Thomas A House

List of Publications by Year
in descending order

83 papers	5,065 citations	109321 35 h-index	114465 63 g-index
99 all docs	99 docs citations	99 times ranked	6685 citing authors

#	Article	IF	Citations
1	Modeling infectious disease dynamics in the complex landscape of global health. Science, 2015, 347, aaa4339.	12.6	492
2	Effect of Delta variant on viral burden and vaccine effectiveness against new SARS-CoV-2 infections in the UK. Nature Medicine, 2021, 27, 2127-2135.	30.7	450
3	Networks and the Epidemiology of Infectious Disease. Interdisciplinary Perspectives on Infectious Diseases, 2011, 2011, 1-28.	1.4	299
4	Impact of vaccination on new SARS-CoV-2 infections in the United Kingdom. Nature Medicine, 2021, 27, 1370-1378.	30.7	260
5	Antibody responses to SARS-CoV-2 vaccines in 45,965 adults from the general population of the United Kingdom. Nature Microbiology, 2021, 6, 1140-1149.	13.3	254
6	Insights from unifying modern approximations to infections on networks. Journal of the Royal Society Interface, 2011, 8, 67-73.	3.4	153
7	Eight challenges for network epidemic models. Epidemics, 2015, 10, 58-62.	3.0	147
8	Community prevalence of SARS-CoV-2 in England from April to November, 2020: results from the ONS Coronavirus Infection Survey. Lancet Public Health, The, 2021, 6, e30-e38.	10.0	147
9	Antibody responses and correlates of protection in the general population after two doses of the ChAdOx1 or BNT162b2 vaccines. Nature Medicine, 2022, 28, 1072-1082.	30.7	147
10	Individual identity and movement networks for disease metapopulations. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 8866-8870.	7.1	130
11	Key questions for modelling COVID-19 exit strategies. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20201405.	2.6	106
12	Social encounter networks: characterizing Great Britain. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20131037.	2.6	103
13	Hospital length of stay for COVID-19 patients: Data-driven methods for forward planning. BMC Infectious Diseases, 2021, 21, 700.	2.9	99
14	Seven challenges for metapopulation models of epidemics, including households models. Epidemics, 2015, 10, 63-67.	3.0	97
15	Social encounter networks: collective properties and disease transmission. Journal of the Royal Society Interface, 2012, 9, 2826-2833.	3.4	95
16	Challenges in control of COVID-19: short doubling time and long delay to effect of interventions. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20200264.	4.0	93
17	Ct threshold values, a proxy for viral load in community SARS-CoV-2 cases, demonstrate wide variation across populations and over time. ELife, 2021, 10, .	6.0	91
18	Possible future waves of SARS-CoV-2 infection generated by variants of concern with a range of characteristics. Nature Communications, 2021, 12, 5730.	12.8	90

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19	Impact of spatial clustering on disease transmission and optimal control. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 1041-1046.	7.1	85
20	Evidence for complex contagion models of social contagion from observational data. PLoS ONE, 2017, 12, e0180802.	2.5	76
21	The Impact of Contact Tracing in Clustered Populations. PLoS Computational Biology, 2010, 6, e1000721.	3.2	75
22	Deterministic epidemic models with explicit household structure. Mathematical Biosciences, 2008, 213, 29-39.	1.9	70
23	Modelling the impact of local reactive school closures on critical care provision during an influenza pandemic. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 2753-2760.	2.6	62
24	Using statistics and mathematical modelling to understand infectious disease outbreaks: COVID-19 as an example. Infectious Disease Modelling, 2020, 5, 409-441.	1.9	61
25	Four key challenges in infectious disease modelling using data from multiple sources. Epidemics, 2015, 10, 83-87.	3.0	59
26	From Markovian to pairwise epidemic models and the performance of moment closure approximations. Journal of Mathematical Biology, 2012, 64, 1021-1042.	1.9	50
27	How big is an outbreak likely to be? Methods for epidemic final-size calculation. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20120436.	2.1	49
28	How the weather affects the pain of citizen scientists using a smartphone app. Npj Digital Medicine, 2019, 2, 105.	10.9	49
29	Vaccine Induced Herd Immunity for Control of Respiratory Syncytial Virus Disease in a Low-Income Country Setting. PLoS ONE, 2015, 10, e0138018.	2.5	49
30	Tracking the Emergence of SARS-CoV-2 Alpha Variant in the United Kingdom. New England Journal of Medicine, 2021, 385, 2582-2585.	27.0	49
31	A Motif-Based Approach to Network Epidemics. Bulletin of Mathematical Biology, 2009, 71, 1693-1706.	1.9	48
32	Five challenges for stochastic epidemic models involving global transmission. Epidemics, 2015, 10, 54-57.	3.0	44
33	The role of routine versus random movements on the spread of disease in Great Britain. Epidemics, 2009, 1, 250-258.	3.0	41
34	Calculation of Disease Dynamics in a Population of Households. PLoS ONE, 2010, 5, e9666.	2.5	40
35	M-theory compactifications on manifolds with G 2 structure. Classical and Quantum Gravity, 2005, 22, 1709-1738.	4.0	39
36	Epidemic prediction and control in clustered populations. Journal of Theoretical Biology, 2011, 272, 1-7.	1.7	38

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37	Estimation of outbreak severity and transmissibility: Influenza A(H1N1)pdm09 in households. BMC Medicine, 2012, 10, 117.	5.5	32
38	Epidemiological consequences of household-based antiviral prophylaxis for pandemic influenza. Journal of the Royal Society Interface, 2013, 10, 20121019.	3.4	32
39	Higher-order structure and epidemic dynamics in clustered networks. Journal of Theoretical Biology, 2014, 348, 21-32.	1.7	31
40	Influencing public health policy with data-informed mathematical models of infectious diseases: Recent developments and new challenges. Epidemics, 2020, 32, 100393.	3.0	31
41	Modelling epidemics on networks. Contemporary Physics, 2012, 53, 213-225.	1.8	30
42	Correcting for day of the week and public holiday effects: improving a national daily syndromic surveillance service for detecting public health threats. BMC Public Health, 2017, 17, 477.	2.9	29
43	Using a household-structured branching process to analyse contact tracing in the SARS-CoV-2 pandemic. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20200267.	4.0	27
44	Epidemiological dynamics of Ebola outbreaks. ELife, 2014, 3, e03908.	6.0	27
45	Exact and approximate moment closures for non-Markovian network epidemics. Journal of Theoretical Biology, 2015, 382, 160-177.	1.7	24
46	Modelling behavioural contagion. Journal of the Royal Society Interface, 2011, 8, 909-912.	3.4	21
47	Systematic Approximations to Susceptible-Infectious-Susceptible Dynamics on Networks. PLoS Computational Biology, 2016, 12, e1005296.	3.2	20
48	Symptoms and Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Positivity in the General Population in the United Kingdom. Clinical Infectious Diseases, 2022, 75, e329-e337.	5.8	20
49	Modelling H5N1 in Bangladesh across spatial scales: Model complexity and zoonotic transmission risk. Epidemics, 2017, 20, 37-55.	3.0	19
50	Scabies in residential care homes: Modelling, inference and interventions for well-connected population sub-units. PLoS Computational Biology, 2018, 14, e1006046.	3.2	19
51	Quantification of protein abundance and interaction defines a mechanism for operation of the circadian clock. ELife, 2022, 11, .	6.0	18
52	Bayesian uncertainty quantification for transmissibility of influenza, norovirus and Ebola using information geometry. Journal of the Royal Society Interface, 2016, 13, 20160279.	3.4	17
53	The impact of surveillance and control on highly pathogenic avian influenza outbreaks in poultry in Dhaka division, Bangladesh. PLoS Computational Biology, 2018, 14, e1006439.	3.2	17
54	Contingency planning for a deliberate release of smallpox in Great Britain - the role of geographical scale and contact structure. BMC Infectious Diseases, 2010, 10, 25.	2.9	14

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55	Dynamics of stochastic epidemics on heterogeneous networks. Journal of Mathematical Biology, 2014, 68, 1583-1605.	1.9	14
56	SARS-CoV-2 antigen testing: weighing the false positives against the costs of failing to control transmission. Lancet Respiratory Medicine,the, 2021, 9, 685-687.	10.7	14
57	Gaussian process approximations for fast inference from infectious disease data. Mathematical Biosciences, 2018, 301, 111-120.	1.9	12
58	Assessing delivery practices of mothers over time and over space in Uganda, 2003â€“2012. Emerging Themes in Epidemiology, 2016, 13, 9.	2.7	11
59	Lie Algebra Solution of Population Models Based on Time-Inhomogeneous Markov Chains. Journal of Applied Probability, 2012, 49, 472-481.	0.7	11
60	Monitoring populations at increased risk for SARS-CoV-2 infection in the community using population-level demographic and behavioural surveillance. Lancet Regional Health - Europe, The, 2022, 13, 100282.	5.6	11
61	The effect of clumped population structure on the variability of spreading dynamics. Journal of Theoretical Biology, 2014, 359, 45-53.	1.7	10
62	Spreading of components of mood in adolescent social networks. Royal Society Open Science, 2017, 4, 170336.	2.4	10
63	Weather Patterns Associated with Pain in Chronic-Pain Sufferers. Bulletin of the American Meteorological Society, 2020, 101, E555-E566.	3.3	10
64	Real-time growth rate for general stochastic SIR epidemics on unclustered networks. Mathematical Biosciences, 2015, 265, 65-81.	1.9	9
65	Heterogeneous network epidemics: real-time growth, variance and extinction of infection. Journal of Mathematical Biology, 2017, 75, 577-619.	1.9	9
66	Heterogeneity in the association between weather and pain severity among patients with chronic pain: a Bayesian multilevel regression analysis. Pain Reports, 2022, 7, e963.	2.7	9
67	Extinction times in the subcritical stochastic SIS logistic epidemic. Journal of Mathematical Biology, 2018, 77, 455-493.	1.9	8
68	The population attributable fraction of cases due to gatherings and groups with relevance to COVID-19 mitigation strategies. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20200273.	4.0	8
69	Can Reactive School Closures help critical care provision during the current influenza pandemic?. PLOS Currents, 2009, 1, RRN1119.	1.4	8
70	Testing the hypothesis of preferential attachment in social network formation. EPJ Data Science, 2015, 4, 13.	2.8	7
71	Stochastic epidemic dynamics on extremely heterogeneous networks. Physical Review E, 2016, 94, 062408.	2.1	7
72	Evidence for history-dependence of influenza pandemic emergence. Scientific Reports, 2017, 7, 43623.	3.3	7

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73	Ivermectin for the control of scabies outbreaks in the UK. Lancet, The, 2019, 394, 2068-2069.	13.7	7
74	Strategies for Controlling Non-Transmissible Infection Outbreaks Using a Large Human Movement Data Set. PLoS Computational Biology, 2014, 10, e1003809.	3.2	6
75	Algebraic Moment Closure for Population Dynamics on Discrete Structures. Bulletin of Mathematical Biology, 2015, 77, 646-659.	1.9	6
76	Outbreaks in care homes may lead to substantial disease burden if not mitigated. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20200269.	4.0	6
77	GENERALIZED NETWORK CLUSTERING AND ITS DYNAMICAL IMPLICATIONS. International Journal of Modeling, Simulation, and Scientific Computing, 2010, 13, 281-291.	1.4	5
78	The rate of convergence to early asymptotic behaviour in age-structured epidemic models. Theoretical Population Biology, 2013, 85, 58-62.	1.1	4
79	A general theory of early growth?. Physics of Life Reviews, 2016, 18, 109-111.	2.8	4
80	Near-critical SIR epidemic on a random graph with given degrees. Journal of Mathematical Biology, 2017, 74, 843-886.	1.9	3
81	For principled model fitting in mathematical biology. Journal of Mathematical Biology, 2015, 70, 1007-1013.	1.9	1
82	Modelling fertility in rural South Africa with combined nonlinear parametric and semi-parametric methods. Emerging Themes in Epidemiology, 2018, 15, 5.	2.7	1
83	Bayesian belief network modelling of household food security in rural South Africa. BMC Public Health, 2021, 21, 935.	2.9	0