

The Molecular Interactions That Stabilize RNA Tertiary and Networks

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Citation Report

#	ARTICLE	IF	CITATIONS
1	RNA modeling, naturally. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 2691-2692.	3.3	16
2	SHAPE-Seq: High-Throughput RNA Structure Analysis. Current Protocols in Chemical Biology, 2012, 4, 275-297.	1.7	67
3	Fingerprinting Noncanonical and Tertiary RNA Structures by Differential SHAPE Reactivity. Journal of the American Chemical Society, 2012, 134, 13160-13163.	6.6	72
4	Open Questions on the Origin of Life at Anoxic Geothermal Fields. Origins of Life and Evolution of Biospheres, 2012, 42, 507-516.	0.8	22
5	B12 cofactors directly stabilize an mRNA regulatory switch. Nature, 2012, 492, 133-137.	13.7	171
6	Functional Replacement of Two Highly Conserved Tetraloops in the Bacterial Ribosome. Biochemistry, 2012, 51, 7618-7626.	1.2	11
7	Cooperative Tertiary Interaction Network Guides RNA Folding. Cell, 2012, 149, 348-357.	13.5	88
8	TectoRNP: self-assembling RNAs with peptide recognition motifs as templates for chemical peptide ligation. Journal of Peptide Science, 2012, 18, 635-642.	0.8	2
9	The Role of Counterion Valence and Size in GAAA Tetraloop Receptor Docking/Undocking Kinetics. Journal of Molecular Biology, 2012, 423, 198-216.	2.0	23
10	Global Structure of a Three-Way Junction in a Phi29 Packaging RNA Dimer Determined Using Site-Directed Spin Labeling. Journal of the American Chemical Society, 2012, 134, 2644-2652.	6.6	52
11	Thermodynamic Origins of Monovalent Facilitated RNA Folding. Biochemistry, 2012, 51, 3732-3743.	1.2	34
12	Computational identification of biologically functional non-hairpin GC-helices in human Argonaute mRNA. BMC Bioinformatics, 2013, 14, 122.	1.2	2
13	Precise Expression Profiling by Stuffer-Free Multiplex Ligation-Dependent Probe Amplification. Analytical Chemistry, 2013, 85, 9383-9389.	3.2	5
14	Tackling Structures of Long Noncoding RNAs. International Journal of Molecular Sciences, 2013, 14, 23672-23684.	1.8	84
15	RNA structure and dynamics: A base pairing perspective. Progress in Biophysics and Molecular Biology, 2013, 113, 264-283.	1.4	58
16	RNA-DNA hybrid origami: folding of a long RNA single strand into complex nanostructures using short DNA helper strands. Chemical Communications, 2013, 49, 5462.	2.2	60
17	Propensities for loop structures of RNA & DNA backbones. Biophysical Chemistry, 2013, 180-181, 110-118.	1.5	5
18	Role of Ion Valence in the Submillisecond Collapse and Folding of a Small RNA Domain. Biochemistry, 2013, 52, 1539-1546.	1.2	18

#	ARTICLE	IF	CITATIONS
19	Ribose 2'-Hydroxyl Groups Stabilize RNA Hairpin Structures Containing GCUAA Pentaloop. <i>Journal of Chemical Theory and Computation</i> , 2013, 9, 1214-1221.	2.3	8
20	Structure and Conformational Dynamics of the Domain 5 RNA Hairpin of a Bacterial Group II Intron Revealed by Solution Nuclear Magnetic Resonance and Molecular Dynamics Simulations. <i>Biochemistry</i> , 2013, 52, 7099-7113.	1.2	10
21	Computational Approaches to Predicting the Impact of Novel Bases on RNA Structure and Stability. <i>ACS Chemical Biology</i> , 2013, 8, 2354-2359.	1.6	7
22	The Essential Role of Stacking Adenines in a Two-Base-Pair RNA Kissing Complex. <i>Journal of the American Chemical Society</i> , 2013, 135, 5602-5611.	6.6	31
23	Hidden coding potential of eukaryotic genomes: nonAUG started ORFs. <i>Journal of Biomolecular Structure and Dynamics</i> , 2013, 31, 103-114.	2.0	25
24	Helicase-mediated changes in RNA structure at the single-molecule level. <i>RNA Biology</i> , 2013, 10, 133-148.	1.5	16
25	The structural stabilization of the 3' three-way junction by Mg(II) represents the first step in the folding of a group II intron. <i>Nucleic Acids Research</i> , 2013, 41, 2489-2504.	6.5	35
26	Automated identification of RNA 3D modules with discriminative power in RNA structural alignments. <i>Nucleic Acids Research</i> , 2013, 41, 9999-10009.	6.5	14
27	Cation-dependent folding of 3' cap-independent translation elements facilitates interaction of a 17-nucleotide conserved sequence with eIF4G. <i>Nucleic Acids Research</i> , 2013, 41, 3398-3413.	6.5	56
28	Exploring Ty1 retrotransposon RNA structure within virus-like particles. <i>Nucleic Acids Research</i> , 2013, 41, 463-473.	6.5	33
29	Solving nucleic acid structures by molecular replacement: examples from group II intron studies. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2013, 69, 2174-2185.	2.5	17
30	An RNA folding motif: GNRA tetraloop-receptor interactions. <i>Quarterly Reviews of Biophysics</i> , 2013, 46, 223-264.	2.4	72
31	Natural Selection and Structural Polymorphism of RNA 3D Structures Involving GNRA Loops and Their Receptor Motifs. , 2013, , 109-120.		1
32	RNA modularity for synthetic biology. <i>F1000prime Reports</i> , 2013, 5, 46.	5.9	37
33	Comparative Sequence and Structure Analysis Reveals the Conservation and Diversity of Nucleotide Positions and Their Associated Tertiary Interactions in the Riboswitches. <i>PLoS ONE</i> , 2013, 8, e73984.	1.1	16
34	Secondary Structures of rRNAs from All Three Domains of Life. <i>PLoS ONE</i> , 2014, 9, e88222.	1.1	122
35	A coarse-grained model with implicit salt for RNAs: Predicting 3D structure, stability and salt effect. <i>Journal of Chemical Physics</i> , 2014, 141, 105102.	1.2	74
36	Purine Biosynthetic Intermediate-Containing Ribose-Phosphate Polymers as Evolutionary Precursors to RNA. <i>Journal of Molecular Evolution</i> , 2014, 79, 91-104.	0.8	10

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37	RNA Bricksâ€”a database of RNA 3D motifs and their interactions. <i>Nucleic Acids Research</i> , 2014, 42, D123-D131.	6.5	76
38	Comparison of the π -stacking properties of purine versus pyrimidine residues. Some generalizations regarding selectivity. <i>Journal of Biological Inorganic Chemistry</i> , 2014, 19, 691-703.	1.1	17
39	Recognition modes of <sc>RNA</sc> tetraloops and tetraloopâ€”like motifs by <sc>RNA</sc>â€”binding proteins. <i>Wiley Interdisciplinary Reviews RNA</i> , 2014, 5, 49-67.	3.2	57
40	Ribonucleotides as nucleotide excision repair substrates. <i>DNA Repair</i> , 2014, 13, 55-60.	1.3	19
41	Topological constraints are major determinants of tRNA tertiary structure and dynamics and provide basis for tertiary folding cooperativity. <i>Nucleic Acids Research</i> , 2014, 42, 11792-11804.	6.5	22
42	Single-molecule correlated chemical probing of RNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 13858-13863.	3.3	140
43	Principles of ion recognition in RNA: insights from the group II intron structures. <i>Rna</i> , 2014, 20, 516-527.	1.6	38
44	Looking at LncRNAs with the Ribozyme Toolkit. <i>Molecular Cell</i> , 2014, 56, 13-17.	4.5	13
45	Hierarchy of RNA Functional Dynamics. <i>Annual Review of Biochemistry</i> , 2014, 83, 441-466.	5.0	162
46	RNA Self-Assembly and RNA Nanotechnology. <i>Accounts of Chemical Research</i> , 2014, 47, 1871-1880.	7.6	217
47	New molecular engineering approaches for crystallographic studies of large RNAs. <i>Current Opinion in Structural Biology</i> , 2014, 26, 9-15.	2.6	46
48	Oxygenâ€”aromatic contacts in intra-strand base pairs: Analysis of high-resolution DNA crystal structures and quantum chemical calculations. <i>Journal of Structural Biology</i> , 2014, 187, 49-57.	1.3	6
49	Molecular-crowding effects on single-molecule RNA folding/unfolding thermodynamics and kinetics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 8464-8469.	3.3	139
50	Construction of RNA nanocages by re-engineering the packaging RNA of Phi29 bacteriophage. <i>Nature Communications</i> , 2014, 5, 3890.	5.8	66
51	Nucleic Acid Catalysis: Metals, Nucleobases, and Other Cofactors. <i>Chemical Reviews</i> , 2014, 114, 4318-4342.	23.0	152
52	Spectrometric Detection of DNA by the Bis-Zn(II) Complex of a Water-soluble Doubly N-Confused Hexaphyrin. <i>Chemistry Letters</i> , 2014, 43, 1929-1931.	0.7	7
53	Regulation of mRNA transport, localization and translation in the nervous system of mammals (Review). <i>International Journal of Molecular Medicine</i> , 2014, 33, 747-762.	1.8	95
54	Computational study of stability of an H-H-type pseudoknot motif. <i>Physical Review E</i> , 2015, 92, 062705.	0.8	9

#	ARTICLE	IF	CITATIONS
55	Probing the effect of minor groove interactions on the catalytic efficiency of DNAzymes 8â€“17 and 10â€“23. <i>Molecular BioSystems</i> , 2015, 11, 1454-1461.	2.9	17
56	Dynamic Motions of the HIV-1 Frameshift Site RNA. <i>Biophysical Journal</i> , 2015, 108, 644-654.	0.2	4
57	Molecular crowding overcomes the destabilizing effects of mutations in a bacterial ribozyme. <i>Nucleic Acids Research</i> , 2015, 43, 1170-1176.	6.5	23
58	An improved design of the kissing complex-based aptasensor for the detection of adenosine. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 6515-6524.	1.9	13
59	Formation of Tertiary Interactions during rRNA GTPase Center Folding. <i>Journal of Molecular Biology</i> , 2015, 427, 2799-2815.	2.0	6
60	Noncanonical Secondary Structure Stabilizes Mitochondrial tRNA ^{Ser(UCN)} by Reducing the Entropic Cost of Tertiary Folding. <i>Journal of the American Chemical Society</i> , 2015, 137, 3592-3599.	6.6	15
61	Structure-specific nucleic acid recognition by L-motifs and their diverse roles in expression and regulation of the genome. <i>Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms</i> , 2015, 1849, 677-687.	0.9	6
62	Multiscale Methods for Computational RNA Enzymology. <i>Methods in Enzymology</i> , 2015, 553, 335-374.	0.4	16
63	Probing the interaction of troxerutin with transfer RNA by spectroscopic and molecular modeling. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2015, 153, 137-144.	1.7	5
64	Dynamic profiling of double-stranded RNA binding proteins. <i>Nucleic Acids Research</i> , 2015, 43, 7566-7576.	6.5	53
65	RNA as a stable polymer to build controllable and defined nanostructures for material and biomedical applications. <i>Nano Today</i> , 2015, 10, 631-655.	6.2	103
66	Computing the origin and evolution of the ribosome from its structure â€” Uncovering processes of macromolecular accretion benefiting synthetic biology. <i>Computational and Structural Biotechnology Journal</i> , 2015, 13, 427-447.	1.9	26
67	How do metal ions direct ribozyme folding?. <i>Nature Chemistry</i> , 2015, 7, 793-801.	6.6	110
68	The role of short RNA loops in recognition of a single-hairpin exon derived from a mammalian-wide interspersed repeat. <i>RNA Biology</i> , 2015, 12, 54-69.	1.5	21
69	Predicting RNA 3D structure using a coarse-grain helix-centered model. <i>Rna</i> , 2015, 21, 1110-1121.	1.6	69
70	Mimicking Ribosomal Unfolding of RNA Pseudoknot in a Protein Channel. <i>Journal of the American Chemical Society</i> , 2015, 137, 15742-15752.	6.6	45
71	<sc>RNA</sc> triplexes: from structural principles to biological and biotech applications. <i>Wiley Interdisciplinary Reviews RNA</i> , 2015, 6, 111-128.	3.2	93
72	Breast anticancer drug tamoxifen and its metabolites bind tRNA at multiple sites. <i>International Journal of Biological Macromolecules</i> , 2015, 72, 692-698.	3.6	9

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73	Structure, Evolution, and Functions of Bacterial Type III Toxin-Antitoxin Systems. <i>Toxins</i> , 2016, 8, 282.	1.5	38
74	Dry/Wet Cycling and the Thermodynamics and Kinetics of Prebiotic Polymer Synthesis. <i>Life</i> , 2016, 6, 28.	1.1	106
75	Binding of single stranded nucleic acids to cationic ligand functionalized gold nanoparticles. <i>Biointerphases</i> , 2016, 11, 04B305.	0.6	13
76	Secondary structure encodes a cooperative tertiary folding funnel in the <i>Azoarcus</i> ribozyme. <i>Nucleic Acids Research</i> , 2016, 44, 402-412.	6.5	3
77	Mechanistic Insights into Cofactor-Dependent Coupling of RNA Folding and mRNA Transcription/Translation by a Cobalamin Riboswitch. <i>Cell Reports</i> , 2016, 15, 1100-1110.	2.9	36
78	3D RNA and Functional Interactions from Evolutionary Couplings. <i>Cell</i> , 2016, 165, 963-975.	13.5	152
79	Coupling of RNA Polymerase II Transcription Elongation with Pre-mRNA Splicing. <i>Journal of Molecular Biology</i> , 2016, 428, 2623-2635.	2.0	245
80	Mapping RNA Structure In Vitro with SHAPE Chemistry and Next-Generation Sequencing (SHAPE-Seq). <i>Methods in Molecular Biology</i> , 2016, 1490, 135-162.	0.4	17
81	The role of sequence in altering the unfolding pathway of an RNA pseudoknot: a steered molecular dynamics study. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 28767-28780.	1.3	7
82	Biophysical insight into the interaction of the bioflavonoid kaempferol with triple and double helical RNA and the dual fluorescence behaviour of kaempferol. <i>RSC Advances</i> , 2016, 6, 83551-83562.	1.7	19
83	Crystal structure of a DNA aptamer bound to PvLDH elucidates novel single-stranded DNA structural elements for folding and recognition. <i>Scientific Reports</i> , 2016, 6, 34998.	1.6	28
84	Influence of Constitution and Charge on Radical Pairing Interactions in Tris-radical Tricationic Complexes. <i>Journal of the American Chemical Society</i> , 2016, 138, 8288-8300.	6.6	29
85	Telomerase RNA is more than a DNA template. <i>RNA Biology</i> , 2016, 13, 683-689.	1.5	19
86	Covalent and non-covalent binding of metal complexes to RNA. <i>Journal of Inorganic Biochemistry</i> , 2016, 163, 278-291.	1.5	32
87	Fingerprinting the junctions of RNA structure by an open-paddlewheel diruthenium compound. <i>Rna</i> , 2016, 22, 330-338.	1.6	19
88	InterRNA: a database of base interactions in RNA structures. <i>Nucleic Acids Research</i> , 2016, 44, D266-D271.	6.5	18
89	Characterization of an RNA receptor motif that recognizes a GCGA tetraloop. <i>Bioscience, Biotechnology and Biochemistry</i> , 2016, 80, 1386-1389.	0.6	6
90	Progress and Current Challenges in Modeling Large RNAs. <i>Journal of Molecular Biology</i> , 2016, 428, 736-747.	2.0	23

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91	Nucleic acid polymeric properties and electrostatics: Directly comparing theory and simulation with experiment. <i>Advances in Colloid and Interface Science</i> , 2016, 232, 49-56.	7.0	10
92	The ins and outs of lncRNA structure: How, why and what comes next?. <i>Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms</i> , 2016, 1859, 46-58.	0.9	71
93	Improved Polarizable Dipole–Dipole Interaction Model for Hydrogen Bonding, Stacking, T-Shaped, and X–H···Y Interactions. <i>Journal of Chemical Theory and Computation</i> , 2017, 13, 2730-2741.	2.3	14
94	rRNA C-Loops: Mechanical Properties of a Recurrent Structural Motif. <i>Journal of Chemical Theory and Computation</i> , 2017, 13, 3359-3371.	2.3	11
95	Fast, clash-free RNA conformational morphing using molecular junctions. <i>Bioinformatics</i> , 2017, 33, 2114-2122.	1.8	4
96	DSSR-enhanced visualization of nucleic acid structures in Jmol. <i>Nucleic Acids Research</i> , 2017, 45, W528-W533.	6.5	42
97	An RNA Aptamer Capable of Forming a Hydrogel by Self-Assembly. <i>Biomacromolecules</i> , 2017, 18, 2056-2063.	2.6	12
98	Theory and Modeling of RNA Structure and Interactions with Metal Ions and Small Molecules. <i>Annual Review of Biophysics</i> , 2017, 46, 227-246.	4.5	112
99	Revisiting GNRA and UNCG folds: U-turns versus Z-turns in RNA hairpin loops. <i>Rna</i> , 2017, 23, 259-269.	1.6	35
100	Structural Roles of Noncoding RNAs in the Heart of Enzymatic Complexes. <i>Biochemistry</i> , 2017, 56, 3-13.	1.2	9
101	The RNA Epistruome: Uncovering RNA Function by Studying Structure and Post-Transcriptional Modifications. <i>Trends in Biotechnology</i> , 2017, 35, 318-333.	4.9	36
102	Composing RNA Nanostructures from a Syntax of RNA Structural Modules. <i>Nano Letters</i> , 2017, 17, 7095-7101.	4.5	68
103	Effect of single-residue bulges on RNA double-helical structures: crystallographic database analysis and molecular dynamics simulation studies. <i>Journal of Molecular Modeling</i> , 2017, 23, 311.	0.8	0
104	Single-Molecule Fluorescence Reveals Commonalities and Distinctions among Natural and <i>in Vitro</i> -Selected RNA Tertiary Motifs in a Multistep Folding Pathway. <i>Journal of the American Chemical Society</i> , 2017, 139, 18576-18589.	6.6	14
105	Multispectroscopic and Theoretical Exploration of the Comparative Binding Aspects of Bioflavonoid Fisetin with Triple- and Double-Helical Forms of RNA. <i>Journal of Physical Chemistry B</i> , 2017, 121, 11037-11052.	1.2	18
106	Chemical and Conformational Diversity of Modified Nucleosides Affects tRNA Structure and Function. <i>Biomolecules</i> , 2017, 7, 29.	1.8	104
107	Aptamer Technology: Adjunct Therapy for Malaria. <i>Biomedicines</i> , 2017, 5, 1.	1.4	38
108	Long noncoding RNAs coordinate functions between mitochondria and the nucleus. <i>Epigenetics and Chromatin</i> , 2017, 10, 41.	1.8	86

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109	Tuning RNA folding and function through rational design of junction topology. <i>Nucleic Acids Research</i> , 2017, 45, 9706-9715.	6.5	7
110	An unexpected RNA distal interaction mode found in an essential region of the hepatitis C virus genome. <i>Nucleic Acids Research</i> , 2018, 46, 4200-4212.	6.5	6
111	Discovery of Selective RNA-Binding Small Molecules by Affinity-Selection Mass Spectrometry. <i>ACS Chemical Biology</i> , 2018, 13, 820-831.	1.6	78
112	Hierarchical Assembly of RNA Three-Dimensional Structures Based on Loop Templates. <i>Journal of Physical Chemistry B</i> , 2018, 122, 5327-5335.	1.2	33
113	Triggering nucleic acid nanostructure assembly by conditional kissing interactions. <i>Nucleic Acids Research</i> , 2018, 46, 1052-1058.	6.5	10
114	In-cell RNA structure probing with SHAPE-MaP. <i>Nature Protocols</i> , 2018, 13, 1181-1195.	5.5	88
115	A Review on Hierarchical Clustering-Based Covariance Model to ncRNA Identification. <i>Advances in Intelligent Systems and Computing</i> , 2018, , 571-581.	0.5	0
116	Role of hydroxyl groups in the B-ring of flavonoids in stabilization of the Hoogsteen paired third strand of Poly(U).Poly(A)*Poly(U) triplex. <i>Archives of Biochemistry and Biophysics</i> , 2018, 637, 9-20.	1.4	30
117	Design of highly active double-pseudoknotted ribozymes: a combined computational and experimental study. <i>Nucleic Acids Research</i> , 2019, 47, 29-42.	6.5	12
118	Corroboration of Zn(II)-Mg(II)-tertiary structure interplays essential for the optimal catalysis of a phosphorothiolate thioesterase ribozyme. <i>RSC Advances</i> , 2018, 8, 32775-32793.	1.7	0
119	Divalent ions tune the kinetics of a bacterial GTPase center rRNA folding transition from secondary to tertiary structure. <i>Rna</i> , 2018, 24, 1828-1838.	1.6	20
120	How the Conformations of an Internal Junction Contribute to Fold an RNA Domain. <i>Journal of Physical Chemistry B</i> , 2018, 122, 11363-11372.	1.2	9
121	Binding properties of chiral ruthenium(II) complexes λ - and $\hat{\lambda}$ "-[Ru(bpy) ₂ dppz-11-CO ₂ Me] ²⁺ toward the triplex RNA poly(U)•poly(A)*poly(U). <i>Journal of Inorganic Biochemistry</i> , 2018, 186, 51-59.	1.5	14
122	A functional genetic screen reveals sequence preferences within a key tertiary interaction in cobalamin riboswitches required for ligand selectivity. <i>Nucleic Acids Research</i> , 2018, 46, 9094-9105.	6.5	11
123	Dual Graph Partitioning Highlights a Small Group of Pseudoknot-Containing RNA Submotifs. <i>Genes</i> , 2018, 9, 371.	1.0	12
124	Structural Changes of RNA in Complex with Proteins in the SRP. <i>Frontiers in Molecular Biosciences</i> , 2018, 5, 7.	1.6	22
125	An exon three-way junction structure modulates splicing and degradation of the SUS1 yeast pre-mRNA. <i>Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms</i> , 2018, 1861, 673-686.	0.9	5
126	Identification of receptors for UNCG and GNRA Z-turns and their occurrence in rRNA. <i>Nucleic Acids Research</i> , 2018, 46, 7989-7997.	6.5	12

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127	High-resolution small RNA structures from exact nuclear Overhauser enhancement measurements without additional restraints. <i>Communications Biology</i> , 2018, 1, 61.	2.0	23
128	Applications of Ribosomal RNA Sequence and Structure Analysis for Extracting Evolutionary and Functional Insights. , 2019, , 554-567.		0
129	Physical and Functional Analysis of Viral RNA Genomes by SHAPE. <i>Annual Review of Virology</i> , 2019, 6, 93-117.	3.0	47
130	On the nature and origin of biological information: The curious case of RNA. <i>BioSystems</i> , 2019, 185, 104031.	0.9	5
131	VfoldLA: A web server for loop assembly-based prediction of putative 3D RNA structures. <i>Journal of Structural Biology</i> , 2019, 207, 235-240.	1.3	18
132	Framework for Conducting and Analyzing Crystal Simulations of Nucleic Acids to Aid in Modern Force Field Evaluation. <i>Journal of Physical Chemistry B</i> , 2019, 123, 4611-4624.	1.2	5
133	Responsive self-assembly of tectoRNAs with loopâ€“receptor interactions from the tetrahydrofolate (THF) riboswitch. <i>Nucleic Acids Research</i> , 2019, 47, 6439-6451.	6.5	8
134	Recent advances in metallodrug-like molecules targeting non-coding RNAs in cancer chemotherapy. <i>Coordination Chemistry Reviews</i> , 2019, 387, 47-59.	9.5	30
135	Morphology Clustering Software for AFM Images, Based on Particle Isolation and Artificial Neural Networks. <i>IEEE Access</i> , 2019, 7, 160304-160323.	2.6	2
136	Refining RNA solution structures with the integrative use of label-free paramagnetic relaxation enhancement NMR. <i>Biophysics Reports</i> , 2019, 5, 244-253.	0.2	4
137	Deducing putative ancestral forms of GNRA/receptor interactions from the ribosome. <i>Nucleic Acids Research</i> , 2019, 47, 480-494.	6.5	8
138	RNA therapy: Are we using the right molecules?. , 2019, 196, 91-104.		116
139	RNA Structural Differentiation: Opportunities with Pattern Recognition. <i>Biochemistry</i> , 2019, 58, 199-213.	1.2	17
140	Supramolecular Luminescent Sensors. <i>Chemical Reviews</i> , 2019, 119, 322-477.	23.0	520
141	Tuning of structural and magnetic properties by intriguing radical-radical interaction by double electron oxidation in U-A-Uâ€“ ² triplex formation. <i>Chemical Physics</i> , 2020, 528, 110527.	0.9	0
142	Topological constraints of RNA pseudoknotted and loop-kissing motifs: applications to three-dimensional structure prediction. <i>Nucleic Acids Research</i> , 2020, 48, 6503-6512.	6.5	11
143	Molecular Dynamics Simulation of the Conformational Preferences of Pseudouridine Derivatives: Improving the Distribution in the Glycosidic Torsion Space. <i>Journal of Chemical Information and Modeling</i> , 2020, 60, 4995-5002.	2.5	5
144	The molecular structure of long non-coding RNAs: emerging patterns and functional implications. <i>Critical Reviews in Biochemistry and Molecular Biology</i> , 2020, 55, 662-690.	2.3	51

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145	Base-intercalated and base-wedged stacking elements in 3D-structure of RNA and RNA-protein complexes. <i>Nucleic Acids Research</i> , 2020, 48, 8675-8685.	6.5	12
146	Advances in RNA 3D Structure Modeling Using Experimental Data. <i>Frontiers in Genetics</i> , 2020, 11, 574485.	1.1	56
147	RNA-targeted Cu(II)-based potential antitumor drug entity: comprehensive structural, biological {DNA/RNA binding, cleavage, cytotoxicity} and computational studies. <i>Journal of Biomolecular Structure and Dynamics</i> , 2020, 39, 1-14.	2.0	9
148	Molecular mechanisms underlying the extreme mechanical anisotropy of the flaviviral exoribonuclease-resistant RNAs (xrRNAs). <i>Nature Communications</i> , 2020, 11, 5496.	5.8	9
149	RNA Drugs and RNA Targets for Small Molecules: Principles, Progress, and Challenges. <i>Pharmacological Reviews</i> , 2020, 72, 862-898.	7.1	192
150	DNA Nanotechnology. <i>Topics in Current Chemistry Collections</i> , 2020, , .	0.2	0
151	Advances in the Bioinformatics Knowledge of mRNA Polyadenylation in Baculovirus Genes. <i>Viruses</i> , 2020, 12, 1395.	1.5	0
152	Occurrence and stability of lone pair- π and OH- π interactions between water and nucleobases in functional RNAs. <i>Nucleic Acids Research</i> , 2020, 48, 5825-5838.	6.5	27
153	RIC-seq for global in situ profiling of RNA-RNA spatial interactions. <i>Nature</i> , 2020, 582, 432-437.	13.7	176
154	Simple and Analytical Model of RNA Collapse. <i>Journal of Physical Chemistry B</i> , 2020, 124, 5149-5155.	1.2	0
155	Unboxing the T-box riboswitches: A glimpse into multivalent and multimodal RNA-RNA interactions. <i>Wiley Interdisciplinary Reviews RNA</i> , 2020, 11, e1600.	3.2	23
156	Structural Insights into RNA Dimerization: Motifs, Interfaces and Functions. <i>Molecules</i> , 2020, 25, 2881.	1.7	28
157	An RNA pseudoknot stimulates HTLV-1 <i>pro-pol</i> programmed +1 ribosomal frameshifting. <i>Rna</i> , 2020, 26, 512-528.	1.6	3
158	RNA contributions to the form and function of biomolecular condensates. <i>Nature Reviews Molecular Cell Biology</i> , 2021, 22, 183-195.	16.1	353
159	Synthetic Technology of Noncoding RNAs Used in Bone Disease Research and Therapeutics. , 2021, , 141-157.		0
160	Supramolecular Biopolymers for Tissue Engineering. <i>Advances in Polymer Technology</i> , 2021, 2021, 1-23.	0.8	13
161	Targeting RNA with small molecules: from fundamental principles towards the clinic. <i>Chemical Society Reviews</i> , 2021, 50, 2224-2243.	18.7	118
162	Metal Ion Interactions With DNA, RNA, and Nucleic Acid Enzymes. , 2021, , 968-993.		4

#	ARTICLE	IF	CITATIONS
163	Structure of a bacterial OapB protein with its OLE RNA target gives insights into the architecture of the OLE ribonucleoprotein complex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	1
164	An RNA Triangle with Six Ribozyme Units Can Promote a Trans-Splicing Reaction through Trimerization of Unit Ribozyme Dimers. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 2583.	1.3	3
165	miRNAs and lncRNAs as Novel Therapeutic Targets to Improve Cancer Immunotherapy. <i>Cancers</i> , 2021, 13, 1587.	1.7	47
166	Beyond ribose and phosphate: Selected nucleic acid modifications for structure–function investigations and therapeutic applications. <i>Beilstein Journal of Organic Chemistry</i> , 2021, 17, 908-931.	1.3	20
167	Transcription Regulation Through Nascent RNA Folding. <i>Journal of Molecular Biology</i> , 2021, 433, 166975.	2.0	30
168	Global in situ profiling of RNA-RNA spatial interactions with RIC-seq. <i>Nature Protocols</i> , 2021, 16, 2916-2946.	5.5	21
169	Small molecule targeting of biologically relevant RNA tertiary and quaternary structures. <i>Cell Chemical Biology</i> , 2021, 28, 594-609.	2.5	28
170	Enhancements of the Gaussian network model in describing nucleotide residue fluctuations for RNA. <i>Chinese Physics B</i> , 2021, 30, 058701.	0.7	1
171	An exon-biased biophysical approach and NMR spectroscopy define the secondary structure of a conserved helical element within the HOTAIR long non-coding RNA. <i>Journal of Structural Biology</i> , 2021, 213, 107728.	1.3	3
172	Computer-aided design of RNA-targeted small molecules: A growing need in drug discovery. <i>CheM</i> , 2021, 7, 2965-2988.	5.8	39
173	Directed Evolution of 2-Fluoro-Modified, RNA-Supported Carbohydrate Clusters That Bind Tightly to HIV Antibody 2G12. <i>Journal of the American Chemical Society</i> , 2021, 143, 8565-8571.	6.6	19
175	Aptamers isolated against mosquito-borne pathogens. <i>World Journal of Microbiology and Biotechnology</i> , 2021, 37, 131.	1.7	2
176	Gold Nanoparticles as Carriers for Functional RNA Nanostructures. <i>Bioconjugate Chemistry</i> , 2021, 32, 1667-1674.	1.8	13
178	Importance of Anion– π Interactions in RNA GAAA and GGAG Tetraloops: A Combined MD and QM Study. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 6624-6633.	2.3	5
179	Scum of the Earth: A Hypothesis for Prebiotic Multi-Compartmentalised Environments. <i>Life</i> , 2021, 11, 976.	1.1	4
181	Preparation of a Conditional RNA Switch. <i>Methods in Molecular Biology</i> , 2017, 1632, 303-324.	0.4	11
182	Nucleic Acids as Supramolecular Targets. <i>Monographs in Supramolecular Chemistry</i> , 2013, , 213-259.	0.2	5
183	DSSR-enabled innovative schematics of 3D nucleic acid structures with PyMOL. <i>Nucleic Acids Research</i> , 2020, 48, e74.	6.5	19

#	ARTICLE	IF	CITATIONS
187	Structure of an RNA helix with pyrimidine mismatches and cross-strand stacking. Acta Crystallographica Section F, Structural Biology Communications, 2019, 75, 652-656.	0.4	4
188	New Perspectives on DNA and RNA Triplexes As Effectors of Biological Activity. PLoS Genetics, 2015, 11, e1005696.	1.5	99
189	CHSalign: A Web Server That Builds upon Junction-Explorer and RNAJAG for Pairwise Alignment of RNA Secondary Structures with Coaxial Helical Stacking. PLoS ONE, 2016, 11, e0147097.	1.1	9
190	Secondary Structural Elements of the HCV X-region Involved in Viral Replication. Journal of Clinical and Translational Hepatology, 2015, 3, 1-8.	0.7	1
191	SARS-CoV-2 Ribosomal Frameshifting Pseudoknot: Detection of Inter-viral Structural Similarity. , 2021, , ,		2
192	Modeling Noncanonical RNA Base Pairs by a Coarse-Grained IsRNA2 Model. Journal of Physical Chemistry B, 2021, 125, 11907-11915.	1.2	13
194	Investigating RNAs Involved in Translational Control by NMR and SAXS. , 2012, , 141-172.		0
195	Introduction: Nucleic Acids Structure, Function, and Why Studying Them In Vacuo. Physical Chemistry in Action, 2014, , 3-20.	0.1	1
196	Probing the Structural Basis of Retroviral RNA Functions via NMR Spectroscopy. , 2014, , 147-168.		0
197	Rational Design of RNA Nanoparticles and Nanoarrays. , 2014, , 229-250.		0
201	Effects of osmolytes and macromolecular crowders on stable GAAA tetraloops and their preference for a CG closing base pair. PeerJ, 2018, 6, e4236.	0.9	1
203	Biotechnological and Therapeutic Applications of Natural Nucleic Acid Structural Motifs. Topics in Current Chemistry, 2020, 378, 26.	3.0	3
204	Pseudoknot length modulates the folding, conformational dynamics, and robustness of Xrn1 resistance of flaviviral xrRNAs. Nature Communications, 2021, 12, 6417.	5.8	15
205	rsRNASP: A residue-separation-based statistical potential for RNA 3D structure evaluation. Biophysical Journal, 2022, 121, 142-156.	0.2	17
207	RNAStat: An Integrated Tool for Statistical Analysis of RNA 3D Structures. Frontiers in Bioinformatics, 2022, 1, .	1.0	1
208	Cooperativity and Interdependency between RNA Structure and RNA-RNA Interactions. Non-coding RNA, 2021, 7, 81.	1.3	5
209	Emerging roles of RNA-RNA interactions in transcriptional regulation. Wiley Interdisciplinary Reviews RNA, 2022, 13, e1712.	3.2	8
211	RNA Triplex Structures Revealed by WAXS-Driven MD Simulations. SSRN Electronic Journal, 0, , .	0.4	0

#	ARTICLE	IF	CITATIONS
212	Architecture of RNA-RNA interactions. <i>Current Opinion in Genetics and Development</i> , 2022, 72, 138-144.	1.5	6
214	Structural Insights into Human Adenovirus Type 4 Virus-Associated RNA I. <i>International Journal of Molecular Sciences</i> , 2022, 23, 3103.	1.8	0
215	Protein-Encoding Free-Standing RNA Hydrogel for Sub-Compartmentalized Translation. <i>Advanced Materials</i> , 2022, 34, e2110424.	11.1	11
216	RNA-Strukturaufklärung durch chemische Modifikation. , 2022, , 811-829.		0
217	Enhanced Triplex Hybridization of DNA and RNA via Syndiotactic Side Chain Presentation in Minimal bPNAs. <i>Biochemistry</i> , 2022, 61, 85-91.	1.2	5
218	Thoughts on how to think (and talk) about RNA structure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2112677119.	3.3	71
219	RNA-Binding Macrocyclic Peptides. <i>Frontiers in Molecular Biosciences</i> , 2022, 9, 883060.	1.6	5
220	Regulation of Gene Expression Through Effector-dependent Conformational Switching by Cobalamin Riboswitches. <i>Journal of Molecular Biology</i> , 2022, 434, 167585.	2.0	8
223	The dynamic, motile and deformative properties of RNA nanoparticles facilitate the third milestone of drug development. <i>Advanced Drug Delivery Reviews</i> , 2022, 186, 114316.	6.6	17
224	Lineage-specific insertions in T-box riboswitches modulate antibiotic binding and action. <i>Nucleic Acids Research</i> , 2022, , .	6.5	2
225	A Biopharmaceutical Perspective on Higher-Order Structure and Thermal Stability of mRNA Vaccines. <i>Molecular Pharmaceutics</i> , 2022, 19, 2022-2031.	2.3	24
226	Insights into the structural stability of major groove RNA triplexes by WAXS-guided MD simulations. <i>Cell Reports Physical Science</i> , 2022, 3, 100971.	2.8	5
227	Cryo neutron crystallography demonstrates influence of RNA 2'-OH orientation on conformation, sugar pucker and water structure. <i>Nucleic Acids Research</i> , 0, , .	6.5	0
228	Exploring the multiple conformational states of RNA genome through interhelical dynamics and network analysis. <i>Journal of Molecular Graphics and Modelling</i> , 2022, 116, 108264.	1.3	1
229	Template-Free Assembly of Functional RNAs by Loop-Closing Ligation. <i>Journal of the American Chemical Society</i> , 2022, 144, 13920-13927.	6.6	10
230	Phase separation in viral infections. <i>Trends in Microbiology</i> , 2022, 30, 1217-1231.	3.5	26
231	Base-Stacking Heterogeneity in RNA Resolved by Fluorescence-Detected Circular Dichroism Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 8010-8018.	2.1	2
232	BAT-Net: An enhanced RNA Secondary Structure prediction via bidirectional GRU-based network with attention mechanism. <i>Computational Biology and Chemistry</i> , 2022, 101, 107765.	1.1	3

#	ARTICLE	IF	CITATIONS
233	Dynamic effects of the spine of hydrated magnesium on viral RNA pseudoknot structure. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 24570-24581.	1.3	5
234	Polypharmacology in Drug Design and Discovery—Basis for Rational Design of Multitarget Drugs. , 2022, , 397-533.		1
235	Assessment of tools for RNA secondary structure prediction and extraction: a final-user perspective. <i>Journal of Biomolecular Structure and Dynamics</i> , 2023, 41, 6917-6936.	2.0	1
237	Modified Nucleotides for Chemical and Enzymatic Synthesis of Therapeutic RNA. <i>Current Medicinal Chemistry</i> , 2023, 30, 1320-1347.	1.2	3
238	RNA as a Major-Groove Ligand: RNA–RNA and RNA–DNA Triplexes Formed by GAA and UUC or TTC Sequences. <i>ACS Omega</i> , 2022, 7, 38728-38743.	1.6	3
240	An atypical RNA quadruplex marks RNAs as vectors for gene silencing. <i>Nature Structural and Molecular Biology</i> , 2022, 29, 1113-1121.	3.6	21
241	Therapeutic Potential of Aptamer–Protein Interactions. <i>ACS Pharmacology and Translational Science</i> , 2022, 5, 1211-1227.	2.5	9
242	Characterizing the Conformational Free-Energy Landscape of RNA Stem-Loops Using Single-Molecule Field-Effect Transistors. <i>Journal of the American Chemical Society</i> , 2023, 145, 402-412.	6.6	1
243	DNA Droplets: Intelligent, Dynamic Fluid. <i>Advanced Biology</i> , 2023, 7, .	1.4	11
245	Context-dependence of T-loop Mediated Long-range RNA Tertiary Interactions. <i>Journal of Molecular Biology</i> , 2023, 435, 168070.	2.0	3
246	Progress of Metal–Based Anticancer Chemotherapeutic Agents in Last two Decades and their Comprehensive Biological (DNA/RNA Binding, Cleavage and Cytotoxicity Activity) Studies. <i>Chemical Record</i> , 2023, 23, .	2.9	3
247	Biophysical characterization of the structure of a SARS-CoV-2 self-amplifying RNA (saRNA) vaccine. <i>Biology Methods and Protocols</i> , 2023, 8, .	1.0	0
249	RIP-PEN-seq identifies a class of kink-turn RNAs as splicing regulators. <i>Nature Biotechnology</i> , 2024, 42, 119-131.	9.4	5
257	Building with DNA: From Curiosity-Driven Research to Practice. <i>Natural Computing Series</i> , 2023, , 173-188.	2.2	0
264	Probing Techniques of Secondary and Tertiary RNA Structure and a Case Study for RNA G-Quadruplexes. <i>RNA Technologies</i> , 2023, , 159-182.	0.2	0
267	Unraveling RNA by—Mechanical Unzipping. <i>RNA Technologies</i> , 2023, , 73-92.	0.2	0
268	RNA Versus Protein, How Structure Influences Targeting, a New Challenge for Drug Discovery. <i>RNA Technologies</i> , 2023, , 119-144.	0.2	0
272	Dynamics and Function of sRNA/mRNAs Under the Scrutiny of Computational Simulation Methods. <i>Methods in Molecular Biology</i> , 2024, , 207-238.	0.4	0

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