

# Ronald R Breaker

## List of Publications by Year in descending order

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218  
papers

33,840  
citations

2975

93  
h-index

3830

178  
g-index

232  
all docs

232  
docs citations

232  
times ranked

13238  
citing authors

#	ARTICLE	IF	CITATIONS
1	A DNA enzyme that cleaves RNA. <i>Chemistry and Biology</i> , 1994, 1, 223-229.	6.0	1,242
2	Thiamine derivatives bind messenger RNAs directly to regulate bacterial gene expression. <i>Nature</i> , 2002, 419, 952-956.	27.8	1,075
3	Control of gene expression by a natural metabolite-responsive ribozyme. <i>Nature</i> , 2004, 428, 281-286.	27.8	847
4	Gene regulation by riboswitches. <i>Nature Reviews Molecular Cell Biology</i> , 2004, 5, 451-463.	37.0	799
5	Importance of the Debye Screening Length on Nanowire Field Effect Transistor Sensors. <i>Nano Letters</i> , 2007, 7, 3405-3409.	9.1	716
6	REGULATION OF BACTERIAL GENE EXPRESSION BY RIBOSWITCHES. <i>Annual Review of Microbiology</i> , 2005, 59, 487-517.	7.3	687
7	Genetic Control by a Metabolite Binding mRNA. <i>Chemistry and Biology</i> , 2002, 9, 1043-1049.	6.0	686
8	Riboswitches Control Fundamental Biochemical Pathways in <i>Bacillus subtilis</i> and Other Bacteria. <i>Cell</i> , 2003, 113, 577-586.	28.9	665
9	Riboswitches in Eubacteria Sense the Second Messenger Cyclic Di-GMP. <i>Science</i> , 2008, 321, 411-413.	12.6	654
10	An mRNA structure that controls gene expression by binding FMN. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 15908-15913.	7.1	599
11	Riboswitches and the RNA World. <i>Cold Spring Harbor Perspectives in Biology</i> , 2012, 4, a003566-a003566.	5.5	529
12	The Structural and Functional Diversity of Metabolite-Binding Riboswitches. <i>Annual Review of Biochemistry</i> , 2009, 78, 305-334.	11.1	506
13	Structural Basis for Discriminative Regulation of Gene Expression by Adenine- and Guanine-Sensing mRNAs. <i>Chemistry and Biology</i> , 2004, 11, 1729-1741.	6.0	505
14	Riboswitches as versatile gene control elements. <i>Current Opinion in Structural Biology</i> , 2005, 15, 342-348.	5.7	503
15	Relationship between internucleotide linkage geometry and the stability of RNA. <i>Rna</i> , 1999, 5, 1308-1325.	3.5	491
16	A Glycine-Dependent Riboswitch That Uses Cooperative Binding to Control Gene Expression. <i>Science</i> , 2004, 306, 275-279.	12.6	491
17	Kinetics of RNA Degradation by Specific Base Catalysis of Transesterification Involving the 2'-Hydroxyl Group. <i>Journal of the American Chemical Society</i> , 1999, 121, 5364-5372.	13.7	479
18	Adenine riboswitches and gene activation by disruption of a transcription terminator. <i>Nature Structural and Molecular Biology</i> , 2004, 11, 29-35.	8.2	471

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19	Prospects for Riboswitch Discovery and Analysis. <i>Molecular Cell</i> , 2011, 43, 867-879.	9.7	445
20	New RNA motifs suggest an expanded scope for riboswitches in bacterial genetic control. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 6421-6426.	7.1	432
21	The Speed of RNA Transcription and Metabolite Binding Kinetics Operate an FMN Riboswitch. <i>Molecular Cell</i> , 2005, 18, 49-60.	9.7	430
22	Riboswitches as antibacterial drug targets. <i>Nature Biotechnology</i> , 2006, 24, 1558-1564.	17.5	419
23	The distributions, mechanisms, and structures of metabolite-binding riboswitches. <i>Genome Biology</i> , 2007, 8, R239.	9.6	414
24	An mRNA structure that controls gene expression by binding S-adenosylmethionine. <i>Nature Structural and Molecular Biology</i> , 2003, 10, 701-707.	8.2	406
25	Structural basis for gene regulation by a thiamine pyrophosphate-sensing riboswitch. <i>Nature</i> , 2006, 441, 1167-1171.	27.8	404
26	A DNA enzyme with Mg <sup>2+</sup> -dependent RNA phosphoesterase activity. <i>Chemistry and Biology</i> , 1995, 2, 655-660.	6.0	393
27	Control of alternative RNA splicing and gene expression by eukaryotic riboswitches. <i>Nature</i> , 2007, 447, 497-500.	27.8	377
28	Riboswitch diversity and distribution. <i>Rna</i> , 2017, 23, 995-1011.	3.5	374
29	Metabolite-binding RNA domains are present in the genes of eukaryotes. <i>Rna</i> , 2003, 9, 644-647.	3.5	372
30	Widespread Genetic Switches and Toxicity Resistance Proteins for Fluoride. <i>Science</i> , 2012, 335, 233-235.	12.6	356
31	Comparative genomics reveals 104 candidate structured RNAs from bacteria, archaea, and their metagenomes. <i>Genome Biology</i> , 2010, 11, R31.	9.6	348
32	Rational design of allosteric ribozymes. <i>Chemistry and Biology</i> , 1997, 4, 453-459.	6.0	347
33	DNA enzymes. <i>Nature Biotechnology</i> , 1997, 15, 427-431.	17.5	340
34	Natural and engineered nucleic acids as tools to explore biology. <i>Nature</i> , 2004, 432, 838-845.	27.8	336
35	Engineering precision RNA molecular switches. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1999, 96, 3584-3589.	7.1	324
36	An Allosteric Self-Splicing Ribozyme Triggered by a Bacterial Second Messenger. <i>Science</i> , 2010, 329, 845-848.	12.6	309

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37	An mRNA structure in bacteria that controls gene expression by binding lysine. <i>Genes and Development</i> , 2003, 17, 2688-2697.	5.9	303
38	Coenzyme B12 riboswitches are widespread genetic control elements in prokaryotes. <i>Nucleic Acids Research</i> , 2004, 32, 143-150.	14.5	292
39	Identification of 22 candidate structured RNAs in bacteria using the CMfinder comparative genomics pipeline. <i>Nucleic Acids Research</i> , 2007, 35, 4809-4819.	14.5	292
40	In-Line Probing Analysis of Riboswitches. <i>Methods in Molecular Biology</i> , 2008, 419, 53-67.	0.9	289
41	Riboswitch Control of Gene Expression in Plants by Splicing and Alternative 3' End Processing of mRNAs. <i>Plant Cell</i> , 2007, 19, 3437-3450.	6.6	281
42	Engineered allosteric ribozymes as biosensor components. <i>Current Opinion in Biotechnology</i> , 2002, 13, 31-39.	6.6	270
43	The Kinetics of Ligand Binding by an Adenine-Sensing Riboswitch. <i>Biochemistry</i> , 2005, 44, 13404-13414.	2.5	264
44	Structural basis of ligand binding by a c-di-GMP riboswitch. <i>Nature Structural and Molecular Biology</i> , 2009, 16, 1218-1223.	8.2	257
45	Genetic Control by Metabolite-Binding Riboswitches. <i>ChemBioChem</i> , 2003, 4, 1024-1032.	2.6	254
46	Cleaving DNA with DNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1998, 95, 2233-2237.	7.1	249
47	Riboswitches in eubacteria sense the second messenger c-di-AMP. <i>Nature Chemical Biology</i> , 2013, 9, 834-839.	8.0	247
48	In Vitro Selection of Catalytic Polynucleotides. <i>Chemical Reviews</i> , 1997, 97, 371-390.	47.7	243
49	Thiamine Pyrophosphate Riboswitches Are Targets for the Antimicrobial Compound Pyrithiamine. <i>Chemistry and Biology</i> , 2005, 12, 1325-1335.	6.0	237
50	In vitro selection of self-cleaving DNAs. <i>Chemistry and Biology</i> , 1996, 3, 1039-1046.	6.0	234
51	Tandem Riboswitch Architectures Exhibit Complex Gene Control Functions. <i>Science</i> , 2006, 314, 300-304.	12.6	232
52	An amino acid as a cofactor for a catalytic polynucleotide. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1998, 95, 6027-6031.	7.1	227
53	R2R - software to speed the depiction of aesthetic consensus RNA secondary structures. <i>BMC Bioinformatics</i> , 2011, 12, 3.	2.6	226
54	A riboswitch selective for the queuosine precursor preQ1 contains an unusually small aptamer domain. <i>Nature Structural and Molecular Biology</i> , 2007, 14, 308-317.	8.2	224

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55	A widespread self-cleaving ribozyme class is revealed by bioinformatics. <i>Nature Chemical Biology</i> , 2014, 10, 56-60.	8.0	217
56	Immobilized RNA switches for the analysis of complex chemical and biological mixtures. <i>Nature Biotechnology</i> , 2001, 19, 336-341.	17.5	214
57	Evidence for a second class of S-adenosylmethionine riboswitches and other regulatory RNA motifs in alpha-proteobacteria. <i>Genome Biology</i> , 2005, 6, R70.	9.6	213
58	6S RNA is a widespread regulator of eubacterial RNA polymerase that resembles an open promoter. <i>Rna</i> , 2005, 11, 774-784.	3.5	210
59	Production of RNA by a polymerase protein encapsulated within phospholipid vesicles. <i>Journal of Molecular Evolution</i> , 1994, 39, 555-559.	1.8	207
60	Antibacterial lysine analogs that target lysine riboswitches. , 2007, 3, 44-49.		205
61	Roseoflavin is a natural antibacterial compound that binds to FMN riboswitches and regulates gene expression. <i>RNA Biology</i> , 2009, 6, 187-194.	3.1	202
62	Computational design and experimental validation of oligonucleotide-sensing allosteric ribozymes. <i>Nature Biotechnology</i> , 2005, 23, 1424-1433.	17.5	199
63	Ribozyme speed limits. <i>Rna</i> , 2003, 9, 907-918.	3.5	191
64	Allosteric selection of ribozymes that respond to the second messengers cGMP and cAMP. <i>Nature Structural Biology</i> , 1999, 6, 1062-1071.	9.7	175
65	New classes of self-cleaving ribozymes revealed by comparative genomics analysis. <i>Nature Chemical Biology</i> , 2015, 11, 606-610.	8.0	174
66	Phosphorylating DNA with DNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1999, 96, 2746-2751.	7.1	170
67	Riboswitches that Sense S-adenosylhomocysteine and Activate Genes Involved in Coenzyme Recycling. <i>Molecular Cell</i> , 2008, 29, 691-702.	9.7	153
68	Bacterial Riboswitches Cooperatively Bind Ni <sup>2+</sup> or Co <sup>2+</sup> Ions and Control Expression of Heavy Metal Transporters. <i>Molecular Cell</i> , 2015, 57, 1088-1098.	9.7	147
69	Riboswitches and Translation Control. <i>Cold Spring Harbor Perspectives in Biology</i> , 2018, 10, a032797.	5.5	147
70	Deoxyribozymes: New players in the ancient game of biocatalysis. <i>Current Opinion in Structural Biology</i> , 1999, 9, 315-323.	5.7	143
71	A widespread riboswitch candidate that controls bacterial genes involved in molybdenum cofactor and tungsten cofactor metabolism. <i>Molecular Microbiology</i> , 2008, 68, 918-932.	2.5	142
72	Allosteric nucleic acid catalysts. <i>Current Opinion in Structural Biology</i> , 2000, 10, 318-325.	5.7	139

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73	Nucleic acid molecular switches. <i>Trends in Biotechnology</i> , 1999, 17, 469-476.	9.3	134
74	Small, Highly Active DNAs That Hydrolyze DNA. <i>Journal of the American Chemical Society</i> , 2013, 135, 9121-9129.	13.7	134
75	Capping DNA with DNA. <i>Biochemistry</i> , 2000, 39, 3106-3114.	2.5	131
76	Guanine riboswitch variants from <i>Mesoplasma florum</i> selectively recognize 2'-deoxyguanosine. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 16092-16097.	7.1	129
77	Metabolism of Free Guanidine in Bacteria Is Regulated by a Widespread Riboswitch Class. <i>Molecular Cell</i> , 2017, 65, 220-230.	9.7	129
78	Identification of Hammerhead Ribozymes in All Domains of Life Reveals Novel Structural Variations. <i>PLoS Computational Biology</i> , 2011, 7, e1002031.	3.2	124
79	MOLECULAR BIOLOGY: Making Catalytic DNAs. <i>Science</i> , 2000, 290, 2095-2096.	12.6	123
80	Altering molecular recognition of RNA aptamers by allosteric selection. <i>Journal of Molecular Biology</i> , 2000, 298, 623-632.	4.2	119
81	A common speed limit for RNA-cleaving ribozymes and deoxyribozymes. <i>Rna</i> , 2003, 9, 949-957.	3.5	119
82	Detection of 224 candidate structured RNAs by comparative analysis of specific subsets of intergenic regions. <i>Nucleic Acids Research</i> , 2017, 45, 10811-10823.	14.5	116
83	Design and Antimicrobial Action of Purine Analogues That Bind Guanine Riboswitches. <i>ACS Chemical Biology</i> , 2009, 4, 915-927.	3.4	113
84	Ligand binding and gene control characteristics of tandem riboswitches in <i>Bacillus anthracis</i> . <i>Rna</i> , 2007, 13, 573-582.	3.5	110
85	Characterization of a DNA-Cleaving deoxyribozyme. <i>Bioorganic and Medicinal Chemistry</i> , 2001, 9, 2589-2600.	3.0	108
86	Eukaryotic resistance to fluoride toxicity mediated by a widespread family of fluoride export proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 19018-19023.	7.1	108
87	Inventing and improving ribozyme function: Rational design versus iterative selection methods. <i>Trends in Biotechnology</i> , 1994, 12, 268-275.	9.3	106
88	Riboswitches that sense S-adenosylmethionine and S-adenosylhomocysteine This paper is one of a selection of papers published in this Special Issue, entitled CSBMCB "Systems and Chemical Biology, and has undergone the Journal's usual peer review process.. <i>Biochemistry and Cell Biology</i> , 2008, 86, 157-168.	2.0	105
89	Complex Riboswitches. <i>Science</i> , 2008, 319, 1795-1797.	12.6	105
90	The aptamer core of SAM-IV riboswitches mimics the ligand-binding site of SAM-I riboswitches. <i>Rna</i> , 2008, 14, 822-828.	3.5	103

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91	Characteristics of the glmS ribozyme suggest only structural roles for divalent metal ions. <i>Rna</i> , 2006, 12, 607-619.	3.5	102
92	Confirmation of a second natural preQ <sub>1</sub> aptamer class in Streptococcaceae bacteria. <i>Rna</i> , 2008, 14, 685-695.	3.5	102
93	Exceptional structured noncoding RNAs revealed by bacterial metagenome analysis. <i>Nature</i> , 2009, 462, 656-659.	27.8	102
94	An Ancient Riboswitch Class in Bacteria Regulates Purine Biosynthesis and One-Carbon Metabolism. <i>Molecular Cell</i> , 2015, 57, 317-328.	9.7	102
95	Ligating DNA with DNA. <i>Journal of the American Chemical Society</i> , 2004, 126, 3454-3460.	13.7	100
96	New families of human regulatory RNA structures identified by comparative analysis of vertebrate genomes. <i>Genome Research</i> , 2011, 21, 1929-1943.	5.5	100
97	Control of bacterial exoelectrogenesis by c-AMP-GMP. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 5389-5394.	7.1	98
98	Emergence of a replicating species from an in vitro RNA evolution reaction.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1994, 91, 6093-6097.	7.1	97
99	A variant riboswitch aptamer class for <i>S</i> -adenosylmethionine common in marine bacteria. <i>Rna</i> , 2009, 15, 2046-2056.	3.5	96
100	Eukaryotic TPP riboswitch regulation of alternative splicing involving long-distance base pairing. <i>Nucleic Acids Research</i> , 2013, 41, 3022-3031.	14.5	96
101	The lost language of the RNA World. <i>Science Signaling</i> , 2017, 10, .	3.6	95
102	Riboswitches for the alarmone ppGpp expand the collection of RNA-based signaling systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 6052-6057.	7.1	94
103	Structural diversity of self-cleaving ribozymes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000, 97, 5784-5789.	7.1	93
104	Unique glycine-activated riboswitch linked to glycine-serine auxotrophy in SAR11. <i>Environmental Microbiology</i> , 2009, 11, 230-238.	3.8	90
105	Purine sensing by riboswitches. <i>Biology of the Cell</i> , 2008, 100, 1-11.	2.0	87
106	The Expanding View of RNA and DNA Function. <i>Chemistry and Biology</i> , 2014, 21, 1059-1065.	6.0	87
107	Biochemical Validation of a Second Guanidine Riboswitch Class in Bacteria. <i>Biochemistry</i> , 2017, 56, 352-358.	2.5	87
108	A Eubacterial Riboswitch Class That Senses the Coenzyme Tetrahydrofolate. <i>Chemistry and Biology</i> , 2010, 17, 681-685.	6.0	86

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109	Bacterial aptamers that selectively bind glutamine. <i>RNA Biology</i> , 2011, 8, 82-89.	3.1	85
110	Design of allosteric hammerhead ribozymes activated by ligand-induced structure stabilization. <i>Structure</i> , 1999, 7, 783-791.	3.3	82
111	Mechanism for allosteric inhibition of an ATP-sensitive ribozyme. <i>Nucleic Acids Research</i> , 1998, 26, 4214-4221.	14.5	79
112	Structural, Functional, and Taxonomic Diversity of Three PreQ1 Riboswitch Classes. <i>Chemistry and Biology</i> , 2014, 21, 880-889.	6.0	78
113	A Computational Pipeline for High-Throughput Discovery of cis-Regulatory Noncoding RNA in Prokaryotes. <i>PLoS Computational Biology</i> , 2007, 3, e126.	3.2	77
114	A highly specialized flavin mononucleotide riboswitch responds differently to similar ligands and confers roseoflavin resistance to <i>Streptomyces davawensis</i> . <i>Nucleic Acids Research</i> , 2012, 40, 8662-8673.	14.5	75
115	Novel Riboswitch-Binding Flavin Analog That Protects Mice against <i>Clostridium difficile</i> Infection without Inhibiting Cecal Flora. <i>Antimicrobial Agents and Chemotherapy</i> , 2015, 59, 5736-5746.	3.2	75
116	Bioinformatic analysis of riboswitch structures uncovers variant classes with altered ligand specificity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E2077-E2085.	7.1	75
117	Generating new ligand-binding RNAs by affinity maturation and disintegration of allosteric ribozymes. <i>Rna</i> , 2001, 7, 524-536.	3.5	71
118	Development and Application of a High-Throughput Assay for glmS Riboswitch Activators. <i>RNA Biology</i> , 2006, 3, 77-81.	3.1	71
119	Biochemical Validation of a Third Guanidine Riboswitch Class in Bacteria. <i>Biochemistry</i> , 2017, 56, 359-363.	2.5	70
120	Engineering ligand-responsive gene-control elements: lessons learned from natural riboswitches. <i>Gene Therapy</i> , 2009, 16, 1189-1201.	4.5	68
121	Molecular Recognition of cAMP by an RNA Aptamer. <i>Biochemistry</i> , 2000, 39, 8983-8992.	2.5	66
122	Challenges of ligand identification for riboswitch candidates. <i>RNA Biology</i> , 2011, 8, 5-10.	3.1	61
123	Riboswitches: from ancient gene-control systems to modern drug targets. <i>Future Microbiology</i> , 2009, 4, 771-773.	2.0	60
124	Evidence for Widespread Gene Control Function by the <i>ydaO</i> Riboswitch Candidate. <i>Journal of Bacteriology</i> , 2010, 192, 3983-3989.	2.2	60
125	Engineered allosteric ribozymes that respond to specific divalent metal ions. <i>Nucleic Acids Research</i> , 2005, 33, 622-631.	14.5	59
126	Biochemical analysis of pistol self-cleaving ribozymes. <i>Rna</i> , 2015, 21, 1852-1858.	3.5	59



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127	Tandem riboswitches form a natural Boolean logic gate to control purine metabolism in bacteria. <i>ELife</i> , 2018, 7, .	6.0	59
128	Characteristics of Ligand Recognition by aglMS Self-Cleaving Ribozyme. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 6689-6693.	13.8	58
129	Identification of candidate structured RNAs in the marine organism 'Candidatus Pelagibacter ubique'. <i>BMC Genomics</i> , 2009, 10, 268.	2.8	56
130	Mechanism for gene control by a natural allosteric group I ribozyme. <i>Rna</i> , 2011, 17, 1967-1972.	3.5	55
131	Catalytic DNA: in training and seeking employment. <i>Nature Biotechnology</i> , 1999, 17, 422-423.	17.5	53
132	Molecular-Recognition Characteristics of SAM-Binding Riboswitches. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 964-968.	13.8	51
133	A glutamine riboswitch is a key element for the regulation of glutamine synthetase in cyanobacteria. <i>Nucleic Acids Research</i> , 2018, 46, 10082-10094.	14.5	51
134	Rapid synthesis of oligoribonucleotides using 2'-O-(o-nitrobenzyloxymethyl)-protected monomers. <i>Bioorganic and Medicinal Chemistry Letters</i> , 1992, 2, 1019-1024.	2.2	50
135	Self-Incorporation of coenzymes by ribozymes. <i>Journal of Molecular Evolution</i> , 1995, 40, 551-558.	1.8	50
136	Engineering high-speed allosteric hammerhead ribozymes. <i>Biological Chemistry</i> , 2007, 388, 779-786.	2.5	50
137	An expanded collection and refined consensus model of <i>aglMS</i> ribozymes. <i>Rna</i> , 2011, 17, 728-736.	3.5	50
138	New Insight on the Response of Bacteria to Fluoride. <i>Caries Research</i> , 2012, 46, 78-81.	2.0	47
139	The Biochemical Landscape of Riboswitch Ligands. <i>Biochemistry</i> , 2022, 61, 137-149.	2.5	47
140	In vitro selection and characterization of cellulose-binding DNA aptamers. <i>Nucleic Acids Research</i> , 2007, 35, 6378-6388.	14.5	46
141	Engineered Allosteric Ribozymes That Sense the Bacterial Second Messenger Cyclic Diguanosyl 5'-Monophosphate. <i>Analytical Chemistry</i> , 2012, 84, 4935-4941.	6.5	45
142	A plant 5S ribosomal RNA mimic regulates alternative splicing of transcription factor IIIA pre-mRNAs. <i>Nature Structural and Molecular Biology</i> , 2009, 16, 541-549.	8.2	43
143	SAM-VI RNAs selectively bind <i>S</i> -adenosylmethionine and exhibit similarities to SAM-III riboswitches. <i>RNA Biology</i> , 2018, 15, 371-378.	3.1	42
144	Identification of Ligand Analogues that Control c-di-GMP Riboswitches. <i>ACS Chemical Biology</i> , 2012, 7, 1436-1443.	3.4	41

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145	Continuous in vitro Evolution of Bacteriophage RNA Polymerase Promoters. <i>Biochemistry</i> , 1994, 33, 11980-11986.	2.5	40
146	Genome-wide discovery of structured noncoding RNAs in bacteria. <i>BMC Microbiology</i> , 2019, 19, 66.	3.3	40
147	Large Noncoding RNAs in Bacteria. <i>Microbiology Spectrum</i> , 2018, 6, .	3.0	39
148	Biochemical analysis of hatchet self-cleaving ribozymes. <i>Rna</i> , 2015, 21, 1845-1851.	3.5	36
149	Identification of a large noncoding RNA in extremophilic eubacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 19490-19495.	7.1	34
150	Variant Bacterial Riboswitches Associated with Nucleotide Hydrolase Genes Sense Nucleoside Diphosphates. <i>Biochemistry</i> , 2019, 58, 401-410.	2.5	34
151	Former orphan riboswitches reveal unexplored areas of bacterial metabolism, signaling, and gene control processes. <i>Rna</i> , 2020, 26, 675-693.	3.5	34
152	The <i>yjdF</i> riboswitch candidate regulates gene expression by binding diverse azaaromatic compounds. <i>Rna</i> , 2016, 22, 530-541.	3.5	33
153	Challenges of ligand identification for the second wave of orphan riboswitch candidates. <i>RNA Biology</i> , 2018, 15, 377-390.	3.1	33
154	A bacterial riboswitch class for the thiamin precursor HMP-PP employs a terminator-embedded aptamer. <i>ELife</i> , 2019, 8, .	6.0	33
155	Biochemical Validation of a Fourth Guanidine Riboswitch Class in Bacteria. <i>Biochemistry</i> , 2020, 59, 4654-4662.	2.5	32
156	Fluoride enhances the activity of fungicides that destabilize cell membranes. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012, 22, 3317-3322.	2.2	31
157	The Biology of Free Guanidine As Revealed by Riboswitches. <i>Biochemistry</i> , 2017, 56, 345-347.	2.5	31
158	Evidence that the <i>nadA</i> motif is a bacterial riboswitch for the ubiquitous enzyme cofactor NAD <sup>+</sup> . <i>Rna</i> , 2019, 25, 1616-1627.	3.5	30
159	FINDING NON-CODING RNAs THROUGH GENOME-SCALE CLUSTERING. <i>Journal of Bioinformatics and Computational Biology</i> , 2009, 07, 373-388.	0.8	28
160	Association of OLE RNA with bacterial membranes via an RNA-protein interaction. <i>Molecular Microbiology</i> , 2011, 79, 21-34.	2.5	28
161	A universal adapter for chemical synthesis of DNA or RNA on any single type of solid support. <i>Tetrahedron Letters</i> , 1995, 36, 27-30.	1.4	26
162	Are engineered proteins getting competition from RNA?. <i>Current Opinion in Biotechnology</i> , 1996, 7, 442-448.	6.6	25

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163	Mechanistic Debris Generated by Twister Ribozymes. ACS Chemical Biology, 2017, 12, 886-891.	3.4	25
164	A bacterial riboswitch class senses xanthine and uric acid to regulate genes associated with purine oxidation. Rna, 2020, 26, 960-968.	3.5	24
165	OLE RNA protects extremophilic bacteria from alcohol toxicity. Nucleic Acids Research, 2012, 40, 6898-6907.	14.5	23
166	Production of single-stranded DNAs by self-cleavage of rolling-circle amplification products. BioTechniques, 2013, 54, 337-343.	1.8	23
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