Zasha Weinberg

List of Publications by Year
in descending order

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67 papers	7,233 citations	81900 39 h-index	114465 63 g-index
70 all docs	70 docs citations	70 times ranked	5964 citing authors

#	Article	IF	Citations
1	Macronuclear Genome Sequence of the Ciliate Tetrahymena thermophila, a Model Eukaryote. PLoS Biology, 2006, 4, e286.	5.6	657
2	A Glycine-Dependent Riboswitch That Uses Cooperative Binding to Control Gene Expression. Science, 2004, 306, 275-279.	12.6	491
3	Rfam 14: expanded coverage of metagenomic, viral and microRNA families. Nucleic Acids Research, 2021, 49, D192-D200.	14.5	475
4	Widespread Genetic Switches and Toxicity Resistance Proteins for Fluoride. Science, 2012, 335, 233-235.	12.6	356
5	Comparative genomics reveals 104 candidate structured RNAs from bacteria, archaea, and their metagenomes. Genome Biology, 2010, 11, R31.	9.6	348
6	CMfinder--a covariance model based RNA motif finding algorithm. Bioinformatics, 2006, 22, 445-452.	4.1	316
7	An Allosteric Self-Splicing Ribozyme Triggered by a Bacterial Second Messenger. Science, 2010, 329, 845-848.	12.6	309
8	Identification of 22 candidate structured RNAs in bacteria using the CMfinder comparative genomics pipeline. Nucleic Acids Research, 2007, 35, 4809-4819.	14.5	292
9	Riboswitches in eubacteria sense the second messenger c-di-AMP. Nature Chemical Biology, 2013, 9, 834-839.	8.0	247
10	tRNA Modifications: Impact on Structure and Thermal Adaptation. Biomolecules, 2017, 7, 35.	4.0	241
11	R2R - software to speed the depiction of aesthetic consensus RNA secondary structures. BMC Bioinformatics, 2011, 12, 3.	2.6	226
12	A widespread self-cleaving ribozyme class is revealed by bioinformatics. Nature Chemical Biology, 2014, 10, 56-60.	8.0	217
13	6S RNA is a widespread regulator of eubacterial RNA polymerase that resembles an open promoter. Rna, 2005, 11, 774-784.	3.5	210
14	New classes of self-cleaving ribozymes revealed by comparative genomics analysis. Nature Chemical Biology, 2015, 11, 606-610.	8.0	174
15	RNAcentral 2021: secondary structure integration, improved sequence search and new member databases. Nucleic Acids Research, 2021, 49, D212-D220.	14.5	160
16	Bacterial Riboswitches Cooperatively Bind Ni 2+ or Co 2+ Ions and Control Expression of Heavy Metal Transporters. Molecular Cell, 2015, 57, 1088-1098.	9.7	147
17	A widespread riboswitch candidate that controls bacterial genes involved in molybdenum cofactor and tungsten cofactor metabolism. Molecular Microbiology, 2008, 68, 918-932.	2.5	142
18	Small, Highly Active DNAs That Hydrolyze DNA. Journal of the American Chemical Society, 2013, 135, 9121-9129.	13.7	134

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19	Fluoride resistance and transport by riboswitch-controlled CLC antiporters. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 15289-15294.	7.1	125
20	Identification of Hammerhead Ribozymes in All Domains of Life Reveals Novel Structural Variations. PLoS Computational Biology, 2011, 7, e1002031.	3.2	124
21	Detection of 224 candidate structured RNAs by comparative analysis of specific subsets of intergenic regions. Nucleic Acids Research, 2017, 45, 10811-10823.	14.5	116
22	The aptamer core of SAM-IV riboswitches mimics the ligand-binding site of SAM-I riboswitches. Rna, 2008, 14, 822-828.	3.5	103
23	Exceptional structured noncoding RNAs revealed by bacterial metagenome analysis. Nature, 2009, 462, 656-659.	27.8	102
24	Sequence-based heuristics for faster annotation of non-coding RNA families. Bioinformatics, 2006, 22, 35-39.	4.1	98
25	Control of bacterial exoelectrogenesis by c-AMP-GMP. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 5389-5394.	7.1	98
26	A Eubacterial Riboswitch Class That Senses the Coenzyme Tetrahydrofolate. Chemistry and Biology, 2010, 17, 681-685.	6.0	86
27	Structural, Functional, and Taxonomic Diversity of Three PreQ1 Riboswitch Classes. Chemistry and Biology, 2014, 21, 880-889.	6.0	78
28	A Computational Pipeline for High- Throughput Discovery of cis-Regulatory Noncoding RNA in Prokaryotes. PLoS Computational Biology, 2007, 3, e126.	3.2	77
29	Bioinformatic analysis of riboswitch structures uncovers variant classes with altered ligand specificity. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E2077-E2085.	7.1	75
30	RNIE: genome-wide prediction of bacterial intrinsic terminators. Nucleic Acids Research, 2011, 39, 5845-5852.	14.5	71
31	A Plant Pathogen Type III Effector Protein Subverts Translational Regulation to Boost Host Polyamine Levels. Cell Host and Microbe, 2019, 26, 638-649.e5.	11.0	68
32	The RNA WikiProject: Community annotation of RNA families. Rna, 2008, 14, 2462-2464.	3.5	66
33	Carba-sugars Activate the glmS-Riboswitch of Staphylococcus aureus. ACS Chemical Biology, 2011, 6, 675-678.	3.4	66
34	The promise of riboswitches as potential antibacterial drug targets. International Journal of Medical Microbiology, 2014, 304, 79-92.	3.6	65
35	Biochemical analysis of pistol self-cleaving ribozymes. Rna, 2015, 21, 1852-1858.	3.5	59
36	Exploiting conserved structure for faster annotation of non-coding RNAs without loss of accuracy. Bioinformatics, 2004, 20, i334-i341.	4.1	56

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37	Identification of candidate structured RNAs in the marine organism 'Candidatus Pelagibacter ubique'. BMC Genomics, 2009, 10, 268.	2.8	56
38	Novel ribozymes: discovery, catalytic mechanisms, and the quest to understand biological function. Nucleic Acids Research, 2019, 47, 9480-9494.	14.5	54
39	An Aptamer Targeting the Apicalâ€Loop Domain Modulates priâ€miRNA Processing. Angewandte Chemie - International Edition, 2010, 49, 4674-4677.	13.8	49
40	Faster genome annotation of non-coding RNA families without loss of accuracy. , 2004, , .		43
41	SAM-VI RNAs selectively bind S-adenosylmethionine and exhibit similarities to SAM-III riboswitches. RNA Biology, 2018, 15, 371-378.	3.1	42
42	Biochemical analysis of hatchet self-cleaving ribozymes. Rna, 2015, 21, 1845-1851.	3.5	36
43	The structure of the SAM/SAH-binding riboswitch. Nucleic Acids Research, 2019, 47, 2654-2665.	14.5	33
44	FINDING NON-CODING RNAs THROUGH GENOME-SCALE CLUSTERING. Journal of Bioinformatics and Computational Biology, 2009, 07, 373-388.	0.8	28
45	RNA diagnostics: realâ€time RTâ€PCR strategies and promising novel target RNAs. Wiley Interdisciplinary Reviews RNA, 2011, 2, 32-41.	6.4	26
46	Activation of the glmS Ribozyme Confers Bacterial Growth Inhibition. ChemBioChem, 2017, 18, 435-440.	2.6	24
47	Discovery and characterization of a fourth class of guanidine riboswitches. Nucleic Acids Research, 2020, 48, 12889-12899.	14.5	23
48	Novel TPP-riboswitch activators bypass metabolic enzyme dependency. Frontiers in Chemistry, 2014, 2, 53.	3.6	17
49	Numerous small hammerhead ribozyme variants associated with Penelope-like retrotransposons cleave RNA as dimers. RNA Biology, 2017, 14, 1499-1507.	3.1	17
50	Identification of over 200-fold more hairpin ribozymes than previously known in diverse circular RNAs. Nucleic Acids Research, 2021, 49, 6375-6388.	14.5	16
51	Widespread bacterial utilization of guanidine as nitrogen source. Molecular Microbiology, 2021, 116, 200-210.	2.5	14
52	Discovery of 20 novel ribosomal leader candidates in bacteria and archaea. BMC Microbiology, 2020, 20, 130.	3.3	10
53	Reporter Gene-Based Screening for TPP Riboswitch Activators. Methods in Molecular Biology, 2017, 1520, 227-235.	0.9	9
54	Biochemical analysis of cleavage and ligation activities of the pistol ribozyme from Paenibacillus polymyxa. RNA Biology, 2021, 18, 1-9.	3.1	9

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55	Spacer prioritization in CRISPRâ€“Cas9 immunity is enabled by the leader RNA. Nature Microbiology, 2022, 7, 530-541.	13.3	9
56	Satellite-Like W-Elements: Repetitive, Transcribed, and Putative Mobile Genetic Factors with Potential Roles for Biology and Evolution of Schistosoma mansoni. Genome Biology and Evolution, 2021, 13, .	2.5	8
57	Natural circularly permuted group II introns in bacteria produce RNA circles. IScience, 2021, 24, 103431.	4.1	7
58	Beyond Plug and Pray: Context Sensitivity and in silico Design of Artificial Neomycin Riboswitches. RNA Biology, 2021, 18, 457-467.	3.1	6
59	A rare bacterial RNA motif is implicated in the regulation of thepurFgene whose encoded enzyme synthesizes phosphoribosylamine. Rna, 2020, 26, 1838-1846.	3.5	5
60	cyPhyRNA-seq: a genome-scale RNA-seq method to detect active self-cleaving ribozymes by capturing RNAs with 2Ê¹,3Ê¹ <u>cy</u>clic <u>p</u>hosphates and 5Ê¹ <u>hy</u>droxyl ends. RNA Biology, 2021, 18, 818-831.	3.1	5
61	A streamlined protocol for the detection of mRNAâ€“sRNA interactions using AMT-crosslinking in vitro. BioTechniques, 2019, 67, 178-183.	1.8	4
62	Screening Assays to Identify Artificial glmS Ribozyme Activators. Methods in Molecular Biology, 2014, 1103, 199-209.	0.9	2
63	Application of RtcB ligase to monitor self-cleaving ribozyme activity by RNA-seq. Biological Chemistry, 2022, .	2.5	2
64	An approximate search engine for structural databases. , 2000, , .		1
65	Meeting report of the RNA Ontology Consortium January 8-9, 2011. Standards in Genomic Sciences, 2011, 4, 252-256.	1.5	1
66	An approximate search engine for structural databases. SIGMOD Record, 2000, 29, 584.	1.2	0
67	FINDING NON-CODING RNAs THROUGH GENOME-SCALE CLUSTERING. , 2007, , .		0