data. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11114-11119.	7.6	128
21	Opportunities and challenges in modeling emerging infectious diseases. Science, 2017, 357, 149-152.	20.9	124
22	Hand, Foot, and Mouth Disease in China: Modeling Epidemic Dynamics of Enterovirus Serotypes and Implications for Vaccination. PLoS Medicine, 2016, 13, e1001958.	8.4	114
23	Understanding Herd Immunity. Trends in Immunology, 2015, 36, 753-755.	6.8	108
24	Towards the endgame and beyond: complexities and challenges for the elimination of infectious diseases. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120137.	4.2	104
25	Modeling the Influence of Genetic and Environmental Variation on the Expression of Plant Life Cycles across Landscapes. American Naturalist, 2015, 185, 212-227.	2.2	98
26	<scp>IPM</scp>pack: an <scp>R</scp> package for integral projection models. Methods in Ecology and Evolution, 2013, 4, 195-200.	5.3	95
27	Identifying climate drivers of infectious disease dynamics: recent advances and challenges ahead. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20170901.	2.8	95
28	Partitioning Regulatory Mechanisms of Within-Host Malaria Dynamics Using the Effective Propagation Number. Science, 2011, 333, 984-988.	20.9	92
29	The Cinderella syndrome: why do malaria-infected cells burst at midnight?. Trends in Parasitology, 2013, 29, 10-16.	3.3	92
30	Seasonality and comparative dynamics of six childhood infections in pre-vaccination Copenhagen. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 4111-4118.	2.8	91
31	Mathematical models to guide pandemic response. Science, 2020, 369, 368-369.	20.9	88
32	Epidemic dynamics of respiratory syncytial virus in current and future climates. Nature Communications, 2019, 10, 5512.	13.2	86
33	Vaccine nationalism and the dynamics and control of SARS-CoV-2. Science, 2021, 373, eabj7364.	20.9	85
34	Is lifeâ€history buffering or lability adaptive in stochastic environments?. Oikos, 2009, 118, 972-980.	2.7	84
35	High resolution age-structured mapping of childhood vaccination coverage in low and middle income countries. Vaccine, 2018, 36, 1583-1591.	4.0	83
36	Mapping vaccination coverage to explore the effects of delivery mechanisms and inform vaccination strategies. Nature Communications, 2019, 10, 1633.	13.2	83

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37	Variation in SARS-CoV-2 outbreaks across sub-Saharan Africa. Nature Medicine, 2021, 27, 447-453.	30.1	83
38	The path of least resistance: aggressive or moderate treatment?. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20140566.	2.8	81
39	Multinational patterns of seasonal asymmetry in human movement influence infectious disease dynamics. Nature Communications, 2017, 8, 2069.	13.2	78
40	The potential effect of improved provision of rabies post-exposure prophylaxis in Gavi-eligible countries: a modelling study. Lancet Infectious Diseases, The, 2019, 19, 102-111.	8.9	77
41	Seroepidemiologic Study Designs for Determining SARS-COV-2 Transmission and Immunity. Emerging Infectious Diseases, 2020, 26, 1978-1986.	4.4	74
42	Forecasting Epidemiological and Evolutionary Dynamics of Infectious Diseases. Trends in Ecology and Evolution, 2016, 31, 776-788.	8.8	71
43	Estimating SARS-CoV-2 seroprevalence and epidemiological parameters with uncertainty from serological surveys. ELife, 2021, 10, .	5.9	71
44	Evolution of Delayed Reproduction in Uncertain Environments: A Lifeâ€History Perspective. American Naturalist, 2008, 172, 797-805.	2.2	70
45	A time to grow and a time to die: a new way to analyze the dynamics of size, light, age, and death of tropical trees. Ecology, 2009, 90, 2766-2778.	3.5	69
46	Impact of birth rate, seasonality and transmission rate on minimum levels of coverage needed for rubella vaccination. Epidemiology and Infection, 2012, 140, 2290-2301.	2.1	66
47	Six challenges in modelling for public health policy. Epidemics, 2015, 10, 93-96.	3.0	64
48	A signature of tree health? Shifts in the microbiome and the ecological drivers of horse chestnut bleeding canker disease. New Phytologist, 2017, 215, 737-746.	7.8	64
49	The geography of measles vaccination in the African Great Lakes region. Nature Communications, 2017, 8, 15585.	13.2	64
50	Predicting the evolutionary dynamics of seasonal adaptation to novel climates in Arabidopsis thaliana. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E2812-21.	7.6	63
51	Estimating Drivers of Autochthonous Transmission of Chikungunya Virus in its Invasion of the Americas. PLOS Currents, 2015, 7, .	1.6	62
52	A Global Immunological Observatory to meet a time of pandemics. ELife, 2020, 9, .	5.9	60
53	Characterizing the impact of spatial clustering of susceptibility for measles elimination. Vaccine, 2019, 37, 732-741.	4.0	58
54	Lives saved with vaccination for 10 pathogens across 112 countries in a pre-COVID-19 world. ELife, 2021, 10, .	5.9	58

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55	Transport networks and inequities in vaccination: remoteness shapes measles vaccine coverage and prospects for elimination across Africa. Epidemiology and Infection, 2015, 143, 1457-1466.	2.1	57
56	Plant neighborhood shapes diversity and reduces interspecific variation of the phyllosphere microbiome. ISME Journal, 2022, 16, 1376-1387.	10.0	57
57	Evolution of flowering decisions in a stochastic, density-dependent environment. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 10466-10470.	7.6	56
58	Measuring the Performance of Vaccination Programs Using Cross-Sectional Surveys: A Likelihood Framework and Retrospective Analysis. PLoS Medicine, 2011, 8, e1001110.	8.4	55
59	Rubella metapopulation dynamics and importance of spatial coupling to the risk of congenital rubella syndrome in Peru. Journal of the Royal Society Interface, 2011, 8, 369-376.	3.4	53
60	Persistent Chaos of Measles Epidemics in the Prevaccination United States Caused by a Small Change in Seasonal Transmission Patterns. PLoS Computational Biology, 2016, 12, e1004655.	3.1	50
61	Tree growth inference and prediction when the point of measurement changes: modelling around buttresses in tropical forests. Journal of Tropical Ecology, 2009, 25, 1-12.	1.0	47
62	The Evolution of Variance Control. Trends in Ecology and Evolution, 2020, 35, 22-33.	8.8	45
63	Maximizing and evaluating the impact of test-trace-isolate programs: A modeling study. PLoS Medicine, 2021, 18, e1003585.	8.4	45
64	Natural selection for imprecise vertical transmission in hostâ€“microbiota systems. Nature Ecology and Evolution, 2022, 6, 77-87.	8.0	42
65	The epidemiology of rubella in Mexico: seasonality, stochasticity and regional variation. Epidemiology and Infection, 2011, 139, 1029-1038.	2.1	41
66	Five challenges in evolution and infectious diseases. Epidemics, 2015, 10, 40-44.	3.0	40
67	Disentangling serology to elucidate henipaâ€•and filovirus transmission in Madagascar fruit bats. Journal of Animal Ecology, 2019, 88, 1001-1016.	2.9	40
68	Growth-survival trade-offs and allometries in rosette-forming perennials. Functional Ecology, 2006, 20, 217-225.	3.6	38
69	Assessing the influence of climate on wintertime SARS-CoV-2 outbreaks. Nature Communications, 2021, 12, 846.	13.2	38
70	Environmental uncertainty, autocorrelation and the evolution of survival. Proceedings of the Royal Society B: Biological Sciences, 2007, 274, 2153-2160.	2.8	37
71	Persistence in Epidemic Metapopulations: Quantifying the Rescue Effects for Measles, Mumps, Rubella and Whooping Cough. PLoS ONE, 2013, 8, e74696.	2.5	37
72	The potential impact of coinfection on antimicrobial chemotherapy and drug resistance. Trends in Microbiology, 2015, 23, 537-544.	7.7	37

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73	Six challenges in the eradication of infectious diseases. Epidemics, 2015, 10, 97-101.	3.0	37
74	Why leveraging sex differences in immune tradeâ€offs may illuminate the evolution of senescence. Functional Ecology, 2020, 34, 129-140.	3.6	37
75	A spatial regression model for the disaggregation of areal unit based data to high-resolution grids with application to vaccination coverage mapping. Statistical Methods in Medical Research, 2019, 28, 3226-3241.	1.6	36
76	Statistical modelling of annual variation for inference on stochastic population dynamics using Integral Projection Models. Methods in Ecology and Evolution, 2015, 6, 1007-1017.	5.3	35
77	Life history in a model system: opening the black box with Arabidopsis thaliana. Ecology Letters, 2009, 12, 593-600.	6.7	34
78	Structured models of infectious disease: Inference with discrete data. Theoretical Population Biology, 2012, 82, 275-282.	1.0	34
79	Implications of spatially heterogeneous vaccination coverage for the risk of congenital rubella syndrome in South Africa. Journal of the Royal Society Interface, 2013, 10, 20120756.	3.4	34
80	The effects of host age and spatial location on bacterial community composition in the English Oak tree (Quercus robur). Environmental Microbiology Reports, 2016, 8, 649-658.	2.6	33
81	Estimating sources and sinks of malaria parasites in Madagascar. Nature Communications, 2018, 9, 3897.	13.2	32
82	Seven challenges in modeling vaccine preventable diseases. Epidemics, 2015, 10, 11-15.	3.0	31
83	Impact on Epidemic Measles of Vaccination Campaigns Triggered by Disease Outbreaks or Serosurveys: A Modeling Study. PLoS Medicine, 2016, 13, e1002144.	8.4	31
84	Schedule and magnitude of reproductive investment under immune trade-offs explains sex differences in immunity. Nature Communications, 2018, 9, 4391.	13.2	31
85	Using models to shape measles control and elimination strategies in low- and middle-income countries: A review of recent applications. Vaccine, 2020, 38, 979-992.	4.0	31
86	Demographic buffering: titrating the effects of birth rate and imperfect immunity on epidemic dynamics. Journal of the Royal Society Interface, 2015, 12, 20141245.	3.4	30
87	Modelling the first dose of measles vaccination: the role of maternal immunity, demographic factors, and delivery systems. Epidemiology and Infection, 2011, 139, 265-274.	2.1	29
88	Balancing Evidence and Uncertainty when Considering Rubella Vaccine Introduction. PLoS ONE, 2013, 8, e67639.	2.5	29
89	Negative Selection on BRCA1 Susceptibility Alleles Sheds Light on the Population Genetics of Late-Onset Diseases and Aging Theory. PLoS ONE, 2007, 2, e1206.	2.5	29
90	Epidemic dynamics, interactions and predictability of enteroviruses associated with hand, foot and mouth disease in Japan. Journal of the Royal Society Interface, 2018, 15, 20180507.	3.4	28

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91	The duration of travel impacts the spatial dynamics of infectious diseases. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 22572-22579.	7.6	28
92	Bottomâ€up regulation of malaria population dynamics in mice coâ€infected with lungâ€migratory nematodes. Ecology Letters, 2015, 18, 1387-1396.	6.7	27
93	Seasonal Population Movements and the Surveillance and Control of Infectious Diseases. Trends in Parasitology, 2017, 33, 10-20.	3.3	27
94	Protective microbiomes can limit the evolution of host pathogen defense. Evolution Letters, 2019, 3, 534-543.	3.4	27
95	Healthcare utilization, provisioning of post-exposure prophylaxis, and estimation of human rabies burden in Madagascar. Vaccine, 2019, 37, A35-A44.	4.0	27
96	Opportunities and challenges of<scp>I</scp>ntegral<scp>P</scp>rojection<scp>M</scp>odels for modelling hostâ€“parasite dynamics. Journal of Animal Ecology, 2016, 85, 343-355.	2.9	26
97	Overcoming data sparseness and parametric constraints in modeling of tree mortality: a new nonparametric Bayesian model. Canadian Journal of Forest Research, 2009, 39, 1677-1687.	1.8	25
98	Revealing mechanisms underlying variation in malaria virulence: effective propagation and host control of uninfected red blood cell supply. Journal of the Royal Society Interface, 2012, 9, 2804-2813.	3.4	25
99	Why Evolve Reliance on the Microbiome for Timing of Ontogeny?. MBio, 2019, 10, .	4.4	25
100	Demographically framing trade-offs between sensitivity and specificity illuminates selection on immunity. Nature Ecology and Evolution, 2017, 1, 1766-1772.	8.0	24
101	A cline in seed dormancy helps conserve the environment experienced during reproduction across the range of Arabidopsis thaliana. American Journal of Botany, 2016, 103, 47-59.	1.9	23
102	Dynamic response of airborne infections to climate change: predictions for varicella. Climatic Change, 2018, 148, 547-560.	3.7	23
103	Transient sensitivities of non-indigenous shrub species indicate complicated invasion dynamics. Biological Invasions, 2008, 10, 833-846.	2.4	22
104	Avoiding the crowds: the evolution of plastic responses to seasonal cues in a densityâ€dependent world. Journal of Ecology, 2015, 103, 819-828.	4.1	21
105	The importance of the generation interval in investigating dynamics and control of new SARS-CoV-2 variants. Journal of the Royal Society Interface, 2022, 19, .	3.4	20
106	Elucidating transmission dynamics and host-parasite-vector relationships for rodent-borne Bartonella spp. in Madagascar. Epidemics, 2017, 20, 56-66.	3.0	19
107	Comparative dynamics, seasonality in transmission, and predictability of childhood infections in Mexico. Epidemiology and Infection, 2017, 145, 607-625.	2.1	19
108	Seasonal gaps in measles vaccination coverage in Madagascar. Vaccine, 2019, 37, 2511-2519.	4.0	19

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109	Predictability in a highly stochastic system: final size of measles epidemics in small populations. Journal of the Royal Society Interface, 2015, 12, 20141125.	3.4	18
110	Demographics, epidemiology and the impact of vaccination campaigns in a measles-free world â€“ Can elimination be maintained?. Vaccine, 2017, 35, 1488-1493.	4.0	18
111	Measles outbreak risk in Pakistan: exploring the potential of combining vaccination coverage and incidence data with novel data-streams to strengthen control. Epidemiology and Infection, 2018, 146, 1575-1583.	2.1	18
112	Hand, Foot, and Mouth Disease in China: Critical Community Size and Spatial Vaccination Strategies. Scientific Reports, 2016, 6, 25248.	3.4	17
113	Immuno-epidemiology and the predictability of viral evolution. Science, 2022, 376, 1161-1162.	20.9	17
114	Seed predators and the evolutionarily stable flowering strategy in the invasive plant, Carduus nutans. Evolutionary Ecology, 2009, 23, 893-906.	1.3	16
115	Challenges in Modelling Infectious Disease Dynamics: Preface. Epidemics, 2015, 10, iii-iv.	3.0	16
116	Introduction of rubella-containing-vaccine to Madagascar: implications for roll-out and local elimination. Journal of the Royal Society Interface, 2016, 13, 20151101.	3.4	16
117	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	16
118	Challenges in modeling the emergence of novel pathogens. Epidemics, 2021, 37, 100516.	3.0	16
119	Population trends for two Malagasy fruit bats. Biological Conservation, 2019, 234, 165-171.	4.2	15
120	A general model for the demographic signatures of the transition from pandemic emergence to endemicity. Science Advances, 2021, 7, .	10.9	15
121	Rubella vaccination: must not be business as usual. Lancet, The, 2012, 380, 217-218.	12.1	14
122	Characterizing the dynamics of rubella relative to measles: the role of stochasticity. Journal of the Royal Society Interface, 2013, 10, 20130643.	3.4	14
123	Vaccine-driven virulence evolution: consequences of unbalanced reductions in mortality and transmission and implications for pertussis vaccines. Journal of the Royal Society Interface, 2019, 16, 20190642.	3.4	14
124	A competing-risks model explains hierarchical spatial coupling of measles epidemics en route to national elimination. Nature Ecology and Evolution, 2020, 4, 934-939.	8.0	14
125	Disentangling the dynamical underpinnings of differences in SARS-CoV-2 pathology using within-host ecological models. PLoS Pathogens, 2020, 16, e1009105.	4.1	14
126	The evolution of powerful yet perilous immune systems. Trends in Immunology, 2022, 43, 117-131.	6.8	14

#	Article	IF	Citations
127	Opportunities and challenges of a World Serum Bank â€“ Authors' reply. Lancet, The, 2017, 389, 252.	12.1	13
128	Perfect counterfactuals for epidemic simulations. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20180279.	4.2	13
129	Monitoring for outbreak-associated excess mortality in an African city: Detection limits in Antananarivo, Madagascar. International Journal of Infectious Diseases, 2021, 103, 338-342.	3.3	13
130	How geographic access to care shapes disease burden: The current impact of post-exposure prophylaxis and potential for expanded access to prevent human rabies deaths in Madagascar. PLoS Neglected Tropical Diseases, 2021, 15, e0008821.	2.4	13
131	Rubella vaccination in India: identifying broad consequences of vaccine introduction and key knowledge gaps. Epidemiology and Infection, 2018, 146, 65-77.	2.1	12
132	Enterovirus D68: a test case for the use of immunological surveillance to develop tools to mitigate the pandemic potential of emerging pathogens. Lancet Microbe, The, 2022, 3, e83-e85.	6.7	12
133	Long-term benefits of nonpharmaceutical interventions for endemic infections are shaped by respiratory pathogen dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.6	12
134	Adenosine Promotes the Recovery of Mice from the Cuprizone-Induced Behavioral and Morphological Changes while Effecting on Microglia and Inflammatory Cytokines in the Brain. Journal of NeuroImmune Pharmacology, 2018, 13, 412-425.	4.0	11
135	The limits of SARS-CoV-2 predictability. Nature Ecology and Evolution, 2021, 5, 1052-1054.	8.0	11
136	Characterizing human mobility patterns in rural settings of sub-Saharan Africa. ELife, 2021, 10, .	5.9	11
137	Challenges and Opportunities in Disease Forecasting in Outbreak Settings: A Case Study of Measles in Lola Prefecture, Guinea. American Journal of Tropical Medicine and Hygiene, 2018, 98, 1489-1497.	3.5	11
138	Study Protocol: A Cross-Sectional Examination of Socio-Demographic and Ecological Determinants of Nutrition and Disease Across Madagascar. Frontiers in Public Health, 2020, 8, 500.	2.8	10
139	Climatological, virological and sociological drivers of current and projected dengue fever outbreak dynamics in Sri Lanka. Journal of the Royal Society Interface, 2020, 17, 20200075.	3.4	10
140	Fine-scale variation in malaria prevalence across ecological regions in Madagascar: a cross-sectional study. BMC Public Health, 2021, 21, 1018.	3.0	10
141	Long-term measles antibody profiles following different vaccine schedules in China, a longitudinal study. Nature Communications, 2023, 14, .	13.2	10
142	Phylogeography of rubella virus in Asia: Vaccination and demography shape synchronous outbreaks. Epidemics, 2019, 28, 100346.	3.0	9
143	Invasion Dynamics of Teratogenic Infections in Light of Rubella Control: Implications for Zika Virus. PLOS Currents, 2016, 8, .	1.6	9
144	Assessing the risk of vaccine-driven virulence evolution in SARS-CoV-2. Royal Society Open Science, 2022, 9, 211021.	2.5	9

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145	Using timelines as part of recoveryâ€focused practice in psychosis. Journal of Psychiatric and Mental Health Nursing, 2011, 18, 869-877.	2.4	8
146	Using Serology with Models to Clarify the Trajectory of the SARS-CoV-2 Emerging Outbreak. Trends in Immunology, 2020, 41, 849-851.	6.8	8
147	Why are there so few (or so many) circulating coronaviruses?. Trends in Immunology, 2021, 42, 751-763.	6.8	8
148	Optimal Semelparity. PLoS ONE, 2013, 8, e57133.	2.5	7
149	Evolving resistance to pathogens. Science, 2019, 363, 1277-1278.	20.9	7
150	Tensor decomposition for infectious disease incidence data. Methods in Ecology and Evolution, 2020, 11, 1690-1700.	5.3	7
151	Response to Comment on â€œLong-term measles-induced immunomodulation increases overall childhood infectious disease mortalityâ€. Science, 2019, 365, .	20.9	7
152	Challenges in evaluating risks and policy options around endemic establishment or elimination of novel pathogens. Epidemics, 2021, 37, 100507.	3.0	7
153	Improving measles incidence inference using age-structured serological data. Epidemiology and Infection, 2018, 146, 1699-1706.	2.1	6
154	Lessons Learned and Paths Forward for Rabies Dog Vaccination in Madagascar: A Case Study of Pilot Vaccination Campaigns in Moramanga District. Tropical Medicine and Infectious Disease, 2021, 6, 48.	2.3	6
155	Existing human mobility data sources poorly predicted the spatial spread of SARS-CoV-2 in Madagascar. Epidemics, 2022, 38, 100534.	3.0	6
156	Mechanistic models to meet the challenge of climate change in plantâ€“pathogen systems. Philosophical Transactions of the Royal Society B: Biological Sciences, 2023, 378, .	4.2	6
157	Measurement of vaccine-derived immunity: how do we use all the data?. Expert Review of Vaccines, 2012, 11, 747-749.	4.5	5
158	Using Serology to Anticipate Measles Post-honeymoon Period Outbreaks. Trends in Microbiology, 2020, 28, 597-600.	7.7	5
159	Cyclic epidemics and extreme outbreaks induced by hydro-climatic variability and memory. Journal of the Royal Society Interface, 2020, 17, 20200521.	3.4	5
160	Long-term trends in seasonality of mortality in urban Madagascar: the role of the epidemiological transition. Global Health Action, 2020, 13, 1717411.	2.0	5
161	Impact of health system strengthening on delivery strategies to improve child immunisation coverage and inequalities in rural Madagascar. BMJ Global Health, 2022, 7, e006824.	5.5	5
162	Assessing the Effects of Measles Virus Infections on Childhood Infectious Disease Mortality in Brazil. Journal of Infectious Diseases, 2022, 227, 133-140.	3.9	5

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163	Impact of disruptions to routine vaccination programs, quantifying burden of measles, and mapping targeted supplementary immunization activities. Epidemics, 2022, 41, 100647.	3.0	5
164	Long term intrinsic cycling in human life course antibody responses to influenza A(H3N2): an observational and modeling study. ELife, 0, 11, .	5.9	5
165	Drivers of measles mortality: the historic fatality burden of famine in Bangladesh. Epidemiology and Infection, 2017, 145, 3361-3369.	2.1	4
166	Trip duration drives shift in travel network structure with implications for the predictability of spatial disease spread. PLoS Computational Biology, 2021, 17, e1009127.	3.1	4
167	Comparing the age and sex trajectories of SARS-CoV-2 morbidity and mortality with other respiratory pathogens. Royal Society Open Science, 2022, 9, .	2.5	4
168	Excess mortality associated with the COVID-19 pandemic during the 2020 and 2021 waves in Antananarivo, Madagascar. BMJ Global Health, 2023, 8, e011801.	5.5	4
169	Rubella Vaccine Introduction in the South African Public Vaccination Schedule: Mathematical Modelling for Decision Making. Vaccines, 2020, 8, 383.	4.5	3
170	Structure, space and size: competing drivers of variation in urban and rural measles transmission. Journal of the Royal Society Interface, 2020, 17, 20200010.	3.4	3
171	Differential drivers of intraspecific and interspecific competition during malariaâ€“helminth co-infection. Parasitology, 2021, 148, 1030-1039.	1.8	3
172	The Challenge of Achieving Immunity Through Multiple-Dose Vaccines in Madagascar. American Journal of Epidemiology, 2021, 190, 2085-2093.	3.7	3
173	Building toward useful SARS-CoV-2 models in Africa. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.6	3
174	Optimal immune specificity at the intersection of host life history and parasite epidemiology. PLoS Computational Biology, 2021, 17, e1009714.	3.1	3
175	Why do some coronaviruses become pandemic threats when others do not?. PLoS Biology, 2022, 20, e3001652.	5.4	3
176	Hosts, microbiomes, and the evolution of critical windows. Evolution Letters, 2022, 6, 412-425.	3.4	3
177	Medium-term scenarios of COVID-19 as a function of immune uncertainties and chronic disease. Journal of the Royal Society Interface, 2023, 20, .	3.4	3
178	The evolutionary dynamics of timing of maternal immunity: evaluating the role of ageâ€specific mortality. Journal of Evolutionary Biology, 2015, 28, 493-502.	1.6	2
179	Partial immunity and SARS-CoV-2 mutationsâ€”Response. Science, 2021, 372, 354-355.	20.9	2
180	Disease spread: heating and stirring the global viral soup. Nature, 2022, 607, 455-456.	36.2	2

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181	Seroprevalence of pertussis in Madagascar and implications for vaccination. Epidemiology and Infection, 2020, 148, e283.	2.1	1
182	Seasonal determinants of access to care: implications for measles outbreak risk in Madagascar. Lancet, The, 2017, 389, S14.	12.1	1
183	Towards better targeting: lessons from a posthoneymoon measles outbreak in Madagascar, 2018â€“2019. BMJ Global Health, 2020, 5, e003153.	5.5	1
184	Leveraging serology to titrate immunization program functionality for diphtheria in Madagascar. Epidemiology and Infection, 2022, 150, 1-34.	2.1	1
185	The required size of cluster randomized trials of nonpharmaceutical interventions in epidemic settings. Statistics in Medicine, 2022, 41, 2466-2482.	1.7	1
186	Closing the gap in the <scp>Janzenâ€“Connell</scp> hypothesis: What determines pathogen diversity?. Ecology Letters, 2024, 27, .	6.7	1
187	MBSE and the Concept Model of the Internet of Things-Based Data Link System Designing Method. , 2022, , .		0
188	Relative role of community transmission and campus contagion in driving the spread of SARS-CoV-2: Lessons from Princeton University. PNAS Nexus, 2023, 2, .	2.6	0
189	The diversity of cGLR receptors: shedding new light on innate immunity. Trends in Immunology, 2023, 44, 763-765.	6.8	0
190	Predicting the impact of COVID-19 non-pharmaceutical intervention on short- and medium-term dynamics of enterovirus D68 in the US. Epidemics, 2024, 46, 100736.	3.0	0
191	Inferring COVID-19 testing and vaccination behavior from New Jersey testing data. Proceedings of the National Academy of Sciences of the United States of America, 2024, 121, .	7.6	0
192	31. Trade-Offs between Mortality Components in Life History Evolution. , 2024, , 715-740.		0
193	Rapid growth and the evolution of complete metamorphosis in insects. Proceedings of the National Academy of Sciences of the United States of America, 2024, 121, .	7.6	0
194	Perspectives on the future of ecology, evolution, and biodiversity from the Council on Microbial Sciences of the American Society for Microbiology. MSphere, 0, , .	3.1	0
195	Predicting pathogen mutual invasibility and co-circulation. Science, 2024, 386, 175-179.	20.9	0