

# Hana M Dobrovolny

## List of Publications by Year in descending order

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Version: 2024-02-01

45  
papers

1,052  
citations

471509

17  
h-index

434195

31  
g-index

46  
all docs

46  
docs citations

46  
times ranked

1222  
citing authors

#	ARTICLE	IF	CITATIONS
1	Coinfections of the Respiratory Tract: Viral Competition for Resources. PLoS ONE, 2016, 11, e0155589.	2.5	152
2	Differences in predictions of ODE models of tumor growth: a cautionary example. BMC Cancer, 2016, 16, 163.	2.6	118
3	The Restitution Portrait: A New Method for Investigating Rate-Dependent Restitution. Journal of Cardiovascular Electrophysiology, 2004, 15, 698-709.	1.7	101
4	Assessing Mathematical Models of Influenza Infections Using Features of the Immune Response. PLoS ONE, 2013, 8, e57088.	2.5	96
5	SARS-CoV-2 coinfections: Could influenza and the common cold be beneficial?. Journal of Medical Virology, 2020, 92, 2623-2630.	5.0	70
6	Neuraminidase inhibitors for treatment of human and avian strain influenza: A comparative modeling study. Journal of Theoretical Biology, 2011, 269, 234-244.	1.7	42
7	Modeling the role of asymptomatics in infection spread with application to SARS-CoV-2. PLoS ONE, 2020, 15, e0236976.	2.5	35
8	Quantifying the effect of remdesivir in rhesus macaques infected with SARS-CoV-2. Virology, 2020, 550, 61-69.	2.4	33
9	Exploring Cell Tropism as a Possible Contributor to Influenza Infection Severity. PLoS ONE, 2010, 5, e13811.	2.5	30
10	Period-Doubling Bifurcation to Alternans in Paced Cardiac Tissue: Crossover from Smooth to Border-Collision Characteristics. Physical Review Letters, 2007, 99, 058101.	7.8	29
11	Assessing Uncertainty in A2 Respiratory Syncytial Virus Viral Dynamics. Computational and Mathematical Methods in Medicine, 2015, 2015, 1-9.	1.3	29
12	Effects of Doxorubicin Delivery by Nitrogen-Doped Graphene Quantum Dots on Cancer Cell Growth: Experimental Study and Mathematical Modeling. Nanomaterials, 2021, 11, 140.	4.1	25
13	A comparison of RSV and influenza in vitro kinetic parameters reveals differences in infecting time. PLoS ONE, 2018, 13, e0192645.	2.5	24
14	Modelling the emergence of influenza drug resistance: The roles of surface proteins, the immune response and antiviral mechanisms. PLoS ONE, 2017, 12, e0180582.	2.5	23
15	Investigating Different Mechanisms of Action in Combination Therapy for Influenza. Frontiers in Pharmacology, 2018, 9, 1207.	3.5	19
16	Initial Inoculum and the Severity of COVID-19: A Mathematical Modeling Study of the Dose-Response of SARS-CoV-2 Infections. Epidemiologia, 2020, 1, 5-15.	2.2	19
17	Quantifying rotavirus kinetics in the REH tumor cell line using in vitro data. Virus Research, 2018, 244, 53-63.	2.2	18
18	Determining drug efficacy parameters for mathematical models of influenza. Journal of Biological Dynamics, 2015, 9, 332-346.	1.7	17

#	ARTICLE	IF	CITATIONS
19	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> , 2017, 7, 40210.	3.3	14
20	Modeling of fusion inhibitor treatment of RSV in African green monkeys. <i>Journal of Theoretical Biology</i> , 2018, 456, 62-73.	1.7	14
21	The rate of viral transfer between upper and lower respiratory tracts determines RSV illness duration. <i>Journal of Mathematical Biology</i> , 2019, 79, 467-483.	1.9	12
22	High-Resolution High-Speed Panoramic Cardiac Imaging System. <i>IEEE Transactions on Biomedical Engineering</i> , 2008, 55, 1241-1243.	4.2	11
23	The impact of cell regeneration on the dynamics of viral coinfection. <i>Chaos</i> , 2017, 27, 063109.	2.5	11
24	A quantitative assessment of dynamical differences of RSV infections in vitro and in vivo. <i>Virology</i> , 2018, 523, 129-139.	2.4	10
25	Effect of stochasticity on coinfection dynamics of respiratory viruses. <i>BMC Bioinformatics</i> , 2019, 20, 191.	2.6	10
26	Epidemiological Consequences of Viral Interference: A Mathematical Modeling Study of Two Interacting Viruses. <i>Frontiers in Microbiology</i> , 2022, 13, 830423.	3.5	10
27	Estimation of viral kinetics model parameters in young and aged SARS-CoV-2 infected macaques. <i>Royal Society Open Science</i> , 2021, 8, 202345.	2.4	9
28	Superinfection and cell regeneration can lead to chronic viral coinfections. <i>Journal of Theoretical Biology</i> , 2019, 466, 24-38.	1.7	8
29	The role of syncytia during viral infections. <i>Journal of Theoretical Biology</i> , 2021, 525, 110749.	1.7	7
30	Predicting the effectiveness of chemotherapy using stochastic ODE models of tumor growth. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2021, 101, 105883.	3.3	7
31	Model Integration in Computational Biology: The Role of Reproducibility, Credibility and Utility. <i>Frontiers in Systems Biology</i> , 2022, 2, .	0.7	7
32	GPU acceleration and data fitting: Agent-based models of viral infections can now be parameterized in hours. <i>Journal of Computational Science</i> , 2022, 61, 101662.	2.9	7
33	A Fiber-Based Ratiometric Optical Cardiac Mapping Channel Using a Diffraction Grating and Split Detector. <i>Biophysical Journal</i> , 2007, 93, 254-263.	0.5	6
34	Intermittent treatment of severe influenza. <i>Journal of Theoretical Biology</i> , 2018, 442, 129-138.	1.7	6
35	Energy Requirements for Loss of Viral Infectivity. <i>Food and Environmental Virology</i> , 2020, 12, 281-294.	3.4	5
36	Linear and nonlinear measures predict swimming in the leech. <i>Physical Review E</i> , 2000, 62, 4826-4834.	2.1	4

#	ARTICLE	IF	CITATIONS
37	Understanding the effect of measurement time on drug characterization. PLoS ONE, 2020, 15, e0233031.	2.5	4
38	A comparison of methods for extracting influenza viral titer characteristics. Journal of Virological Methods, 2016, 231, 14-24.	2.1	3
39	An approximate solution of the interferon-dependent viral kinetics model of influenza. Journal of Theoretical Biology, 2020, 498, 110266.	1.7	2
40	A study of the effects of age on the dynamics of RSV in animal models. Virus Research, 2021, 304, 198524.	2.2	2
41	Quantifying the effect of trypsin and elastase on in vitro SARS-CoV infections. Virus Research, 2021, 299, 198423.	2.2	1
42	Treatment of Respiratory Viral Coinfections. Epidemiologia, 2022, 3, 81-96.	2.2	1
43	Spatial heterogeneity of restitution properties and the onset of alternans. , 2009, 2009, 4186-9.		0
44	How Bad is it Doc? the Varying Predictions of ODE Cancer Growth Models. Biophysical Journal, 2015, 108, 312a.	0.5	0
45	Testing the limits of cardiac electrophysiology models through systematic variation of current. AIMS Mathematics, 2020, 5, 140-157.	1.6	0