

# Hana M Dobrovolny

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

44  
papers

701  
citations

14  
h-index

26  
g-index

46  
ext. papers

900  
ext. citations

3.8  
avg, IF

5.15  
L-index

#	Paper	IF	Citations
44	Coinfections of the Respiratory Tract: Viral Competition for Resources. <i>PLoS ONE</i> , <b>2016</b> , 11, e0155589	3.7	94
43	The restitution portrait: a new method for investigating rate-dependent restitution. <i>Journal of Cardiovascular Electrophysiology</i> , <b>2004</b> , 15, 698-709	2.7	92
42	Assessing mathematical models of influenza infections using features of the immune response. <i>PLoS ONE</i> , <b>2013</b> , 8, e57088	3.7	77
41	Differences in predictions of ODE models of tumor growth: a cautionary example. <i>BMC Cancer</i> , <b>2016</b> , 16, 163	4.8	59
40	SARS-CoV-2 coinfections: Could influenza and the common cold be beneficial?. <i>Journal of Medical Virology</i> , <b>2020</b> , 92, 2623-2630	19.7	43
39	Neuraminidase inhibitors for treatment of human and avian strain influenza: A comparative modeling study. <i>Journal of Theoretical Biology</i> , <b>2011</b> , 269, 234-44	2.3	38
38	Exploring cell tropism as a possible contributor to influenza infection severity. <i>PLoS ONE</i> , <b>2010</b> , 5, e13811	3.7	27
37	Period-doubling bifurcation to alternans in paced cardiac tissue: crossover from smooth to border-collision characteristics. <i>Physical Review Letters</i> , <b>2007</b> , 99, 058101	7.4	25
36	Assessing Uncertainty in A2 Respiratory Syncytial Virus Viral Dynamics. <i>Computational and Mathematical Methods in Medicine</i> , <b>2015</b> , 2015, 567589	2.8	24
35	Quantifying the effect of remdesivir in rhesus macaques infected with SARS-CoV-2. <i>Virology</i> , <b>2020</b> , 550, 61-69	3.6	22
34	Modeling the role of asymptomatics in infection spread with application to SARS-CoV-2. <i>PLoS ONE</i> , <b>2020</b> , 15, e0236976	3.7	20
33	Modelling the emergence of influenza drug resistance: The roles of surface proteins, the immune response and antiviral mechanisms. <i>PLoS ONE</i> , <b>2017</b> , 12, e0180582	3.7	18
32	Determining drug efficacy parameters for mathematical models of influenza. <i>Journal of Biological Dynamics</i> , <b>2015</b> , 9 Suppl 1, 332-46	2.4	16
31	A comparison of RSV and influenza in vitro kinetic parameters reveals differences in infecting time. <i>PLoS ONE</i> , <b>2018</b> , 13, e0192645	3.7	16
30	Modeling of fusion inhibitor treatment of RSV in African green monkeys. <i>Journal of Theoretical Biology</i> , <b>2018</b> , 456, 62-73	2.3	12
29	Investigating Different Mechanisms of Action in Combination Therapy for Influenza. <i>Frontiers in Pharmacology</i> , <b>2018</b> , 9, 1207	5.6	12
28	The rate of viral transfer between upper and lower respiratory tracts determines RSV illness duration. <i>Journal of Mathematical Biology</i> , <b>2019</b> , 79, 467-483	2	11

27	Initial Inoculum and the Severity of COVID-19: A Mathematical Modeling Study of the Dose-Response of SARS-CoV-2 Infections. <i>Epidemiologia</i> , <b>2020</b> , 1, 5-15	2.8	11
26	High-resolution high-speed panoramic cardiac imaging system. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2008</b> , 55, 1241-3	5	11
25	Quantifying rotavirus kinetics in the REH tumor cell line using in vitro data. <i>Virus Research</i> , <b>2018</b> , 244, 53-63	6.4	11
24	The in vivo efficacy of neuraminidase inhibitors cannot be determined from the decay rates of influenza viral titers observed in treated patients. <i>Scientific Reports</i> , <b>2017</b> , 7, 40210	4.9	10
23	A quantitative assessment of dynamical differences of RSV infections in vitro and in vivo. <i>Virology</i> , <b>2018</b> , 523, 129-139	3.6	8
22	The impact of cell regeneration on the dynamics of viral coinfection. <i>Chaos</i> , <b>2017</b> , 27, 063109	3.3	6
21	A fiber-based ratiometric optical cardiac mapping channel using a diffraction grating and split detector. <i>Biophysical Journal</i> , <b>2007</b> , 93, 254-63	2.9	6
20	Effects of Doxorubicin Delivery by Nitrogen-Doped Graphene Quantum Dots on Cancer Cell Growth: Experimental Study and Mathematical Modeling. <i>Nanomaterials</i> , <b>2021</b> , 11,	5.4	5
19	Intermittent treatment of severe influenza. <i>Journal of Theoretical Biology</i> , <b>2018</b> , 442, 129-138	2.3	4
18	Superinfection and cell regeneration can lead to chronic viral coinfections. <i>Journal of Theoretical Biology</i> , <b>2019</b> , 466, 24-38	2.3	4
17	Effect of stochasticity on coinfection dynamics of respiratory viruses. <i>BMC Bioinformatics</i> , <b>2019</b> , 20, 191	3.6	3
16	A comparison of methods for extracting influenza viral titer characteristics. <i>Journal of Virological Methods</i> , <b>2016</b> , 231, 14-24	2.6	3
15	Linear and nonlinear measures predict swimming in the leech. <i>Physical Review E</i> , <b>2000</b> , 62, 4826-34	2.4	3
14	Energy Requirements for Loss of Viral Infectivity. <i>Food and Environmental Virology</i> , <b>2020</b> , 12, 281-294	4	3
13	Understanding the effect of measurement time on drug characterization. <i>PLoS ONE</i> , <b>2020</b> , 15, e0233031	3.7	2
12	Estimation of viral kinetics model parameters in young and aged SARS-CoV-2 infected macaques. <i>Royal Society Open Science</i> , <b>2021</b> , 8, 202345	3.3	1
11	The role of syncytia during viral infections. <i>Journal of Theoretical Biology</i> , <b>2021</b> , 525, 110749	2.3	1
10	A study of the effects of age on the dynamics of RSV in animal models. <i>Virus Research</i> , <b>2021</b> , 304, 198524	6.4	1

9	Model Integration in Computational Biology: The Role of Reproducibility, Credibility and Utility <b>2022</b> , 2,		1
8	Epidemiological Consequences of Viral Interference: A Mathematical Modeling Study of Two Interacting Viruses.. <i>Frontiers in Microbiology</i> , <b>2022</b> , 13, 830423	5.7	1
7	An approximate solution of the interferon-dependent viral kinetics model of influenza. <i>Journal of Theoretical Biology</i> , <b>2020</b> , 498, 110266	2.3	0
6	Predicting the effectiveness of chemotherapy using stochastic ODE models of tumor growth. <i>Communications in Nonlinear Science and Numerical Simulation</i> , <b>2021</b> , 101, 105883	3.7	0
5	GPU acceleration and data fitting: Agent-based models of viral infections can now be parameterized in hours. <i>Journal of Computational Science</i> , <b>2022</b> , 101662	3.4	0
4	Spatial heterogeneity of restitution properties and the onset of alternans. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2009</b> , 2009, 4186-9	0.9	
3	Testing the limits of cardiac electrophysiology models through systematic variation of current. <i>AIMS Mathematics</i> , <b>2020</b> , 5, 140-157	2.2	
2	Quantifying the effect of trypsin and elastase on in vitro SARS-CoV infections. <i>Virus Research</i> , <b>2021</b> , 299, 198423	6.4	
1	Treatment of Respiratory Viral Coinfections. <i>Epidemiologia</i> , <b>2022</b> , 3, 81-96	2.8	