

Naturalâ€Product Sugar Biosynthesis and Enzymatic G

Angewandte Chemie - International Edition

47, 9814-9859

DOI: 10.1002/anie.200801204

Citation Report

#	ARTICLE	IF	CITATIONS
1	Chapter 21 Enzymatic Synthesis of TDP-Deoxysugars. <i>Methods in Enzymology</i> , 2009, 459, 521-544.	0.4	26
2	Chemoenzymatic elaboration of monosaccharides using engineered cytochrome P450 <sup>BM3</sup> demethylases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 16550-16555.	3.3	83
4	Sucrose Phosphorylase Harboring a Redesigned, Glycosyltransferase-Like Active Site Exhibits Retaining Glucosyl Transfer in the Absence of a Covalent Intermediate. <i>ChemBioChem</i> , 2009, 10, 2333-2337.	1.3	30
5	Enzymatic activity of a glycosyltransferase KanM2 encoded in the kanamycin biosynthetic gene cluster. <i>Journal of Antibiotics</i> , 2009, 62, 707-710.	1.0	14
6	Characterization and Mechanistic Studies of DesII: A Radical <i>S</i> -Adenosyl-methionine Enzyme Involved in the Biosynthesis of TDP-Desosamine. <i>Journal of the American Chemical Society</i> , 2009, 131, 14030-14042.	6.6	62
7	Synthesis at the Interface of Chemistry and Biology. <i>Journal of the American Chemical Society</i> , 2009, 131, 12497-12515.	6.6	90
8	Combined Chemical and Biosynthetic Route to Access a New Apoptolidin Congener. <i>Organic Letters</i> , 2009, 11, 3032-3034.	2.4	14
9	A survey of chemical methods for sugar-nucleotide synthesis. <i>Natural Product Reports</i> , 2009, 26, 1172.	5.2	125
10	Cloning and in vitro characterization of dTDP-6-deoxy-l-talose biosynthetic genes from <i>Kitasatospora kifunensis</i> featuring the dTDP-6-deoxy-l-lyxo-4-hexulose reductase that synthesizes dTDP-6-deoxy-l-talose. <i>Carbohydrate Research</i> , 2010, 345, 1958-1962.	1.1	6
11	Biosynthetic enzymes of unusual microbial sugars. <i>Current Opinion in Structural Biology</i> , 2010, 20, 543-550.	2.6	20
12	Glycosyltransferases and their Assays. <i>ChemBioChem</i> , 2010, 11, 1939-1949.	1.3	77
13	Cloning and Characterization of the Biosynthetic Gene Cluster of 16-Membered Macrolide Antibiotic FD-891: Involvement of a Dual Functional Cytochrome P450 Monooxygenase Catalyzing Epoxidation and Hydroxylation. <i>ChemBioChem</i> , 2010, 11, 1574-1582.	1.3	35
14	Highly Efficient Synthesis of UDP-GalNAc/GlcNAc Analogues with Promiscuous Recombinant Human UDP-GalNAc Pyrophosphorylase AGX1. <i>Chemistry - A European Journal</i> , 2010, 16, 13343-13345.	1.7	44
15	Methods to Study the Biosynthesis of Bacterial Furanosides. <i>Methods in Enzymology</i> , 2010, 478, 389-411.	0.4	19
16	Type II PKS. , 2010, , 227-303.		9
17	A Biosynthetic Pathway for BE-7585A, a 2-Thiosugar-Containing Angucycline-Type Natural Product. <i>Journal of the American Chemical Society</i> , 2010, 132, 7405-7417.	6.6	63
18	Molecular Architecture of a C-3-Methyltransferase Involved in the Biosynthesis of Tetrone. <i>Biochemistry</i> , 2010, 49, 5891-5898.	1.2	14
19	Enzymatic Total Synthesis of Rabelomycin, an Angucycline Group Antibiotic. <i>Organic Letters</i> , 2010, 12, 2814-2817.	2.4	33

#	ARTICLE	IF	CITATIONS
20	Chemoenzymatic and Bioenzymatic Synthesis of Carbohydrate Containing Natural Products. Topics in Current Chemistry, 2010, 297, 105-148.	4.0	10
21	Biosynthesis of Spinosyn in <i>Saccharopolyspora spinosa</i> : Synthesis of Permethylated Rhamnose and Characterization of the Functions of SpnH, SpnI, and SpnK. Journal of the American Chemical Society, 2010, 132, 2901-2903.	6.6	46
22	Redox Mechanism of Glycosidic Bond Hydrolysis Catalyzed by 6-Phospho- $\alpha$ -glucosidase: A DFT Study. Journal of Physical Chemistry B, 2010, 114, 11196-11206.	1.2	30
23	A De Novo Approach to the Synthesis of Glycosylated Methymycin Analogues with Structural and Stereochemical Diversity. Organic Letters, 2010, 12, 5150-5153.	2.4	36
24	Natural Products Version 2.0: Connecting Genes to Molecules. Journal of the American Chemical Society, 2010, 132, 2469-2493.	6.6	407
25	Characterization of Glycosyltransferase DesVII and Its Auxiliary Partner Protein DesVIII in the Methymycin/Pikromycin Biosynthetic Pathway. Biochemistry, 2010, 49, 8071-8084.	1.2	19
26	Mechanistic Studies of the Biosynthesis of 2-Thiosugar: Evidence for the Formation of an Enzyme-Bound 2-Ketohexose Intermediate in BexX-Catalyzed Reaction. Journal of the American Chemical Society, 2010, 132, 15544-15546.	6.6	18
27	Moving posttranslational modifications forward to biosynthesize the glycosylated thiopeptide nocathiacin I in <i>Nocardia</i> sp. ATCC202099. Molecular BioSystems, 2010, 6, 1180.	2.9	70
28	Characterization of Tiacumicin B Biosynthetic Gene Cluster Affording Diversified Tiacumicin Analogues and Revealing a Tailoring Dihalogenase. Journal of the American Chemical Society, 2011, 133, 1092-1105.	6.6	81
29	Combined Structural and Functional Investigation of a C-3 $\alpha$ -Ketoreductase Involved in the Biosynthesis of dTDP-Digitoxose. Biochemistry, 2011, 50, 5905-5917.	1.2	22
30	Biosynthetic Origin and Mechanism of Formation of the Aminoribosyl Moiety of Peptidyl Nucleoside Antibiotics. Journal of the American Chemical Society, 2011, 133, 14452-14459.	6.6	36
31	Using simple donors to drive the equilibria of glycosyltransferase-catalyzed reactions. Nature Chemical Biology, 2011, 7, 685-691.	3.9	113
32	Mechanistic Studies of the Radical <i>S</i> -Adenosyl-methionine Enzyme DesII: EPR Characterization of a Radical Intermediate Generated During Its Catalyzed Dehydrogenation of TDP-Quinovose. Journal of the American Chemical Society, 2011, 133, 7292-7295.	6.6	24
33	Pathways for the Biosynthesis of NDP Sugars. , 2011, , 195-235.		9
34	Challenging reaction equilibria. Nature Chemical Biology, 2011, 7, 658-659.	3.9	12
35	Molecular characterization of a novel thermostable mannose-6-phosphate isomerase from <i>Thermus thermophilus</i> . Biochimie, 2011, 93, 1659-1667.	1.3	9
36	Mechanisms and structures of vitamin B6-dependent enzymes involved in deoxy sugar biosynthesis. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2011, 1814, 1534-1547.	1.1	37
37	Recombinant <i>E. coli</i> Prototype Strains for <i>In Vivo</i> Glycorandomization. ACS Chemical Biology, 2011, 6, 95-100.	1.6	59

#	ARTICLE	IF	CITATIONS
38	Enzymatic methods for glyco(diversification/randomization) of drugs and small molecules. <i>Natural Product Reports</i> , 2011, 28, 1811.	5.2	214
39	Characterization of the TDP-d-ravidosamine biosynthetic pathway: one-pot enzymatic synthesis of TDP-d-ravidosamine from thymidine-5-phosphate and glucose-1-phosphate. <i>Organic and Biomolecular Chemistry</i> , 2011, 9, 1799.	1.5	14
40	Enzyme-catalysed [4+2] cycloaddition is a key step in the biosynthesis of spinosyn A. <i>Nature</i> , 2011, 473, 109-112.	13.7	265
41	2,3,6-Trideoxy sugar nucleotides: synthesis and stability. <i>Tetrahedron Letters</i> , 2011, 52, 5799-5801.	0.7	5
42	N-Methylimidazolium chloride-catalyzed pyrophosphate formation: Application to the synthesis of Lipid I and NDP-sugar donors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011, 21, 5050-5053.	1.0	36
43	Enzymes in the Synthesis of Glycoconjugates. <i>Chemical Reviews</i> , 2011, 111, 4259-4307.	23.0	246
44	Preliminary X-ray crystallographic analysis of the glycosyltransferase from a marine <i>Streptomyces</i> species. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2011, 67, 136-139.	0.7	1
46	Broadening Deoxysugar Glycodyversity: Natural and Engineered Transaldolases Unlock a Complementary Substrate Space. <i>Chemistry - A European Journal</i> , 2011, 17, 2623-2632.	1.7	55
47	The Transaldolase Family: New Synthetic Opportunities from an Ancient Enzyme Scaffold. <i>ChemBioChem</i> , 2011, 12, 1454-1474.	1.3	44
48	Investigating Mithramycin Deoxysugar Biosynthesis: Enzymatic Total Synthesis of TDP- <i>olivose</i> . <i>ChemBioChem</i> , 2011, 12, 2568-2571.	1.3	18
49	Glycosyltransferases as biocatalysts. <i>Current Opinion in Chemical Biology</i> , 2011, 15, 226-233.	2.8	147
50	A new route to dTDP-6-deoxy- <i>l</i> -talose and dTDP- <i>l</i> -rhamnose: dTDP- <i>l</i> -rhamnose 4-epimerase in <i>Burkholderia thailandensis</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011, 21, 3914-3917.	1.0	9
51	Engineered Biosynthesis of Gilvocarcin Analogues with Altered Deoxyhexopyranose Moieties. <i>Applied and Environmental Microbiology</i> , 2011, 77, 435-441.	1.4	31
52	Expanding the Nucleotide and Sugar 1-Phosphate Promiscuity of Nucleotidyltransferase RmlA via Directed Evolution. <i>Journal of Biological Chemistry</i> , 2011, 286, 13235-13243.	1.6	37
53	The S-Layer Glycome "Adding to the Sugar Coat of Bacteria. <i>International Journal of Microbiology</i> , 2011, 2011, 1-16.	0.9	31
54	Characterization of the Amicetin Biosynthesis Gene Cluster from <i>Streptomyces vinaceusdrappus</i> NRRL 2363 Implicates Two Alternative Strategies for Amide Bond Formation. <i>Applied and Environmental Microbiology</i> , 2012, 78, 2393-2401.	1.4	41
55	Recent Progress in Enzymatic Synthesis of Sugar Nucleotides. <i>Journal of Carbohydrate Chemistry</i> , 2012, 31, 535-552.	0.4	31
56	Crystal structure of the glycosyltransferase SnogD from the biosynthetic pathway of nogalamycin in <i>Streptomyces nogalater</i> . <i>FEBS Journal</i> , 2012, 279, 3251-3263.	2.2	17

#	ARTICLE	IF	CITATIONS
57	Optimised chemical synthesis of 5-substituted UDP-sugars and their evaluation as glycosyltransferase inhibitors. <i>Carbohydrate Research</i> , 2012, 364, 22-27.	1.1	17
58	7.23 New Emerging Reactions. , 2012, , 481-515.		1
59	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> , 2012, 134, 17432-17435.	6.6	46
60	Intramolecular cyclization of alkoxyaminosugars: access to novel glycosidase inhibitor families. <i>Organic and Biomolecular Chemistry</i> , 2012, 10, 4220.	1.5	4
62	Switching between <i>O</i> - and <i>C</i> -Glycosyltransferase through Exchange of Active Site Motifs. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 12879-12883.	7.2	69
63	Unique biocatalytic resolution of racemic tetrahydroberberubine via kinetic glycosylation and enantio-selective sulfation. <i>Chemical Communications</i> , 2012, 48, 6127.	2.2	16
64	Synthetic diversification of natural products: semi-synthesis and evaluation of triazole jadomycins. <i>Chemical Science</i> , 2012, 3, 1640.	3.7	35
65	A Processive Carbohydrate Polymerase That Mediates Bifunctional Catalysis Using a Single Active Site. <i>Biochemistry</i> , 2012, 51, 1148-1159.	1.2	32
66	Impact of glycosylation on physico-chemical and biological properties of nitrification inhibitors. <i>Tetrahedron</i> , 2012, 68, 7095-7102.	1.0	2
68	Site-Selective Catalysis: Toward a Regiodivergent Resolution of 1,2-Diols. <i>Journal of the American Chemical Society</i> , 2012, 134, 7321-7324.	6.6	89
69	Structure of the Glycosyltransferase EryCIII in Complex with its Activating P450 Homologue EryCII. <i>Journal of Molecular Biology</i> , 2012, 415, 92-101.	2.0	29
71	Cooperation of Two Bifunctional Enzymes in the Biosynthesis and Attachment of Deoxysugars of the Antitumor Antibiotic Mithramycin. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 10638-10642.	7.2	27
72	Angucyclines: Biosynthesis, mode-of-action, new natural products, and synthesis. <i>Natural Product Reports</i> , 2012, 29, 264-325.	5.2	280
73	Tackling tunicamycin. <i>Nature Chemistry</i> , 2012, 4, 520-521.	6.6	4
74	Radical SAM enzymes in the biosynthesis of sugar-containing natural products. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2012, 1824, 1231-1244.	1.1	39
75	Structural and Functional Studies on a $\beta$ -Epimerase Involved in the Biosynthesis of dTDP-6-deoxy-d-allose. <i>Biochemistry</i> , 2012, 51, 9375-9383.	1.2	17
76	Glycosynthases as tools for the production of glycan analogs of natural products. <i>Natural Product Reports</i> , 2012, 29, 697.	5.2	48
77	The structural biology of enzymes involved in natural product glycosylation. <i>Natural Product Reports</i> , 2012, 29, 1201.	5.2	99

#	ARTICLE	IF	CITATIONS
78	Ribosome-independent biosynthesis of biologically active peptides: Application of synthetic biology to generate structural diversity. <i>FEBS Letters</i> , 2012, 586, 2065-2075.	1.3	50
79	Ketoolivosyl-tetracenomycin C: A new ketosugar bearing tetracenomycin reveals new insight into the substrate flexibility of glycosyltransferase ElmGT. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012, 22, 2247-2250.	1.0	12
80	Biological synthesis of quercetin 3-O-N-acetylglucosamine conjugate using engineered <i>Escherichia coli</i> expressing UGT78D2. <i>Applied Microbiology and Biotechnology</i> , 2012, 93, 2447-2453.	1.7	46
81	Carbohydrate synthesis and biosynthesis technologies for cracking of the glycan code: Recent advances. <i>Biotechnology Advances</i> , 2013, 31, 17-37.	6.0	14
82	Characterizing Amosamine Biosynthesis in Amicetin Reveals AmiG as a Reversible Retaining Glycosyltransferase. <i>Journal of the American Chemical Society</i> , 2013, 135, 12152-12155.	6.6	27
83	Cloning and sequencing of the kedarcidin biosynthetic gene cluster from <i>Streptoalloteichus</i> sp. ATCC 53650 revealing new insights into biosynthesis of the enediyne family of antitumor antibiotics. <i>Molecular BioSystems</i> , 2013, 9, 478.	2.9	39
84	In vivo investigation of the substrate recognition capability and activity affecting amino acid residues of glycosyltransferase FscMI in the biosynthesis of candicidin. <i>Molecular BioSystems</i> , 2013, 9, 422.	2.9	7
85	Improvement of Regio-Specific Production of Myricetin-3-O- $\beta$ -l-Rhamnoside in Engineered <i>Escherichia coli</i> . <i>Applied Biochemistry and Biotechnology</i> , 2013, 171, 1956-1967.	1.4	24
86	Synthesis and Antibacterial Activity of Doxycycline Neoglycosides. <i>Journal of Natural Products</i> , 2013, 76, 1627-1636.	1.5	14
87	Deoxysugar pathway interchange for erythromycin analogues heterologously produced through <i>Escherichia coli</i> . <i>Metabolic Engineering</i> , 2013, 20, 92-100.	3.6	21
88	Unconventional Origin and Hybrid System for Construction of Pyrrolopyrrole Moiety in Kosinostatin Biosynthesis. <i>Chemistry and Biology</i> , 2013, 20, 796-805.	6.2	30
89	Glycogenomics as a mass spectrometry-guided genome-mining method for microbial glycosylated molecules. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, E4407-16.	3.3	101
90	Highly regioselective glycosylation of xylosyl-containing taxanes by <i>Enterobacter cloacae</i> . <i>FASEB J</i> , 2013, 27, 158-162.	1.1	0
91	Structure of a Sugar <i>N</i> -Formyltransferase from <i>Campylobacter jejuni</i> . <i>Biochemistry</i> , 2013, 52, 6114-6126.	1.2	21
92	Synthesis of Leonosides E and F derived from <i>Leonurus japonicus</i> Houtt. <i>Carbohydrate Research</i> , 2013, 380, 174-180.	1.1	8
93	Synthesis of Cardiac Glycoside Analogs by Catalyst-Controlled, Regioselective Glycosylation of Digitoxin. <i>Organic Letters</i> , 2013, 15, 1358-1361.	2.4	73
94	The biosynthesis of nitrogen-, sulfur-, and high-carbon chain-containing sugars. <i>Chemical Society Reviews</i> , 2013, 42, 4377.	18.7	75
95	Structures and Comparative Characterization of Biosynthetic Gene Clusters for Cyanosporosides, Enediyne-Derived Natural Products from Marine Actinomycetes. <i>Journal of the American Chemical Society</i> , 2013, 135, 4171-4174.	6.6	73

#	ARTICLE	IF	CITATIONS
96	Total Synthesis of the Postulated Structure of Fulcineroside. <i>Chemistry - A European Journal</i> , 2013, 19, 7423-7436.	1.7	22
97	Achievements and impacts of glycosylation reactions involved in natural product biosynthesis in prokaryotes. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 5691-5704.	1.7	31
98	Profiling Glycosyltransferase Activities by Tritium Imaging of Glycan Microarrays. <i>ChemBioChem</i> , 2013, 14, 862-869.	1.3	9
99	Active Site Architecture of a Sugar N-Oxygenase. <i>Biochemistry</i> , 2013, 52, 3191-3193.	1.2	16
100	Structure of EvaA: A Paradigm for Sugar 2,3-Dehydratases. <i>Biochemistry</i> , 2013, 52, 2078-2088.	1.2	3
101	Efficient Enzymatic Synthesis of Guanosine 5'-Diphosphate-Sugars and Derivatives. <i>Organic Letters</i> , 2013, 15, 5528-5530.	2.4	35
102	Enzymatic C-glycosylation: Insights from the study of a complementary pair of plant O- and C-glucosyltransferases. <i>Pure and Applied Chemistry</i> , 2013, 85, 1865-1877.	0.9	21
103	Broadening the scope of glycosyltransferase-catalyzed sugar nucleotide synthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 7648-7653.	3.3	88
104	Engineering of a Cytidine 5'-Monophosphate Sialic Acid Synthetase for Improved Tolerance to Functional Sialic Acids. <i>Advanced Synthesis and Catalysis</i> , 2013, 355, 3597-3612.	2.1	18
105	MoeH: a natural glycorandomizer from the moenomycin biosynthetic pathway. <i>Molecular Microbiology</i> , 2013, 90, 1324-1338.	1.2	13
106	Leloir Glycosyltransferases and Natural Product Glycosylation: Biocatalytic Synthesis of the C-Glucoside Nothofagin, a Major Antioxidant of Redbush Herbal Tea. <i>Advanced Synthesis and Catalysis</i> , 2013, 355, 2757-2763.	2.1	93
107	Biocatalytic Syntheses of Tertiary Alcohols. <i>Chemie-Ingenieur-Technik</i> , 2013, 85, 795-808.	0.4	3
108	Uncovering a Glycosyltransferase Provides Insights into the Glycosylation Step during Macrolactin and Bacillaene Biosynthesis. <i>ChemBioChem</i> , 2014, 15, 2747-2753.	1.3	19
109	Multivariate sequence analysis reveals additional function impacting residues in the SDR superfamily. <i>Proteins: Structure, Function and Bioinformatics</i> , 2014, 82, 2842-2856.	1.5	5
110	Biosynthetic Origin of the Antibiotic Cyclocarbamate Brabantamide A (SB253514) in Plant-Associated <i>Pseudomonas</i> .. <i>ChemBioChem</i> , 2014, 15, 259-266.	1.3	59
111	Enzymatic Synthesis of Tertiary Alcohols. <i>ChemBioEng Reviews</i> , 2014, 1, 14-26.	2.6	30
113	Enzymatic Methylation and Structure-Activity-Relationship Studies on Polycarcin V, a Gilvocarcin-Type Antitumor Agent. <i>ChemBioChem</i> , 2014, 15, 2729-2735.	1.3	8
114	Structure and mechanism of a nonhaem-iron SAM-dependent C-methyltransferase and its engineering to a hydratase and an O-methyltransferase. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2014, 70, 1549-1560.	2.5	30



#	ARTICLE	IF	CITATIONS
115	Specificity and Promiscuity at the Branch Point in Gentamicin Biosynthesis. <i>Chemistry and Biology</i> , 2014, 21, 608-618.	6.2	42
116	Synthesis of potential allosteric modulators of Hsp90 by chemical glycosylation of Eupomatenoid-6. <i>Carbohydrate Research</i> , 2014, 390, 33-41.	1.1	12
118	Direct Glycosylation of Bioactive Small Molecules with Glycosyl Iodide and Strained Olefin as Acid Scavenger. <i>Journal of Organic Chemistry</i> , 2014, 79, 1100-1110.	1.7	24
119	Enzymatic glycosylation of the topical antibiotic mupirocin. <i>Glycoconjugate Journal</i> , 2014, 31, 563-572.	1.4	10
120	Sequential one-pot enzymatic synthesis of oligo-N-acetyllactosamine and its multi-sialylated extensions. <i>Chemical Communications</i> , 2014, 50, 5786-5789.	2.2	30
121	Biotransformation of tetrahydroprotoberberines by <i>Panax ginseng</i> hairy root culture. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2014, 110, 133-139.	1.8	5
122	A two-step O- to C-glycosidic bond rearrangement using complementary glycosyltransferase activities. <i>Chemical Communications</i> , 2014, 50, 5465-5468.	2.2	37
124	Identification of the Flagellin Glycosylation System in <i>Burkholderia cenocepacia</i> and the Contribution of Glycosylated Flagellin to Evasion of Human Innate Immune Responses. <i>Journal of Biological Chemistry</i> , 2014, 289, 19231-19244.	1.6	63
125	Production of a Novel <i>N</i> -Monomethylated Dideoxysugar. <i>Biochemistry</i> , 2014, 53, 1105-1107.	1.2	5
126	Synthesis of Nitrogen-Containing Furanose Sugar Nucleotides for Use as Enzymatic Probes. <i>Organic Letters</i> , 2014, 16, 212-215.	2.4	13
127	Towards the synthesis of glycosylated dihydrochalcone natural products using glycosyltransferase-catalysed cascade reactions. <i>Green Chemistry</i> , 2014, 16, 4417-4425.	4.6	52
128	Enzymatic synthesis of epothilone A glycosides. <i>AMB Express</i> , 2014, 4, 31.	1.4	38
129	In Vitro Characterization of LmbK and LmbO: Identification of GDP-d-erythro- $\beta$ -D-glucopyranosyl-1,6-galactopyranoside as a Key Intermediate in Lincomycin A Biosynthesis. <i>Journal of the American Chemical Society</i> , 2014, 136, 906-909.	6.6	28
130	Bioactive oligosaccharide natural products. <i>Natural Product Reports</i> , 2014, 31, 1026-1042.	5.2	102
131	Biocatalysts for Natural Product Biosynthesis. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2014, 5, 347-366.	3.3	47
132	Exploring the Catalytic Promiscuity of a New Glycosyltransferase from <i>Carthamus tinctorius</i> . <i>Organic Letters</i> , 2014, 16, 4874-4877.	2.4	83
133	Exploring the glycosylation capabilities of <i>Gliocladium deliquescens</i> NRRL 1086 on hydroxyl benzophenones. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2014, 99, 85-88.	1.8	4
134	CAZyme discovery and design for sweet dreams. <i>Current Opinion in Chemical Biology</i> , 2014, 19, 17-24.	2.8	74



#	ARTICLE	IF	CITATIONS
135	A General NMR-Based Strategy for the in Situ Characterization of Sugar-Nucleotide-Dependent Biosynthetic Pathways. <i>Organic Letters</i> , 2014, 16, 3220-3223.	2.4	9
136	Co-opting sulphur-carrier proteins from primary metabolic pathways for 2-thiosugar biosynthesis. <i>Nature</i> , 2014, 510, 427-431.	13.7	59
137	Neoglycosylation and neoglycorandomization: enabling tools for the discovery of novel glycosylated bioactive probes and early stage leads. <i>MedChemComm</i> , 2014, 5, 1036-1047.	3.5	44
138	Enzymatic Redox Cascade for One-Pot Synthesis of Uridine 5'-Diphosphate Xylose from Uridine 5'-Diphosphate Glucose. <i>Advanced Synthesis and Catalysis</i> , 2014, 356, 3575-3584.	2.1	30
140	Characterization of Early Enzymes Involved in TDP-Aminodideoxypentose Biosynthesis en Route to Indolocarbazole AT2433. <i>ChemBioChem</i> , 2015, 16, 2141-2146.	1.3	6
141	Probing the Catalytic Promiscuity of a Regio- and Stereospecific C-Glycosyltransferase from <i>Mangifera indica</i> . <i>Angewandte Chemie - International Edition</i> , 2015, 54, 12678-12682.	7.2	96
142	Structural characterization of AtmS13, a putative sugar aminotransferase involved in indolocarbazole AT2433 aminopentose biosynthesis. <i>Proteins: Structure, Function and Bioinformatics</i> , 2015, 83, 1547-1554.	1.5	10
144	Characterization of a Mannose-6-Phosphate Isomerase from <i>Bacillus amyloliquefaciens</i> and Its Application in Fructose-6-Phosphate Production. <i>PLoS ONE</i> , 2015, 10, e0131585.	1.1	15
145	Structural Basis for the Stereochemical Control of Amine Installation in Nucleotide Sugar Aminotransferases. <i>ACS Chemical Biology</i> , 2015, 10, 2048-2056.	1.6	12
146	Structural Basis of Substrate Specificity and Regiochemistry in the MycF/TylF Family of Sugar O-Methyltransferases. <i>ACS Chemical Biology</i> , 2015, 10, 1340-1351.	1.6	12
147	Biosynthesis of trioxacarcin revealing a different starter unit and complex tailoring steps for type II polyketide synthase. <i>Chemical Science</i> , 2015, 6, 3440-3447.	3.7	31
148	Structural Characterization of CalS8, a TDP-1-d-Glucose Dehydrogenase Involved in Calicheamicin Aminodideoxypentose Biosynthesis. <i>Journal of Biological Chemistry</i> , 2015, 290, 26249-26258.	1.6	5
149	Genomes to natural products Prediction Informatics for Secondary Metabolomes (PRISM). <i>Nucleic Acids Research</i> , 2015, 43, gkv1012.	6.5	210
150	Delineating the Biosynthesis of Gentamicin X2, the Common Precursor of the Gentamicin C Antibiotic Complex. <i>Chemistry and Biology</i> , 2015, 22, 251-261.	6.2	60
151	Enzymatic synthesis of nucleobase-modified UDP-sugars: scope and limitations. <i>Carbohydrate Research</i> , 2015, 404, 17-25.	1.1	21
152	A comprehensive review of glycosylated bacterial natural products. <i>Chemical Society Reviews</i> , 2015, 44, 7591-7697.	18.7	347
153	Biosynthesis of the Carbamoylated D-Gulosamine Moiety of Streptothricins: Involvement of a Guanidino-N-glycosyltransferase and an N-Acetyl-D-gulosamine Deacetylase. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 5175-5178.	2.2	25
154	Mechanistic Enzymology of the Radical SAM Enzyme DesII. <i>Israel Journal of Chemistry</i> , 2015, 55, 315-324.	1.0	20

#	ARTICLE	IF	CITATIONS
155	Metabolic faecal fingerprinting of trans-resveratrol and quercetin following a high-fat sucrose dietary model using liquid chromatography coupled to high-resolution mass spectrometry. <i>Food and Function</i> , 2015, 6, 2758-2767.	2.1	23
156	O-Glycosylation methods in the total synthesis of complex natural glycosides. <i>Natural Product Reports</i> , 2015, 32, 1331-1355.	5.2	158
157	An automated Genomes-to-Natural Products platform (GNP) for the discovery of modular natural products. <i>Nature Communications</i> , 2015, 6, 8421.	5.8	123
158	Opportunities for enzyme catalysis in natural product chemistry. <i>Tetrahedron</i> , 2015, 71, 1473-1508.	1.0	43
159	Kinetic evaluation of glucose 1-phosphate analogues with a thymidyltransferase using a continuous coupled enzyme assay. <i>Organic and Biomolecular Chemistry</i> , 2015, 13, 866-875.	1.5	17
160	Glycosyltransferase-Mediated Exchange of Rare Microbial Sugars with Natural Products. <i>Frontiers in Microbiology</i> , 2016, 7, 1849.	1.5	9
161	A Novel FC116/BC10 Mutation Distinctively Causes Alteration in the Expression of the Genes for Cell Wall Polymer Synthesis in Rice. <i>Frontiers in Plant Science</i> , 2016, 7, 1366.	1.7	23
162	A Single Gene Cluster for Chalcomycins and Aldgamycins: Genetic Basis for Bifurcation of Their Biosynthesis. <i>ChemBioChem</i> , 2016, 17, 1241-1249.	1.3	10
163	Screening of recombinant glycosyltransferases reveals the broad acceptor specificity of stevia UGT-76G1. <i>Journal of Biotechnology</i> , 2016, 233, 49-55.	1.9	43
164	A Kinase-Independent One-Pot Multienzyme Cascade for an Expedient Synthesis of Guanosine 5'-Diphosphate. <i>Advanced Synthesis and Catalysis</i> , 2016, 358, 3809-3816.	2.1	16
165	Donor substrate flexibility study of AtUGT89C1, a glycosyltransferase from <i>Arabidopsis thaliana</i> . <i>Journal of Carbohydrate Chemistry</i> , 2016, 35, 367-377.	0.4	4
166	Exploring the aglycon promiscuity of a new glycosyltransferase from <i>Pueraria lobata</i> . <i>Tetrahedron Letters</i> , 2016, 57, 1518-1521.	0.7	14
167	Complete Genome Sequence of <i>Streptomyces venezuelae</i> ATCC 15439, Producer of the Methymycin/Pikromycin Family of Macrolide Antibiotics, Using PacBio Technology. <i>Genome Announcements</i> , 2016, 4, .	0.8	9
168	Synthesis of $\beta$ -Deoxymono and Difluorohexopyranosyl 1-Phosphates and Kinetic Evaluation with Thymidyl- and Guanidyltransferases. <i>Journal of Organic Chemistry</i> , 2016, 81, 8816-8825.	1.7	21
169	Conformational studies of glycosylated cyclic oligomers of furanoid sugar amino acids. <i>Tetrahedron</i> , 2016, 72, 5671-5678.	1.0	2
170	Methyl 1,2-Orthoesters in Acid-Washed Molecular Sieves Mediated Glycosylations. <i>ChemistrySelect</i> , 2016, 1, 6011-6015.	0.7	9
171	One-pot four-enzyme synthesis of thymidinediphosphate-l-rhamnose. <i>Chemical Communications</i> , 2016, 52, 13995-13998.	2.2	16
172	Diversity synthesis of tetrahydroprotoberberines glycosides by combined chemical and microbial catalysis. <i>Chinese Journal of Natural Medicines</i> , 2016, 14, 783-788.	0.7	1

#	ARTICLE	IF	CITATIONS
173	Selvamicin, an atypical antifungal polyene from two alternative genomic contexts. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12940-12945.	3.3	88
174	Elucidation of the glycosylation steps during biosynthesis of antitumor macrolides PM100117 and PM100118 and engineering for novel derivatives. Microbial Cell Factories, 2016, 15, 187.	1.9	15
175	Genome-wide identification and characterization of macrolide glycosyltransferases from a marine-derived <i>Bacillus</i> strain and their phylogenetic distribution. Environmental Microbiology, 2016, 18, 4770-4781.	1.8	13
176	Recent Trends in Nucleotide Synthesis. Chemical Reviews, 2016, 116, 7854-7897.	23.0	148
177	Functional analysis of anomeric sugar kinases. Carbohydrate Research, 2016, 432, 23-30.	1.1	13
178	Donor specificity of YjiC glycosyltransferase determines the conjugation of cytosolic NDP-sugar in in vivo glycosylation reactions. Enzyme and Microbial Technology, 2016, 91, 26-33.	1.6	7
179	Chemoenzymatic synthesis of the bacterial polysaccharide repeating unit undecaprenyl pyrophosphate and its analogs. Nature Protocols, 2016, 11, 1280-1298.	5.5	16
180	Biochemical and Structural Insights into the Aminotransferase CrmG in Caerulomycin Biosynthesis. ACS Chemical Biology, 2016, 11, 943-952.	1.6	23
181	Development of an Unnatural Amino Acid Incorporation System in the Actinobacterial Natural Product Producer <i>Streptomyces venezuelae</i> ATCC 15439. ACS Synthetic Biology, 2016, 5, 125-132.	1.9	21
182	Silkrose: A novel acidic polysaccharide from the silkworm that can stimulate the innate immune response. Carbohydrate Polymers, 2016, 136, 995-1001.	5.1	30
183	Isotope Probing of the UDP-Arabinose/UDP-Xylose Synthase Reaction: Evidence of a Mechanism via a Coupled Oxidation and Aldol Cleavage. Angewandte Chemie - International Edition, 2017, 56, 2503-2507.	7.2	13
184	Biocatalytic Cascade of Polyphosphate Kinase and Sucrose Synthase for Synthesis of Nucleotide-Activated Derivatives of Glucose. Advanced Synthesis and Catalysis, 2017, 359, 292-301.	2.1	30
185	Replacing D-Glucosamine with Its L-Enantiomer in Glycosylated Antitumor Ether Lipids (GAELs) Retains Cytotoxic Effects against Epithelial Cancer Cells and Cancer Stem Cells. Journal of Medicinal Chemistry, 2017, 60, 2142-2147.	2.9	13
186	Molecular cloning and expression of a glycosyltransferase from <i>Bacillus subtilis</i> for modification of morin and related polyphenols. Biotechnology Letters, 2017, 39, 1229-1235.	1.1	3
187	Total synthesis of natural products containing benzofuran rings. RSC Advances, 2017, 7, 24470-24521.	1.7	122
188	Engineered jadomycin analogues with altered sugar moieties revealing JadS as a substrate flexible O-glycosyltransferase. Applied Microbiology and Biotechnology, 2017, 101, 5291-5300.	1.7	5
189	Application of GC/MS Soft Ionization for Isomeric Biological Compound Analysis. Critical Reviews in Analytical Chemistry, 2017, 47, 438-453.	1.8	16
190	New insights into polyene macrolide biosynthesis in <i>Couchioplanes caeruleus</i> . Molecular BioSystems, 2017, 13, 866-873.	2.9	9

#	ARTICLE	IF	CITATIONS
191	Isolation, structure elucidation and biosynthesis of benzo[b]fluorene nenenstatin A from deep-sea derived <i>Micromonospora echinospora</i> SCSIO 04089. <i>Tetrahedron</i> , 2017, 73, 3585-3590.	1.0	36
192	3- <i>Aminodeoxy</i> pyranoses in Glycosylation: Diversity-Oriented Synthesis and Assembly in Oligosaccharides. <i>Angewandte Chemie</i> , 2017, 129, 5311-5315.	1.6	7
193	3- <i>Aminodeoxy</i> pyranoses in Glycosylation: Diversity-Oriented Synthesis and Assembly in Oligosaccharides. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 5227-5231.	7.2	55
194	Exploiting the aglycon promiscuity of glycosyltransferase Bs-YjiC from <i>Bacillus subtilis</i> and its application in synthesis of glycosides. <i>Journal of Biotechnology</i> , 2017, 248, 69-76.	1.9	64
195	An enzymatic approach to configurationally rare <i>trans</i> -androsteronyl- $\alpha$ -D-glucoside and its potential anticancer application. <i>Chemical Biology and Drug Design</i> , 2017, 89, 61-66.	1.5	6
196	Synthesis of Sialic Acids, Their Derivatives, and Analogs by Using a Whole-Cell Catalyst. <i>Chemistry - A European Journal</i> , 2017, 23, 15143-15149.	1.7	13
197	Recent advances in the chemical synthesis of sugar-nucleotides. <i>Carbohydrate Research</i> , 2017, 451, 95-109.	1.1	35
198	An ortho C-methylation/O-glycosylation motif on a hydroxy-coumarin scaffold, selectively installed by biocatalysis. <i>Organic and Biomolecular Chemistry</i> , 2017, 15, 7917-7924.	1.5	11
199	Reaktion von UDP-Apiose/UDP-Xylose-Synthase mit isotopenmarkierten Substraten: Hinweise auf einen Mechanismus mit gekoppelter Oxidation und Aldolspaltung. <i>Angewandte Chemie</i> , 2017, 129, 2544-2548.	1.6	0
200	Selective Oxidation of Secondary Amines to N,N-Disubstituted Hydroxylamines by Choline Peroxydisulfate. <i>Synlett</i> , 2017, 28, 2315-2319.	1.0	7
201	Biosynthesis of Glycyrrhetic Acid-3-O-monoglucose Using Glycosyltransferase UGT73C11 from <i>Barbarea vulgaris</i> . <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 14949-14958.	1.8	24
202	Enabling techniques in the search for new antibiotics: Combinatorial biosynthesis of sugar-containing antibiotics. <i>Biochemical Pharmacology</i> , 2017, 134, 56-73.	2.0	14
203	Diversifying Natural Products with Promiscuous Glycosyltransferase Enzymes via a Sustainable Microbial Fermentation Approach. <i>Frontiers in Chemistry</i> , 2017, 5, 110.	1.8	6
204	New insights into bacterial type II polyketide biosynthesis. <i>F1000Research</i> , 2017, 6, 172.	0.8	70
205	Biocatalytic C-Glycosylation of Coumarins Using an Engineered C-Glycosyltransferase. <i>Organic Letters</i> , 2018, 20, 1634-1637.	2.4	25
206	<scp>d</scp> -Sedoheptulose-7-phosphate is a common precursor for the heptoses of septacidin and hygromycin B. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 2818-2823.	3.3	40
207	The expansive library of jadomycins. <i>Canadian Journal of Chemistry</i> , 2018, 96, 495-501.	0.6	5
208	Structural and functional studies of Spr1654: an essential aminotransferase in teichoic acid biosynthesis in <i>Streptococcus pneumoniae</i> . <i>Open Biology</i> , 2018, 8, 170248.	1.5	2

#	ARTICLE	IF	CITATIONS
209	Probing and Engineering Key Residues for Bis-<i>C</i>-glycosylation and Promiscuity of a <i>C</i>-Glycosyltransferase. ACS Catalysis, 2018, 8, 4917-4927.	5.5	41
211	Isolation and characterization of a multifunctional flavonoid glycosyltransferase from <i>Ornithogalum caudatum</i> with glycosidase activity. Scientific Reports, 2018, 8, 5886.	1.6	19
212	Use of a Promiscuous Glycosyltransferase from <i>Bacillus subtilis</i> 168 for the Enzymatic Synthesis of Novel Protopanaxatriol-Type Ginsenosides. Journal of Agricultural and Food Chemistry, 2018, 66, 943-949.	2.4	40
213	Methyltransferases of gentamicin biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1340-1345.	3.3	41
214	UGT74AN1, a Permissive Glycosyltransferase from <i>Asclepias curassavica</i> for the Regiospecific Steroid 3-<i>O</i>-Glycosylation. Organic Letters, 2018, 20, 534-537.	2.4	35
216	Tailoring Natural Products with Glycosyltransferases. , 2018, , 219-263.		4
217	Enzymatic Synthesis of Novel Glycyrrhizic Acid Glucosides Using a Promiscuous <i>Bacillus</i> Glycosyltransferase. Catalysts, 2018, 8, 615.	1.6	31
218	Acyl Glycosides through Stereospecific Glycosyl Cross-Coupling: Rapid Access to C(sp <sup>3</sup> )<sup>3</sup>-Linked Glycomimetics. ACS Central Science, 2018, 4, 1652-1662.	5.3	50
219	OcUGT1-Catalyzed Glucosylation of Sulfuretin Yields Ten Glucosides. Catalysts, 2018, 8, 416.	1.6	5
220	Engineering Heterologous Production of Salicylate Glucoside and Glycosylated Variants. Frontiers in Microbiology, 2018, 9, 2241.	1.5	7
221	Rifamycin congeners kanglemycins are active against rifampicin-resistant bacteria via a distinct mechanism. Nature Communications, 2018, 9, 4147.	5.8	57
224	Identification and Isolation of Glucosyltransferases (GT) Expressed Fungi Using a Two-Photon Ratiometric Fluorescent Probe Activated by GT. Analytical Chemistry, 2018, 90, 13341-13347.	3.2	24
225	Leloir Glycosyltransferases as Biocatalysts for Chemical Production. ACS Catalysis, 2018, 8, 6283-6300.	5.5	133
226	Methylglucosylation of aromatic amino and phenolic moieties of drug-like biosynthons by combinatorial biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E4980-E4989.	3.3	40
227	Searching for Glycosylated Natural Products in Actinomycetes and Identification of Novel Macrolactams and Angucyclines. Frontiers in Microbiology, 2018, 9, 39.	1.5	25
228	Toward Automated Enzymatic Synthesis of Oligosaccharides. Chemical Reviews, 2018, 118, 8151-8187.	23.0	153
229	Novel Types of Hypermodified Fluorescent Phyllobilins from Breakdown of Chlorophyll in Senescent Leaves of Grapevine (<i>Vitis vinifera</i>). Chemistry - A European Journal, 2018, 24, 17268-17279.	1.7	15
230	Enzymatic Synthesis of the C-Glycosidic Moiety of Nogalamycin R. ACS Chemical Biology, 2018, 13, 2433-2437.	1.6	14

#	ARTICLE	IF	CITATIONS
231	Biocatalytic Aldol Addition of Simple Aliphatic Nucleophiles to Hydroxyaldehydes. <i>ACS Catalysis</i> , 2018, 8, 8804-8809.	5.5	25
232	Broadened glycosylation patterning of heterologously produced erythromycin. <i>Biotechnology and Bioengineering</i> , 2018, 115, 2771-2777.	1.7	8
233	Engineering actinomycetes for biosynthesis of macrolactone polyketides. <i>Microbial Cell Factories</i> , 2019, 18, 137.	1.9	25
234	Phylogenetic reconciliation reveals the natural history of glycopeptide antibiotic biosynthesis and resistance. <i>Nature Microbiology</i> , 2019, 4, 1862-1871.	5.9	67
235	Two Trifunctional Leloir Glycosyltransferases as Biocatalysts for Natural Products Glycodiversification. <i>Organic Letters</i> , 2019, 21, 8058-8064.	2.4	19
236	Michael additions in polyketide biosynthesis. <i>Natural Product Reports</i> , 2019, 36, 531-547.	5.2	23
237	Biochemical Characterization of the $\alpha$ -Rhamnosidase <i>DtRha</i> from <i>Dictyoglomus thermophilum</i> : Application to the Selective Derhamnosylation of Natural Flavonoids. <i>ACS Omega</i> , 2019, 4, 1916-1922.	1.6	27
238	Biochemical studies of a $\beta$ -1,4-rhamnosyltransferase from <i>Streptococcus pneumoniae</i> serotype 23F. <i>Organic and Biomolecular Chemistry</i> , 2019, 17, 1071-1075.	1.5	4
239	Discovery of an RmlC/D fusion protein in the microalga <i>Prymnesium parvum</i> and its implications for NDP- $\beta$ -l-rhamnose biosynthesis in microalgae. <i>Journal of Biological Chemistry</i> , 2019, 294, 9172-9185.	1.6	11
240	Biocatalytic Synthesis of Non-Natural Monoterpene <i>O</i> -Glycosides Exhibiting Superior Antibacterial and Antinematodal Properties. <i>ACS Omega</i> , 2019, 4, 9367-9375.	1.6	18
241	Molecular and Structural Characterization of a Promiscuous <i>C</i> -Glycosyltransferase from <i>Trollius chinensis</i> . <i>Angewandte Chemie</i> , 2019, 131, 11637-11644.	1.6	14
242	Molecular and Structural Characterization of a Promiscuous <i>C</i> -Glycosyltransferase from <i>Trollius chinensis</i> . <i>Angewandte Chemie - International Edition</i> , 2019, 58, 11513-11520.	7.2	105
243	Phylogeny-guided characterization of glycosyltransferases for epothilone glycosylation. <i>Microbial Biotechnology</i> , 2019, 12, 763-774.	2.0	12
244	The biosynthetic pathway to ossamycin, a macrocyclic polyketide bearing a spiroacetal moiety. <i>PLoS ONE</i> , 2019, 14, e0215958.	1.1	14
245	An Efficient One-Pot Enzymatic Synthesis of Cardiac Glycosides with Varied Sugar Chain Lengths. <i>Advanced Synthesis and Catalysis</i> , 2019, 361, 3114-3119.	2.1	10
246	Production of a trioxacarcin analog by introducing a C-3 dehydratase into deoxysugar biosynthesis. <i>Acta Biochimica Et Biophysica Sinica</i> , 2019, 51, 539-541.	0.9	4
247	Enzymatically Synthesized Ginsenoside Exhibits Antiproliferative Activity in Various Cancer Cell Lines. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 893.	1.3	4
248	Deciphering the enzymatic mechanism of sugar ring contraction in UDP-apiose biosynthesis. <i>Nature Catalysis</i> , 2019, 2, 1115-1123.	16.1	16



#	ARTICLE	IF	CITATIONS
249	Involvement of $\beta$ -Alkylation Machinery and Two Sets of Ketosynthase $\alpha$ -Chain Length Factors in the Biosynthesis of Fogacin Polyketides in <i>Actinoplanes missouriensis</i> . <i>ChemBioChem</i> , 2019, 20, 1039-1050.	1.3	7
250	A structural and functional perspective on the enzymes of <i>Mycobacterium tuberculosis</i> involved in the L-rhamnose biosynthesis pathway. <i>Progress in Biophysics and Molecular Biology</i> , 2019, 145, 52-64.	1.4	8
251	Biosynthesis of Aminoglycoside Antibiotics. , 2020, , 588-612.		5
252	Recent Progress in Unusual Carbohydrate-Containing Natural Products Biosynthesis. , 2020, , 336-392.		3
253	Identification and Mobilization of a Cryptic Antibiotic Biosynthesis Gene Locus from a Human-Pathogenic <i>Nocardia</i> Isolate. <i>ACS Chemical Biology</i> , 2020, 15, 1161-1168.	1.6	10
254	Efficient modification of the <i>Pseudomonas aeruginosa</i> toxin 2-heptyl-1-hydroxyquinolin-4-one by three <i>Bacillus</i> glycosyltransferases with broad substrate ranges. <i>Journal of Biotechnology</i> , 2020, 308, 74-81.	1.9	6
255	Assembly Line and Post-PKS Modifications in the Biosynthesis of Marine Polyketide Natural Products. , 2020, , 139-197.		7
256	Exploring and applying the substrate promiscuity of a C-glycosyltransferase in the chemo-enzymatic synthesis of bioactive C-glycosides. <i>Nature Communications</i> , 2020, 11, 5162.	5.8	36
257	Mechanism of Nucleotidyltransfer Reaction and Role of Mg <sup>2+</sup> Ion in Sugar Nucleotidyltransferases. <i>Biophysical Journal</i> , 2020, 119, 619-627.	0.2	2
258	Too sweet: cheminformatics for deglycosylation in natural products. <i>Journal of Cheminformatics</i> , 2020, 12, 67.	2.8	19
259	Functional analysis of PpRHM1 and PpRHM2 involved in UDP-l-rhamnose biosynthesis in <i>Prunus persica</i> . <i>Plant Physiology and Biochemistry</i> , 2020, 155, 658-666.	2.8	5
260	Microscale thermophoresis as a powerful tool for screening glycosyltransferases involved in cell wall biosynthesis. <i>Plant Methods</i> , 2020, 16, 99.	1.9	14
261	Deciphering the Biosynthesis of TDP- $\beta$ -oleandrose in Avermectin. <i>Journal of Natural Products</i> , 2020, 83, 3199-3206.	1.5	6
262	Pathway Engineering of Anthracyclines: Blazing Trails in Natural Product Glycodiversification. <i>Journal of Organic Chemistry</i> , 2020, 85, 12012-12023.	1.7	7
263	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> , 2020, 117, 24794-24801.	3.3	11
264	Regioselective Hydroxylation of Naringin Dihydrochalcone to Produce Neoeriocitrin Dihydrochalcone by CYP102A1 (BM3) Mutants. <i>Catalysts</i> , 2020, 10, 823.	1.6	8
265	Fast and Sensitive Detection of Oligosaccharides Using Desalting Paper Spray Mass Spectrometry (DPS-MS). <i>Journal of the American Society for Mass Spectrometry</i> , 2020, 31, 2226-2235.	1.2	14
266	Determinants of the Nucleotide Specificity in the Carbohydrate Epimerase Family 1. <i>Biotechnology Journal</i> , 2020, 15, e2000132.	1.8	6



#	ARTICLE	IF	CITATIONS
267	Substrate specificity of the galactokinase from the human gut symbiont <i>Akkermansia muciniphila</i> ATCC BAA-835. <i>Enzyme and Microbial Technology</i> , 2020, 139, 109568.	1.6	2
268	Solvent-Dependent Mechanism and Stereochemistry of Mitsunobu Glycosylation with Unprotected Pyranoses. <i>Organic Letters</i> , 2020, 22, 4754-4759.	2.4	16
269	Glycosyltransferase GT1 family: Phylogenetic distribution, substrates coverage, and representative structural features. <i>Computational and Structural Biotechnology Journal</i> , 2020, 18, 1383-1390.	1.9	59
270	Biosynthetic access to the rare antiarose sugar <i>via</i> an unusual reductase-epimerase. <i>Chemical Science</i> , 2020, 11, 3959-3964.	3.7	11
271	<i>In Vivo</i> Production of Five Crocins in the Engineered <i>Escherichia coli</i> . <i>ACS Synthetic Biology</i> , 2020, 9, 1160-1168.	1.9	17
272	Heterologous Expression Leads to Discovery of Diversified Lobophorin Analogues and a Flexible Glycosyltransferase. <i>Organic Letters</i> , 2020, 22, 1062-1066.	2.4	15
273	Genome-based analysis for the bioactive potential of <i>Streptomyces yeochonensis</i> CN732, an acidophilic filamentous soil actinobacterium. <i>BMC Genomics</i> , 2020, 21, 118.	1.2	18
274	Flavonoids, terpenoids, and polyketide antibiotics: Role of glycosylation and biocatalytic tactics in engineering glycosylation. <i>Biotechnology Advances</i> , 2020, 41, 107550.	6.0	50
275	Structural and biochemical studies of the glycosyltransferase Bs-YjiC from <i>Bacillus subtilis</i> . <i>International Journal of Biological Macromolecules</i> , 2021, 166, 806-817.	3.6	16
276	Natural product <i>C</i> -glycosyltransferases – a scarcely characterised enzymatic activity with biotechnological potential. <i>Natural Product Reports</i> , 2021, 38, 432-443.	5.2	39
277	Synthesis and evaluation of the antibiotic-adjuvant activity of carbohydrate-based phosphoramidate derivatives. <i>Carbohydrate Research</i> , 2021, 500, 108216.	1.1	6
278	Expanding the Enzyme Repertoire for Sugar Nucleotide Epimerization: the CDP-Tyvelose 2-Epimerase from <i>Thermodesulfatator atlanticus</i> for Glucose/Mannose Interconversion. <i>Applied and Environmental Microbiology</i> , 2021, 87, .	1.4	5
279	Reactivity – Stereoselectivity Mapping for the Assembly of <i>Mycobacterium marinum</i> Lipooligosaccharides. <i>Angewandte Chemie</i> , 2021, 133, 950-958.	1.6	6
280	Reactivity – Stereoselectivity Mapping for the Assembly of <i>Mycobacterium marinum</i> Lipooligosaccharides. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 937-945.	7.2	16
281	Heptose-containing bacterial natural products: structures, bioactivities, and biosyntheses. <i>Natural Product Reports</i> , 2021, 38, 1887-1909.	5.2	10
282	Dissection of the Glycosylation in the Biosynthesis of the Heptadecaglycoside Antibiotic Saccharomicin A. <i>Journal of Organic Chemistry</i> , 2021, 86, 11117-11124.	1.7	3
283	Glycorandomization: A promising diversification strategy for the drug development. <i>European Journal of Medicinal Chemistry</i> , 2021, 213, 113156.	2.6	15
284	Synthesis of O-linked Cyclitol Analogues of Gilvocarcin M and Antibacterial Activity. <i>Israel Journal of Chemistry</i> , 2021, 61, 394-400.	1.0	1

#	ARTICLE	IF	CITATIONS
286	Fungal glycosides: Structure and biological function. Trends in Food Science and Technology, 2021, 110, 611-651.	7.8	10
287	Synthesis and Structural Characteristics of all Mono- and Difluorinated 4,6-Dideoxy- <i>α</i> -xylo-hexopyranoses. Journal of Organic Chemistry, 2021, 86, 7725-7756.	1.7	7
288	Selective Transformations of Carbohydrates Inspired by Radical-Based Enzymatic Mechanisms. ACS Chemical Biology, 2021, 16, 1814-1828.	1.6	31
289	Structure-function relationships in NDP-sugar active SDR enzymes: Fingerprints for functional annotation and enzyme engineering. Biotechnology Advances, 2021, 48, 107705.	6.0	17
290	C-glycosylated pyrroles and their application in dipyrromethane and porphyrin synthesis. Journal of Porphyrins and Phthalocyanines, 2021, 25, 741-755.	0.4	2
291	Semisynthetic Triazoles as an Approach in the Discovery of Novel Lead Compounds. Current Organic Chemistry, 2021, 25, 1097-1179.	0.9	1
292	Genome mining Streptomyces sp. KCTC 0041BP as a producer of dihydrochalcomycin. Applied Microbiology and Biotechnology, 2021, 105, 5023-5037.	1.7	4
293	A Unified Strategy to Access 2- and 4-Deoxygenated Sugars Enabled by Manganese-Promoted 1,2-Radical Migration. Journal of the American Chemical Society, 2021, 143, 13798-13805.	6.6	37
294	Antimicrobial Activity and Identification of the Biosynthetic Gene Cluster of X-14952B From Streptomyces sp. 135. Frontiers in Microbiology, 2021, 12, 703093.	1.5	7
295	Chemical Biology Tools for Modulating and Visualizing Gram-Negative Bacterial Surface Polysaccharides. ACS Chemical Biology, 2021, 16, 1841-1865.	1.6	8
296	Metabolic Engineering of Corynebacterium glutamicum for Production of UDP-N-Acetylglucosamine. Frontiers in Bioengineering and Biotechnology, 2021, 9, 748510.	2.0	9
298	Discovery of Venturicin Congeners and Identification of the Biosynthetic Gene Cluster from Streptomyces sp. NRRL S-4. Journal of Natural Products, 2021, 84, 110-119.	1.5	11
299	Identification and Characterization of a New Erythromycin Biosynthetic Gene Cluster in Actinopolyspora erythraea YIM90600, a Novel Erythronolide-Producing Halophilic Actinomycete Isolated from Salt Field. PLoS ONE, 2014, 9, e108129.	1.1	17
300	Biochemical Investigation of an N-Acetyltransferase from Helicobacter pullorum. Protein Science, 2021, 30, 2418-2432.	3.1	4
302	A conservative distribution of tridomain NDP-heptose synthetases in actinobacteria. Science China Life Sciences, 2022, 65, 1014-1023.	2.3	4
303	Synthesis and Modification of Carbohydrates via Metabolic Pathway Engineering in Microorganisms. , 2011, , .		0
304	Iteratively Acting Glycosyltransferases. , 2011, , .		0
306	Biosynthesis of a rosavin natural product in Escherichia coli by glycosyltransferase rational design and artificial pathway construction. Metabolic Engineering, 2022, 69, 15-25.	3.6	12

#	ARTICLE	IF	CITATIONS
307	In Vitro Reconstitution of the dTDP-l-Daunosamine Biosynthetic Pathway Provides Insights into Anthracycline Glycosylation. <i>ACS Chemical Biology</i> , 2021, , .	1.6	1
308	Recent Advancements in Microbial Polysaccharides: Synthesis and Applications. <i>Polymers</i> , 2021, 13, 4136.	2.0	30
309	Stereoselective gold(I)-catalyzed approach to the synthesis of complex $\hat{\pm}$ -glycosyl phosphosaccharides. <i>Nature Communications</i> , 2022, 13, 421.	5.8	5
310	Characterization of the Aminosugar Biosynthetic and Regulatory Genes of Vicenistatin in <i>Monodonata labio</i> -Associated <i>Streptomyces parvus</i> SCSIO Mla-L010. <i>Journal of Natural Products</i> , 2022, 85, 256-263.	1.5	5
311	GDP-Mannose 3,5-Epimerase: A View on Structure, Mechanism, and Industrial Potential. <i>Frontiers in Molecular Biosciences</i> , 2021, 8, 784142.	1.6	9
312	Clues to reaction specificity in $\langle \text{sc} \rangle \text{PLP} \langle \text{sc} \rangle$ -dependent fold type I aminotransferases of monosaccharide biosynthesis. <i>Proteins: Structure, Function and Bioinformatics</i> , 2022, 90, 1247-1258.	1.5	0
313	Mechanism of Sugar Ring Contraction and Closure Catalyzed by UDP- $\langle \text{sc} \rangle \text{d} \langle \text{sc} \rangle$ -apiose/UDP- $\langle \text{sc} \rangle \text{d} \langle \text{sc} \rangle$ -xylose Synthase (UAXS). <i>Journal of Chemical Information and Modeling</i> , 2022, 62, 632-646.	2.5	2
314	Nucleotide sugar dehydratases: Structure, mechanism, substrate specificity, and application potential. <i>Journal of Biological Chemistry</i> , 2022, 298, 101809.	1.6	9
315	Multi-strategy engineering unusual sugar TDP-l-mycarose biosynthesis to improve the production of 3-O- $\hat{\pm}$ -mycarosylerythronolide B in <i>Escherichia coli</i> . <i>Synthetic and Systems Biotechnology</i> , 2022, 7, 756-764.	1.8	2
316	Application of the Spin-Center Shift in Organic Synthesis. <i>Jacs Au</i> , 2022, 2, 1032-1042.	3.6	29
319	The Advances and Challenges in Enzymatic <i>C</i> -glycosylation of Flavonoids in Plants. <i>Current Pharmaceutical Design</i> , 2022, 28, 1466-1479.	0.9	5
320	Facile Synthesis of Sugar Nucleotides from Common Sugars by the Cascade Conversion Strategy. <i>Journal of the American Chemical Society</i> , 2022, 144, 9980-9989.	6.6	17
321	Insights into the biosynthesis of septacidin l-heptosamine moiety unveils a VOC family sugar epimerase. <i>Acta Pharmaceutica Sinica B</i> , 2023, 13, 765-774.	5.7	3
322	Selective Axial-to-Equatorial Epimerization of Carbohydrates. <i>Journal of the American Chemical Society</i> , 2022, 144, 11870-11877.	6.6	28
323	Glycosylation of Aromatic Glycosides by a Promiscuous Glycosyltransferase UGT71BD1 from <i>Cistanche tubulosa</i> . <i>Journal of Natural Products</i> , 2022, 85, 1826-1836.	1.5	12
324	Potent Antibiotic Lemonomycin: A Glimpse of Its Discovery, Origin, and Chemical Synthesis. <i>Molecules</i> , 2022, 27, 4324.	1.7	3
325	Rhamnose-Containing Compounds: Biosynthesis and Applications. <i>Molecules</i> , 2022, 27, 5315.	1.7	9
326	Expanding the Substrate Scope of a Bacterial Nucleotidyltransferase via Allosteric Mutations. <i>ACS Infectious Diseases</i> , 2022, 8, 2035-2044.	1.8	6

#	ARTICLE	IF	CITATIONS
327	Metabolic Engineering of <i>Escherichia coli</i> for High-Level Production of Salicin. ACS Omega, 2022, 7, 33147-33155.	1.6	1
328	Tetracycline natural products: discovery, biosynthesis and engineering. Chinese Journal of Natural Medicines, 2022, 20, 773-794.	0.7	3
329	Comparison of Conformational Analyses of Naturally Occurring Flavonoid-O-Glycosides with Unnatural Flavonoid-CF <sub>2</sub> -Glycosides Using Molecular Modeling. Journal of Chemical Information and Modeling, 2023, 63, 375-386.	2.5	1
330	Accumulation of lankamycin derivative with a branched-chain sugar from a blocked mutant of chalcose biosynthesis in <i>Streptomyces rochei</i> 7434AN4. Bioorganic and Medicinal Chemistry Letters, 2023, 80, 129125.	1.0	0
331	Structures of the NDP-pyranose mutase belonging to glycosyltransferase family 75 reveal residues important for Mn <sup>2+</sup> coordination and substrate binding. Journal of Biological Chemistry, 2023, , 102903.	1.6	1
332	Bioactive Alpha-Pyrone and Phenolic Glucosides from the Marine-Derived <i>Metarhizium</i> sp. P2100. Journal of Fungi (Basel, Switzerland), 2023, 9, 28.	1.5	0
333	Purine- and Pyrimidine-derived Natural Products. , 2022, , 316-359.		0
334	Synthesis of Alpha-Linked Glucosides from Soybean Isoflavone Aglycones Using Amylosucrase from <i>Deinococcus geothermalis</i> . Journal of Agricultural and Food Chemistry, 2023, 71, 2430-2437.	2.4	3
335	A biphasic glycosyltransferase high-throughput screen identifies novel anthraquinone glycosides in the diversification of phenolic natural products. Journal of Biological Chemistry, 2023, 299, 102931.	1.6	1
336	Natural Product Oligosaccharides and Glycosides. , 2017, , 570-628.		0
337	Engineered production of bioactive polyphenolic O-glycosides. Biotechnology Advances, 2023, 65, 108146.	6.0	8
338	Natural Product Oligosaccharides and Glycosides. , 2022, , 448-500.		0
339	Purine- and Pyrimidine-derived Natural Products. , 2017, , 320-355.		0
340	Systematic Enzymatic Synthesis of dTDP-Activated Sugar Nucleotides. Angewandte Chemie, 0, , .	1.6	0
341	Systematic Enzymatic Synthesis of dTDP-Activated Sugar Nucleotides. Angewandte Chemie - International Edition, 2023, 62, .	7.2	3
342	Nitroso-Ene-type Cyclization Toward Diversified Synthesis of Amino Deoxysugars: A Proof of Concept. Organic Letters, 2023, 25, 1929-1934.	2.4	3
343	Expression and Purification of Glycosyltransferase DnmS from <i>Streptomyces peucetius</i> ATCC 27952 and Study on Catalytic Characterization of Its Reverse Glycosyltransferase Reaction. Microorganisms, 2023, 11, 762.	1.6	0
344	Rethinking Biosynthesis of Aclacinomycin A. Molecules, 2023, 28, 2761.	1.7	1

#	ARTICLE	IF	CITATIONS
345	Multiple C–C Bond Cleavage Reactions Catalyzed by Tolyporphin Tetrapyrrole Biosynthetic Enzymes. Journal of the American Chemical Society, 2023, 145, 9834-9839.	6.6	2
348	Feedback Inhibition of Bacterial Nucleotidyltransferases by Rare Nucleotide <i>l</i> -Sugars Restricts Substrate Promiscuity. Journal of the American Chemical Society, 0, , .	6.6	1