

William M Gelbart

List of Publications by Year in descending order

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Version: 2024-02-01

49
papers

2,508
citations

218677

26
h-index

223800

46
g-index

50
all docs

50
docs citations

50
times ranked

2241
citing authors

#	ARTICLE	IF	CITATIONS
1	How and why RNA genomes are (partially) ordered in viral capsids. <i>Current Opinion in Virology</i> , 2022, 52, 203-210.	5.4	2
2	The Nonmonotonic Dose Dependence of Protein Expression in Cells Transfected with Self-Amplifying RNA. <i>Journal of Virology</i> , 2022, , e0185821.	3.4	0
3	Controlling the surface charge of simple viruses. <i>PLoS ONE</i> , 2021, 16, e0255820.	2.5	16
4	The non-monotonic dose dependence of protein expression in cells transfected with self-amplifying RNA. <i>Journal of Virological Methods</i> , 2021, , 114386.	2.1	1
5	Genome organization and interaction with capsid protein in a multipartite RNA virus. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 10673-10680.	7.1	31
6	RNA Homopolymers Form Higher-Curvature Virus-like Particles Than Do Normal-Composition RNAs. <i>Biophysical Journal</i> , 2019, 117, 1331-1341.	0.5	7
7	Delivery of self-amplifying RNA vaccines in in vitro reconstituted virus-like particles. <i>PLoS ONE</i> , 2019, 14, e0215031.	2.5	42
8	The effect of macromolecular crowding on single-round transcription by <i>Escherichia coli</i> RNA polymerase. <i>Nucleic Acids Research</i> , 2019, 47, 1440-1450.	14.5	26
9	Two-Stage Dynamics of <i>In Vivo</i> Bacteriophage Genome Ejection. <i>Physical Review X</i> , 2018, 8, .	8.9	7
10	Protocol for Efficient Cell-Free Synthesis of Cowpea Chlorotic Mottle Virus-Like Particles Containing Heterologous RNAs. <i>Methods in Molecular Biology</i> , 2018, 1776, 249-265.	0.9	2
11	Enzymatic Synthesis and Fractionation of Fluorescent PolyU RNAs. <i>Bio-protocol</i> , 2018, 8, e2988.	0.4	0
12	The Effect of RNA Secondary Structure on the Self-Assembly of Viral Capsids. <i>Biophysical Journal</i> , 2017, 113, 339-347.	0.5	30
13	Encapsidated ultrasmall nanolipospheres as novel nanocarriers for highly hydrophobic anticancer drugs. <i>Nanoscale</i> , 2017, 9, 11625-11631.	5.6	12
14	Sizes of Long RNA Molecules Are Determined by the Branching Patterns of Their Secondary Structures. <i>Biophysical Journal</i> , 2016, 111, 2077-2085.	0.5	53
15	Physical Principles in the Self-Assembly of a Simple Spherical Virus. <i>Accounts of Chemical Research</i> , 2016, 49, 48-55.	15.6	85
16	Coaxing a Viral RNA Out Of Its Shell: How Does a Viral RNA Genome Initiate Contact With Its Host?. <i>FASEB Journal</i> , 2016, 30, 599.3.	0.5	0
17	Controlling the extent of viral genome release by a combination of osmotic stress and polyvalent cations. <i>Physical Review E</i> , 2015, 92, 022708.	2.1	4
18	Role of RNA Branchedness in the Competition for Viral Capsid Proteins. <i>Journal of Physical Chemistry B</i> , 2015, 119, 13991-14002.	2.6	24

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19	A Simple RNA-DNA Scaffold Templates the Assembly of Monofunctional Virus-Like Particles. <i>Journal of the American Chemical Society</i> , 2015, 137, 7584-7587.	13.7	34
20	Regulation of interferon production. <i>Nature Materials</i> , 2015, 14, 661-662.	27.5	5
21	Visualizing the global secondary structure of a viral RNA genome with cryo-electron microscopy. <i>Rna</i> , 2015, 21, 877-886.	3.5	45
22	Bacteriophage P22 ejects all of its internal proteins before its genome. <i>Virology</i> , 2015, 485, 128-134.	2.4	34
23	The Assembly Pathway of an Icosahedral Single-Stranded RNA Virus Depends on the Strength of Inter-Subunit Attractions. <i>Journal of Molecular Biology</i> , 2014, 426, 1050-1060.	4.2	94
24	Role of Electrostatics in the Assembly Pathway of a Single-Stranded RNA Virus. <i>Journal of Virology</i> , 2014, 88, 10472-10479.	3.4	79
25	Characterization of Viral Capsid Protein Self-Assembly around Short Single-Stranded RNA. <i>Journal of Physical Chemistry B</i> , 2014, 118, 7510-7519.	2.6	42
26	Viral RNAs Are Unusually Compact. <i>PLoS ONE</i> , 2014, 9, e105875.	2.5	41
27	Reconstituted plant viral capsids can release genes to mammalian cells. <i>Virology</i> , 2013, 441, 12-17.	2.4	74
28	<i>In Vitro</i> Quantification of the Relative Packaging Efficiencies of Single-Stranded RNA Molecules by Viral Capsid Protein. <i>Journal of Virology</i> , 2012, 86, 12271-12282.	3.4	60
29	Self-Assembly of Viral Capsid Protein and RNA Molecules of Different Sizes: Requirement for a Specific High Protein/RNA Mass Ratio. <i>Journal of Virology</i> , 2012, 86, 3318-3326.	3.4	151
30	Multishell Structures of Virus Coat Proteins. <i>Journal of Physical Chemistry B</i> , 2010, 114, 5522-5533.	2.6	33
31	Pressurized Viruses. <i>Science</i> , 2009, 323, 1682-1683.	12.6	89
32	Curvature Dependence of Viral Protein Structures on Encapsidated Nanoemulsion Droplets. <i>ACS Nano</i> , 2008, 2, 281-286.	14.6	70
33	Packaging of a Polymer by a Viral Capsid: The Interplay between Polymer Length and Capsid Size. <i>Biophysical Journal</i> , 2008, 94, 1428-1436.	0.5	192
34	Measuring the Force Ejecting DNA from Phage. <i>Journal of Physical Chemistry B</i> , 2004, 108, 6838-6843.	2.6	76
35	Adhesion and Wrapping in Colloid-Vesicle Complexes. <i>Journal of Physical Chemistry B</i> , 2002, 106, 5543-5552.	2.6	168
36	Chain self-assembly and phase transitions in semiflexible polymer systems. <i>Journal of Chemical Physics</i> , 2001, 114, 1432-1439.	3.0	36

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37	Elastically Driven Linker Aggregation between Two Semiflexible Polyelectrolytes. <i>Physical Review Letters</i> , 2001, 86, 2182-2185.	7.8	34
38	Theory of lamellar-lamellar phase transitions in pure and mixed surfactant solutions. <i>Journal of Chemical Physics</i> , 1999, 111, 3733-3743.	3.0	17
39	Microphase separation versus the vapor-liquid transition in systems of spherical particles. <i>Journal of Chemical Physics</i> , 1999, 110, 4582-4588.	3.0	127
40	Surprising Superstructures: Rings. <i>Advanced Materials</i> , 1998, 10, 351-353.	21.0	46
41	Surprising Superstructures: Rings. <i>Advanced Materials</i> , 1998, 10, 351-353.	21.0	1
42	Counterion-Induced Attraction between Rigid Polyelectrolytes. <i>Physical Review Letters</i> , 1997, 78, 2477-2480.	7.8	462
43	Compositional-mechanical instability of interacting mixed lipid membranes. <i>Physical Review E</i> , 1997, 55, 831-835.	2.1	22
44	Monte Carlo and mean-field studies of phase evolution in concentrated surfactant solutions. <i>Journal of Chemical Physics</i> , 1995, 103, 8764-8782.	3.0	26
45	Monte Carlo and mean-field studies of successive phase transitions in rod monolayers. <i>Journal of Chemical Physics</i> , 1992, 96, 2236-2252.	3.0	33
46	On the parallel-perpendicular transition for a nematic phase at a wall. <i>Liquid Crystals</i> , 1992, 11, 25-30.	2.2	12
47	Effect of elongational flow on the orientational order phase transitions and viscosity of hard rod fluids. <i>Journal of Chemical Physics</i> , 1989, 90, 597-598.	3.0	11
48	Theory of Micellar Stability in Isotropic and Nematic Phases. <i>Molecular Crystals and Liquid Crystals</i> , 1986, 132, 325-337.	0.8	11
49	On the statistical thermodynamics of interacting charged particles of arbitrary shape and concentration. <i>Journal of Chemical Physics</i> , 1984, 81, 4574-4583.	3.0	41