Purshotam Sharma

List of Publications by Year
in descending order

18 papers	144 citations	1163117 8 h-index	1281871 11 g-index
19 all docs	19 docs citations	19 times ranked	169 citing authors

#	Article	IF	Citations
1	Exploring the Nature of Hydrogen Bonding between RNA and Proteins: A Comprehensive Analysis of RNAâ€‰:â€‰Protein Complexes. ChemPhysChem, 2022, 23, e202100731.	2.1	2
2	Influence of the Number, Nature and Position of Methyl Posttranscriptional Modifications on Nucleobase Stacking in RNA. ChemPhysChem, 2021, 22, 1622-1630.	2.1	5
3	Role of Stacking Interactions in the Stability of Primitive Genetics: A Quantum Chemical View. Journal of Chemical Information and Modeling, 2021, 61, 4321-4330.	5.4	1
4	Molecular Dynamics Simulations of the Aptamer Domain of Guanidinium Ion Binding Riboswitch <i>ykkC</i>-III: Structural Insights into the Discrimination of Cognate and Alternate Ligands. Journal of Chemical Information and Modeling, 2021, 61, 5243-5255.	5.4	3
5	Replication of the Aristolochic Acid I Adenine Adduct (ALI-N⁶-A) by a Model Translesion Synthesis DNA Polymerase: Structural Insights on the Induction of Transversion Mutations from Molecular Dynamics Simulations. Chemical Research in Toxicology, 2020, 33, 2573-2583.	3.3	7
6	Can modified DNA base pairs with chalcogen bonding expand the genetic alphabet? A combined quantum chemical and molecular dynamics simulation study. Physical Chemistry Chemical Physics, 2020, 22, 23754-23765.	2.8	6
7	Structural Patterns and Stabilities of Hydrogen-Bonded Pairs Involving Ribonucleotide Bases and Arginine, Glutamic Acid, or Glutamine Residues of Proteins from Quantum Mechanical Calculations. ACS Omega, 2020, 5, 3612-3623.	3.5	11
8	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
9	Could Purines Be Formed from Cyanamide and Cyanoacetylene in a Prebiotic Earth Environment?. ACS Omega, 2019, 4, 12771-12781.	3.5	9
10	Molecular Dynamics Study of One-Base Deletion Duplexes Containing the Major DNA Adduct Formed by Ochratoxin A: Effects of Sequence Context and Adduct Ionization State on Lesion Site Structure and Mutagenicity. Journal of Physical Chemistry B, 2019, 123, 6980-6989.	2.6	7
11	Can Cyanuric Acid and 2,4,6-Triaminopyrimidine Containing Ribonucleosides be Components of Prebiotic RNA? Insights from QM Calculations and MD Simulations. ChemPhysChem, 2019, 20, 1415-1415.	2.1	0
12	Can Cyanuric Acid and 2,4,6â€Triaminopyrimidine Containing Ribonucleosides be Components of Prebiotic RNA? Insights from QM Calculations and MD Simulations. ChemPhysChem, 2019, 20, 1425-1436.	2.1	10
13	Radical pathways for the formation of non-canonical nucleobases in prebiotic environments. RSC Advances, 2019, 9, 36530-36538.	3.6	6
14	Cyanoacetaldehyde as a building block for prebiotic formation of pyrimidines. International Journal of Quantum Chemistry, 2019, 119, e25886.	2.0	9
15	Molecular Dynamics Simulations of Mismatched DNA Duplexes Associated with the Major C⁸-Linked 2â€²-Deoxyguanosine Adduct of the Food Mutagen Ochratoxin A: Influence of Opposing Base, Adduct Ionization State, and Sequence on the Structure of Damaged DNA. Chemical Research in Toxicology, 2018, 31, 712-720.	3.3	7
16	How do hydrophobic nucleobases differ from natural DNA nucleobases? Comparison of structural features and duplex properties from QM calculations and MD simulations. Physical Chemistry Chemical Physics, 2017, 19, 16365-16374.	2.8	24
17	Higher order structures involving post transcriptionally modified nucleobases in RNA. RSC Advances, 2017, 7, 35694-35703.	3.6	9
18	Structural and electronic properties of barbituric acid and melamine-containing ribonucleosides as plausible components of prebiotic RNA: implications for prebiotic self-assembly. Physical Chemistry Chemical Physics, 2017, 19, 30762-30771.	2.8	20