M Gabriela M Gomes

List of Publications by Year
in descending order

83 papers	2,752 citations	201674 27 h-index	223800 46 g-index
92 all docs	92 docs citations	92 times ranked	3418 citing authors

#	Article	IF	Citations
1	Three-dimensional instability in flow over a backward-facing step. Journal of Fluid Mechanics, 2002, 473, 167-190.	3.4	285
2	Web-based participatory surveillance of infectious diseases: the Influenzanet participatory surveillance experience. Clinical Microbiology and Infection, 2014, 20, 17-21.	6.0	142
3	Infection, reinfection, and vaccination under suboptimal immune protection: epidemiological perspectives. Journal of Theoretical Biology, 2004, 228, 539-549.	1.7	141
4	The reinfection threshold promotes variability in tuberculosis epidemiology and vaccine efficacy. Proceedings of the Royal Society B: Biological Sciences, 2004, 271, 617-623.	2.6	84
5	Pertussis: increasing disease as a consequence of reducing transmission. Lancet Infectious Diseases, The, 2006, 6, 112-117.	9.1	75
6	Individual variation in susceptibility or exposure to SARS-CoV-2 lowers the herd immunity threshold. Journal of Theoretical Biology, 2022, 540, 111063.	1.7	75
7	Understanding the transmission dynamics of respiratory syncytial virus using multiple time series and nested models. Mathematical Biosciences, 2007, 209, 222-239.	1.9	73
8	Prospects for Malaria Eradication in Sub-Saharan Africa. PLoS ONE, 2008, 3, e1767.	2.5	72
9	Drug resistance in tuberculosisâ€”a reinfection model. Theoretical Population Biology, 2007, 71, 196-212.	1.1	71
10	On the determinants of population structure in antigenically diverse pathogens. Proceedings of the Royal Society B: Biological Sciences, 2002, 269, 227-233.	2.6	68
11	The Importance of Heterogeneity to the Epidemiology of Tuberculosis. Clinical Infectious Diseases, 2019, 69, 159-166.	5.8	68
12	The reinfection threshold. Journal of Theoretical Biology, 2005, 236, 111-113.	1.7	65
13	The role of weather on the relation between influenza and influenza-like illness. Journal of Theoretical Biology, 2012, 298, 131-137.	1.7	65
14	On the Final Size of Epidemics with Seasonality. Bulletin of Mathematical Biology, 2009, 71, 1954-66.	1.9	59
15	A Missing Dimension in Measures of Vaccination Impacts. PLoS Pathogens, 2014, 10, e1003849.	4.7	54
16	Ten-year performance of Influenzanet: ILI time series, risks, vaccine effects, and care-seeking behaviour. Epidemics, 2015, 13, 28-36.	3.0	53
17	A Bayesian Framework for Parameter Estimation in Dynamical Models. PLoS ONE, 2011, 6, e19616.	2.5	49
18	How host heterogeneity governs tuberculosis reinfection?. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 2473-2478.	2.6	48

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19	Variation in Wolbachia effects on Aedes mosquitoes as a determinant of invasiveness and vectorial capacity. Nature Communications, 2018, 9, 1483.	12.8	47
20	Controlling Malaria Using Livestock-Based Interventions: A One Health Approach. PLoS ONE, 2014, 9, e101699.	2.5	46
21	Implications of partial immunity on the prospects for tuberculosis control by post-exposure interventions. Journal of Theoretical Biology, 2007, 248, 608-617.	1.7	43
22	Genetic Diversity in the SIR Model of Pathogen Evolution. PLoS ONE, 2009, 4, e4876.	2.5	38
23	Dynamical behaviour of epidemiological models with sub-optimal immunity and nonlinear incidence. Journal of Mathematical Biology, 2005, 51, 414-430.	1.9	36
24	Migration to middle-income countries and tuberculosisâ€"global policies for global economies. Globalization and Health, 2017, 13, 15.	4.9	36
25	Modeling the Effects of Relapse in the Transmission Dynamics of Malaria Parasites. Journal of Parasitology Research, 2012, 2012, 1-8.	1.2	32
26	Vaccine Effects on Heterogeneity in Susceptibility and Implications for Population Health Management. MBio, 2017, 8, .	4.1	32
27	Heterogeneity in susceptibility to infection can explain high reinfection rates. Journal of Theoretical Biology, 2009, 259, 280-290.	1.7	31
28	Assessing the Potential of a Candidate Dengue Vaccine with Mathematical Modeling. PLoS Neglected Tropical Diseases, 2012, 6, e1450.	3.0	31
29	How direct competition shapes coexistence and vaccine effects in multi-strain pathogen systems. Journal of Theoretical Biology, 2016, 388, 50-60.	1.7	31
30	Bistable chaos. II. Bifurcation analysis. Physical Review A, 1992, 46, 3100-3110.	2.5	28
31	A spatially stochastic epidemic model with partial immunization shows in mean field approximation the reinfection threshold. Journal of Biological Dynamics, 2010, 4, 634-649.	1.7	27
32	Utilizing Syndromic Surveillance Data for Estimating Levels of Influenza Circulation. American Journal of Epidemiology, 2014, 179, 1394-1401.	3.4	27
33	Clinical trials: The mathematics of falling vaccine efficacy with rising disease incidence. Vaccine, 2016, 34, 3007-3009.	3.8	27
34	Steady PDEs on generalized rectangles: a change of genericity in mode interactions. Nonlinearity, 1994, 7, 253-272.	1.4	24
35	Tuberculosis in Brazil and cash transfer programs: A longitudinal database study of the effect of cash transfer on cure rates. PLoS ONE, 2019, 14, e0212617.	2.5	23
36	The reinfection threshold regulates pathogen diversity: the case of influenza. Journal of the Royal Society Interface, 2007, 4, 137-142.	3.4	22

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37	Unveiling Time in Dose-Response Models to Infer Host Susceptibility to Pathogens. PLoS Computational Biology, 2014, 10, e1003773.	3.2	20
38	Successes and Shortcomings of Polio Eradication: A Transmission Modeling Analysis. American Journal of Epidemiology, 2013, 177, 1236-1245.	3.4	19
39	Modelling the epidemiology of residual Plasmodium vivax malaria in a heterogeneous host population: A case study in the Amazon Basin. PLoS Computational Biology, 2020, 16, e1007377.	3.2	19
40	Interpreting measures of tuberculosis transmission: a case study on the Portuguese population. BMC Infectious Diseases, 2014, 14, 340.	2.9	18
41	End TB strategy: the need to reduce risk inequalities. BMC Infectious Diseases, 2016, 16, 132.	2.9	18
42	Limited available evidence supports theoretical predictions of reduced vaccine efficacy at higher exposure dose. Scientific Reports, 2019, 9, 3203.	3.3	18
43	SNP typing reveals similarity in Mycobacterium tuberculosis genetic diversity between Portugal and Northeast Brazil. Infection, Genetics and Evolution, 2013, 18, 238-246.	2.3	17
44	Unlocking pathogen genotyping information for public health by mathematical modeling. Trends in Microbiology, 2010, 18, 406-412.	7.7	15
45	Black-eye patterns: A representation of three-dimensional symmetries in thin domains. Physical Review E, 1999, 60, 3741-3747.	2.1	14
46	The Impact of IPTi and IPTc Interventions on Malaria Clinical Burden â€" In Silico Perspectives. PLoS ONE, 2009, 4, e6627.	2.5	14
47	Introducing risk inequality metrics in tuberculosis policy development. Nature Communications, 2019, 10, 2480.	12.8	13
48	Comparative analysis of Streptococcus pneumoniaetransmission in Portuguese and Finnish day-care centres. BMC Infectious Diseases, 2013, 13, 180.	2.9	12
49	Expanding vaccine efficacy estimation with dynamic models fitted to cross-sectional prevalence data post-licensure. Epidemics, 2016, 14, 71-82.	3.0	12
50	A systematic review of East African-Indian family of Mycobacterium tuberculosis in Brazil. Brazilian Journal of Infectious Diseases, 2017, 21, 317-324.	0.6	12
51	Herd immunity under individual variation and reinfection. Journal of Mathematical Biology, 2022, 85, .	1.9	12
52	Immune Selection and Within-Host Competition Can Structure the Repertoire of Variant Surface Antigens in Plasmodium falciparum - A Mathematical Model. PLoS ONE, 2010, 5, e9778.	2.5	11
53	Dynamics of Multiple Strains of Infectious Agents Coupled by Cross-Immunity: A Comparison of Models. The IMA Volumes in Mathematics and Its Applications, 2002, , 171-191.	0.5	11
54	Localized contacts between hosts reduce pathogen diversity. Journal of Theoretical Biology, 2006, 241, 477-487.	1.7	10

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55	Infectivity of Chronic Malaria Infections and Its Consequences for Control and Elimination. Clinical Infectious Diseases, 2018, 67, 295-302.	5.8	9
56	Forced Symmetry-Breaking of Square Lattice Planforms. Journal of Dynamics and Differential Equations, 2006, 18, 223-255.	1.9	8
57	Heterogeneity in symbiotic effects facilitates Wolbachia establishment in insect populations. Theoretical Ecology, 2015, 8, 53-65.	1.0	8
58	Impact of tuberculosis treatment length and adherence under different transmission intensities. Theoretical Population Biology, 2015, 104, 68-77.	1.1	8
59	Model-based inference from multiple dose, time course data reveals Wolbachia effects on infection profiles of type 1 dengue virus in Aedes aegypti. PLoS Neglected Tropical Diseases, 2018, 12, e0006339.	3.0	8
60	inTB - a data integration platform for molecular and clinical epidemiological analysis of tuberculosis. BMC Bioinformatics, 2013, 14, 264.	2.6	7
61	A theoretical framework to identify invariant thresholds in infectious disease epidemiology. Journal of Theoretical Biology, 2016, 395, 97-102.	1.7	7
62	Spatial Hidden Symmetries in Pattern Formation. The IMA Volumes in Mathematics and Its Applications, 1999, , 83-99.	0.5	7
63	Hopf Bifurcations on Generalized Rectangles with Neumann Boundary Conditions. , 1994, , 139-158.		7
64	EXAMPLES OF FORCED SYMMETRY-BREAKING TO HOMOCLINIC CYCLES IN THREE-DIMENSIONAL EUCLIDEAN-INVARIANT SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2008, 18, 83-107.	1.7	5
65	Mycobacterial ecology as a modulator of tuberculosis vaccine success. Theoretical Population Biology, 2009, 75, 142-152.	1.1	5
66	Heterogeneity in disease risk induces falling vaccine protection with rising disease incidence. Dynamical Systems, 2017, 32, 148-163.	0.4	4
67	The effects of individual nonheritable variation on fitness estimation and coexistence. Ecology and Evolution, 2019, 9, 8995-9004.	1.9	4
68	Symmetry of Generic Bifurcations in Cubic Domains. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1997, 07, 147-171.	1.7	3
69	Heterogeneity in antibody range and the antigenic drift of influenza A viruses. Ecological Complexity, 2013, 14, 157-165.	2.9	3
70	On the correlation between variance in individual susceptibilities and infection prevalence in populations. Journal of Mathematical Biology, 2015, 71, 1643-1661.	1.9	3
71	Timeliness and obsolescence of herd immunity threshold estimates in the COVID-19 pandemic. Public Health, 2022, 205, e3-e4.	2.9	3
72	Dynamics and control of measles in Portugal: Accessing the impact of anticipating the age for the first dose of MMR from 15 to 12 months of age. Vaccine, 2008, 26, 2418-2427.	3.8	2

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73	Partial classification of heteroclinic behaviour associated with the perturbation of hexagonal planforms. Dynamical Systems, 2008, 23, 137-162.	0.4	2
74	Investigating extradomiciliary transmission of tuberculosis: An exploratory approach using social network patterns of TB cases and controls and the genotyping of Mycobacterium tuberculosis. Tuberculosis, 2020, 125, 102010.	1.9	2
75	The impact of active case finding on transmission dynamics of tuberculosis: A modelling study. PLoS ONE, 2021, 16, e0257242.	2.5	2
76	Modeling Malaria Infection and Immunity against Variant Surface Antigens in PrÃncipe Island, West Africa. PLoS ONE, 2014, 9, e88110.	2.5	1
77	EXAMPLES OF FORCED SYMMETRY-BREAKING TO HETEROCLINIC CYCLES AND NETWORKS IN THREE-DIMENSIONAL EUCLIDEAN-INVARIANT SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2009, 19, 1655-1678.	1.7	0
78	Reply to: â€œEnhancement of Aedes aegypti susceptibility to dengue by Wolbachia is not supportedâ€. Nature Communications, 2020, 11, 6113.	12.8	0
79	Title is missing!. , 2020, 16, e1007377.		0
80	Title is missing!. , 2020, 16, e1007377.		0
81	Title is missing!. , 2020, 16, e1007377.		0
82	Title is missing!. , 2020, 16, e1007377.		0
83	Title is missing!. , 2020, 16, e1007377.		0