MaÃra Aguiar

List of Publications by Year
in descending order

75 papers	1,404 citations	331259 21 h-index	377514 34 g-index
82 all docs	82 docs citations	82 times ranked	1188 citing authors

#	Article	IF	Citations
1	The Impact of the Newly Licensed Dengue Vaccine in Endemic Countries. PLoS Neglected Tropical Diseases, 2016, 10, e0005179.	1.3	146
2	The role of seasonality and import in a minimalistic multi-strain dengue model capturing differences between primary and secondary infections: Complex dynamics and its implications for data analysis. Journal of Theoretical Biology, 2011, 289, 181-196.	0.8	104
3	The risks behind Dengvaxia recommendation. Lancet Infectious Diseases, The, 2016, 16, 882-883.	4.6	92
4	Epidemiology of Dengue Fever: A Model with Temporary Cross-Immunity and Possible Secondary Infection Shows Bifurcations and Chaotic Behaviour in Wide Parameter Regions. Mathematical Modelling of Natural Phenomena, 2008, 3, 48-70.	0.9	65
5	Mathematical models for dengue fever epidemiology: A 10-year systematic review. Physics of Life Reviews, 2022, 40, 65-92.	1.5	46
6	Time-scale separation and centre manifold analysis describing vector-borne disease dynamics. International Journal of Computer Mathematics, 2013, 90, 2105-2125.	1.0	44
7	Dengvaxia: age as surrogate for serostatus. Lancet Infectious Diseases, The, 2018, 18, 245.	4.6	43
8	Ethics of a partially effective dengue vaccine: Lessons from the Philippines. Vaccine, 2020, 38, 5572-5576.	1.7	43
9	How much complexity is needed to describe the fluctuations observed in dengue hemorrhagic fever incidence data?. Ecological Complexity, 2013, 16, 31-40.	1.4	39
10	Modelling COVID 19 in the Basque Country from introduction to control measure response. Scientific Reports, 2020, 10, 17306.	1.6	38
11	Dynamic noise, chaos and parameter estimation in population biology. Interface Focus, 2012, 2, 156-169.	1.5	36
12	Consider stopping dengvaxia administration without immunological screening. Expert Review of Vaccines, 2017, 16, 301-302.	2.0	36
13	Scale-free network of a dengue epidemic. Applied Mathematics and Computation, 2008, 195, 376-381.	1.4	35
14	Torus bifurcations, isolas and chaotic attractors in a simple dengue fever model with ADE and temporary cross immunity. International Journal of Computer Mathematics, 2009, 86, 1867-1877.	1.0	35
15	Understanding dengue fever dynamics: a study of seasonality in vector-borne disease models. International Journal of Computer Mathematics, 2016, 93, 1405-1422.	1.0	30
16	Hopf and torus bifurcations, torus destruction and chaos in population biology. Ecological Complexity, 2017, 30, 91-99.	1.4	30
17	Dengvaxia Efficacy Dependency on Serostatus: A Closer Look at More Recent Data. Clinical Infectious Diseases, 2018, 66, 641-642.	2.9	29
18	Analysis of an asymmetric two-strain dengue model. Mathematical Biosciences, 2014, 248, 128-139.	0.9	28

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19	A spatially stochastic epidemic model with partial immunization shows in mean field approximation the reinfection threshold. Journal of Biological Dynamics, 2010, 4, 634-649.	0.8	27
20	Scaling of Stochasticity in Dengue Hemorrhagic Fever Epidemics. Mathematical Modelling of Natural Phenomena, 2012, 7, 1-11.	0.9	27
21	Bifurcation analysis of a family of multi-strain epidemiology models. Journal of Computational and Applied Mathematics, 2013, 252, 148-158.	1.1	27
22	A multiscale network-based model of contagion dynamics: Heterogeneity, spatial distancing and vaccination. Mathematical Models and Methods in Applied Sciences, 2021, 31, 2425-2454.	1.7	27
23	Critical fluctuations in epidemic models explain COVID-19 post-lockdown dynamics. Scientific Reports, 2021, 11, 13839.	1.6	26
24	Reproduction ratio and growth rates: Measures for an unfolding pandemic. PLoS ONE, 2020, 15, e0236620.	1.1	24
25	The practice of prediction: What can ecologists learn from applied, ecology-related fields?. Ecological Complexity, 2017, 32, 156-167.	1.4	22
26	Condition-specific mortality risk can explain differences in COVID-19 case fatality ratios around the globe. Public Health, 2020, 188, 18-20.	1.4	21
27	Are we modelling the correct dataset? Minimizing false predictions for dengue fever in Thailand. Epidemiology and Infection, 2014, 142, 2447-2459.	1.0	19
28	Carnival or football, is there a real risk for acquiring dengue fever in Brazil during holidays seasons?. Scientific Reports, 2015, 5, 8462.	1.6	18
29	Dengue vaccination: a more ethical approach is needed. Lancet, The, 2018, 391, 1769-1770.	6.3	18
30	The Impact of Serotype Cross-Protection on Vaccine Trials: DENVax as a Case Study. Vaccines, 2020, 8, 674.	2.1	18
31	Dengue transmission during the 2014 FIFA World Cup in Brazil. Lancet Infectious Diseases, The, 2015, 15, 765-766.	4.6	17
32	Dengue vaccines: Are they safe for travelers?. Travel Medicine and Infectious Disease, 2016, 14, 378-383.	1.5	17
33	On the role of vector modeling in a minimalistic epidemic model. Mathematical Biosciences and Engineering, 2019, 16, 4314-4338.	1.0	15
34	The role of mild and asymptomatic infections on COVID-19 vaccines performance: A modeling study. Journal of Advanced Research, 2022, 39, 157-166.	4.4	14
35	Mathematical models of dengue fever epidemiology: multi-strain dynamics, immunological aspects associated to disease severity and vaccines. Communication in Biomathematical Sciences, 2017, 1, 1.	0.1	11
36	Dynamics of Epidemiological Models. Acta Biotheoretica, 2010, 58, 381-389.	0.7	10

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37	Applications of fractional calculus to epidemiological models. , 2012, , .		9
38	Superdiffusion and epidemiological spreading. Ecological Complexity, 2018, 36, 168-183.	1.4	9
39	Modeling Dengue Immune Responses Mediated by Antibodies: A Qualitative Study. Biology, 2021, 10, 941.	1.3	9
40	Semiclassical approximations of stochastic epidemiological processes towards parameter estimation using as prime example the SIS system with import. Ecological Complexity, 2016, 27, 63-73.	1.4	8
41	SHAR and effective SIR models: from dengue fever toy models to a COVID-19 fully parametrized SHARUCD framework. Communication in Biomathematical Sciences, 2020, 3, 60-89.	0.1	7
42	Modeling Dengue Immune Responses Mediated by Antibodies: Insights on the Biological Parameters to Describe Dengue Infections. Computational and Mathematical Methods, 2022, 2022, 1-11.	0.3	7
43	Dengue vaccine and the 2016 Olympics. Lancet, The, 2016, 388, 237-238.	6.3	6
44	The Stochastic Multi-strain Dengue Model: Analysis of the Dynamics. , 2011, , .		5
45	Prediction and Predictability in Population Biology: Noise and Chaos. Mathematical Modelling of Natural Phenomena, 2015, 10, 142-164.	0.9	5
46	Modeling the initial phase of COVID-19 epidemic: The role of age and disease severity in the Basque Country, Spain. PLoS ONE, 2022, 17, e0267772.	1.1	5
47	Multi-Strain Deterministic Chaos in Dengue Epidemiology, A Challenge for Computational Mathematics. , 2009, , .		4
48	Modelling Holling type II functional response in deterministic and stochastic food chain models with mass conservation. Ecological Complexity, 2022, 49, 100982.	1.4	4
49	Seasonally Forced SIR Systems Applied to Respiratory Infectious Diseases, Bifurcations, and Chaos. Computational and Mathematical Methods, 2022, 2022, 1-12.	0.3	4
50	Two Strain Dengue Model with Temporary Cross Immunity and Seasonality. , 2010, , .		3
51	The effect of global warming on vector-borne diseasesComment on â€œModeling the impact of global warming on vector-borneâ€•infections by E. Massad et al.. Physics of Life Reviews, 2011, 8, 202-3; discussion 206-7.	1.5	3
52	On the series expansion of the spatial SIS evolution operator. Journal of Difference Equations and Applications, 2011, 17, 1107-1118.	0.7	3
53	Understanding the effect of vector dynamics in epidemic models using center manifold analysis. , 2012, 1479, 1319-1322.		3
54	Epidemiological models in semiclassical approximation: an analytically solvable model as a test case. Mathematical Methods in the Applied Sciences, 2016, 39, 4914-4922.	1.2	3

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55	The currently best estimate for worldwide dengue vaccine efficacy. AIP Conference Proceedings, 2016, , .	0.3	3
56	Parameter Estimation in Epidemiology: from Simple to Complex Dynamics. , 2011, 1389, 1248-1251.		2
57	Deterministic and Stochastic Dynamics of COVID-19: The Case Study of Italy and Spain. Computational and Mathematical Methods, 2022, 2022, 1-16.	0.3	2
58	Dynamic Noise and its Role in Understanding Epidemiological Processes. , 2010, , .		1
59	Describing dengue epidemics: Insights from simple mechanistic models. , 2012, 1479, 1307-1310.		1
60	Scaling up complexity in hostâ€"pathogens interaction models. Physics of Life Reviews, 2015, 15, 41-42.	1.5	1
61	Modelling spatial connectivity in epidemiological systems, dengue fever in Thailand on networks from radiation models. AIP Conference Proceedings, 2016, , .	0.3	1
62	Is discussion of dengue vaccination for the 2016 Olympics necessary?: Authors' reply. Lancet, The, 2016, 388, 1881-1882.	6.3	1
63	Effect of General Cross-Immunity Protection and Antibody-Dependent Enhancement in Dengue Dynamics. Computational and Mathematical Methods, 2022, 2022, 1-22.	0.3	1
64	Symposium on Biomathematics. , 2009, , .		0
65	Symposium on Biomathematics. , 2010, , .		0
66	Biomathematics V. , 2011, , .		0
67	Preface of the "Symposium on biomathematics VI". , 2012, , .		0
68	Mathematical models and numerical methods in life sciences. AIP Conference Proceedings, 2016, , .	0.3	0
69	Stochastic Hopf and torus bifurcations in population biology. AIP Conference Proceedings, 2016, , .	0.3	0
70	Preface special issue â€œdynamics in bio-systemsâ€•(DSABNS 2016). Ecological Complexity, 2017, 30, 1.	1.4	0
71	Spatially Extended SHAR Epidemiological Framework of Infectious Disease Transmission. Computational and Mathematical Methods, 2022, 2022, 1-14.	0.3	0
72	Reproduction ratio and growth rates: Measures for an unfolding pandemic. , 2020, 15, e0236620.		0

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73	Reproduction ratio and growth rates: Measures for an unfolding pandemic. , 2020, 15, e0236620.		0
74	Reproduction ratio and growth rates: Measures for an unfolding pandemic. , 2020, 15, e0236620.		0
75	Reproduction ratio and growth rates: Measures for an unfolding pandemic. , 2020, 15, e0236620.		0