Eric Charles Dykeman

List of Publications by Year
in descending order

32	1,037	566801 15	580395 25
papers	citations	h-index	g-index

34	34	34	879
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	Packaging signals in single-stranded RNA viruses: natureâ€™s alternative to a purely electrostatic assembly mechanism. Journal of Biological Physics, 2013, 39, 277-287.	0.7	86
3	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
4	Direct Evidence for Packaging Signal-Mediated Assembly of Bacteriophage MS2. Journal of Molecular Biology, 2016, 428, 431-448.	2.0	80
5	Protein-mediated RNA folding governs sequence-specific interactions between rotavirus genome segments. ELife, 2017, 6, .	2.8	70
6	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
7	Genomic RNA folding mediates assembly of human parechovirus. Nature Communications, 2017, 8, 5.	5.8	67
8	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
9	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
10	A modelling paradigm for RNA virus assembly. Current Opinion in Virology, 2018, 31, 74-81.	2.6	62
11	Cryo-EM structure and in vitro DNA packaging of a thermophilic virus with supersized T=7 capsids. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3556-3561.	3.3	54
12	Building a viral capsid in the presence of genomic RNA. Physical Review E, 2013, 87, 022717.	0.8	45
13	Bacteriophage MS2 genomic RNA encodes an assembly instruction manual for its capsid. Bacteriophage, 2016, 6, e1157666.	1.9	38
14	Assembly of infectious enteroviruses depends on multiple, conserved genomic RNA-coat protein contacts. PLoS Pathogens, 2020, 16, e1009146.	2.1	31
15	All-atom normal-mode analysis reveals an RNA-induced allostery in a bacteriophage coat protein. Physical Review E, 2010, 81, 031908.	0.8	27
16	Comparing antiviral strategies against COVID-19 via multiscale within-host modelling. Royal Society Open Science, 2021, 8, 210082.	1.1	17
17	A stochastic model for simulating ribosome kinetics in vivo. PLoS Computational Biology, 2020, 16, e1007618.	1.5	15
18	An Intracellular Model of Hepatitis B Viral Infection: An In Silico Platform for Comparing Therapeutic Strategies. Viruses, 2021, 13, 11.	1.5	13

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19	An implementation of the Gillespie algorithm for RNA kinetics with logarithmic time update. Nucleic Acids Research, 2015, 43, 5708-5715.	6.5	12
20	Asymmetric Genome Organization in an RNA Virus Revealed via Graph-Theoretical Analysis of Tomographic Data. PLoS Computational Biology, 2015, 11, e1004146.	1.5	12
21	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
22	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
23	A Model for Viral Assembly around an Explicit RNA Sequence Generates an Implicit Fitness Landscape. Biophysical Journal, 2017, 113, 506-516.	0.2	6
24	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
25	Conservation of Genetically-Embedded Virus Assembly Instructions: A Novel Route to Antiviral Therapy. Proceedings (mdpi), 2020, 50, 87.	0.2	0
26	Structural characterization of genomic RNA-coat protein contacts in single-stranded RNA viruses by high-resolution cryo-EM. Access Microbiology, 2020, 2, .	0.2	0
27	A stochastic model for simulating ribosome kinetics in vivo. , 2020, 16, e1007618.		0
28	A stochastic model for simulating ribosome kinetics in vivo. , 2020, 16, e1007618.		0
29	A stochastic model for simulating ribosome kinetics in vivo. , 2020, 16, e1007618.		0
30	A stochastic model for simulating ribosome kinetics in vivo. , 2020, 16, e1007618.		0
31	A stochastic model for simulating ribosome kinetics in vivo. , 2020, 16, e1007618.		0
32	A stochastic model for simulating ribosome kinetics in vivo. , 2020, 16, e1007618.		0