Nilesh K Banavali

List of Publications by Year in descending order

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49 papers

3,268 citations

23 h-index 242451 47 g-index

55 all docs 55 docs citations

55 times ranked 4836 citing authors

#	Article	IF	CITATIONS
1	SufB intein splicing in <i>Mycobacterium tuberculosis</i> is influenced by two remote conserved N-extein histidines. Bioscience Reports, 2022, 42, .	1.1	1
2	Ribosome hibernation: a new molecular framework for targeting nonreplicating persisters of mycobacteria. Microbiology (United Kingdom), 2021, 167 , .	0.7	16
3	Distinct mechanisms of the human mitoribosome recycling and antibiotic resistance. Nature Communications, 2021, 12, 3607.	5.8	7
4	The Mechanism of Cholesterol Modification of Hedgehog Ligand. Journal of Computational Chemistry, 2020, 41, 520-527.	1.5	10
5	Structures of the human mitochondrial ribosome bound to EF-G1 reveal distinct features of mitochondrial translation elongation. Nature Communications, 2020, 11, 3830.	5.8	36
6	Spliceosomal Prp8 intein at the crossroads of protein and RNA splicing. PLoS Biology, 2019, 17, e3000104.	2.6	28
7	General Base Swap Preserves Activity and Expands Substrate Tolerance in Hedgehog Autoprocessing. Journal of the American Chemical Society, 2019, 141, 18380-18384.	6.6	6
8	Sterol A-ring plasticity in hedgehog protein cholesterolysis supports a primitive substrate selectivity mechanism. Chemical Communications, 2019, 55, 1829-1832.	2.2	10
9	Conditional Protein Splicing Switch in Hyperthermophiles through an Intein-Extein Partnership. MBio, 2018, 9, .	1.8	26
10	Structural Articulation of Biochemical Reactions Using Restrained Geometries and Topology Switching. Journal of Chemical Information and Modeling, 2018, 58, 453-463.	2.5	3
11	Mycobacterial DnaB helicase intein as oxidative stress sensor. Nature Communications, 2018, 9, 4363.	5.8	26
12	Geometric Patterns for Neighboring Bases Near the Stacked State in Nucleic Acid Strands. Biochemistry, 2017, 56, 1426-1443.	1.2	6
13	Chemical activation of adenylyl cyclase $Rv1625c$ inhibits growth of <i>Mycobacterium tuberculosis</i> on cholesterol and modulates intramacrophage signaling. Molecular Microbiology, 2017, 105, 294-308.	1.2	26
14	Existing drugs as broad-spectrum and potent inhibitors for Zika virus by targeting NS2B-NS3 interaction. Cell Research, 2017, 27, 1046-1064.	5.7	153
15	Maintenance of electrostatic stabilization in altered tubulin lateral contacts may facilitate formation of helical filaments in foraminifera. Scientific Reports, 2016, 6, 31723.	1.6	5
16	<scp>RNA</scp> approaches the <scp>B</scp> â€form in stacked single strand dinucleotide contexts. Biopolymers, 2016, 105, 65-82.	1.2	7
17	Novel Broad Spectrum Inhibitors Targeting the Flavivirus Methyltransferase. PLoS ONE, 2015, 10, e0130062.	1.1	58
18	Identification and Characterization of Novel Broad-Spectrum Inhibitors of the Flavivirus Methyltransferase. ACS Infectious Diseases, 2015, 1, 340-349.	1.8	51

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19	Post-translational environmental switch of RadA activity by extein–intein interactions in protein splicing. Nucleic Acids Research, 2015, 43, 6631-6648.	6.5	54
20	Cytosine Unstacking and Strand Slippage at an Insertion–Deletion Mutation Sequence in an Overhang-Containing DNA Duplex. Biochemistry, 2014, 53, 3807-3816.	1.2	5
21	Selective inhibition of the West Nile virus methyltransferase by nucleoside analogs. Antiviral Research, 2013, 97, 232-239.	1.9	51
22	Analyzing the Relationship between Single Base Flipping and Strand Slippage near DNA Duplex Termini. Journal of Physical Chemistry B, 2013, 117, 14320-14328.	1.2	4
23	Partial Base Flipping Is Sufficient for Strand Slippage near DNA Duplex Termini. Journal of the American Chemical Society, 2013, 135, 8274-8282.	6.6	14
24	Molecular Evidence for \hat{l}^2 -tubulin Neofunctionalization in Retaria (Foraminifera and Radiolarians). Molecular Biology and Evolution, 2013, 30, 2487-2493.	3.5	16
25	Modeling a Ryanodine Receptor N-terminal Domain Connecting the Central Vestibule and the Corner Clamp Region. Journal of Biological Chemistry, 2013, 288, 903-914.	1.6	10
26	Insights into Structural Basis of Mammalian Mitochondrial Translation. , 2013, , 1-28.		9
27	S-Adenosyl-Homocysteine Is a Weakly Bound Inhibitor for a Flaviviral Methyltransferase. PLoS ONE, 2013, 8, e76900.	1.1	18
28	Insertion domain within mammalian mitochondrial translation initiation factor 2 serves the role of eubacterial initiation factor 1. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 3918-3923.	3.3	51
29	Computational Exploration of Structural Hypotheses for an Additional Sequence in a Mammalian Mitochondrial Protein. PLoS ONE, 2011, 6, e21871.	1.1	5
30	A Low Affinity Ground State Conformation for the Dynein Microtubule Binding Domain. Journal of Biological Chemistry, 2010, 285, 15994-16002.	1.6	12
31	Mapping the conformational transition in Src activation by cumulating the information from multiple molecular dynamics trajectories. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 3776-3781.	3.3	106
32	Flexibility and charge asymmetry in the activation loop of Src tyrosine kinases. Proteins: Structure, Function and Bioinformatics, 2009, 74, 378-389.	1.5	38
33	Characterizing Structural Transitions Using Localized Free Energy Landscape Analysis. PLoS ONE, 2009, 4, e5525.	1.1	7
34	DNA bending induced by carbocyclic sugar analogs constrained to the north conformation. Biopolymers, 2007, 85, 438-449.	1.2	5
35	Anatomy of a structural pathway for activation of the catalytic domain of Src kinase Hck. Proteins: Structure, Function and Bioinformatics, 2007, 67, 1096-1112.	1.5	39
36	Conserved Patterns in Backbone Torsional Changes Allow for Single Base Flipping from Duplex DNA with Minimal Distortion of the Double Helix. Journal of Physical Chemistry B, 2006, 110, 10997-11004.	1.2	12

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37	The N-Terminal End of the Catalytic Domain of Src Kinase Hck Is a Conformational Switch Implicated in Long-Range Allosteric Regulation. Structure, 2005, 13, 1715-1723.	1.6	45
38	Free Energy Landscape of A-DNA to B-DNA Conversion in Aqueous Solution. Journal of the American Chemical Society, 2005, 127, 6866-6876.	6.6	122
39	Caught in the act: visualization of an intermediate in the DNA base-flipping pathway induced by Hhal methyltransferase. Nucleic Acids Research, 2004, 32, 3877-3886.	6.5	43
40	Protein-facilitated base flipping in DNA by cytosine-5-methyltransferase. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 68-73.	3.3	128
41	Atomic Radii for Continuum Electrostatics Calculations on Nucleic Acids. Journal of Physical Chemistry B, 2002, 106, 11026-11035.	1.2	69
42	Electrostatic free energy calculations using the generalized solvent boundary potential method. Journal of Chemical Physics, 2002, 117, 7381-7388.	1.2	37
43	Free Energy and Structural Pathways of Base Flipping in a DNA GCGC Containing Sequence. Journal of Molecular Biology, 2002, 319, 141-160.	2.0	151
44	INHIBITION OF (CYTOSINE C5)-METHYLTRANSFERASE BY OLIGONUCLEOTIDES CONTAINING FLEXIBLE (CYCLOPENTANE) AND CONFORMATIONALLY CONSTRAINED (BICYCLO[3.1.0]HEXANE) ABASIC SITES. Nucleosides, Nucleotides and Nucleic Acids, 2001, 20, 451-459.	0.4	21
45	Reevaluation of Stereoelectronic Contributions to the Conformational Properties of the Phosphodiester and N3â€~-Phosphoramidate Moieties of Nucleic Acids. Journal of the American Chemical Society, 2001, 123, 6747-6755.	6.6	36
46	All-atom empirical force field for nucleic acids: II. Application to molecular dynamics simulations of DNA and RNA in solution. Journal of Computational Chemistry, 2000, 21, 105-120.	1.5	701
47	Development and current status of the CHARMM force field for nucleic acids. Biopolymers, 2000, 56, 257-265.	1.2	923
48	Use of Oligodeoxyribonucleotides with Conformationally Constrained Abasic Sugar Targets To Probe the Mechanism of Base Flipping byHhal DNA (Cytosine C5)-methyltransferase. Journal of the American Chemical Society, 2000, 122, 12422-12434.	6.6	51
49	Development and current status of the CHARMM force field for nucleic acids. , 0, .		7