William H Mcclain

List of Publications by Year
in descending order

54 papers	2,073 citations	257101 24 h-index	243296 44 g-index
55 all docs	55 docs citations	55 times ranked	1091 citing authors

#	Article	IF	Citations
1	RNA: yesterday, today and tomorrow. Rna, 2015, 21, 541-543.	1.6	0
2	Discovery of a mini-RNase P in archaea. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 22371-22372.	3.3	1
3	Trials, Travails and Triumphs: An Account of RNA Catalysis in RNase P. Journal of Molecular Biology, 2010, 397, 627-646.	2.0	23
4	Surprising contribution to aminoacylation and translation of non-Watson-Crick pairs in tRNA. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 4570-4575.	3.3	14
5	Structure-function analysis of tRNAGln in an Escherichia coli knockout strain. Rna, 2004, 10, 795-804.	1.6	1
6	Aptamer redesigned tRNA is nonfunctional and degraded in cells. Rna, 2004, 10, 7-11.	1.6	4
7	Recognition of acceptor-stem structure of tRNAAsp by Escherichia coli aspartyl-tRNA synthetase. Rna, 2003, 9, 386-393.	1.6	20
8	Genetic Perturbations of RNA Reveal Structure-based Recognition in Proteinâ€“RNA Interaction. Journal of Molecular Biology, 2002, 324, 573-576.	2.0	4
9	Construction of an Escherichia coli knockout strain for functional analysis of tRNA Asp 1 1Edited by J. Karn. Journal of Molecular Biology, 2001, 310, 537-542.	2.0	6
10	Plasmid systems to study RNA function in Escherichia coli 1 1Edited by J. Karn. Journal of Molecular Biology, 2001, 310, 543-548.	2.0	9
11	The GÂ·U wobble base pair. EMBO Reports, 2000, 1, 18-23.	2.0	399
12	The relationship of thermodynamic stability at a Gâ€¢U recognition site to tRNA aminoacylation specificity. Rna, 1999, 5, 1490-1494.	1.6	19
13	Functional compensation by particular nucleotide substitutions of a critical Gâ€¢U wobble base-pair during aminoacylation of transfer RNA 1 1Edited by A. Klug. Journal of Molecular Biology, 1999, 286, 1025-1032.	2.0	9
14	The reliability of in Vivo structure-function analysis of tRNA aminoacylation. Journal of Molecular Biology, 1999, 290, 391-409.	2.0	23
15	A set of plasmids constitutively producing different RNA levels in Escherichia coli. Journal of Molecular Biology, 1999, 290, 385-389.	2.0	11
16	tRNA nucleotide 47: An evolutionary enigma. Rna, 1998, 4, 928-936.	1.6	1
17	Searching tRNA sequences for relatedness to aminoacyl-tRNA synthetase families. Journal of Molecular Evolution, 1995, 40, 482-486.	0.8	21
18	Distinctive acceptor-end structure and other determinants ofEscherichia colitRNAProidentity. Nucleic Acids Research, 1994, 22, 522-529.	6.5	29

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19	Rules that Govern tRNA Identity in Protein Synthesis. Journal of Molecular Biology, 1993, 234, 257-280.	2.0	172
20	Transfer RNA identity.. FASEB Journal, 1993, 7, 72-78.	0.2	66
21	Genetic analysis of structure and function in phage T4 tRNASer. Journal of Molecular Biology, 1988, 203, 549-553.	2.0	9
22	Nucleotides that contribute to the identity of Escherichia coli tRNAPhe. Journal of Molecular Biology, 1988, 202, 697-709.	2.0	89
23	Specific duplications fostered by a DNA structure containing adjacent inverted repeat sequences. Journal of Molecular Biology, 1988, 204, 27-38.	2.0	4
24	An algorithm for discriminating sequences and its application to yeast transfer RNA. Bioinformatics, 1987, 3, 177-181.	1.8	11
25	Genetic conversion of G Â· C base-pairs to A Â· U base-pairs in a transfer RNA. Journal of Molecular Biology, 1987, 197, 605-608.	2.0	3
26	Suppressor and novel mutants of bacteriophage T4 tRNAGly. Journal of Molecular Biology, 1987, 193, 223-226.	2.0	7
27	Rapid site-specific mutagenesis in plasmids. Gene, 1987, 59, 285-290.	1.0	55
28	Differences between transfer RNA molecules. Journal of Molecular Biology, 1987, 194, 635-642.	2.0	71
29	Variants in clones of gene-machine-synthesized oligodeoxynucleotides. Nucleic Acids Research, 1986, 14, 6770-6770.	6.5	31
30	A statistical method for correlating tRNA sequence with amino acid specificity. Nucleic Acids Research, 1986, 14, 375-380.	6.5	32
31	Cleavage of tRNA precursors by the RNA subunit of E. coli ribonuclease P (M1 RNA) is influenced by 3â€²-proximal CCA in the substrates. Cell, 1984, 38, 219-224.	13.5	107
32	Hybrid transfer RNA genes in phage T4. Cell, 1984, 38, 225-231.	13.5	13
33	Characterization of bacteriophage T4 Band D RNA, a low-molecular-weight RNA of unknown function. Archives of Biochemistry and Biophysics, 1981, 210, 298-306.	1.4	2
34	Maturation Events Leading to Transfer RNA and Ribosomal RNA. , 1980, , 439-545.		4
35	A role for ribonuclease III in synthesis of bacteriophage T4 transfer RNAs. Biochemical and Biophysical Research Communications, 1979, 86, 718-724.	1.0	21
36	Rare transfer ribonucleic acid essential for phage growth. Nucleotide sequence comparison of normal and mutant T4 isoleucine-accepting transfer ribonucleic acid. Biochemistry, 1979, 18, 3786-3795.	1.2	30

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37	Three suppressor forms of bacteriophage T4 leucine transfer RNA. Journal of Molecular Biology, 1979, 135, 1013-1021.	2.0	9
38	Evolution of the biosynthesis of 3â€²-terminal C-C-A residues in T-even bacteriophage transfer RNAs. Journal of Molecular Biology, 1978, 119, 519-536.	2.0	20
39	An Escherichia coli ribonuclease which removes an extra nucleotide from a biosynthetic intermediate of bacteriophage T4 proline transfer RNA. Nucleic Acids Research, 1978, 5, 4129-4140.	6.5	21
40	Seven terminal steps in a biosynthetic pathway leading from DNA to transfer RNA. Accounts of Chemical Research, 1977, 10, 418-425.	7.6	58
41	Cysteine transfer RNA of Escherichia coli: Nucleotide sequence and unusual metabolic properties of the 3â€² C-C-A terminus. Journal of Molecular Biology, 1977, 117, 1061-1079.	2.0	25
42	Genetic perturbations that reveal tertiary conformation of tRNA precursor molecules. Nature, 1975, 257, 106-110.	13.7	44
43	A mutant of escherichia coli defective in removing 3â€² terminal nucleotides from some transfer RNA precursor molecules. Cell, 1975, 5, 389-400.	13.5	80
44	A mutation of the wobble nucleotide of a bacteriophage T4 transfer RNA. Journal of Molecular Biology, 1975, 99, 283-293.	2.0	31
45	Nucleotide alterations in bacteriophage T4 serine transfer RNA that affect the conversion of precursor RNA into transfer RNA. Journal of Molecular Biology, 1975, 99, 717-732.	2.0	44
46	Five steps in the conversion of a large precursor RNA into bacteriophage proline and serine transfer RNAs. Journal of Molecular Biology, 1975, 99, 733-760.	2.0	58
47	An ochre suppressor of bacteriophage T4 that is associated with a transfer RNA. Journal of Molecular Biology, 1974, 90, 665-676.	2.0	48
48	Nucleotide alterations in the bacteriophage T4 glutamine transfer RNA that affect ochre suppressor activity. Journal of Molecular Biology, 1974, 90, 677-689.	2.0	65
49	Transfer Ribonucleic Acid Nucleotidyl-transferase Plays an Essential Role in the Normal Growth of Escherichia coli and in the Biosynthesis of Some Bacteriophage T4 Transfer Ribonucleic Acids. Journal of Biological Chemistry, 1974, 249, 6696-6699.	1.6	55
50	Conditionally lethal mutants of bacteriophage T4 defective in production of a transfer RNA. Journal of Molecular Biology, 1973, 81, 137-155.	2.0	53
51	The psu1+ amber suppressor gene of bacteriophage T4: Identification of its amino acid and transfer RNA. Journal of Molecular Biology, 1973, 81, 157-171.	2.0	49
52	Nucleotide sequence of a glycine transfer RNA coded by bacteriophage T4. FEBS Letters, 1973, 37, 64-69.	1.3	40
53	UAG suppressor coded by bacteriophage T4. FEBS Letters, 1970, 6, 99-101.	1.3	37
54	The tRNA Identity Problem: Past, Present, and Future. , 0, , 335-347.		13