

# Atul Rangadurai

## List of Publications by Year in descending order

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Version: 2024-02-01

23  
papers

687  
citations

623734

14  
h-index

642732

23  
g-index

32  
all docs

32  
docs citations

32  
times ranked

511  
citing authors

#	ARTICLE	IF	CITATIONS
1	DNA mismatches reveal conformational penalties in protein-DNA recognition. <i>Nature</i> , 2020, 587, 291-296.	27.8	74
2	High-performance virtual screening by targeting a high-resolution RNA dynamic ensemble. <i>Nature Structural and Molecular Biology</i> , 2018, 25, 425-434.	8.2	69
3	2- <sup>2</sup> O-Methylation can increase the abundance and lifetime of alternative RNA conformational states. <i>Nucleic Acids Research</i> , 2020, 48, 12365-12379.	14.5	59
4	Insights into Watson-Crick/Hoogsteen breathing dynamics and damage repair from the solution structure and dynamic ensemble of DNA duplexes containing m1A. <i>Nucleic Acids Research</i> , 2017, 45, 5586-5601.	14.5	57
5	Characterizing micro-to-millisecond chemical exchange in nucleic acids using off-resonance R1 $\rho$ relaxation dispersion. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2019, 112-113, 55-102.	7.5	53
6	Rapid and accurate determination of atomistic RNA dynamic ensemble models using NMR and structure prediction. <i>Nature Communications</i> , 2020, 11, 5531.	12.8	52
7	NMR Chemical Exchange Measurements Reveal That <sup>6</sup> N-Methyladenosine Slows RNA Annealing. <i>Journal of the American Chemical Society</i> , 2019, 141, 19988-19993.	13.7	46
8	Developments in solution-state NMR yield broader and deeper views of the dynamic ensembles of nucleic acids. <i>Current Opinion in Structural Biology</i> , 2021, 70, 16-25.	5.7	42
9	Atomic structures of excited state A-T Hoogsteen base pairs in duplex DNA by combining NMR relaxation dispersion, mutagenesis, and chemical shift calculations. <i>Journal of Biomolecular NMR</i> , 2018, 70, 229-244.	2.8	30
10	Why are Hoogsteen base pairs energetically disfavored in A-RNA compared to B-DNA?. <i>Nucleic Acids Research</i> , 2018, 46, 11099-11114.	14.5	23
11	Environmental Effects on Guanine-Thymine Mismatch Tautomerization Explored with Quantum Mechanical/Molecular Free Energy Simulations. <i>Journal of the American Chemical Society</i> , 2020, 142, 11183-11191.	13.7	20
12	Extending the Sensitivity of CEST NMR Spectroscopy to Micro-to-millisecond Dynamics in Nucleic Acids Using High-Power Radio-Frequency Fields. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 11262-11266.	13.8	20
13	Hoogsteen base pairs increase the susceptibility of double-stranded DNA to cytotoxic damage. <i>Journal of Biological Chemistry</i> , 2020, 295, 15933-15947.	3.4	20
14	5-Oxyacetic Acid Modification Destabilizes Double Helical Stem Structures and Favors Anionic Watson-Crick like <sup>5</sup> U-G Base Pairs. <i>Chemistry - A European Journal</i> , 2018, 24, 18903-18906.	3.3	18
15	A quantitative model predicts how m6A reshapes the kinetic landscape of nucleic acid hybridization and conformational transitions. <i>Nature Communications</i> , 2021, 12, 5201.	12.8	18
16	Probing conformational transitions towards mutagenic Watson-Crick-like G-T mismatches using off-resonance sugar carbon R1 $\rho$ relaxation dispersion. <i>Journal of Biomolecular NMR</i> , 2020, 74, 457-471.	2.8	15
17	Increasing the length of poly-pyrimidine bulges broadens RNA conformational ensembles with minimal impact on stacking energetics. <i>Rna</i> , 2018, 24, 1363-1376.	3.5	13
18	Direct evidence for (G)O6 $\cdot$ -H2-N4(C)+ hydrogen bonding in transient G(syn)-C+ and G(syn)-m5C+ Hoogsteen base pairs in duplex DNA from cytosine amino nitrogen off-resonance R1 $\rho$ relaxation dispersion measurements. <i>Journal of Magnetic Resonance</i> , 2019, 308, 106589.	2.1	11

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19	Revealing A-T and G-C Hoogsteen base pairs in stressed protein-bound duplex DNA. <i>Nucleic Acids Research</i> , 2021, 49, 12540-12555.	14.5	10
20	Probing the Hydrogen-Bonding Environment of Individual Bases in DNA Duplexes with Isotope-Edited Infrared Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2021, 125, 7613-7627.	2.6	9
21	Rapid assessment of Watson-Crick to Hoogsteen exchange in unlabeled DNA duplexes using high-power SELOPE imino $^1\text{H}$ CEST. <i>Magnetic Resonance</i> , 2021, 2, 715-731.	1.9	9
22	Measuring thermodynamic preferences to form non-native conformations in nucleic acids using ultraviolet melting. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	7.1	8
23	Extending the Sensitivity of CEST NMR Spectroscopy to Microsecond Dynamics in Nucleic Acids Using High-Power Radio-Frequency Fields. <i>Angewandte Chemie</i> , 2020, 132, 11358-11362.	2.0	1