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List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Crystal structure of a hepatitis delta virus ribozyme. Nature, 1998, 395, 567-574.	27.8	747
2	Recognition by Max of its cognate DNA through a dimeric b/HLH/Z domain. Nature, 1993, 363, 38-45.	27.8	727
3	Molecular basis of mouse microphthalmia (mi) mutations helps explain their developmental and phenotypic consequences. Nature Genetics, 1994, 8, 256-263.	21.4	505
4	Crystal structure of a hairpin ribozyme–inhibitor complex with implications for catalysis. Nature, 2001, 410, 780-786.	27.8	441
5	Structural Basis of glmS Ribozyme Activation by Glucosamine-6-Phosphate. Science, 2006, 313, 1752-1756.	12.6	357
6	The structure and function of small nucleolar ribonucleoproteins. Nucleic Acids Research, 2007, 35, 1452-1464.	14.5	337
7	Structural basis for activity of highly efficient RNA mimics of green fluorescent protein. Nature Structural and Molecular Biology, 2014, 21, 658-663.	8.2	299
8	Transition State Stabilization by a Catalytic RNA. Science, 2002, 298, 1421-1424.	12.6	271
9	Cocrystal Structure of a tRNA $\hat{\Gamma}$ 55 Pseudouridine Synthase. Cell, 2001, 107, 929-939.	28.9	259
10	Pseudouridine Synthases. Chemistry and Biology, 2006, 13, 1125-1135.	6.0	236
11	Crystal Structures of the Thi-Box Riboswitch Bound to Thiamine Pyrophosphate Analogs Reveal Adaptive RNA-Small Molecule Recognition. Structure, 2006, 14, 1459-1468.	3.3	236
12	Structural basis of G-quadruplex unfolding by the DEAH/RHA helicase DHX36. Nature, 2018, 558, 465-469.	27.8	224
13	Recognition of the bacterial second messenger cyclic diguanylate by its cognate riboswitch. Nature Structural and Molecular Biology, 2009, 16, 1212-1217.	8.2	176
14	Riboswitches: Discovery of Drugs That Target Bacterial Gene-Regulatory RNAs. Accounts of Chemical Research, 2011, 44, 1329-1338.	15.6	175
15	Use of Cis- and Trans-Ribozymes to Remove 5' and 3' Heterogeneities From Milligrams of In Vitro Transcribed RNA. Nucleic Acids Research, 1996, 24, 977-978.	14.5	173
16	Small Self-cleaving Ribozymes. Cold Spring Harbor Perspectives in Biology, 2010, 2, a003574-a003574.	5.5	164
17	<i>RNA-Puzzles</i> Round II: assessment of RNA structure prediction programs applied to three large RNA structures. Rna, 2015, 21, 1066-1084.	3.5	161
18	Cocrystal structure of a class I preQ1 riboswitch reveals a pseudoknot recognizing an essential hypermodified nucleobase. Nature Structural and Molecular Biology, 2009, 16, 343-344.	8.2	160

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19	RNA-Puzzles Round III: 3D RNA structure prediction of five riboswitches and one ribozyme. Rna, 2017, 23, 655-672.	3.5	158
20	Rapid Construction of Empirical RNA Fitness Landscapes. Science, 2010, 330, 376-379.	12.6	157
21	Probing the solution structure of the DNAâ€binding protein Max by a combination of proteolysis and mass spectrometry. Protein Science, 1995, 4, 1088-1099.	7.6	149
22	Riboswitches: small-molecule recognition by gene regulatory RNAs. Current Opinion in Structural Biology, 2007, 17, 273-279.	5.7	140
23	Ribozymes and Riboswitches: Modulation of RNA Function by Small Molecules. Biochemistry, 2010, 49, 9123-9131.	2.5	140
24	Co-crystal structure of a T-box riboswitch stem I domain in complex with its cognate tRNA. Nature, 2013, 500, 363-366.	27.8	136
25	Structural basis of specific tRNA aminoacylation by a small in vitro selected ribozyme. Nature, 2008, 454, 358-361.	27.8	133
26	Use of dynamic light scattering to assess crystallizability of macromolecules and macromolecular assemblies. Structure, 1994, 2, 357-359.	3.3	131
27	Structure of Protein L7Ae Bound to a K-Turn Derived from an Archaeal Box H/ACA sRNA at 1.8 Ã Resolution. Structure, 2004, 12, 893-903.	3.3	131
28	A general module for RNA crystallization. Journal of Molecular Biology, 1998, 279, 621-631.	4.2	117
29	A homodimer interface without base pairs in an RNA mimic of red fluorescent protein. Nature Chemical Biology, 2017, 13, 1195-1201.	8.0	111
30	Structural Basis for Specific, High-Affinity Tetracycline Binding by an In Vitro Evolved Aptamer and Artificial Riboswitch. Chemistry and Biology, 2008, 15, 1125-1137.	6.0	108
31	Structural basis for high-affinity fluorophore binding and activation by RNA Mango. Nature Chemical Biology, 2017, 13, 807-813.	8.0	105
32	The Cbf5–Nop10 complex is a molecular bracket that organizes box H/ACA RNPs. Nature Structural and Molecular Biology, 2005, 12, 1101-1107.	8.2	104
33	Direct pKaMeasurement of the Active-Site Cytosine in a Genomic Hepatitis Delta Virus Ribozyme. Journal of the American Chemical Society, 2001, 123, 8447-8452.	13.7	100
34	RNA FOLDS: Insights from Recent Crystal Structures. Annual Review of Biophysics and Biomolecular Structure, 1999, 28, 57-73.	18.3	97
35	Idiosyncratically tuned switching behavior of riboswitch aptamer domains revealed by comparative small-angle X-ray scattering analysis. Rna, 2010, 16, 598-609.	3.5	97
36	Synthesis and applications of RNAs with position-selective labelling and mosaic composition. Nature, 2015, 522, 368-372.	27.8	95

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37	Essential Role of an Active-Site Guanine in <i>glmS</i> Ribozyme Catalysis. Journal of the American Chemical Society, 2007, 129, 14858-14859.	13.7	87
38	A nested double pseudoknot is required for self-cleavage activity of both the genomic and antigenomic hepatitis delta virus ribozymes. Rna, 1999, 5, 720-727.	3.5	85
39	Insights into the mechanism of a G-quadruplex-unwinding DEAH-box helicase. Nucleic Acids Research, 2015, 43, 2223-2231.	14.5	84
40	Crystal Structure of Pseudouridine Synthase RluA: Indirect Sequence Readout through Protein-Induced RNA Structure. Molecular Cell, 2006, 24, 535-545.	9.7	83
41	Structure and functional reselection of the Mango-III fluorogenic RNA aptamer. Nature Chemical Biology, 2019, 15, 472-479.	8.0	83
42	Requirement of Helix P2.2 and Nucleotide G1 for Positioning the Cleavage Site and Cofactor of the glmS Ribozyme. Journal of Molecular Biology, 2007, 373, 178-189.	4.2	82
43	[10] Dynamic light scattering in evaluating crystallizability of macromolecules. Methods in Enzymology, 1997, 276, 157-166.	1.0	80
44	Validating Fragment-Based Drug Discovery for Biological RNAs: Lead Fragments Bind and Remodel the TPP Riboswitch Specifically. Chemistry and Biology, 2014, 21, 591-595.	6.0	79
45	Thermodynamic analysis of ligand binding and ligand binding-induced tertiary structure formation by the thiamine pyrophosphate riboswitch. Rna, 2010, 16, 186-196.	3.5	73
46	The Box H/ACA Ribonucleoprotein Complex: Interplay of RNA and Protein Structures in Post-transcriptional RNA Modification. Journal of Biological Chemistry, 2010, 285, 805-809.	3.4	72
47	Protein and RNA dynamical fingerprinting. Nature Communications, 2019, 10, 1026.	12.8	72
48	Riboswitch function: Flipping the switch or tuning the dimmer?. RNA Biology, 2010, 7, 328-332.	3.1	69
49	RNA-modifying enzymes. Current Opinion in Structural Biology, 2003, 13, 49-55.	5.7	66
50	Synthetic ligands for PreQ1 riboswitches provide structural and mechanistic insights into targeting RNA tertiary structure. Nature Communications, 2019, 10, 1501.	12.8	66
51	Long-Range Interactions in Riboswitch Control of Gene Expression. Annual Review of Biophysics, 2017, 46, 455-481.	10.0	65
52	Allosteric Tertiary Interactions Preorganize the c-di-GMP Riboswitch and Accelerate Ligand Binding. ACS Chemical Biology, 2012, 7, 920-927.	3.4	64
53	The tRNA Elbow in Structure, Recognition and Evolution. Life, 2016, 6, 3.	2.4	63
54	The <i>glmS</i> ribozyme: use of a small molecule coenzyme by a gene-regulatory RNA. Quarterly Reviews of Biophysics, 2010, 43, 423-447.	5.7	59

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55	The hairpin ribozyme. Biopolymers, 2004, 73, 71-78.	2.4	56
56	RNA G-quadruplex is resolved by repetitive and ATP-dependent mechanism of DHX36. Nature Communications, 2019, 10, 1855.	12.8	56
57	The emerging structural complexity of G-quadruplex RNAs. Rna, 2021, 27, 390-402.	3.5	56
58	Crystal structure of a câ€diâ€ <scp>AMP</scp> riboswitch reveals an internally pseudoâ€dimeric <scp>RNA</scp> . EMBO Journal, 2014, 33, 2692-2703.	7.8	53
59	Dramatic Improvement of Crystals of Large RNAs by Cation Replacement and Dehydration. Structure, 2014, 22, 1363-1371.	3.3	52
60	Tracking RNA with light: selection, structure, and design of fluorescence turn-on RNA aptamers. Quarterly Reviews of Biophysics, 2019, 52, e8.	5.7	50
61	YbxF and YlxQ are bacterial homologs of L7Ae and bind K-turns but not K-loops. Rna, 2012, 18, 759-770.	3.5	49
62	Direct Evaluation of tRNA Aminoacylation Status by the T-Box Riboswitch Using tRNA-mRNA Stacking and Steric Readout. Molecular Cell, 2014, 55, 148-155.	9.7	49
63	Crystal Structures of the Mango-II RNA Aptamer Reveal Heterogeneous Fluorophore Binding and Guide Engineering of Variants with Improved Selectivity and Brightness. Biochemistry, 2018, 57, 3544-3548.	2.5	49
64	Use of the spliceosomal protein U1A to facilitate crystallization and structure determination of complex RNAs. Methods, 2010, 52, 159-167.	3.8	46
65	New molecular engineering approaches for crystallographic studies of large RNAs. Current Opinion in Structural Biology, 2014, 26, 9-15.	5.7	46
66	A Helicase Unwinds Hexanucleotide Repeat RNA G-Quadruplexes and Facilitates Repeat-Associated Non-AUG Translation. Journal of the American Chemical Society, 2021, 143, 7368-7379.	13.7	43
67	RNA quaternary structure and global symmetry. Trends in Biochemical Sciences, 2015, 40, 211-220.	7.5	40
68	Structural Principles of Fluorescent RNA Aptamers. Trends in Pharmacological Sciences, 2017, 38, 928-939.	8.7	40
69	The Roles of Metal lons in Regulation by Riboswitches. Metal lons in Life Sciences, 2011, 9, 141-173.	1.0	40
70	Recognition of the bacterial alarmone ZMP through long-distance association of two RNA subdomains. Nature Structural and Molecular Biology, 2015, 22, 679-685.	8.2	39
71	Modulation of quaternary structure and enhancement of ligand binding by the K-turn of tandem glycine riboswitches. Rna, 2013, 19, 167-176.	3.5	38
72	Structure and mechanism ofÂtheÂTâ€box riboswitches. Wiley Interdisciplinary Reviews RNA, 2015, 6, 419-433.	6.4	38

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73	The <i>glmS</i> Ribozyme Tunes the Catalytically Critical p <i>K</i> _a of Its Coenzyme Glucosamine-6-phosphate. Journal of the American Chemical Society, 2011, 133, 14188-14191.	13.7	36
74	Real-time monitoring of single ZTP riboswitches reveals a complex and kinetically controlled decision landscape. Nature Communications, 2020, 11, 4531.	12.8	36
75	Crystal structure of the highly divergent pseudouridine synthase TruD reveals a circular permutation of a conserved fold. Rna, 2004, 10, 1026-1033.	3.5	34
76	Global analysis of riboswitches by small-angle X-ray scattering and calorimetry. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2014, 1839, 1020-1029.	1.9	34
77	From fluorescent proteins to fluorogenic RNAs: Tools for imaging cellular macromolecules. Protein Science, 2019, 28, 1374-1386.	7.6	31
78	An in vitro evolved glmS ribozyme has the wild-type fold but loses coenzyme dependence. Nature Chemical Biology, 2013, 9, 805-810.	8.0	28
79	Rapid RNA–ligand interaction analysis through high-information content conformational and stability landscapes. Nature Communications, 2015, 6, 8898.	12.8	28
80	Precursor complex structure of pseudouridine synthase TruB suggests coupling of active site perturbations to an RNA-sequestering peripheral protein domain. Protein Science, 2005, 14, 2201-2206.	7.6	26
81	Crystal structure of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) frameshifting pseudoknot. Rna, 2022, 28, 239-249.	3.5	25
82	Binding between G Quadruplexes at the Homodimer Interface of the Corn RNA Aptamer Strongly Activates Thioflavin T Fluorescence. Cell Chemical Biology, 2019, 26, 1159-1168.e4.	5.2	24
83	Convergent Use of Heptacoordination for Cation Selectivity by RNA and Protein Metalloregulators. Cell Chemical Biology, 2018, 25, 962-973.e5.	5.2	23
84	Fluorogenic aptamers resolve the flexibility of RNA junctions using orientation-dependent FRET. Rna, 2021, 27, 433-444.	3.5	22
85	Anti-cooperative Biphasic Equilibrium Binding of Transcription Factor Upstream Stimulatory Factor to Its Cognate DNA Monitored by Protein Fluorescence Changes. Journal of Biological Chemistry, 1995, 270, 19325-19329.	3.4	21
86	Crystallization of the Hairpin Ribozyme: Illustrative Protocols. , 2004, 252, 303-312.		21
87	Glucosamine and Glucosamine-6-phosphate Derivatives: Catalytic Cofactor Analogues for the glmS Ribozyme. Journal of Organic Chemistry, 2013, 78, 4730-4743.	3.2	21
88	Structure-Guided Engineering of the Homodimeric Mango-IV Fluorescence Turn-on Aptamer Yields an RNA FRET Pair. Structure, 2020, 28, 776-785.e3.	3.3	20
89	SEWAL: an open-source platform for next-generation sequence analysis and visualization. Nucleic Acids Research, 2010, 38, 7908-7915.	14.5	19
90	Use of a coenzyme by the <i>glmS</i> ribozyme-riboswitch suggests primordial expansion of RNA chemistry by small molecules. Philosophical Transactions of the Royal Society B: Biological Sciences, 2011, 366, 2942-2948.	4.0	19

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91	Many Activities, One Structure: Functional Plasticity of Ribozyme Folds. Molecules, 2016, 21, 1570.	3.8	19
92	Structure-Guided Engineering of the Regioselectivity of RNA Ligase Ribozymes. Journal of the American Chemical Society, 2009, 131, 3532-3540.	13.7	18
93	Methods to Crystallize RNA. Current Protocols in Nucleic Acid Chemistry, 2000, 1, Unit 7.6.	0.5	16
94	Crystallization of the glmS Ribozyme-Riboswitch. Methods in Molecular Biology, 2009, 540, 129-139.	0.9	16
95	U1A RNA-binding domain at 1.8â€Ã resolution. Acta Crystallographica Section D: Biological Crystallography, 2003, 59, 1521-1524.	2.5	14
96	A divalent cation-dependent variant of the <i>glmS</i> ribozyme with stringent Ca ²⁺ selectivity co-opts a preexisting nonspecific metal ion-binding site. Rna, 2017, 23, 355-364.	3.5	13
97	Parallel Discovery Strategies Provide a Basis for Riboswitch Ligand Design. Cell Chemical Biology, 2020, 27, 1241-1249.e4.	5.2	13
98	The fluorescent aptamer Squash extensively repurposes the adenine riboswitch fold. Nature Chemical Biology, 2022, 18, 191-198.	8.0	12
99	A Flexible, Scalable Method for Preparation of Homogeneous Aminoacylated tRNAs. Methods in Enzymology, 2014, 549, 105-113.	1.0	9
100	Isothermal Titration Calorimetry Measurements of Riboswitch-Ligand Interactions. Methods in Molecular Biology, 2019, 1964, 75-87.	0.9	9
101	In vitro evolution of coenzyme-independent variants from the glmS ribozyme structural scaffold. Methods, 2016, 106, 76-81.	3.8	8
102	Analysis of Riboswitch Structure and Ligand Binding Using Small-Angle X-ray Scattering (SAXS). Methods in Molecular Biology, 2014, 1103, 211-225.	0.9	8
103	Engineering Crystal Packing in RNA Structures I: Past and Future Strategies for Engineering RNA Packing in Crystals. Crystals, 2021, 11, 952.	2.2	7
104	Use of the U1A Protein to Facilitate Crystallization and Structure Determination of Large RNAs. Methods in Molecular Biology, 2016, 1320, 67-76.	0.9	7
105	Co-crystal structure of the <i>i</i> Mango-III fluorescent RNA aptamer using an X-ray free-electron laser. Acta Crystallographica Section F, Structural Biology Communications, 2019, 75, 547-551.	0.8	6
106	How RNA closes a Diel. Nature Structural and Molecular Biology, 2005, 12, 206-208.	8.2	5
107	RNA Binding: Getting Specific about Specificity. Cell Chemical Biology, 2016, 23, 1177-1178.	5.2	4
108	An uncommon [K ⁺ (Mg ²⁺) ₂] metal ion triad imparts stability and selectivity to the Guanidine-I riboswitch. Rna, 2021, 27, 1257-1264.	3.5	4

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109	Crystallographic Analysis of TPP Riboswitch Binding by Small-Molecule Ligands Discovered Through Fragment-Based Drug Discovery Approaches. Methods in Enzymology, 2014, 549, 221-233.	1.0	3
110	Monitoring co-transcriptional folding of riboswitches through helicase unwinding. Methods in Enzymology, 2019, 623, 209-227.	1.0	2
111	Post-crystallization Improvement of RNA Crystal Diffraction Quality. Methods in Molecular Biology, 2015, 1316, 13-24.	0.9	2
112	An RNP switch raises a roadblock. Nature Chemical Biology, 2010, 6, 5-6.	8.0	1
113	Stop the nonsense. Nature, 2011, 474, 289-290.	27.8	1
114	On the shoulders of giants. Rna, 2015, 21, 504-505.	3.5	1
115	Improving RNA Crystal Diffraction Quality by Postcrystallization Treatment. Methods in Molecular Biology, 2021, 2323, 25-37.	0.9	1
116	Post-crystallization Improvement of RNA Crystals by Synergistic Ion Exchange and Dehydration. Bio-protocol, 2015, 5, .	0.4	1
117	The bacterial yjdF riboswitch regulates translation through its tRNA-like fold. Journal of Biological Chemistry, 2022, 298, 101934.	3.4	1
118	RNA methods: From sequence to structure and dynamics. Methods, 2010, 52, 123-124.	3.8	0
119	Ribozyme Structural Elements: Hairpin Ribozyme. , 2004, , 743-746.		0
120	Ribozymes and riboswitches: modulation of RNA function by small molecules. FASEB Journal, 2009, 23, 326.1.	0.5	0