

# Wilfred Ajw Van Der Donk

## List of Publications by Citations

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125  
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353  
ext. papers

22,172  
ext. citations

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7.16  
L-index

#	Paper	IF	Citations
311	Ribosomally synthesized and post-translationally modified peptide natural products: overview and recommendations for a universal nomenclature. <i>Natural Product Reports</i> , <b>2013</b> , 30, 108-60	15.1	1298
310	Protein Radicals in Enzyme Catalysis. <i>Chemical Reviews</i> , <b>1998</b> , 98, 705-762	68.1	1278
309	Biosynthesis and mode of action of lantibiotics. <i>Chemical Reviews</i> , <b>2005</b> , 105, 633-84	68.1	616
308	Minimum Information about a Biosynthetic Gene cluster. <i>Nature Chemical Biology</i> , <b>2015</b> , 11, 625-31	11.7	498
307	Lantibiotics: peptides of diverse structure and function. <i>Annual Review of Microbiology</i> , <b>2007</b> , 61, 477-501	17.5	492
306	Recent developments in pyridine nucleotide regeneration. <i>Current Opinion in Biotechnology</i> , <b>2003</b> , 14, 421-6	11.4	327
305	Follow the leader: the use of leader peptides to guide natural product biosynthesis. <i>Nature Chemical Biology</i> , <b>2010</b> , 6, 9-18	11.7	299
304	Regeneration of cofactors for use in biocatalysis. <i>Current Opinion in Biotechnology</i> , <b>2003</b> , 14, 583-9	11.4	287
303	Discovery, biosynthesis, and engineering of lantipeptides. <i>Annual Review of Biochemistry</i> , <b>2012</b> , 81, 479-505	20.1	278
302	Reactions of catecholborane with Wilkinson's catalyst: implications for transition metal-catalyzed hydroborations of alkenes. <i>Journal of the American Chemical Society</i> , <b>1992</b> , 114, 9350-9359	16.4	273
301	Biosynthesis of phosphonic and phosphinic acid natural products. <i>Annual Review of Biochemistry</i> , <b>2009</b> , 78, 65-94	29.1	251
300	Bacteriophage targeting of gut bacterium attenuates alcoholic liver disease. <i>Nature</i> , <b>2019</b> , 575, 505-511	50.4	245
299	Structure and mechanism of the lantibiotic cyclase involved in nisin biosynthesis. <i>Science</i> , <b>2006</b> , 311, 1464-7	33.7	239
298	Mechanistic Understanding of Lanthipeptide Biosynthetic Enzymes. <i>Chemical Reviews</i> , <b>2017</b> , 117, 5457-5520	58.0	224
297	Catalytic promiscuity in the biosynthesis of cyclic peptide secondary metabolites in planktonic marine cyanobacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 10430-5	11.5	201
296	Structure and mechanism of the tRNA-dependent lantibiotic dehydratase NisB. <i>Nature</i> , <b>2015</b> , 517, 509-13	30.4	198
295	Synthesis of methylphosphonic acid by marine microbes: a source for methane in the aerobic ocean. <i>Science</i> , <b>2012</b> , 337, 1104-7	33.3	196

294	Lacticin 481: in vitro reconstitution of lantibiotic synthetase activity. <i>Science</i> , <b>2004</b> , 303, 679-81	33.3	196
293	Synthesis of a selenocysteine-containing peptide by native chemical ligation. <i>Organic Letters</i> , <b>2001</b> , 3, 1331-4	6.2	194
292	Discovery and in vitro biosynthesis of haloduracin, a two-component lantibiotic. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2006</b> , 103, 17243-8	11.5	190
291	New Insights into the Biosynthetic Logic of Ribosomally Synthesized and Post-translationally Modified Peptide Natural Products. <i>Cell Chemical Biology</i> , <b>2016</b> , 23, 31-44	8.2	186
290	Radical-mediated enzymatic methylation: a tale of two SAMS. <i>Accounts of Chemical Research</i> , <b>2012</b> , 45, 555-64	24.3	174
289	Ribonucleotide reductases: radical enzymes with suicidal tendencies. <i>Chemistry and Biology</i> , <b>1995</b> , 2, 793-801		163
288	Discovery of unique lanthionine synthetases reveals new mechanistic and evolutionary insights. <i>PLoS Biology</i> , <b>2010</b> , 8, e1000339	9.7	161
287	Sublancin is not a lantibiotic but an S-linked glycopeptide. <i>Nature Chemical Biology</i> , <b>2011</b> , 7, 78-80	11.7	154
286	New developments in RiPP discovery, enzymology and engineering. <i>Natural Product Reports</i> , <b>2021</b> , 38, 130-239	15.1	146
285	Genome mining for ribosomally synthesized natural products. <i>Current Opinion in Chemical Biology</i> , <b>2011</b> , 15, 11-21	9.7	139
284	Facile chemoselective synthesis of dehydroalanine-containing peptides. <i>Organic Letters</i> , <b>2000</b> , 2, 3603-66.2		139
283	The cyclooxygenase reaction mechanism. <i>Biochemistry</i> , <b>2002</b> , 41, 15451-8	3.2	132
282	Relaxing the nicotinamide cofactor specificity of phosphite dehydrogenase by rational design. <i>Biochemistry</i> , <b>2003</b> , 42, 11604-14	3.2	131
281	Production of lantipeptides in <i>Escherichia coli</i> . <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 2338-41	16.4	129
280	Discovery of phosphonic acid natural products by mining the genomes of 10,000 actinomycetes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 12175-80	11.5	125
279	Evolution of lanthipeptide synthetases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 18361-6	11.5	121
278	In Vitro Biosynthesis of the Core Scaffold of the Thiopeptide Thiomuracin. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 16012-5	16.4	114
277	Phosphite dehydrogenase: a versatile cofactor-regeneration enzyme. <i>Angewandte Chemie - International Edition</i> , <b>2002</b> , 41, 3257-9	16.4	110

276	Lactacin 481 synthetase phosphorylates its substrate during lantibiotic production. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 15332-3	16.4	108
275	Convergent synthesis of peptide conjugates using dehydroalanines for chemoselective ligations. <i>Organic Letters</i> , <b>2001</b> , 3, 1189-92	6.2	107
274	Heterologous production of fosfomycin and identification of the minimal biosynthetic gene cluster. <i>Chemistry and Biology</i> , <b>2006</b> , 13, 1171-82		104
273	New insight into the mechanism of methyl transfer during the biosynthesis of fosfomycin. <i>Chemical Communications</i> , <b>2007</b> , 359-61	5.8	103
272	An unusual carbon-carbon bond cleavage reaction during phosphinothricin biosynthesis. <i>Nature</i> , <b>2009</b> , 459, 871-4	50.4	102
271	Substrate activation by iron superoxo intermediates. <i>Current Opinion in Structural Biology</i> , <b>2010</b> , 20, 673-83	8.3	100
270	An engineered azurin variant containing a selenocysteine copper ligand. <i>Journal of the American Chemical Society</i> , <b>2002</b> , 124, 2084-5	16.4	99
269	Lantibiotics from <i>Geobacillus thermodenitrificans</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 5241-6	11.5	98
268	Unusual transformations in the biosynthesis of the antibiotic phosphinothricin tripeptide. <i>Nature Chemical Biology</i> , <b>2007</b> , 3, 480-5	11.7	94
267	Insights into the Functional Role of the Tyrosine-Histidine Linkage in Cytochrome c Oxidase. <i>Journal of the American Chemical Society</i> , <b>2000</b> , 122, 2403-2404	16.4	92
266	Ribosomally synthesized and post-translationally modified peptide natural product discovery in the genomic era. <i>Current Opinion in Chemical Biology</i> , <b>2017</b> , 38, 36-44	9.7	90
265	Insights into the mode of action of the two-peptide lantibiotic haloduracin. <i>ACS Chemical Biology</i> , <b>2009</b> , 4, 865-74	4.9	90
264	Nine post-translational modifications during the biosynthesis of cinnamycin. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 13753-60	16.4	84
263	In vitro mutasynthesis of lantibiotic analogues containing nonproteinogenic amino acids. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 12024-5	16.4	83
262	In vitro activity of the nisin dehydratase NisB. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 7258-63	11.5	81
261	Aziridine-2-carboxylic acid-containing peptides: application to solution- and solid-phase convergent site-selective peptide modification. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 7359-69	16.4	79
260	The importance of the leader sequence for directing lanthionine formation in lactacin 481. <i>Biochemistry</i> , <b>2008</b> , 47, 7342-51	3.2	78
259	Engineering dehydro amino acids and thioethers into peptides using lactacin 481 synthetase. <i>Chemistry and Biology</i> , <b>2006</b> , 13, 1109-17		78

258	Biomimetic studies on the mechanism of stereoselective lanthionine formation. <i>Organic and Biomolecular Chemistry</i> , <b>2003</b> , 1, 3304-15	3.9	78
257	Novel cofactors via post-translational modifications of enzyme active sites. <i>Chemistry and Biology</i> , <b>2000</b> , 7, R159-71		78
256	EPR Investigations of the Inactivation of E. coli Ribonucleotide Reductase with 2SAzido-2Sdeoxyuridine 5SDiphosphate: Evidence for the Involvement of the Thiyl Radical of C225-R1. <i>Journal of the American Chemical Society</i> , <b>1995</b> , 117, 8908-8916	16.4	78
255	Structural characterization of four prochlorosins: a novel class of lantipeptides produced by planktonic marine cyanobacteria. <i>Biochemistry</i> , <b>2012</b> , 51, 4271-9	3.2	76
254	Mechanism of inhibition of Bacillus anthracis spore outgrowth by the lantibiotic nisin. <i>ACS Chemical Biology</i> , <b>2011</b> , 6, 744-52	4.9	76
253	Properties and reactivity of chlorovinylcobalamin and vinylcobalamin and their implications for vitamin B12-catalyzed reductive dechlorination of chlorinated alkenes. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 1126-36	16.4	75
252	Heterologous expression, purification, and characterization of a highly active xylose reductase from Neurospora crassa. <i>Applied and Environmental Microbiology</i> , <b>2005</b> , 71, 1642-7	4.8	75
251	Ribosomally synthesized and post-translationally modified peptide natural products: new insights into the role of leader and core peptides during biosynthesis. <i>Chemistry - A European Journal</i> , <b>2013</b> , 19, 7662-77	4.8	74
250	A lantipeptide library used to identify a protein-protein interaction inhibitor. <i>Nature Chemical Biology</i> , <b>2018</b> , 14, 375-380	11.7	73
249	Biosynthesis of rhizocitcins, antifungal phosphonate oligopeptides produced by Bacillus subtilis ATCC6633. <i>Chemistry and Biology</i> , <b>2010</b> , 17, 28-37		71
248	SpaC and NisC, the cyclases involved in subtilin and nisin biosynthesis, are zinc proteins. <i>Biochemistry</i> , <b>2003</b> , 42, 13613-24	3.2	71
247	Comparison of the properties of prostaglandin H synthase-1 and -2. <i>Progress in Lipid Research</i> , <b>2003</b> , 42, 377-404	14.3	71
246	Biosynthesis of the class III lantipeptide catenulipeptin. <i>ACS Chemical Biology</i> , <b>2012</b> , 7, 1529-35	4.9	70
245	Post-translational modifications during lantibiotic biosynthesis. <i>Current Opinion in Chemical Biology</i> , <b>2004</b> , 8, 498-507	9.7	70
244	Mechanistic investigation of a novel vitamin B(12)-catalyzed carbon [bond] carbon bond forming reaction, the reductive dimerization of arylalkenes. <i>Journal of Organic Chemistry</i> , <b>2002</b> , 67, 837-46	4.2	69
243	Biomimetic stereoselective formation of methyllanthionine. <i>Organic Letters</i> , <b>2002</b> , 4, 1335-8	6.2	69
242	The sequence of the enterococcal cytolysin imparts unusual lanthionine stereochemistry. <i>Nature Chemical Biology</i> , <b>2013</b> , 9, 157-9	11.7	68
241	An engineered lantibiotic synthetase that does not require a leader peptide on its substrate. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 6952-5	16.4	68

- 240 Phosphonate biosynthesis and catabolism: a treasure trove of unusual enzymology. *Current Opinion in Chemical Biology*, **2013**, 17, 580-8 9.7 67
- 239 In vitro reconstitution and substrate specificity of a lantibiotic protease. *Biochemistry*, **2008**, 47, 7352-63, 2 67
- 238 Development and Application of Yeast and Phage Display of Diverse Lanthipeptides. *ACS Central Science*, **2018**, 4, 458-467 16.8 66
- 237 Synthesis and activity of thioether-containing analogues of the complement inhibitor compstatin. *ACS Chemical Biology*, **2011**, 6, 753-60 4.9 64
- 236 Mechanistic Studies on the Vitamin B12-Catalyzed Dechlorination of Chlorinated Alkenes. *Journal of the American Chemical Society*, **2000**, 122, 12403-12404 16.4 64
- 235 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
- 234 Detection of a new substrate-derived radical during inactivation of ribonucleotide reductase from *Escherichia coli* by gemcitabine 5Sdiphosphate. *Biochemistry*, **1998**, 37, 6419-26 3.2 63
- 233 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
- 232 Inhibition of *Bacillus anthracis* spore outgrowth by nisin. *Antimicrobial Agents and Chemotherapy*, **2008**, 52, 4281-8 5.9 61
- 231 Mutants of the zinc ligands of lactacin 481 synthetase retain dehydration activity but have impaired cyclization activity. *Biochemistry*, **2007**, 46, 6268-76 3.2 61
- 230 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
- 229 Structure-activity relationship studies of the two-component lantibiotic haloduracin. *Chemistry and Biology*, **2008**, 15, 1035-45 60
- 228 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
- 227 Inactivation of ribonucleotide reductase by (E)-2Sfluoromethylene-2Sdeoxycytidine 5Sdiphosphate: a paradigm for nucleotide mechanism-based inhibitors. *Biochemistry*, **1996**, 35, 8381-91 3.2 59
- 226 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
- 225 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
- 224 Substrate control in stereoselective lanthionine biosynthesis. *Nature Chemistry*, **2015**, 7, 57-64 17.6 57
- 223 Mechanistic investigations of the dehydration reaction of lactacin 481 synthetase using site-directed mutagenesis. *Biochemistry*, **2007**, 46, 5991-6000 3.2 57

222	Chimeric Leader Peptides for the Generation of Non-Natural Hybrid RiPP Products. <i>ACS Central Science</i> , <b>2017</b> , 3, 629-638	16.8	56
221	Biosynthesis of the antimicrobial peptide epilancin 15X and its N-terminal lactate. <i>Chemistry and Biology</i> , <b>2011</b> , 18, 857-67		56
220	Mechanism and applications of phosphite dehydrogenase. <i>Bioorganic Chemistry</i> , <b>2005</b> , 33, 171-89	5.1	56
219	The many roles of glutamate in metabolism. <i>Journal of Industrial Microbiology and Biotechnology</i> , <b>2016</b> , 43, 419-30	4.2	55
218	Expanded natural product diversity revealed by analysis of lanthipeptide-like gene clusters in actinobacteria. <i>Applied and Environmental Microbiology</i> , <b>2015</b> , 81, 4339-50	4.8	54
217	Chemical synthesis and biological activity of analogues of the lantibiotic epilancin 15X. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 7648-51	16.4	54
216	Biosynthetic Timing and Substrate Specificity for the Thiopeptide Thiomuracin. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 15511-15514	16.4	54
215	Use of a scaffold peptide in the biosynthesis of amino acid-derived natural products. <i>Science</i> , <b>2019</b> , 365, 280-284	33.3	53
214	The glycosyltransferase involved in thurandacin biosynthesis catalyzes both O- and S-glycosylation. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 84-7	16.4	53
213	The enterococcal cytolysin synthetase has an unanticipated lipid kinase fold. <i>ELife</i> , <b>2015</b> , 4,	8.9	52
212	Structural investigation of ribosomally synthesized natural products by hypothetical structure enumeration and evaluation using tandem MS. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 12031-6	11.5	50
211	Mechanistic studies of Ser/Thr dehydration catalyzed by a member of the LanL lanthionine synthetase family. <i>Biochemistry</i> , <b>2011</b> , 50, 891-8	3.2	50
210	Phosphite dehydrogenase: an unusual phosphoryl transfer reaction. <i>Journal of the American Chemical Society</i> , <b>2001</b> , 123, 2672-3	16.4	50
209	Structure and tRNA Specificity of MibB, a Lantibiotic Dehydratase from Actinobacteria Involved in NAI-107 Biosynthesis. <i>Cell Chemical Biology</i> , <b>2016</b> , 23, 370-380	8.2	49
208	A price to pay for relaxed substrate specificity: a comparative kinetic analysis of the class II lanthipeptide synthetases ProcM and HalM2. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 17513-29	16.4	49
207	Structural insights into enzymatic [4+2] -cycloaddition in thiopeptide antibiotic biosynthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 12928-12933	11.5	49
206	Oligosaccharide-peptide ligation of glycosyl thiolates with dehydropeptides: synthesis of S-linked mucin-related glycopeptide conjugates. <i>Chemistry - A European Journal</i> , <b>2003</b> , 9, 5997-6006	4.8	49
205	Two Flavoenzymes Catalyze the Post-Translational Generation of 5-Chlorotryptophan and 2-Aminovinyl-Cysteine during NAI-107 Biosynthesis. <i>ACS Chemical Biology</i> , <b>2017</b> , 12, 548-557	4.9	48



204	Precursor peptide-targeted mining of more than one hundred thousand genomes expands the lanthipeptide natural product family. <i>BMC Genomics</i> , <b>2020</b> , 21, 387	4.5	47
203	Ribosomal Natural Products, Tailored To Fit. <i>Accounts of Chemical Research</i> , <b>2017</b> , 50, 1577-1586	24.3	47
202	Distributive and directional behavior of lantibiotic synthetases revealed by high-resolution tandem mass spectrometry. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 12258-64	16.4	47
201	The leader peptide is not required for post-translational modification by lactacin 481 synthetase. <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 10314-5	16.4	47
200	Selenocysteine derivatives for chemoselective ligations. <i>ChemBioChem</i> , <b>2002</b> , 3, 709-16	3.8	47
199	Discovery and Characterization of Bicereucin, an Unusual d-Amino Acid-Containing Mixed Two-Component Lantibiotic. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 5254-7	16.4	47
198	Use of lantibiotic synthetases for the preparation of bioactive constrained peptides. <i>Bioorganic and Medicinal Chemistry Letters</i> , <b>2008</b> , 18, 3025-8	2.9	46
197	Characterization of a Substrate-Derived Radical Detected during the Inactivation of Ribonucleotide Reductase from <i>Escherichia coli</i> by 2-Fluoromethylene-2-Deoxycytidine 5-Diphosphate. <i>Journal of the American Chemical Society</i> , <b>1998</b> , 120, 3823-3835	16.4	46
196	Haloduracin Binds the peptidoglycan precursor lipid II with 2:1 stoichiometry. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 17544-7	16.4	45
195	Synthesis and characterization of chlorinated alkenylcobaloximes to probe the mechanism of vitamin B(12)-catalyzed dechlorination of priority pollutants. <i>Inorganic Chemistry</i> , <b>2002</b> , 41, 393-404	5.1	45
194	High divergence of the precursor peptides in combinatorial lanthipeptide biosynthesis. <i>ACS Chemical Biology</i> , <b>2014</b> , 9, 2686-94	4.9	44
193	Different biosynthetic pathways to fosfomycin in <i>Pseudomonas syringae</i> and <i>Streptomyces</i> species. <i>Antimicrobial Agents and Chemotherapy</i> , <b>2012</b> , 56, 4175-83	5.9	44
192	New developments in lantibiotic biosynthesis and mode of action. <i>Current Opinion in Microbiology</i> , <b>2005</b> , 8, 543-51	7.9	44
191	Tyrosyl radical cofactors. <i>Advances in Protein Chemistry</i> , <b>2001</b> , 58, 317-85		44
190	Mechanistic studies on the substrate-tolerant lanthipeptide synthetase ProcM. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 10450-9	16.4	43
189	Evolutionary radiation of lanthipeptides in marine cyanobacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, E5424-E5433	11.5	43
188	Synthesis of isotopically labeled arachidonic acids to probe the reaction mechanism of prostaglandin H synthase. <i>Journal of the American Chemical Society</i> , <b>2002</b> , 124, 10785-96	16.4	43
187	Investigation of the substrate specificity of lactacin 481 synthetase by using nonproteinogenic amino acids. <i>ChemBioChem</i> , <b>2009</b> , 10, 911-9	3.8	42



186	Model studies of the histidine-tyrosine cross-link in cytochrome C oxidase reveal the flexible substituent effect of the imidazole moiety. <i>Organic Letters</i> , <b>2005</b> , 7, 2735-8	6.2	41
185	Chemical and Enzymatic Synthesis of Lanthionines. <i>Mini-Reviews in Organic Chemistry</i> , <b>2005</b> , 2, 23-37	1.7	41
184	Chemical synthesis of the lantibiotic lactacin 481 reveals the importance of lanthionine stereochemistry. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 7094-7	16.4	40
183	Hydroperoxylation by hydroxyethylphosphonate dioxygenase. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 16225-32	16.4	40
182	New Insights into the Biosynthesis of Fosfazinomycin. <i>Chemical Science</i> , <b>2016</b> , 7, 5219-5223	9.4	40
181	Heterologous production of the lantibiotic Ala(0)actagardine in Escherichia coli. <i>Chemical Communications</i> , <b>2012</b> , 48, 10966-8	5.8	39
180	Mechanistic investigations of human reticulocyte 15- and platelet 12-lipoxygenases with arachidonic acid. <i>Biochemistry</i> , <b>2009</b> , 48, 6259-67	3.2	39
179	Substrate selectivity of the sublancin S-glycosyltransferase. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 16394-7	16.4	38
178	Reconstitution and Substrate Specificity of the Radical S-Adenosyl-methionine Thiazole C-Methyltransferase in Thiomuracin Biosynthesis. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 4310-4313	16.4	37
177	Kinetic and structural investigations of the allosteric site in human epithelial 15-lipoxygenase-2. <i>Biochemistry</i> , <b>2009</b> , 48, 8721-30	3.2	37
176	Characterization of chlorovinylcobalamin, a putative intermediate in reductive degradation of chlorinated ethylenes. <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 4410-1	16.4	37
175	Reductive Dechlorination of Trichloroethylene: A Computational Study. <i>Journal of Physical Chemistry A</i> , <b>2002</b> , 106, 8708-8715	2.8	37
174	Enantioselective hydroborations catalyzed by rhodium(+1) complexes. <i>Tetrahedron: Asymmetry</i> , <b>1991</b> , 2, 613-621		37
173	Insights into AMS/PCAT transporters from biochemical and structural characterization of a double Glycine motif protease. <i>ELife</i> , <b>2019</b> , 8,	8.9	37
172	Glutamic acid is a carrier for hydrazine during the biosyntheses of fosfazinomycin and kinamycin. <i>Nature Communications</i> , <b>2018</b> , 9, 3687	17.4	37
171	Lanthionine synthetase C-like protein 2 (LanCL2) is a novel regulator of Akt. <i>Molecular Biology of the Cell</i> , <b>2014</b> , 25, 3954-61	3.5	36
170	Characterization and structure of Dhpl, a phosphonate O-methyltransferase involved in dehydrophos biosynthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 17557-62	11.5	36
169	On the stereochemistry of 2-hydroxyethylphosphonate dioxygenase. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 4236-9	16.4	36

- 168 Biosynthesis of 2-hydroxyethylphosphonate, an unexpected intermediate common to multiple phosphonate biosynthetic pathways. *Journal of Biological Chemistry*, **2008**, 283, 23161-8 5.4 36
- 167 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
- 166 Structure and mechanism of lanthipeptide biosynthetic enzymes. *Current Opinion in Structural Biology*, **2014**, 29, 58-66 8.1 34
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