Ronald R Breaker

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/3432279/ronald-r-breaker-publications-by-year.pdf

Version: 2024-04-19

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

213	28,579	88	168
papers	citations	h-index	g-index
232 ext. papers	31,574 ext. citations	12.1 avg, IF	7.56 L-index

#	Paper	IF	Citations
213	The Biochemical Landscape of Riboswitch Ligands <i>Biochemistry</i> , 2022 ,	3.2	6
212	A second riboswitch class for the enzyme cofactor NAD. <i>Rna</i> , 2021 , 27, 99-105	5.8	8
211	Comprehensive discovery of novel structured noncoding RNAs in 26 bacterial genomes. <i>RNA Biology</i> , 2021 , 18, 2417-2432	4.8	6
210	The case of the missing allosteric ribozymes. <i>Nature Chemical Biology</i> , 2021 , 17, 375-382	11.7	6
209	Ribozyme Discovery in Bacteria 2021 , 281-302		
208	DIMPL: a bioinformatics pipeline for the discovery of structured noncoding RNA motifs in bacteria. <i>Bioinformatics</i> , 2021 ,	7.2	1
207	Witnessing the structural evolution of an RNA enzyme. <i>ELife</i> , 2021 , 10,	8.9	2
206	Natural circularly permuted group II introns in bacteria produce RNA circles <i>IScience</i> , 2021 , 24, 103431	6.1	1
205	A bacterial riboswitch class senses xanthine and uric acid to regulate genes associated with purine oxidation. <i>Rna</i> , 2020 , 26, 960-968	5.8	9
204	Former orphan riboswitches reveal unexplored areas of bacterial metabolism, signaling, and gene control processes. <i>Rna</i> , 2020 , 26, 675-693	5.8	19
203	Biochemical Validation of a Fourth Guanidine Riboswitch Class in Bacteria. <i>Biochemistry</i> , 2020 , 59, 4654-	-4662	20
202	OapB forms a high-affinity complex with the P13 region of the noncoding RNA OLE. <i>Journal of Biological Chemistry</i> , 2020 , 295, 9326-9334	5.4	1
201	A rare bacterial RNA motif is implicated in the regulation of the gene whose encoded enzyme synthesizes phosphoribosylamine. <i>Rna</i> , 2020 , 26, 1838-1846	5.8	1
200	Evidence that the motif is a bacterial riboswitch for the ubiquitous enzyme cofactor NAD. <i>Rna</i> , 2019 , 25, 1616-1627	5.8	17
199	Genome-wide discovery of structured noncoding RNAs in bacteria. <i>BMC Microbiology</i> , 2019 , 19, 66	4.5	26
198	Variant Bacterial Riboswitches Associated with Nucleotide Hydrolase Genes Sense Nucleoside Diphosphates. <i>Biochemistry</i> , 2019 , 58, 401-410	3.2	18
197	Biochemical validation of a second class of tetrahydrofolate riboswitches in bacteria. <i>Rna</i> , 2019 , 25, 109	9 ₁₅ :8097	710

(2017-2019)

196	Employing a ZTP Riboswitch to Detect Bacterial Folate Biosynthesis Inhibitors in a Small Molecule High-Throughput Screen. <i>ACS Chemical Biology</i> , 2019 , 14, 2841-2850	4.9	7
195	Disruption of the OLE ribonucleoprotein complex causes magnesium toxicity in Bacillus halodurans. <i>Molecular Microbiology</i> , 2019 , 112, 1552-1563	4.1	2
194	A bacterial riboswitch class for the thiamin precursor HMP-PP employs a terminator-embedded aptamer. <i>ELife</i> , 2019 , 8,	8.9	22
193	Genome-wide Discovery of Rare Riboswitches in Bacteria. <i>FASEB Journal</i> , 2019 , 33, 778.8	0.9	1
192	Rare variants of the FMN riboswitch class in and other bacteria exhibit altered ligand specificity. <i>Rna</i> , 2019 , 25, 23-34	5.8	12
191	A glutamine riboswitch is a key element for the regulation of glutamine synthetase in cyanobacteria. <i>Nucleic Acids Research</i> , 2018 , 46, 10082-10094	20.1	31
190	Tandem riboswitches form a natural Boolean logic gate to control purine metabolism in bacteria. <i>ELife</i> , 2018 , 7,	8.9	36
189	Large Noncoding RNAs in Bacteria. <i>Microbiology Spectrum</i> , 2018 , 6,	8.9	23
188	A second RNA-binding protein is essential for ethanol tolerance provided by the bacterial OLE ribonucleoprotein complex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, E6319-E6328	11.5	4
187	High Throughput Validation of Orphan Riboswitch Candidates. <i>FASEB Journal</i> , 2018 , 32, lb18	0.9	
186	SAM-VI RNAs selectively bind S-adenosylmethionine and exhibit similarities to SAM-III riboswitches. <i>RNA Biology</i> , 2018 , 15, 371-378	4.8	26
185	Challenges of ligand identification for the second wave of orphan riboswitch candidates. <i>RNA Biology</i> , 2018 , 15, 377-390	4.8	25
184	Large Noncoding RNAs in Bacteria 2018 , 515-526		Ο
183	Riboswitches and Translation Control. Cold Spring Harbor Perspectives in Biology, 2018, 10,	10.2	93
182	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	11.5	50
181	The Biology of Free Guanidine As Revealed by Riboswitches. <i>Biochemistry</i> , 2017 , 56, 345-347	3.2	21
180	Search for 5Tleader regulatory RNA structures based on gene annotation aided by the RiboGap database. <i>Methods</i> , 2017 , 117, 3-13	4.6	4
179	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	11.5	55

178	Mechanistic Debris Generated by Twister Ribozymes. ACS Chemical Biology, 2017, 12, 886-891	4.9	23
177	Riboswitch diversity and distribution. <i>Rna</i> , 2017 , 23, 995-1011	5.8	253
176	The lost language of the RNA World. Science Signaling, 2017, 10,	8.8	63
175	Biochemical Validation of a Second Guanidine Riboswitch Class in Bacteria. <i>Biochemistry</i> , 2017 , 56, 352-	3 <u>58</u>	58
174	Biochemical Validation of a Third Guanidine Riboswitch Class in Bacteria. <i>Biochemistry</i> , 2017 , 56, 359-36	5 3 3.2	54
173	Metabolism of Free Guanidine in Bacteria Is Regulated by a Widespread Riboswitch Class. <i>Molecular Cell</i> , 2017 , 65, 220-230	17.6	84
172	Identification of 15 candidate structured noncoding RNA motifs in fungi by comparative genomics. <i>BMC Genomics</i> , 2017 , 18, 785	4.5	8
171	Detection of 224 candidate structured RNAs by comparative analysis of specific subsets of intergenic regions. <i>Nucleic Acids Research</i> , 2017 , 45, 10811-10823	20.1	73
170	Numerous small hammerhead ribozyme variants associated with Penelope-like retrotransposons cleave RNA as dimers. <i>RNA Biology</i> , 2017 , 14, 1499-1507	4.8	9
169	The yjdF riboswitch candidate regulates gene expression by binding diverse azaaromatic compounds. <i>Rna</i> , 2016 , 22, 530-41	5.8	24
168	Singlet glycine riboswitches bind ligand as well as tandem riboswitches. <i>Rna</i> , 2016 , 22, 1728-1738	5.8	16
167	Novel riboswitch-binding flavin analog that protects mice against Clostridium difficile infection without inhibiting cecal flora. <i>Antimicrobial Agents and Chemotherapy</i> , 2015 , 59, 5736-46	5.9	56
166	New classes of self-cleaving ribozymes revealed by comparative genomics analysis. <i>Nature Chemical Biology</i> , 2015 , 11, 606-10	11.7	142
165	Small molecule fluoride toxicity agonists. <i>Chemistry and Biology</i> , 2015 , 22, 527-534		15
164	Bacterial riboswitches cooperatively bind Ni(2+) or Co(2+) ions and control expression of heavy metal transporters. <i>Molecular Cell</i> , 2015 , 57, 1088-1098	17.6	103
163	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, 5389-94	11.5	70
162	Biochemical analysis of hatchet self-cleaving ribozymes. <i>Rna</i> , 2015 , 21, 1845-51	5.8	31
161	Biochemical analysis of pistol self-cleaving ribozymes. <i>Rna</i> , 2015 , 21, 1852-8	5.8	48

(2012-2015)

160	An ancient riboswitch class in bacteria regulates purine biosynthesis and one-carbon metabolism. <i>Molecular Cell</i> , 2015 , 57, 317-28	17.6	75
159	A widespread self-cleaving ribozyme class is revealed by bioinformatics. <i>Nature Chemical Biology</i> , 2014 , 10, 56-60	11.7	177
158	Gramicidin D enhances the antibacterial activity of fluoride. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014 , 24, 2969-2971	2.9	8
157	The expanding view of RNA and DNA function. <i>Chemistry and Biology</i> , 2014 , 21, 1059-65		70
156	Structural, functional, and taxonomic diversity of three preQ1 riboswitch classes. <i>Chemistry and Biology</i> , 2014 , 21, 880-889		61
155	Riboswitches That Sense Cyclic Di-GMP 2014 , 215-229		3
154	In vitro selection of allosteric ribozymes that sense the bacterial second messenger c-di-GMP. <i>Methods in Molecular Biology</i> , 2014 , 1111, 209-20	1.4	8
153	Riboswitches in eubacteria sense the second messenger c-di-AMP. <i>Nature Chemical Biology</i> , 2013 , 9, 834	1 1 91.7	201
152	Integron attl1 sites, not riboswitches, associate with antibiotic resistance genes. <i>Cell</i> , 2013 , 153, 1417-8	56.2	16
151	Small, highly active DNAs that hydrolyze DNA. <i>Journal of the American Chemical Society</i> , 2013 , 135, 9121	1 -19 6.4	116
150	Eukaryotic TPP riboswitch regulation of alternative splicing involving long-distance base pairing. <i>Nucleic Acids Research</i> , 2013 , 41, 3022-31	20.1	76
149	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, 190	o18:∑3	81
148	Production of single-stranded DNAs by self-cleavage of rolling-circle amplification products. <i>BioTechniques</i> , 2013 , 54, 337-43	2.5	21
147	Fluoride enhances the activity of fungicides that destabilize cell membranes. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012 , 22, 3317-22	2.9	28
146	Riboswitches and the RNA world. Cold Spring Harbor Perspectives in Biology, 2012, 4,	10.2	426
145	Engineered allosteric ribozymes that sense the bacterial second messenger cyclic diguanosyl 5Fmonophosphate. <i>Analytical Chemistry</i> , 2012 , 84, 4935-41	7.8	41
144	Widespread genetic switches and toxicity resistance proteins for fluoride. <i>Science</i> , 2012 , 335, 233-235	33.3	282
143	A highly specialized flavin mononucleotide riboswitch responds differently to similar ligands and confers roseoflavin resistance to Streptomyces davawensis. <i>Nucleic Acids Research</i> , 2012 , 40, 8662-73	20.1	56

142	Identification of ligand analogues that control c-di-GMP riboswitches. <i>ACS Chemical Biology</i> , 2012 , 7, 1436-43	4.9	36
141	OLE RNA protects extremophilic bacteria from alcohol toxicity. <i>Nucleic Acids Research</i> , 2012 , 40, 6898-9	0 70.1	16
140	New insight on the response of bacteria to fluoride. Caries Research, 2012, 46, 78-81	4.2	29
139	Mechanism and distribution of glmS ribozymes. <i>Methods in Molecular Biology</i> , 2012 , 848, 113-29	1.4	18
138	Prospects for riboswitch discovery and analysis. <i>Molecular Cell</i> , 2011 , 43, 867-79	17.6	384
137	Association of OLE RNA with bacterial membranes via an RNA-protein interaction. <i>Molecular Microbiology</i> , 2011 , 79, 21-34	4.1	20
136	Improved genetic transformation methods for the model alkaliphile Bacillus halodurans C-125. <i>Letters in Applied Microbiology</i> , 2011 , 52, 430-2	2.9	7
135	R2Rsoftware to speed the depiction of aesthetic consensus RNA secondary structures. <i>BMC Bioinformatics</i> , 2011 , 12, 3	3.6	160
134	An expanded collection and refined consensus model of glmS ribozymes. <i>Rna</i> , 2011 , 17, 728-36	5.8	43
133	Mechanism for gene control by a natural allosteric group I ribozyme. <i>Rna</i> , 2011 , 17, 1967-72	5.8	49
132	New families of human regulatory RNA structures identified by comparative analysis of vertebrate genomes. <i>Genome Research</i> , 2011 , 21, 1929-43	9.7	76
131	Challenges of ligand identification for riboswitch candidates. <i>RNA Biology</i> , 2011 , 8, 5-10	4.8	51
130	Bacterial aptamers that selectively bind glutamine. RNA Biology, 2011, 8, 82-9	4.8	80
129	Identification of hammerhead ribozymes in all domains of life reveals novel structural variations. <i>PLoS Computational Biology</i> , 2011 , 7, e1002031	5	104
128	Evidence for widespread gene control function by the ydaO riboswitch candidate. <i>Journal of Bacteriology</i> , 2010 , 192, 3983-9	3.5	55
127	RNA switches out in the cold. <i>Molecular Cell</i> , 2010 , 37, 1-2	17.6	19
126	An allosteric self-splicing ribozyme triggered by a bacterial second messenger. <i>Science</i> , 2010 , 329, 845-8	8 4§ .3	273
125	Comparative genomics reveals 104 candidate structured RNAs from bacteria, archaea, and their metagenomes. <i>Genome Biology</i> , 2010 , 11, R31	18.3	278

124	A eubacterial riboswitch class that senses the coenzyme tetrahydrofolate. <i>Chemistry and Biology</i> , 2010 , 17, 681-5		74
123	RNA Second Messengers and Riboswitches: Relics from the RNA World?. <i>Microbe Magazine</i> , 2010 , 5, 13	-20	6
122	The large, noncoding OLE RNA is associated with membrane biochemistry. FASEB Journal, 2010, 24, 493	3.2 .9	
121	Roseoflavin is a natural antibacterial compound that binds to FMN riboswitches and regulates gene expression. <i>RNA Biology</i> , 2009 , 6, 187-94	4.8	159
120	A variant riboswitch aptamer class for S-adenosylmethionine common in marine bacteria. <i>Rna</i> , 2009 , 15, 2046-56	5.8	79
119	Identification of candidate structured RNAs in the marine organism C andidatus Pelagibacter ubiqueT <i>BMC Genomics</i> , 2009 , 10, 268	4.5	51
118	Engineering ligand-responsive gene-control elements: lessons learned from natural riboswitches. <i>Gene Therapy</i> , 2009 , 16, 1189-201	4	61
117	Exceptional structured noncoding RNAs revealed by bacterial metagenome analysis. <i>Nature</i> , 2009 , 462, 656-9	50.4	77
116	A plant 5S ribosomal RNA mimic regulates alternative splicing of transcription factor IIIA pre-mRNAs. <i>Nature Structural and Molecular Biology</i> , 2009 , 16, 541-9	17.6	37
115	Structural basis of ligand binding by a c-di-GMP riboswitch. <i>Nature Structural and Molecular Biology</i> , 2009 , 16, 1218-23	17.6	232
114	Unique glycine-activated riboswitch linked to glycine-serine auxotrophy in SAR11. <i>Environmental Microbiology</i> , 2009 , 11, 230-8	5.2	76
113	The structural and functional diversity of metabolite-binding riboswitches. <i>Annual Review of Biochemistry</i> , 2009 , 78, 305-34	29.1	443
112	Design and antimicrobial action of purine analogues that bind Guanine riboswitches. <i>ACS Chemical Biology</i> , 2009 , 4, 915-27	4.9	95
111	Finding non-coding RNAs through genome-scale clustering. <i>Journal of Bioinformatics and Computational Biology</i> , 2009 , 7, 373-88	1	26
110	In vitro selection of glmS ribozymes. <i>Methods in Molecular Biology</i> , 2009 , 540, 349-64	1.4	1
109	A plant 5S rRNA mimic regulates alternative splicing of transcription factor IIIA pre-mRNAs. <i>FASEB Journal</i> , 2009 , 23, 665.4	0.9	
108	A widespread riboswitch candidate that controls bacterial genes involved in molybdenum cofactor and tungsten cofactor metabolism. <i>Molecular Microbiology</i> , 2008 , 68, 918-32	4.1	127
107	In-line probing analysis of riboswitches. <i>Methods in Molecular Biology</i> , 2008 , 419, 53-67	1.4	243

106	Purine sensing by riboswitches. <i>Biology of the Cell</i> , 2008 , 100, 1-11	3.5	73
105	Riboswitches in eubacteria sense the second messenger cyclic di-GMP. <i>Science</i> , 2008 , 321, 411-3	33.3	556
104	Riboswitches that sense S-adenosylhomocysteine and activate genes involved in coenzyme recycling. <i>Molecular Cell</i> , 2008 , 29, 691-702	17.6	123
103	Riboswitches that sense S-adenosylmethionine and S-adenosylhomocysteine. <i>Biochemistry and Cell Biology</i> , 2008 , 86, 157-68	3.6	89
102	Complex riboswitches. <i>Science</i> , 2008 , 319, 1795-7	33.3	89
101	The aptamer core of SAM-IV riboswitches mimics the ligand-binding site of SAM-I riboswitches. <i>Rna</i> , 2008 , 14, 822-8	5.8	88
100	Confirmation of a second natural preQ1 aptamer class in Streptococcaceae bacteria. Rna, 2008, 14, 685	5- 3 58	88
99	In vitro selection and characterization of cellulose-binding RNA aptamers using isothermal amplification. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2008 , 27, 949-66	1.4	15
98	Riboswitches as new antibiotics targets. <i>FASEB Journal</i> , 2008 , 22, 264.3	0.9	
97	Riboswitch control of gene expression in plants by splicing and alternative 3Tend processing of mRNAs. <i>Plant Cell</i> , 2007 , 19, 3437-50	11.6	229
96	Importance of the Debye screening length on nanowire field effect transistor sensors. <i>Nano Letters</i> , 2007 , 7, 3405-9	11.5	593
95	Antibacterial lysine analogs that target lysine riboswitches 2007 , 3, 44-9		172
94	A riboswitch selective for the queuosine precursor preQ1 contains an unusually small aptamer domain. <i>Nature Structural and Molecular Biology</i> , 2007 , 14, 308-17	17.6	186
93	Control of alternative RNA splicing and gene expression by eukaryotic riboswitches. <i>Nature</i> , 2007 , 447, 497-500	50.4	336
92	Ligand binding and gene control characteristics of tandem riboswitches in Bacillus anthracis. <i>Rna</i> , 2007 , 13, 573-82	5.8	98
91	A computational pipeline for high- throughput discovery of cis-regulatory noncoding RNA in prokaryotes. <i>PLoS Computational Biology</i> , 2007 , 3, e126	5	66
90	Identification of 22 candidate structured RNAs in bacteria using the CMfinder comparative genomics pipeline. <i>Nucleic Acids Research</i> , 2007 , 35, 4809-19	20.1	256
89	Guanine riboswitch variants from Mesoplasma florum selectively recognize 2Fdeoxyguanosine. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 16092-7	11.5	109

(2006-2007)

88	In vitro selection and characterization of cellulose-binding DNA aptamers. <i>Nucleic Acids Research</i> , 2007 , 35, 6378-88	20.1	42
87	Engineering high-speed allosteric hammerhead ribozymes. <i>Biological Chemistry</i> , 2007 , 388, 779-86	4.5	46
86	The distributions, mechanisms, and structures of metabolite-binding riboswitches. <i>Genome Biology</i> , 2007 , 8, R239	18.3	358
85	Molecular-recognition characteristics of SAM-binding riboswitches. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 964-8	16.4	40
84	Characteristics of ligand recognition by a glmS self-cleaving ribozyme. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 6689-93	16.4	54
83	Molecular-Recognition Characteristics of SAM-Binding Riboswitches. <i>Angewandte Chemie</i> , 2006 , 118, 978-982	3.6	6
82	Characteristics of Ligand Recognition by a glmS Self-Cleaving Ribozyme. <i>Angewandte Chemie</i> , 2006 , 118, 6841-6845	3.6	6
81	Development and application of a high-throughput assay for glmS riboswitch activators. <i>RNA Biology</i> , 2006 , 3, 77-81	4.8	64
80	Examination of the structural and functional versatility of glmS ribozymes by using in vitro selection. <i>Nucleic Acids Research</i> , 2006 , 34, 4968-75	20.1	20
79	Characteristics of the glmS ribozyme suggest only structural roles for divalent metal ions. <i>Rna</i> , 2006 , 12, 607-19	5.8	97
78	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, 19490-5	11.5	25
77	Tandem riboswitch architectures exhibit complex gene control functions. <i>Science</i> , 2006 , 314, 300-4	33.3	210
76	Riboswitches: Natural Metabolite-binding RNAs Controlling Gene Expression 2006 , 191-207		
75	Riboswitches as antibacterial drug targets. <i>Nature Biotechnology</i> , 2006 , 24, 1558-64	44.5	354
74	Structural basis for gene regulation by a thiamine pyrophosphate-sensing riboswitch. <i>Nature</i> , 2006 , 441, 1167-71	50.4	347
73	Riboswitches as Genetic Control Elements 2006 , 89-106		
72	Genetic control by riboswitches and ribozymes. FASEB Journal, 2006, 20, A455	0.9	
71	Riboswitches: Regulators of modern and ancient metabolism. <i>Biochemist</i> , 2006 , 28, 11-15	0.5	1

7º	Regulation of bacterial gene expression by riboswitches. <i>Annual Review of Microbiology</i> , 2005 , 59, 487-5	5 17 .5	607
69	6S RNA is a widespread regulator of eubacterial RNA polymerase that resembles an open promoter. <i>Rna</i> , 2005 , 11, 774-84	5.8	180
68	The kinetics of ligand binding by an adenine-sensing riboswitch. <i>Biochemistry</i> , 2005 , 44, 13404-14	3.2	239
67	The speed of RNA transcription and metabolite binding kinetics operate an FMN riboswitch. <i>Molecular Cell</i> , 2005 , 18, 49-60	17.6	375
66	Evidence for a second class of S-adenosylmethionine riboswitches and other regulatory RNA motifs in alpha-proteobacteria. <i>Genome Biology</i> , 2005 , 6, R70	18.3	191
65	Thiamine pyrophosphate riboswitches are targets for the antimicrobial compound pyrithiamine. <i>Chemistry and Biology</i> , 2005 , 12, 1325-35		187
64	Computational design and experimental validation of oligonucleotide-sensing allosteric ribozymes. <i>Nature Biotechnology</i> , 2005 , 23, 1424-33	44.5	174
63	Riboswitches as versatile gene control elements. <i>Current Opinion in Structural Biology</i> , 2005 , 15, 342-8	8.1	436
62	Engineered allosteric ribozymes that respond to specific divalent metal ions. <i>Nucleic Acids Research</i> , 2005 , 33, 622-31	20.1	53
61	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, 6421-6	11.5	385
60	Selection in vitro of allosteric ribozymes. <i>Methods in Molecular Biology</i> , 2004 , 252, 145-64	1.4	16
59	Coenzyme B12 riboswitches are widespread genetic control elements in prokaryotes. <i>Nucleic Acids Research</i> , 2004 , 32, 143-50	20.1	228
58	Gene regulation by riboswitches. <i>Nature Reviews Molecular Cell Biology</i> , 2004 , 5, 451-63	48.7	695
57	Adenine riboswitches and gene activation by disruption of a transcription terminator. <i>Nature Structural and Molecular Biology</i> , 2004 , 11, 29-35	17.6	411
56	Control of gene expression by a natural metabolite-responsive ribozyme. <i>Nature</i> , 2004 , 428, 281-6	50.4	735
55	Natural and engineered nucleic acids as tools to explore biology. <i>Nature</i> , 2004 , 432, 838-45	50.4	302
54	Structural basis for discriminative regulation of gene expression by adenine- and guanine-sensing mRNAs. <i>Chemistry and Biology</i> , 2004 , 11, 1729-41		448
53	Ligating DNA with DNA. Journal of the American Chemical Society, 2004, 126, 3454-60	16.4	91

(2001-2004)

52	A glycine-dependent riboswitch that uses cooperative binding to control gene expression. <i>Science</i> , 2004 , 306, 275-9	33.3	434
51	Metabolite-binding RNA domains are present in the genes of eukaryotes. <i>Rna</i> , 2003 , 9, 644-7	5.8	307
50	Ribozyme speed limits. <i>Rna</i> , 2003 , 9, 907-18	5.8	163
49	Genetic control by metabolite-binding riboswitches. <i>ChemBioChem</i> , 2003 , 4, 1024-32	3.8	216
48	An mRNA structure that controls gene expression by binding S-adenosylmethionine. <i>Nature Structural and Molecular Biology</i> , 2003 , 10, 701-7	17.6	349
47	Riboswitches control fundamental biochemical pathways in Bacillus subtilis and other bacteria. <i>Cell</i> , 2003 , 113, 577-86	56.2	575
46	An mRNA structure in bacteria that controls gene expression by binding lysine. <i>Genes and Development</i> , 2003 , 17, 2688-97	12.6	269
45	A common speed limit for RNA-cleaving ribozymes and deoxyribozymes. <i>Rna</i> , 2003 , 9, 949-57	5.8	104
44	Substrate specificity and reaction kinetics of an X-motif ribozyme. <i>Rna</i> , 2003 , 9, 688-97	5.8	15
43	Genetic control by a metabolite binding mRNA. <i>Chemistry and Biology</i> , 2002 , 9, 1043		578
42	Thiamine derivatives bind messenger RNAs directly to regulate bacterial gene expression. <i>Nature</i> , 2002 , 419, 952-6	50.4	912
41	Engineered allosteric ribozymes as biosensor components. <i>Current Opinion in Biotechnology</i> , 2002 , 13, 31-9	11.4	249
40	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, 15908-13	11.5	504
39	Characterization of a DNA-cleaving deoxyribozyme. <i>Bioorganic and Medicinal Chemistry</i> , 2001 , 9, 2589-6	i0 <u>0</u> 4	100
39	Characterization of a DNA-cleaving deoxyribozyme. <i>Bioorganic and Medicinal Chemistry</i> , 2001 , 9, 2589-6 Immobilized RNA switches for the analysis of complex chemical and biological mixtures. <i>Nature Biotechnology</i> , 2001 , 19, 336-41	609 ₁₄	199
	Immobilized RNA switches for the analysis of complex chemical and biological mixtures. <i>Nature</i>		
38	Immobilized RNA switches for the analysis of complex chemical and biological mixtures. <i>Nature Biotechnology</i> , 2001 , 19, 336-41 Selection for catalytic function with nucleic acids. <i>Current Protocols in Nucleic Acid Chemistry</i> , 2001 ,	44.5	

34	Allosteric nucleic acid catalysts. Current Opinion in Structural Biology, 2000, 10, 318-25	8.1	125
33	Structural diversity of self-cleaving ribozymes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000 , 97, 5784-9	11.5	83
32	Altering molecular recognition of RNA aptamers by allosteric selection. <i>Journal of Molecular Biology</i> , 2000 , 298, 623-32	6.5	109
31	Tech.Sight. Molecular biology. Making catalytic DNAs. <i>Science</i> , 2000 , 290, 2095-6	33.3	113
30	Capping DNA with DNA. <i>Biochemistry</i> , 2000 , 39, 3106-14	3.2	121
29	Molecular recognition of cAMP by an RNA aptamer. <i>Biochemistry</i> , 2000 , 39, 8983-92	3.2	60
28	Relationship between internucleotide linkage geometry and the stability of RNA. <i>Rna</i> , 1999 , 5, 1308-25	5.8	437
27	In vitro selection of deoxyribozymes with DNA capping activity. <i>Nucleic Acids Symposium Series</i> , 1999 , 237-8		2
26	Engineering precision RNA molecular switches. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1999 , 96, 3584-9	11.5	292
25	Phosphorylating DNA with DNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1999 , 96, 2746-51	11.5	156
24	Allosteric selection of ribozymes that respond to the second messengers cGMP and cAMP. <i>Nature Structural Biology</i> , 1999 , 6, 1062-71		148
23	Nucleic acid molecular switches. <i>Trends in Biotechnology</i> , 1999 , 17, 469-76	15.1	128
22	Deoxyribozymes: new players in the ancient game of biocatalysis. <i>Current Opinion in Structural Biology</i> , 1999 , 9, 315-23	8.1	131
21	Design of allosteric hammerhead ribozymes activated by ligand-induced structure stabilization. <i>Structure</i> , 1999 , 7, 783-91	5.2	70
20	Kinetics of RNA Degradation by Specific Base Catalysis of Transesterification Involving the 2EHydroxyl Group. <i>Journal of the American Chemical Society</i> , 1999 , 121, 5364-5372	16.4	401
19	Mechanism for allosteric inhibition of an ATP-sensitive ribozyme. <i>Nucleic Acids Research</i> , 1998 , 26, 4214	- 2 0.1	71
18	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, 6027-31	11.5	202
17	Cleaving DNA with DNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1998 , 95, 2233-7	11.5	233

LIST OF PUBLICATIONS

16	In Vitro Selection of Catalytic Polynucleotides. <i>Chemical Reviews</i> , 1997 , 97, 371-390	68.1	232
15	DNA enzymes. <i>Nature Biotechnology</i> , 1997 , 15, 427-31	44.5	308
14	Rational design of allosteric ribozymes. <i>Chemistry and Biology</i> , 1997 , 4, 453-9		306
13	In vitro selection of self-cleaving DNAs. <i>Chemistry and Biology</i> , 1996 , 3, 1039-46		214
12	Are engineered proteins getting competition from RNA?. Current Opinion in Biotechnology, 1996, 7, 442-	8 1.4	23
11	Self-incorporation of coenzymes by ribozymes. <i>Journal of Molecular Evolution</i> , 1995 , 40, 551-8	3.1	41
10	A DNA enzyme with Mg(2+)-dependent RNA phosphoesterase activity. <i>Chemistry and Biology</i> , 1995 , 2, 655-60		343
9	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	2	24
8	Production of RNA by a polymerase protein encapsulated within phospholipid vesicles. <i>Journal of Molecular Evolution</i> , 1994 , 39, 555-9	3.1	180
7	A DNA enzyme that cleaves RNA. <i>Chemistry and Biology</i> , 1994 , 1, 223-9		1045
6	Inventing and improving ribozyme function: rational design versus iterative selection methods. <i>Trends in Biotechnology</i> , 1994 , 12, 268-75	15.1	97
5			
	Continuous in vitro evolution of bacteriophage RNA polymerase promoters. <i>Biochemistry</i> , 1994 , 33, 119	8,0≥6	34
4	Emergence of a replicating species from an in vitro RNA evolution reaction. <i>Proceedings of the</i>	8 <u>02</u> 6	34 84
4	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, 6093-7 Rapid synthesis of oligoribonucleotides using 2?-O-(o-nitrobenzyloxymethyl)-protected monomers.		
	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, 6093-7 Rapid synthesis of oligoribonucleotides using 2?-O-(o-nitrobenzyloxymethyl)-protected monomers. <i>Bioorganic and Medicinal Chemistry Letters</i> , 1992 , 2, 1019-1024 Polynucleotide phosphorylase forms polymers from an ADP analog in which the 5Toxygen is	11.5	84