

David J Vocadlo

List of Publications by Year in descending order

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170
papers

11,832
citations

27035

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178
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178
times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Bicyclic Picomolar OGA Inhibitors Enable Chemoproteomic Mapping of Its Endogenous Post-translational Modifications. <i>Journal of the American Chemical Society</i> , 2022, 144, 832-844.	6.6	15
2	Synthesis, conformational analysis and glycosidase inhibition of bicyclic nojirimycin C-glycosides based on an octahydrofuro[3,2-b]pyridine motif. <i>Carbohydrate Research</i> , 2022, 511, 108491.	1.1	3
3	Immunoprecipitation and Western blot-based detection of protein O-GlcNAcylation in cells. <i>STAR Protocols</i> , 2022, 3, 101108.	0.5	4
4	Quantifying lysosomal glycosidase activity within cells using bis-acetal substrates. <i>Nature Chemical Biology</i> , 2022, 18, 332-341.	3.9	11
5	Discovery of a New Drug-like Series of OGT Inhibitors by Virtual Screening. <i>Molecules</i> , 2022, 27, 1996.	1.7	3
6	Thermal Proteome Profiling Reveals the O-GlcNAc-Dependent Meltome. <i>Journal of the American Chemical Society</i> , 2022, 144, 3833-3842.	6.6	19
7	sp ² -Iminosugars targeting human lysosomal β -hexosaminidase as pharmacological chaperone candidates for late-onset Tay-Sachs disease. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2022, 37, 1364-1374.	2.5	5
8	Chemoproteomic identification of CO ₂ -dependent lysine carboxylation in proteins. <i>Nature Chemical Biology</i> , 2022, 18, 782-791.	3.9	18
9	A versatile fluorescence-quenched substrate for quantitative measurement of glucocerebrosidase activity within live cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	10
10	Pharmacological inhibition and knockdown of O β -GlcNAcase reduces cellular internalization of β -synuclein preformed fibrils. <i>FEBS Journal</i> , 2021, 288, 452-470.	2.2	28
11	Protective Roles of O β -GlcNAc in Neurodegenerative Diseases. <i>FASEB Journal</i> , 2021, 35, .	0.2	0
12	Thiamme2-G, a Novel O-GlcNAcase Inhibitor, Reduces Tau Hyperphosphorylation and Rescues Cognitive Impairment in Mice. <i>Journal of Alzheimer's Disease</i> , 2021, 81, 273-286.	1.2	5
13	Monitoring and modulating O-GlcNAcylation: assays and inhibitors of O-GlcNAc processing enzymes. <i>Current Opinion in Structural Biology</i> , 2021, 68, 157-165.	2.6	30
14	Rational design of cell active C2-modified DGJ analogues for the inhibition of human β -galactosidase A (GALA). <i>Organic and Biomolecular Chemistry</i> , 2021, 19, 8057-8062.	1.5	1
15	Cryo-EM structure provides insights into the dimer arrangement of the O-linked β -N-acetylglucosamine transferase OGT. <i>Nature Communications</i> , 2021, 12, 6508.	5.8	24
16	Structural variation of the 3-acetamido-4,5,6-trihydroxyazepane iminosugar through epimerization and C-alkylation leads to low micromolar HexAB and NagZ inhibitors. <i>Organic and Biomolecular Chemistry</i> , 2021, , .	1.5	3
17	The structure of a family 110 glycoside hydrolase provides insight into the hydrolysis of β -1,3-galactosidic linkages in λ -carrageenan and blood group antigens. <i>Journal of Biological Chemistry</i> , 2020, 295, 18426-18435.	1.6	8
18	Tandem Bioorthogonal Labeling Uncovers Endogenous Cotranslationally <i>O</i> -GlcNAc Modified Nascent Proteins. <i>Journal of the American Chemical Society</i> , 2020, 142, 15729-15739.	6.6	27

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19	A Shut-and-Open Case: An Epoxide Intermediate Spotted in the Reaction Coordinate of a Family of Glycoside Hydrolases. <i>ACS Central Science</i> , 2020, 6, 619-621.	5.3	1
20	MK-8719, a Novel and Selective <i>O</i> -GlcNAcase Inhibitor That Reduces the Formation of Pathological Tau and Ameliorates Neurodegeneration in a Mouse Model of Tauopathy. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2020, 374, 252-263.	1.3	45
21	Precision Mapping of <i>O</i> -Linked <i>N</i> -Acetylglucosamine Sites in Proteins Using Ultraviolet Photodissociation Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 2020, 142, 11569-11577.	6.6	28
22	A Direct Fluorescent Activity Assay for Glycosyltransferases Enables Convenient High-Throughput Screening: Application to <i>O</i> -GlcNAc Transferase. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 9601-9609.	7.2	19
23	Selective Fluorogenic β -Glucocerebrosidase Substrates for Convenient Analysis of Enzyme Activity in Cell and Tissue Homogenates. <i>ACS Chemical Biology</i> , 2020, 15, 824-829.	1.6	6
24	A Direct Fluorescent Activity Assay for Glycosyltransferases Enables Convenient High-Throughput Screening: Application to <i>O</i> -GlcNAc Transferase. <i>Angewandte Chemie</i> , 2020, 132, 9688-9696.	1.6	8
25	The nutrient sensor OGT regulates Hipk stability and tumorigenic-like activities in <i>Drosophila</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 2004-2013.	3.3	19
26	Diverse perspectives on interdisciplinarity from Members of the College of the Royal Society of Canada. <i>Facets</i> , 2020, 5, 138-165.	1.1	19
27	Molecular mechanisms regulating <i>O</i> -linked <i>N</i> -acetylglucosamine (<i>O</i> -GlcNAc) processing enzymes. <i>Current Opinion in Chemical Biology</i> , 2019, 53, 131-144.	2.8	46
28	Discovery of MK-8719, a Potent <i>O</i> -GlcNAcase Inhibitor as a Potential Treatment for Tauopathies. <i>Journal of Medicinal Chemistry</i> , 2019, 62, 10062-10097.	2.9	87
29	A Chemical Genetic Method for Monitoring Genome-Wide Dynamics of <i>O</i> -GlcNAc Turnover on Chromatin-Associated Proteins. <i>ACS Central Science</i> , 2019, 5, 663-670.	5.3	10
30	Molecular Basis for the Potent Inhibition of the Emerging Carbapenemase VCC-1 by Avibactam. <i>Antimicrobial Agents and Chemotherapy</i> , 2019, 63, .	1.4	4
31	A round up on some of the latest in the chemistry and biology of carbohydrates and carbohydrate-processing enzymes. <i>Current Opinion in Chemical Biology</i> , 2019, 53, A1-A3.	2.8	0
32	Pharmacological Inhibition of <i>O</i> -GlcNAcase Enhances Autophagy in Brain through an mTOR-Independent Pathway. <i>ACS Chemical Neuroscience</i> , 2018, 9, 1366-1379.	1.7	47
33	A divergent synthesis to generate targeted libraries of inhibitors for endo- <i>N</i> -acetylglucosaminidases. <i>Canadian Journal of Chemistry</i> , 2018, 96, 248-254.	0.6	0
34	Direct One-Step Fluorescent Labeling of <i>O</i> -GlcNAc-Modified Proteins in Live Cells Using Metabolic Intermediates. <i>Journal of the American Chemical Society</i> , 2018, 140, 15300-15308.	6.6	39
35	Metabolic Inhibitors of <i>O</i> -GlcNAc Transferase That Act <i>In Vivo</i> Implicate Decreased <i>O</i> -GlcNAc Levels in Leptin-Mediated Nutrient Sensing. <i>Angewandte Chemie</i> , 2018, 130, 7770-7774.	1.6	7
36	Fluorescence-Quenched Substrates for Quantitative Live Cell Imaging of Glucocerebrosidase Activity. <i>Methods in Enzymology</i> , 2018, 598, 199-215.	0.4	5

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37	Metabolic Inhibitors of O-GlcNAc Transferase That Act In Vivo Implicate Decreased O-GlcNAc Levels in Leptin-Mediated Nutrient Sensing. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 7644-7648.	7.2	56
38	Quinolinic Acid Amyloid-like Fibrillar Assemblies Seed α -Synuclein Aggregation. <i>Journal of Molecular Biology</i> , 2018, 430, 3847-3862.	2.0	43
39	A mechanism-based GlcNAc-inspired cyclophellitol inactivator of the peptidoglycan recycling enzyme NagZ reverses resistance to β -lactams in <i>Pseudomonas aeruginosa</i> . <i>Chemical Communications</i> , 2018, 54, 10630-10633.	2.2	12
40	Cura Annonae—Chemically Boosting Crop Yields Through Metabolic Feeding of a Plant Signaling Precursor. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 5980-5982.	7.2	2
41	Selective trihydroxylated azepane inhibitors of NagZ, a glycosidase involved in <i>Pseudomonas aeruginosa</i> resistance to β -lactam antibiotics. <i>Organic and Biomolecular Chemistry</i> , 2017, 15, 4609-4619.	1.5	12
42	Genome-wide chemical mapping of O-GlcNAcylated proteins in <i>Drosophila melanogaster</i> . <i>Nature Chemical Biology</i> , 2017, 13, 161-167.	3.9	33
43	Inhibition of O-GlcNAcase leads to elevation of O-GlcNAc tau and reduction of tauopathy and cerebrospinal fluid tau in rTg4510 mice. <i>Molecular Neurodegeneration</i> , 2017, 12, 39.	4.4	106
44	Carbohydrate Bis-acetal-Based Substrates as Tunable Fluorescence-Quenched Probes for Monitoring <i>exo</i> -Glycosidase Activity. <i>Journal of the American Chemical Society</i> , 2017, 139, 8392-8395.	6.6	31
45	Multivalency To Inhibit and Discriminate Hexosaminidases. <i>Chemistry - A European Journal</i> , 2017, 23, 9022-9025.	1.7	28
46	Structural and functional insight into human O-GlcNAcase. <i>Nature Chemical Biology</i> , 2017, 13, 610-612.	3.9	88
47	Conformational flexibility of the glycosidase NagZ allows it to bind structurally diverse inhibitors to suppress β -lactam antibiotic resistance. <i>Protein Science</i> , 2017, 26, 1161-1170.	3.1	18
48	Cura Annonae — chemische Erhohung des Getreideertrags durch metabolisches Verattern einer pflanzlichen Signalmolekulvorstufe. <i>Angewandte Chemie</i> , 2017, 129, 6074-6076.	1.6	2
49	Catalytic Promiscuity of <i>O</i> -GlcNAc Transferase Enables Unexpected Metabolic Engineering of Cytoplasmic Proteins with 2-Azido-2-deoxy-glucose. <i>ACS Chemical Biology</i> , 2017, 12, 206-213.	1.6	34
50	Production of O-GlcNAc Modified Recombinant Tau in <i>E. coli</i> and Detection of Ser400 O-GlcNAc Tau In Vivo. <i>Methods in Molecular Biology</i> , 2017, 1523, 237-248.	0.4	6
51	Software for rapid time dependent ChIP-sequencing analysis (TDCA). <i>BMC Bioinformatics</i> , 2017, 18, 521.	1.2	1
52	P4036: Pharmacokinetics and Pharmacodynamics to Support Clinical Studies of MK8719: an O-GlcNAcase Inhibitor for Progressive Supranuclear Palsy. <i>Alzheimer's and Dementia</i> , 2016, 12, P1028.	0.4	20
53	O21304: Early Clinical Results and Preclinical Validation of the O-GlcNAcase (OGA) Inhibitor Mk8719 as a Novel Therapeutic for the Treatment of Tauopathies. <i>Alzheimer's and Dementia</i> , 2016, 12, P261.	0.4	15
54	Analysis of transition state mimicry by tight binding aminothiazoline inhibitors provides insight into catalysis by human O-GlcNAcase. <i>Chemical Science</i> , 2016, 7, 3742-3750.	3.7	33

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55	Mechanism of Human Nucleocytoplasmic Hexosaminidase D. <i>Biochemistry</i> , 2016, 55, 2735-2747.	1.2	15
56	A Fluorescent Transport Assay Enables Studying AmpG Permeases Involved in Peptidoglycan Recycling and Antibiotic Resistance. <i>ACS Chemical Biology</i> , 2016, 11, 2626-2635.	1.6	8
57	The Details of Glycolipid Glycan Hydrolysis by the Structural Analysis of a Family 123 Glycoside Hydrolase from <i>Clostridium perfringens</i> . <i>Journal of Molecular Biology</i> , 2016, 428, 3253-3265.	2.0	11
58	Post-translational O-GlcNAcylation is essential for nuclear pore integrity and maintenance of the pore selectivity filter. <i>Journal of Molecular Cell Biology</i> , 2016, 8, 2-16.	1.5	57
59	Modifying the phenyl group of PUGNAc: reactivity tuning to deliver selective inhibitors for N-acetyl-d-glucosaminidases. <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 3193-3197.	1.5	16
60	A Convenient Approach to Stereoisomeric Iminocyclitols: Generation of Potent Brain-Permeable OGA Inhibitors. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 15429-15433.	7.2	41
61	mTOR/MYC Axis Regulates O-GlcNAc Transferase Expression and O-GlcNAcylation in Breast Cancer. <i>Molecular Cancer Research</i> , 2015, 13, 923-933.	1.5	109
62	Fluorescence-Quenched Substrates for Live Cell Imaging of Human Glucocerebrosidase Activity. <i>Journal of the American Chemical Society</i> , 2015, 137, 1181-1189.	6.6	59
63	O-GlcNAc occurs cotranslationally to stabilize nascent polypeptide chains. <i>Nature Chemical Biology</i> , 2015, 11, 319-325.	3.9	113
64	Structures of lactate dehydrogenase A (LDHA) in apo, ternary and inhibitor-bound forms. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2015, 71, 185-195.	2.5	49
65	Structural Analysis of a Family 101 Glycoside Hydrolase in Complex with Carbohydrates Reveals Insights into Its Mechanism. <i>Journal of Biological Chemistry</i> , 2015, 290, 25657-25669.	1.6	23
66	The β -Lactamase Gene Regulator AmpR Is a Tetramer That Recognizes and Binds the d-Ala-d-Ala Motif of Its Repressor UDP-N-acetylmuramic Acid (MurNAc)-pentapeptide. <i>Journal of Biological Chemistry</i> , 2015, 290, 2630-2643.	1.6	77
67	Conformational Itinerary of <i>Pseudomonas aeruginosa</i> 1,6-Anhydro-N-acetylmuramic Acid Kinase during Its Catalytic Cycle. <i>Journal of Biological Chemistry</i> , 2014, 289, 4504-4514.	1.6	7
68	A mechanism-based inactivator of glycoside hydrolases involving formation of a transient non-classical carbocation. <i>Nature Communications</i> , 2014, 5, 5590.	5.8	25
69	Substrate-Guided Front-Face Reaction Revealed by Combined Structural Snapshots and Metadynamics for the Polypeptide N-Acetylgalactosaminyltransferase...2. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 8206-8210.	7.2	80
70	O-GlcNAc Modification of tau Directly Inhibits Its Aggregation without Perturbing the Conformational Properties of tau Monomers. <i>Journal of Molecular Biology</i> , 2014, 426, 1736-1752.	2.0	110
71	Pharmacological inhibition of O-GlcNAcase (OGA) prevents cognitive decline and amyloid plaque formation in bigenic tau/APP mutant mice. <i>Molecular Neurodegeneration</i> , 2014, 9, 42.	4.4	114
72	The Emerging Link between O-GlcNAc and Alzheimer Disease. <i>Journal of Biological Chemistry</i> , 2014, 289, 34472-34481.	1.6	205

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73	Design of glycosyltransferase inhibitors targeting human O-GlcNAc transferase (OGT). <i>MedChemComm</i> , 2014, 5, 1172-1178.	3.5	17
74	O-GlcNAc and neurodegeneration: biochemical mechanisms and potential roles in Alzheimer's disease and beyond. <i>Chemical Society Reviews</i> , 2014, 43, 6839-6858.	18.7	209
75	O-GlcNAcylation Regulates Cancer Metabolism and Survival Stress Signaling via Regulation of the HIF-1 Pathway. <i>Molecular Cell</i> , 2014, 54, 820-831.	4.5	307
76	Synthesis of 4-methylumbelliferyl β -D-mannopyranosyl-(1 \rightarrow 6)- β -D-mannopyranoside and development of a coupled fluorescent assay for GH125 exo- β -1,6-mannosidases. <i>Bioorganic and Medicinal Chemistry</i> , 2013, 21, 4839-4845.	1.4	7
77	HCF-1 Is Cleaved in the Active Site of O-GlcNAc Transferase. <i>Science</i> , 2013, 342, 1235-1239.	6.0	162
78	Selective trihydroxyazepane NagZ inhibitors increase sensitivity of <i>Pseudomonas aeruginosa</i> to β -lactams. <i>Chemical Communications</i> , 2013, 49, 10983.	2.2	36
79	Inhibition of the family 20 glycoside hydrolase catalytic modules in the <i>Streptococcus pneumoniae</i> exo- β -D-N-acetylglucosaminidase, StrH. <i>Organic and Biomolecular Chemistry</i> , 2013, 11, 7907.	1.5	9
80	Tools for probing and perturbing O-GlcNAc in cells and in vivo. <i>Current Opinion in Chemical Biology</i> , 2013, 17, 719-728.	2.8	38
81	Characterization and downstream mannose phosphorylation of human recombinant β -D-glucuronidase produced in <i>A. nidulans</i> complex glycan-deficient (<i>cgl</i>) seeds. <i>Plant Biotechnology Journal</i> , 2013, 11, 1034-1043.	4.1	18
82	The Development of Selective Inhibitors of NagZ: Increased Susceptibility of Gram-Negative Bacteria to β -Lactams. <i>ChemBioChem</i> , 2013, 14, 1973-1981.	1.3	38
83	Hyper-O-GlcNAcylation Is Anti-apoptotic and Maintains Constitutive NF- κ B Activity in Pancreatic Cancer Cells. <i>Journal of Biological Chemistry</i> , 2013, 288, 15121-15130.	1.6	205
84	Analysis of Keystone Enzyme in Agar Hydrolysis Provides Insight into the Degradation (of a) Tj ETQqO O O rgBT /Overlock 10 Tf 50 302 T	1.6	89
85	Metabolism of Vertebrate Amino Sugars with N-Glycolyl Groups. <i>Journal of Biological Chemistry</i> , 2012, 287, 28898-28916.	1.6	37
86	Metabolic Inhibition of Sialyl-Lewis X Biosynthesis by 5-Thiofucose Remodels the Cell Surface and Impairs Selectin-Mediated Cell Adhesion*. <i>Journal of Biological Chemistry</i> , 2012, 287, 40021-40030.	1.6	42
87	Metabolism of Vertebrate Amino Sugars with N-Glycolyl Groups. <i>Journal of Biological Chemistry</i> , 2012, 287, 28882-28897.	1.6	23
88	Structural snapshots of the reaction coordinate for O-GlcNAc transferase. <i>Nature Chemical Biology</i> , 2012, 8, 966-968.	3.9	132
89	O-GlcNAc processing enzymes: catalytic mechanisms, substrate specificity, and enzyme regulation. <i>Current Opinion in Chemical Biology</i> , 2012, 16, 488-497.	2.8	122
90	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

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91	Active Site Plasticity within the Glycoside Hydrolase NagZ Underlies a Dynamic Mechanism of Substrate Distortion. <i>Chemistry and Biology</i> , 2012, 19, 1471-1482.	6.2	67
92	Reduced protein O-glycosylation in the nervous system of the mutant SOD1 transgenic mouse model of amyotrophic lateral sclerosis. <i>Neuroscience Letters</i> , 2012, 516, 296-301.	1.0	39
93	Developing inhibitors of glycan processing enzymes as tools for enabling glycobiology. <i>Nature Chemical Biology</i> , 2012, 8, 683-694.	3.9	159
94	Insights into O-Linked N-Acetylglucosamine ([O-9]O-GlcNAc) Processing and Dynamics through Kinetic Analysis of O-GlcNAc Transferase and O-GlcNAcase Activity on Protein Substrates. <i>Journal of Biological Chemistry</i> , 2012, 287, 15395-15408.	1.6	102
95	Production of Î±-L-iduronidase in maize for the potential treatment of a human lysosomal storage disease. <i>Nature Communications</i> , 2012, 3, 1062.	5.8	25
96	Increasing O-GlcNAc slows neurodegeneration and stabilizes tau against aggregation. <i>Nature Chemical Biology</i> , 2012, 8, 393-399.	3.9	493
97	Differential Effects of an O-GlcNAcase Inhibitor on Tau Phosphorylation. <i>PLoS ONE</i> , 2012, 7, e35277.	1.1	76
98	Providing Î²-lactams a helping hand: targeting the AmpC Î²-lactamase induction pathway. <i>Future Microbiology</i> , 2011, 6, 1415-1427.	1.0	61
99	Structural, Mechanistic, and Computational Analysis of the Effects of Anomeric Fluorines on Anomeric Fluoride Departure in 5-Fluoroxylsyl Fluorides. <i>Journal of the American Chemical Society</i> , 2011, 133, 15826-15829.	6.6	24
100	Hijacking a biosynthetic pathway yields a glycosyltransferase inhibitor within cells. <i>Nature Chemical Biology</i> , 2011, 7, 174-181.	3.9	291
101	The Conformation and Function of a Multimodular Glycogen-Degrading Pneumococcal Virulence Factor. <i>Structure</i> , 2011, 19, 640-651.	1.6	42
102	Inhibition of the Pneumococcal Virulence Factor StrH and Molecular Insights into N-Glycan Recognition and Hydrolysis. <i>Structure</i> , 2011, 19, 1603-1614.	1.6	38
103	Mapping O-GlcNAc modification sites on tau and generation of a site-specific O-GlcNAc tau antibody. <i>Amino Acids</i> , 2011, 40, 857-868.	1.2	103
104	6â€³-Azido-6â€³-deoxy-UDP-N-acetylglucosamine as a glycosyltransferase substrate. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011, 21, 1199-1201.	1.0	17
105	Analysis of a New Family of Widely Distributed Metal-independent Î±-Mannosidases Provides Unique Insight into the Processing of N-Linked Glycans. <i>Journal of Biological Chemistry</i> , 2011, 286, 15586-15596.	1.6	65
106	Molecular Basis of 1,6-Anhydro Bond Cleavage and Phosphoryl Transfer by <i>Pseudomonas aeruginosa</i> 1,6-Anhydro-N-acetylmuramic Acid Kinase. <i>Journal of Biological Chemistry</i> , 2011, 286, 12283-12291.	1.6	24
107	AmpG Inactivation Restores Susceptibility of Pan-Î²-Lactam-Resistant <i>Pseudomonas aeruginosa</i> Clinical Strains. <i>Antimicrobial Agents and Chemotherapy</i> , 2011, 55, 1990-1996.	1.4	47
108	Mechanism, Structure, and Inhibition of O-GlcNAc Processing Enzymes. <i>Current Signal Transduction Therapy</i> , 2010, 5, 74-91.	0.3	54

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109	Elevation of Global O-GlcNAc in Rodents Using a Selective O-GlcNAcase Inhibitor Does Not Cause Insulin Resistance or Perturb Glucohomeostasis. <i>Chemistry and Biology</i> , 2010, 17, 949-958.	6.2	71
110	Inhibition of O-GlcNAcase Using a Potent and Cell-Permeable Inhibitor Does Not Induce Insulin Resistance in 3T3-L1 Adipocytes. <i>Chemistry and Biology</i> , 2010, 17, 937-948.	6.2	67
111	NagZ Inactivation Prevents and Reverts β -Lactam Resistance, Driven by AmpD and PBP 4 Mutations, in <i>Pseudomonas aeruginosa</i> . <i>Antimicrobial Agents and Chemotherapy</i> , 2010, 54, 3557-3563.	1.4	61
112	Mammalian Notch is modified by d-Xyl- β 1-3-d-Xyl- β 1-3-d-Glc- β 1-O-Ser: Implementation of a method to study O-glycosylation. <i>Glycobiology</i> , 2010, 20, 287-299.	1.3	37
113	Crystal Structure of the AmpR Effector Binding Domain Provides Insight into the Molecular Regulation of Inducible AmpC β -Lactamase. <i>Journal of Molecular Biology</i> , 2010, 400, 998-1010.	2.0	48
114	Increasing O-GlcNAc levels: An overview of small-molecule inhibitors of O-GlcNAcase. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2010, 1800, 107-121.	1.1	105
115	<i>Streptococcus pneumoniae</i> endohexosaminidase D; feasibility of using N-glycan oxazoline donors for synthetic glycosylation of a GlcNAc-asparagine acceptor. <i>Organic and Biomolecular Chemistry</i> , 2010, 8, 1861.	1.5	22
116	Visualizing the Reaction Coordinate of an O-GlcNAc Hydrolase. <i>Journal of the American Chemical Society</i> , 2010, 132, 1807-1809.	6.6	70
117	<i>Streptococcus pneumoniae</i> Endohexosaminidase D, Structural and Mechanistic Insight into Substrate-assisted Catalysis in Family 85 Glycoside Hydrolases. <i>Journal of Biological Chemistry</i> , 2009, 284, 11676-11689.	1.6	85
118	<i>Drosophila</i> O-GlcNAc transferase (OGT) is encoded by the Polycomb group (PcG) gene, <i>super sex combs</i> (<i>sxc</i>). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 13427-13432.	3.3	214
119	In Vivo Modulation of O-GlcNAc Levels Regulates Hippocampal Synaptic Plasticity through Interplay with Phosphorylation. <i>Journal of Biological Chemistry</i> , 2009, 284, 174-181.	1.6	115
120	O-GlcNAc Modification and the Tauopathies: Insights from Chemical Biology. <i>Current Alzheimer Research</i> , 2009, 6, 451-454.	0.7	25
121	Differential Recognition and Hydrolysis of Host Carbohydrate Antigens by <i>Streptococcus pneumoniae</i> Family 98 Glycoside Hydrolases. <i>Journal of Biological Chemistry</i> , 2009, 284, 26161-26173.	1.6	41
122	O-GlcNAc post-translational modifications regulate the entry of neurons into an axon branching program. <i>Developmental Neurobiology</i> , 2009, 69, 162-173.	1.5	43
123	A Selective Inhibitor GalPUGNAc of Human Lysosomal β -Hexosaminidases Modulates Levels of the Ganglioside GM2 in Neuroblastoma Cells. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 1300-1303.	7.2	39
124	Insight into a strategy for attenuating AmpC-mediated β -lactam resistance: Structural basis for selective inhibition of the glycoside hydrolase NagZ. <i>Protein Science</i> , 2009, 18, 1541-1551.	3.1	43
125	Enzymatic characterization and inhibition of the nuclear variant of human O-GlcNAcase. <i>Carbohydrate Research</i> , 2009, 344, 1079-1084.	1.1	34
126	Inactivation of the Glycoside Hydrolase NagZ Attenuates Antipseudomonal β -Lactam Resistance in <i>Pseudomonas aeruginosa</i> . <i>Antimicrobial Agents and Chemotherapy</i> , 2009, 53, 2274-2282.	1.4	65

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127	Mislocalization of TDP-43 in the G93A mutant SOD1 transgenic mouse model of ALS. <i>Neuroscience Letters</i> , 2009, 458, 70-74.	1.0	64
128	Probing Synergy between Two Catalytic Strategies in the Glycoside Hydrolase <i>O</i> -GlcNAcase Using Multiple Linear Free Energy Relationships. <i>Journal of the American Chemical Society</i> , 2009, 131, 13415-13422.	6.6	36
129	Affinity-Based Proteomics Probes; Tools for Studying Carbohydrate-Processing Enzymes. <i>Australian Journal of Chemistry</i> , 2009, 62, 521.	0.5	6
130	Molecular Basis for Inhibition of GH84 Glycoside Hydrolases by Substituted Azepanes: Conformational Flexibility Enables Probing of Substrate Distortion. <i>Journal of the American Chemical Society</i> , 2009, 131, 5390-5392.	6.6	62
131	The Chitopentaose Complex of a Mutant Hen Egg-White Lysozyme Displays No Distortion of the α -1 Sugar Away from a 4C1 Chair Conformation. <i>Australian Journal of Chemistry</i> , 2009, 62, 528.	0.5	3
132	The synthesis and biological evaluation of some carbocyclic analogues of PUGNAc. <i>Carbohydrate Research</i> , 2008, 343, 2744-2753.	1.1	7
133	Mechanistic insights into glycosidase chemistry. <i>Current Opinion in Chemical Biology</i> , 2008, 12, 539-555.	2.8	363
134	Structure of an <i>O</i> -GlcNAc transferase homolog provides insight into intracellular glycosylation. <i>Nature Structural and Molecular Biology</i> , 2008, 15, 764-765.	3.6	98
135	A potent mechanism-inspired <i>O</i> -GlcNAcase inhibitor that blocks phosphorylation of tau in vivo. <i>Nature Chemical Biology</i> , 2008, 4, 483-490.	3.9	576
136	Synthesis and Use of Mechanism-Based Protein-Profilng Probes for Retaining β -Glucosaminidases Facilitate Identification of <i>Pseudomonas aeruginosa</i> NagZ. <i>Journal of the American Chemical Society</i> , 2008, 130, 327-335.	6.6	95
137	Elevation of Global <i>O</i> -GlcNAc Levels in 3T3-L1 Adipocytes by Selective Inhibition of <i>O</i> -GlcNAcase Does Not Induce Insulin Resistance. <i>Journal of Biological Chemistry</i> , 2008, 283, 34687-34695.	1.6	106
138	Structural and mechanistic insight into the basis of mucopolysaccharidosis IIIB. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 6560-6565.	3.3	79
139	Small Molecule Inhibitors of a Glycoside Hydrolase Attenuate Inducible AmpC-mediated β -Lactam Resistance. <i>Journal of Biological Chemistry</i> , 2007, 282, 21382-21391.	1.6	103
140	A 1-acetamido derivative of 6-epi-valienamine: an inhibitor of a diverse group of β -N-acetylglucosaminidases. <i>Organic and Biomolecular Chemistry</i> , 2007, 5, 3013.	1.5	37
141	Analysis of PUGNAc and NAG-thiazoline as Transition State Analogues for Human <i>O</i> -GlcNAcase: A Mechanistic and Structural Insights into Inhibitor Selectivity and Transition State Poise. <i>Journal of the American Chemical Society</i> , 2007, 129, 635-644.	6.6	155
142	Inhibition of <i>O</i> -GlcNAcase by a gluco-configured nagstatin and a PUGNAc-imidazole hybrid inhibitor. <i>Chemical Communications</i> , 2006, , 4372-4374.	2.2	60
143	A divergent synthesis of 2-acyl derivatives of PUGNAc yields selective inhibitors of <i>O</i> -GlcNAcase. <i>Organic and Biomolecular Chemistry</i> , 2006, 4, 839.	1.5	65
144	Identification of Asp174 and Asp175 as the Key Catalytic Residues of Human <i>O</i> -GlcNAcase by Functional Analysis of Site-Directed Mutants. <i>Biochemistry</i> , 2006, 45, 3835-3844.	1.2	107

#	ARTICLE	IF	CITATIONS
145	Molecular Basis for G Protein Control of the Prokaryotic ATP Sulfurylase. <i>Molecular Cell</i> , 2006, 21, 109-122.	4.5	48
146	Functional analysis of a group A streptococcal glycoside hydrolase Spy1600 from family 84 reveals it is a Î²-N-acetylglucosaminidase and not a hyaluronidase. <i>Biochemical Journal</i> , 2006, 399, 241-247.	1.7	35
147	Characterization of a beta-N-acetylhexosaminidase and a beta-N-acetylglucosaminidase/beta-glucosidase from <i>Cellulomonas fimi</i> . <i>FEBS Journal</i> , 2006, 273, 2929-2941.	2.2	60
148	Structure and mechanism of a bacterial Î²-glucosaminidase having O-GlcNAcase activity. <i>Nature Structural and Molecular Biology</i> , 2006, 13, 365-371.	3.6	182
149	A highly concise preparation of O-deacetylated arylthioglycosides of N-acetyl-d-glucosamine from 2-acetamido-3,4,6-tri-O-acetyl-2-deoxy-Î±-d-glucopyranosyl chloride and aryl thiols or disulfides. <i>Carbohydrate Research</i> , 2006, 341, 1764-1769.	1.1	7
150	Functional Proteomic Profiling of Glycanâ€™Processing Enzymes. <i>Methods in Enzymology</i> , 2006, 415, 253-268.	0.4	4
151	The chemical synthesis of 2-deoxy-2-fluorodisaccharide probes of the hen egg white lysozyme mechanism. <i>Carbohydrate Research</i> , 2005, 340, 379-388.	1.1	14
152	O-GlcNAcase Uses Substrate-assisted Catalysis. <i>Journal of Biological Chemistry</i> , 2005, 280, 25313-25322.	1.6	333
153	Detailed Comparative Analysis of the Catalytic Mechanisms of Î²-N-Acetylglucosaminidases from Families 3 and 20 of Glycoside Hydrolases. <i>Biochemistry</i> , 2005, 44, 12809-12818.	1.2	98
154	O-GlcNAcase Catalyzes Cleavage of Thioglycosides without General Acid Catalysis. <i>Journal of the American Chemical Society</i> , 2005, 127, 17202-17203.	6.6	69
155	A Strategy for Functional Proteomic Analysis of Glycosidase Activity from Cell Lysates. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 5338-5342.	7.2	131
156	Crystal Structure of Î²-d-Xylosidase from <i>Thermoanaerobacterium saccharolyticum</i> , a Family 39 Glycoside Hydrolase. <i>Journal of Molecular Biology</i> , 2004, 335, 155-165.	2.0	69
157	A chemical approach for identifying O-GlcNAc-modified proteins in cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 9116-9121.	3.3	496
158	Aspartate 313 in the <i>Streptomyces plicatus</i> Hexosaminidase Plays a Critical Role in Substrate-assisted Catalysis by Orienting the 2-Acetamido Group and Stabilizing the Transition State. <i>Journal of Biological Chemistry</i> , 2002, 277, 40055-40065.	1.6	126
159	Mechanism of <i>Thermoanaerobacterium saccharolyticum</i> Î²-Xylosidase: Kinetic Studies. <i>Biochemistry</i> , 2002, 41, 9727-9735.	1.2	47
160	A Case for Reverse Protonation: Identification of Glu160 as an Acid/Base Catalyst in <i>Thermoanaerobacterium saccharolyticum</i> Î²-Xylosidase and Detailed Kinetic Analysis of a Site-Directed Mutant. <i>Biochemistry</i> , 2002, 41, 9736-9746.	1.2	50
161	Characterization of the Glu and Asp Residues in the Active Site of Human Î²-Hexosaminidase B. <i>Biochemistry</i> , 2001, 40, 2201-2209.	1.2	36
162	Catalysis by hen egg-white lysozyme proceeds via a covalent intermediate. <i>Nature</i> , 2001, 412, 835-838.	13.7	588

#	ARTICLE	IF	CITATIONS
163	Biochemical and Structural Assessment of the 1-N-Azasugar GalNAc-isofagomine as a Potent Family 20 β -N-Acetylhexosaminidase Inhibitor. <i>Journal of Biological Chemistry</i> , 2001, 276, 42131-42137.	1.6	42
164	Crystallographic Evidence for Substrate-assisted Catalysis in a Bacterial β -Hexosaminidase. <i>Journal of Biological Chemistry</i> , 2001, 276, 10330-10337.	1.6	239
165	Identification of Active Site Residues in Glycosidases by Use of Tandem Mass Spectrometry. , 2000, 146, 203-222.		7
166	Role of β Arg211 in the Active Site of Human β -Hexosaminidase B. <i>Biochemistry</i> , 2000, 39, 6219-6227.	1.2	17
167	Mechanism of Action and Identification of Asp242 as the Catalytic Nucleophile of <i>Vibrio furnisii</i> N-Acetyl- β -d-glucosaminidase Using 2-Acetamido-2-deoxy-5-fluoro- β -l-idopyranosyl Fluoride. <i>Biochemistry</i> , 2000, 39, 117-126.	1.2	106
168	Identification of Glu-277 as the catalytic nucleophile of <i>Thermoanaerobacterium saccharolyticum</i> β -xylosidase using electrospray MS. <i>Biochemical Journal</i> , 1998, 335, 449-455.	1.7	41
169	An Allosamizoline/Glucosamine Hybrid NAGase Inhibitor. <i>Synlett</i> , 1997, 1997, 435-436.	1.0	11
170	NAG-thiazoline, An N-Acetyl- β -hexosaminidase Inhibitor That Implicates Acetamido Participation. <i>Journal of the American Chemical Society</i> , 1996, 118, 6804-6805.	6.6	248