Thomas R Cech

List of Publications by Year in Descending Order

243 papers	32,956 citations	93 h-index	179 g-index
266 ext. papers	36,058 ext. citations	22.1 avg, IF	7.56 L-index

#	Paper	IF	Citations
243	RNA in biological condensates.. *Rna*, **2022**, 28, 1-2	5.8	1
242	CST does not evict elongating telomerase but prevents initiation by ssDNA binding. *Nucleic Acids Research*, **2021**, 49, 11653-11665	20.1	0
241	Nuclear compartmentalization of TERT mRNA and TUG1 lncRNA is driven by intron retention. *Nature Communications*, **2021**, 12, 3308	17.4	2
240	Targeted mutagenesis in human iPSCs using CRISPR genome-editing tools. *Methods*, **2021**, 191, 44-58	4.6	1
239	Competition between PRC2.1 and 2.2 subcomplexes regulates PRC2 chromatin occupancy in human stem cells. *Molecular Cell*, **2021**, 81, 488-501.e9	17.6	10
238	Shaping human telomeres: from shelterin and CST complexes to telomeric chromatin organization. *Nature Reviews Molecular Cell Biology*, **2021**, 22, 283-298	48.7	32
237	TRIM28 is a transcriptional activator of the mutant TERT promoter in human bladder cancer. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	5
236	The structure of human CST reveals a decameric assembly bound to telomeric DNA. *Science*, **2020**, 368, 1081-1085	33.3	32
235	RNA is essential for PRC2 chromatin occupancy and function in human pluripotent stem cells. *Nature Genetics*, **2020**, 52, 931-938	36.3	47
234	Mesenchymal and MAPK Expression Signatures Associate with Telomerase Promoter Mutations in Multiple Cancers. *Molecular Cancer Research*, **2020**, 18, 1050-1062	6.6	9
233	Bending and looping of long DNA by Polycomb repressive complex 2 revealed by AFM imaging in liquid. *Nucleic Acids Research*, **2020**, 48, 2969-2981	20.1	5
232	Allele-specific proximal promoter hypomethylation of the telomerase reverse transcriptase gene (TERT) associates with TERT expression in multiple cancers. *Molecular Oncology*, **2020**, 14, 2358-2374	7.9	6
231	Regulation of histone methylation by automethylation of PRC2. *Genes and Development*, **2019**, 33, 1416-1427	11.8	32
230	Single-cell imaging reveals unexpected heterogeneity of telomerase reverse transcriptase expression across human cancer cell lines. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 18488-18497	11.5	16
229	C9orf72 and triplet repeat disorder RNAs: G-quadruplex formation, binding to PRC2 and implications for disease mechanisms. *Rna*, **2019**, 25, 935-947	5.8	16
228	Dynamics of human telomerase recruitment depend on template-telomere base pairing. *Molecular Biology of the Cell*, **2018**, 29, 869-880	3.5	15
227	Fission yeast telosomes: non-canonical histone-containing chromatin structures dependent on shelterin and RNA. *Nucleic Acids Research*, **2018**, 46, 8865-8875	20.1	5

226	Live-cell imaging reveals the dynamics of PRC2 and recruitment to chromatin by SUZ12-associated subunits. *Genes and Development*, **2018**, 32, 794-805	12.6	45
225	Regulation of Monoallelic TERT Expression in Cancer Cells with Wildtype Promoters. *FASEB Journal*, **2018**, 32, 523.1	0.9	
224	A Lifelong Passion for All Things Ribonucleic. *Cell*, **2018**, 175, 14-17	56.2	1
223	In Crystallo Selection to Establish New RNA Crystal Contacts. *Structure*, **2018**, 26, 1275-1283.e3	5.2	7
222	Targeted CRISPR disruption reveals a role for RNase MRP RNA in human preribosomal RNA processing. *Genes and Development*, **2017**, 31, 59-71	12.6	60
221	Targeting of Polycomb Repressive Complex 2 to RNA by Short Repeats of Consecutive Guanines. *Molecular Cell*, **2017**, 65, 1056-1067.e5	17.6	119
220	How do lncRNAs regulate transcription?. *Science Advances*, **2017**, 3, eaao2110	14.3	338
219	Molecular analysis of PRC2 recruitment to DNA in chromatin and its inhibition by RNA. *Nature Structural and Molecular Biology*, **2017**, 24, 1028-1038	17.6	135
218	Reconstitution of human shelterin complexes reveals unexpected stoichiometry and dual pathways to enhance telomerase processivity. *Nature Communications*, **2017**, 8, 1075	17.4	43
217	Allele-Specific DNA Methylation and Its Interplay with Repressive Histone Marks at Promoter-Mutant TERT Genes. *Cell Reports*, **2017**, 21, 3700-3707	10.6	44
216	Conserved RNA-binding specificity of polycomb repressive complex 2 is achieved by dispersed amino acid patches in EZH2. *ELife*, **2017**, 6,	8.9	57
215	Inhibition of telomerase RNA decay rescues telomerase deficiency caused by dyskerin or PARN defects. *Nature Structural and Molecular Biology*, **2016**, 23, 286-92	17.6	71
214	RNA Duplex Map in Living Cells Reveals Higher-Order Transcriptome Structure. *Cell*, **2016**, 165, 1267-1279	56.2	368
213	Live Cell Imaging Reveals the Dynamics of Telomerase Recruitment to Telomeres. *Cell*, **2016**, 166, 1188-1197.e9	56.2	106
212	Nucleic acid-binding specificity of human FUS protein. *Nucleic Acids Research*, **2015**, 43, 7535-43	20.1	74
211	Mutation of the TERT promoter, switch to active chromatin, and monoallelic TERT expression in multiple cancers. *Genes and Development*, **2015**, 29, 2219-24	12.6	117
210	Biochemical Properties and Biological Functions of FET Proteins. *Annual Review of Biochemistry*, **2015**, 84, 355-79	29.1	107
209	A novel two-step genome editing strategy with CRISPR-Cas9 provides new insights into telomerase action and TERT gene expression. *Genome Biology*, **2015**, 16, 231	18.3	58

208	RNA World research-still evolving. *Rna*, **2015**, 21, 474-5	5.8	9
207	Human telomerase: biogenesis, trafficking, recruitment, and activation. *Genes and Development*, **2015**, 29, 1095-105	12.6	190
206	The recruitment of chromatin modifiers by long noncoding RNAs: lessons from PRC2. *Rna*, **2015**, 21, 2007-22	5.8	195
205	Protein-RNA interaction restricts telomerase from running through the stop sign. *Nature Structural and Molecular Biology*, **2015**, 22, 835-6	17.6	3
204	Toward a consensus on the binding specificity and promiscuity of PRC2 for RNA. *Molecular Cell*, **2015**, 57, 552-8	17.6	156
203	Contributions of the TEL-patch amino acid cluster on TPP1 to telomeric DNA synthesis by human telomerase. *Journal of Molecular Biology*, **2015**, 427, 1291-1303	6.5	22
202	Cancer. TERT promoter mutations and telomerase reactivation in urothelial cancer. *Science*, **2015**, 347, 1006-10	33.3	214
201	Disease mutant analysis identifies a new function of DAXX in telomerase regulation and telomere maintenance. *Journal of Cell Science*, **2015**, 128, 331-41	5.3	21
200	The noncoding RNA revolution-trashing old rules to forge new ones. *Cell*, **2014**, 157, 77-94	56.2	1466
199	Academia and industry: Companies on campus. *Nature*, **2014**, 514, 297-8	50.4	6
198	Identification of human TERT elements necessary for telomerase recruitment to telomeres. *ELife*, **2014**, 3,	8.9	67
197	FUS is sequestered in nuclear aggregates in ALS patient fibroblasts. *Molecular Biology of the Cell*, **2014**, 25, 2571-8	3.5	40
196	Inventory of telomerase components in human cells reveals multiple subpopulations of hTR and hTERT. *Nucleic Acids Research*, **2014**, 42, 8565-77	20.1	92
195	A dimeric state for PRC2. *Nucleic Acids Research*, **2014**, 42, 9236-48	20.1	30
194	Structure and function of steroid receptor RNA activator protein, the proposed partner of SRA noncoding RNA. *Journal of Molecular Biology*, **2014**, 426, 1766-1785	6.5	25
193	Inhibition of telomerase recruitment and cancer cell death. *Journal of Biological Chemistry*, **2013**, 288, 33171-80	5.4	37
192	RNA recognition by the DNA end-binding Ku heterodimer. *Rna*, **2013**, 19, 841-51	5.8	21
191	3R terminal diversity of MRP RNA and other human noncoding RNAs revealed by deep sequencing. *BMC Molecular Biology*, **2013**, 14, 23	4.5	24

190	Promiscuous RNA binding by Polycomb repressive complex 2. *Nature Structural and Molecular Biology*, **2013**, 20, 1250-7	17.6	332
189	Many disease-associated variants of hTERT retain high telomerase enzymatic activity. *Nucleic Acids Research*, **2013**, 41, 8969-78	20.1	55
188	Finding the end: recruitment of telomerase to telomeres. *Nature Reviews Molecular Cell Biology*, **2013**, 14, 69-82	48.7	267
187	Die RNA aus der Sicht eines Chemikers. *Angewandte Chemie*, **2013**, 125, 78-82	3.6	
186	How a chemist looks at RNA. *Angewandte Chemie - International Edition*, **2013**, 52, 75-8	16.4	4
185	RNA seeds higher-order assembly of FUS protein. *Cell Reports*, **2013**, 5, 918-25	10.6	216
184	FUS binds the CTD of RNA polymerase II and regulates its phosphorylation at Ser2. *Genes and Development*, **2012**, 26, 2690-5	12.6	152
183	RNase P branches out from RNP to protein: organelle-triggered diversification?. *Genes and Development*, **2012**, 26, 1005-9	12.6	8
182	The TEL patch of telomere protein TPP1 mediates telomerase recruitment and processivity. *Nature*, **2012**, 492, 285-9	50.4	231
181	Mutually exclusive binding of telomerase RNA and DNA by Ku alters telomerase recruitment model. *Cell*, **2012**, 148, 922-32	56.2	69
180	The RNA worlds in context. *Cold Spring Harbor Perspectives in Biology*, **2012**, 4, a006742	10.2	109
179	DNA-induced dimerization of the single-stranded DNA binding telomeric protein Pot1 from Schizosaccharomyces pombe. *Nucleic Acids Research*, **2012**, 40, 235-44	20.1	20
178	The RNA accordion model for template positioning by telomerase RNA during telomeric DNA synthesis. *Nature Structural and Molecular Biology*, **2011**, 18, 1371-5	17.6	50
177	Telomere shortening and loss of self-renewal in dyskeratosis congenita induced pluripotent stem cells. *Nature*, **2011**, 474, 399-402	50.4	186
176	Multiple POT1-TPP1 proteins coat and compact long telomeric single-stranded DNA. *Journal of Molecular Biology*, **2011**, 410, 10-7	6.5	30
175	Ku can contribute to telomere lengthening in yeast at multiple positions in the telomerase RNP. *Rna*, **2011**, 17, 298-311	5.8	22
174	POT1-TPP1 enhances telomerase processivity by slowing primer dissociation and aiding translocation. *EMBO Journal*, **2010**, 29, 924-33	13	137
173	Tetrahymena telomerase protein p65 induces conformational changes throughout telomerase RNA (TER) and rescues telomerase reverse transcriptase and TER assembly mutants. *Molecular and Cellular Biology*, **2010**, 30, 4965-76	4.8	26

172	How telomeric protein POT1 avoids RNA to achieve specificity for single-stranded DNA. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 651-6	11.5	58
171	Functional interaction between telomere protein TPP1 and telomerase. *Genes and Development*, **2010**, 24, 613-22	12.6	93
170	Engineering cis-telomerase RNAs that add telomeric repeats to themselves. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 4914-8	11.5	6
169	Evolution of biological catalysis: ribozyme to RNP enzyme. *Cold Spring Harbor Symposia on Quantitative Biology*, **2009**, 74, 11-6	3.9	23
168	Inhibition of yeast telomerase action by the telomeric ssDNA-binding protein, Cdc13p. *Nucleic Acids Research*, **2009**, 37, 354-67	20.1	24
167	A natural ribozyme with 3′,5′ RNA ligase activity. *Nature Chemical Biology*, **2009**, 5, 97-9	11.7	26
166	Crawling out of the RNA world. *Cell*, **2009**, 136, 599-602	56.2	84
165	Triple-helix structure in telomerase RNA contributes to catalysis. *Nature Structural and Molecular Biology*, **2008**, 15, 634-40	17.6	100
164	Mutation in TERT separates processivity from anchor-site function. *Nature Structural and Molecular Biology*, **2008**, 15, 870-2	17.6	54
163	Multiple yeast genes, including Paf1 complex genes, affect telomere length via telomerase RNA abundance. *Molecular and Cellular Biology*, **2008**, 28, 4152-61	4.8	35
162	Toward predicting self-splicing and protein-facilitated splicing of group I introns. *Rna*, **2008**, 14, 2013-29	5.8	32
161	The future of research universities. Is the model of research-intensive universities still valid at the beginning of the twenty-first century?. *EMBO Reports*, **2007**, 8, 804-10	6.5	5
160	The POT1-TPP1 telomere complex is a telomerase processivity factor. *Nature*, **2007**, 445, 506-10	50.4	513
159	Local RNA structural changes induced by crystallization are revealed by SHAPE. *Rna*, **2007**, 13, 536-48	5.8	47
158	On the occasion of the 25th anniversary of the discovery of catalytic RNA. *Biological Chemistry*, **2007**, 388, 661-2	4.5	1
157	Atomic level architecture of group I introns revealed. *Trends in Biochemical Sciences*, **2006**, 31, 41-51	10.3	136
156	Low abundance of telomerase in yeast: implications for telomerase haploinsufficiency. *Rna*, **2006**, 12, 1721-37	5.8	93
155	Comparison of crystal structure interactions and thermodynamics for stabilizing mutations in the Tetrahymena ribozyme. *Rna*, **2006**, 12, 387-95	5.8	11

154	Crystal structure of the essential N-terminal domain of telomerase reverse transcriptase. *Nature Structural and Molecular Biology*, **2006**, 13, 218-25	17.6	148
153	Always a Teacher, Always a Student. *FASEB Journal*, **2006**, 20, A420	0.9	
152	Crystal structure of an essential telomerase-specific domain of TERT. *FASEB Journal*, **2006**, 20, A984	0.9	
151	Human POT1 disrupts telomeric G-quadruplexes allowing telomerase extension in vitro. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 10864-9	11.5	295
150	Soluble domains of telomerase reverse transcriptase identified by high-throughput screening. *Protein Science*, **2005**, 14, 2051-8	6.3	35
149	A miniature yeast telomerase RNA functions in vivo and reconstitutes activity in vitro. *Nature Structural and Molecular Biology*, **2005**, 12, 1072-7	17.6	72
148	Fostering innovation and discovery in biomedical research. *JAMA - Journal of the American Medical Association*, **2005**, 294, 1390-3	27.4	18
147	Expression of a RecQ helicase homolog affects progression through crisis in fission yeast lacking telomerase. *Journal of Biological Chemistry*, **2005**, 280, 5249-57	5.4	41
146	Switching human telomerase on and off with hPOT1 protein in vitro. *Journal of Biological Chemistry*, **2005**, 280, 20449-56	5.4	128
145	POT1 stimulates RecQ helicases WRN and BLM to unwind telomeric DNA substrates. *Journal of Biological Chemistry*, **2005**, 280, 32069-80	5.4	139
144	The Euplotes telomerase subunit p43 stimulates enzymatic activity and processivity in vitro. *Rna*, **2004**, 10, 1108-18	5.8	22
143	Yeast telomerase RNA: a flexible scaffold for protein subunits. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 10024-9	11.5	187
142	Nurturing interdisciplinary research. *Nature Structural and Molecular Biology*, **2004**, 11, 1166-9	17.6	32
141	Structure of human POT1 bound to telomeric single-stranded DNA provides a model for chromosome end-protection. *Nature Structural and Molecular Biology*, **2004**, 11, 1223-9	17.6	356
140	Self-splicing and enzymatic activity of an intervening sequence RNA from Tetrahymena. *Bioscience Reports*, **2004**, 24, 362-85	4.1	3
139	Beginning to understand the end of the chromosome. *Cell*, **2004**, 116, 273-9	56.2	360
138	Human POT1 facilitates telomere elongation by telomerase. *Current Biology*, **2003**, 13, 942-6	6.3	171
137	DNA self-recognition in the structure of Pot1 bound to telomeric single-stranded DNA. *Nature*, **2003**, 426, 198-203	50.4	165

136	The Euplotes La motif protein p43 has properties of a telomerase-specific subunit. *Biochemistry*, **2003**, 42, 5736-47	3.2	49
135	Yeast telomerase is specialized for C/A-rich RNA templates. *Nucleic Acids Research*, **2003**, 31, 1646-55	20.1	17
134	A template-proximal RNA paired element contributes to Saccharomyces cerevisiae telomerase activity. *Rna*, **2003**, 9, 1323-32	5.8	44
133	Sharing publication-related data and materials: responsibilities of authorship in the life sciences. *Plant Physiology*, **2003**, 132, 19-24	6.6	33
132	N-terminal domain of yeast telomerase reverse transcriptase: recruitment of Est3p to the telomerase complex. *Molecular Biology of the Cell*, **2003**, 14, 1-13	3.5	56
131	Tetrahymena telomerase is active as a monomer. *Molecular Biology of the Cell*, **2003**, 14, 4794-804	3.5	46
130	In vivo selection of better self-splicing introns in Escherichia coli: the role of the P1 extension helix of the Tetrahymena intron. *Rna*, **2002**, 8, 647-58	5.8	21
129	The chemical repertoire of natural ribozymes. *Nature*, **2002**, 418, 222-8	50.4	559
128	Evolution of Tetrahymena ribozyme mutants with increased structural stability. *Nature Structural Biology*, **2002**, 9, 855-61		25
127	Essential regions of Saccharomyces cerevisiae telomerase RNA: separate elements for Est1p and Est2p interaction. *Molecular and Cellular Biology*, **2002**, 22, 2366-74	4.8	93
126	A bulged stem tethers Est1p to telomerase RNA in budding yeast. *Genes and Development*, **2002**, 16, 2800-12	12.6	110
125	Human Pot1 (protection of telomeres) protein: cytolocalization, gene structure, and alternative splicing. *Molecular and Cellular Biology*, **2002**, 22, 8079-87	4.8	139
124	Ribozymes, the first 20 years. *Biochemical Society Transactions*, **2002**, 30, 1162-6	5.1	92
123	Cooperative binding of single-stranded telomeric DNA by the Pot1 protein of Schizosaccharomyces pombe. *Biochemistry*, **2002**, 41, 14560-8	3.2	72
122	HHMIR attention to WileyR lab staff. *Science*, **2002**, 295, 43	33.3	1
121	Structural basis of the enhanced stability of a mutant ribozyme domain and a detailed view of RNA--solvent interactions. *Structure*, **2001**, 9, 221-31	5.2	146
120	Pot1, the putative telomere end-binding protein in fission yeast and humans. *Science*, **2001**, 292, 1171-5	33.3	786
119	An early transition state for folding of the P4-P6 RNA domain. *Rna*, **2001**, 7, 161-6	5.8	50

118	Leben am Ende der Chromosomen: Telomere und Telomerase. *Angewandte Chemie*, **2000**, 112, 34-44	3.6	20
117	Life at the End of the Chromosome: Telomeres and Telomerase. *Angewandte Chemie - International Edition*, **2000**, 39, 34-43	16.4	119
116	Protection of telomeres by the Ku protein in fission yeast. *Molecular Biology of the Cell*, **2000**, 11, 3265-75	3.5	125
115	A mutant of Tetrahymena telomerase reverse transcriptase with increased processivity. *Journal of Biological Chemistry*, **2000**, 275, 24199-207	5.4	76
114	Telomerase RNA bound by protein motifs specific to telomerase reverse transcriptase. *Molecular Cell*, **2000**, 6, 493-9	17.6	100
113	Structural biology. The ribosome is a ribozyme. *Science*, **2000**, 289, 878-9	33.3	245
112	Multiple folding pathways for the P4-P6 RNA domain. *Biochemistry*, **2000**, 39, 12465-75	3.2	85
111	Quantifying the energetic interplay of RNA tertiary and secondary structure interactions. *Rna*, **1999**, 5, 1665-74	5.8	50
110	In vitro selection of RNAs with increased tertiary structure stability. *Rna*, **1999**, 5, 1119-29	5.8	37
109	Saccharomyces cerevisiae telomerase is an Sm small nuclear ribonucleoprotein particle. *Nature*, **1999**, 401, 177-80	50.4	237
108	Telomerase and the maintenance of chromosome ends. *Current Opinion in Cell Biology*, **1999**, 11, 318-24	9	235
107	Self-splicing of the Tetrahymena intron from mRNA in mammalian cells. *EMBO Journal*, **1999**, 18, 6491-500	10	32
106	RNA tertiary folding monitored by fluorescence of covalently attached pyrene. *Biochemistry*, **1999**, 38, 14224-37	3.2	71
105	Energetics and cooperativity of tertiary hydrogen bonds in RNA structure. *Biochemistry*, **1999**, 38, 8691-702	3.2	110
104	Peptidyl-transferase ribozymes: trans reactions, structural characterization and ribosomal RNA-like features. *Chemistry and Biology*, **1998**, 5, 539-53		83
103	Telomerase and chromosome end maintenance. *Current Opinion in Genetics and Development*, **1998**, 8, 226-32	4.9	94
102	Reversing time: origin of telomerase. *Cell*, **1998**, 92, 587-90	56.2	272
101	Euplotes telomerase: evidence for limited base-pairing during primer elongation and dGTP as an effector of translocation. *Biochemistry*, **1998**, 37, 5162-72	3.2	41

100	A preorganized active site in the crystal structure of the Tetrahymena ribozyme. *Science*, **1998**, 282, 259-64	33.3	262
99	Two modes of survival of fission yeast without telomerase. *Science*, **1998**, 282, 493-6	33.3	222
98	Modulation of telomerase activity by telomere DNA-binding proteins in Oxytricha. *Genes and Development*, **1998**, 12, 1504-14	12.6	66
97	In vitro selection of the Naegleria GIR1 ribozyme identifies three base changes that dramatically improve activity. *Rna*, **1998**, 4, 1481-92	5.8	14
96	A quantitative study of the flexibility contributed to RNA structures by nicks and single-stranded gaps. *Rna*, **1998**, 4, 1179-85	5.8	7
95	Dynamics of Thermal Motions within a Large Catalytic RNA Investigated by Cross-linking with Thiol□Disulfide Interchange. *Journal of the American Chemical Society*, **1997**, 119, 6259-6268	16.4	70
94	Reverse transcriptase motifs in the catalytic subunit of telomerase. *Science*, **1997**, 276, 561-7	33.3	1034
93	Joining the two domains of a group I ribozyme to form the catalytic core. *Science*, **1997**, 275, 847-9	33.3	44
92	Crystals by design: a strategy for crystallization of a ribozyme derived from the Tetrahymena group I intron. *Journal of Molecular Biology*, **1997**, 270, 711-23	6.5	38
91	Telomerase catalytic subunit homologs from fission yeast and human. *Science*, **1997**, 277, 955-9	33.3	1963
90	Peptide bond formation by in vitro selected ribozymes. *Nature*, **1997**, 390, 96-100	50.4	257
89	Regulation of telomere length and function by a Myb-domain protein in fission yeast. *Nature*, **1997**, 385, 744-7	50.4	432
88	A second catalytic metal ion in group I ribozyme. *Nature*, **1997**, 388, 805-8	50.4	169
87	Telomerase and the chromosome end replication problem. *Novartis Foundation Symposium*, **1997**, 211, 20-8; discussion 28-34		7
86	Synthesis and Characterization of an RNA Dinucleotide Containing a 3□5-Phosphorothiolate Linkage. *Journal of the American Chemical Society*, **1996**, 118, 10341-10350	16.4	50
85	Conformational switches involved in orchestrating the successive steps of group I RNA splicing. *Biochemistry*, **1996**, 35, 3754-63	3.2	35
84	Minor-groove recognition of double-stranded RNA by the double-stranded RNA-binding domain from the RNA-activated protein kinase PKR. *Biochemistry*, **1996**, 35, 9983-94	3.2	209
83	Exocyclic amine of the conserved G.U pair at the cleavage site of the Tetrahymena ribozyme contributes to 5'-splice site selection and transition state stabilization. *Biochemistry*, **1996**, 35, 1201-11	3.2	52

82	Group I introns: new molecular mechanisms for mRNA repair. *Nature Biotechnology*, **1995**, 13, 323-6	44.5	4
81	Protein facilitation of group I intron splicing by assembly of the catalytic core and the 5R̈splice site domain. *Cell*, **1995**, 82, 221-30	56.2	108
80	Phosphorylation of the Oxytricha telomere protein: possible cell cycle regulation. *Nucleic Acids Research*, **1995**, 23, 1887-93	20.1	17
79	Ribozyme-mediated repair of defective mRNA by targeted, trans-splicing. *Nature*, **1994**, 371, 619-22	50.4	236
78	Translocation of an RNA duplex on a ribozyme. *Nature Structural and Molecular Biology*, **1994**, 1, 13-7	17.6	35
77	Representation of the secondary and tertiary structure of group I introns. *Nature Structural and Molecular Biology*, **1994**, 1, 273-80	17.6	238
76	GAAA tetraloop and conserved bulge stabilize tertiary structure of a group I intron domain. *Journal of Molecular Biology*, **1994**, 236, 49-63	6.5	234
75	Visualization of a tertiary structural domain of the Tetrahymena group I intron by electron microscopy. *Journal of Molecular Biology*, **1994**, 236, 64-71	6.5	39
74	Metal Ion Dependence of Active-Site Structure of the Tetrahymena Ribozyme Revealed by Site-Specific Photo-crosslinking. *Journal of the American Chemical Society*, **1994**, 116, 4178-4182	16.4	24
73	The efficiency and versatility of catalytic RNA: implications for an RNA world. *Gene*, **1993**, 135, 33-6	3.8	79
72	The beta subunit of Oxytricha telomere-binding protein promotes G-quartet formation by telomeric DNA. *Cell*, **1993**, 74, 875-85	56.2	248
71	Catalytic RNA: structure and mechanism. *Biochemical Society Transactions*, **1993**, 21, 229-34	5.1	22
70	Metal ion catalysis in the Tetrahymena ribozyme reaction. *Nature*, **1993**, 361, 85-8	50.4	369
69	Mutations at the guanosine-binding site of the Tetrahymena ribozyme also affect site-specific hydrolysis. *Nucleic Acids Research*, **1992**, 20, 6613-9	20.1	18
68	RNA substrate binding site in the catalytic core of the Tetrahymena ribozyme. *Nature*, **1992**, 358, 123-8	50.4	194
67	Inhibition of telomerase by G-quartet DNA structures. *Nature*, **1991**, 350, 718-20	50.4	1002
66	A self-splicing group I intron in the nuclear pre-rRNA of the green alga, Ankistrodesmus stipitatus. *Nucleic Acids Research*, **1991**, 19, 4429-36	20.1	54
65	Molecular cloning of telomere-binding protein genes from Stylonychia mytilis. *Nucleic Acids Research*, **1991**, 19, 5515-8	20.1	48

64	A hammerhead ribozyme allows synthesis of a new form of the Tetrahymena ribozyme homogeneous in length with a 3′ end blocked for transesterification. *Nucleic Acids Research*, **1991**, 19, 3875-80	20.1	67
63	Ribozyme recognition of RNA by tertiary interactions with specific ribose 2′OH groups. *Nature*, **1991**, 350, 628-31	50.4	185
62	Cloning and expression of genes for the Oxytricha telomere-binding protein: specific subunit interactions in the telomeric complex. *Cell*, **1991**, 67, 807-14	56.2	148
61	Mutations in a nonconserved sequence of the Tetrahymena ribozyme increase activity and specificity. *Cell*, **1991**, 67, 1007-19	56.2	82
60	RNA editing: world's smallest introns?. *Cell*, **1991**, 64, 667-9	56.2	140
59	Self-splicing and enzymatic cleavage of RNA by a group I intervening sequence. *Methods in Enzymology*, **1990**, 181, 558-69	1.7	17
58	DNA cleavage catalysed by the ribozyme from Tetrahymena. *Nature*, **1990**, 344, 405-9	50.4	124
57	Nobel lecture. Self-splicing and enzymatic activity of an intervening sequence RNA from Tetrahymena. *Bioscience Reports*, **1990**, 10, 239-61	4.1	52
56	Symposium 3: Non-enzymatic biocatalysts in nature and biotechnology. *Freseniuss Journal of Analytical Chemistry*, **1990**, 337, 12-14		
55	Self-splicing and Enzymatic Activity of an Intervening Sequence RNA from Tetrahymena (Nobel Lecture). *Angewandte Chemie International Edition in English*, **1990**, 29, 759-768		47
54	Selbstspleißen und enzymatische Aktivität einer intervenierenden Sequenz der RNA von Tetrahymena (Nobel-Vortrag). *Angewandte Chemie*, **1990**, 102, 745-755	3.6	16
53	Catalysis of RNA cleavage by the Tetrahymena thermophila ribozyme. 1. Kinetic description of the reaction of an RNA substrate complementary to the active site. *Biochemistry*, **1990**, 29, 10159-71	3.2	291
52	Catalysis of RNA cleavage by the Tetrahymena thermophila ribozyme. 2. Kinetic description of the reaction of an RNA substrate that forms a mismatch at the active site. *Biochemistry*, **1990**, 29, 10172-80	3.2	97
51	Self-splicing of group I introns. *Annual Review of Biochemistry*, **1990**, 59, 543-68	29.1	774
50	A Tetrahymena intron nucleotide connected to the GTP/arginine site. *Nucleic Acids Research*, **1989**, 17, 6969-81	20.1	10
49	Oxytricha telomeric nucleoprotein complexes reconstituted with synthetic DNA. *Nucleic Acids Research*, **1989**, 17, 4235-53	20.1	55
48	Specificity for 3′,5′ linked substrates in RNA-catalyzed RNA polymerization. *Journal of Molecular Evolution*, **1989**, 29, 480-5	3.1	8
47	Assembly and self-association of oxytricha telomeric nucleoprotein complexes. *Cell*, **1989**, 59, 719-28	56.2	57

46	Reverse self-splicing of the tetrahymena group I intron: implication for the directionality of splicing and for intron transposition. *Cell*, **1989**, 57, 335-45	56.2	183
45	Monovalent cation-induced structure of telomeric DNA: the G-quartet model. *Cell*, **1989**, 59, 871-80	56.2	1080
44	Conserved sequences and structures of group I introns: building an active site for RNA catalysis--a review. *Gene*, **1988**, 73, 259-71	3.8	441
43	Mitochondrial telomeres: surprising diversity of repeated telomeric DNA sequences among six species of Tetrahymena. *Cell*, **1988**, 52, 367-74	56.2	81
42	Phylogenetic relationships and altered genome structures among Tetrahymena mitochondrial DNAs. *Nucleic Acids Research*, **1988**, 16, 327-46	20.1	49
41	Structural conventions for group I introns. *Nucleic Acids Research*, **1987**, 15, 7217-21	20.1	276
40	5Rexon requirement for self-splicing of the Tetrahymena thermophila pre-ribosomal RNA and identification of a cryptic 5Rsplice site in the 3Rexon. *Journal of Molecular Biology*, **1987**, 196, 49-60	6.5	40
39	Selection of circularization sites in a group I IVS RNA requires multiple alignments of an internal template-like sequence. *Cell*, **1987**, 50, 951-61	56.2	56
38	Self-splicing RNA and an RNA enzyme in Tetrahymena. *Journal of Protozoology*, **1987**, 34, 416-7		2
37	RNA as an enzyme. *Scientific American*, **1986**, 255, 64-75	0.5	113
36	Mechanism of recognition of the 5Rsplice site in self-splicing group I introns. *Nature*, **1986**, 322, 86-9	50.4	32
35	The Tetrahymena ribozyme acts like an RNA restriction endonuclease. *Nature*, **1986**, 324, 429-33	50.4	261
34	The telomeres of the linear mitochondrial DNA of Tetrahymena thermophila consist of 53 bp tandem repeats. *Cell*, **1986**, 46, 873-83	56.2	74
33	The generality of self-splicing RNA: relationship to nuclear mRNA splicing. *Cell*, **1986**, 44, 207-10	56.2	450
32	Role of conserved sequence elements 9L and 2 in self-splicing of the Tetrahymena ribosomal RNA precursor. *Cell*, **1986**, 45, 167-76	56.2	77
31	One binding site determines sequence specificity of Tetrahymena pre-rRNA self-splicing, trans-splicing, and RNA enzyme activity. *Cell*, **1986**, 47, 207-16	56.2	207
30	New reactions of the ribosomal RNA precursor of Tetrahymena and the mechanism of self-splicing. *Journal of Molecular Biology*, **1986**, 189, 143-65	6.5	175
29	Self-splicing RNA: implications for evolution. *International Review of Cytology*, **1985**, 93, 3-22		92

28	Self-catalyzed cyclization of the intervening sequence RNA of Tetrahymena: inhibition by intercalating dyes. *Nucleic Acids Research*, **1985**, 13, 7741-58	20.1	15
27	Self-catalyzed cyclization of the intervening sequence RNA of Tetrahymena: inhibition by methidiumpropyl.EDTA and localization of the major dye binding sites. *Nucleic Acids Research*, **1985**, 13, 7759-79	20.1	23
26	Sites of circularization of the Tetrahymena rRNA IVS are determined by sequence and influenced by position and secondary structure. *Nucleic Acids Research*, **1985**, 13, 8389-408	20.1	70
25	Sequence requirements for self-splicing of the Tetrahymena thermophila pre-ribosomal RNA. *Nucleic Acids Research*, **1985**, 13, 1871-89	20.1	57
24	Reversibility of cyclization of the Tetrahymena rRNA intervening sequence: implication for the mechanism of splice site choice. *Cell*, **1985**, 42, 639-48	56.2	66
23	Intermolecular exon ligation of the rRNA precursor of Tetrahymena: oligonucleotides can function as 5Rexons. *Cell*, **1985**, 43, 431-7	56.2	116
22	Specific interaction between the self-splicing RNA of Tetrahymena and its guanosine substrate: implications for biological catalysis by RNA. *Nature*, **1984**, 308, 820-6	50.4	248
21	Chromatin structure of the molecular ends of Oxytricha macronuclear DNA: phased nucleosomes and a telomeric complex. *Cell*, **1984**, 38, 501-10	56.2	130
20	Chromatin structure at the replication origins and transcription-initiation regions of the ribosomal RNA genes of Tetrahymena. *Cell*, **1984**, 36, 933-42	56.2	107
19	RNA splicing: three themes with variations. *Cell*, **1983**, 34, 713-6	56.2	221
18	Different nucleosome spacing in transcribed and non-transcribed regions of the ribosomal RNA gene in Tetrahymena thermophila. *Nucleic Acids Research*, **1983**, 11, 2093-109	20.1	32
17	Transcribed and non-transcribed regions of Tetrahymena ribosomal gene chromatin have different accessibilities to micrococcal nuclease. *Nucleic Acids Research*, **1983**, 11, 2077-91	20.1	16
16	Autocatalytic cyclization of an excised intervening sequence RNA is a cleavage-ligation reaction. *Nature*, **1983**, 301, 578-83	50.4	260
15	The intervening sequence excised from the ribosomal RNA precursor of Tetrahymena contains a 5-terminal guanosine residue not encoded by the DNA. *Nucleic Acids Research*, **1982**, 10, 2823-38	20.1	70
14	Self-splicing RNA: autoexcision and autocyclization of the ribosomal RNA intervening sequence of Tetrahymena. *Cell*, **1982**, 31, 147-57	56.2	1756
13	In vitro splicing of the ribosomal RNA precursor of Tetrahymena: involvement of a guanosine nucleotide in the excision of the intervening sequence. *Cell*, **1981**, 27, 487-96	56.2	731
12	The intervening sequence of the ribosomal RNA precursor is converted to a circular RNA in isolated nuclei of Tetrahymena. *Cell*, **1981**, 23, 467-76	56.2	139
11	Replication of the extrachromosomal ribosomal RNA genes of Tetrahymena thermophilia. *Nucleic Acids Research*, **1981**, 9, 3531-43	20.1	97

10	Chromatin structure of the ribosomal RNA genes of Tetrahymena thermophila as analyzed by trimethylpsoralen crosslinking in vivo. *Journal of Molecular Biology*, **1980**, 136, 395-416	6.5	47
9	In vitro splicing of the ribosomal RNA precursor in nuclei of Tetrahymena. *Cell*, **1980**, 19, 331-8	56.2	95
8	Cross-linking of DNA with trimethylpsoralen is a probe for chromatin structure. *Cell*, **1977**, 11, 631-40	56.2	137
7	Organization of highly repeated sequences in mouse main-band DNA. *Journal of Molecular Biology*, **1976**, 100, 227-56	6.5	37
6	An electron microscopic study of mouse foldback DNA. *Cell*, **1975**, 5, 429-46	56.2	70
5	Characterization of the most rapidly renaturing sequences in mouse main-band DNA. *Journal of Molecular Biology*, **1973**, 81, 299-325	6.5	53
4	Nuclear compartmentalization of TERT mRNA and TUG1 lncRNA transcripts is driven by intron retention: implications for RNA-directed therapies		1
3	Polycomb-mediated Genome Architecture Enables Long-range Spreading of H3K27 methylation		5
2	Regulation of histone methylation by automethylation of PRC2		6
1	The cryo-EM structure of human CST reveals a two-megadalton decameric assembly bound to telomeric DNA		1