

# Wilfred Ajw Van Der Donk

## List of Publications by Year in descending order

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324  
papers

24,317  
citations

9756

73  
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10708

138  
g-index

353  
all docs

353  
docs citations

353  
times ranked

14853  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ribosomally synthesized and post-translationally modified peptide natural products: overview and recommendations for a universal nomenclature. <i>Natural Product Reports</i> , 2013, 30, 108-160.	5.2	1,692
2	Protein Radicals in Enzyme Catalysis. <i>Chemical Reviews</i> , 1998, 98, 705-762.	23.0	1,401
3	Minimum Information about a Biosynthetic Gene cluster. <i>Nature Chemical Biology</i> , 2015, 11, 625-631.	3.9	715
4	Biosynthesis and Mode of Action of Lantibiotics. <i>Chemical Reviews</i> , 2005, 105, 633-684.	23.0	681
5	Lantibiotics: Peptides of Diverse Structure and Function. <i>Annual Review of Microbiology</i> , 2007, 61, 477-501.	2.9	564
6	Bacteriophage targeting of gut bacterium attenuates alcoholic liver disease. <i>Nature</i> , 2019, 575, 505-511.	13.7	493
7	New developments in RiPP discovery, enzymology and engineering. <i>Natural Product Reports</i> , 2021, 38, 130-239.	5.2	412
8	Mechanistic Understanding of Lanthipeptide Biosynthetic Enzymes. <i>Chemical Reviews</i> , 2017, 117, 5457-5520.	23.0	375
9	Follow the leader: the use of leader peptides to guide natural product biosynthesis. <i>Nature Chemical Biology</i> , 2010, 6, 9-18.	3.9	352
10	Recent developments in pyridine nucleotide regeneration. <i>Current Opinion in Biotechnology</i> , 2003, 14, 421-426.	3.3	346
11	Reactions of catecholborane with Wilkinson's catalyst: implications for transition metal-catalyzed hydroborations of alkenes. <i>Journal of the American Chemical Society</i> , 1992, 114, 9350-9359.	6.6	334
12	Regeneration of cofactors for use in biocatalysis. <i>Current Opinion in Biotechnology</i> , 2003, 14, 583-589.	3.3	331
13	Discovery, Biosynthesis, and Engineering of Lantipeptides. <i>Annual Review of Biochemistry</i> , 2012, 81, 479-505.	5.0	310
14	Biosynthesis of Phosphonic and Phosphinic Acid Natural Products. <i>Annual Review of Biochemistry</i> , 2009, 78, 65-94.	5.0	303
15	Structure and mechanism of the tRNA-dependent lantibiotic dehydratase NisB. <i>Nature</i> , 2015, 517, 509-512.	13.7	278
16	Structure and Mechanism of the Lantibiotic Cyclase Involved in Nisin Biosynthesis. <i>Science</i> , 2006, 311, 1464-1467.	6.0	275
17	Synthesis of Methylphosphonic Acid by Marine Microbes: A Source for Methane in the Aerobic Ocean. <i>Science</i> , 2012, 337, 1104-1107.	6.0	263
18	Catalytic promiscuity in the biosynthesis of cyclic peptide secondary metabolites in planktonic marine cyanobacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 10430-10435.	3.3	256

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19	New Insights into the Biosynthetic Logic of Ribosomally Synthesized and Post-translationally Modified Peptide Natural Products. <i>Cell Chemical Biology</i> , 2016, 23, 31-44.	2.5	241
20	Lacticin 481: In Vitro Reconstitution of Lantibiotic Synthetase Activity. <i>Science</i> , 2004, 303, 679-681.	6.0	221
21	Synthesis of a Selenocysteine-Containing Peptide by Native Chemical Ligation. <i>Organic Letters</i> , 2001, 3, 1331-1334.	2.4	217
22	Discovery and in vitro biosynthesis of haloduracin, a two-component lantibiotic. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 17243-17248.	3.3	215
23	Radical-Mediated Enzymatic Methylation: A Tale of Two SAMS. <i>Accounts of Chemical Research</i> , 2012, 45, 555-564.	7.6	207
24	Sublancin is not a lantibiotic but an S-linked glycopeptide. <i>Nature Chemical Biology</i> , 2011, 7, 78-80.	3.9	187
25	Discovery of Unique Lanthionine Synthetases Reveals New Mechanistic and Evolutionary Insights. <i>PLoS Biology</i> , 2010, 8, e1000339.	2.6	186
26	Ribonucleotide reductases: radical enzymes with suicidal tendencies. <i>Chemistry and Biology</i> , 1995, 2, 793-801.	6.2	182
27	Evolution of lanthipeptide synthetases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 18361-18366.	3.3	178
28	Discovery of phosphonic acid natural products by mining the genomes of 10,000 actinomycetes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 12175-12180.	3.3	168
29	Genome mining for ribosomally synthesized natural products. <i>Current Opinion in Chemical Biology</i> , 2011, 15, 11-21.	2.8	162
30	Production of Lantipeptides in <i>Escherichia coli</i> . <i>Journal of the American Chemical Society</i> , 2011, 133, 2338-2341.	6.6	161
31	Facile Chemoselective Synthesis of Dehydroalanine-Containing Peptides. <i>Organic Letters</i> , 2000, 2, 3603-3606.	2.4	154
32	The Cyclooxygenase Reaction Mechanism. <i>Biochemistry</i> , 2002, 41, 15451-15458.	1.2	154
33	Relaxing the Nicotinamide Cofactor Specificity of Phosphite Dehydrogenase by Rational Design. <i>Biochemistry</i> , 2003, 42, 11604-11614.	1.2	153
34	In Vitro Biosynthesis of the Core Scaffold of the Thiopeptide Thiomuracin. <i>Journal of the American Chemical Society</i> , 2015, 137, 16012-16015.	6.6	145
35	Lantibiotics from <i>Geobacillus thermodenitrificans</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 5241-5246.	3.3	129
36	Unusual transformations in the biosynthesis of the antibiotic phosphinothricin tripeptide. <i>Nature Chemical Biology</i> , 2007, 3, 480-485.	3.9	126

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37	Ribosomally synthesized and post-translationally modified peptide natural product discovery in the genomic era. <i>Current Opinion in Chemical Biology</i> , 2017, 38, 36-44.	2.8	124
38	Phosphite Dehydrogenase: A Versatile Cofactor-Regeneration Enzyme. <i>Angewandte Chemie - International Edition</i> , 2002, 41, 3257-3259.	7.2	123
39	Lactacin 481 Synthetase Phosphorylates its Substrate during Lantibiotic Production. <i>Journal of the American Chemical Society</i> , 2005, 127, 15332-15333.	6.6	120
40	A lanthipeptide library used to identify a protein-protein interaction inhibitor. <i>Nature Chemical Biology</i> , 2018, 14, 375-380.	3.9	117
41	Heterologous Production of Fosfomycin and Identification of the Minimal Biosynthetic Gene Cluster. <i>Chemistry and Biology</i> , 2006, 13, 1171-1182.	6.2	116
42	Convergent Synthesis of Peptide Conjugates Using Dehydroalanines for Chemoselective Ligations. <i>Organic Letters</i> , 2001, 3, 1189-1192.	2.4	114
43	New insight into the mechanism of methyl transfer during the biosynthesis of fosfomycin. <i>Chemical Communications</i> , 2007, , 359-361.	2.2	112
44	An unusual carbon-carbon bond cleavage reaction during phosphinothricin biosynthesis. <i>Nature</i> , 2009, 459, 871-874.	13.7	111
45	The many roles of glutamate in metabolism. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2016, 43, 419-430.	1.4	111
46	An Engineered Azurin Variant Containing a Selenocysteine Copper Ligand. <i>Journal of the American Chemical Society</i> , 2002, 124, 2084-2085.	6.6	109
47	Use of a scaffold peptide in the biosynthesis of amino acid-derived natural products. <i>Science</i> , 2019, 365, 280-284.	6.0	108
48	Substrate activation by iron superoxo intermediates. <i>Current Opinion in Structural Biology</i> , 2010, 20, 673-683.	2.6	107
49	Insights into the Mode of Action of the Two-Peptide Lantibiotic Haloduracin. <i>ACS Chemical Biology</i> , 2009, 4, 865-874.	1.6	104
50	In vitro activity of the nisin dehydratase NisB. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 7258-7263.	3.3	104
51	Precursor peptide-targeted mining of more than one hundred thousand genomes expands the lanthipeptide natural product family. <i>BMC Genomics</i> , 2020, 21, 387.	1.2	102
52	Development and Application of Yeast and Phage Display of Diverse Lanthipeptides. <i>ACS Central Science</i> , 2018, 4, 458-467.	5.3	101
53	Nine Post-translational Modifications during the Biosynthesis of Cinnamycin. <i>Journal of the American Chemical Society</i> , 2011, 133, 13753-13760.	6.6	99
54	Insights into the Functional Role of the Tyrosine-Histidine Linkage in Cytochrome c Oxidase. <i>Journal of the American Chemical Society</i> , 2000, 122, 2403-2404.	6.6	96

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55	Biosynthesis of Rhizocticins, Antifungal Phosphonate Oligopeptides Produced by <i>Bacillus subtilis</i> ATCC6633. <i>Chemistry and Biology</i> , 2010, 17, 28-37.	6.2	95
56	Structural Characterization of Four Prochlorosins: A Novel Class of Lantipeptides Produced by Planktonic Marine Cyanobacteria. <i>Biochemistry</i> , 2012, 51, 4271-4279.	1.2	93
57	The sequence of the enterococcal cytolyisin imparts unusual lanthionine stereochemistry. <i>Nature Chemical Biology</i> , 2013, 9, 157-159.	3.9	92
58	Ribosomally Synthesized and Post-translationally Modified Peptide Natural Products: New Insights into the Role of Leader and Core Peptides during Biosynthesis. <i>Chemistry - A European Journal</i> , 2013, 19, 7662-7677.	1.7	91
59	Novel cofactors via post-translational modifications of enzyme active sites. <i>Chemistry and Biology</i> , 2000, 7, R159-R171.	6.2	90
60	In Vitro Mutasynthesis of Lantibiotic Analogues Containing Nonproteinogenic Amino Acids. <i>Journal of the American Chemical Society</i> , 2009, 131, 12024-12025.	6.6	90
61	Mechanism of Inhibition of <i>Bacillus anthracis</i> Spore Outgrowth by the Lantibiotic Nisin. <i>ACS Chemical Biology</i> , 2011, 6, 744-752.	1.6	90
62	An Engineered Lantibiotic Synthetase That Does Not Require a Leader Peptide on Its Substrate. <i>Journal of the American Chemical Society</i> , 2012, 134, 6952-6955.	6.6	87
63	Biosynthetic investigation of phomopsins reveals a widespread pathway for ribosomal natural products in Ascomycetes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 3521-3526.	3.3	87
64	Chimeric Leader Peptides for the Generation of Non-Natural Hybrid RiPP Products. <i>ACS Central Science</i> , 2017, 3, 629-638.	5.3	87
65	Properties and Reactivity of Chlorovinylcobalamin and Vinylcobalamin and Their Implications for Vitamin B12-Catalyzed Reductive Dechlorination of Chlorinated Alkenes. <i>Journal of the American Chemical Society</i> , 2005, 127, 1126-1136.	6.6	85
66	Engineering Dehydro Amino Acids and Thioethers into Peptides Using Lactacin 481 Synthetase. <i>Chemistry and Biology</i> , 2006, 13, 1109-1117.	6.2	85
67	Biosynthesis of the Class III Lantipeptide Catenulipeptin. <i>ACS Chemical Biology</i> , 2012, 7, 1529-1535.	1.6	85
68	Biomimetic studies on the mechanism of stereoselective lanthionine formation Electronic supplementary information (ESI) available: separation of the diastereomers of 5; cleavage of peptides from resins; COSY NMR spectrum of the product obtained from cyclization of both E-1 and 19. See <a href="http://www.rsc.org/suppdata/ob/b3/b304945k/">http://www.rsc.org/suppdata/ob/b3/b304945k/</a> . <i>Organic and Biomolecular Chemistry</i> , 2003, 1, 3304.	1.5	84
69	The Importance of the Leader Sequence for Directing Lanthionine Formation in Lactacin 481. <i>Biochemistry</i> , 2008, 47, 7342-7351.	1.2	84
70	EPR Investigations of the Inactivation of <i>E. coli</i> Ribonucleotide Reductase with 2'-Azido-2'-deoxyuridine 5'-Diphosphate: Evidence for the Involvement of the Thiyl Radical of C225-R1. <i>Journal of the American Chemical Society</i> , 1995, 117, 8908-8916.	6.6	83
71	Mechanistic Investigation of a Novel Vitamin B12-Catalyzed Carbon-Carbon Bond Forming Reaction, the Reductive Dimerization of Arylalkenes. <i>Journal of Organic Chemistry</i> , 2002, 67, 837-846.	1.7	81
72	Heterologous Expression, Purification, and Characterization of a Highly Active Xylose Reductase from <i>Neurospora crassa</i> . <i>Applied and Environmental Microbiology</i> , 2005, 71, 1642-1647.	1.4	81

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73	Phosphonate biosynthesis and catabolism: a treasure trove of unusual enzymology. <i>Current Opinion in Chemical Biology</i> , 2013, 17, 580-588.	2.8	81
74	Comparison of the properties of prostaglandin H synthase-1 and -2. <i>Progress in Lipid Research</i> , 2003, 42, 377-404.	5.3	80
75	Aziridine-2-carboxylic Acid-Containing Peptides: Application to Solution- and Solid-Phase Convergent Site-Selective Peptide Modification. <i>Journal of the American Chemical Society</i> , 2005, 127, 7359-7369.	6.6	80
76	Evolutionary radiation of lanthipeptides in marine cyanobacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E5424-E5433.	3.3	80
77	Post-translational modifications during lantibiotic biosynthesis. <i>Current Opinion in Chemical Biology</i> , 2004, 8, 498-507.	2.8	79
78	Substrate control in stereoselective lanthionine biosynthesis. <i>Nature Chemistry</i> , 2015, 7, 57-64.	6.6	79
79	Biomimetic Stereoselective Formation of Methyllanthionine. <i>Organic Letters</i> , 2002, 4, 1335-1338.	2.4	78
80	Identification of Essential Catalytic Residues of the Cyclase NisC Involved in the Biosynthesis of Nisin. <i>Journal of Biological Chemistry</i> , 2007, 282, 21169-21175.	1.6	78
81	Discovery and Characterization of Bicerucin, an Unusual <i>d</i> -Amino Acid-Containing Mixed Two-Component Lantibiotic. <i>Journal of the American Chemical Society</i> , 2016, 138, 5254-5257.	6.6	78
82	SpaC and NisC, the Cyclases Involved in Subtilin and Nisin Biosynthesis, Are Zinc Proteins. <i>Biochemistry</i> , 2003, 42, 13613-13624.	1.2	76
83	Further evidence for the role of <i>d</i> . <i>π</i> - <i>p</i> . <i>π</i> bonding in rhodium-mediated hydroborations. <i>Journal of the American Chemical Society</i> , 1991, 113, 6139-6144.	6.6	75
84	Mechanistic Studies on the Vitamin B12-Catalyzed Dechlorination of Chlorinated Alkenes. <i>Journal of the American Chemical Society</i> , 2000, 122, 12403-12404.	6.6	73
85	Biosynthetic Timing and Substrate Specificity for the Thiopeptide Thiomuracin. <i>Journal of the American Chemical Society</i> , 2016, 138, 15511-15514.	6.6	73
86	The enterococcal cytolyisin synthetase has an unanticipated lipid kinase fold. <i>ELife</i> , 2015, 4, .	2.8	73
87	Structure-Activity Relationship Studies of the Two-Component Lantibiotic Haloduracin. <i>Chemistry and Biology</i> , 2008, 15, 1035-1045.	6.2	71
88	<i>In Vitro</i> Reconstitution and Substrate Specificity of a Lantibiotic Protease. <i>Biochemistry</i> , 2008, 47, 7352-7363.	1.2	71
89	Synthesis and Activity of Thioether-Containing Analogues of the Complement Inhibitor Compstatin. <i>ACS Chemical Biology</i> , 2011, 6, 753-760.	1.6	70
90	Biosynthesis of the Antimicrobial Peptide Epilancin 15X and Its N-Terminal Lactate. <i>Chemistry and Biology</i> , 2011, 18, 857-867.	6.2	70

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91	Expanded Natural Product Diversity Revealed by Analysis of Lanthipeptide-Like Gene Clusters in Actinobacteria. <i>Applied and Environmental Microbiology</i> , 2015, 81, 4339-4350.	1.4	70
92	Structural insights into enzymatic [4+2] cycloaddition in thiopeptide antibiotic biosynthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 12928-12933.	3.3	70
93	Detection of a New Substrate-Derived Radical during Inactivation of Ribonucleotide Reductase from <i>Escherichia coli</i> by Gemcitabine 5'-Diphosphate. <i>Biochemistry</i> , 1998, 37, 6419-6426.	1.2	69
94	Mutants of the Zinc Ligands of Lactacin 481 Synthetase Retain Dehydration Activity but Have Impaired Cyclization Activity. <i>Biochemistry</i> , 2007, 46, 6268-6276.	1.2	68
95	Inactivation of Ribonucleotide Reductase by (E)-2-Fluoromethylene-2-deoxycytidine 5'-Diphosphate: A Paradigm for Nucleotide Mechanism-Based Inhibitors. <i>Biochemistry</i> , 1996, 35, 8381-8391.	1.2	67
96	Transforming a Blue Copper into a Red Copper Protein: Engineering Cysteine and Homocysteine into the Axial Position of Azurin Using Site-Directed Mutagenesis and Expressed Protein Ligation. <i>Journal of the American Chemical Society</i> , 2010, 132, 10093-10101.	6.6	67
97	The Selenocysteine-Substituted Blue Copper Center: Spectroscopic Investigations of Cys112SeCys Pseudomonas aeruginosa Azurin. <i>Journal of the American Chemical Society</i> , 2004, 126, 7244-7256.	6.6	66
98	Inhibition of <i>Bacillus anthracis</i> Spore Outgrowth by Nisin. <i>Antimicrobial Agents and Chemotherapy</i> , 2008, 52, 4281-4288.	1.4	66
99	A Price To Pay for Relaxed Substrate Specificity: A Comparative Kinetic Analysis of the Class II Lanthipeptide Synthetases ProcM and HalM2. <i>Journal of the American Chemical Society</i> , 2014, 136, 17513-17529.	6.6	66
100	Mechanism and applications of phosphite dehydrogenase. <i>Bioorganic Chemistry</i> , 2005, 33, 171-189.	2.0	65
101	The Glycosyltransferase Involved in Thurandacin Biosynthesis Catalyzes Both O- and S-Glycosylation. <i>Journal of the American Chemical Society</i> , 2014, 136, 84-87.	6.6	64
102	Structure and tRNA Specificity of MibB, a Lantibiotic Dehydratase from Actinobacteria Involved in NAI-107 Biosynthesis. <i>Cell Chemical Biology</i> , 2016, 23, 370-380.	2.5	64
103	Two Flavoenzymes Catalyze the Post-Translational Generation of 5-Chlorotryptophan and 2-Aminovinyl-Cysteine during NAI-107 Biosynthesis. <i>ACS Chemical Biology</i> , 2017, 12, 548-557.	1.6	64
104	Site-Selective Conjugation of Thiols with Aziridine-2-Carboxylic Acid-Containing Peptides. <i>Journal of the American Chemical Society</i> , 2004, 126, 12712-12713.	6.6	63
105	Mechanistic Investigations of the Dehydration Reaction of Lactacin 481 Synthetase Using Site-Directed Mutagenesis. <i>Biochemistry</i> , 2007, 46, 5991-6000.	1.2	63
106	Insights into AMS/PCAT transporters from biochemical and structural characterization of a double Glycine motif protease. <i>ELife</i> , 2019, 8, .	2.8	63
107	Chemical Synthesis and Biological Activity of Analogues of the Lantibiotic Epilancin 15X. <i>Journal of the American Chemical Society</i> , 2012, 134, 7648-7651.	6.6	62
108	Ribosomal Natural Products, Tailored To Fit. <i>Accounts of Chemical Research</i> , 2017, 50, 1577-1586.	7.6	61

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109	Different Biosynthetic Pathways to Fosfomycin in <i>Pseudomonas syringae</i> and <i>Streptomyces</i> Species. <i>Antimicrobial Agents and Chemotherapy</i> , 2012, 56, 4175-4183.	1.4	60
110	Mechanistic Studies of Ser/Thr Dehydration Catalyzed by a Member of the LanL Lanthionine Synthetase Family. <i>Biochemistry</i> , 2011, 50, 891-898.	1.2	59
111	Structural investigation of ribosomally synthesized natural products by hypothetical structure enumeration and evaluation using tandem MS. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 12031-12036.	3.3	58
112	Enantioselective hydroborations catalyzed by rhodium(+1) complexes. <i>Tetrahedron: Asymmetry</i> , 1991, 2, 613-621.	1.8	57
113	Mechanistic Studies on the Substrate-Tolerant Lanthipeptide Synthetase ProcM. <i>Journal of the American Chemical Society</i> , 2014, 136, 10450-10459.	6.6	56
114	Phosphite Dehydrogenase: An Unusual Phosphoryl Transfer Reaction. <i>Journal of the American Chemical Society</i> , 2001, 123, 2672-2673.	6.6	55
115	New insights into the biosynthesis of fosfazinomycin. <i>Chemical Science</i> , 2016, 7, 5219-5223.	3.7	55
116	Oligosaccharide-Peptide Ligation of Glycosyl Thiolates with Dehydropeptides: Synthesis of S-Linked Mucin-Related Glycopeptide Conjugates. <i>Chemistry - A European Journal</i> , 2003, 9, 5997-6006.	1.7	54
117	Haloduracin Binds the Peptidoglycan Precursor Lipid II with 2:1 Stoichiometry. <i>Journal of the American Chemical Society</i> , 2011, 133, 17544-17547.	6.6	54
118	Glutamic acid is a carrier for hydrazine during the biosyntheses of fosfazinomycin and kinamycin. <i>Nature Communications</i> , 2018, 9, 3687.	5.8	54
119	Selenocysteine Derivatives for Chemoselective Ligations. <i>ChemBioChem</i> , 2002, 3, 709.	1.3	53
120	<i>O</i> -Methyltransferase-Mediated Incorporation of a $\beta$ -Amino Acid in Lanthipeptides. <i>Journal of the American Chemical Society</i> , 2019, 141, 16790-16801.	6.6	53
121	Tyrosyl radical cofactors. <i>Advances in Protein Chemistry</i> , 2001, 58, 317-385.	4.4	52
122	High Divergence of the Precursor Peptides in Combinatorial Lanthipeptide Biosynthesis. <i>ACS Chemical Biology</i> , 2014, 9, 2686-2694.	1.6	52
123	Distributive and Directional Behavior of Lantibiotic Synthetases Revealed by High-Resolution Tandem Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 2009, 131, 12258-12264.	6.6	51
124	Characterization of a Substrate-Derived Radical Detected during the Inactivation of Ribonucleotide Reductase from <i>Escherichia coli</i> by 2-Fluoromethylene-2-deoxycytidine 5-Diphosphate. <i>Journal of the American Chemical Society</i> , 1998, 120, 3823-3835.	6.6	50
125	Use of lantibiotic synthetases for the preparation of bioactive constrained peptides. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008, 18, 3025-3028.	1.0	50
126	Chemical Synthesis of the Lantibiotic Lactacin 481 Reveals the Importance of Lanthionine Stereochemistry. <i>Journal of the American Chemical Society</i> , 2013, 135, 7094-7097.	6.6	50

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127	Synthesis and Characterization of Chlorinated Alkenylcobaloximes To Probe the Mechanism of Vitamin B12-Catalyzed Dechlorination of Priority Pollutants. <i>Inorganic Chemistry</i> , 2002, 41, 393-404.	1.9	49
128	The Leader Peptide Is Not Required for Post-Translational Modification by Lactacin 481 Synthetase. <i>Journal of the American Chemical Society</i> , 2007, 129, 10314-10315.	6.6	48
129	Substrate Selectivity of the Sublancin S-Glycosyltransferase. <i>Journal of the American Chemical Society</i> , 2011, 133, 16394-16397.	6.6	47
130	Synthesis of Isotopically Labeled Arachidonic Acids To Probe the Reaction Mechanism of Prostaglandin H Synthase. <i>Journal of the American Chemical Society</i> , 2002, 124, 10785-10796.	6.6	46
131	Model Studies of the Histidine-Tyrosine Cross-Link in Cytochrome c Oxidase Reveal the Flexible Substituent Effect of the Imidazole Moiety. <i>Organic Letters</i> , 2005, 7, 2735-2738.	2.4	46
132	Dehydroalanine-containing peptides: preparation from phenylselenocysteine and utility in convergent ligation strategies. <i>Nature Protocols</i> , 2006, 1, 3001-3010.	5.5	46
133	Kinetic and Structural Investigations of the Allosteric Site in Human Epithelial 15-Lipoxygenase-2. <i>Biochemistry</i> , 2009, 48, 8721-8730.	1.2	46
134	Lanthionine synthetase C $\alpha$ -like protein 2 (LanCL2) is a novel regulator of Akt. <i>Molecular Biology of the Cell</i> , 2014, 25, 3954-3961.	0.9	46
135	New developments in lantibiotic biosynthesis and mode of action. <i>Current Opinion in Microbiology</i> , 2005, 8, 543-551.	2.3	45
136	Biosynthesis of 2-Hydroxyethylphosphonate, an Unexpected Intermediate Common to Multiple Phosphonate Biosynthetic Pathways. <i>Journal of Biological Chemistry</i> , 2008, 283, 23161-23168.	1.6	45
137	Investigation of the Substrate Specificity of Lactacin 481 Synthetase by Using Nonproteinogenic Amino Acids. <i>ChemBioChem</i> , 2009, 10, 911-919.	1.3	45
138	Structure and mechanism of lanthipeptide biosynthetic enzymes. <i>Current Opinion in Structural Biology</i> , 2014, 29, 58-66.	2.6	45
139	Reconstitution and Substrate Specificity of the Radical S-Adenosyl-methionine Thiazole C-Methyltransferase in Thiomuracin Biosynthesis. <i>Journal of the American Chemical Society</i> , 2017, 139, 4310-4313.	6.6	45
140	Chemical and Enzymatic Synthesis of Lanthionines. <i>Mini-Reviews in Organic Chemistry</i> , 2005, 2, 23-37.	0.6	44
141	Michael-Type Cyclizations in Lantibiotic Biosynthesis Are Reversible. <i>ACS Chemical Biology</i> , 2015, 10, 1234-1238.	1.6	44
142	The Phosphoenolpyruvate: Sugar Phosphotransferase System Is Involved in Sensitivity to the Glucosylated Bacteriocin Sublancin. <i>Antimicrobial Agents and Chemotherapy</i> , 2015, 59, 6844-6854.	1.4	44
143	Mechanistic Investigations of Human Reticulocyte 15- and Platelet 12-Lipoxygenases with Arachidonic Acid. <i>Biochemistry</i> , 2009, 48, 6259-6267.	1.2	43
144	Hydroperoxylation by Hydroxyethylphosphonate Dioxygenase. <i>Journal of the American Chemical Society</i> , 2009, 131, 16225-16232.	6.6	43

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145	Product Formation by the Promiscuous Lanthipeptide Synthetase ProcM is under Kinetic Control. <i>Journal of the American Chemical Society</i> , 2015, 137, 5140-5148.	6.6	43
146	Investigation of Substrate Recognition and Biosynthesis in Class IV Lanthipeptide Systems. <i>Journal of the American Chemical Society</i> , 2018, 140, 5743-5754.	6.6	43
147	On Titanium-Promoted Hydroborations of Alkenes by Borohydride and by Catecholborane. <i>Organometallics</i> , 1994, 13, 3616-3620.	1.1	42
148	Molecular Cloning and Heterologous Expression of the Dehydrophos Biosynthetic Gene Cluster. <i>Chemistry and Biology</i> , 2010, 17, 402-411.	6.2	42
149	Insights into the evolution of lanthipeptide biosynthesis. <i>Protein Science</i> , 2013, 22, 1478-1489.	3.1	42
150	Characterization of glutamyl-tRNA <sup>Asp</sup> -dependent dehydratases using nonreactive substrate mimics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 17245-17250.	3.3	42
151	Characterization and structure of Dhpl, a phosphonate <i>O</i> -methyltransferase involved in dehydrophos biosynthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 17557-17562.	3.3	41
152	NMR Structure of the S-Linked Glycopeptide Sublancin 168. <i>ACS Chemical Biology</i> , 2014, 9, 796-801.	1.6	41
153	Genetic and Biochemical Characterization of a Pathway for the Degradation of 2-Aminoethylphosphonate in <i>Sinorhizobium meliloti</i> 1021. <i>Journal of Biological Chemistry</i> , 2011, 286, 22283-22290.	1.6	40
154	Heterologous production of the lantibiotic Ala(0)actagardine in <i>Escherichia coli</i> . <i>Chemical Communications</i> , 2012, 48, 10966.	2.2	40
155	Use of a Phosphonate Methyltransferase in the Identification of the Fosfazinomycin Biosynthetic Gene Cluster. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 1334-1337.	7.2	40
156	Facile Removal of Leader Peptides from Lanthipeptides by Incorporation of a Hydroxy Acid. <i>Journal of the American Chemical Society</i> , 2015, 137, 6975-6978.	6.6	40
157	Post-translational Introduction of <i>D</i> -Alanine into Ribosomally Synthesized Peptides by the Dehydroalanine Reductase NpnJ. <i>Journal of the American Chemical Society</i> , 2015, 137, 12426-12429.	6.6	40
158	Engineering of new-to-nature ribosomally synthesized and post-translationally modified peptide natural products. <i>Current Opinion in Biotechnology</i> , 2021, 69, 221-231.	3.3	40
159	Revisiting the biosynthesis of dehydrophos reveals a tRNA-dependent pathway. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 10952-10957.	3.3	39
160	Structural basis for methylphosphonate biosynthesis. <i>Science</i> , 2017, 358, 1336-1339.	6.0	39
161	Stereospecific Radical-Mediated B <sub>12</sub> -Dependent Methyl Transfer by the Fosfomycin Biosynthesis Enzyme Fom3. <i>Biochemistry</i> , 2018, 57, 4967-4971.	1.2	39
162	Characterization of Chlorovinylcobalamin, A Putative Intermediate in Reductive Degradation of Chlorinated Ethylenes. <i>Journal of the American Chemical Society</i> , 2003, 125, 4410-4411.	6.6	38

#	ARTICLE	IF	CITATIONS
163	Reassignment of the Structure of the Antibiotic A53868 Reveals an Unusual Amino Dehydrophosphonic Acid. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 9089-9092.	7.2	38
164	On the Stereochemistry of 2-Hydroxyethylphosphonate Dioxygenase. <i>Journal of the American Chemical Society</i> , 2011, 133, 4236-4239.	6.6	38
165	Structural and Mechanistic Insights into C-P Bond Hydrolysis by Phosphonoacetate Hydrolase. <i>Chemistry and Biology</i> , 2011, 18, 1230-1240.	6.2	38
166	Reductive Dechlorination of Trichloroethylene: A Computational Study. <i>Journal of Physical Chemistry A</i> , 2002, 106, 8708-8715.	1.1	37
167	On the Substrate Specificity of Dehydration by Lactacin 481 Synthetase. <i>Journal of the American Chemical Society</i> , 2007, 129, 2212-2213.	6.6	37
168	Isotope Sensitive Branching and Kinetic Isotope Effects in the Reaction of Deuterated Arachidonic Acids with Human 12- and 15-Lipoxygenases. <i>Biochemistry</i> , 2008, 47, 7295-7303.	1.2	37
169	Crystal Structures of Phosphite Dehydrogenase Provide Insights into Nicotinamide Cofactor Regeneration. <i>Biochemistry</i> , 2012, 51, 4263-4270.	1.2	37
170	Theoretical Investigations into the Intermediacy of Chlorinated Vinylcobalamins in the Reductive Dehalogenation of Chlorinated Ethylenes. <i>Journal of the American Chemical Society</i> , 2005, 127, 384-396.	6.6	36
171	Optimizing a Biocatalyst for Improved NAD(P)H Regeneration: Directed Evolution of Phosphite Dehydrogenase. <i>Combinatorial Chemistry and High Throughput Screening</i> , 2006, 9, 237-245.	0.6	36
172	Insights into the Biosynthesis of Duramycin. <i>Applied and Environmental Microbiology</i> , 2017, 83, .	1.4	36
173	Go it alone: four-electron oxidations by mononuclear non-heme iron enzymes. <i>Journal of Biological Inorganic Chemistry</i> , 2017, 22, 381-394.	1.1	36
174	Protein Radicals in Enzyme Catalysis. [ <i>Chem. Rev.</i> 1998, 98, 705-762. <i>Chemical Reviews</i> , 1998, 98, 2661-2662.	23.0	35
175	Rapid Discovery of Glycocins through Pathway Refactoring in <i>Escherichia coli</i> . <i>ACS Chemical Biology</i> , 2018, 13, 2966-2972.	1.6	35
176	Investigations into the Mechanism of Action of Sublancin. <i>ACS Infectious Diseases</i> , 2019, 5, 454-459.	1.8	35
177	Rings, Radicals, and Regeneration: The Early Years of a Bioorganic Laboratory. <i>Journal of Organic Chemistry</i> , 2006, 71, 9561-9571.	1.7	34
178	Substrate Specificity of the Lanthipeptide Peptidase ElxP and the Oxidoreductase ElxO. <i>ACS Chemical Biology</i> , 2014, 9, 1718-1725.	1.6	34
179	Leader Peptide Establishes Dehydration Order, Promotes Efficiency, and Ensures Fidelity During Lactacin 481 Biosynthesis. <i>Journal of the American Chemical Society</i> , 2016, 138, 6436-6444.	6.6	34
180	LanCLs add glutathione to dehydroamino acids generated at phosphorylated sites in the proteome. <i>Cell</i> , 2021, 184, 2680-2695.e26.	13.5	34

#	ARTICLE	IF	CITATIONS
181	Unusual behaviour of the thioether function of the ligand 1,8-bis(3,5-dimethyl-1-pyrazolyl)-3,6-dithiaoctane (bddo) towards transition-metal salts. X-Ray structures of a green and a red modification of [Cu(bddo)Cl <sub>2</sub> ]. <i>Journal of the Chemical Society Dalton Transactions</i> , 1990, , 3123.	1.1	33
182	Inhibition and pH Dependence of Phosphite Dehydrogenase. <i>Biochemistry</i> , 2005, 44, 6640-6649.	1.2	33
183	Lactacin 481 Synthetase as a General Serine/Threonine Kinase. <i>ACS Chemical Biology</i> , 2009, 4, 379-385.	1.6	33
184	Catalytic promiscuity of a bacterial N-methyltransferase. <i>FEBS Letters</i> , 2012, 586, 3391-3397.	1.3	33
185	Non-proteinogenic Amino Acids in Lactacin 481 Analogues Result in More Potent Inhibition of Peptidoglycan Transglycosylation. <i>ACS Chemical Biology</i> , 2012, 7, 1791-1795.	1.6	33
186	A General Method for Fluorescent Labeling of the N-Termini of Lanthipeptides and Its Application to Visualize their Cellular Localization. <i>Journal of the American Chemical Society</i> , 2013, 135, 10362-10371.	6.6	33
187	Oxygen-18 Kinetic Isotope Effects of Nonheme Iron Enzymes HEPD and MPnS Support Iron(III) Superoxide as the Hydrogen Abstraction Species. <i>Journal of the American Chemical Society</i> , 2015, 137, 10448-10451.	6.6	33
188	Mechanism of a Class C Radical S-Adenosyl-methionine Thiazole Methyl Transferase. <i>Journal of the American Chemical Society</i> , 2017, 139, 18623-18631.	6.6	33
189	MicroED in natural product and small molecule research. <i>Natural Product Reports</i> , 2021, 38, 423-431.	5.2	33
190	Titanium-Mediated Additions of Borohydride to Alkenes. <i>Journal of the American Chemical Society</i> , 1994, 116, 6561-6569.	6.6	32
191	The Antibiotic Dehydrophos Is Converted to a Toxic Pyruvate Analog by Peptide Bond Cleavage in <i>Salmonella enterica</i> . <i>Antimicrobial Agents and Chemotherapy</i> , 2011, 55, 3357-3362.	1.4	32
192	Structural Characterization and Bioactivity Analysis of the Two-Component Lantibiotic Flv System from a Ruminant Bacterium. <i>Cell Chemical Biology</i> , 2016, 23, 246-256.	2.5	32
193	Elucidation of the roles of conserved residues in the biosynthesis of the lasso peptide paeninodin. <i>Chemical Communications</i> , 2018, 54, 9007-9010.	2.2	32
194	Heterologous expression and purification of SpaB involved in subtilin biosynthesis. <i>Biochemical and Biophysical Research Communications</i> , 2002, 295, 952-957.	1.0	31
195	Enzymatic hydrogen atom abstraction from polyunsaturated fatty acids. <i>Chemical Communications</i> , 2003, , 2843.	2.2	31
196	The Dehydratase Activity of Lactacin 481 Synthetase is Highly Processive. <i>Journal of the American Chemical Society</i> , 2006, 128, 1420-1421.	6.6	31
197	O-H Activation by an Unexpected Ferryl Intermediate during Catalysis by 2-Hydroxyethylphosphonate Dioxygenase. <i>Journal of the American Chemical Society</i> , 2017, 139, 2045-2052.	6.6	31
198	Assessing the Flexibility of the Prochlorosin 2.8 Scaffold for Bioengineering Applications. <i>ACS Synthetic Biology</i> , 2019, 8, 1204-1214.	1.9	31

#	ARTICLE	IF	CITATIONS
199	Structure-activity relationships of the phosphonate antibiotic dehydrophos. <i>Chemical Communications</i> , 2010, 46, 7694.	2.2	30
200	Discovery of the Antibiotic Phosacetamycin via a New Mass Spectrometry-Based Method for Phosphonic Acid Detection. <i>ACS Chemical Biology</i> , 2013, 8, 908-913.	1.6	30
201	Direct EPR Spectroscopic Evidence for an Allylic Radical Generated from (E)-2-Fluoromethylene-2-deoxycytidine 5-Diphosphate by <i>E. coli</i> Ribonucleotide Reductase. <i>Journal of the American Chemical Society</i> , 1998, 120, 4252-4253.	6.6	29
202	Site-Directed Mutagenesis of Active Site Residues of Phosphite Dehydrogenase. <i>Biochemistry</i> , 2005, 44, 4765-4774.	1.2	29
203	Structure-Activity Relationships of the S-Linked Glycocin Sublancin. <i>ACS Chemical Biology</i> , 2017, 12, 2965-2969.	1.6	29
204	Bacteroidetes can be a rich source of novel lanthipeptides: The case study of <i>Pedobacter lusitanus</i> . <i>Microbiological Research</i> , 2020, 235, 126441.	2.5	29
205	Structural Analysis of Class I Lanthipeptides from <i>Pedobacter lusitanus</i> NL19 Reveals an Unusual Ring Pattern. <i>ACS Chemical Biology</i> , 2021, 16, 1019-1029.	1.6	29
206	Photochemical cleavage of leader peptides. <i>Chemical Communications</i> , 2010, 46, 8935.	2.2	28
207	A catalytic role for methionine revealed by a combination of computation and experiments on phosphite dehydrogenase. <i>Chemical Science</i> , 2014, 5, 2191-2199.	3.7	28
208	Structural Characterization of a Pentadienyl Radical Intermediate Formed during Catalysis by Prostaglandin H Synthase-2. <i>Journal of the American Chemical Society</i> , 2001, 123, 3609-3610.	6.6	27
209	Phosphite Dehydrogenase: A Versatile Cofactor-Regeneration Enzyme. <i>Angewandte Chemie</i> , 2002, 114, 3391-3393.	1.6	27
210	A Quantum Chemical Study of the Synthesis of Prostaglandin G <sub>2</sub> by the Cyclooxygenase Active Site in Prostaglandin Endoperoxide H Synthase 1. <i>Journal of Physical Chemistry B</i> , 2003, 107, 3297-3308.	1.2	27
211	Chapter 21 In Vitro Studies of Lantibiotic Biosynthesis. <i>Methods in Enzymology</i> , 2009, 458, 533-558.	0.4	27
212	Biosynthesis of fosfazinomycin is a convergent process. <i>Chemical Science</i> , 2015, 6, 1282-1287.	3.7	27
213	Incorporation of Nonproteinogenic Amino Acids in Class I and II Lantibiotics. <i>ACS Chemical Biology</i> , 2018, 13, 951-957.	1.6	27
214	An Unusual Isotope Effect on Substrate Inhibition in the Oxidation of Arachidonic Acid by Lipoygenase. <i>Journal of the American Chemical Society</i> , 2003, 125, 8988-8989.	6.6	26
215	On the Regioselectivity of Thioether Formation by Lacticin 481 Synthetase. <i>Organic Letters</i> , 2007, 9, 3343-3346.	2.4	26
216	Synergistic Binding of the Leader and Core Peptides by the Lantibiotic Synthetase HalM2. <i>ACS Chemical Biology</i> , 2015, 10, 970-977.	1.6	26

#	ARTICLE	IF	CITATIONS
217	Discovery and Characterization of a Class IV Lanthipeptide with a Nonoverlapping Ring Pattern. <i>ACS Chemical Biology</i> , 2020, 15, 1642-1649.	1.6	26
218	New and Efficient Synthesis of an Amino Acid for Preparing Phosphine-Functionalized Peptidomimetics. <i>Journal of Organic Chemistry</i> , 1998, 63, 5262-5264.	1.7	25
219	Rapid Screening of Lanthipeptide Analogs via In-Colony Removal of Leader Peptides in <i>Escherichia coli</i> . <i>Journal of the American Chemical Society</i> , 2018, 140, 11884-11888.	6.6	25
220	Substrate-assisted enzymatic formation of lysinoalanine in duramycin. <i>Nature Chemical Biology</i> , 2018, 14, 928-933.	3.9	25
221	Structural determinants of macrocyclization in substrate-controlled lanthipeptide biosynthetic pathways. <i>Chemical Science</i> , 2020, 11, 12854-12870.	3.7	25
222	Mechanistic investigation of a highly active phosphite dehydrogenase mutant and its application for NADPH regeneration. <i>FEBS Journal</i> , 2005, 272, 3816-3827.	2.2	24
223	Synthesis of Nonproteinogenic Amino Acids To Probe Lantibiotic Biosynthesis. <i>Journal of Organic Chemistry</i> , 2005, 70, 6685-6692.	1.7	24
224	On the role of alkylcobalamins in the vitamin B12-catalyzed reductive dehalogenation of perchloroethylene and trichloroethylene. <i>Chemical Communications</i> , 2006, , 558-560.	2.2	24
225	Mechanistic Investigation of Methylphosphonate Synthase, a Non-Heme Iron-Dependent Oxygenase. <i>Journal of the American Chemical Society</i> , 2012, 134, 15660-15663.	6.6	24
226	Structure and Function of Phosphonoacetaldehyde Dehydrogenase: The Missing Link in Phosphonoacetate Formation. <i>Chemistry and Biology</i> , 2014, 21, 125-135.	6.2	24
227	Substrate Recognition by the Class II Lanthipeptide Synthetase HalM2. <i>ACS Chemical Biology</i> , 2020, 15, 1473-1486.	1.6	24
228	Answers to the Carbon-Phosphorus Lyase Conundrum. <i>ChemBioChem</i> , 2012, 13, 627-629.	1.3	23
229	A biosynthetic pathway to aromatic amines that uses glycyl-tRNA as nitrogen donor. <i>Nature Chemistry</i> , 2022, 14, 71-77.	6.6	23
230	Synthesis of Site-Specifically Labeled Arachidonic Acids as Mechanistic Probes for Prostaglandin H Synthase. <i>Organic Letters</i> , 2004, 6, 349-352.	2.4	22
231	Mode of action and structure-activity relationship studies of geobacillin I. <i>Journal of Antibiotics</i> , 2014, 67, 133-136.	1.0	22
232	Applications of the class II lanthipeptide protease LicP for sequence-specific, traceless peptide bond cleavage. <i>Chemical Science</i> , 2015, 6, 6270-6279.	3.7	22
233	Identification of an Active Site Residue of the R1 Subunit of Ribonucleotide Reductase from <i>Escherichia coli</i> : A Characterization of Substrate-Induced Polypeptide Cleavage by C225SR1. <i>Biochemistry</i> , 1996, 35, 10058-10067.	1.2	21
234	Structural Characterization of Arachidonyl Radicals Formed by Aspirin-treated Prostaglandin H Synthase-2. <i>Journal of Biological Chemistry</i> , 2002, 277, 38311-38321.	1.6	21

#	ARTICLE	IF	CITATIONS
235	Dichloroacetylene Is Not the Precursor to Dichlorinated Vinylcobaloxime and Vinylcobalamin in Cobalt Catalyzed Dechlorination of Perchloro- and Trichloroethylene. <i>Inorganic Chemistry</i> , 2002, 41, 5844-5848.	1.9	21
236	Structure and mechanism of enzymes involved in biosynthesis and breakdown of the phosphonates fosfomycin, dehydrophos, and phosphinothricin. <i>Archives of Biochemistry and Biophysics</i> , 2011, 505, 13-21.	1.4	21
237	Converging on a mechanism for choline degradation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 21184-21185.	3.3	21
238	A Common Late-Stage Intermediate in Catalysis by 2-Hydroxyethyl-phosphonate Dioxygenase and Methylphosphonate Synthase. <i>Journal of the American Chemical Society</i> , 2015, 137, 3217-3220.	6.6	21
239	Characterization of Leader Peptide Binding During Catalysis by the Nisin Dehydratase NisB. <i>Journal of the American Chemical Society</i> , 2018, 140, 4200-4203.	6.6	21
240	On deuterium-labeling studies for probing rhodium-catalyzed hydroboration reactions. <i>Journal of Organic Chemistry</i> , 1991, 56, 2949-2951.	1.7	20
241	Homemade cofactors: Self-processing in galactose oxidase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001, 98, 12863-12865.	3.3	20
242	Mechanism and Substrate Recognition of 2-Hydroxyethylphosphonate Dioxygenase. <i>Biochemistry</i> , 2011, 50, 6598-6605.	1.2	20
243	Cyclooxygenase reaction mechanism of prostaglandin H synthase from deuterium kinetic isotope effects. <i>Journal of Inorganic Biochemistry</i> , 2011, 105, 382-390.	1.5	20
244	Discovery and Biosynthesis of Phosphonate and Phosphinate Natural Products. <i>Methods in Enzymology</i> , 2012, 516, 101-123.	0.4	20
245	Mechanistic Studies of the Kinase Domains of Class IV Lanthipeptide Synthetases. <i>ACS Chemical Biology</i> , 2019, 14, 1583-1592.	1.6	20
246	LanCL proteins are not Involved in Lanthionine Synthesis in Mammals. <i>Scientific Reports</i> , 2017, 7, 40980.	1.6	20
247	Macrocyclization and Backbone Modification in RiPP Biosynthesis. <i>Annual Review of Biochemistry</i> , 2022, 91, 269-294.	5.0	20
248	Synthesis of 2-Amino-3-fluoroacrylic Acid Containing Peptides. <i>Organic Letters</i> , 2001, 3, 593-596.	2.4	19
249	Efficient Synthesis of Suitably Protected $\hat{1}^2$ -Difluoroalanine and $\hat{1}^3$ -Difluorothreonine from l-Ascorbic Acid. <i>Organic Letters</i> , 2007, 9, 41-44.	2.4	19
250	The Enterococcal Cytolysin Synthetase Coevolves with Substrate for Stereoselective Lanthionine Synthesis. <i>ACS Chemical Biology</i> , 2016, 11, 2438-2446.	1.6	19
251	Substrate Sequence Controls Regioselectivity of Lanthionine Formation by ProcM. <i>Journal of the American Chemical Society</i> , 2021, 143, 18733-18743.	6.6	19
252	Modulating the copper-sulfur interaction in type 1 blue copper azurin by replacing Cys112 with nonproteinogenic homocysteine. <i>Inorganic Chemistry Frontiers</i> , 2014, 1, 153-158.	3.0	18

#	ARTICLE	IF	CITATIONS
253	<b>Mechanism of Radical S-Adenosyl-methionine Adenylation: Radical Intermediates and the Catalytic Competence of the 5'-Deoxyadenosyl Radical. Journal of the American Chemical Society, 2022, 144, 5087-5098.	6.6	18
254	Pre-Steady-State Studies of Phosphite Dehydrogenase Demonstrate That Hydride Transfer Is Fully Rate Limiting. Biochemistry, 2007, 46, 13101-13108.	1.2	17
255	In Vitro Characterization of a Heterologously Expressed Nonribosomal Peptide Synthetase Involved in Phosphinothricin Tripeptide Biosynthesis. Biochemistry, 2009, 48, 5054-5056.	1.2	17
256	Bacillus anthracis spore interactions with mammalian cells: Relationship between germination state and the outcome of in vitro. BMC Microbiology, 2011, 11, 46.	1.3	17
257	Characterization of Two Late-Stage Enzymes Involved in Fosfomycin Biosynthesis in Pseudomonads. ACS Chemical Biology, 2017, 12, 456-463.	1.6	17
258	Characterization of a Dehydratase and Methyltransferase in the Biosynthesis of Ribosomally Synthesized and Posttranslationally Modified Peptides in Lachnospiraceae. ChemBioChem, 2020, 21, 190-199.	1.3	17
259	Selenocysteine Positional Variants Reveal Contributions to Copper Binding from Cysteine Residues in Domains 2 and 3 of Human Copper Chaperone for Superoxide Dismutase. Biochemistry, 2008, 47, 13074-13083.	1.2	16
260	Investigation of the Role of Arg301 Identified in the X-ray Structure of Phosphite Dehydrogenase. Biochemistry, 2012, 51, 4254-4262.	1.2	16
261	The Enzymology of Prochlorosin Biosynthesis. Methods in Enzymology, 2018, 604, 165-203.	0.4	16
262	Synthesis and Bioactivity of Diastereomers of the Virulence Lanthipeptide Cytolysin. Organic Letters, 2016, 18, 6188-6191.	2.4	15
263	Probing the role of the backbone carbonyl interaction with the Cu <sup>A</sup> center in azurin by replacing the peptide bond with an ester linkage. Chemical Communications, 2017, 53, 224-227.	2.2	15
264	Nonribosomal Peptide Extension by a Peptide Amino-Acyl tRNA Ligase. Journal of the American Chemical Society, 2019, 141, 19625-19633.	6.6	15
265	Biosynthesis of 3-thia-Î±-amino acids on a carrier peptide. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	15
266	On hydroborations of alkenes catalyzed by titanium complexes. Tetrahedron Letters, 1993, 34, 6817-6820.	0.7	14
267	Arabidopsis thaliana fatty acid alpha-dioxygenase-1: evaluation of substrates, inhibitors and amino-terminal function. Plant Physiology and Biochemistry, 2006, 44, 284-293.	2.8	14
268	Kinetic isotope effects in the oxidation of arachidonic acid by soybean lipoxygenase-1. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 5959-5962.	1.0	14
269	The Fellowship of the Rings: Macrocyclic Antibiotic Peptides Reveal an Anti-Gram-Negative Target. Biochemistry, 2020, 59, 343-345.	1.2	14
270	Unexpected Methylanthionine Stereochemistry in the Morphogenetic Lanthipeptide SapT. Journal of the American Chemical Society, 2022, 144, 6373-6382.	6.6	14

#	ARTICLE	IF	CITATIONS
271	Conjugation to Albuminâ€Binding Molecule Tags as a Strategy to Improve Both Efficacy and Pharmacokinetic Properties of the Complement Inhibitor Compstatin. <i>ChemMedChem</i> , 2014, 9, 2223-2226.	1.6	13
272	Chemical Rescue and Inhibition Studies to Determine the Role of Arg301 in Phosphite Dehydrogenase. <i>PLoS ONE</i> , 2014, 9, e87134.	1.1	12
273	CylA is a sequence-specific protease involved in toxin biosynthesis. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2019, 46, 537-549.	1.4	12
274	Chapter 5 Expressed Protein Ligation for Metalloprotein Design and Engineering. <i>Methods in Enzymology</i> , 2009, 462, 97-115.	0.4	11
275	Characterization of the stereochemical configuration of lanthionines formed by the lanthipeptide synthetase <sc>G</sc>eo<sc>M</sc>. <i>Biopolymers</i> , 2016, 106, 834-842.	1.2	11
276	Mechanisms and Evolution of Diversity-Generating RiPP Biosynthesis. <i>Trends in Chemistry</i> , 2021, 3, 266-278.	4.4	11
277	Substrate Recognition by the Peptidyl-(<i>S</i>)-2-mercaptoglycine Synthase TgIHI during 3-Thiaglutamate Biosynthesis. <i>ACS Chemical Biology</i> , 2022, 17, 930-940.	1.6	11
278	The importance of phosphine-to-rhodium ratios in enantioselective hydroborations. <i>Inorganica Chimica Acta</i> , 1994, 220, 93-98.	1.2	10
279	Biosynthesis and Mode of Action of Lantibiotics. , 2010, , 217-256.		10
280	Characterization and application of the Fe(ii) and Î±-ketoglutarate dependent hydroxylase FrbJ. <i>Chemical Communications</i> , 2011, 47, 10025.	2.2	10
281	Introduction: Unusual Enzymology in Natural Product Synthesis. <i>Chemical Reviews</i> , 2017, 117, 5223-5225.	23.0	10
282	Temperature-Independent Kinetic Isotope Effects as Evidence for a Marcus-like Model of Hydride Tunneling in Phosphite Dehydrogenase. <i>Biochemistry</i> , 2019, 58, 4260-4268.	1.2	10
283	Model studies of the CuBsite of cytochrome c oxidase utilizing a Zn(ii) complex containing an imidazoleâ€phenol cross-linked ligand. <i>Dalton Transactions</i> , 2006, , 3326-3337.	1.6	9
284	Vitamin B12Catalyzed Radical Cyclizations of Arylalkenes. <i>Synlett</i> , 2006, 2006, 211-214.	1.0	9
285	Cyclooxygenase reaction mechanism of PGHS â€ Evidence for a reversible transition between a pentadienyl radical and a new tyrosyl radical by nitric oxide trapping. <i>Journal of Inorganic Biochemistry</i> , 2011, 105, 356-365.	1.5	9
286	Cameo appearances of aminoacyl-tRNA in natural product biosynthesis. <i>Current Opinion in Chemical Biology</i> , 2016, 35, 29-36.	2.8	9
287	Synthesis of Antibiotics and Related Molecules. <i>Journal of Organic Chemistry</i> , 2018, 83, 6826-6828.	1.7	9
288	Exploring structural signatures of the lanthipeptide prochlorosin 2.8 using tandem mass spectrometry and trapped ion mobility-mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2021, 413, 4815-4824.	1.9	9

#	ARTICLE	IF	CITATIONS
289	Chemical and Enzymatic Synthesis of Fluorinated-Dehydroalanine-Containing Peptides. <i>ChemBioChem</i> , 2003, 4, 1206-1215.	1.3	8
290	Bacteria Do It Differently: An Alternative Path to Squalene. <i>ACS Central Science</i> , 2015, 1, 64-65.	5.3	8
291	Investigation of Amide Bond Formation during Dehydrophos Biosynthesis. <i>ACS Chemical Biology</i> , 2018, 13, 537-541.	1.6	8
292	Structural and mechanistic investigations of protein S-glycosyltransferases. <i>Cell Chemical Biology</i> , 2021, 28, 1740-1749.e6.	2.5	8
293	Accessing Diverse Pyridine-Based Macrocyclic Peptides by a Two-Site Recognition Pathway. <i>Journal of the American Chemical Society</i> , 2022, 144, 11263-11269.	6.6	8
294	Lighting Up the Nascent Cell Wall. <i>ACS Chemical Biology</i> , 2006, 1, 425-428.	1.6	7
295	Synthesis of 11-thialinoleic acid and 14-thialinoleic acid, inhibitors of soybean and human lipoxygenases. <i>Organic and Biomolecular Chemistry</i> , 2008, 6, 4242.	1.5	7
296	An engineered lantipeptide synthetase serves as a general leader peptide-dependent kinase. <i>Chemical Communications</i> , 2012, 48, 10615.	2.2	7
297	Editorial overview: Biocatalysis and Biotransformation: Esoteric, Niche Enzymology. <i>Current Opinion in Chemical Biology</i> , 2016, 31, v-vii.	2.8	7
298	<sup>18</sup> O Kinetic Isotope Effects Reveal an Associative Transition State for Phosphite Dehydrogenase Catalyzed Phosphoryl Transfer. <i>Journal of the American Chemical Society</i> , 2018, 140, 17820-17824.	6.6	7
299	Use of the dehydrophos biosynthetic enzymes to prepare antimicrobial analogs of alaphosphin. <i>Organic and Biomolecular Chemistry</i> , 2019, 17, 822-829.	1.5	7
300	Biosynthesis of fosfomycin in pseudomonads reveals an unexpected enzymatic activity in the metallohydrolase superfamily. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	7
301	The Antimicrobial Activity of the Glycocin Sublancin Is Dependent on an Active Phosphoenolpyruvate-Sugar Phosphotransferase System. <i>ACS Infectious Diseases</i> , 2021, 7, 2402-2412.	1.8	7
302	Structure-Activity Relationships of the Enterococcal Cytolysin. <i>ACS Infectious Diseases</i> , 2021, 7, 2445-2454.	1.8	7
303	Stereochemistry of hydride transfer by group III alcohol dehydrogenases involved in phosphonate biosynthesis. <i>MedChemComm</i> , 2012, 3, 967.	3.5	6
304	Overall Retention of Methyl Stereochemistry during B12-Dependent Radical SAM Methyl Transfer in Fosfomycin Biosynthesis. <i>Biochemistry</i> , 2021, 60, 1587-1596.	1.2	6
305	Design of a Fluoro-olefin Cytidine Nucleoside as a Bioprecursor of a Mechanism-Based Inhibitor of Ribonucleotide Reductase. <i>ACS Symposium Series</i> , 1996, , 246-264.	0.5	5
306	Chapter 6 Using Expressed Protein Ligation to Probe the Substrate Specificity of Lantibiotic Synthetases. <i>Methods in Enzymology</i> , 2009, 462, 117-134.	0.4	5

#	ARTICLE	IF	CITATIONS
307	Peptide backbone modifications in lanthipeptides. <i>Methods in Enzymology</i> , 2021, 656, 573-621.	0.4	5
308	Synthesis of site-specifically deuterated arachidonic acid derivatives containing a remote tritium radiolabel. <i>Journal of Labelled Compounds and Radiopharmaceuticals</i> , 2006, 49, 545-558.	0.5	4
309	Lanthionine synthetase C-like protein 2 (LanCL2) is important for adipogenic differentiation. <i>Journal of Lipid Research</i> , 2018, 59, 1433-1445.	2.0	4
310	Synthesis of 7-thiaarachidonic acid as a mechanistic probe of prostaglandin H synthase-2. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2007, 17, 4049-4052.	1.0	3
311	An unexpected role for ergothioneine. <i>National Science Review</i> , 2015, 2, 382-383.	4.6	3
312	Substrate Specificity of the Flavoenzyme BhaC <sub>1</sub> That Converts a C-Terminal Trp to a Hydroxyquinone. <i>Biochemistry</i> , 2023, 62, 378-387.	1.2	3
313	Corrigendum to: "Novel cofactors via post-translational modifications of enzyme active sites". <i>Chemistry and Biology</i> , 2001, 8, 97.	6.2	1
314	Conjugation of Selenols with Aziridine-2-Carboxylic Acid-Containing Peptides. <i>Synlett</i> , 2005, 2005, 2011-2014.	1.0	1
315	Structural comparisons of arachidonic acid-induced radicals formed by prostaglandin H synthase-1 and -2. <i>Journal of Inorganic Biochemistry</i> , 2011, 105, 366-374.	1.5	1
316	Recent Progress in Lanthipeptide Biosynthesis, Discovery, and Engineering. , 2020, , 119-165.		1
317	Biosynthesis and Mode of Action of Lantibiotics. <i>ChemInform</i> , 2005, 36, no.	0.1	0
318	Nature's Way To Make the Lantibiotics. <i>Journal of Chemical Education</i> , 2006, 83, 1769.	1.1	0
319	Never stop questioning. <i>Current Opinion in Chemical Biology</i> , 2007, 11, 527-528.	2.8	0
320	Positive and radical. <i>Nature</i> , 2013, 496, 34-35.	13.7	0
321	Structural description of enzyme catalysing unusual modification in lantibiotic biosynthesis. <i>FASEB Journal</i> , 2010, 24, lb205.	0.2	0
322	Investigations into the role of Lantibiotic Cyclase-like (LanCL) proteins in mammals. <i>FASEB Journal</i> , 2013, 27, 1045.6.	0.2	0
323	Development of Phage Display of Nisin. <i>FASEB Journal</i> , 2018, 32, lb88.	0.2	0
324	Non-Heme Iron-Dependent Enzymes That Cleave Carbon-Carbon Bonds During Phosphonate Biosynthesis. , 2020, , 173-190.		0