## Wilfred Ajw Van Der Donk

List of Publications by Year in descending order

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		9786	10734
324	24,317	73	138
papers	citations	h-index	g-index
353	353	353	14853
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Substrate Specificity of the Flavoenzyme BhaC <sub>1</sub> That Converts a C-Terminal Trp to a Hydroxyquinone. Biochemistry, 2023, 62, 378-387.	2.5	3
2	A biosynthetic pathway to aromatic amines that uses glycyl-tRNA as nitrogen donor. Nature Chemistry, 2022, 14, 71-77.	13.6	23
3	<b>Mechanism of Radical <i>S</i>-Adenosyl-</b> <scp>l</scp> -methionine Adenosylation: Radical Intermediates and the Catalytic Competence of the 5′-Deoxyadenosyl Radical. Journal of the American Chemical Society, 2022, 144, 5087-5098.	13.7	18
4	Macrocyclization and Backbone Modification in RiPP Biosynthesis. Annual Review of Biochemistry, 2022, 91, 269-294.	11.1	20
5	Unexpected Methyllanthionine Stereochemistry in the Morphogenetic Lanthipeptide SapT. Journal of the American Chemical Society, 2022, 144, 6373-6382.	13.7	14
6	Substrate Recognition by the Peptidyl-( <i>S</i> )-2-mercaptoglycine Synthase TglHI during 3-Thiaglutamate Biosynthesis. ACS Chemical Biology, 2022, 17, 930-940.	3.4	11
7	Accessing Diverse Pyridine-Based Macrocyclic Peptides by a Two-Site Recognition Pathway. Journal of the American Chemical Society, 2022, 144, 11263-11269.	13.7	8
8	Biosynthesis of 3-thia-α-amino acids on a carrier peptide. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	15
9	New developments in RiPP discovery, enzymology and engineering. Natural Product Reports, 2021, 38, 130-239.	10.3	412
10	MicroED in natural product and small molecule research. Natural Product Reports, 2021, 38, 423-431.	10.3	33
11	Peptide backbone modifications in lanthipeptides. Methods in Enzymology, 2021, 656, 573-621.	1.0	5
12	Mechanisms and Evolution of Diversity-Generating RiPP Biosynthesis. Trends in Chemistry, 2021, 3, 266-278.	8.5	11
13	Overall Retention of Methyl Stereochemistry during B12-Dependent Radical SAM Methyl Transfer in Fosfomycin Biosynthesis. Biochemistry, 2021, 60, 1587-1596.	2.5	6
14	LanCLs add glutathione to dehydroamino acids generated at phosphorylated sites in the proteome. Cell, 2021, 184, 2680-2695.e26.	28.9	34
15	Biosynthesis of fosfomycin in pseudomonads reveals an unexpected enzymatic activity in the metallohydrolase superfamily. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	7
16	Engineering of new-to-nature ribosomally synthesized and post-translationally modified peptide natural products. Current Opinion in Biotechnology, 2021, 69, 221-231.	6.6	40
17	Exploring structural signatures of the lanthipeptide prochlorosin 2.8 using tandem mass spectrometry and trapped ion mobility-mass spectrometry. Analytical and Bioanalytical Chemistry, 2021, 413, 4815-4824.	3.7	9
18	Structural Analysis of Class I Lanthipeptides from <i>Pedobacter lusitanus</i> NL19 Reveals an Unusual Ring Pattern. ACS Chemical Biology, 2021, 16, 1019-1029.	3.4	29

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19	The Antimicrobial Activity of the Glycocin Sublancin Is Dependent on an Active Phosphoenolpyruvate-Sugar Phosphotransferase System. ACS Infectious Diseases, 2021, 7, 2402-2412.	3.8	7
20	Structural and mechanistic investigations of protein S-glycosyltransferases. Cell Chemical Biology, 2021, 28, 1740-1749.e6.	5.2	8
21	Structure–Activity Relationships of the Enterococcal Cytolysin. ACS Infectious Diseases, 2021, 7, 2445-2454.	3.8	7
22	Substrate Sequence Controls Regioselectivity of Lanthionine Formation by ProcM. Journal of the American Chemical Society, 2021, 143, 18733-18743.	13.7	19
23	Characterization of a Dehydratase and Methyltransferase in the Biosynthesis of Ribosomally Synthesized and Postâ€ŧranslationally Modified Peptides in <i>Lachnospiraceae</i> . ChemBioChem, 2020, 21, 190-199.	2.6	17
24	The Fellowship of the Rings: Macrocyclic Antibiotic Peptides Reveal an Anti-Gram-Negative Target. Biochemistry, 2020, 59, 343-345.	2.5	14
25	Recent Progress in Lanthipeptide Biosynthesis, Discovery, and Engineering. , 2020, , 119-165.		1
26	Precursor peptide-targeted mining of more than one hundred thousand genomes expands the lanthipeptide natural product family. BMC Genomics, 2020, 21, 387.	2.8	102
27	Structural determinants of macrocyclization in substrate-controlled lanthipeptide biosynthetic pathways. Chemical Science, 2020, 11, 12854-12870.	7.4	25
28	Bacteroidetes can be a rich source of novel lanthipeptides: The case study of Pedobacter lusitanus. Microbiological Research, 2020, 235, 126441.	5.3	29
29	Discovery and Characterization of a Class IV Lanthipeptide with a Nonoverlapping Ring Pattern. ACS Chemical Biology, 2020, 15, 1642-1649.	3.4	26
30	Substrate Recognition by the Class II Lanthipeptide Synthetase HalM2. ACS Chemical Biology, 2020, 15, 1473-1486.	3.4	24
31	Non-Heme Iron-Dependent Enzymes That Cleave Carbon-Carbon Bonds During Phosphonate Biosynthesis. , 2020, , 173-190.		0
32	Use of a scaffold peptide in the biosynthesis of amino acid–derived natural products. Science, 2019, 365, 280-284.	12.6	108
33	Characterization of glutamyl-tRNA–dependent dehydratases using nonreactive substrate mimics. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 17245-17250.	7.1	42
34	Temperature-Independent Kinetic Isotope Effects as Evidence for a Marcus-like Model of Hydride Tunneling in Phosphite Dehydrogenase. Biochemistry, 2019, 58, 4260-4268.	2.5	10
35	<i>O</i> -Methyltransferase-Mediated Incorporation of a β-Amino Acid in Lanthipeptides. Journal of the American Chemical Society, 2019, 141, 16790-16801.	13.7	53
36	Use of the dehydrophos biosynthetic enzymes to prepare antimicrobial analogs of alaphosphin. Organic and Biomolecular Chemistry, 2019, 17, 822-829.	2.8	7

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37	Mechanistic Studies of the Kinase Domains of Class IV Lanthipeptide Synthetases. ACS Chemical Biology, 2019, 14, 1583-1592.	3.4	20
38	Assessing the Flexibility of the Prochlorosin 2.8 Scaffold for Bioengineering Applications. ACS Synthetic Biology, 2019, 8, 1204-1214.	3.8	31
39	Nonribosomal Peptide Extension by a Peptide Amino-Acyl tRNA Ligase. Journal of the American Chemical Society, 2019, 141, 19625-19633.	13.7	15
40	Bacteriophage targeting of gut bacterium attenuates alcoholic liver disease. Nature, 2019, 575, 505-511.	27.8	493
41	Investigations into the Mechanism of Action of Sublancin. ACS Infectious Diseases, 2019, 5, 454-459.	3.8	35
42	CylA is a sequence-specific protease involved in toxin biosynthesis. Journal of Industrial Microbiology and Biotechnology, 2019, 46, 537-549.	3.0	12
43	Insights into AMS/PCAT transporters from biochemical and structural characterization of a double Glycine motif protease. ELife, 2019, 8, .	6.0	63
44	A lanthipeptide library used to identify a protein–protein interaction inhibitor. Nature Chemical Biology, 2018, 14, 375-380.	8.0	117
45	Investigation of Substrate Recognition and Biosynthesis in Class IV Lanthipeptide Systems. Journal of the American Chemical Society, 2018, 140, 5743-5754.	13.7	43
46	Incorporation of Nonproteinogenic Amino Acids in Class I and II Lantibiotics. ACS Chemical Biology, 2018, 13, 951-957.	3.4	27
47	Investigation of Amide Bond Formation during Dehydrophos Biosynthesis. ACS Chemical Biology, 2018, 13, 537-541.	3.4	8
48	Characterization of Leader Peptide Binding During Catalysis by the Nisin Dehydratase NisB. Journal of the American Chemical Society, 2018, 140, 4200-4203.	13.7	21
49	Development and Application of Yeast and Phage Display of Diverse Lanthipeptides. ACS Central Science, 2018, 4, 458-467.	11.3	101
50	<sup>18</sup> O Kinetic Isotope Effects Reveal an Associative Transition State for Phosphite Dehydrogenase Catalyzed Phosphoryl Transfer. Journal of the American Chemical Society, 2018, 140, 17820-17824.	13.7	7
51	Rapid Discovery of Glycocins through Pathway Refactoring in <i>Escherichia coli</i> . ACS Chemical Biology, 2018, 13, 2966-2972.	3.4	35
52	Rapid Screening of Lanthipeptide Analogs via In-Colony Removal of Leader Peptides in <i>Escherichia coli</i> . Journal of the American Chemical Society, 2018, 140, 11884-11888.	13.7	25
53	Glutamic acid is a carrier for hydrazine during the biosyntheses of fosfazinomycin and kinamycin. Nature Communications, 2018, 9, 3687.	12.8	54
54	Substrate-assisted enzymatic formation of lysinoalanine in duramycin. Nature Chemical Biology, 2018, 14, 928-933.	8.0	25

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55	Stereospecific Radical-Mediated B <sub>12</sub> -Dependent Methyl Transfer by the Fosfomycin Biosynthesis Enzyme Fom3. Biochemistry, 2018, 57, 4967-4971.	2.5	39
56	Synthesis of Antibiotics and Related Molecules. Journal of Organic Chemistry, 2018, 83, 6826-6828.	3.2	9
57	Elucidation of the roles of conserved residues in the biosynthesis of the lasso peptide paeninodin. Chemical Communications, 2018, 54, 9007-9010.	4.1	32
58	Lanthionine synthetase C-like protein 2 (LanCL2) is important for adipogenic differentiation. Journal of Lipid Research, 2018, 59, 1433-1445.	4.2	4
59	The Enzymology of Prochlorosin Biosynthesis. Methods in Enzymology, 2018, 604, 165-203.	1.0	16
60	Development of Phage Display of Nisin. FASEB Journal, 2018, 32, lb88.	0.5	0
61	Mechanistic Understanding of Lanthipeptide Biosynthetic Enzymes. Chemical Reviews, 2017, 117, 5457-5520.	47.7	375
62	O–H Activation by an Unexpected Ferryl Intermediate during Catalysis by 2-Hydroxyethylphosphonate Dioxygenase. Journal of the American Chemical Society, 2017, 139, 2045-2052.	13.7	31
63	Ribosomally synthesized and post-translationally modified peptide natural product discovery in the genomic era. Current Opinion in Chemical Biology, 2017, 38, 36-44.	6.1	124
64	Introduction: Unusual Enzymology in Natural Product Synthesis. Chemical Reviews, 2017, 117, 5223-5225.	47.7	10
65	Chimeric Leader Peptides for the Generation of Non-Natural Hybrid RiPP Products. ACS Central Science, 2017, 3, 629-638.	11.3	87
66	Reconstitution and Substrate Specificity of the Radical <i>S</i> -Adenosyl-methionine Thiazole <i>C</i> -Methyltransferase in Thiomuracin Biosynthesis. Journal of the American Chemical Society, 2017, 139, 4310-4313.	13.7	45
67	Probing the role of the backbone carbonyl interaction with the Cu <sub>A</sub> center in azurin by replacing the peptide bond with an ester linkage. Chemical Communications, 2017, 53, 224-227.	4.1	15
68	Two Flavoenzymes Catalyze the Post-Translational Generation of 5-Chlorotryptophan and 2-Aminovinyl-Cysteine during NAI-107 Biosynthesis. ACS Chemical Biology, 2017, 12, 548-557.	3.4	64
69	Characterization of Two Late-Stage Enzymes Involved in Fosfomycin Biosynthesis in Pseudomonads. ACS Chemical Biology, 2017, 12, 456-463.	3.4	17
70	Structural basis for methylphosphonate biosynthesis. Science, 2017, 358, 1336-1339.	12.6	39
71	Mechanism of a Class C Radical <i>S</i> -Adenosyl- <scp>l</scp> -methionine Thiazole Methyl Transferase. Journal of the American Chemical Society, 2017, 139, 18623-18631.	13.7	33
72	Structural insights into enzymatic [4+2] <i>aza</i> -cycloaddition in thiopeptide antibiotic biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12928-12933.	7.1	70

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73	Structure–Activity Relationships of the S-Linked Glycocin Sublancin. ACS Chemical Biology, 2017, 12, 2965-2969.	3.4	29
74	Ribosomal Natural Products, Tailored To Fit. Accounts of Chemical Research, 2017, 50, 1577-1586.	15.6	61
75	Evolutionary radiation of lanthipeptides in marine cyanobacteria. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E5424-E5433.	7.1	80
76	Insights into the Biosynthesis of Duramycin. Applied and Environmental Microbiology, 2017, 83, .	3.1	36
77	Go it alone: four-electron oxidations by mononuclear non-heme iron enzymes. Journal of Biological Inorganic Chemistry, 2017, 22, 381-394.	2.6	36
78	LanCL proteins are not Involved in Lanthionine Synthesis in Mammals. Scientific Reports, 2017, 7, 40980.	3.3	20
79	Characterization of the stereochemical configuration of lanthionines formed by the lanthipeptide synthetase <scp>G</scp> eo <scp>M</scp> . Biopolymers, 2016, 106, 834-842.	2.4	11
80	New insights into the biosynthesis of fosfazinomycin. Chemical Science, 2016, 7, 5219-5223.	7.4	55
81	Discovery and Characterization of Bicereucin, an Unusual <scp>d</scp> -Amino Acid-Containing Mixed Two-Component Lantibiotic. Journal of the American Chemical Society, 2016, 138, 5254-5257.	13.7	78
82	Leader Peptide Establishes Dehydration Order, Promotes Efficiency, and Ensures Fidelity During Lacticin 481 Biosynthesis. Journal of the American Chemical Society, 2016, 138, 6436-6444.	13.7	34
83	Cameo appearances of aminoacyl-tRNA in natural product biosynthesis. Current Opinion in Chemical Biology, 2016, 35, 29-36.	6.1	9
84	Biosynthetic Timing and Substrate Specificity for the Thiopeptide Thiomuracin. Journal of the American Chemical Society, 2016, 138, 15511-15514.	13.7	73
85	Synthesis and Bioactivity of Diastereomers of the Virulence Lanthipeptide Cytolysin. Organic Letters, 2016, 18, 6188-6191.	4.6	15
86	The Enterococcal Cytolysin Synthetase Coevolves with Substrate for Stereoselective Lanthionine Synthesis. ACS Chemical Biology, 2016, 11, 2438-2446.	3.4	19
87	New Insights into the Biosynthetic Logic of Ribosomally Synthesized and Post-translationally Modified Peptide Natural Products. Cell Chemical Biology, 2016, 23, 31-44.	5.2	241
88	Biosynthetic investigation of phomopsins reveals a widespread pathway for ribosomal natural products in Ascomycetes. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3521-3526.	7.1	87
89	Structure and tRNA Specificity of MibB, a Lantibiotic Dehydratase from Actinobacteria Involved in NAI-107 Biosynthesis. Cell Chemical Biology, 2016, 23, 370-380.	5.2	64
90	Structural Characterization and Bioactivity Analysis of the Two-Component Lantibiotic Flv System from a Ruminant Bacterium. Cell Chemical Biology, 2016, 23, 246-256.	5.2	32

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91	Editorial overview: Biocatalysis and Biotransformation: Esoteric, Niche Enzymology. Current Opinion in Chemical Biology, 2016, 31, v-vii.	6.1	7
92	The many roles of glutamate in metabolism. Journal of Industrial Microbiology and Biotechnology, 2016, 43, 419-430.	3.0	111
93	Facile Removal of Leader Peptides from Lanthipeptides by Incorporation of a Hydroxy Acid. Journal of the American Chemical Society, 2015, 137, 6975-6978.	13.7	40
94	An unexpected role for ergothioneine. National Science Review, 2015, 2, 382-383.	9.5	3
95	In Vitro Biosynthesis of the Core Scaffold of the Thiopeptide Thiomuracin. Journal of the American Chemical Society, 2015, 137, 16012-16015.	13.7	145
96	Applications of the class II lanthipeptide protease LicP for sequence-specific, traceless peptide bond cleavage. Chemical Science, 2015, 6, 6270-6279.	7.4	22
97	A Common Late-Stage Intermediate in Catalysis by 2-Hydroxyethyl-phosphonate Dioxygenase and Methylphosphonate Synthase. Journal of the American Chemical Society, 2015, 137, 3217-3220.	13.7	21
98	Synergistic Binding of the Leader and Core Peptides by the Lantibiotic Synthetase HalM2. ACS Chemical Biology, 2015, 10, 970-977.	3.4	26
99	Michael-Type Cyclizations in Lantibiotic Biosynthesis Are Reversible. ACS Chemical Biology, 2015, 10, 1234-1238.	3.4	44
100	Bacteria Do It Differently: An Alternative Path to Squalene. ACS Central Science, 2015, 1, 64-65.	11.3	8
101	Expanded Natural Product Diversity Revealed by Analysis of Lanthipeptide-Like Gene Clusters in Actinobacteria. Applied and Environmental Microbiology, 2015, 81, 4339-4350.	3.1	70
102	Product Formation by the Promiscuous Lanthipeptide Synthetase ProcM is under Kinetic Control. Journal of the American Chemical Society, 2015, 137, 5140-5148.	13.7	43
103	Oxygen-18 Kinetic Isotope Effects of Nonheme Iron Enzymes HEPD and MPnS Support Iron(III) Superoxide as the Hydrogen Abstraction Species. Journal of the American Chemical Society, 2015, 137, 10448-10451.	13.7	33
104	Minimum Information about a Biosynthetic Gene cluster. Nature Chemical Biology, 2015, 11, 625-631.	8.0	715
105	Discovery of phosphonic acid natural products by mining the genomes of 10,000 actinomycetes. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12175-12180.	7.1	168
106	The Phosphoenolpyruvate:Sugar Phosphotransferase System Is Involved in Sensitivity to the Glucosylated Bacteriocin Sublancin. Antimicrobial Agents and Chemotherapy, 2015, 59, 6844-6854.	3.2	44
107	Post-translational Introduction of <scp>d</scp> -Alanine into Ribosomally Synthesized Peptides by the Dehydroalanine Reductase NpnJ. Journal of the American Chemical Society, 2015, 137, 12426-12429.	13.7	40
108	Biosynthesis of fosfazinomycin is a convergent process. Chemical Science, 2015, 6, 1282-1287.	7.4	27

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109	Substrate control in stereoselective lanthionine biosynthesis. Nature Chemistry, 2015, 7, 57-64.	13.6	79
110	Structure and mechanism of the tRNA-dependent lantibiotic dehydratase NisB. Nature, 2015, 517, 509-512.	27.8	278
111	The enterococcal cytolysin synthetase has an unanticipated lipid kinase fold. ELife, 2015, 4, .	6.0	73
112	Chemical Rescue and Inhibition Studies to Determine the Role of Arg301 in Phosphite Dehydrogenase. PLoS ONE, 2014, 9, e87134.	2.5	12
113	Lanthionine synthetase C–like protein 2 (LanCL2) is a novel regulator of Akt. Molecular Biology of the Cell, 2014, 25, 3954-3961.	2.1	46
114	High Divergence of the Precursor Peptides in Combinatorial Lanthipeptide Biosynthesis. ACS Chemical Biology, 2014, 9, 2686-2694.	3.4	52
115	Mode of action and structure–activity relationship studies of geobacillin I. Journal of Antibiotics, 2014, 67, 133-136.	2.0	22
116	Use of a Phosphonate Methyltransferase in the Identification of the Fosfazinomycin Biosynthetic Gene Cluster. Angewandte Chemie - International Edition, 2014, 53, 1334-1337.	13.8	40
117	Conjugation to Albuminâ€Binding Molecule Tags as a Strategy to Improve Both Efficacy and Pharmacokinetic Properties of the Complement Inhibitor Compstatin. ChemMedChem, 2014, 9, 2223-2226.	3.2	13
118	Modulating the copper–sulfur interaction in type 1 blue copper azurin by replacing Cys112 with nonproteinogenic homocysteine. Inorganic Chemistry Frontiers, 2014, 1, 153-158.	6.0	18
119	The Glycosyltransferase Involved in Thurandacin Biosynthesis Catalyzes Both O- and S-Glycosylation. Journal of the American Chemical Society, 2014, 136, 84-87.	13.7	64
120	NMR Structure of the S-Linked Glycopeptide Sublancin 168. ACS Chemical Biology, 2014, 9, 796-801.	3.4	41
121	A Price To Pay for Relaxed Substrate Specificity: A Comparative Kinetic Analysis of the Class II Lanthipeptide Synthetases ProcM and HalM2. Journal of the American Chemical Society, 2014, 136, 17513-17529.	13.7	66
122	Substrate Specificity of the Lanthipeptide Peptidase ElxP and the Oxidoreductase ElxO. ACS Chemical Biology, 2014, 9, 1718-1725.	3.4	34
123	A catalytic role for methionine revealed by a combination of computation and experiments on phosphite dehydrogenase. Chemical Science, 2014, 5, 2191-2199.	7.4	28
124	Structural investigation of ribosomally synthesized natural products by hypothetical structure enumeration and evaluation using tandem MS. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 12031-12036.	7.1	58
125	Structure and mechanism of lanthipeptide biosynthetic enzymes. Current Opinion in Structural Biology, 2014, 29, 58-66.	5.7	45
126	Mechanistic Studies on the Substrate-Tolerant Lanthipeptide Synthetase ProcM. Journal of the American Chemical Society, 2014, 136, 10450-10459.	13.7	56

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127	Structure and Function of Phosphonoacetaldehyde Dehydrogenase: The Missing Link in Phosphonoacetate Formation. Chemistry and Biology, 2014, 21, 125-135.	6.0	24
128	Phosphonate biosynthesis and catabolism: a treasure trove of unusual enzymology. Current Opinion in Chemical Biology, 2013, 17, 580-588.	6.1	81
129	Insights into the evolution of lanthipeptide biosynthesis. Protein Science, 2013, 22, 1478-1489.	7.6	42
130	Ribosomally Synthesized and Postâ€Translationally Modified Peptide Natural Products: New Insights into the Role of Leader and Core Peptides during Biosynthesis. Chemistry - A European Journal, 2013, 19, 7662-7677.	3.3	91
131	A General Method for Fluorescent Labeling of the N-Termini of Lanthipeptides and Its Application to Visualize their Cellular Localization. Journal of the American Chemical Society, 2013, 135, 10362-10371.	13.7	33
132	Ribosomally synthesized and post-translationally modified peptide natural products: overview and recommendations for a universal nomenclature. Natural Product Reports, 2013, 30, 108-160.	10.3	1,692
133	Discovery of the Antibiotic Phosacetamycin via a New Mass Spectrometry-Based Method for Phosphonic Acid Detection. ACS Chemical Biology, 2013, 8, 908-913.	3.4	30
134	The sequence of the enterococcal cytolysin imparts unusual lanthionine stereochemistry. Nature Chemical Biology, 2013, 9, 157-159.	8.0	92
135	Positive and radical. Nature, 2013, 496, 34-35.	27.8	0
136	Chemical Synthesis of the Lantibiotic Lacticin 481 Reveals the Importance of Lanthionine Stereochemistry. Journal of the American Chemical Society, 2013, 135, 7094-7097.	13.7	50
137	In vitro activity of the nisin dehydratase NisB. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7258-7263.	7.1	104
138	Revisiting the biosynthesis of dehydrophos reveals a tRNA-dependent pathway. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 10952-10957.	7.1	39
139	Investigations into the role of Lantibiotic Cyclaseâ€ŀike (LanCL) proteins in mammals. FASEB Journal, 2013, 27, 1045.6.	0.5	0
140	Different Biosynthetic Pathways to Fosfomycin in Pseudomonas syringae and Streptomyces Species. Antimicrobial Agents and Chemotherapy, 2012, 56, 4175-4183.	3.2	60
141	Converging on a mechanism for choline degradation. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 21184-21185.	7.1	21
142	Evolution of lanthipeptide synthetases. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 18361-18366.	7.1	178
143	Discovery, Biosynthesis, and Engineering of Lantipeptides. Annual Review of Biochemistry, 2012, 81, 479-505.	11.1	310
144	Catalytic promiscuity of a bacterial αâ€ <i>N</i> â€methyltransferase. FEBS Letters, 2012, 586, 3391-3397.	2.8	33

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145	An engineered lantipeptide synthetase serves as a general leader peptide-dependent kinase. Chemical Communications, 2012, 48, 10615.	4.1	7
146	Biosynthesis of the Class III Lantipeptide Catenulipeptin. ACS Chemical Biology, 2012, 7, 1529-1535.	3.4	85
147	Non-proteinogenic Amino Acids in Lacticin 481 Analogues Result in More Potent Inhibition of Peptidoglycan Transglycosylation. ACS Chemical Biology, 2012, 7, 1791-1795.	3.4	33
148	Synthesis of Methylphosphonic Acid by Marine Microbes: A Source for Methane in the Aerobic Ocean. Science, 2012, 337, 1104-1107.	12.6	263
149	Chemical Synthesis and Biological Activity of Analogues of the Lantibiotic Epilancin 15X. Journal of the American Chemical Society, 2012, 134, 7648-7651.	13.7	62
150	An Engineered Lantibiotic Synthetase That Does Not Require a Leader Peptide on Its Substrate. Journal of the American Chemical Society, 2012, 134, 6952-6955.	13.7	87
151	Radical-Mediated Enzymatic Methylation: A Tale of Two SAMS. Accounts of Chemical Research, 2012, 45, 555-564.	15.6	207
152	Crystal Structures of Phosphite Dehydrogenase Provide Insights into Nicotinamide Cofactor Regeneration. Biochemistry, 2012, 51, 4263-4270.	2.5	37
153	Structural Characterization of Four Prochlorosins: A Novel Class of Lantipeptides Produced by Planktonic Marine Cyanobacteria. Biochemistry, 2012, 51, 4271-4279.	2.5	93
154	Investigation of the Role of Arg301 Identified in the X-ray Structure of Phosphite Dehydrogenase. Biochemistry, 2012, 51, 4254-4262.	2.5	16
155	Mechanistic Investigation of Methylphosphonate Synthase, a Non-Heme Iron-Dependent Oxygenase. Journal of the American Chemical Society, 2012, 134, 15660-15663.	13.7	24
156	Heterologous production of the lantibiotic Ala(0)actagardine in Escherichia coli. Chemical Communications, 2012, 48, 10966.	4.1	40
157	Discovery and Biosynthesis of Phosphonate and Phosphinate Natural Products. Methods in Enzymology, 2012, 516, 101-123.	1.0	20
158	Answers to the Carbon–Phosphorus Lyase Conundrum. ChemBioChem, 2012, 13, 627-629.	2.6	23
159	Stereochemistry of hydride transfer by group III alcohol dehydrogenases involved in phosphonate biosynthesis. MedChemComm, 2012, 3, 967.	3.4	6
160	Lantibiotics from <i>Geobacillus thermodenitrificans</i> . Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 5241-5246.	7.1	129
161	Characterization and application of the Fe(ii) and α-ketoglutarate dependent hydroxylase FrbJ. Chemical Communications, 2011, 47, 10025.	4.1	10
162	Production of Lantipeptides in <i>Escherichia coli</i> . Journal of the American Chemical Society, 2011, 133, 2338-2341.	13.7	161

## Wilfred Ajw Van Der Donk

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163	Mechanism and Substrate Recognition of 2-Hydroxyethylphosphonate Dioxygenase. Biochemistry, 2011, 50, 6598-6605.	2.5	20
164	Mechanism of Inhibition of <i>Bacillus anthracis</i> Spore Outgrowth by the Lantibiotic Nisin. ACS Chemical Biology, 2011, 6, 744-752.	3.4	90
165	Nine Post-translational Modifications during the Biosynthesis of Cinnamycin. Journal of the American Chemical Society, 2011, 133, 13753-13760.	13.7	99
166	Mechanistic Studies of Ser/Thr Dehydration Catalyzed by a Member of the LanL Lanthionine Synthetase Family. Biochemistry, 2011, 50, 891-898.	2.5	59
167	On the Stereochemistry of 2-Hydroxyethylphosphonate Dioxygenase. Journal of the American Chemical Society, 2011, 133, 4236-4239.	13.7	38
168	Substrate Selectivity of the Sublancin S-Glycosyltransferase. Journal of the American Chemical Society, 2011, 133, 16394-16397.	13.7	47
169	Haloduracin α Binds the Peptidoglycan Precursor Lipid II with 2:1 Stoichiometry. Journal of the American Chemical Society, 2011, 133, 17544-17547.	13.7	54
170	Structure and mechanism of enzymes involved in biosynthesis and breakdown of the phosphonates fosfomycin, dehydrophos, and phosphinothricin. Archives of Biochemistry and Biophysics, 2011, 505, 13-21.	3.0	21
171	Synthesis and Activity of Thioether-Containing Analogues of the Complement Inhibitor Compstatin. ACS Chemical Biology, 2011, 6, 753-760.	3.4	70
172	Sublancin is not a lantibiotic but an S-linked glycopeptide. Nature Chemical Biology, 2011, 7, 78-80.	8.0	187
173	Structural and Mechanistic Insights into C-P Bond Hydrolysis by Phosphonoacetate Hydrolase. Chemistry and Biology, 2011, 18, 1230-1240.	6.0	38
174	Bacillus anthracis spore interactions with mammalian cells: Relationship between germination state and the outcome of in vitro. BMC Microbiology, 2011, 11, 46.	3.3	17
175	Genome mining for ribosomally synthesized natural products. Current Opinion in Chemical Biology, 2011, 15, 11-21.	6.1	162
176	Biosynthesis of the Antimicrobial Peptide Epilancin 15X and Its N-Terminal Lactate. Chemistry and Biology, 2011, 18, 857-867.	6.0	70
177	Structural comparisons of arachidonic acid-induced radicals formed by prostaglandin H synthase-1 and -2. Journal of Inorganic Biochemistry, 2011, 105, 366-374.	3.5	1
178	Cyclooxygenase reaction mechanism of PGHS — Evidence for a reversible transition between a pentadienyl radical and a new tyrosyl radical by nitric oxide trapping. Journal of Inorganic Biochemistry, 2011, 105, 356-365.	3.5	9
179	Cyclooxygenase reaction mechanism of prostaglandin H synthase from deuterium kinetic isotope effects. Journal of Inorganic Biochemistry, 2011, 105, 382-390.	3.5	20
180	The Antibiotic Dehydrophos Is Converted to a Toxic Pyruvate Analog by Peptide Bond Cleavage in Salmonella enterica. Antimicrobial Agents and Chemotherapy, 2011, 55, 3357-3362.	3.2	32

#	Article	IF	CITATIONS
181	Genetic and Biochemical Characterization of a Pathway for the Degradation of 2-Aminoethylphosphonate in Sinorhizobium meliloti 1021. Journal of Biological Chemistry, 2011, 286, 22283-22290.	3.4	40
182	Substrate activation by iron superoxo intermediates. Current Opinion in Structural Biology, 2010, 20, 673-683.	5.7	107
183	Biosynthesis of Rhizocticins, Antifungal Phosphonate Oligopeptides Produced by Bacillus subtilis ATCC6633. Chemistry and Biology, 2010, 17, 28-37.	6.0	95
184	Molecular Cloning and Heterologous Expression of the Dehydrophos Biosynthetic Gene Cluster. Chemistry and Biology, 2010, 17, 402-411.	6.0	42
185	Follow the leader: the use of leader peptides to guide natural product biosynthesis. Nature Chemical Biology, 2010, 6, 9-18.	8.0	352
186	Catalytic promiscuity in the biosynthesis of cyclic peptide secondary metabolites in planktonic marine cyanobacteria. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10430-10435.	7.1	256
187	Biosynthesis and Mode of Action of Lantibiotics. , 2010, , 217-256.		10
188	Characterization and structure of Dhpl, a phosphonate <i>O</i> -methyltransferase involved in dehydrophos biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 17557-17562.	7.1	41
189	Discovery of Unique Lanthionine Synthetases Reveals New Mechanistic and Evolutionary Insights. PLoS Biology, 2010, 8, e1000339.	5.6	186
190	Photochemical cleavage of leader peptides. Chemical Communications, 2010, 46, 8935.	4.1	28
191	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. Journal of the American Chemical Society, 2010, 132, 10093-10101.	13.7	67
192	Structure–activity relationships of the phosphonate antibiotic dehydrophos. Chemical Communications, 2010, 46, 7694.	4.1	30
193	Structural description of enzyme catalysing unusual modification in lantibiotic biosynthesis. FASEB Journal, 2010, 24, lb205.	0.5	0
194	Chapter 5 Expressed Protein Ligation for Metalloprotein Design and Engineering. Methods in Enzymology, 2009, 462, 97-115.	1.0	11
195	Investigation of the Substrate Specificity of Lacticin 481 Synthetase by Using Nonproteinogenic Amino Acids. ChemBioChem, 2009, 10, 911-919.	2.6	45
196	An unusual carbon–carbon bond cleavage reaction during phosphinothricin biosynthesis. Nature, 2009, 459, 871-874.	27.8	111
197	In Vitro Characterization of a Heterologously Expressed Nonribosomal Peptide Synthetase Involved in Phosphinothricin Tripeptide Biosynthesis. Biochemistry, 2009, 48, 5054-5056.	2.5	17
198	Mechanistic Investigations of Human Reticulocyte 15- and Platelet 12-Lipoxygenases with Arachidonic Acid. Biochemistry, 2009, 48, 6259-6267.	2.5	43

#	Article	IF	CITATIONS
199	Distributive and Directional Behavior of Lantibiotic Synthetases Revealed by High-Resolution Tandem Mass Spectrometry. Journal of the American Chemical Society, 2009, 131, 12258-12264.	13.7	51
200	Hydroperoxylation by Hydroxyethylphosphonate Dioxygenase. Journal of the American Chemical Society, 2009, 131, 16225-16232.	13.7	43
201	Lacticin 481 Synthetase as a General Serine/Threonine Kinase. ACS Chemical Biology, 2009, 4, 379-385.	3.4	33
202	In Vitro Mutasynthesis of Lantibiotic Analogues Containing Nonproteinogenic Amino Acids. Journal of the American Chemical Society, 2009, 131, 12024-12025.	13.7	90
203	Kinetic and Structural Investigations of the Allosteric Site in Human Epithelial 15-Lipoxygenase-2. Biochemistry, 2009, 48, 8721-8730.	2.5	46
204	Biosynthesis of Phosphonic and Phosphinic Acid Natural Products. Annual Review of Biochemistry, 2009, 78, 65-94.	11.1	303
205	Chapter 21 In Vitro Studies of Lantibiotic Biosynthesis. Methods in Enzymology, 2009, 458, 533-558.	1.0	27
206	Chapter 6 Using Expressed Protein Ligation to Probe the Substrate Specificity of Lantibiotic Synthetases. Methods in Enzymology, 2009, 462, 117-134.	1.0	5
207	Insights into the Mode of Action of the Two-Peptide Lantibiotic Haloduracin. ACS Chemical Biology, 2009, 4, 865-874.	3.4	104
208	Use of lantibiotic synthetases for the preparation of bioactive constrained peptides. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 3025-3028.	2.2	50
209	Structure-Activity Relationship Studies of the Two-Component Lantibiotic Haloduracin. Chemistry and Biology, 2008, 15, 1035-1045.	6.0	71
210	Kinetic isotope effects in the oxidation of arachidonic acid by soybean lipoxygenase-1. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 5959-5962.	2.2	14
211	Inhibition of Bacillus anthracis Spore Outgrowth by Nisin. Antimicrobial Agents and Chemotherapy, 2008, 52, 4281-4288.	3.2	66
212	<i>In Vitro</i> Reconstitution and Substrate Specificity of a Lantibiotic Protease. Biochemistry, 2008, 47, 7352-7363.	2.5	71
213	Synthesis of 11-thialinoleic acid and 14-thialinoleic acid, inhibitors of soybean and human lipoxygenases. Organic and Biomolecular Chemistry, 2008, 6, 4242.	2.8	7
214	Isotope Sensitive Branching and Kinetic Isotope Effects in the Reaction of Deuterated Arachidonic Acids with Human 12- and 15-Lipoxygenases. Biochemistry, 2008, 47, 7295-7303.	2.5	37
215	The Importance of the Leader Sequence for Directing Lanthionine Formation in Lacticin 481. Biochemistry, 2008, 47, 7342-7351.	2.5	84
216	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.	2.5	16

#	Article	IF	CITATIONS
217	Biosynthesis of 2-Hydroxyethylphosphonate, an Unexpected Intermediate Common to Multiple Phosphonate Biosynthetic Pathways. Journal of Biological Chemistry, 2008, 283, 23161-23168.	3.4	45
218	Identification of Essential Catalytic Residues of the Cyclase NisC Involved in the Biosynthesis of Nisin. Journal of Biological Chemistry, 2007, 282, 21169-21175.	3.4	78
219	New insight into the mechanism of methyl transfer during the biosynthesis of fosfomycin. Chemical Communications, 2007, , 359-361.	4.1	112
220	Efficient Synthesis of Suitably Protected β-Difluoroalanine and γ-Difluorothreonine froml-Ascorbic Acid. Organic Letters, 2007, 9, 41-44.	4.6	19
221	Mechanistic Investigations of the Dehydration Reaction of Lacticin 481 Synthetase Using Site-Directed Mutagenesis. Biochemistry, 2007, 46, 5991-6000.	2.5	63
222	On the Substrate Specificity of Dehydration by Lacticin 481 Synthetase. Journal of the American Chemical Society, 2007, 129, 2212-2213.	13.7	37
223	On the Regioselectivity of Thioether Formation by Lacticin 481 Synthetase. Organic Letters, 2007, 9, 3343-3346.	4.6	26
224	Mutants of the Zinc Ligands of Lacticin 481 Synthetase Retain Dehydration Activity but Have Impaired Cyclization Activity. Biochemistry, 2007, 46, 6268-6276.	2.5	68
225	Pre-Steady-State Studies of Phosphite Dehydrogenase Demonstrate That Hydride Transfer Is Fully Rate Limiting. Biochemistry, 2007, 46, 13101-13108.	2.5	17
226	The Leader Peptide Is Not Required for Post-Translational Modification by Lacticin 481 Synthetase. Journal of the American Chemical Society, 2007, 129, 10314-10315.	13.7	48
227	Reassignment of the Structure of the Antibiotic A53868 Reveals an Unusual Amino Dehydrophosphonic Acid. Angewandte Chemie - International Edition, 2007, 46, 9089-9092.	13.8	38
228	Never stop questioning. Current Opinion in Chemical Biology, 2007, 11, 527-528.	6.1	0
229	Synthesis of 7-thiaarachidonic acid as a mechanistic probe of prostaglandin H synthase-2. Bioorganic and Medicinal Chemistry Letters, 2007, 17, 4049-4052.	2.2	3
230	Unusual transformations in the biosynthesis of the antibiotic phosphinothricin tripeptide. Nature Chemical Biology, 2007, 3, 480-485.	8.0	126
231	Lantibiotics: Peptides of Diverse Structure and Function. Annual Review of Microbiology, 2007, 61, 477-501.	7.3	564
232	Model studies of the CuBsite of cytochrome c oxidase utilizing a Zn(ii) complex containing an imidazole–phenol cross-linked ligand. Dalton Transactions, 2006, , 3326-3337.	3.3	9
233	On the role of alkylcobalamins in the vitamin B12-catalyzed reductive dehalogenation of perchloroethylene and trichloroethylene. Chemical Communications, 2006, , 558-560.	4.1	24
234	Nature's Way To Make the Lantibiotics. Journal of Chemical Education, 2006, 83, 1769.	2.3	0

#	Article	IF	CITATIONS
235	The Dehydratase Activity of Lacticin 481 Synthetase is Highly Processive. Journal of the American Chemical Society, 2006, 128, 1420-1421.	13.7	31
236	Rings, Radicals, and Regeneration: The Early Years of a Bioorganic Laboratory. Journal of Organic Chemistry, 2006, 71, 9561-9571.	3.2	34
237	Lighting Up the Nascent Cell Wall. ACS Chemical Biology, 2006, 1, 425-428.	3.4	7
238	Dehydroalanine-containing peptides: preparation from phenylselenocysteine and utility in convergent ligation strategies. Nature Protocols, 2006, 1, 3001-3010.	12.0	46
239	Engineering Dehydro Amino Acids and Thioethers into Peptides Using Lacticin 481 Synthetase. Chemistry and Biology, 2006, 13, 1109-1117.	6.0	85
240	Heterologous Production of Fosfomycin and Identification of the Minimal Biosynthetic Gene Cluster. Chemistry and Biology, 2006, 13, 1171-1182.	6.0	116
241	ArabidopsisÂthaliana fatty acid alpha-dioxygenase-1: evaluation ofÂsubstrates, inhibitors andÂamino-terminal function. Plant Physiology and Biochemistry, 2006, 44, 284-293.	5.8	14
242	Synthesis of site-specifically deuterated arachidonic acid derivatives containing a remote tritium radiolabel. Journal of Labelled Compounds and Radiopharmaceuticals, 2006, 49, 545-558.	1.0	4
243	Vitamin B12Catalyzed Radical Cyclizations of Arylalkenes. Synlett, 2006, 2006, 211-214.	1.8	9
244	Optimizing a Biocatalyst for Improved NAD(P)H Regeneration: Directed Evolution of Phosphite Dehydrogenase. Combinatorial Chemistry and High Throughput Screening, 2006, 9, 237-245.	1.1	36
245	Structure and Mechanism of the Lantibiotic Cyclase Involved in Nisin Biosynthesis. Science, 2006, 311, 1464-1467.	12.6	275
246	Discovery and in vitro biosynthesis of haloduracin, a two-component lantibiotic. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 17243-17248.	7.1	215
247	Mechanism and applications of phosphite dehydrogenase. Bioorganic Chemistry, 2005, 33, 171-189.	4.1	65
248	Lacticin 481 Synthetase Phosphorylates its Substrate during Lantibiotic Production. Journal of the American Chemical Society, 2005, 127, 15332-15333.	13.7	120
249	Mechanistic investigation of a highly active phosphite dehydrogenase mutant and its application for NADPH regeneration. FEBS Journal, 2005, 272, 3816-3827.	4.7	24
250	Biosynthesis and Mode of Action of Lantibiotics. ChemInform, 2005, 36, no.	0.0	0
251	Chemical and Enzymatic Synthesis of Lanthionines. Mini-Reviews in Organic Chemistry, 2005, 2, 23-37.	1.3	44
252	Inhibition and pH Dependence of Phosphite Dehydrogenaseâ€. Biochemistry, 2005, 44, 6640-6649.	2.5	33

#	Article	IF	CITATIONS
253	Conjugation of Selenols with Aziridine-2-Carboxylic Acid-Containing Peptides. Synlett, 2005, 2005, 2011-2014.	1.8	1
254	Heterologous Expression, Purification, and Characterization of a Highly Active Xylose Reductase from Neurospora crassa. Applied and Environmental Microbiology, 2005, 71, 1642-1647.	3.1	81
255	Properties and Reactivity of Chlorovinylcobalamin and Vinylcobalamin and Their Implications for Vitamin B12-Catalyzed Reductive Dechlorination of Chlorinated Alkenes. Journal of the American Chemical Society, 2005, 127, 1126-1136.	13.7	85
256	Synthesis of Nonproteinogenic Amino Acids To Probe Lantibiotic Biosynthesis. Journal of Organic Chemistry, 2005, 70, 6685-6692.	3.2	24
257	Model Studies of the Histidine-Tyrosine Cross-Link in CytochromecOxidase Reveal the Flexible Substituent Effect of the Imidazole Moiety. Organic Letters, 2005, 7, 2735-2738.	4.6	46
258	Theoretical Investigations into the Intermediacy of Chlorinated Vinylcobalamins in the Reductive Dehalogenation of Chlorinated Ethylenes. Journal of the American Chemical Society, 2005, 127, 384-396.	13.7	36
259	Site-Directed Mutagenesis of Active Site Residues of Phosphite Dehydrogenaseâ€. Biochemistry, 2005, 44, 4765-4774.	2.5	29
260	New developments in lantibiotic biosynthesis and mode of action. Current Opinion in Microbiology, 2005, 8, 543-551.	5.1	45
261	Aziridine-2-carboxylic Acid-Containing Peptides:Â Application to Solution- and Solid-Phase Convergent Site-Selective Peptide Modification. Journal of the American Chemical Society, 2005, 127, 7359-7369.	13.7	80
262	Biosynthesis and Mode of Action of Lantibiotics. Chemical Reviews, 2005, 105, 633-684.	47.7	681
263	Site-Selective Conjugation of Thiols with Aziridine-2-Carboxylic Acid-Containing Peptides. Journal of the American Chemical Society, 2004, 126, 12712-12713.	13.7	63
264	Post-translational modifications during lantibiotic biosynthesis. Current Opinion in Chemical Biology, 2004, 8, 498-507.	6.1	79
265	The Selenocysteine-Substituted Blue Copper Center:  Spectroscopic Investigations of Cys112SeCys Pseudomonas aeruginosa Azurin. Journal of the American Chemical Society, 2004, 126, 7244-7256.	13.7	66
266	Synthesis of Site-Specifically Labeled Arachidonic Acids as Mechanistic Probes for Prostaglandin H Synthase. Organic Letters, 2004, 6, 349-352.	4.6	22
267	Lacticin 481: In Vitro Reconstitution of Lantibiotic Synthetase Activity. Science, 2004, 303, 679-681.	12.6	221
268	Oligosaccharide–Peptide Ligation of Glycosyl Thiolates with Dehydropeptides: Synthesis of S-Linked Mucin-Related Glycopeptide Conjugates. Chemistry - A European Journal, 2003, 9, 5997-6006.	3.3	54
269	Chemical and Enzymatic Synthesis of Fluorinated-Dehydroalanine-Containing Peptides. ChemBioChem, 2003, 4, 1206-1215.	2.6	8
270	Regeneration of cofactors for use in biocatalysis. Current Opinion in Biotechnology, 2003, 14, 583-589.	6.6	331

#	Article	IF	CITATIONS
271	Recent developments in pyridine nucleotide regeneration. Current Opinion in Biotechnology, 2003, 14, 421-426.	6.6	346
272	Relaxing the Nicotinamide Cofactor Specificity of Phosphite Dehydrogenase by Rational Designâ€. Biochemistry, 2003, 42, 11604-11614.	2.5	153
273	An Unusual Isotope Effect on Substrate Inhibition in the Oxidation of Arachidonic Acid by Lipoxygenase. Journal of the American Chemical Society, 2003, 125, 8988-8989.	13.7	26
274	Characterization of Chlorovinylcobalamin, A Putative Intermediate in Reductive Degradation of Chlorinated Ethylenes. Journal of the American Chemical Society, 2003, 125, 4410-4411.	13.7	38
275	A Quantum Chemical Study of the Synthesis of Prostaglandin G2by the Cyclooxygenase Active Site in Prostaglandin Endoperoxide H Synthase 1. Journal of Physical Chemistry B, 2003, 107, 3297-3308.	2.6	27
276	SpaC and NisC, the Cyclases Involved in Subtilin and Nisin Biosynthesis, Are Zinc Proteins. Biochemistry, 2003, 42, 13613-13624.	2.5	76
277	Comparison of the properties of prostaglandin H synthase-1 and -2. Progress in Lipid Research, 2003, 42, 377-404.	11.6	80
278	Enzymatic hydrogen atom abstraction from polyunsaturated fatty acids. Chemical Communications, 2003, , 2843.	4.1	31
279	Biomimetic studies on the mechanism of stereoselective lanthionine formationElectronic 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 http://www.rsc.org/suppdata/ob/b3/b304945k/. Organic and Biomolecular Chemistry. 2003. 1, 3304.	2.8	84
280	Structural Characterization of Arachidonyl Radicals Formed by Aspirin-treated Prostaglandin H Synthase-2. Journal of Biological Chemistry, 2002, 277, 38311-38321.	3.4	21
281	Mechanistic Investigation of a Novel Vitamin B12-Catalyzed Carbonâ <sup>••</sup> Carbon Bond Forming Reaction, the Reductive Dimerization of Arylalkenes. Journal of Organic Chemistry, 2002, 67, 837-846.	3.2	81
282	An Engineered Azurin Variant Containing a Selenocysteine Copper Ligand. Journal of the American Chemical Society, 2002, 124, 2084-2085.	13.7	109
283	Dichloroacetylene Is Not the Precursor to Dichlorinated Vinylcobaloxime and Vinylcobalamin in Cobalt Catalyzed Dechlorination of Perchloro- and Trichloroethylene. Inorganic Chemistry, 2002, 41, 5844-5848.	4.0	21
284	Reductive Dechlorination of Trichloroethylene:Â A Computational Study. Journal of Physical Chemistry A, 2002, 106, 8708-8715.	2.5	37
285	Heterologous expression and purification of SpaB involved in subtilin biosynthesis. Biochemical and Biophysical Research Communications, 2002, 295, 952-957.	2.1	31
286	Synthesis and Characterization of Chlorinated Alkenylcobaloximes To Probe the Mechanism of Vitamin B12-Catalyzed Dechlorination of Priority Pollutants. Inorganic Chemistry, 2002, 41, 393-404.	4.0	49
287	Biomimetic Stereoselective Formation of Methyllanthionine. Organic Letters, 2002, 4, 1335-1338.	4.6	78
288	Phosphite Dehydrogenase: A Versatile Cofactor-Regeneration Enzyme. Angewandte Chemie, 2002, 114, 3391-3393.	2.0	27

#	Article	IF	CITATIONS
289	Phosphite Dehydrogenase: A Versatile Cofactor-Regeneration Enzyme. Angewandte Chemie - International Edition, 2002, 41, 3257-3259.	13.8	123
290	Selenocysteine Derivatives for Chemoselective Ligations. ChemBioChem, 2002, 3, 709.	2.6	53
291	Synthesis of Isotopically Labeled Arachidonic Acids To Probe the Reaction Mechanism of Prostaglandin H Synthase. Journal of the American Chemical Society, 2002, 124, 10785-10796.	13.7	46
292	The Cyclooxygenase Reaction Mechanism. Biochemistry, 2002, 41, 15451-15458.	2.5	154
293	Tyrosyl radical cofactors. Advances in Protein Chemistry, 2001, 58, 317-385.	4.4	52
294	Phosphite Dehydrogenase:Â An Unusual Phosphoryl Transfer Reaction. Journal of the American Chemical Society, 2001, 123, 2672-2673.	13.7	55
295	Convergent Synthesis of Peptide Conjugates Using Dehydroalanines for Chemoselective Ligations. Organic Letters, 2001, 3, 1189-1192.	4.6	114
296	Structural Characterization of a Pentadienyl Radical Intermediate Formed during Catalysis by Prostaglandin H Synthase-2. Journal of the American Chemical Society, 2001, 123, 3609-3610.	13.7	27
297	Synthesis of a Selenocysteine-Containing Peptide by Native Chemical Ligation. Organic Letters, 2001, 3, 1331-1334.	4.6	217
298	Synthesis of 2-Amino-3-fluoroacrylic Acid Containing Peptides. Organic Letters, 2001, 3, 593-596.	4.6	19
299	Corrigendum to: â€~Novel cofactors via post-translational modifications of enzyme active sites'. Chemistry and Biology, 2001, 8, 97.	6.0	1
300	Homemade cofactors: Self-processing in galactose oxidase. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 12863-12865.	7.1	20
301	Novel cofactors via post-translational modifications of enzyme active sites. Chemistry and Biology, 2000, 7, R159-R171.	6.0	90
302	Mechanistic Studies on the Vitamin B12-Catalyzed Dechlorination of Chlorinated Alkenes. Journal of the American Chemical Society, 2000, 122, 12403-12404.	13.7	73
303	Insights into the Functional Role of the Tyrosineâ	13.7	96
304	Facile Chemoselective Synthesis of Dehydroalanine-Containing Peptidesâ€. Organic Letters, 2000, 2, 3603-3606.	4.6	154
305	Protein Radicals in Enzyme Catalysis. [Chem. Rev. 1998, 98, 705â~'762. Chemical Reviews, 1998, 98, 2661-2662.	47.7	35
306	Characterization of a Substrate-Derived Radical Detected during the Inactivation of Ribonucleotide Reductase fromEscherichia coliby 2â€~-Fluoromethylene-2â€~-deoxycytidine 5â€~-Diphosphate. Journal of the American Chemical Society, 1998, 120, 3823-3835.	13.7	50

#	Article	IF	CITATIONS
307	Detection of a New Substrate-Derived Radical during Inactivation of Ribonucleotide Reductase fromEscherichia coliby Gemcitabine 5†-Diphosphateâ€. Biochemistry, 1998, 37, 6419-6426.	2.5	69
308	Direct EPR Spectroscopic Evidence for an Allylic Radical Generated from (E)-2â€~-Fluoromethylene-2â€~-deoxycytidine 5â€~-Diphosphate byE.coliRibonucleotide Reductase. Journal of the American Chemical Society, 1998, 120, 4252-4253.	13.7	29
309	New and Efficient Synthesis of an Amino Acid for Preparing Phosphine-Functionalized Peptidomimetics. Journal of Organic Chemistry, 1998, 63, 5262-5264.	3.2	25
310	Protein Radicals in Enzyme Catalysis. Chemical Reviews, 1998, 98, 705-762.	47.7	1,401
311	Inactivation of Ribonucleotide Reductase by (E)-2â€~-Fluoromethylene-2â€~-deoxycytidine 5â€~-Diphosphate: A Paradigm for Nucleotide Mechanism-Based Inhibitorsâ€. Biochemistry, 1996, 35, 8381-8391.	2.5	67
312	ldentification of an Active Site Residue of the R1 Subunit of Ribonucleotide Reductase fromEscherichia coli: Characterization of Substrate-Induced Polypeptide Cleavage by C225SR1â€. Biochemistry, 1996, 35, 10058-10067.	2.5	21
313	Design of a Fluoro-olefin Cytidine Nucleoside as a Bioprecursor of a Mechanism-Based Inhibitor of Ribonucleotide Reductase. ACS Symposium Series, 1996, , 246-264.	0.5	5
314	Ribonucleotide reductases: radical enzymes with suicidal tendencies. Chemistry and Biology, 1995, 2, 793-801.	6.0	182
315	EPR Investigations of the Inactivation of E. coli Ribonucleotide Reductase with 2'-Azido-2'-deoxyuridine 5'-Diphosphate: Evidence for the Involvement of the Thiyl Radical of C225-R1. Journal of the American Chemical Society, 1995, 117, 8908-8916.	13.7	83
316	The importance of phosphine-to-rhodium ratios in enantioselective hydroborations. Inorganica Chimica Acta, 1994, 220, 93-98.	2.4	10
317	On Titanium-Promoted Hydroborations of Alkenes by Borohydride and by Catecholborane. Organometallics, 1994, 13, 3616-3620.	2.3	42
318	Titanium-Mediated Additions of Borohydride to Alkenes. Journal of the American Chemical Society, 1994, 116, 6561-6569.	13.7	32
319	On hydroborations of alkenes catalyzed by titanium complexes. Tetrahedron Letters, 1993, 34, 6817-6820.	1.4	14
320	Reactions of catecholborane with Wilkinson's catalyst: implications for transition metal-catalyzed hydroborations of alkenes. Journal of the American Chemical Society, 1992, 114, 9350-9359.	13.7	334
321	On deuterium-labeling studies for probing rhodium-catalyzed hydroboration reactions. Journal of Organic Chemistry, 1991, 56, 2949-2951.	3.2	20
322	Enantioselective hydroborations catalyzed by rhodium(+1) complexes. Tetrahedron: Asymmetry, 1991, 2, 613-621.	1.8	57
323	Further evidence for the role of d.pip.pi. bonding in rhodium-mediated hydroborations. Journal of the American Chemical Society, 1991, 113, 6139-6144.	13.7	75
324	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)Cl2]. Journal of the Chemical Society Dalton Transactions, 1990, , 3123.	1.1	33