

# Ronald W Woodard

## List of Publications by Year in descending order

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docs citations

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times ranked

1908  
citing authors

#	ARTICLE	IF	CITATIONS
1	Identification and Characterization of Bacterial Cutinase. <i>Journal of Biological Chemistry</i> , 2008, 283, 25854-25862.	3.4	195
2	Redefining the Requisite Lipopolysaccharide Structure in <i>Escherichia coli</i> . <i>ACS Chemical Biology</i> , 2006, 1, 33-42.	3.4	129
3	Structure and Mechanism of 3-Deoxy-d-manno-octulosonate 8-Phosphate Synthase. <i>Journal of Biological Chemistry</i> , 2000, 275, 9476-9484.	3.4	91
4	Modification of Lipopolysaccharide with Colanic Acid (M-antigen) Repeats in <i>Escherichia coli</i> *. <i>Journal of Biological Chemistry</i> , 2007, 282, 7790-7798.	3.4	84
5	Overproduction and One-step Purification of <i>Escherichia coli</i> 3-Deoxy-D-manno-octulosonic Acid 8-Phosphate Synthase and Oxygen Transfer Studies during Catalysis Using Isotopic-shifted Heteronuclear NMR. <i>Journal of Biological Chemistry</i> , 1995, 270, 13698-13705.	3.4	72
6	Stereochemistry of 3-deoxyoctulosonate 8-phosphate synthase. <i>Biochemistry</i> , 1993, 32, 12392-12397.	2.5	71
7	Crystal Structure of the Reaction Complex of 3-Deoxy- d - arabino -heptulosonate-7-phosphate Synthase from <i>Thermotoga maritima</i> Refines the Catalytic Mechanism and Indicates a New Mechanism of Allosteric Regulation. <i>Journal of Molecular Biology</i> , 2004, 341, 455-466.	4.2	65
8	Substrate and Metal Complexes of 3-Deoxy-d-manno-octulosonate-8-phosphate Synthase from <i>Aquifex aeolicus</i> at 1.9-Å... Resolution. <i>Journal of Biological Chemistry</i> , 2001, 276, 8393-8402.	3.4	62
9	<i>Escherichia coli</i> YrbH Is a D-Arabinose 5-Phosphate Isomerase. <i>Journal of Biological Chemistry</i> , 2003, 278, 32771-32777.	3.4	61
10	Extracellular Location of <i>Thermobifida fusca</i> Cutinase Expressed in <i>Escherichia coli</i> BL21(DE3) without Mediation of a Signal Peptide. <i>Applied and Environmental Microbiology</i> , 2013, 79, 4192-4198.	3.1	57
11	KpsF Is the Arabinose-5-phosphate Isomerase Required for 3-Deoxy-d-manno-octulosonic Acid Biosynthesis and for Both Lipooligosaccharide Assembly and Capsular Polysaccharide Expression in <i>Neisseria meningitidis</i> . <i>Journal of Biological Chemistry</i> , 2002, 277, 24103-24113.	3.4	56
12	<i>Escherichia coli</i> Yrbl Is 3-Deoxy-d-manno-octulosonate 8-Phosphate Phosphatase. <i>Journal of Biological Chemistry</i> , 2003, 278, 18117-18123.	3.4	52
13	Enzymatic Synthesis of 3-Deoxy-d-manno-octulosonate 8-Phosphate, 3-Deoxy-d-altro-octulosonate 8-Phosphate, 3,5-Dideoxy-d-gluco(manno)-octulosonate 8-Phosphate by 3-Deoxy-d-arabino-heptulosonate 7-Phosphate Synthase. <i>Journal of the American Chemical Society</i> , 1998, 120, 11027-11032.	13.7	49
14	A Metal Bridge between Two Enzyme Families. <i>Journal of Biological Chemistry</i> , 2000, 275, 22824-22831.	3.4	49
15	<i>Aquifex aeolicus</i> 3-Deoxy-d-manno-2-Octulosonic Acid 8-Phosphate Synthase: A New Class of KDO 8-P Synthase?. <i>Journal of Molecular Evolution</i> , 2001, 52, 205-214.	1.8	49
16	Single amino acid substitutions in either YhjD or MsbA confer viability to 3-deoxy-d-manno-octulosonic acid-depleted <i>Escherichia coli</i> . <i>Molecular Microbiology</i> , 2008, 67, 633-648.	2.5	47
17	Identification of a Slow Tight-Binding Inhibitor of 3-Deoxy-d-manno-octulosonic Acid 8-Phosphate Synthase. <i>Journal of the American Chemical Society</i> , 2000, 122, 9334-9335.	13.7	46
18	Structural and mechanistic analysis of the membrane-embedded glycosyltransferase WaaA required for lipopolysaccharide synthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 6253-6258.	7.1	45

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19	Extracellular overexpression of recombinant <i>Thermobifida fusca</i> cutinase by alpha-hemolysin secretion system in <i>E. coli</i> BL21 (DE3). <i>Microbial Cell Factories</i> , 2012, 11, 8.	4.0	42
20	Identification of GutQ from <i>Escherichia coli</i> as a d -Arabinose 5-Phosphate Isomerase. <i>Journal of Bacteriology</i> , 2005, 187, 6936-6942.	2.2	41
21	Structures of <i>Aquifex aeolicus</i> KDO8P Synthase in Complex with R5P and PEP, and with a Bisubstrate Inhibitor: Role of Active Site Water in Catalysis. <i>Biochemistry</i> , 2001, 40, 15676-15683.	2.5	39
22	Permeation of buprenorphine and its 3-alkyl-ester prodrugs through human skin. <i>Pharmaceutical Research</i> , 1996, 13, 1519-1523.	3.5	38
23	New Insights into the Evolutionary Links Relating to the 3-Deoxy-D-arabino-heptulosonate 7-Phosphate Synthase Subfamilies. <i>Journal of Biological Chemistry</i> , 2006, 281, 4042-4048.	3.4	37
24	Synthesis of stereospecific deuterium-labeled homoserines and homoserine lactones. <i>Journal of Organic Chemistry</i> , 1988, 53, 1900-1903.	3.2	36
25	Stereochemistry of indolmycin biosynthesis. Steric course of C- and N-methylation reactions. <i>Journal of the American Chemical Society</i> , 1980, 102, 6314-6318.	13.7	34
26	Characterization of N-acetylneuraminic acid synthase isoenzyme 1 from <i>Campylobacter jejuni</i> . <i>Biochemical Journal</i> , 2004, 383, 83-89.	3.7	34
27	Stereochemical course of the biosynthesis of 1-aminocyclopropane-1-carboxylic acid. I. Role of the asymmetric sulfonium pole and the $\alpha$ -amino acid center. <i>Biochemical and Biophysical Research Communications</i> , 1984, 121, 181-187.	2.1	33
28	WaaA of the Hyperthermophilic Bacterium <i>Aquifex aeolicus</i> Is a Monofunctional 3-Deoxy-d-manno-oct-2-ulosonic Acid Transferase Involved in Lipopolysaccharide Biosynthesis. <i>Journal of Biological Chemistry</i> , 2009, 284, 22248-22262.	3.4	33
29	Functional and Biochemical Characterization of a Recombinant 3-Deoxy-d-manno-octulosonic Acid 8-Phosphate Synthase from the Hyperthermophilic Bacterium <i>Aquifex aeolicus</i> . <i>Biochemical and Biophysical Research Communications</i> , 1999, 263, 346-351.	2.1	32
30	An Asymmetric Strecker Synthesis of (R)-(+)-2-Methyl-3-Phenylalanine: An Efficient Preparation. <i>Synthetic Communications</i> , 1986, 16, 337-342.	2.1	31
31	A practical large scale chemical synthesis of chiral glycines. <i>Tetrahedron</i> , 1988, 44, 5597-5604.	1.9	30
32	<i>Thermotoga maritima</i> 3-Deoxy-D-arabino-heptulosonate 7-Phosphate (DAHP) Synthase. <i>Journal of Biological Chemistry</i> , 2003, 278, 27525-27531.	3.4	30
33	A convenient synthesis of -(5 $\epsilon$ -deoxy-5 $\epsilon$ -adenosyl)- ( $\hat{A}$ $\pm$ ) -2-methylhomocysteine. <i>Tetrahedron Letters</i> , 1985, 26, 1135-1136.	1.4	28
34	Characterization of <i>Escherichia coli</i> D-arabinose 5-phosphate isomerase encoded by <i>kpsF</i> : implications for group 2 capsule biosynthesis. <i>Biochemical Journal</i> , 2006, 395, 427-432.	3.7	28
35	A novel strategy for enhancing extracellular secretion of recombinant proteins in <i>Escherichia coli</i> . <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 6705-6713.	3.6	26
36	<i>Bacillus subtilis</i> 3-deoxy-D-arabino-heptulosonate 7-phosphate synthase revisited: resolution of two long-standing enigmas. <i>Biochemical Journal</i> , 2005, 390, 583-590.	3.7	25

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37	Essential Cysteines in 3-Deoxy-d-manno-octulosonic Acid 8-Phosphate Synthase from <i>Escherichia coli</i> : A Analysis by Chemical Modification and Site-Directed Mutagenesis. <i>Biochemistry</i> , 1996, 35, 8942-8947.	2.5	23
38	Insights into the Mechanism of 3-Deoxy-D-arabino-heptulosonate 7-Phosphate Synthase (Phe) from <i>Escherichia coli</i> Using a Transient Kinetic Analysis. <i>Journal of Biological Chemistry</i> , 2004, 279, 45618-45625.	3.4	23
39	Structure and characterization of the 3-deoxy-d-arabino-heptulosonate 7-phosphate synthase from <i>Aeropyrum pernix</i> . <i>Bioorganic Chemistry</i> , 2012, 40, 79-86.	4.1	23
40	A solubility and related physicochemical property comparison of buprenorphine and its 3-alkyl esters. <i>Pharmaceutical Research</i> , 1995, 12, 1526-1529.	3.5	21
41	Mechanistic Insight into 3-Deoxy-d-manno-octulosonate-8-phosphate Synthase and 3-Deoxy-d-arabino-heptulosonate-7-phosphate Synthase Utilizing Phosphorylated Monosaccharide Analogues. <i>Biochemistry</i> , 2003, 42, 4843-4854.	2.5	21
42	An improved synthesis of S-adenosylhomocysteine and related compounds. <i>Journal of Organic Chemistry</i> , 1984, 49, 1291-1293.	3.2	20
43	The Tail of KdsC. <i>Journal of Biological Chemistry</i> , 2009, 284, 30594-30603.	3.4	19
44	Synthesis of (4R)-D,L-[4-2H]- and (4S)-D,L-[42H]homoserine lactones. <i>Journal of Organic Chemistry</i> , 1985, 50, 2259-2263.	3.2	18
45	Probing the Stereochemistry of <i>E. coli</i> 3-Deoxy-d-arabino-heptulosonate 7-Phosphate Synthase (Phenylalanine-Sensitive)-Catalyzed Synthesis of KDO 8-P Analogues. <i>Journal of Organic Chemistry</i> , 2000, 65, 5891-5897.	3.2	17
46	Conversion of <i>Aquifex aeolicus</i> 3-Deoxy-d-manno-octulosonate 8-Phosphate Synthase, a Metalloenzyme, into a Nonmetalloenzyme. <i>Journal of the American Chemical Society</i> , 2004, 126, 7448-7449.	13.7	17
47	Functional and biochemical characterization of a recombinant <i>Arabidopsis thaliana</i> 3-deoxy-D-manno-octulosonate 8-phosphate synthase. <i>Biochemical Journal</i> , 2004, 381, 185-193.	3.7	17
48	Stereochemistry of Biological Reactions at Prochiral Centers. <i>Topics in Stereochemistry</i> , 0, , 253-321.	2.0	17
49	Enediol mimics as inhibitors of the d-arabinose 5-phosphate isomerase (KdsD) from <i>Francisella tularensis</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011, 21, 2679-2682.	2.2	16
50	Identification of Essential Histidine Residues in 3-Deoxy-d-manno-octulosonic Acid 8-Phosphate Synthase: A Analysis by Chemical Modification with Diethyl Pyrocarbonate and Site-Directed Mutagenesis. <i>Biochemistry</i> , 1999, 38, 14320-14329.	2.5	15
51	Function of His185 in <i>Aquifex aeolicus</i> 3-Deoxy-d-manno-octulosonate 8-Phosphate Synthase. <i>Journal of Molecular Biology</i> , 2002, 324, 205-214.	4.2	15
52	Preparation of 1-deuterioaldehydes via the use of diisobutylaluminum deuteride (DIBAL-D). <i>Tetrahedron</i> , 1984, 40, 3387-3392.	1.9	14
53	Role of steric interactions in the delta opioid receptor selectivity of [ <sup>d</sup> Pen <sup>2</sup> , <sup>d</sup> Pen <sup>5</sup> ]enkephalin. <i>International Journal of Peptide and Protein Research</i> , 1988, 32, 1-8.	0.1	14
54	Stereochemical course of the transmethylation catalyzed by histamine N-methyltransferase. <i>Archives of Biochemistry and Biophysics</i> , 1984, 231, 253-256.	3.0	13

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55	Isolation and Identification of Two Azetidine-2-carboxylic Acid-Degrading Soil Microorganisms, <i>Enterobacter agglomerans</i> and <i>Enterobacter amnigenus</i> . <i>Journal of Natural Products</i> , 1998, 61, 207-211.	3.0	13
56	Substrate Ambiguity of 3-Deoxy-d-manno-Octulosonate 8-Phosphate Synthase from <i>Neisseria gonorrhoeae</i> Revisited. <i>Journal of Bacteriology</i> , 2000, 182, 5005-5008.	2.2	13
57	Preliminary X-ray analysis of a new crystal form of the <i>Escherichia coli</i> KDO8P synthase. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2000, 56, 516-519.	2.5	12
58	Structure-Based Design of Novel Inhibitors of 3-Deoxy-d-manno-octulosonate 8-Phosphate Synthase. <i>Drug Design and Discovery</i> , 2003, 18, 91-99.	0.3	12
59	Evidence for a Two-Metal-Ion Mechanism in the Cytidyltransferase KdsB, an Enzyme Involved in Lipopolysaccharide Biosynthesis. <i>PLoS ONE</i> , 2011, 6, e23231.	2.5	12
60	Substrate structure-activity relationship reveals a limited lipopolysaccharide chemotype range for intestinal alkaline phosphatase. <i>Journal of Biological Chemistry</i> , 2019, 294, 19405-19423.	3.4	12
61	A Single Point Mutation in 3-Deoxy-d-manno-octulosonate-8-phosphate Synthase Is Responsible for Temperature Sensitivity in a Mutant Strain of <i>Salmonella typhimurium</i> . <i>Journal of Biological Chemistry</i> , 2000, 275, 32141-32146.	3.4	11
62	Stereochemical course of the methylation of the polygalacturonic acid carboxyl groups of pectin. <i>Archives of Biochemistry and Biophysics</i> , 1981, 207, 51-54.	3.0	10
63	Synthesis of deuterium-labeled 1-aminocyclopropane-1-carboxylic acid. <i>Journal of Labelled Compounds and Radiopharmaceuticals</i> , 1984, 21, 833-841.	1.0	10
64	Probing the potential metal binding site in <i>Escherichia coli</i> 3-deoxy-d-arabino-heptulosonate 7-phosphate synthase (phenylalanine-sensitive). <i>FEBS Letters</i> , 1998, 441, 195-199.	2.8	10
65	Arabinose 5-phosphate isomerase as a target for antibacterial design: Studies with substrate analogues and inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2014, 22, 2576-2583.	3.0	10
66	Alternate substrates and inhibitors of 1-aminocyclopropane-1-carboxylic acid synthase. <i>Bioorganic Chemistry</i> , 1987, 15, 92-99.	4.1	8
67	Synthesis of (E)- and (Z)-3-deuteriophosphoenolpyruvate. <i>Journal of Organic Chemistry</i> , 1990, 55, 758-760.	3.2	8
68	The Use of (E)- and (Z)-Phosphoenol-3-fluoropyruvate as Mechanistic Probes Reveals Significant Differences between the Active Sites of KDO8P and DAHP Synthases. <i>Biochemistry</i> , 2005, 44, 7326-7335.	2.5	8
69	A simple assay for 3-deoxy-d-manno-octulosonate cytidyltransferase and its use as a pathway screen. <i>Analytical Biochemistry</i> , 2011, 416, 152-158.	2.4	8
70	A Unique Arabinose 5-Phosphate Isomerase Found within a Genomic Island Associated with the Uropathogenicity of <i>Escherichia coli</i> CFT073. <i>Journal of Bacteriology</i> , 2011, 193, 2981-2988.	2.2	8
71	Identification of a <i>scpD</i> -Arabinose-5-Phosphate Isomerase in the Gram-Positive <i>Clostridium tetani</i> . <i>Journal of Bacteriology</i> , 2017, 199, .	2.2	7
72	Preparation of S-(N6,N6-dimethyladenosyl)-l-methionine. <i>Carbohydrate Research</i> , 1985, 142, 123-126.	2.3	6

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73	Overproduction and One-Step Purification of <i>Escherichia coli</i> UDP-N-Acetylglucosamine Enolpyruvyl Reductase. <i>Protein Expression and Purification</i> , 1995, 6, 757-762.	1.3	6
74	Histidine 268 in 3-Deoxy-d-arabino-heptulosonic Acid 7-Phosphate Synthase Plays the Same Role as Histidine 202 in 3-Deoxy-d-manno-octulosonic Acid 8-Phosphate Synthase. <i>Journal of Biological Chemistry</i> , 2000, 275, 40258-40265.	3.4	6
75	Synthesis of L-[4,4-2H <sub>2</sub> ] and D,L-[3,3,4,4-2H <sub>4</sub> ] methionine. <i>Journal of Labelled Compounds and Radiopharmaceuticals</i> , 1984, 21, 563-568.	1.0	4
76	Conversion of the covalent intermediate 3-fluoro-2-phospho-lactyl-EPTase to 3-fluoro-2-phospholactyl-UDP-GlcNAc. <i>Bioorganic and Medicinal Chemistry Letters</i> , 1996, 6, 133-138.	2.2	4
77	Kinetic and mutagenic evidence for the role of histidine residues in the <i>Lycopersicon esculentum</i> 1-aminocyclopropane-1-carboxylic acid oxidase. <i>The Protein Journal</i> , 1999, 18, 55-68.	1.1	4
78	<i>Neisseria gonorrhoeae</i> 3-Deoxy-d-arabino-heptulosonate 7-Phosphate Synthase Does Not Catalyze the Formation of the ribo Analogue. <i>Organic Letters</i> , 2001, 3, 21-24.	4.6	4
79	Synthesis and 1H-nmr of deuterium labeled D,L-homoserine lactone hydrochlorides. <i>Journal of Labelled Compounds and Radiopharmaceuticals</i> , 1987, 24, 369-376.	1.0	3
80	Unique biosynthesis of dehydroquinic acid?. <i>Bioorganic Chemistry</i> , 2004, 32, 309-315.	4.1	3
81	A Novel Glucose 6-Phosphate Isomerase from <i>Listeria monocytogenes</i> . <i>Protein Journal</i> , 2014, 33, 447-456.	1.6	3
82	Analysis of the Arabinose-5-Phosphate Isomerase of <i>Bacteroides fragilis</i> Provides Insight into Regulation of Single-Domain Arabinose Phosphate Isomerases. <i>Journal of Bacteriology</i> , 2014, 196, 2861-2868.	2.2	3
83	Structure-Based Design of Novel Inhibitors of 3-Deoxy-d-manno-octulosonate 8-Phosphate Synthase. <i>Drug Design and Discovery</i> , 2003, 18, 91-99.	0.3	3
84	Assignment of the chemical shift values of N-trityl l-homoserine lactone. <i>Tetrahedron Letters</i> , 1988, 29, 4045-4048.	1.4	2
85	Enantioselective synthesis of (R)- and (S)-2-methyl-[3,3,2-H <sub>3</sub> ] alanines. <i>International Journal of Peptide and Protein Research</i> , 1986, 28, 579-585.	0.1	2
86	The Proton NMR Assignment of 1-Aminocyclo-propane-1-carboxylic Acid. <i>Spectroscopy Letters</i> , 1986, 19, 1059-1069.	1.0	1
87	A direct spectropolarimetric assay of arabinose 5-phosphate isomerase. <i>Analytical Biochemistry</i> , 2021, 622, 114116.	2.4	1
88	Studies on 3-deoxy-d-manno-octulosonic acid 8-phosphate synthase using chorismate mutase inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2001, 11, 2795-2798.	2.2	0
89	Insights into the Function of the $\pm$ Helical Tail of <i>Haemophilus influenzae</i> 3-Deoxy-d-manno-octulosonate 8-Phosphate Phosphatase. <i>FASEB Journal</i> , 2010, 24, 835.3.	0.5	0
90	Mechanistic Insights into the Function of the $\pm$ Helical Tail in <i>Haemophilus influenzae</i> 3-Deoxy-d-manno-octulosonate 8-Phosphate Phosphatase. <i>FASEB Journal</i> , 2010, 24, .	0.5	0

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91	An unassigned DAHP synthase activity found only in pathogenic Escherichia coli strains. FASEB Journal, 2011, 25, 967.8.	0.5	0