Wilfred Ajw Van Der Donk

List of Publications by Year in Descending Order

311 papers	19,324 citations	69 h-index	125 g-index
353 ext. papers	22,172 ext. citations	10.7 avg, IF	7.16 L-index

#	Paper	IF	Citations
311	Substrate Sequence Controls Regioselectivity of Lanthionine Formation by ProcM. *Journal of the American Chemical Society*, **2021**, 143, 18733-18743	16.4	2
310	A biosynthetic pathway to aromatic amines that uses glycyl-tRNA as nitrogen donor. *Nature Chemistry*, **2021**,	17.6	4
309	Mechanisms and Evolution of Diversity-Generating RiPP Biosynthesis. *Trends in Chemistry*, **2021**, 3, 266-278	14.8	2
308	Overall Retention of Methyl Stereochemistry during B-Dependent Radical SAM Methyl Transfer in Fosfomycin Biosynthesis. *Biochemistry*, **2021**, 60, 1587-1596	3.2	3
307	LanCLs add glutathione to dehydroamino acids generated at phosphorylated sites in the proteome. *Cell*, **2021**, 184, 2680-2695.e26	56.2	6
306	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,	11.5	2
305	Engineering of new-to-nature ribosomally synthesized and post-translationally modified peptide natural products. *Current Opinion in Biotechnology*, **2021**, 69, 221-231	11.4	9
304	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	4.4	1
303	Structural Analysis of Class I Lanthipeptides from NL19 Reveals an Unusual Ring Pattern. *ACS Chemical Biology*, **2021**, 16, 1019-1029	4.9	5
302	The Antimicrobial Activity of the Glycocin Sublancin Is Dependent on an Active Phosphoenolpyruvate-Sugar Phosphotransferase System. *ACS Infectious Diseases*, **2021**, 7, 2402-2412	5.5	3
301	Structure-Activity Relationships of the Enterococcal Cytolysin. *ACS Infectious Diseases*, **2021**, 7, 2445-2454	5.5	3
300	New developments in RiPP discovery, enzymology and engineering. *Natural Product Reports*, **2021**, 38, 130-239	15.1	146
299	MicroED in natural product and small molecule research. *Natural Product Reports*, **2021**, 38, 423-431	15.1	12
298	Peptide backbone modifications in lanthipeptides. *Methods in Enzymology*, **2021**, 656, 573-621	1.7	1
297	Precursor peptide-targeted mining of more than one hundred thousand genomes expands the lanthipeptide natural product family. *BMC Genomics*, **2020**, 21, 387	4.5	47
296	Structural determinants of macrocyclization in substrate-controlled lanthipeptide biosynthetic pathways. *Chemical Science*, **2020**, 11, 12854-12870	9.4	12
295	Bacteroidetes can be a rich source of novel lanthipeptides: The case study of Pedobacter lusitanus. *Microbiological Research*, **2020**, 235, 126441	5.3	15

294	Discovery and Characterization of a Class IV Lanthipeptide with a Nonoverlapping Ring Pattern. *ACS Chemical Biology*, **2020**, 15, 1642-1649	4.9	10
293	Non-Heme Iron-Dependent Enzymes That Cleave Carbon-Carbon Bonds During Phosphonate Biosynthesis **2020**, 173-190		
292	Characterization of a Dehydratase and Methyltransferase in the Biosynthesis of Ribosomally Synthesized and Post-translationally Modified Peptides in Lachnospiraceae. *ChemBioChem*, **2020**, 21, 190-199	3.8	6
291	Recent Progress in Lanthipeptide Biosynthesis, Discovery, and Engineering **2020**, 119-165		1
290	Substrate Recognition by the Class II Lanthipeptide Synthetase HalM2. *ACS Chemical Biology*, **2020**, 15, 1473-1486	4.9	11
289	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	11.5	25
288	Temperature-Independent Kinetic Isotope Effects as Evidence for a Marcus-like Model of Hydride Tunneling in Phosphite Dehydrogenase. *Biochemistry*, **2019**, 58, 4260-4268	3.2	7
287	-Methyltransferase-Mediated Incorporation of a Amino Acid in Lanthipeptides. *Journal of the American Chemical Society*, **2019**, 141, 16790-16801	16.4	20
286	Use of the dehydrophos biosynthetic enzymes to prepare antimicrobial analogs of alaphosphin. *Organic and Biomolecular Chemistry*, **2019**, 17, 822-829	3.9	6
285	Mechanistic Studies of the Kinase Domains of Class IV Lanthipeptide Synthetases. *ACS Chemical Biology*, **2019**, 14, 1583-1592	4.9	8
284	Assessing the Flexibility of the Prochlorosin 2.8 Scaffold for Bioengineering Applications. *ACS Synthetic Biology*, **2019**, 8, 1204-1214	5.7	15
283	Use of a scaffold peptide in the biosynthesis of amino acid-derived natural products. *Science*, **2019**, 365, 280-284	33.3	53
282	Insights into AMS/PCAT transporters from biochemical and structural characterization of a double Glycine motif protease. *ELife*, **2019**, 8,	8.9	37
281	Nonribosomal Peptide Extension by a Peptide Amino-Acyl tRNA Ligase. *Journal of the American Chemical Society*, **2019**, 141, 19625-19633	16.4	8
280	Bacteriophage targeting of gut bacterium attenuates alcoholic liver disease. *Nature*, **2019**, 575, 505-511	50.4	245
279	Investigations into the Mechanism of Action of Sublancin. *ACS Infectious Diseases*, **2019**, 5, 454-459	5.5	19
278	CylA is a sequence-specific protease involved in toxin biosynthesis. *Journal of Industrial Microbiology and Biotechnology*, **2019**, 46, 537-549	4.2	9
277	A lanthipeptide library used to identify a protein-protein interaction inhibitor. *Nature Chemical Biology*, **2018**, 14, 375-380	11.7	73

276	Investigation of Substrate Recognition and Biosynthesis in Class IV Lanthipeptide Systems. *Journal of the American Chemical Society*, **2018**, 140, 5743-5754	16.4	28
275	Incorporation of Nonproteinogenic Amino Acids in Class I and II Lantibiotics. *ACS Chemical Biology*, **2018**, 13, 951-957	4.9	22
274	Investigation of Amide Bond Formation during Dehydrophos Biosynthesis. *ACS Chemical Biology*, **2018**, 13, 537-541	4.9	7
273	Characterization of Leader Peptide Binding During Catalysis by the Nisin Dehydratase NisB. *Journal of the American Chemical Society*, **2018**, 140, 4200-4203	16.4	16
272	Development and Application of Yeast and Phage Display of Diverse Lanthipeptides. *ACS Central Science*, **2018**, 4, 458-467	16.8	66
271	Synthesis of Antibiotics and Related Molecules. *Journal of Organic Chemistry*, **2018**, 83, 6826-6828	4.2	8
270	Elucidation of the roles of conserved residues in the biosynthesis of the lasso peptide paeninodin. *Chemical Communications*, **2018**, 54, 9007-9010	5.8	23
269	Lanthionine synthetase C-like protein 2 (LanCL2) is important for adipogenic differentiation. *Journal of Lipid Research*, **2018**, 59, 1433-1445	6.3	2
268	The Enzymology of Prochlorosin Biosynthesis. *Methods in Enzymology*, **2018**, 604, 165-203	1.7	13
267	Development of Phage Display of Nisin. *FASEB Journal*, **2018**, 32, lb88	0.9	
266	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	16.4	5
265	Rapid Discovery of Glycocins through Pathway Refactoring in Escherichia coli. *ACS Chemical Biology*, **2018**, 13, 2966-2972	4.9	19
264	Rapid Screening of Lanthipeptide Analogs via In-Colony Removal of Leader Peptides in Escherichia coli. *Journal of the American Chemical Society*, **2018**, 140, 11884-11888	16.4	13
263	Glutamic acid is a carrier for hydrazine during the biosyntheses of fosfazinomycin and kinamycin. *Nature Communications*, **2018**, 9, 3687	17.4	37
262	Substrate-assisted enzymatic formation of lysinoalanine in duramycin. *Nature Chemical Biology*, **2018**, 14, 928-933	11.7	14
261	Stereospecific Radical-Mediated B-Dependent Methyl Transfer by the Fosfomycin Biosynthesis Enzyme Fom3. *Biochemistry*, **2018**, 57, 4967-4971	3.2	25
260	Mechanistic Understanding of Lanthipeptide Biosynthetic Enzymes. *Chemical Reviews*, **2017**, 117, 5457-5520	56.0	224
259	O-H Activation by an Unexpected Ferryl Intermediate during Catalysis by 2-Hydroxyethylphosphonate Dioxygenase. *Journal of the American Chemical Society*, **2017**, 139, 2045-2052	16.4	23

258	Ribosomally synthesized and post-translationally modified peptide natural product discovery in the genomic era. *Current Opinion in Chemical Biology*, **2017**, 38, 36-44	9.7	90
257	Chimeric Leader Peptides for the Generation of Non-Natural Hybrid RiPP Products. *ACS Central Science*, **2017**, 3, 629-638	16.8	56
256	Reconstitution and Substrate Specificity of the Radical S-Adenosyl-methionine Thiazole C-Methyltransferase in Thiomuracin Biosynthesis. *Journal of the American Chemical Society*, **2017**, 139, 4310-4313	16.4	37
255	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	4.9	48
254	Characterization of Two Late-Stage Enzymes Involved in Fosfomycin Biosynthesis in Pseudomonads. *ACS Chemical Biology*, **2017**, 12, 456-463	4.9	12
253	Structural basis for methylphosphonate biosynthesis. *Science*, **2017**, 358, 1336-1339	33.3	26
252	Mechanism of a Class C Radical S-Adenosyl-l-methionine Thiazole Methyl Transferase. *Journal of the American Chemical Society*, **2017**, 139, 18623-18631	16.4	29
251	Structural insights into enzymatic [4+2] -cycloaddition in thiopeptide antibiotic biosynthesis. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 12928-12933	11.5	49
250	Structure-Activity Relationships of the S-Linked Glycocin Sublancin. *ACS Chemical Biology*, **2017**, 12, 2965-2969	4.9	23
249	Ribosomal Natural Products, Tailored To Fit. *Accounts of Chemical Research*, **2017**, 50, 1577-1586	24.3	47
248	Evolutionary radiation of lanthipeptides in marine cyanobacteria. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E5424-E5433	11.5	43
247	Insights into the Biosynthesis of Duramycin. *Applied and Environmental Microbiology*, **2017**, 83,	4.8	30
246	Go it alone: four-electron oxidations by mononuclear non-heme iron enzymes. *Journal of Biological Inorganic Chemistry*, **2017**, 22, 381-394	3.7	28
245	LanCL proteins are not Involved in Lanthionine Synthesis in Mammals. *Scientific Reports*, **2017**, 7, 40980	4.9	11
244	The many roles of glutamate in metabolism. *Journal of Industrial Microbiology and Biotechnology*, **2016**, 43, 419-30	4.2	55
243	Probing the role of the backbone carbonyl interaction with the Cu center in azurin by replacing the peptide bond with an ester linkage. *Chemical Communications*, **2016**, 53, 224-227	5.8	12
242	Synthesis and Bioactivity of Diastereomers of the Virulence Lanthipeptide Cytolysin. *Organic Letters*, **2016**, 18, 6188-6191	6.2	12
241	The Enterococcal Cytolysin Synthetase Coevolves with Substrate for Stereoselective Lanthionine Synthesis. *ACS Chemical Biology*, **2016**, 11, 2438-46	4.9	14

240	New Insights into the Biosynthetic Logic of Ribosomally Synthesized and Post-translationally Modified Peptide Natural Products. *Cell Chemical Biology*, **2016**, 23, 31-44	8.2	186
239	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, 3521-6	11.5	58
238	Structure and tRNA Specificity of MibB, a Lantibiotic Dehydratase from Actinobacteria Involved in NAI-107 Biosynthesis. *Cell Chemical Biology*, **2016**, 23, 370-380	8.2	49
237	Structural Characterization and Bioactivity Analysis of the Two-Component Lantibiotic Flv System from a Ruminant Bacterium. *Cell Chemical Biology*, **2016**, 23, 246-256	8.2	26
236	Characterization of the stereochemical configuration of lanthionines formed by the lanthipeptide synthetase GeoM. *Biopolymers*, **2016**, 106, 834-842	2.2	7
235	New Insights into the Biosynthesis of Fosfazinomycin. *Chemical Science*, **2016**, 7, 5219-5223	9.4	40
234	Discovery and Characterization of Bicereucin, an Unusual d-Amino Acid-Containing Mixed Two-Component Lantibiotic. *Journal of the American Chemical Society*, **2016**, 138, 5254-7	16.4	47
233	Leader Peptide Establishes Dehydration Order, Promotes Efficiency, and Ensures Fidelity During Lacticin 481 Biosynthesis. *Journal of the American Chemical Society*, **2016**, 138, 6436-44	16.4	25
232	Cameo appearances of aminoacyl-tRNA in natural product biosynthesis. *Current Opinion in Chemical Biology*, **2016**, 35, 29-36	9.7	8
231	Biosynthetic Timing and Substrate Specificity for the Thiopeptide Thiomuracin. *Journal of the American Chemical Society*, **2016**, 138, 15511-15514	16.4	54
230	Michael-type cyclizations in lantibiotic biosynthesis are reversible. *ACS Chemical Biology*, **2015**, 10, 1234-8	4.9	33
229	Expanded natural product diversity revealed by analysis of lanthipeptide-like gene clusters in actinobacteria. *Applied and Environmental Microbiology*, **2015**, 81, 4339-50	4.8	54
228	Product Formation by the Promiscuous Lanthipeptide Synthetase ProcM is under Kinetic Control. *Journal of the American Chemical Society*, **2015**, 137, 5140-8	16.4	30
227	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, 10448-51	16.4	28
226	Minimum Information about a Biosynthetic Gene cluster. *Nature Chemical Biology*, **2015**, 11, 625-31	11.7	498
225	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, 12175-80	11.5	125
224	The phosphoenolpyruvate:sugar phosphotransferase system is involved in sensitivity to the glucosylated bacteriocin sublancin. *Antimicrobial Agents and Chemotherapy*, **2015**, 59, 6844-54	5.9	33
223	Post-translational Introduction of D-Alanine into Ribosomally Synthesized Peptides by the Dehydroalanine Reductase NpnJ. *Journal of the American Chemical Society*, **2015**, 137, 12426-9	16.4	28

222	Biosynthesis of fosfazinomycin is a convergent process. *Chemical Science*, **2015**, 6, 1282-1287	9.4	20
221	Substrate control in stereoselective lanthionine biosynthesis. *Nature Chemistry*, **2015**, 7, 57-64	17.6	57
220	Structure and mechanism of the tRNA-dependent lantibiotic dehydratase NisB. *Nature*, **2015**, 517, 509-12	30.4	198
219	Facile Removal of Leader Peptides from Lanthipeptides by Incorporation of a Hydroxy Acid. *Journal of the American Chemical Society*, **2015**, 137, 6975-8	16.4	28
218	An unexpected role for ergothioneine. *National Science Review*, **2015**, 2, 382-383	10.8	2
217	In Vitro Biosynthesis of the Core Scaffold of the Thiopeptide Thiomuracin. *Journal of the American Chemical Society*, **2015**, 137, 16012-5	16.4	114
216	Applications of the class II lanthipeptide protease LicP for sequence-specific, traceless peptide bond cleavage. *Chemical Science*, **2015**, 6, 6270-6279	9.4	15
215	A common late-stage intermediate in catalysis by 2-hydroxyethyl-phosphonate dioxygenase and methylphosphonate synthase. *Journal of the American Chemical Society*, **2015**, 137, 3217-20	16.4	20
214	Synergistic binding of the leader and core peptides by the lantibiotic synthetase HalM2. *ACS Chemical Biology*, **2015**, 10, 970-7	4.9	18
213	The enterococcal cytolysin synthetase has an unanticipated lipid kinase fold. *ELife*, **2015**, 4,	8.9	52
212	Modulating the Copper-Sulfur Interaction in Type 1 Blue Copper Azurin by Replacing Cys112 with Nonproteinogenic Homocysteine. *Inorganic Chemistry Frontiers*, **2014**, 1, 153-158	6.8	14
211	The glycosyltransferase involved in thurandacin biosynthesis catalyzes both O- and S-glycosylation. *Journal of the American Chemical Society*, **2014**, 136, 84-7	16.4	53
210	NMR structure of the S-linked glycopeptide sublancin 168. *ACS Chemical Biology*, **2014**, 9, 796-801	4.9	33
209	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, 17513-29	16.4	49
208	Substrate specificity of the lanthipeptide peptidase ElxP and the oxidoreductase ElxO. *ACS Chemical Biology*, **2014**, 9, 1718-25	4.9	27
207	A catalytic role for methionine revealed by a combination of computation and experiments on phosphite dehydrogenase. *Chemical Science*, **2014**, 5, 2191-2199	9.4	28
206	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, 12031-6	11.5	50
205	Structure and mechanism of lanthipeptide biosynthetic enzymes. *Current Opinion in Structural Biology*, **2014**, 29, 58-66	8.1	34

204	Mechanistic studies on the substrate-tolerant lanthipeptide synthetase ProcM. *Journal of the American Chemical Society*, **2014**, 136, 10450-9	16.4	43
203	Structure and function of phosphonoacetaldehyde dehydrogenase: the missing link in phosphonoacetate formation. *Chemistry and Biology*, **2014**, 21, 125-35		16
202	Chemical rescue and inhibition studies to determine the role of Arg301 in phosphite dehydrogenase. *PLoS ONE*, **2014**, 9, e87134	3.7	10
201	Lanthionine synthetase C-like protein 2 (LanCL2) is a novel regulator of Akt. *Molecular Biology of the Cell*, **2014**, 25, 3954-61	3.5	36
200	High divergence of the precursor peptides in combinatorial lanthipeptide biosynthesis. *ACS Chemical Biology*, **2014**, 9, 2686-94	4.9	44
199	Mode of action and structure-activity relationship studies of geobacillin I. *Journal of Antibiotics*, **2014**, 67, 133-6	3.7	18
198	RiPPs: Ribosomally Synthesized and Posttranslationally Modified Peptides **2014**, 195-217		2
197	Use of a phosphonate methyltransferase in the identification of the fosfazinomycin biosynthetic gene cluster. *Angewandte Chemie - International Edition*, **2014**, 53, 1334-7	16.4	34
196	Conjugation to albumin-binding molecule tags as a strategy to improve both efficacy and pharmacokinetic properties of the complement inhibitor compstatin. *ChemMedChem*, **2014**, 9, 2223-6	3.7	11
195	Phosphonate biosynthesis and catabolism: a treasure trove of unusual enzymology. *Current Opinion in Chemical Biology*, **2013**, 17, 580-8	9.7	67
194	Insights into the evolution of lanthipeptide biosynthesis. *Protein Science*, **2013**, 22, 1478-89	6.3	33
193	Ribosomally synthesized and post-translationally modified peptide natural products: new insights into the role of leader and core peptides during biosynthesis. *Chemistry - A European Journal*, **2013**, 19, 7662-77	4.8	74
192	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, 10362-71	16.4	28
191	Ribosomally synthesized and post-translationally modified peptide natural products: overview and recommendations for a universal nomenclature. *Natural Product Reports*, **2013**, 30, 108-60	15.1	1298
190	Discovery of the antibiotic phosacetamycin via a new mass spectrometry-based method for phosphonic acid detection. *ACS Chemical Biology*, **2013**, 8, 908-13	4.9	23
189	The sequence of the enterococcal cytolysin imparts unusual lanthionine stereochemistry. *Nature Chemical Biology*, **2013**, 9, 157-9	11.7	68
188	Chemical synthesis of the lantibiotic lacticin 481 reveals the importance of lanthionine stereochemistry. *Journal of the American Chemical Society*, **2013**, 135, 7094-7	16.4	40
187	In vitro activity of the nisin dehydratase NisB. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 7258-63	11.5	81

186	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, 10952-7	11.5	31
185	Investigations into the role of Lantibiotic Cyclase-like (LanCL) proteins in mammals. *FASEB Journal*, **2013**, 27, 1045.6	0.9	
184	Evolution of lanthipeptide synthetases. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 18361-6	11.5	121
183	Discovery, biosynthesis, and engineering of lantipeptides. *Annual Review of Biochemistry*, **2012**, 81, 479-505	2.51	278
182	Catalytic promiscuity of a bacterial N-methyltransferase. *FEBS Letters*, **2012**, 586, 3391-7	3.8	28
181	An engineered lantipeptide synthetase serves as a general leader peptide-dependent kinase. *Chemical Communications*, **2012**, 48, 10615-7	5.8	7
180	Biosynthesis of the class III lantipeptide catenulipeptin. *ACS Chemical Biology*, **2012**, 7, 1529-35	4.9	70
179	Non-proteinogenic amino acids in lacticin 481 analogues result in more potent inhibition of peptidoglycan transglycosylation. *ACS Chemical Biology*, **2012**, 7, 1791-5	4.9	30
178	Synthesis of methylphosphonic acid by marine microbes: a source for methane in the aerobic ocean. *Science*, **2012**, 337, 1104-7	33.3	196
177	Chemical synthesis and biological activity of analogues of the lantibiotic epilancin 15X. *Journal of the American Chemical Society*, **2012**, 134, 7648-51	16.4	54
176	An engineered lantibiotic synthetase that does not require a leader peptide on its substrate. *Journal of the American Chemical Society*, **2012**, 134, 6952-5	16.4	68
175	Radical-mediated enzymatic methylation: a tale of two SAMS. *Accounts of Chemical Research*, **2012**, 45, 555-64	24.3	174
174	Crystal structures of phosphite dehydrogenase provide insights into nicotinamide cofactor regeneration. *Biochemistry*, **2012**, 51, 4263-70	3.2	24
173	Structural characterization of four prochlorosins: a novel class of lantipeptides produced by planktonic marine cyanobacteria. *Biochemistry*, **2012**, 51, 4271-9	3.2	76
172	Investigation of the role of Arg301 identified in the X-ray structure of phosphite dehydrogenase. *Biochemistry*, **2012**, 51, 4254-62	3.2	12
171	Mechanistic investigation of methylphosphonate synthase, a non-heme iron-dependent oxygenase. *Journal of the American Chemical Society*, **2012**, 134, 15660-3	16.4	21
170	Heterologous production of the lantibiotic Ala(0)actagardine in Escherichia coli. *Chemical Communications*, **2012**, 48, 10966-8	5.8	39
169	Discovery and biosynthesis of phosphonate and phosphinate natural products. *Methods in Enzymology*, **2012**, 516, 101-23	1.7	15

168	Answers to the carbon-phosphorus lyase conundrum. *ChemBioChem*, **2012**, 13, 627-9	3.8	19
167	Stereochemistry of Hydride Transfer by Group III Alcohol Dehydrogenases Involved in Phosphonate Biosynthesis. *MedChemComm*, **2012**, 3, 967-970	5	5
166	Lantibiotics from Geobacillus thermodenitrificans. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 5241-6	11.5	98
165	Different biosynthetic pathways to fosfomycin in Pseudomonas syringae and Streptomyces species. *Antimicrobial Agents and Chemotherapy*, **2012**, 56, 4175-83	5.9	44
164	Converging on a mechanism for choline degradation. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 21184-5	11.5	16
163	Haloduracin binds the peptidoglycan precursor lipid II with 2:1 stoichiometry. *Journal of the American Chemical Society*, **2011**, 133, 17544-7	16.4	45
162	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	4.1	19
161	Synthesis and activity of thioether-containing analogues of the complement inhibitor compstatin. *ACS Chemical Biology*, **2011**, 6, 753-60	4.9	64
160	Sublancin is not a lantibiotic but an S-linked glycopeptide. *Nature Chemical Biology*, **2011**, 7, 78-80	11.7	154
159	Structural and mechanistic insights into C-P bond hydrolysis by phosphonoacetate hydrolase. *Chemistry and Biology*, **2011**, 18, 1230-40		30
158	Bacillus anthracis spore interactions with mammalian cells: relationship between germination state and the outcome of in vitro. *BMC Microbiology*, **2011**, 11, 46	4.5	15
157	Genome mining for ribosomally synthesized natural products. *Current Opinion in Chemical Biology*, **2011**, 15, 11-21	9.7	139
156	Biosynthesis of the antimicrobial peptide epilancin 15X and its N-terminal lactate. *Chemistry and Biology*, **2011**, 18, 857-67		56
155	Characterization and application of the Fe(II) and ketoglutarate dependent hydroxylase FrbJ. *Chemical Communications*, **2011**, 47, 10025-7	5.8	8
154	Production of lantipeptides in Escherichia coli. *Journal of the American Chemical Society*, **2011**, 133, 2338-41	16.4	129
153	Mechanism and substrate recognition of 2-hydroxyethylphosphonate dioxygenase. *Biochemistry*, **2011**, 50, 6598-605	3.2	18
152	Mechanism of inhibition of Bacillus anthracis spore outgrowth by the lantibiotic nisin. *ACS Chemical Biology*, **2011**, 6, 744-52	4.9	76
151	Nine post-translational modifications during the biosynthesis of cinnamycin. *Journal of the American Chemical Society*, **2011**, 133, 13753-60	16.4	84

150	Mechanistic studies of Ser/Thr dehydration catalyzed by a member of the LanL lanthionine synthetase family. *Biochemistry*, **2011**, 50, 891-8	3.2	50
149	On the stereochemistry of 2-hydroxyethylphosphonate dioxygenase. *Journal of the American Chemical Society*, **2011**, 133, 4236-9	16.4	36
148	Substrate selectivity of the sublancin S-glycosyltransferase. *Journal of the American Chemical Society*, **2011**, 133, 16394-7	16.4	38
147	Structural comparisons of arachidonic acid-induced radicals formed by prostaglandin H synthase-1 and -2. *Journal of Inorganic Biochemistry*, **2011**, 105, 366-74	4.2	1
146	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, 356-65	4.2	8
145	Cyclooxygenase reaction mechanism of prostaglandin H synthase from deuterium kinetic isotope effects. *Journal of Inorganic Biochemistry*, **2011**, 105, 382-90	4.2	19
144	The antibiotic dehydrophos is converted to a toxic pyruvate analog by peptide bond cleavage in Salmonella enterica. *Antimicrobial Agents and Chemotherapy*, **2011**, 55, 3357-62	5.9	25
143	Genetic and biochemical characterization of a pathway for the degradation of 2-aminoethylphosphonate in Sinorhizobium meliloti 1021. *Journal of Biological Chemistry*, **2011**, 286, 22283-90	5.4	30
142	Follow the leader: the use of leader peptides to guide natural product biosynthesis. *Nature Chemical Biology*, **2010**, 6, 9-18	11.7	299
141	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, 10430-5	11.5	201
140	Biosynthesis and Mode of Action of Lantibiotics **2010**, 217-256		6
139	Characterization and structure of DhpI, a phosphonate O-methyltransferase involved in dehydrophos biosynthesis. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 17557-62	11.5	36
138	Discovery of unique lanthionine synthetases reveals new mechanistic and evolutionary insights. *PLoS Biology*, **2010**, 8, e1000339	9.7	161
137	Photochemical cleavage of leader peptides. *Chemical Communications*, **2010**, 46, 8935-7	5.8	24
136	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, 10093-101	16.4	58
135	Structure-activity relationships of the phosphonate antibiotic dehydrophos. *Chemical Communications*, **2010**, 46, 7694-6	5.8	29
134	Substrate activation by iron superoxo intermediates. *Current Opinion in Structural Biology*, **2010**, 20, 673-83	8.1	100
133	Biosynthesis of rhizocticins, antifungal phosphonate oligopeptides produced by Bacillus subtilis ATCC6633. *Chemistry and Biology*, **2010**, 17, 28-37		71

132	Molecular cloning and heterologous expression of the dehydrophos biosynthetic gene cluster. *Chemistry and Biology*, **2010**, 17, 402-11		34
131	Structural description of enzyme catalysing unusual modification in lantibiotic biosynthesis. *FASEB Journal*, **2010**, 24, lb205	0.9	
130	Expressed protein ligation for metalloprotein design and engineering. *Methods in Enzymology*, **2009** , 462, 97-115	1.7	10
129	Investigation of the substrate specificity of lacticin 481 synthetase by using nonproteinogenic amino acids. *ChemBioChem*, **2009**, 10, 911-9	3.8	42
128	An unusual carbon-carbon bond cleavage reaction during phosphinothricin biosynthesis. *Nature*, **2009**, 459, 871-4	50.4	102
127	In vitro characterization of a heterologously expressed nonribosomal Peptide synthetase involved in phosphinothricin tripeptide biosynthesis. *Biochemistry*, **2009**, 48, 5054-6	3.2	17
126	Mechanistic investigations of human reticulocyte 15- and platelet 12-lipoxygenases with arachidonic acid. *Biochemistry*, **2009**, 48, 6259-67	3.2	39
125	Distributive and directional behavior of lantibiotic synthetases revealed by high-resolution tandem mass spectrometry. *Journal of the American Chemical Society*, **2009**, 131, 12258-64	16.4	47
124	Hydroperoxylation by hydroxyethylphosphonate dioxygenase. *Journal of the American Chemical Society*, **2009**, 131, 16225-32	16.4	40
123	Lacticin 481 synthetase as a general serine/threonine kinase. *ACS Chemical Biology*, **2009**, 4, 379-85	4.9	30
122	In vitro mutasynthesis of lantibiotic analogues containing nonproteinogenic amino acids. *Journal of the American Chemical Society*, **2009**, 131, 12024-5	16.4	83
121	Kinetic and structural investigations of the allosteric site in human epithelial 15-lipoxygenase-2. *Biochemistry*, **2009**, 48, 8721-30	3.2	37
120	Biosynthesis of phosphonic and phosphinic acid natural products. *Annual Review of Biochemistry*, **2009**, 78, 65-94	29.1	251
119	Chapter 21. In vitro studies of lantibiotic biosynthesis. *Methods in Enzymology*, **2009**, 458, 533-58	1.7	24
118	Using expressed protein ligation to probe the substrate specificity of lantibiotic synthetases. *Methods in Enzymology*, **2009**, 462, 117-34	1.7	5
117	Insights into the mode of action of the two-peptide lantibiotic haloduracin. *ACS Chemical Biology*, **2009**, 4, 865-74	4.9	90
116	Inhibition of Bacillus anthracis spore outgrowth by nisin. *Antimicrobial Agents and Chemotherapy*, **2008**, 52, 4281-8	5.9	61
115	In vitro reconstitution and substrate specificity of a lantibiotic protease. *Biochemistry*, **2008**, 47, 7352-63	3.2	67

114	Synthesis of 11-thialinoleic acid and 14-thialinoleic acid, inhibitors of soybean and human lipoxygenases. *Organic and Biomolecular Chemistry*, **2008**, 6, 4242-52	3.9	6
113	Isotope sensitive branching and kinetic isotope effects in the reaction of deuterated arachidonic acids with human 12- and 15-lipoxygenases. *Biochemistry*, **2008**, 47, 7295-303	3.2	33
112	The importance of the leader sequence for directing lanthionine formation in lacticin 481. *Biochemistry*, **2008**, 47, 7342-51	3.2	78
111	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, 13074-83	3.2	15
110	Biosynthesis of 2-hydroxyethylphosphonate, an unexpected intermediate common to multiple phosphonate biosynthetic pathways. *Journal of Biological Chemistry*, **2008**, 283, 23161-8	5.4	36
109	Use of lantibiotic synthetases for the preparation of bioactive constrained peptides. *Bioorganic and Medicinal Chemistry Letters*, **2008**, 18, 3025-8	2.9	46
108	Structure-activity relationship studies of the two-component lantibiotic haloduracin. *Chemistry and Biology*, **2008**, 15, 1035-45		60
107	Kinetic isotope effects in the oxidation of arachidonic acid by soybean lipoxygenase-1. *Bioorganic and Medicinal Chemistry Letters*, **2008**, 18, 5959-62	2.9	14
106	New insight into the mechanism of methyl transfer during the biosynthesis of fosfomycin. *Chemical Communications*, **2007**, 359-61	5.8	103
105	Efficient synthesis of suitably protected beta-difluoroalanine and gamma-difluorothreonine from L-ascorbic acid. *Organic Letters*, **2007**, 9, 41-4	6.2	16
104	Mechanistic investigations of the dehydration reaction of lacticin 481 synthetase using site-directed mutagenesis. *Biochemistry*, **2007**, 46, 5991-6000	3.2	57
103	On the substrate specificity of dehydration by lacticin 481 synthetase. *Journal of the American Chemical Society*, **2007**, 129, 2212-3	16.4	33
102	On the regioselectivity of thioether formation by lacticin 481 synthetase. *Organic Letters*, **2007**, 9, 3343-6	6.2	26
101	Mutants of the zinc ligands of lacticin 481 synthetase retain dehydration activity but have impaired cyclization activity. *Biochemistry*, **2007**, 46, 6268-76	3.2	61
100	Pre-steady-state studies of phosphite dehydrogenase demonstrate that hydride transfer is fully rate limiting. *Biochemistry*, **2007**, 46, 13101-8	3.2	13
99	The leader peptide is not required for post-translational modification by lacticin 481 synthetase. *Journal of the American Chemical Society*, **2007**, 129, 10314-5	16.4	47
98	Reassignment of the structure of the antibiotic A53868 reveals an unusual amino dehydrophosphonic acid. *Angewandte Chemie - International Edition*, **2007**, 46, 9089-92	16.4	32
97	Never stop questioning. *Current Opinion in Chemical Biology*, **2007**, 11, 527-528	9.7	

96	Synthesis of 7-thiaarachidonic acid as a mechanistic probe of prostaglandin H synthase-2. *Bioorganic and Medicinal Chemistry Letters*, **2007**, 17, 4049-52	2.9	3
95	Unusual transformations in the biosynthesis of the antibiotic phosphinothricin tripeptide. *Nature Chemical Biology*, **2007**, 3, 480-5	11.7	94
94	Lantibiotics: peptides of diverse structure and function. *Annual Review of Microbiology*, **2007**, 61, 477-501	17.5	492
93	Identification of essential catalytic residues of the cyclase NisC involved in the biosynthesis of nisin. *Journal of Biological Chemistry*, **2007**, 282, 21169-75	5.4	62
92	Synthesis of site-specifically deuterated arachidonic acid derivatives containing a remote tritium radiolabel. *Journal of Labelled Compounds and Radiopharmaceuticals*, **2006**, 49, 545-558	1.9	3
91	Vitamin B12Catalyzed Radical Cyclizations of Arylalkenes. *Synlett*, **2006**, 2006, 211-214	2.2	9
90	Optimizing a biocatalyst for improved NAD(P)H regeneration: directed evolution of phosphite dehydrogenase. *Combinatorial Chemistry and High Throughput Screening*, **2006**, 9, 237-45	1.3	36
89	Structure and mechanism of the lantibiotic cyclase involved in nisin biosynthesis. *Science*, **2006**, 311, 1464-7	33	239
88	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, 17243-8	11.5	190
87	Chlorotris(triphenylphosphine)-rhodium(I) **2006**,		2
86	Model studies of the Cu(B) site of cytochrome c oxidase utilizing a Zn(II) complex containing an imidazole-phenol cross-linked ligand. *Dalton Transactions*, **2006**, 3326-37	4.3	9
85	On the role of alkylcobalamins in the vitamin B12-catalyzed reductive dehalogenation of perchloroethylene and trichloroethylene. *Chemical Communications*, **2006**, 558-60	5.8	22
84	Nature'S Way To Make the Lantibiotics. *Journal of Chemical Education*, **2006**, 83, 1769	2.4	
83	The dehydratase activity of lacticin 481 synthetase is highly processive. *Journal of the American Chemical Society*, **2006**, 128, 1420-1	16.4	28
82	Rings, radicals, and regeneration: the early years of a bioorganic laboratory. *Journal of Organic Chemistry*, **2006**, 71, 9561-71	4.2	32
81	Lighting up the nascent cell wall. *ACS Chemical Biology*, **2006**, 1, 425-8	4.9	7
80	Dehydroalanine-containing peptides: preparation from phenylselenocysteine and utility in convergent ligation strategies. *Nature Protocols*, **2006**, 1, 3001-10	18.8	32
79	Engineering dehydro amino acids and thioethers into peptides using lacticin 481 synthetase. *Chemistry and Biology*, **2006**, 13, 1109-17		78

78	Heterologous production of fosfomycin and identification of the minimal biosynthetic gene cluster. *Chemistry and Biology*, **2006**, 13, 1171-82		104
77	Arabidopsis thaliana fatty acid alpha-dioxygenase-1: evaluation of substrates, inhibitors and amino-terminal function. *Plant Physiology and Biochemistry*, **2006**, 44, 284-93	5.4	12
76	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, 1126-36	16.4	75
75	Synthesis of nonproteinogenic amino acids to probe lantibiotic biosynthesis. *Journal of Organic Chemistry*, **2005**, 70, 6685-92	4.2	22
74	Model studies of the histidine-tyrosine cross-link in cytochrome C oxidase reveal the flexible substituent effect of the imidazole moiety. *Organic Letters*, **2005**, 7, 2735-8	6.2	41
73	Theoretical investigations into the intermediacy of chlorinated vinylcobalamins in the reductive dehalogenation of chlorinated ethylenes. *Journal of the American Chemical Society*, **2005**, 127, 384-96	16.4	33
72	Site-directed mutagenesis of active site residues of phosphite dehydrogenase. *Biochemistry*, **2005**, 44, 4765-74	3.2	28
71	New developments in lantibiotic biosynthesis and mode of action. *Current Opinion in Microbiology*, **2005**, 8, 543-51	7.9	44
70	Aziridine-2-carboxylic acid-containing peptides: application to solution- and solid-phase convergent site-selective peptide modification. *Journal of the American Chemical Society*, **2005**, 127, 7359-69	16.4	79
69	Biosynthesis and mode of action of lantibiotics. *Chemical Reviews*, **2005**, 105, 633-84	68.1	616
68	Mechanism and applications of phosphite dehydrogenase. *Bioorganic Chemistry*, **2005**, 33, 171-89	5.1	56
67	Lacticin 481 synthetase phosphorylates its substrate during lantibiotic production. *Journal of the American Chemical Society*, **2005**, 127, 15332-3	16.4	108
66	Mechanistic investigation of a highly active phosphite dehydrogenase mutant and its application for NADPH regeneration. *FEBS Journal*, **2005**, 272, 3816-27	5.7	22
65	Chemical and Enzymatic Synthesis of Lanthionines. *Mini-Reviews in Organic Chemistry*, **2005**, 2, 23-37	1.7	41
64	Inhibition and pH dependence of phosphite dehydrogenase. *Biochemistry*, **2005**, 44, 6640-9	3.2	33
63	Heterologous expression, purification, and characterization of a highly active xylose reductase from Neurospora crassa. *Applied and Environmental Microbiology*, **2005**, 71, 1642-7	4.8	75
62	Site-selective conjugation of thiols with aziridine-2-carboxylic acid-containing peptides. *Journal of the American Chemical Society*, **2004**, 126, 12712-3	16.4	60
61	Post-translational modifications during lantibiotic biosynthesis. *Current Opinion in Chemical Biology*, **2004**, 8, 498-507	9.7	70

60	The selenocysteine-substituted blue copper center: spectroscopic investigations of Cys112SeCys Pseudomonas aeruginosa azurin. *Journal of the American Chemical Society*, **2004**, 126, 7244-56	16.4	63
59	Synthesis of site-specifically labeled arachidonic acids as mechanistic probes for prostaglandin H synthase. *Organic Letters*, **2004**, 6, 349-52	6.2	18
58	Lacticin 481: in vitro reconstitution of lantibiotic synthetase activity. *Science*, **2004**, 303, 679-81	33.3	196
57	Oligosaccharide-peptide ligation of glycosyl thiolates with dehydropeptides: synthesis of S-linked mucin-related glycopeptide conjugates. *Chemistry - A European Journal*, **2003**, 9, 5997-6006	4.8	49
56	Chemical and enzymatic synthesis of fluorinated-dehydroalanine-containing peptides. *ChemBioChem*, **2003**, 4, 1206-15	3.8	8
55	Regeneration of cofactors for use in biocatalysis. *Current Opinion in Biotechnology*, **2003**, 14, 583-9	11.4	287
54	Recent developments in pyridine nucleotide regeneration. *Current Opinion in Biotechnology*, **2003**, 14, 421-6	11.4	327
53	Relaxing the nicotinamide cofactor specificity of phosphite dehydrogenase by rational design. *Biochemistry*, **2003**, 42, 11604-14	3.2	131
52	An unusual isotope effect on substrate inhibition in the oxidation of arachidonic acid by lipoxygenase. *Journal of the American Chemical Society*, **2003**, 125, 8988-9	16.4	25
51	Characterization of chlorovinylcobalamin, a putative intermediate in reductive degradation of chlorinated ethylenes. *Journal of the American Chemical Society*, **2003**, 125, 4410-1	16.4	37
50	A Quantum Chemical Study of the Synthesis of Prostaglandin G2 by the Cyclooxygenase Active Site in Prostaglandin Endoperoxide H Synthase 1. *Journal of Physical Chemistry B*, **2003**, 107, 3297-3308	3.4	24
49	SpaC and NisC, the cyclases involved in subtilin and nisin biosynthesis, are zinc proteins. *Biochemistry*, **2003**, 42, 13613-24	3.2	71
48	Comparison of the properties of prostaglandin H synthase-1 and -2. *Progress in Lipid Research*, **2003**, 42, 377-404	14.3	71
47	Enzymatic hydrogen atom abstraction from polyunsaturated fatty acids. *Chemical Communications*, **2003**, 2843-6	5.8	31
46	Biomimetic studies on the mechanism of stereoselective lanthionine formation. *Organic and Biomolecular Chemistry*, **2003**, 1, 3304-15	3.9	78
45	Phosphite Dehydrogenase: A Versatile Cofactor-Regeneration Enzyme. *Angewandte Chemie*, **2002**, 114, 3391-3393	3.6	23
44	Phosphite dehydrogenase: a versatile cofactor-regeneration enzyme. *Angewandte Chemie - International Edition*, **2002**, 41, 3257-9	16.4	110
43	Selenocysteine derivatives for chemoselective ligations. *ChemBioChem*, **2002**, 3, 709-16	3.8	47

42	Synthesis of isotopically labeled arachidonic acids to probe the reaction mechanism of prostaglandin H synthase. *Journal of the American Chemical Society*, **2002**, 124, 10785-96	16.4	43
41	The cyclooxygenase reaction mechanism. *Biochemistry*, **2002**, 41, 15451-8	3.2	132
40	Structural characterization of arachidonyl radicals formed by aspirin-treated prostaglandin H synthase-2. *Journal of Biological Chemistry*, **2002**, 277, 38311-21	5.4	19
39	Mechanistic investigation of a novel vitamin B(12)-catalyzed carbon [bond] carbon bond forming reaction, the reductive dimerization of arylalkenes. *Journal of Organic Chemistry*, **2002**, 67, 837-46	4.2	69
38	An engineered azurin variant containing a selenocysteine copper ligand. *Journal of the American Chemical Society*, **2002**, 124, 2084-5	16.4	99
37	Dichloroacetylene is not the precursor to dichlorinated vinylcobaloxime and vinylcobalamin in cobalt catalyzed dechlorination of perchloro- and trichloroethylene. *Inorganic Chemistry*, **2002**, 41, 5844-8	5.1	21
36	Reductive Dechlorination of Trichloroethylene:A Computational Study. *Journal of Physical Chemistry A*, **2002**, 106, 8708-8715	2.8	37
35	Heterologous expression and purification of SpaB involved in subtilin biosynthesis. *Biochemical and Biophysical Research Communications*, **2002**, 295, 952-7	3.4	28
34	Synthesis and characterization of chlorinated alkenylcobaloximes to probe the mechanism of vitamin B(12)-catalyzed dechlorination of priority pollutants. *Inorganic Chemistry*, **2002**, 41, 393-404	5.1	45
33	Biomimetic stereoselective formation of methyllanthionine. *Organic Letters*, **2002**, 4, 1335-8	6.2	69
32	Synthesis of 2-amino-3-fluoroacrylic acid containing peptides. *Organic Letters*, **2001**, 3, 593-6	6.2	15
31	Homemade cofactors: self-processing in galactose oxidase. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 12863-5	11.5	19
30	Tyrosyl radical cofactors. *Advances in Protein Chemistry*, **2001**, 58, 317-85		44
29	Phosphite dehydrogenase: an unusual phosphoryl transfer reaction. *Journal of the American Chemical Society*, **2001**, 123, 2672-3	16.4	50
28	Convergent synthesis of peptide conjugates using dehydroalanines for chemoselective ligations. *Organic Letters*, **2001**, 3, 1189-92	6.2	107
27	Structural characterization of a pentadienyl radical intermediate formed during catalysis by prostaglandin H synthase-2. *Journal of the American Chemical Society*, **2001**, 123, 3609-10	16.4	25
26	Synthesis of a selenocysteine-containing peptide by native chemical ligation. *Organic Letters*, **2001**, 3, 1331-4	6.2	194
25	Novel cofactors via post-translational modifications of enzyme active sites. *Chemistry and Biology*, **2000**, 7, R159-71		78

24	Mechanistic Studies on the Vitamin B12-Catalyzed Dechlorination of Chlorinated Alkenes. *Journal of the American Chemical Society*, **2000**, 122, 12403-12404	16.4	64
23	Insights into the Functional Role of the Tyrosine−Histidine Linkage in Cytochrome c Oxidase. *Journal of the American Chemical Society*, **2000**, 122, 2403-2404	16.4	92
22	Facile chemoselective synthesis of dehydroalanine-containing peptides. *Organic Letters*, **2000**, 2, 3603-6	6.2	139
21	Protein Radicals in Enzyme Catalysis. [Chem. Rev. 1998, 98, 705minus sign762. *Chemical Reviews*, **1998**, 98, 2661-2662	68.1	27
20	Characterization of a Substrate-Derived Radical Detected during the Inactivation of Ribonucleotide Reductase fromEscherichia coliby 2′-Fluoromethylene-2′-deoxycytidine 5′-Diphosphate. *Journal of the American Chemical Society*, **1998**, 120, 3823-3835	16.4	46
19	Detection of a new substrate-derived radical during inactivation of ribonucleotide reductase from Escherichia coli by gemcitabine 5′-diphosphate. *Biochemistry*, **1998**, 37, 6419-26	3.2	63
18	Direct EPR Spectroscopic Evidence for an Allylic Radical Generated from (E)-2′-Fluoromethylene-2′-deoxycytidine 5′-Diphosphate by E. coli Ribonucleotide Reductase. *Journal of the American Chemical Society*, **1998**, 120, 4252-4253	16.4	25
17	New and Efficient Synthesis of an Amino Acid for Preparing Phosphine-Functionalized Peptidomimetics. *Journal of Organic Chemistry*, **1998**, 63, 5262-5264	4.2	23
16	Protein Radicals in Enzyme Catalysis. *Chemical Reviews*, **1998**, 98, 705-762	68.1	1278
15	Inactivation of ribonucleotide reductase by (E)-2′-fluoromethylene-2′-deoxycytidine 5′-diphosphate: a paradigm for nucleotide mechanism-based inhibitors. *Biochemistry*, **1996**, 35, 8381-91	3.2	59
14	Identification of an active site residue of the R1 subunit of ribonucleotide reductase from Escherichia coli: characterization of substrate-induced polypeptide cleavage by C225SR1. *Biochemistry*, **1996**, 35, 10058-67	3.2	20
13	Design of a Fluoro-olefin Cytidine Nucleoside as a Bioprecursor of a Mechanism-Based Inhibitor of Ribonucleotide Reductase. *ACS Symposium Series*, **1996**, 246-264	0.4	3
12	Ribonucleotide reductases: radical enzymes with suicidal tendencies. *Chemistry and Biology*, **1995**, 2, 793-801		163
11	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	16.4	78
10	The importance of phosphine-to-rhodium ratios in enantioselective hydroborations. *Inorganica Chimica Acta*, **1994**, 220, 93-98	2.7	8
9	On Titanium-Promoted Hydroborations of Alkenes by Borohydride and by Catecholborane. *Organometallics*, **1994**, 13, 3616-3620	3.8	29
8	Titanium-Mediated Additions of Borohydride to Alkenes. *Journal of the American Chemical Society*, **1994**, 116, 6561-6569	16.4	27
7	On hydroborations of alkenes catalyzed by titanium complexes. *Tetrahedron Letters*, **1993**, 34, 6817-6820		8

6	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	16.4	273
5	Enantioselective hydroborations catalyzed by rhodium(+1) complexes. *Tetrahedron: Asymmetry*, **1991**, 2, 613-621		37
4	Further evidence for the role of d.pi.-p.pi. bonding in rhodium-mediated hydroborations. *Journal of the American Chemical Society*, **1991**, 113, 6139-6144	16.4	61
3	On deuterium-labeling studies for probing rhodium-catalyzed hydroboration reactions. *Journal of Organic Chemistry*, **1991**, 56, 2949-2951	4.2	19
2	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		28
1	Precursor peptide-targeted mining of more than one hundred thousand genomes expands the lanthipeptide natural product family		2