Abhijit Mitra

List of Publications by Year
in descending order

33 papers	839 citations	430874 18 h-index	526287 27 g-index
41 all docs	41 docs citations	41 times ranked	644 citing authors

#	ARTICLE	IF	CITATIONS
1	MD simulations of ligand-bound and ligand-free aptamer: Molecular level insights into the binding and switching mechanism of the <i>add</i> A-riboswitch. Rna, 2009, 15, 1673-1692.	3.5	66
2	Non-Canonical Base Pairs and Higher Order Structures in Nucleic Acids: Crystal Structure Database Analysis. Journal of Biomolecular Structure and Dynamics, 2006, 24, 149-161.	3.5	60
3	Understanding the Thermostability and Activity of <i>Bacillus subtilis</i> Lipase Mutants: Insights from Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2015, 119, 392-409.	2.6	58
4	Trans Hoogsteen/Sugar Edge Base Pairing in RNA. Structures, Energies, and Stabilities from Quantum Chemical Calculations. Journal of Physical Chemistry B, 2009, 113, 1743-1755.	2.6	55
5	Quantum Chemical Studies of Structures and Binding in Noncanonical RNA Base pairs: The Trans Watson-Crick:Watson-Crick Family. Journal of Biomolecular Structure and Dynamics, 2008, 25, 709-732.	3.5	50
6	Theoretical analysis of noncanonical base pairing interactions in RNA molecules. Journal of Biosciences, 2007, 32, 809-825.	1.1	46
7	Protonation of Base Pairs in RNA: Context Analysis and Quantum Chemical Investigations of Their Geometries and Stabilities. Journal of Physical Chemistry B, 2011, 115, 1469-1484.	2.6	44
8	On the role of Hoogsteen:Hoogsteen interactions in RNA: Ab initio investigations of structures and energies. Rna, 2010, 16, 942-957.	3.5	39
9	Feasibility of occurrence of different types of protonated base pairs in RNA: a quantum chemical study. Physical Chemistry Chemical Physics, 2014, 16, 18383-18396.	2.8	36
10	On the Role of the cis Hoogsteen:Sugar-Edge Family of Base Pairs in Platforms and Tripletsâ€"Quantum Chemical Insights into RNA Structural Biology. Journal of Physical Chemistry B, 2010, 114, 3307-3320.	2.6	33
11	Structural landscape of base pairs containing post-transcriptional modifications in RNA. Rna, 2017, 23, 847-859.	3.5	29
12	Modeling the noncovalent interactions at the metabolite binding site in purine riboswitches. Journal of Molecular Modeling, 2009, 15, 633-649.	1.8	27
13	The role of N7 protonation of guanine in determining the structure, stability and function of RNA base pairs. Physical Chemistry Chemical Physics, 2015, 17, 26249-26263.	2.8	27
14	Base pairing in RNA structures: A computational analysis of structural aspects and interaction energies. Journal of Chemical Sciences, 2007, 119, 525-531.	1.5	24
15	Comparative modeling of thioredoxin glutathione reductase from Schistosoma mansoni: A multifunctional target for antischistosomal therapy. Journal of Molecular Graphics and Modelling, 2009, 27, 665-675.	2.4	24
16	1,3â€Dipolare Cycloadditionen, 93 Ãœberraschungen bei der Umsetzung des 2,3â€DicyanfumarsÃureâ€dimethylesters mit Diazomethan. Chemische Berichte, 1987, 120, 159-169.	0.2	21
17	Estimating Strengths of Individual Hydrogen Bonds in RNA Base Pairs: Toward a Consensus between Different Computational Approaches. ACS Omega, 2019, 4, 7354-7368.	3.5	21
18	A Theoretical Study on Interaction of Small Gold Clusters Au_n(n = 4, 6, 8) with xDNA Base Pairs. Journal of Biomolecular Structure and Dynamics, 2009, 27, 65-81.	3.5	20

#	Article	IF	Citations
19	Consequences of Mg²⁺ binding on the geometry and stability of RNA base pairs. Physical Chemistry Chemical Physics, 2018, 20, 21934-21948.	2.8	20
20	Why Does Substitution of Thymine by 6-Ethynylpyridone Increase the Thermostability of DNA Double Helices?. Journal of Physical Chemistry B, 2014, 118, 6586-6596.	2.6	17
21	RNABP COGEST: a resource for investigating functional RNAs. Database: the Journal of Biological Databases and Curation, 2015, 2015, .	3.0	15
22	On the Nature of Nucleobase Stacking in RNA: A Comprehensive Survey of Its Structural Variability and a Systematic Classification of Associated Interactions. Journal of Chemical Information and Modeling, 2021, 61, 1470-1480.	5.4	13
23	How Does Mg 2+ Modulate the RNA Folding Mechanism: A Case Study of the G:C W:W Trans Basepair. Biophysical Journal, 2017, 113, 277-289.	0.5	12
24	Effects of point mutations on the thermostability of B. subtilis lipase: investigating nonadditivity. Journal of Computer-Aided Molecular Design, 2016, 30, 899-916.	2.9	11
25	1,3â€Dipolare Cycloadditionen, 92 Reaktionen aliphatischer Diazoverbindungen mit vierfach Acceptorsubstituierten Ethylenen. Chemische Berichte, 1987, 120, 153-158.	0.2	10
26	Going beyond base-pairs: topology-based characterization of base-multiplets in RNA. Rna, 2019, 25, 573-589.	3.5	10
27	Higher order structures involving post transcriptionally modified nucleobases in RNA. RSC Advances, 2017, 7, 35694-35703.	3.6	9
28	Pairing interactions between nucleobases and ligands in aptamer:ligand complexes of riboswitches: crystal structure analysis, classification, optimal structures, and accurate interaction energies. Rna, 2019, 25, 1274-1290.	3.5	8
29	Evidence for Hidden Involvement of N3-Protonated Guanine in RNA Structure and Function. ACS Omega, 2019, 4, 699-709.	3.5	8
30	The Astounding Reaction of Diazomethane with Dimethyl 2,3-Dicyanofumarate. Heterocycles, 1986, 24, 2429.	0.7	7
31	Thermal and photochemical transformations of 1-(arylazo)-n-arylidene-2-naphthylamines. Journal of Organic Chemistry, 1980, 45, 3182-3186.	3.2	6
32	Noncanonical Base Pairing in RNA: Topological and NBO Analysis of Hoogsteen Edge - Sugar Edge Interactions. Lecture Notes in Computer Science, 2008, , 379-386.	1.3	6
33	Unfolding Transitions of Peripheral Subunit Binding Domains Show Cooperative Behavior. Journal of Physical Chemistry B, 2019, 123, 3441-3451.	2.6	0