

Stephen G Withers

List of Publications by Year in descending order

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Version: 2024-02-01

434
papers

24,726
citations

5782

84
h-index

15253

130
g-index

460
all docs

460
docs citations

460
times ranked

14827
citing authors

#	ARTICLE	IF	CITATIONS
1	Crystal structure of the <i>Propionibacterium acnes</i> surface sialidase, a drug target for <i>P. acnes</i> -associated diseases. <i>Glycobiology</i> , 2022, 32, 162-170.	1.3	2
2	Ex vivo enzymatic treatment converts blood type A donor lungs into universal blood type lungs. <i>Science Translational Medicine</i> , 2022, 14, eabm7190.	5.8	30
3	Carbohydrate-active enzymes (CAZymes) in the gut microbiome. <i>Nature Reviews Microbiology</i> , 2022, 20, 542-556.	13.6	139
4	A Synthetic Gene Library Yields a Previously Unknown Glycoside Phosphorylase That Degrades and Assembles Poly- β -1,3-GlcNAc, Completing the Suite of β -Linked GlcNAc Polysaccharides. <i>ACS Central Science</i> , 2022, 8, 430-440.	5.3	7
5	Mammalian sialyltransferases allow efficient <i>Escherichia coli</i> -based production of mucin-type O-glycoproteins but can also transfer Kdo. <i>Glycobiology</i> , 2022, 32, 429-440.	1.3	2
6	Development of an active site titration reagent for α -amylases. <i>Chemical Science</i> , 2021, 12, 683-687.	3.7	2
7	Synthesis and evaluation of sensitive coumarin-based fluorogenic substrates for discovery of β -N-acetyl galactosaminidases through droplet-based screening. <i>Organic and Biomolecular Chemistry</i> , 2021, 19, 789-793.	1.5	5
8	New β -galactosidase-inhibiting aminohydroxycyclopentanes. <i>RSC Advances</i> , 2021, 11, 15943-15951.	1.7	4
9	Lipid-mimicking phosphorus-based glycosidase inactivators as pharmacological chaperones for the treatment of Gaucher's disease. <i>Chemical Science</i> , 2021, 12, 13909-13913.	3.7	9
10	7-Fluorosialyl Glycosides Are Hydrolysis Resistant but Readily Assembled by Sialyltransferases Providing Easy Access to More Metabolically Stable Glycoproteins. <i>ACS Central Science</i> , 2021, 7, 345-354.	5.3	16
11	Discovery of β -N-acetylglucosaminidases from screening metagenomic libraries and their use as thioglycoligase mutants. <i>Organic and Biomolecular Chemistry</i> , 2021, 19, 9068-9075.	1.5	1
12	N-Glycan Degradation Pathways in Gut- and Soil-Dwelling Actinobacteria Share Common Core Genes. <i>ACS Chemical Biology</i> , 2021, 16, 701-711.	1.6	6
13	Discovery and Development of Promiscuous O-Glycan Hydrolases for Removal of Intact Sialyl T-Antigen. <i>ACS Chemical Biology</i> , 2021, 16, 2004-2015.	1.6	7
14	Prevention of vascular-allograft rejection by protecting the endothelial glycocalyx with immunosuppressive polymers. <i>Nature Biomedical Engineering</i> , 2021, 5, 1202-1216.	11.6	12
15	Four cellulose-active lytic polysaccharide monooxygenases from <i>Cellulomonas</i> species. <i>Biotechnology for Biofuels</i> , 2021, 14, 29.	6.2	15
16	Design of the Recombinant Influenza Neuraminidase Antigen Is Crucial for Its Biochemical Properties and Protective Efficacy. <i>Journal of Virology</i> , 2021, 95, e0116021.	1.5	11
17	Quantification of the total neuraminidase content of recent commercially-available influenza vaccines: Introducing a neuraminidase titration reagent. <i>Vaccine</i> , 2020, 38, 715-718.	1.7	10
18	Toward universal donor blood: Enzymatic conversion of A and B to O type. <i>Journal of Biological Chemistry</i> , 2020, 295, 325-334.	1.6	36

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19	Thioglycoligase derived from fungal GH3 β -xylosidase is a multi-glycoligase with broad acceptor tolerance. <i>Nature Communications</i> , 2020, 11, 4864.	5.8	21
20	Mechanistic Insights into the Chaperoning of Human Lysosomal-Galactosidase Activity: Highly Functionalized Aminocyclopentanes and C-5a-Substituted Derivatives of 4-epi-Isogomine. <i>Molecules</i> , 2020, 25, 4025.	1.7	4
21	N-Alkylated Iminosugar Based Ligands: Synthesis and Inhibition of Human Lysosomal β -Glucocerebrosidase. <i>Molecules</i> , 2020, 25, 4618.	1.7	4
22	Chemoenzymatic Synthesis of Chito-oligosaccharides with Alternating α -D-Glucosamine and β -D-Glucosamine. <i>Biochemistry</i> , 2020, 59, 4581-4590.	1.2	9
23	High-Throughput Generation of Product Profiles for Arabinoxylan-Active Enzymes from Metagenomes. <i>Applied and Environmental Microbiology</i> , 2020, 86, .	1.4	3
24	Directed evolution of an α -1,3-fucosyltransferase using a single-cell ultrahigh-throughput screening method. <i>Science Advances</i> , 2019, 5, eaaw8451.	4.7	58
25	Prospecting for microbial α -N-acetylgalactosaminidases yields a new class of GH31 O-glycanase. <i>Journal of Biological Chemistry</i> , 2019, 294, 16400-16415.	1.6	22
26	High-Throughput α -FP-Tag Assay for the Identification of Glycosyltransferase Inhibitors. <i>Journal of the American Chemical Society</i> , 2019, 141, 2201-2204.	6.6	21
27	Passaging of an influenza A(H1N1)pdm09 virus in a difluoro sialic acid inhibitor selects for a novel, but unfit I106M neuraminidase mutant. <i>Antiviral Research</i> , 2019, 169, 104542.	1.9	5
28	An enzymatic pathway in the human gut microbiome that converts A to universal O type blood. <i>Nature Microbiology</i> , 2019, 4, 1475-1485.	5.9	56
29	High-Throughput Recovery and Characterization of Metagenome-Derived Glycoside Hydrolase-Containing Clones as a Resource for Biocatalyst Development. <i>MSystems</i> , 2019, 4, .	1.7	11
30	Development and Application of a High-Throughput Functional Metagenomic Screen for Glycoside Phosphorylases. <i>Cell Chemical Biology</i> , 2019, 26, 1001-1012.e5.	2.5	23
31	Probing the role of an invariant active site His in family GH1 β -glycosidases. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2019, 34, 973-980.	2.5	2
32	Synthesis of modified 1,5-imino-d-xylitols as ligands for lysosomal β -glucocerebrosidase. <i>Monatshefte für Chemie</i> , 2019, 150, 831-842.	0.9	4
33	Biologically active branched-chain aminocyclopentane tetraols from d-galactose. <i>Monatshefte für Chemie</i> , 2019, 150, 861-870.	0.9	2
34	Directed evolution of bacterial polysialyltransferases. <i>Glycobiology</i> , 2019, 29, 588-598.	1.3	8
35	Systematic Screening of Synthetic Gene-Encoded Enzymes for Synthesis of Modified Glycosides. <i>ACS Catalysis</i> , 2019, 9, 3219-3227.	5.5	17
36	Synthesis of montbretin A analogues yields potent competitive inhibitors of human pancreatic α -amylase. <i>Chemical Science</i> , 2019, 10, 11073-11077.	3.7	10

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37	Facile Formation of Î²-GlcNAc Linkages to Thiol-Containing Sugars, Peptides, and Proteins using a Mutant GH20 Hexosaminidase. <i>Angewandte Chemie</i> , 2019, 131, 1646-1651.	1.6	6
38	A Bacterial Expression Platform for Production of Therapeutic Proteins Containing Human-like O-Linked Glycans. <i>Cell Chemical Biology</i> , 2019, 26, 203-212.e5.	2.5	35
39	Facile Formation of Î²-GlcNAc Linkages to Thiol-Containing Sugars, Peptides, and Proteins using a Mutant GH20 Hexosaminidase. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 1632-1637.	7.2	35
40	Structural and mechanistic analysis of a Î²-glycoside phosphorylase identified by screening a metagenomic library. <i>Journal of Biological Chemistry</i> , 2018, 293, 3451-3467.	1.6	18
41	The Molecular Basis of Polysaccharide Sulfatase Activity and a Nomenclature for Catalytic Subsites in this Class of Enzyme. <i>Structure</i> , 2018, 26, 747-758.e4.	1.6	30
42	Oversized galactosides as a probe for conformational dynamics in LacY. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 4146-4151.	3.3	8
43	Characterization of a thermostable endoglucanase from <i>Cellulomonas fimi</i> ATCC484. <i>Biochemistry and Cell Biology</i> , 2018, 96, 68-76.	0.9	10
44	The p K a values of the catalytic residues in the retaining glycoside hydrolase T26H mutant of T4 lysozyme. <i>Protein Science</i> , 2018, 28, 620-632.	3.1	3
45	Endo-fucoidan hydrolases from glycoside hydrolase family 107 (GH107) display structural and mechanistic similarities to Î±-L-fucosidases from GH29. <i>Journal of Biological Chemistry</i> , 2018, 293, 18296-18308.	1.6	42
46	Identity and role of the non-conserved acid/base catalytic residue in the GH29 fucosidase from the spider <i>Nephilingis cruentata</i> . <i>Glycobiology</i> , 2018, 28, 925-932.	1.3	6
47	Proximity Ligation-Based Fluorogenic Imaging Agents for Neuraminidases. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 13538-13541.	7.2	15
48	Structural Dissection of Helianthamide Reveals the Basis of Its Potent Inhibition of Human Pancreatic Î±-Amylase. <i>Biochemistry</i> , 2018, 57, 5384-5387.	1.2	10
49	Proximity Ligation-Based Fluorogenic Imaging Agents for Neuraminidases. <i>Angewandte Chemie</i> , 2018, 130, 13726-13729.	1.6	5
50	Discovery of UDP-Glycosyltransferases and BAHD-Acyltransferases Involved in the Biosynthesis of the Antidiabetic Plant Metabolite Montbretin A. <i>Plant Cell</i> , 2018, 30, 1864-1886.	3.1	41
51	Synthesis of azido-deoxy and amino-deoxy glycosides and glycosyl fluorides for screening of glycosidase libraries and assembly of substituted glycosides. <i>Carbohydrate Research</i> , 2018, 467, 33-44.	1.1	19
52	A Mechanism-Based Approach to Screening Metagenomic Libraries for Discovery of Unconventional Glycosidases. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 11359-11364.	7.2	22
53	Metagenomics reveals functional synergy and novel polysaccharide utilization loci in the <i>Castor canadensis</i> fecal microbiome. <i>ISME Journal</i> , 2018, 12, 2757-2769.	4.4	36
54	Potent GH20 N-Acetyl-Î²-D-hexosaminidase Inhibitors: N-Substituted 3-acetamido-4-amino-5-hydroxymethyl-cyclopentane-1,2-diols. <i>Molecules</i> , 2018, 23, 708.	1.7	8

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55	A Mechanism-Based Approach to Screening Metagenomic Libraries for Discovery of Unconventional Glycosidases. <i>Angewandte Chemie</i> , 2018, 130, 11529-11534.	1.6	5
56	Insights into Heptosyltransferase I Catalysis and Inhibition through the Structure of Its Ternary Complex. <i>Structure</i> , 2018, 26, 1399-1407.e5.	1.6	18
57	Modulating the Nucleophile of a Glycoside Hydrolase through Site-Specific Incorporation of Fluoroglutamic Acids. <i>Journal of the American Chemical Society</i> , 2018, 140, 8268-8276.	6.6	11
58	C-5a-substituted validamine type glycosidase inhibitors. <i>Carbohydrate Research</i> , 2017, 440-441, 1-9.	1.1	3
59	Rapid Discovery of Potent and Selective Glycosidase-Inhibiting De Novo Peptides. <i>Cell Chemical Biology</i> , 2017, 24, 381-390.	2.5	46
60	Ultrasensitive Fluorogenic Reagents for Neuraminidase Titration. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 6112-6116.	7.2	20
61	Ultrasensitive Fluorogenic Reagents for Neuraminidase Titration. <i>Angewandte Chemie</i> , 2017, 129, 6208-6212.	1.6	4
62	Refolding the unfoldable: A systematic approach for renaturation of <i>Bacillus circulans</i> xylanase. <i>Protein Science</i> , 2017, 26, 1555-1563.	3.1	5
63	Fungal Glycolipid Hydrolase Inhibitors and Their Effect on <i>Cryptococcus neoformans</i> . <i>ChemBioChem</i> , 2017, 18, 284-290.	1.3	6
64	A new type of pharmacological chaperone for G M1 -gangliosidosis related human lysosomal β -galactosidase: N-Substituted 5-amino-1-hydroxymethyl-cyclopentanetriols. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2017, 27, 3431-3435.	1.0	15
65	A Morita-Baylis-Hillman based route to C -5a-chain-extended 4- epi -isofagomine type glycosidase inhibitors. <i>Carbohydrate Research</i> , 2017, 442, 31-40.	1.1	7
66	N-Substituted 5-amino-1-hydroxymethyl-cyclopentanetriols: A new family of activity promoters for a G M1 -gangliosidosis related human lysosomal β -galactosidase mutant. <i>Carbohydrate Research</i> , 2017, 443-444, 15-22.	1.1	6
67	Alpha-glucosidase and alpha-amylase inhibiting thiodiketopiperazines from the endophytic fungus <i>Setosphaeria rostrata</i> isolated from the medicinal plant <i>Costus speciosus</i> in Sri Lanka. <i>Phytochemistry Letters</i> , 2017, 22, 76-80.	0.6	23
68	Remarkable Reactivity Differences between Glucosides with Identical Leaving Groups. <i>Journal of the American Chemical Society</i> , 2017, 139, 15994-15999.	6.6	12
69	Glycosyl Cations versus Allylic Cations in Spontaneous and Enzymatic Hydrolysis. <i>Journal of the American Chemical Society</i> , 2017, 139, 10629-10632.	6.6	19
70	Structural basis of Notch O-glycosylation and O ⁶ -xylosylation by mammalian protein ⁶ -O-glycosyltransferase 1 (POGLUT1). <i>Nature Communications</i> , 2017, 8, 185.	5.8	39
71	X-ray crystallographic structure of a bacterial polysialyltransferase provides insight into the biosynthesis of capsular polysialic acid. <i>Scientific Reports</i> , 2017, 7, 5842.	1.6	13
72	Discovery of New Glycosidases From Metagenomic Libraries. <i>Methods in Enzymology</i> , 2017, 597, 3-23.	0.4	9

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73	Introducing transgalactosylation activity into a family 42 Î²-galactosidase. <i>Glycobiology</i> , 2017, 27, 425-437.	1.3	14
74	Enzymatic fine-tuning for 2-(6-hydroxynaphthyl) Î²-d-xylopyranoside synthesis catalyzed by the recombinant Î²-xylosidase BxTW1 from <i>Talaromyces amestolkiae</i> . <i>Microbial Cell Factories</i> , 2016, 15, 171.	1.9	13
75	Advances in Enzymatic Glycoside Synthesis. <i>ACS Chemical Biology</i> , 2016, 11, 1784-1794.	1.6	140
76	Synthesis of C-5a-substituted derivatives of 4-epi-isofagomine: notable Î²-galactosidase inhibitors and activity promoters of GM1-gangliosidosis related human lysosomal Î²-galactosidase mutant R201C. <i>Carbohydrate Research</i> , 2016, 429, 71-80.	1.1	21
77	The Staudinger/aza-Wittig/Grignard reaction as key step for the concise synthesis of 1-C-Alkyl-iminoalditol glycomimetics. <i>Carbohydrate Research</i> , 2016, 429, 62-70.	1.1	13
78	Glycosynthase mediated synthesis of psychosine. <i>Carbohydrate Research</i> , 2016, 435, 97-99.	1.1	6
79	Substrate Engineering Enabling Fluorescence Droplet Entrapment for IVC-FACS-Based Ultrahigh-Throughput Screening. <i>Analytical Chemistry</i> , 2016, 88, 8587-8595.	3.2	27
80	A general and efficient strategy for generating the stable enzymes. <i>Scientific Reports</i> , 2016, 6, 33797.	1.6	53
81	Evaluation of the Significance of Starch Surface Binding Sites on Human Pancreatic Î±-Amylase. <i>Biochemistry</i> , 2016, 55, 6000-6009.	1.2	24
82	Chemoenzymatic synthesis of 6-phospho-Î²-cyclophellitol as a novel probe of 6-phospho-Î²-galactosidases. <i>FEBS Letters</i> , 2016, 590, 461-468.	1.3	8
83	Glucosyl Î²-cyclophellitol allows mechanism-based inactivation and structural analysis of human pancreatic Î±-amylase. <i>FEBS Letters</i> , 2016, 590, 1143-1151.	1.3	19
84	Synthesis and evaluation of a series of 6-chloro-4-methylumbelliferyl glycosides as fluorogenic reagents for screening metagenomic libraries for glycosidase activity. <i>Carbohydrate Research</i> , 2016, 421, 33-39.	1.1	20
85	Proteolytic Cleavage Driven by Glycosylation. <i>Journal of Biological Chemistry</i> , 2016, 291, 429-434.	1.6	10
86	Potent Human Î±-Amylase Inhibition by the Î²-Defensin-like Protein Helianthamide. <i>ACS Central Science</i> , 2016, 2, 154-161.	5.3	32
87	Synthesis of C-5a-chain extended derivatives of 4-epi-isofagomine: Powerful Î²-galactosidase inhibitors and low concentration activators of GM1-gangliosidosis-related human lysosomal Î²-galactosidase. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016, 26, 1438-1442.	1.0	12
88	Observing cellulose biosynthesis and membrane translocation in crystallo. <i>Nature</i> , 2016, 531, 329-334.	13.7	133
89	5-Fluoro derivatives of 4-epi-isofagomine as Î²-galactosidase inhibitors and potential pharmacological chaperones for GM1-gangliosidosis as well as Fabry's disease. <i>Carbohydrate Research</i> , 2016, 420, 6-12.	1.1	13
90	Mechanisms of the sialidase and trans-sialidase activities of bacterial sialyltransferases from glycosyltransferase family 80. <i>Glycobiology</i> , 2016, 26, 353-359.	1.3	30

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91	Structure and Mechanism of <i>Staphylococcus aureus</i> TarS, the Wall Teichoic Acid β -glycosyltransferase Involved in Methicillin Resistance. <i>PLoS Pathogens</i> , 2016, 12, e1006067.	2.1	46
92	Recent Developments in Enzymatic Synthesis of Modified Sialic Acid Derivatives. <i>Advanced Synthesis and Catalysis</i> , 2015, 357, 1633-1654.	2.1	36
93	Chemoenzymatic Synthesis of a Type 2 Blood Group A Tetrasaccharide and Development of High-throughput Assays Enables a Platform for Screening Blood Group Antigen-cleaving Enzymes. <i>Glycobiology</i> , 2015, 25, 806-811.	1.3	15
94	The Gymnosperm Cytochrome P450 CYP750B1 Catalyzes Stereospecific Monoterpene Hydroxylation of (+)-Sabinene in Thujone Biosynthesis in Western Redcedar. <i>Plant Physiology</i> , 2015, 168, 94-106.	2.3	38
95	A FRET Probe for Cell-Based Imaging of Ganglioside Processing Enzyme Activity and High-Throughput Screening. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 5389-5393.	7.2	44
96	Assessing the oral bioavailability of difluorosialic acid prodrugs, potent viral neuraminidase inhibitors, using a snapshot PK screening assay. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2015, 25, 2505-2509.	1.0	4
97	Structure and mechanism of <i>Staphylococcus aureus</i> TarM, the wall teichoic acid β -glycosyltransferase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E576-85.	3.3	49
98	Structure of human ST8Siall sialyltransferase provides insight into cell-surface polysialylation. <i>Nature Structural and Molecular Biology</i> , 2015, 22, 627-635.	3.6	62
99	Toward Efficient Enzymes for the Generation of Universal Blood through Structure-Guided Directed Evolution. <i>Journal of the American Chemical Society</i> , 2015, 137, 5695-5705.	6.6	53
100	N-Acetylglucosaminidases from CAZy Family GH3 Are Really Glycoside Phosphorylases, Thereby Explaining Their Use of Histidine as an Acid/Base Catalyst in Place of Glutamic Acid. <i>Journal of Biological Chemistry</i> , 2015, 290, 4887-4895.	1.6	70
101	The amylase inhibitor montbretin A reveals a new glycosidase inhibition motif. <i>Nature Chemical Biology</i> , 2015, 11, 691-696.	3.9	113
102	Difluorosialic acids, potent novel influenza virus neuraminidase inhibitors, induce fewer drug resistance-associated neuraminidase mutations than does oseltamivir. <i>Virus Research</i> , 2015, 210, 126-132.	1.1	6
103	Mechanistic Investigations of Unsaturated Glucuronyl Hydrolase from <i>Clostridium perfringens</i> . <i>Journal of Biological Chemistry</i> , 2014, 289, 11385-11395.	1.6	8
104	Mechanistic Insights from Substrate Preference in Unsaturated Glucuronyl Hydrolase. <i>ChemBioChem</i> , 2014, 15, 124-134.	1.3	6
105	Tuning Mechanism-Based Inactivators of Neuraminidases: Mechanistic and Structural Insights. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 3382-3386.	7.2	24
106	A plate-based high-throughput activity assay for polysialyltransferase from <i>Neisseria meningitidis</i> . <i>Analytical Biochemistry</i> , 2014, 444, 67-74.	1.1	14
107	Unusual Enzymatic Glycoside Cleavage Mechanisms. <i>Accounts of Chemical Research</i> , 2014, 47, 226-235.	7.6	67
108	Concise synthesis of C-1-cyano-iminosugars via a new Staudinger/aza Wittig/Strecker multicomponent reaction strategy. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014, 24, 2777-2780.	1.0	18

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109	Enhancement of biological reactions on cell surfaces via macromolecular crowding. <i>Nature Communications</i> , 2014, 5, 4683.	5.8	51
110	Fluoro-glycosyl acridinones are ultra-sensitive active site titrating agents for retaining β -glucosidases. <i>Chemical Communications</i> , 2014, 50, 9379-9382.	2.2	10
111	Periplasmic de-acylase helps bacteria don their biofilm coat. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 10904-10905.	3.3	1
112	The Mechanism of Cellulose Hydrolysis by a Two-Step, Retaining Cellobiohydrolase Elucidated by Structural and Transition Path Sampling Studies. <i>Journal of the American Chemical Society</i> , 2014, 136, 321-329.	6.6	164
113	Fluorinated Mechanism-Based Inhibitors: Common Themes and Recent Developments. <i>Current Topics in Medicinal Chemistry</i> , 2014, 14, 865-874.	1.0	25
114	S2-6 Identifying and improving glycosidases through metagenomics and directed evolution(Recent) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	8.0	10
115	Improvement of the expression level of β -glucosidase from <i>Agrobacterium</i> sp. in <i>Escherichia coli</i> by rare codon optimization. <i>Food Science and Biotechnology</i> , 2013, 22, 269-273.	1.2	7
116	Biomining active cellulases from a mining bioremediation system. <i>Journal of Biotechnology</i> , 2013, 167, 462-471.	1.9	35
117	Synthesis of Glycans and Glycopolymers Through Engineered Enzymes. <i>Biopolymers</i> , 2013, 99, 666-674.	1.2	39
118	A glyco-gold nanoparticle based assay for β -2,8-polysialyltransferase from <i>Neisseria meningitidis</i> . <i>Chemical Communications</i> , 2013, 49, 10166.	2.2	14
119	Identifying the Catalytic Acid/Base in GH29 β -Fucosidase Subfamilies. <i>Biochemistry</i> , 2013, 52, 5857-5864.	1.2	43
120	Insights into mucopolysaccharidosis I from the structure and action of β -L-iduronidase. <i>Nature Chemical Biology</i> , 2013, 9, 739-745.	3.9	48
121	Mutational analysis in the glycone binding pocket of <i>Dalbergia cochinchinensis</i> β -glucosidase to increase catalytic efficiency toward mannosides. <i>Carbohydrate Research</i> , 2013, 373, 35-41.	1.1	8
122	Mechanism-Based Covalent Neuraminidase Inhibitors with Broad-Spectrum Influenza Antiviral Activity. <i>Science</i> , 2013, 340, 71-75.	6.0	175
123	Structure-based mutagenic analysis of mechanism and substrate specificity in mammalian glycosyltransferases: Porcine ST3Gal-H. <i>Glycobiology</i> , 2013, 23, 536-545.	1.3	16
124	The structure of the <i>Mycobacterium smegmatis</i> trehalose synthase reveals an unusual active site configuration and acarbose-binding mode. <i>Glycobiology</i> , 2013, 23, 1075-1083.	1.3	41
125	How to make a difference: mechanisms of protein and nucleic acid modifying enzymes. <i>Current Opinion in Chemical Biology</i> , 2012, 16, 461-464.	2.8	0
126	Directed evolution of a β -glucosidase from <i>Agrobacterium</i> sp. to enhance its glycosynthase activity toward C3-modified donor sugars. <i>Protein Engineering, Design and Selection</i> , 2012, 25, 465-472.	1.0	27

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127	Mechanistic Insights into the 1,3-Xylanases: Useful Enzymes for Manipulation of Algal Biomass. <i>Journal of the American Chemical Society</i> , 2012, 134, 3895-3902.	6.6	23
128	Purification and quantitation of bacteriophage M13 using desalting spin columns and digital PCR. <i>Journal of Virological Methods</i> , 2012, 185, 171-174.	1.0	8
129	Order and Disorder: Differential Structural Impacts of Myricetin and Ethyl Caffate on Human Amylase, an Antidiabetic Target. <i>Journal of Medicinal Chemistry</i> , 2012, 55, 10177-10186.	2.9	95
130	Rapid Assembly of a Library of Lipophilic Iminosugars via the Thiolâ€Ene Reaction Yields Promising Pharmacological Chaperones for the Treatment of Gaucher Disease. <i>Journal of Medicinal Chemistry</i> , 2012, 55, 2737-2745.	2.9	74
131	The role of the oligosaccharide binding cleft of rice BGlu1 in hydrolysis of celooligosaccharides and in their synthesis by rice BGlu1 glycosynthase. <i>Protein Science</i> , 2012, 21, 362-372.	3.1	10
132	A Chemoenzymatic Total Synthesis of the Neurogenic Starfish Ganglioside LLGâ€B Using an Engineered and Evolved Synthase. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 8640-8643.	7.2	42
133	Rice BGlu1 glycosynthase and wild type transglycosylation activities distinguished by cyclophellitol inhibition. <i>Carbohydrate Research</i> , 2012, 352, 51-59.	1.1	8
134	The acute effects of Montbretin A (MbA), an α -glucosidase inhibitor, on plasma glucose levels in the Zucker Diabetic Fatty rat. <i>FASEB Journal</i> , 2012, 26, .	0.2	0
135	Toward Efficient Enzymatic Glycan Synthesis: Directed Evolution and Enzyme Engineering. <i>Journal of Carbohydrate Chemistry</i> , 2011, 30, 181-205.	0.4	15
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