Eric C Dykeman

List of Publications by Year
in descending order

27 papers	976 citations	17 h-index (471061)	28 g-index (500791)
29 all docs	29 docs citations	29 times ranked	772 citing authors

#	Article	IF	Citations
1	The impact of local assembly rules on RNA packaging in a T = 1 satellite plant virus. PLoS Computational Biology, 2021, 17, e1009306.	1.5	4
2	An Intracellular Model of Hepatitis B Viral Infection: An In Silico Platform for Comparing Therapeutic Strategies. Viruses, 2021, 13, 11.	1.5	13
3	Assembly of infectious enteroviruses depends on multiple, conserved genomic RNA-coat protein contacts. PLoS Pathogens, 2020, 16, e1009146.	2.1	31
4	A modelling paradigm for RNA virus assembly. Current Opinion in Virology, 2018, 31, 74-81.	2.6	62
5	HBV RNA pre-genome encodes specific motifs that mediate interactions with the viral core protein that promote nucleocapsid assembly. Nature Microbiology, 2017, 2, 17098.	5.9	69
6	Genomic RNA folding mediates assembly of human parechovirus. Nature Communications, 2017, 8, 5.	5.8	67
7	RNA Virus Evolution via a Quasispecies-Based Model Reveals a Drug Target with a High Barrier to Resistance. Viruses, 2017, 9, 347.	1.5	20
8	A group theoretical approach to structural transitions of icosahedral quasicrystals and point arrays. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 175203.	0.7	8
9	An implementation of the Gillespie algorithm for RNA kinetics with logarithmic time update. Nucleic Acids Research, 2015, 43, 5708-5715.	6.5	12
10	Revealing the density of encoded functions in a viral RNA. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2227-2232.	3.3	64
11	Asymmetric Genome Organization in an RNA Virus Revealed via Graph-Theoretical Analysis of Tomographic Data. PLoS Computational Biology, 2015, 11, e1004146.	1.5	12
12	On the subgroup structure of the hyperoctahedral group in six dimensions. Acta Crystallographica Section A: Foundations and Advances, 2014, 70, 417-428.	0.0	6
13	Solving a Levinthal's paradox for virus assembly identifies a unique antiviral strategy. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 5361-5366.	3.3	102
14	Packaging Signals in Two Single-Stranded RNA Viruses Imply a Conserved Assembly Mechanism and Geometry of the Packaged Genome. Journal of Molecular Biology, 2013, 425, 3235-3249.	2.0	80
15	Building a viral capsid in the presence of genomic RNA. Physical Review E, 2013, 87, 022717.	0.8	45
16	Degenerate RNA Packaging Signals in the Genome of Satellite Tobacco Necrosis Virus: Implications for the Assembly of a T= 1 Capsid. Journal of Molecular Biology, 2011, 413, 51-65.	2.0	65
17	Atomistic modeling of the low-frequency mechanical modes and Raman spectra of icosahedral virus capsids. Physical Review E, 2010, 81, 021918.	0.8	23
18	All-atom normal-mode analysis reveals an RNA-induced allostery in a bacteriophage coat protein. Physical Review E, 2010, 81, 031908.	0.8	27

#	Article	IF	Citations
19	Normal mode analysis and applications in biological physics. Journal of Physics Condensed Matter, 2010, 22, 423202.	0.7	71
20	The Impact of Viral RNA on Assembly Pathway Selection. Journal of Molecular Biology, 2010, 401, 298-308.	2.0	64
21	Simulations of impulsive laser scattering of biological protein assemblies: Application to M13 bacteriophage. Physical Review E, 2009, 80, 041909.	0.8	5
22	Vibrational energy funneling in virusesâ€"simulations of impulsive stimulated Raman scattering in M13 bacteriophage. Journal of Physics Condensed Matter, 2009, 21, 505102.	0.7	11
23	Theory of the low frequency mechanical modes and Raman spectra of the M13 bacteriophage capsid with atomic detail. Journal of Physics Condensed Matter, 2009, 21, 035116.	0.7	9
24	Low Frequency Mechanical Modes of Viral Capsids: An Atomistic Approach. Physical Review Letters, 2008, 100, 028101.	2.9	43
25	Raman intensity and spectra predictions for cylindrical viruses. Physical Review E, 2007, 76, 011906.	0.8	15
26	Observation of the low frequency vibrational modes of bacteriophage M13 in water by Raman spectroscopy. Virology Journal, 2006, 3, 79.	1.4	22
27	Raman scattering studies of the low-frequency vibrational modes of bacteriophage M13 in waterâ€"observation of an axial torsion mode. Nanotechnology, 2006, 17, 5474-5479.	1.3	21