

# Roger G Bowers

## List of Publications by Year in descending order

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49  
papers

2,575  
citations

236925

25  
h-index

197818

49  
g-index

49  
all docs

49  
docs citations

49  
times ranked

2649  
citing authors

#	ARTICLE	IF	CITATIONS
1	A clarification of transmission terms in host-microparasite models: numbers, densities and areas. <i>Epidemiology and Infection</i> , 2002, 129, 147-153.	2.1	388
2	Infection in Social Networks: Using Network Analysis to Identify High-Risk Individuals. <i>American Journal of Epidemiology</i> , 2005, 162, 1024-1031.	3.4	298
3	Parasite establishment in host communities. <i>Ecology Letters</i> , 2003, 6, 837-842.	6.4	205
4	Persistence of Tick-borne Virus in the Presence of Multiple Host Species: Tick Reservoirs and Parasite Mediated Competition. <i>Journal of Theoretical Biology</i> , 1999, 200, 111-118.	1.7	169
5	Three Mechanisms of Host Resistance to Microparasites—Avoidance, Recovery and Tolerance—Show Different Evolutionary Dynamics. <i>Journal of Theoretical Biology</i> , 1999, 201, 13-23.	1.7	141
6	Disease and Community Structure: The Importance of Host Self-Regulation in a Host-Host-Pathogen Model. <i>American Naturalist</i> , 1992, 139, 1131-1150.	2.1	117
7	The evolution of resistance through costly acquired immunity. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2004, 271, 715-723.	2.6	100
8	Community Structure and the Interplay between Interspecific Infection and Competition. <i>Journal of Theoretical Biology</i> , 1997, 187, 95-109.	1.7	76
9	The geometric theory of adaptive evolution: trade-off and invasion plots. <i>Journal of Theoretical Biology</i> , 2005, 233, 363-377.	1.7	68
10	Host-Pathogen Population Cycles in Forest Insects? Lessons from Simple Models Reconsidered. <i>Oikos</i> , 1993, 67, 529.	2.7	64
11	The influence of trade-off shape on evolutionary behaviour in classical ecological scenarios. <i>Journal of Theoretical Biology</i> , 2008, 250, 498-511.	1.7	60
12	Epidemiological consequences of an incursion of highly pathogenic H5N1 avian influenza into the British poultry flock. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2008, 275, 19-28.	2.6	58
13	Lattice Model for the $\lambda$ -Transition in a Bose Fluid. <i>Physical Review Letters</i> , 1967, 19, 630-632.	7.8	56
14	Host-Host-Pathogen Models and Microbial Pest Control: The Effect of Host Self Regulation. <i>Journal of Theoretical Biology</i> , 1994, 169, 275-287.	1.7	52
15	A host-host-pathogen model with free-living infective stages, applicable to microbial pest control. <i>Journal of Theoretical Biology</i> , 1991, 148, 305-329.	1.7	51
16	HOW SPECIFICITY AND EPIDEMIOLOGY DRIVE THE COEVOLUTION OF STATIC TRAIT DIVERSITY IN HOSTS AND PARASITES. <i>Evolution; International Journal of Organic Evolution</i> , 2014, 68, 1594-1606.	2.3	48
17	Some Critical Properties of the Heisenberg Model. <i>Physical Review</i> , 1969, 177, 917-932.	2.7	45
18	Pair-level approximations to the spatio-temporal dynamics of epidemics on asymmetric contact networks. <i>Journal of Mathematical Biology</i> , 2006, 53, 61-85.	1.9	45

#	ARTICLE	IF	CITATIONS
19	Modelling bluetongue virus transmission between farms using animal and vector movements. <i>Scientific Reports</i> , 2012, 2, 319.	3.3	45
20	Understanding the dynamics of Salmonella infections in dairy herds: a modelling approach. <i>Journal of Theoretical Biology</i> , 2005, 233, 159-175.	1.7	38
21	A model appropriate to the transmission of a human food-borne pathogen in a multigroup managed herd. <i>Preventive Veterinary Medicine</i> , 2003, 57, 175-198.	1.9	33
22	Modelling pathogen transmission: the interrelationship between local and global approaches. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2003, 270, 105-112.	2.6	30
23	Adaptive dynamics of Lotka-Volterra systems with trade-offs: the role of interspecific parameter dependence in branching. <i>Mathematical Biosciences</i> , 2005, 193, 101-117.	1.9	30
24	A dynamic refuge model and population regulation by insect parasitoids. <i>Journal of Animal Ecology</i> , 1998, 67, 270-279.	2.8	27
25	Host-Pathogen Cycles in Self-Regulated Forest Insect Systems: Resolving Conflicting Predictions. <i>American Naturalist</i> , 1996, 148, 220-225.	2.1	27
26	Two-Host, Two-Vector Basic Reproduction Ratio (R0) for Bluetongue. <i>PLoS ONE</i> , 2013, 8, e53128.	2.5	27
27	Host-parasite fluctuating selection in the absence of specificity. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2017, 284, 20171615.	2.6	25
28	A semi-stochastic model of the transmission of Escherichia coli O157 in a typical UK dairy herd: Dynamics, sensitivity analysis and intervention/prevention strategies. <i>Journal of Theoretical Biology</i> , 2006, 241, 806-822.	1.7	23
29	The basic depression ratio of the host: the evolution of host resistance to microparasites. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2001, 268, 243-250.	2.6	20
30	The importance of who infects whom: the evolution of diversity in host resistance to infectious disease. <i>Ecology Letters</i> , 2012, 15, 1104-1111.	6.4	20
31	A model to assess the efficacy of vaccines for control of liver fluke infection. <i>Scientific Reports</i> , 2016, 6, 23345.	3.3	19
32	Red/blue chaotic power spectra. <i>Nature</i> , 1996, 381, 198-198.	27.8	18
33	When is evolutionary branching in predator-prey systems possible with an explicit carrying capacity?. <i>Mathematical Biosciences</i> , 2007, 210, 1-16.	1.9	18
34	A Model of Disease and Vaccination for Infections with Acute and Chronic Phases. <i>Journal of Theoretical Biology</i> , 1998, 190, 355-367.	1.7	16
35	A Baseline Model for the Apparent Competition between Many Host Strains: the Evolution of Host Resistance to Microparasites. <i>Journal of Theoretical Biology</i> , 1999, 200, 65-75.	1.7	16
36	Community Dynamics, Trade-offs, Invasion Criteria and the Evolution of Host Resistance to Microparasites. <i>Journal of Theoretical Biology</i> , 2001, 212, 315-331.	1.7	16

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37	The adaptive dynamics of Lotka–Volterra systems with trade-offs. <i>Mathematical Biosciences</i> , 2002, 175, 67-81.	1.9	15
38	Dynamics of infection with multiple transmission mechanisms in unmanaged/managed animal populations. <i>Theoretical Population Biology</i> , 2007, 71, 408-423.	1.1	13
39	Pair approximations and the inclusion of indirect transmission: Theory and application to between farm transmission of Salmonella. <i>Journal of Theoretical Biology</i> , 2007, 244, 532-540.	1.7	12
40	Evolutionary Behaviour, Trade-Offs and Cyclic and Chaotic Population Dynamics. <i>Bulletin of Mathematical Biology</i> , 2011, 73, 1154-1169.	1.9	11
41	Modelling the stability of Stx lysogens. <i>Journal of Theoretical Biology</i> , 2007, 248, 241-250.	1.7	9
42	Baseline criteria and the evolution of hosts and parasites: $D_0$ , $R_0$ and competition for resources between strains. <i>Journal of Theoretical Biology</i> , 2003, 223, 361-365.	1.7	6
43	Can possible evolutionary outcomes be determined directly from the population dynamics?. <i>Theoretical Population Biology</i> , 2008, 74, 311-323.	1.1	5
44	Evolution, the loss of diversity and the role of trade-offs. <i>Mathematical Biosciences</i> , 2015, 264, 86-93.	1.9	5
45	On the determination of evolutionary outcomes directly from the population dynamics of the resident. <i>Journal of Mathematical Biology</i> , 2011, 62, 901-924.	1.9	4
46	A baseline model for the co-evolution of hosts and pathogens. <i>Journal of Mathematical Biology</i> , 2008, 57, 791-809.	1.9	2
47	The effect of delayed host self-regulation on host–pathogen population cycles in forest insects. <i>Journal of Theoretical Biology</i> , 2009, 258, 240-249.	1.7	2
48	ECOLOGICAL MODELS OF MICROPARASITIC DISEASES: THE IMPORTANCE OF RECOVERY AND IMMUNITY. <i>Journal of Biological Systems</i> , 1995, 03, 813-820.	1.4	1
49	The adaptive dynamics of the evolution of host resistance to indirectly transmitted microparasites. <i>Mathematical Biosciences</i> , 2007, 210, 668-679.	1.9	1