The Three-dimensional Structure of Genomic RNA in Ba Assembly

Journal of Molecular Biology 375, 824-836 DOI: 10.1016/j.jmb.2007.08.067

Citation Report

#	Article	IF	CITATIONS
2	Single-Molecule Fluorescence Resonance Energy Transfer Assays Reveal Heterogeneous Folding Ensembles in a Simple RNA Stem–Loop. Journal of Molecular Biology, 2008, 384, 264-278.	4.2	28
3	RNA Packing Specificity and Folding during Assembly of the Bacteriophage MS2. Computational and Mathematical Methods in Medicine, 2008, 9, 339-349.	1.3	12
4	New Insights into Viral Architecture via Affine Extended Symmetry Groups. Computational and Mathematical Methods in Medicine, 2008, 9, 221-229.	1.3	10
5	Armored Long RNA Controls or Standards for Branched DNA Assay for Detection of Human Immunodeficiency Virus Type 1. Journal of Clinical Microbiology, 2009, 47, 2571-2576.	3.9	46
6	A theory for viral capsid assembly around electrostatic cores. Journal of Chemical Physics, 2009, 130, 114902.	3.0	68
7	Electrostatics of capsid-induced viral RNA organization. Journal of Chemical Physics, 2009, 131, .	3.0	43
8	DNA duplex cage structures with icosahedral symmetry. Theoretical Computer Science, 2009, 410, 1440-1447.	0.9	7
9	Affine extensions of the icosahedral group with applications to the three-dimensional organisation of simple viruses. Journal of Mathematical Biology, 2009, 59, 287-313.	1.9	46
10	The Structure of Bacteriophage φCb5 Reveals a Role of the RNA Genome and Metal Ions in Particle Stability and Assembly. Journal of Molecular Biology, 2009, 391, 635-647.	4.2	26
11	Encapsulation of a polymer by an icosahedral virus. Physical Biology, 2010, 7, 045003.	1.8	98
12	All-atom normal-mode analysis reveals an RNA-induced allostery in a bacteriophage coat protein. Physical Review E, 2010, 81, 031908.	2.1	27
13	Mechanisms of Capsid Assembly around a Polymer. Biophysical Journal, 2010, 99, 619-628.	0.5	52
14	Nucleotides and Nucleic Acids; Oligo- and Polynucleotides. Organophosphorus Chemistry, 2010, , 144-237.	0.3	1
15	Dynamic Allostery Controls Coat Protein Conformer Switching during MS2 Phage Assembly. Journal of Molecular Biology, 2010, 395, 916-923.	4.2	61
16	Viral Genomic Single-Stranded RNA Directs the Pathway Toward a T=3 Capsid. Journal of Molecular Biology, 2010, 395, 924-936.	4.2	60
17	Mutually-induced Conformational Switching of RNA and Coat Protein Underpins Efficient Assembly of a Viral Capsid. Journal of Molecular Biology, 2010, 401, 309-322.	4.2	37
18	The Impact of Viral RNA on Assembly Pathway Selection. Journal of Molecular Biology, 2010, 401, 298-308.	4.2	64
19	RNA-induced conformational changes in a viral coat protein studied by hydrogen/deuterium exchange mass spectrometry. Physical Chemistry Chemical Physics, 2010, 12, 13468.	2.8	18

#	Article	IF	CITATIONS
20	Ensemble of Secondary Structures for Encapsidated Satellite Tobacco Mosaic Virus RNA Consistent with Chemical Probing and Crystallography Constraints. Biophysical Journal, 2011, 101, 167-175.	0.5	39
21	On the Origin of Order in the Genome Organization of ssRNA Viruses. Biophysical Journal, 2011, 101, 774-780.	0.5	12
22	A Theoretical Model for the Dynamic Structure of Hepatitis B Nucleocapsid. Biophysical Journal, 2011, 101, 2476-2484.	0.5	23
23	Simple Rules for Efficient Assembly Predict the Layout of a Packaged Viral RNA. Journal of Molecular Biology, 2011, 408, 399-407.	4.2	59
24	Visualising a Viral RNA Genome Poised for Release from Its Receptor Complex. Journal of Molecular Biology, 2011, 408, 408-419.	4.2	36
25	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.	4.2	65
26	Virus assembly, allostery and antivirals. Trends in Microbiology, 2011, 19, 14-23.	7.7	122
27	Form, symmetry and packing of biomacromolecules. IV. Filled capsids of cowpea, tobacco, MS2Âand pariacoto RNA viruses. Acta Crystallographica Section A: Foundations and Advances, 2011, 67, 517-520.	0.3	9
28	Form, symmetry and packing of biomacromolecules. V. Shells with boundaries at anti-nodes of resonant vibrations in icosahedral RNA viruses. Acta Crystallographica Section A: Foundations and Advances, 2011, 67, 521-532.	0.3	9
29	Nucleotide-driven packaging of a singlet oxygen generating porphyrin in an icosahedral virus. Journal of Porphyrins and Phthalocyanines, 2012, 16, 47-54.	0.8	5
30	Evidence that viral RNAs have evolved for efficient, two-stage packaging. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 15769-15774.	7.1	131
31	Visualizing large RNA molecules in solution. Rna, 2012, 18, 284-299.	3.5	95
32	Incorporating global features of RNA motifs in predictions for an ensemble of secondary structures for encapsidated MS2 bacteriophage RNA. Rna, 2012, 18, 1309-1318.	3.5	14
33	A MATHEMATICAL APPROACH TO STRUCTURAL TRANSITIONS IN VIRAL CAPSIDS. International Journal of Modern Physics Conference Series, 2012, 09, 11-23.	0.7	0
34	Effectiveness of chitosan on the inactivation of enteric viral surrogates. Food Microbiology, 2012, 32, 57-62.	4.2	53
35	Peptide Inhibitors of Viral Assembly: A Novel Route to Broad-Spectrum Antivirals. Journal of Chemical Information and Modeling, 2012, 52, 770-776.	5.4	17
36	Isolation of an Asymmetric RNA Uncoating Intermediate for a Single-Stranded RNA Plant Virus. Journal of Molecular Biology, 2012, 417, 65-78.	4.2	30
37	Virus Inactivation Mechanisms: Impact of Disinfectants on Virus Function and Structural Integrity. Environmental Science & Technology, 2012, 46, 12069-12078.	10.0	311

CITATION REPORT

	CITATION	CITATION REPORT	
#	ARTICLE Crystal structure of a plectonemic RNA supercoil Nature Communications, 2012, 3, 901	IF 12.8	Citations
30	Crystal structure of a piectonemic KitA supercon. Nature Communications, 2012, 3, 901.	12.0	/
39	Surveying Capsid Assembly Pathways through Simulation-Based Data Fitting. Biophysical Journal, 2012, 103, 1545-1554.	0.5	31
40	Packaging signals in single-stranded RNA viruses: nature's alternative to a purely electrostatic assembly mechanism. Journal of Biological Physics, 2013, 39, 277-287.	1.5	86
41	Structure and Physics of Viruses. Sub-Cellular Biochemistry, 2013, , .	2.4	41
42	The icosahedral RNA virus as a grotto: organizing the genome into stalagmites and stalactites. Journal of Biological Physics, 2013, 39, 163-172.	1.5	9
43	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.	4.2	80
44	The Asymmetric Structure of an Icosahedral Virus Bound to Its Receptor Suggests a Mechanism for Genome Release. Structure, 2013, 21, 1225-1234.	3.3	61
45	A new paradigm for the roles of the genome in ssRNA viruses. Future Virology, 2013, 8, 531-543.	1.8	18
46	Targeted in vitro photodynamic therapy via aptamer-labeled, porphyrin-loaded virus capsids. Journal of Photochemistry and Photobiology B: Biology, 2013, 121, 67-74.	3.8	38
47	Structural constraints on the three-dimensional geometry of simple viruses: case studies of a new predictive tool. Acta Crystallographica Section A: Foundations and Advances, 2013, 69, 140-150.	0.3	25
48	Building a viral capsid in the presence of genomic RNA. Physical Review E, 2013, 87, 022717.	2.1	45
49	A two-stage mechanism of viral RNA compaction revealed by single molecule fluorescence. RNA Biology, 2013, 10, 481-489.	3.1	47
51	Building Polyhedra by Self-Assembly: Theory and Experiment. Artificial Life, 2014, 20, 409-439.	1.3	15
52	Pathways for Virus Assembly around Nucleic Acids. Journal of Molecular Biology, 2014, 426, 3148-3165.	4.2	83
53	Limits of Structural Plasticity in a Picornavirus Capsid Revealed by a Massively Expanded Equine Rhinitis A Virus Particle. Journal of Virology, 2014, 88, 6093-6099.	3.4	20
54	Modeling Viral Capsid Assembly. Advances in Chemical Physics, 2014, 155, 1-68.	0.3	120
55	Orbits of crystallographic embedding of non-crystallographic groups and applications to virology. Acta Crystallographica Section A: Foundations and Advances, 2015, 71, 569-582.	0.1	4
56	Mechanisms of assembly and genome packaging in an RNA virus revealed by high-resolution cryo-EM. Nature Communications, 2015, 6, 10113.	12.8	57

CITATION REPORT

#	Article	IF	CITATIONS
57	Structure of Ljungan virus provides insight into genome packaging of this picornavirus. Nature Communications, 2015, 6, 8316.	12.8	43
58	Sequential and Simultaneous Applications of UV and Chlorine for Adenovirus Inactivation. Food and Environmental Virology, 2015, 7, 295-304.	3.4	27
59	Asymmetric Genome Organization in an RNA Virus Revealed via Graph-Theoretical Analysis of Tomographic Data. PLoS Computational Biology, 2015, 11, e1004146.	3.2	12
60	Visualizing the global secondary structure of a viral RNA genome with cryo-electron microscopy. Rna, 2015, 21, 877-886.	3.5	45
61	Methods for Preparation of MS2 Phage-Like Particles and Their Utilization as Process Control Viruses in RT-PCR and qRT-PCR Detection of RNA Viruses From Food Matrices and Clinical Specimens. Food and Environmental Virology, 2015, 7, 96-111.	3.4	15
62	Characterization and control of surfactant-mediated Norovirus interactions. Soft Matter, 2015, 11, 8621-8631.	2.7	27
63	The True Story and Advantages of RNA Phage Capsids as Nanotools. Intervirology, 2016, 59, 74-110.	2.8	52
64	Direct Evidence for Packaging Signal-Mediated Assembly of Bacteriophage MS2. Journal of Molecular Biology, 2016, 428, 431-448.	4.2	80
65	Symmetry-adapted digital modeling III. Coarse-grained icosahedral viruses. Acta Crystallographica Section A: Foundations and Advances, 2016, 72, 324-337.	0.1	2
66	Asymmetric cryo-EM structure of the canonical <i>Allolevivirus</i> Qβ reveals a single maturation protein and the genomic ssRNA in situ. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11519-11524.	7.1	67
67	Genetic, Structural, and Phenotypic Properties of MS2 Coliphage with Resistance to ClO ₂ Disinfection. Environmental Science & Technology, 2016, 50, 13520-13528.	10.0	34
68	Sizes of Long RNA Molecules Are Determined by the Branching Patterns of Their Secondary Structures. Biophysical Journal, 2016, 111, 2077-2085.	0.5	53
69	Asymmetric cryo-EM reconstruction of phage MS2 reveals genome structure in situ. Nature Communications, 2016, 7, 12524.	12.8	114
70	A novel delivery platform based on Bacteriophage MS2 virus-like particles. Virus Research, 2016, 211, 9-16.	2.2	50
71	The impact of viral RNA on the association free energies of capsid protein assembly: bacteriophage MS2 as a case study. Journal of Molecular Modeling, 2017, 23, 47.	1.8	0
72	The structures of a naturally empty cowpea mosaic virus particle and its genome-containing counterpart by cryo-electron microscopy. Scientific Reports, 2017, 7, 539.	3.3	20
73	Length of encapsidated cargo impacts stability and structure of <i>in vitro</i> assembled alphavirus core-like particles. Journal of Physics Condensed Matter, 2017, 29, 484003.	1.8	19
74	RNA Base Pairing Determines the Conformations of RNA Inside Spherical Viruses. Physical Review Letters, 2017, 119, 188102.	7.8	14

#	Article	IF	CITATIONS
75	MRI compatible MS2 nanoparticles designed to cross the blood–brain-barrier: providing a path towards tinnitus treatment. Nanomedicine: Nanotechnology, Biology, and Medicine, 2018, 14, 1999-2008.	3.3	16
76	Functionalization and Characterization of an MRI-Capable, Targeted Nanoparticle Platform for Delivery to the Brain. MRS Advances, 2018, 3, 3027-3032.	0.9	2
77	Biologically-Derived Nanomaterials for Targeted Therapeutic Delivery to the Brain. Science Progress, 2018, 101, 273-292.	1.9	11
78	Current Status of Single Particle Imaging with X-ray Lasers. Applied Sciences (Switzerland), 2018, 8, 132.	2.5	27
79	Alphavirus Nucleocapsid Packaging and Assembly. Viruses, 2018, 10, 138.	3.3	43
80	Genome packaging within icosahedral capsids and large-scale segmentation in viral genomic sequences. Journal of Biomolecular Structure and Dynamics, 2019, 37, 2322-2338.	3.5	8
81	A Multiscale Model for the Self-Assembly of Coat Proteins in Bacteriophage MS2. Journal of Chemical Information and Modeling, 2019, 59, 3899-3909.	5.4	11
82	Watching a virus grow. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 22420-22422.	7.1	5
83	Anomalous small viral shells and simplest polyhedra with icosahedral symmetry: the rhombic triacontahedron case. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, 135-141.	0.1	8
84	Packaging of Genomic RNA in Positive-Sense Single-Stranded RNA Viruses: A Complex Story. Viruses, 2019, 11, 253.	3.3	38
85	RNA-Mediated Virus Assembly: Mechanisms and Consequences for Viral Evolution and Therapy. Annual Review of Biophysics, 2019, 48, 495-514.	10.0	54
86	Bacteriophage MS2 displays unreported capsid variability assembling <i>T</i> Â=Â4 and mixed capsids. Molecular Microbiology, 2020, 113, 143-152.	2.5	24
87	Adsorption of bacteriophage MS2 to colloids: Kinetics and particle interactions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 585, 124099.	4.7	21
88	Enzyme Stabilization by Virus-Like Particles. Biochemistry, 2020, 59, 2870-2881.	2.5	28
89	Interaction of the maturation protein of the bacteriophage MS2 and the sex pilus of the Escherichia coli F plasmid. Journal of Molecular Graphics and Modelling, 2020, 101, 107723.	2.4	2
90	Visualizing a viral genome with contrast variation small angle X-ray scattering. Journal of Biological Chemistry, 2020, 295, 15923-15932.	3.4	8
91	Association of novel monomethine cyanine dyes with bacteriophage MS2: A fluorescence study. Journal of Molecular Liquids, 2020, 302, 112569.	4.9	14
92	Functional resilience of activated sludge exposed to Bacillus globigii and bacteriophage MS2. Water and Environment Journal, 2021, 35, 930-936.	2.2	0

CITATION REPORT

#	Article	IF	CITATIONS
93	Virus Removal and Inactivation Mechanisms during Iron Electrocoagulation: Capsid and Genome Damages and Electro-Fenton Reactions. Environmental Science & Technology, 2021, 55, 13198-13208.	10.0	9
94	Virus Isoelectric Point Estimation: Theories and Methods. Applied and Environmental Microbiology, 2021, 87, .	3.1	28
95	DNA Cages with Icosahedral Symmetry inÂBionanotechnology. Natural Computing Series, 2009, , 141-158.	2.2	1
96	Bacteriophage Receptor Recognition and Nucleic Acid Transfer. Sub-Cellular Biochemistry, 2013, 68, 489-518.	2.4	18
97	Improved Virus Isoelectric Point Estimation by Exclusion of Known and Predicted Genome-Binding Regions. Applied and Environmental Microbiology, 2020, 86, .	3.1	11
101	How and why RNA genomes are (partially) ordered in viral capsids. Current Opinion in Virology, 2022, 52, 203-210.	5.4	2
102	Removal and Inactivation of Nonenveloped and Enveloped Virus Surrogates by Conventional Coagulation and Electrocoagulation Using Aluminum and Iron. ACS ES&T Engineering, 2022, 2, 1974-1986.	7.6	2
103	Virus Stabilization with Enhanced Porous Superabsorbent Polymer (PSAP) Beads for Diagnostics and Surveillance. ACS ES&T Water, 2022, 2, 2378-2387.	4.6	2
104	Innovative nonthermal technologies for inactivation of emerging foodborne viruses. Comprehensive Reviews in Food Science and Food Safety, 2023, 22, 3395-3421.	11.7	2
105	基于病æ⁻'æ·é¢—ç²'çš"mRNA递é€ç³»ç»Ÿç"ç©¶èį›å±•. Chinese Science Bulletin, 2023, , .	0.7	0