

# Hung-wen Liu

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

129  
papers

5,209  
citations

38  
h-index

68  
g-index

138  
ext. papers

5,896  
ext. citations

14.6  
avg, IF

5.81  
L-index

#	Paper	IF	Citations
129	Studies of GenK and OxsB, two B12-dependent radical SAM enzymes involved in natural product biosynthesis. <i>Methods in Enzymology</i> , <b>2022</b> ,	1.7	
128	Byproduct formation during the biosynthesis of spinosyn A and evidence for an enzymatic interplay to prevent its formation. <i>Tetrahedron</i> , <b>2022</b> , 103, 132569	2.4	0
127	Evidence for an Enzyme-Catalyzed Rauhut-Currier Reaction during the Biosynthesis of Spinosyn A. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 20291-20295	16.4	2
126	Mechanistic Investigation of 1,2-Diol Dehydration of Paromamine Catalyzed by the Radical -Adenosyl-l-methionine Enzyme AprD4. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 5038-5043	16.4	3
125	Distinguishing Concerted versus Stepwise Mechanisms Using Isotope Effects on Isotope Effects. <i>Biochemistry</i> , <b>2021</b> , 60, 3416-3418	3.2	
124	Identification of a Pyrrole Intermediate Which Undergoes C-Glycosidation and Autoxidation to Yield the Final Product in Showdomycin Biosynthesis. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 17148-17154	16.4	3
123	Identification of a Pyrrole Intermediate Which Undergoes C-Glycosidation and Autoxidation to Yield the Final Product in Showdomycin Biosynthesis. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 17285-17291	3.6	0
122	Biosynthesis of Oxetanocin-A Includes a B-Dependent Radical SAM Enzyme That Can Catalyze both Oxidative Ring Contraction and the Demethylation of SAM. <i>Biochemistry</i> , <b>2021</b> , 60, 537-546	3.2	5
121	HygY Is a Twitch Radical SAM Epimerase with Latent Dehydrogenase Activity Revealed upon Mutation of a Single Cysteine Residue. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 15152-15158	16.4	1
120	Characterization of the coformycin biosynthetic gene cluster in. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 10265-10270	11.5	2
119	Recent Progress in Unusual Carbohydrate-Containing Natural Products Biosynthesis <b>2020</b> , 336-392		1
118	Identification of the Enzymes Mediating the Maturation of the Seryl-tRNA Synthetase Inhibitor SB-217452 during the Biosynthesis of Albomycins. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 3586-3590	3.6	
117	Identification of the Enzymes Mediating the Maturation of the Seryl-tRNA Synthetase Inhibitor SB-217452 during the Biosynthesis of Albomycins. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 3558-3562	16.4	7
116	Studies of lincosamide formation complete the biosynthetic pathway for lincomycin A. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 24794-24801	11.5	1
115	Biosynthetic Origin of the Atypical Stereochemistry in the Thioheptose Core of Albomycin Nucleoside Antibiotics. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 2211-2214	16.4	19
114	The Amipurimycin and Miharamycin Biosynthetic Gene Clusters: Unraveling the Origins of 2-Aminopurinylyl Peptidyl Nucleoside Antibiotics. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 14152-14159	16.4	12
113	Identification of the Formycin A Biosynthetic Gene Cluster from <i>Streptomyces kaniharaensis</i> Illustrates the Interplay between Biological Pyrazolopyrimidine Formation and de Novo Purine Biosynthesis. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 6127-6131	16.4	23

112	Identification of the C-Glycoside Synthases during Biosynthesis of the Pyrazole-C-Nucleosides Formycin and Pyrazofurin. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 16512-16516	16.4	14
111	Identification of the C-Glycoside Synthases during Biosynthesis of the Pyrazole-C-Nucleosides Formycin and Pyrazofurin. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 16664-16668	3.6	2
110	Elucidation of the Herbicidin Tailoring Pathway Offers Insights into Its Structural Diversity. <i>Organic Letters</i> , <b>2019</b> , 21, 1374-1378	6.2	8
109	Measurement of Net Rate Constants from Enzyme Progress Curves without Curve Fitting. <i>Biochemistry</i> , <b>2019</b> , 58, 4950-4956	3.2	0
108	Complete reconstitution of the diverse pathways of gentamicin B biosynthesis. <i>Nature Chemical Biology</i> , <b>2019</b> , 15, 295-303	11.7	13
107	Changes in Regioselectivity of H Atom Abstraction during the Hydroxylation and Cyclization Reactions Catalyzed by Hyoscyamine 6 $\beta$ -Hydroxylase. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 1062-1066	16.4	10
106	Mechanistic Implications of the Deamination of TDP-4-amino-4-deoxy-d-fucose Catalyzed by the Radical SAM Enzyme DesII. <i>Biochemistry</i> , <b>2018</b> , 57, 3130-3133	3.2	1
105	Following the electrons: peculiarities in the catalytic cycles of radical SAM enzymes. <i>Natural Product Reports</i> , <b>2018</b> , 35, 615-621	15.1	21
104	PARP-1-dependent recruitment of cold-inducible RNA-binding protein promotes double-strand break repair and genome stability. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, E1759-E1768	11.5	27
103	Influence of water and enzyme SpnF on the dynamics and energetics of the ambimodal [6+4]/[4+2] cycloaddition. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, E848-E855	11.5	45
102	Substrate Conformation Correlates with the Outcome of Hyoscyamine 6 $\beta$ -Hydroxylase Catalyzed Oxidation Reactions. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 7433-7436	16.4	15
101	Molecular basis of dimer formation during the biosynthesis of benzofluorene-containing atypical angucyclines. <i>Nature Communications</i> , <b>2018</b> , 9, 2088	17.4	37
100	Biosynthesis of oxetanocin: are two cofactors better than one?. <i>FASEB Journal</i> , <b>2018</b> , 32, 796.25	0.9	
99	Biochemical Basis of Vosevi, a New Treatment for Hepatitis C. <i>Biochemistry</i> , <b>2018</b> , 57, 479-480	3.2	7
98	Identification and Characterization of Enzymes Catalyzing Pyrazolopyrimidine Formation in the Biosynthesis of Formycin A. <i>Organic Letters</i> , <b>2017</b> , 19, 1426-1429	6.2	15
97	Characterization of the flavoenzyme XiaK as an $\alpha$ -hydroxylase and implications in indolosesquiterpene diversification. <i>Chemical Science</i> , <b>2017</b> , 8, 5067-5077	9.4	25
96	Natural [4 + 2]-Cyclases. <i>Chemical Reviews</i> , <b>2017</b> , 117, 5367-5388	68.1	84
95	A B-dependent radical SAM enzyme involved in oxetanocin A biosynthesis. <i>Nature</i> , <b>2017</b> , 544, 322-326	50.4	62

94	Reaction Catalyzed by GenK, a Cobalamin-Dependent Radical S-Adenosyl-L-methionine Methyltransferase in the Biosynthetic Pathway of Gentamicin, Proceeds with Retention of Configuration. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 16084-16087	16.4	37
93	Biochemistry: The surprising history of an antioxidant. <i>Nature</i> , <b>2017</b> , 551, 37-38	50.4	15
92	Investigation of the mechanism of the SpnF-catalyzed [4+2]-cycloaddition reaction in the biosynthesis of spinosyn A. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 10408-10413	11.5	27
91	Identification and Interrogation of the Herbicidin Biosynthetic Gene Cluster: First Insight into the Biosynthesis of a Rare Undecose Nucleoside Antibiotic. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 16450-16453	16.4	9
90	The Enzymology of Organic Transformations: A Survey of Name Reactions in Biological Systems. <i>Angewandte Chemie - International Edition</i> , <b>2017</b> , 56, 3446-3489	16.4	44
89	Die Enzymologie organischer Umwandlungen: Namensreaktionen in biologischen Systemen. <i>Angewandte Chemie</i> , <b>2017</b> , 129, 3498-3542	3.6	14
88	The type II isopentenyl Diphosphate:Dimethylallyl diphosphate isomerase (IDI-2): A model for acid/base chemistry in flavoenzyme catalysis. <i>Archives of Biochemistry and Biophysics</i> , <b>2017</b> , 632, 47-58	4.1	8
87	Theory and Application of the Relationship Between Steady-State Isotope Effects on Enzyme Intermediate Concentrations and Net Rate Constants. <i>Methods in Enzymology</i> , <b>2017</b> , 596, 459-499	1.7	3
86	Characterization of Enzymes Catalyzing Transformations of Cysteine S-Conjugated Intermediates in the Lincosamide Biosynthetic Pathway. <i>ChemBioChem</i> , <b>2016</b> , 17, 1606-11	3.8	11
85	An HD domain phosphohydrolase active site tailored for oxetanocin-A biosynthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 13750-13755	11.5	21
84	C3RDeoxygenation of Paromamine Catalyzed by a Radical S-Adenosylmethionine Enzyme: Characterization of the Enzyme AprD4 and Its Reductase Partner AprD3. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 3724-8	16.4	22
83	Insights into Complex Oxidation during BE-7585A Biosynthesis: Structural Determination and Analysis of the Polyketide Monooxygenase BexE. <i>ACS Chemical Biology</i> , <b>2016</b> , 11, 1137-47	4.9	8
82	Dynamically Complex [6+4] and [4+2] Cycloadditions in the Biosynthesis of Spinosyn A. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 3631-4	16.4	92
81	C3'-Deoxygenation of Paromamine Catalyzed by a Radical S-Adenosylmethionine Enzyme: Characterization of the Enzyme AprD4 and Its Reductase Partner AprD3. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 3788-3792	3.6	5
80	Study of Uridine 5RDiphosphate (UDP)-Galactopyranose Mutase Using UDP-5-Fluorogalactopyranose as a Probe: Incubation Results and Mechanistic Implications. <i>Organic Letters</i> , <b>2016</b> , 18, 3438-41	6.2	5
79	Fungal biotransformation of tanshinone results in [4+2] cycloaddition with sorbicillinol: evidence for enzyme catalysis and increased antibacterial activity. <i>Applied Microbiology and Biotechnology</i> , <b>2016</b> , 100, 8349-57	5.7	14
78	The structure of SpnF, a standalone enzyme that catalyzes [4 + 2] cycloaddition. <i>Nature Chemical Biology</i> , <b>2015</b> , 11, 256-8	11.7	89
77	Mechanistic Enzymology of the Radical SAM Enzyme DesII. <i>Israel Journal of Chemistry</i> , <b>2015</b> , 55, 315-324	3.4	20

76	Mechanistic Studies of the Radical S-Adenosylmethionine Enzyme DesII with TDP-D-Fucose. <i>Angewandte Chemie</i> , <b>2015</b> , 127, 874-877	3.6	8
75	Studies of 1-Amino-2,2-difluorocyclopropane-1-carboxylic Acid: Mechanism of Decomposition and Inhibition of 1-Aminocyclopropane-1-carboxylic Acid Deaminase. <i>Organic Letters</i> , <b>2015</b> , 17, 3342-5	6.2	6
74	Mechanistic Investigation of the Radical S-Adenosyl-L-methionine Enzyme DesII Using Fluorinated Analogues. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 4964-7	16.4	16
73	Mechanistic studies of the radical S-adenosylmethionine enzyme DesII with TDP-D-fucose. <i>Angewandte Chemie - International Edition</i> , <b>2015</b> , 54, 860-3	16.4	23
72	Structural and functional analysis of two di-domain aromatase/cyclases from type II polyketide synthases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, E6844-51	11.5	19
71	Biosynthesis of versipelostatin: identification of an enzyme-catalyzed [4+2]-cycloaddition required for macrocyclization of spirotetronate-containing polyketides. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 572-5	16.4	73
70	Mechanistic Investigation of the Radical SAM Enzyme DesII Using Fluorinated Analogs. <i>FASEB Journal</i> , <b>2015</b> , 29, 572.6	0.9	
69	In vitro characterization of LmbK and LmbO: identification of GDP-D-erythro- $\beta$ -D-gluco-octose as a key intermediate in lincomycin A biosynthesis. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 906-9	16.4	23
68	Chemoenzymatic synthesis of spinosyn A. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 13553-7	16.4	26
67	Co-opting sulphur-carrier proteins from primary metabolic pathways for 2-thiosugar biosynthesis. <i>Nature</i> , <b>2014</b> , 510, 427-31	50.4	51
66	Nitrosynthase-triggered oxidative carbon-carbon bond cleavage in baumycin biosynthesis. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 11457-60	16.4	13
65	Current development in isoprenoid precursor biosynthesis and regulation. <i>Current Opinion in Chemical Biology</i> , <b>2013</b> , 17, 571-9	9.7	73
64	The biosynthesis of nitrogen-, sulfur-, and high-carbon chain-containing sugars. <i>Chemical Society Reviews</i> , <b>2013</b> , 42, 4377-407	58.5	68
63	GenK-catalyzed C-6Rmethylation in the biosynthesis of gentamicin: isolation and characterization of a cobalamin-dependent radical SAM enzyme. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 8093-6	16.4	87
62	Methylerythritol phosphate pathway of isoprenoid biosynthesis. <i>Annual Review of Biochemistry</i> , <b>2013</b> , 82, 497-530	29.1	172
61	EPR-kinetic isotope effect study of the mechanism of radical-mediated dehydrogenation of an alcohol by the radical SAM enzyme DesII. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 2088-93	11.5	30
60	Mechanistic studies of an unprecedented enzyme-catalysed 1,2-phosphono-migration reaction. <i>Nature</i> , <b>2013</b> , 496, 114-8	50.4	54
59	Evidence that the fosfomycin-producing epoxidase, HppE, is a non-heme-iron peroxidase. <i>Science</i> , <b>2013</b> , 342, 991-5	33.3	57

58	Stereochemical studies of the type II isopentenyl diphosphate-dimethylallyl diphosphate isomerase implicate the FMN coenzyme in substrate protonation. <i>ChemBioChem</i> , <b>2012</b> , 13, 42-6	3.8	13
57	Enzymatic chemistry of cyclopropane, epoxide, and aziridine biosynthesis. <i>Chemical Reviews</i> , <b>2012</b> , 112, 1681-709	68.1	173
56	Construction of the octose 8-phosphate intermediate in lincomycin A biosynthesis: characterization of the reactions catalyzed by LmbR and LmbN. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 17432-5	16.4	37
55	Radical SAM enzymes in the biosynthesis of sugar-containing natural products. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , <b>2012</b> , 1824, 1231-44	4	31
54	Current developments and challenges in the search for a naturally selected Diels-Alderase. <i>Current Opinion in Chemical Biology</i> , <b>2012</b> , 16, 124-31	9.7	56
53	Structural basis of regioselectivity of a mononuclear iron enzyme in antibiotic fosfomycin biosynthesis. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 11262-9	16.4	33
52	Mechanistic studies of the radical S-adenosyl-L-methionine enzyme DesII: EPR characterization of a radical intermediate generated during its catalyzed dehydrogenation of TDP-D-quinovose. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 7292-5	16.4	24
51	Enzyme-catalysed [4+2] cycloaddition is a key step in the biosynthesis of spinosyn A. <i>Nature</i> , <b>2011</b> , 473, 109-12	50.4	229
50	Pathway and Enzyme Engineering and Applications for Glycodiversification <b>2011</b> , 309-362		
49	Linear free energy relationships demonstrate a catalytic role for the flavin mononucleotide coenzyme of the type II isopentenyl diphosphate:dimethylallyl diphosphate isomerase. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 9994-6	16.4	25
48	A biosynthetic pathway for BE-7585A, a 2-thiosugar-containing angucycline-type natural product. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 7405-17	16.4	46
47	Stoichiometry of the redox neutral deamination and oxidative dehydrogenation reactions catalyzed by the radical SAM enzyme DesII. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 2359-69	16.4	48
46	Mechanistic studies of the biosynthesis of 2-thiosugar: evidence for the formation of an enzyme-bound 2-ketohexose intermediate in BexX-catalyzed reaction. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 15544-6	16.4	13
45	Characterization and mechanistic studies of DesII: a radical S-adenosyl-L-methionine enzyme involved in the biosynthesis of TDP-D-desosamine. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 14030-42	16.4	53
44	A secondary kinetic isotope effect study of the 1-deoxy-D-xylulose-5-phosphate reductoisomerase-catalyzed reaction: evidence for a retroaldol-aldol rearrangement. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 2048-9	16.4	57
43	Unraveling the Mechanisms of Isoprenoid Biosynthetic Enzymes: Mechanistic Studies of the Early Stage Enzymes. <i>Chimia</i> , <b>2009</b> , 63, 334-339	1.3	5
42	Evidence for the involvement of acid/base chemistry in the reaction catalyzed by the type II isopentenyl diphosphate/dimethylallyl diphosphate isomerase from <i>Staphylococcus aureus</i> . <i>Biochemistry</i> , <b>2008</b> , 47, 2547-58	3.2	29
41	<sup>18</sup> O kinetic isotope effects in non-heme iron enzymes: probing the nature of Fe/O <sub>2</sub> intermediates. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 8122-3	16.4	48

40	Natural-product sugar biosynthesis and enzymatic glycodiversification. <i>Angewandte Chemie - International Edition</i> , <b>2008</b> , 47, 9814-59	16.4	311
39	Characterization of the Metal and DNA Binding Properties of an Unusual Zinc Finger from Poly(ADP-ribose) Polymerase-1 (PARP-1). <i>FASEB Journal</i> , <b>2008</b> , 22, 1057.12	0.9	
38	Elucidation of the kijanimicin gene cluster: insights into the biosynthesis of spirotetronate antibiotics and nitrosugars. <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 14670-83	16.4	112
37	Determination of the substrate binding mode to the active site iron of (S)-2-hydroxypropylphosphonic acid epoxidase using <sup>17</sup> O-enriched substrates and substrate analogues. <i>Biochemistry</i> , <b>2007</b> , 46, 12628-38	3.2	26
36	The biosynthesis of spinosyn in <i>Saccharopolyspora spinosa</i> : synthesis of the cross-bridging precursor and identification of the function of SpnJ. <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 14582-4	16.4	59
35	Characterization and mechanistic studies of type II isopentenyl diphosphate:dimethylallyl diphosphate isomerase from <i>Staphylococcus aureus</i> . <i>Biochemistry</i> , <b>2007</b> , 46, 8401-13	3.2	32
34	The diverse roles of flavin coenzymes--nature's most versatile thespians. <i>Journal of Organic Chemistry</i> , <b>2007</b> , 72, 6329-42	4.2	126
33	Characterization of TDP-4-keto-6-deoxy-D-glucose-3,4-ketoisomerase from the D-mycaminose biosynthetic pathway of <i>Streptomyces fradiae</i> : in vitro activity and substrate specificity studies. <i>Biochemistry</i> , <b>2007</b> , 46, 577-90	3.2	34
32	Unusual sugar biosynthesis and natural product glycodiversification. <i>Nature</i> , <b>2007</b> , 446, 1008-16	50.4	254
31	Manipulating nature's sugar biosynthetic machineries for glycodiversification of macrolides: Recent advances and future prospects. <i>Pure and Applied Chemistry</i> , <b>2007</b> , 79, 785-799	2.1	23
30	Characterization of SpnQ from the spinosyn biosynthetic pathway of <i>Saccharopolyspora spinosa</i> : mechanistic and evolutionary implications for C-3 deoxygenation in deoxysugar biosynthesis. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 14262-3	16.4	32
29	Stereochemical analysis of isopentenyl diphosphate isomerase type II from <i>Staphylococcus aureus</i> using chemically synthesized (S)- and (R)-[2- <sup>2</sup> H]isopentenyl diphosphates. <i>Organic Letters</i> , <b>2005</b> , 7, 5677-80	6.2	24
28	Structural insight into antibiotic fosfomycin biosynthesis by a mononuclear iron enzyme. <i>Nature</i> , <b>2005</b> , 437, 838-44	50.4	99
27	Biosynthesis of TDP-D-desosamine: identification of a strategy for C4 deoxygenation. <i>Angewandte Chemie - International Edition</i> , <b>2005</b> , 44, 6742-6	16.4	52
26	Mechanisms of enzymatic C=O bond cleavages in deoxyhexose biosynthesis. <i>Current Opinion in Chemical Biology</i> , <b>2002</b> , 6, 590-7	9.7	74
25	Formation of unusual sugars: mechanistic studies and biosynthetic applications. <i>Annual Review of Biochemistry</i> , <b>2002</b> , 71, 701-54	29.1	144
24	Insights into the Branched-Chain Formation of Mycarose: Methylation Catalyzed by an (S)-Adenosylmethionine-Dependent Methyltransferase. <i>Angewandte Chemie - International Edition</i> , <b>2001</b> , 40, 607-610	16.4	37
23	Protein purification and function assignment of the epoxidase catalyzing the formation of fosfomycin. <i>Journal of the American Chemical Society</i> , <b>2001</b> , 123, 4619-20	16.4	85

22	Characterisation of a sugar epimerase enzyme involved in the biosynthesis of a vancomycin-group antibiotic. <i>Chemical Communications</i> , <b>2000</b> , 1565-1566	5.8	13
21	Novel enzymatic mechanisms in carbohydrate metabolism. <i>Chemical Reviews</i> , <b>2000</b> , 100, 4615-62	68.1	86
20	Learning Nature's Strategies for Making Deoxy Sugars: Pathways, Mechanisms, and Combinatorial Applications. <i>Accounts of Chemical Research</i> , <b>1999</b> , 32, 579-588	24.3	78
19	Expression, Purification, and Characterization of TylB, an Aminotransferase Involved in the Biosynthesis of Mycaminose. <i>Journal of the American Chemical Society</i> , <b>1999</b> , 121, 7166-7167	16.4	25
18	Biosynthesis of Mycarose: Isolation and Characterization of Enzymes Involved in the C-2 Deoxygenation. <i>Journal of the American Chemical Society</i> , <b>1999</b> , 121, 8124-8125	16.4	50
17	An Efficient Synthesis of Unsymmetrical Optically Active Phosphatidyl Glycerol. <i>Journal of Organic Chemistry</i> , <b>1999</b> , 64, 648-651	4.2	8
16	Expression, Purification, and Characterization of TylM1, an N,N-Dimethyltransferase Involved in the Biosynthesis of Mycaminose. <i>Journal of the American Chemical Society</i> , <b>1998</b> , 120, 9951-9952	16.4	29
15	Mechanistic studies of the biosynthesis of paratose: purification and characterization of CDP-paratose synthase. <i>Biochemistry</i> , <b>1998</b> , 37, 4935-45	3.2	21
14	Biosynthesis of Desosamine: Molecular Evidence Suggesting $\beta$ -Glucosylation as a Self-Resistance Mechanism in Methymycin/Neomethymycin Producing Strain, <i>Streptomyces venezuelae</i> . <i>Journal of the American Chemical Society</i> , <b>1998</b> , 120, 9374-9375	16.4	27
13	Biosynthesis of Yersiniose: Attachment of the Two-Carbon Branched-Chain Is Catalyzed by a Thiamine Pyrophosphate-Dependent Flavoprotein. <i>Journal of the American Chemical Society</i> , <b>1998</b> , 120, 11796-11797	16.4	46
12	CDP-6-deoxy-6,6-difluoro-d-glucose: A Mechanism-Based Inhibitor for CDP-d-glucose 4,6-Dehydratase. <i>Journal of the American Chemical Society</i> , <b>1998</b> , 120, 9698-9699	16.4	24
11	Microbial Resistance to Mitomycins Involves a Redox Relay Mechanism. <i>Journal of the American Chemical Society</i> , <b>1997</b> , 119, 2576-2577	16.4	28
10	Mechanistic Studies of the Inactivation of Crotonase by (Methylenecyclopropyl)formyl-CoA. <i>Journal of the American Chemical Society</i> , <b>1996</b> , 118, 275-276	16.4	18
9	Probing the coenzyme and substrate binding events of CDP-D-glucose 4,6-dehydratase: mechanistic implications. <i>Biochemistry</i> , <b>1996</b> , 35, 4721-31	3.2	35
8	Studies of the redox properties of CDP-6-deoxy-L-threo-D-glycero-4-hexulose-3-dehydrase (E1) and CDP-6-deoxy-L-threo-D-glycero-4-hexulose-3-dehydrase reductase (E3): two important enzymes involved in the biosynthesis of ascarylose. <i>Biochemistry</i> , <b>1996</b> , 35, 7879-89	3.2	25
7	Biosynthesis of 3,6-dideoxyhexoses: in vivo and in vitro evidence for protein-protein interaction between CDP-6-deoxy-L-threo-D-glycero-4-hexulose 3-dehydrase (E1) and its reductase (E3). <i>Biochemistry</i> , <b>1996</b> , 35, 16412-20	3.2	219
6	Mechanistic Studies of 1-Aminocyclopropane-1-carboxylate Deaminase: Unique Covalent Catalysis by Coenzyme B6. <i>Journal of the American Chemical Society</i> , <b>1996</b> , 118, 8763-8764	16.4	34
5	Mechanistic Studies of the Biosynthesis of 3,6-Dideoxy Sugars: Stereochemical Analysis of C-3 Deoxygenation. <i>Journal of the American Chemical Society</i> , <b>1995</b> , 117, 5158-5159	16.4	22



4	Mechanistic Studies of the Biosynthesis of 3,6-Dideoxysugars in Bacteria: Exploration of a Novel C-O Bond Cleavage Event. <i>Journal of the Chinese Chemical Society</i> , <b>1995</b> , 42, 627-636	1.5	3
3	Pathways and mechanisms in the biogenesis of novel deoxysugars by bacteria. <i>Annual Review of Microbiology</i> , <b>1994</b> , 48, 223-56	17.5	240
2	Biochemistry of the Cyclopropyl Group 959-1025		23
1	Deciphering the Reaction Pathway of Mononuclear Iron Enzyme-Catalyzed N≡C Triple Bond Formation in Isocyanide Lipopeptide and Polyketide Biosynthesis. <i>ACS Catalysis</i> , 2270-2279	13.1	2