## William H Mcclain

## List of Publications by Year in Descending Order

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

| 55          | 1,792                | 24      | 41      |
|-------------|----------------------|---------|---------|
| papers      | citations            | h-index | g-index |
| 55          | 1,873 ext. citations | 10.8    | 4·37    |
| ext. papers |                      | avg, IF | L-index |

| #  | Paper   | IF           | Citations |
|----|---|--------------|-----------|
| 55 | RNA: yesterday, today and tomorrow. <i>Rna</i> , <b>2015</b> , 21, 541-3  | 5.8          |           |
| 54 | Discovery of a mini-RNase P in archaea. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 22371-2   | 11.5         | 1         |
| 53 | Trials, travails and triumphs: an account of RNA catalysis in RNase P. <i>Journal of Molecular Biology</i> , <b>2010</b> , 397, 627-46  | 6.5          | 22        |
| 52 | Surprising contribution to aminoacylation and translation of non-Watson-Crick pairs in tRNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2006</b> , 103, 4570-5 | 11.5         | 13        |
| 51 | Structure-function analysis of tRNA(Gln) in an Escherichia coli knockout strain. <i>Rna</i> , <b>2004</b> , 10, 795-804   | 5.8          | 1         |
| 50 | Aptamer redesigned tRNA is nonfunctional and degraded in cells. <i>Rna</i> , <b>2004</b> , 10, 7-11   | 5.8          | 2         |
| 49 | Recognition of acceptor-stem structure of tRNA(Asp) by Escherichia coli aspartyl-tRNA synthetase. <i>Rna</i> , <b>2003</b> , 9, 386-93  | 5.8          | 18        |
| 48 | Genetic perturbations of RNA reveal structure-based recognition in protein-RNA interaction. <i>Journal of Molecular Biology</i> , <b>2002</b> , 324, 573-6  | 6.5          | 4         |
| 47 | Construction of an Escherichia coli knockout strain for functional analysis of tRNA(Asp). <i>Journal of Molecular Biology</i> , <b>2001</b> , 310, 537-42   | 6.5          | 6         |
| 46 | Plasmid systems to study RNA function in Escherichia coli. <i>Journal of Molecular Biology</i> , <b>2001</b> , 310, 543-  | <b>8</b> 6.5 | 9         |
| 45 | The G x U wobble base pair. A fundamental building block of RNA structure crucial to RNA function in diverse biological systems. <i>EMBO Reports</i> , <b>2000</b> , 1, 18-23                                   | 6.5          | 318       |
| 44 | The relationship of thermodynamic stability at a $G \times U$ recognition site to tRNA aminoacylation specificity. <i>Rna</i> , <b>1999</b> , 5, 1490-4   | 5.8          | 15        |
| 43 | Functional compensation by particular nucleotide substitutions of a critical G*U wobble base-pair during aminoacylation of transfer RNA. <i>Journal of Molecular Biology</i> , <b>1999</b> , 286, 1025-32       | 6.5          | 9         |
| 42 | The reliability of in vivo structure-function analysis of tRNA aminoacylation. <i>Journal of Molecular Biology</i> , <b>1999</b> , 290, 391-409   | 6.5          | 21        |
| 41 | A set of plasmids constitutively producing different RNA levels in Escherichia coli. <i>Journal of Molecular Biology</i> , <b>1999</b> , 290, 385-9   | 6.5          | 10        |
| 40 | tRNA nucleotide 47: an evolutionary enigma. <i>Rna</i> , <b>1998</b> , 4, 928-36  | 5.8          | 1         |
| 39 | Searching tRNA sequences for relatedness to aminoacyl-tRNA synthetase families. <i>Journal of Molecular Evolution</i> , <b>1995</b> , 40, 482-6   | 3.1          | 18        |

| 38 | Distinctive acceptor-end structure and other determinants of Escherichia coli tRNAPro identity. <i>Nucleic Acids Research</i> , <b>1994</b> , 22, 522-9                     | 20.1 | 24  |
|----|---|------|-----|
| 37 | Rules that govern tRNA identity in protein synthesis. <i>Journal of Molecular Biology</i> , <b>1993</b> , 234, 257-80   | 6.5  | 148 |
| 36 | Transfer RNA identity. FASEB Journal, 1993, 7, 72-8   | 0.9  | 60  |
| 35 | Genetic analysis of structure and function in phage T4 tRNASer. <i>Journal of Molecular Biology</i> , <b>1988</b> , 203, 549-53   | 6.5  | 8   |
| 34 | Nucleotides that contribute to the identity of Escherichia coli tRNA(Phe). <i>Journal of Molecular Biology</i> , <b>1988</b> , 202, 697-709                                 | 6.5  | 84  |
| 33 | Specific duplications fostered by a DNA structure containing adjacent inverted repeat sequences.<br>Journal of Molecular Biology, <b>1988</b> , 204, 27-40                  | 6.5  | 4   |
| 32 | An algorithm for discriminating sequences and its application to yeast transfer RNA. <i>Bioinformatics</i> , <b>1987</b> , 3, 177-81  | 7.2  | 8   |
| 31 | Genetic conversion of G.C base-pairs to A.U base-pairs in a transfer RNA. <i>Journal of Molecular Biology</i> , <b>1987</b> , 197, 605-8                                    | 6.5  | 2   |
| 30 | Suppressor and novel mutants of bacteriophage T4 tRNA(Gly). <i>Journal of Molecular Biology</i> , <b>1987</b> , 193, 223-6  | 6.5  | 5   |
| 29 | Rapid site-specific mutagenesis in plasmids. <i>Gene</i> , <b>1987</b> , 59, 285-90   | 3.8  | 47  |
| 28 | Differences between transfer RNA molecules. <i>Journal of Molecular Biology</i> , <b>1987</b> , 194, 635-42   | 6.5  | 67  |
| 27 | A statistical method for correlating tRNA sequence with amino acid specificity. <i>Nucleic Acids Research</i> , <b>1986</b> , 14, 375-80                                    | 20.1 | 30  |
| 26 | Variants in clones of gene-machine-synthesized oligodeoxynucleotides. <i>Nucleic Acids Research</i> , <b>1986</b> , 14, 6770  | 20.1 | 29  |
| 25 | Cleavage of tRNA precursors by the RNA subunit of E. coli ribonuclease P (M1 RNA) is influenced by 3Wproximal CCA in the substrates. <i>Cell</i> , <b>1984</b> , 38, 219-24 | 56.2 | 98  |
| 24 | Hybrid transfer RNA genes in phage T4. <i>Cell</i> , <b>1984</b> , 38, 225-31   | 56.2 | 10  |
| 23 | Characterization of bacteriophage T4 and D RNA, a low-molecular-weight RNA of unknown function. <i>Archives of Biochemistry and Biophysics</i> , <b>1981</b> , 210, 298-306 | 4.1  | 2   |
|    |   |      |     |
| 22 | Maturation Events Leading to Transfer RNA and Ribosomal RNA 1980, 439-545   |      | 4   |

| 20 | Rare transfer ribonucleic acid essential for phage growth. Nucleotide sequence comparison of normal and mutant T4 isoleucine-accepting transfer ribonucleic acid. <i>Biochemistry</i> , <b>1979</b> , 18, 3786-95  | 3.2  | 26 |
|----|--|------|----|
| 19 | Three suppressor forms of bacteriophage T4 leucine transfer RNA. <i>Journal of Molecular Biology</i> , <b>1979</b> , 135, 1013-21  | 6.5  | 8  |
| 18 | Evolution of the biosynthesis of 3Wterminal C-C-A residues in T-even bacteriophage transfer RNAs.<br>Journal of Molecular Biology, 1978, 119, 519-36   | 6.5  | 19 |
| 17 | An Escherichia coli ribonuclease which removes an extra nucleotide from a biosynthetic intermediate of bacteriophage T4 proline transfer RNA. <i>Nucleic Acids Research</i> , <b>1978</b> , 5, 4129-39   | 20.1 | 18 |
| 16 | Seven terminal steps in a biosynthetic pathway leading from DNA to transfer RNA. <i>Accounts of Chemical Research</i> , <b>1977</b> , 10, 418-425  | 24.3 | 54 |
| 15 | Cysteine transfer RNA of Escherichia coli: nucleotide sequence and unusual metabolic properties of the 3WC-C-A terminus. <i>Journal of Molecular Biology</i> , <b>1977</b> , 117, 1061-79  | 6.5  | 24 |
| 14 | Genetic perturbations that reveal tertiary conformation of tRNA precursor molecules. <i>Nature</i> , <b>1975</b> , 257, 106-10   | 50.4 | 41 |
| 13 | A mutant of escherichia coli defective in removing 3Vterminal nucleotides from some transfer RNA precursor molecules. <i>Cell</i> , <b>1975</b> , 5, 389-400   | 56.2 | 75 |
| 12 | A mutation of the wobble nucleotide of a bacteriophage T4 transfer RNA. <i>Journal of Molecular Biology</i> , <b>1975</b> , 99, 283-93   | 6.5  | 27 |
| 11 | Nucleotide alterations in bacteriophage T4 serine transfer RNA that affect the conversion of precursor RNA into transfer RNA. <i>Journal of Molecular Biology</i> , <b>1975</b> , 99, 717-32   | 6.5  | 38 |
| 10 | Five steps in the conversion of a large precursor RNA into bacteriophage proline and serine transfer RNAs. <i>Journal of Molecular Biology</i> , <b>1975</b> , 99, 733-60  | 6.5  | 50 |
| 9  | An ochre suppressor of bacteriophage T4 that is associated with a transfer RNA. <i>Journal of Molecular Biology</i> , <b>1974</b> , 90, 665-76   | 6.5  | 42 |
| 8  | Nucleotide alterations in the bacteriophage T4 glutamine transfer RNA that affect ochre suppressor activity. <i>Journal of Molecular Biology</i> , <b>1974</b> , 90, 677-89  | 6.5  | 56 |
| 7  | 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.<br>Journal of Biological Chemistry, <b>1974</b> , 249, 6696-6699 | 5.4  | 46 |
| 6  | Conditionally lethal mutants of bacteriophage T4 defective in production of a transfer RNA. <i>Journal of Molecular Biology</i> , <b>1973</b> , 81, 137-55   | 6.5  | 47 |
| 5  | The psu1+ amber suppressor gene of bacteriophage T4: identification of its amino acid and transfer RNA. <i>Journal of Molecular Biology</i> , <b>1973</b> , 81, 157-71   | 6.5  | 40 |
| 4  | Nucleotide sequence of a glycine transfer RNA coded by bacteriophage T4. FEBS Letters, 1973, 37, 64-9  | 3.8  | 21 |
| 3  | UAG suppressor coded by bacteriophage T4. <i>FEBS Letters</i> , <b>1970</b> , 6, 99-101  | 3.8  | 35 |

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