Kelley W Moremen

List of Publications by Year
in descending order

161 papers	8,922 citations	41344 49 h-index	49909 87 g-index
169 all docs	169 docs citations	169 times ranked	9405 citing authors

#	Article	IF	Citations
1	Vertebrate protein glycosylation: diversity, synthesis and function. Nature Reviews Molecular Cell Biology, 2012, 13, 448-462.	37.0	1,372
2	Glycosidases of the asparagine-linked oligosaccharide processing pathway. Glycobiology, 1994, 4, 113-125.	2.5	331
3	Alpha-Mannosidase-II Deficiency Results in Dyserythropoiesis and Unveils an Alternate Pathway in Oligosaccharide Biosynthesis. Cell, 1997, 90, 157-167.	28.9	199
4	Two <scp>A</scp>rabidopsis proteins synthesize acetylated xylan <i>inÂvitro</i>. Plant Journal, 2014, 80, 197-206.	5.7	192
5	Regulation of Glycan Structures in Animal Tissues. Journal of Biological Chemistry, 2008, 283, 17298-17313.	3.4	188
6	Expression system for structural and functional studies of human glycosylation enzymes. Nature Chemical Biology, 2018, 14, 156-162.	8.0	182
7	Elucidation of the molecular logic by which misfolded Î±1-antitrypsin is preferentially selected for degradation. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 8229-8234.	7.1	158
8	Structural Basis for Catalysis and Inhibition ofN-Glycan Processing Class I Î±1,2-Mannosidases. Journal of Biological Chemistry, 2000, 275, 41287-41298.	3.4	141
9	Human EDEM2, a novel homolog of family 47 glycosidases, is involved in ER-associated degradation of glycoproteins. Glycobiology, 2005, 15, 421-436.	2.5	139
10	Germ Cell Survival Through Carbohydrate-Mediated Interaction with Sertoli Cells. Science, 2002, 295, 124-127.	12.6	134
11	Identification, Expression, and Characterization of a cDNA Encoding Human Endoplasmic Reticulum Mannosidase I, the Enzyme That Catalyzes the First Mannose Trimming Step in Mammalian Asn-linked Oligosaccharide Biosynthesis. Journal of Biological Chemistry, 1999, 274, 21375-21386.	3.4	132
12	Glycomics of Proteoglycan Biosynthesis in Murine Embryonic Stem Cell Differentiation. Journal of Proteome Research, 2007, 6, 4374-4387.	3.7	130
13	An automated platform for the enzyme-mediated assembly of complex oligosaccharides. Nature Chemistry, 2019, 11, 229-236.	13.6	124
14	Emerging structural insights into glycosyltransferase-mediated synthesis of glycans. Nature Chemical Biology, 2019, 15, 853-864.	8.0	123
15	Synthesis of asymmetrical multiantennary human milk oligosaccharides. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 6954-6959.	7.1	118
16	Enzymatic Basis for N-Glycan Sialylation. Journal of Biological Chemistry, 2013, 288, 34680-34698.	3.4	116
17	Structural basis for regulation of human calcium-sensing receptor by magnesium ions and an unexpected tryptophan derivative co-agonist. Science Advances, 2016, 2, e1600241.	10.3	116
18	Mechanistic insights into a Ca2+-dependent family of Î±-mannosidases in a human gut symbiont. Nature Chemical Biology, 2010, 6, 125-132.	8.0	115

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19	N-linked glycan recognition and processing: the molecular basis of endoplasmic reticulum quality control. Current Opinion in Structural Biology, 2006, 16, 592-599.	5.7	111
20	Substrate specificities of recombinant murine Golgi Â1,2-mannosidases IA and IB and comparison with endoplasmic reticulum and Golgi processing Â1,2-mannosidases. Glycobiology, 1998, 8, 981-995.	2.5	109
21	IDAWG: Metabolic Incorporation of Stable Isotope Labels for Quantitative Glycomics of Cultured Cells. Journal of Proteome Research, 2009, 8, 3816-3823.	3.7	108
22	NMR Characterization of Immunoglobulin G Fc Glycan Motion on Enzymatic Sialylation. Biochemistry, 2012, 51, 4618-4626.	2.5	108
23	Mechanism of Class 1 (Glycosylhydrolase Family 47) Î±-Mannosidases Involved in N-Glycan Processing and Endoplasmic Reticulum Quality Control. Journal of Biological Chemistry, 2005, 280, 16197-16207.	3.4	106
24	Organizational Diversity among Distinct Glycoprotein Endoplasmic Reticulum-associated Degradation Programs. Molecular Biology of the Cell, 2002, 13, 2639-2650.	2.1	103
25	Focused glycomic analysis of the <i>N</i>â€linked glycan biosynthetic pathway in ovarian cancer. Proteomics, 2008, 8, 3210-3220.	2.2	103
26	The functional O-mannose glycan on Î±-dystroglycan contains a phospho-ribitol primed for matriglycan addition. ELife, 2016, 5, .	6.0	98
27	Cell-based glycan arrays for probing glycanâ€"glycan binding protein interactions. Nature Communications, 2018, 9, 880.	12.8	94
28	Streamlining the chemoenzymatic synthesis of complex N-glycans by a stop and go strategy. Nature Chemistry, 2019, 11, 161-169.	13.6	94
29	Regulation of Glycan Structures in Murine Embryonic Stem Cells. Journal of Biological Chemistry, 2012, 287, 37835-37856.	3.4	91
30	Selective Exoâ€Enzymatic Labeling of Nâ€Glycans on the Surface of Living Cells by Recombinant ST6Galâ€…I. Angewandte Chemie - International Edition, 2013, 52, 13012-13015.	13.8	83
31	Cloning, Expression, Purification, and Characterization of the Human Broad Specificity Lysosomal Acid Î±-Mannosidase. Journal of Biological Chemistry, 1996, 271, 28348-28358.	3.4	82
32	One-Step Selective Exoenzymatic Labeling (SEEL) Strategy for the Biotinylation and Identification of Glycoproteins of Living Cells. Journal of the American Chemical Society, 2016, 138, 11575-11582.	13.7	81
33	B4GAT1 is the priming enzyme for the LARGE-dependent functional glycosylation of Î±-dystroglycan. ELife, 2014, 3, .	6.0	78
34	Heparan Sulfate Facilitates FGF and BMP Signaling to Drive Mesoderm Differentiation of Mouse Embryonic Stem Cells. Journal of Biological Chemistry, 2012, 287, 22691-22700.	3.4	76
35	Mutations in the Alpha 1,2-Mannosidase Gene, MAN1B1, Cause Autosomal-Recessive Intellectual Disability. American Journal of Human Genetics, 2011, 89, 176-182.	6.2	73
36	Mucin-type O-glycosylation is controlled by short- and long-range glycopeptide substrate recognition that varies among members of the polypeptide GalNAc transferase family. Glycobiology, 2016, 26, 360-376.	2.5	73

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37	A mutant-cell library for systematic analysis of heparan sulfate structureâ€"function relationships. Nature Methods, 2018, 15, 889-899.	19.0	71
38	The Lectin Domain of the Polypeptide GalNAc Transferase Family of Glycosyltransferases (ppGalNAc Ts) Acts as a Switch Directing Glycopeptide Substrate Glycosylation in an N- or C-terminal Direction, Further Controlling Mucin Type O-Glycosylation. Journal of Biological Chemistry, 2013, 288, 19900-19914.	3.4	67
39	Identification of an algal xylan synthase indicates that there is functional orthology between algal and plant cell wall biosynthesis. New Phytologist, 2018, 218, 1049-1060.	7.3	67
40	Essential and mutually compensatory roles of Â-mannosidase II and Â-mannosidase IIx in N-glycan processing in vivo in mice. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 8983-8988.	7.1	65
41	Identification of Key Enzymes for Pectin Synthesis in Seed Mucilage. Plant Physiology, 2018, 178, 1045-1064.	4.8	63
42	Family 47 Î±â€Mannosidases in Nâ€Glycan Processing. Methods in Enzymology, 2006, 415, 31-46.	1.0	62
43	Remodeling of Mouse Milk Glycoconjugates by Transgenic Expression of a Human Glycosyltransferase. Journal of Biological Chemistry, 1995, 270, 29515-29519.	3.4	61
44	Cloning and expression of a Xenopus laevis oocyte lectin and characterization of its mRNA levels during early development. Glycobiology, 1997, 7, 367-372.	2.5	61
45	Association mapping, transcriptomics, and transient expression identify candidate genes mediating plantâ€"pathogen interactions in a tree. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11573-11578.	7.1	61
46	Helicobacter pylori chronic infection and mucosal inflammation switches the human gastric glycosylation pathways. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2015, 1852, 1928-1939.	3.8	60
47	A Single-Step Chemoenzymatic Reaction for the Construction of Antibodyâ€"Cell Conjugates. ACS Central Science, 2018, 4, 1633-1641.	11.3	59
48	High Yield Expression of Recombinant Human Proteins with the Transient Transfection of HEK293 Cells in Suspension. Journal of Visualized Experiments, 2015, , e53568.	0.3	55
49	A PEGylated Photocleavable Auxiliary Mediates the Sequential Enzymatic Glycosylation and Native Chemical Ligation of Peptides. Angewandte Chemie - International Edition, 2015, 54, 7711-7715.	13.8	55
50	High Structural Resolution Hydroxyl Radical Protein Footprinting Reveals an Extended Robo1-Heparin Binding Interface. Journal of Biological Chemistry, 2015, 290, 10729-10740.	3.4	54
51	Structural, mutagenic and <i>inÂsilico</i> studies of xyloglucan fucosylation in <i>Arabidopsis thaliana</i> suggest a waterâ€mediated mechanism. Plant Journal, 2017, 91, 931-949.	5.7	53
52	Heparan sulfate deficiency disrupts developmental angiogenesis and causes congenital diaphragmatic hernia. Journal of Clinical Investigation, 2014, 124, 209-221.	8.2	53
53	Deep evolutionary analysis reveals the design principles of fold A glycosyltransferases. ELife, 2020, 9, .	6.0	53
54	Probing the Substrate Specificity of Golgi Î±-Mannosidase II by Use of Synthetic Oligosaccharides and a Catalytic Nucleophile Mutant. Journal of the American Chemical Society, 2008, 130, 8975-8983.	13.7	50

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55	O-Linked N-Acetylglucosamine (O-GlcNAc) Expression Levels Epigenetically Regulate Colon Cancer Tumorigenesis by Affecting the Cancer Stem Cell Compartment via Modulating Expression of Transcriptional Factor MYBL1. Journal of Biological Chemistry, 2017, 292, 4123-4137.	3.4	50
56	Structure of Mouse Golgi Î±-Mannosidase IA Reveals the Molecular Basis for Substrate Specificity among Class 1 (Family 47 Glycosylhydrolase) Î±1,2-Mannosidases. Journal of Biological Chemistry, 2004, 279, 29774-29786.	3.4	48
57	The mammalian UPR boosts glycoprotein ERAD by suppressing the proteolytic downregulation of ER mannosidase I. Journal of Cell Science, 2009, 122, 976-984.	2.0	48
58	Isolation and characterization of a class II Î±-mannosidase cDNA from lepidopteran insect cells. Glycobiology, 1997, 7, 113-127.	2.5	46
59	Human Endoplasmic Reticulum Mannosidase I Is Subject to Regulated Proteolysis. Journal of Biological Chemistry, 2007, 282, 4841-4849.	3.4	46
60	Selective Exo-Enzymatic Labeling Detects Increased Cell Surface Sialoglycoprotein Expression upon Megakaryocytic Differentiation. Journal of Biological Chemistry, 2016, 291, 3982-3989.	3.4	45
61	Rapid screening of sugar-nucleotide donor specificities of putative glycosyltransferases. Glycobiology, 2017, 27, 206-212.	2.5	45
62	Proteomic Identification of Glycosylphosphatidylinositol Anchor-dependent Membrane Proteins Elevated in Breast Carcinoma. Journal of Biological Chemistry, 2012, 287, 25230-25240.	3.4	44
63	A Practical Synthesis of Kifunensine Analogues as Inhibitors of Endoplasmic Reticulum Î±-Mannosidase I. Journal of Organic Chemistry, 2005, 70, 9892-9904.	3.2	43
64	A two-phase model for the non-processive biosynthesis of homogalacturonan polysaccharides by the GAUT1:GAUT7 complex. Journal of Biological Chemistry, 2018, 293, 19047-19063.	3.4	43
65	Integrated Approach to Identify Heparan Sulfate Ligand Requirements of Robo1. Journal of the American Chemical Society, 2016, 138, 13059-13067.	13.7	42
66	Insect Cells Encode a Class II Î±-Mannosidase with Unique Properties. Journal of Biological Chemistry, 2001, 276, 16335-16340.	3.4	41
67	Cloning, expression, purification, and characterization of the acid Â-mannosidase from Trypanosoma cruzi. Glycobiology, 1998, 8, 1183-1194.	2.5	39
68	Î±-Mannosidases involved in N-glycan processing show cell specificity and distinct subcompartmentalization within the Golgi apparatus of cells in the testis and epididymis. European Journal of Cell Biology, 1999, 78, 441-452.	3.6	39
69	Energetics of Substrate Binding and Catalysis by Class 1 (Glycosylhydrolase Family 47) Î±-Mannosidases Involved in N-Glycan Processing and Endoplasmic Reticulum Quality Control. Journal of Biological Chemistry, 2005, 280, 29837-29848.	3.4	38
70	Characterization of a Human Core-specific Lysosomal Î±1,6-Mannosidase Involved in N-Glycan Catabolism. Journal of Biological Chemistry, 2005, 280, 37204-37216.	3.4	38
71	Divergent Chemoenzymatic Synthesis of Asymmetricalâ€Coreâ€Fucosylated and Coreâ€Unmodified <i>N</i>â€Glycans. Chemistry - A European Journal, 2016, 22, 18742-18746.	3.3	38
72	Human <i>N</i> -acetylglucosaminyltransferase II substrate recognition uses a modular architecture that includes a convergent exosite. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4637-4642.	7.1	37

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73	Human Lysosomal and Jack Bean Î±-Mannosidases Are Retaining Glycosidases. Biochemical and Biophysical Research Communications, 1997, 238, 896-898.	2.1	36
74	Excessive activity of cathepsin K is associated with cartilage defects in a zebrafish model of mucolipidosis II. DMM Disease Models and Mechanisms, 2012, 5, 177-190.	2.4	36
75	Glycan remodeled erythrocytes facilitate antigenic characterization of recent A/H3N2 influenza viruses. Nature Communications, 2021, 12, 5449.	12.8	35
76	Selective Engineering of Linkageâ€Specific Î±2,6â€‹<i>N</i>â€Linked Sialoproteins Using Sydnoneâ€Modified Sialic Acid Bioorthogonal Reporters. Angewandte Chemie - International Edition, 2019, 58, 4281-4285.	13.8	34
77	Molecular Mechanism of Polysaccharide Acetylation by the Arabidopsis Xylan <i>O</i>-acetyltransferase XOAT1. Plant Cell, 2020, 32, 2367-2382.	6.6	32
78	Transcript profiling and lipidomic analysis of ceramide subspecies in mouse embryonic stem cells and embryoid bodies. Journal of Lipid Research, 2010, 51, 480-489.	4.2	31
79	Variable posttranslational modifications of severe acute respiratory syndrome coronavirus 2 nucleocapsid protein. Glycobiology, 2021, 31, 1080-1092.	2.5	31
80	Glycosylation Alters Dimerization Properties of a Cell-surface Signaling Protein, Carcinoembryonic Antigen-related Cell Adhesion Molecule 1 (CEACAM1). Journal of Biological Chemistry, 2016, 291, 20085-20095.	3.4	30
81	Overexpression of the Golgi-localized enzyme Î±-mannosidase IIx in Chinese hamster ovary cells results in the conversion of hexamannosyl-N-acetylchitobiose to tetramannosyl-N-acetylchitobiose in the N-glycan-processing pathway. FEBS Journal, 2001, 268, 1280-1288.	0.2	29
82	Substrate recognition and catalysis by GH47 Î±-mannosidases involved in Asn-linked glycan maturation in the mammalian secretory pathway. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E7890-E7899.	7.1	29
83	Inhibition of Golgi Mannosidase II with Mannostatin A Analogues: Synthesis, Biological Evaluation, and Structure-Activity Relationship Studies. ChemBioChem, 2004, 5, 1220-1227.	2.6	28
84	Potent and Selective Inhibition of Class II Î±-D-Mannosidase Activity by a Bicyclic Sulfonium Salt. ChemBioChem, 2005, 6, 845-848.	2.6	28
85	Transcript Analysis of Stem Cells. Methods in Enzymology, 2010, 479, 73-91.	1.0	28
86	NDST2 (N-Deacetylase/N-Sulfotransferase-2) Enzyme Regulates Heparan Sulfate Chain Length. Journal of Biological Chemistry, 2016, 291, 18600-18607.	3.4	28
87	Protein O-Linked Mannose Î²-1,4-N-Acetylglucosaminyl-transferase 2 (POMGNT2) Is a Gatekeeper Enzyme for Functional Glycosylation of Î±-Dystroglycan. Journal of Biological Chemistry, 2017, 292, 2101-2109.	3.4	27
88	Modulation of Siglec-7 Signaling Via In Situ-Created High-Affinity <i>cis</i>-Ligands. ACS Central Science, 2021, 7, 1338-1346.	11.3	27
89	Elucidating Human Milk Oligosaccharide biosynthetic genes through network-based multi-omics integration. Nature Communications, 2022, 13, 2455.	12.8	27
90	Modulating Cellâ€Surface Receptor Signaling and Ion Channel Functions by Inâ€…Situ Glycan Editing. Angewandte Chemie - International Edition, 2018, 57, 967-971.	13.8	26

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91	¹³C-Sialic Acid Labeling of Glycans on Glycoproteins Using ST6Gal-I. Journal of the American Chemical Society, 2008, 130, 11864-11865.	13.7	25
92	Characterization of the interaction between Robo1 and heparin and other glycosaminoglycans. Biochimie, 2013, 95, 2345-2353.	2.6	25
93	ERManI (Endoplasmic Reticulum Class I Î±-Mannosidase) Is Required for HIV-1 Envelope Glycoprotein Degradation via Endoplasmic Reticulum-associated Protein Degradation Pathway. Journal of Biological Chemistry, 2015, 290, 22184-22192.	3.4	24
94	Sialyltransferase-Based Chemoenzymatic Histology for the Detection of <i>N</i>- and <i>O</i>-Glycans. Bioconjugate Chemistry, 2018, 29, 1231-1239.	3.6	24
95	Integration of genetic and metabolic features related to sialic acid metabolism distinguishes human breast cell subtypes. PLoS ONE, 2018, 13, e0195812.	2.5	24
96	Direct Determination of Multiple Ligand Interactions with the Extracellular Domain of the Calcium-sensing Receptor. Journal of Biological Chemistry, 2014, 289, 33529-33542.	3.4	23
97	Cell surface glycan engineering reveals that matriglycan alone can recapitulate dystroglycan binding and function. Nature Communications, 2022, 13, .	12.8	23
98	Structural Aspects of Heparan Sulfate Binding to Robo1â€“Ig1â€“2. ACS Chemical Biology, 2016, 11, 3106-3113.	3.4	22
99	Isotopic labeling with cellular O-glycome reporter/amplification (ICORA) for comparative O-glycomics of cultured cells. Glycobiology, 2018, 28, 214-222.	2.5	22
100	A Glycan Arrayâ€Based Assay for the Identification and Characterization of Plant Glycosyltransferases. Angewandte Chemie - International Edition, 2020, 59, 12493-12498.	13.8	22
101	Mapping the glycosyltransferase fold landscape using interpretable deep learning. Nature Communications, 2021, 12, 5656.	12.8	22
102	A Genetic Model of Substrate Reduction Therapy for Mucopolysaccharidosis. Journal of Biological Chemistry, 2012, 287, 36283-36290.	3.4	21
103	Transcriptional Regulation of the Protocadherin Î² Cluster during Her-2 Protein-induced Mammary Tumorigenesis Results from Altered N-Glycan Branching. Journal of Biological Chemistry, 2012, 287, 24941-24954.	3.4	21
104	ST8SIA4-Dependent Polysialylation is Part of a Developmental Program Required for Germ Layer Formation from Human Pluripotent Stem Cells. Stem Cells, 2016, 34, 1742-1752.	3.2	21
105	A photo-cross-linking GlcNAc analog enables covalent capture of N-linked glycoprotein-binding partners on the cell surface. Cell Chemical Biology, 2022, 29, 84-97.e8.	5.2	21
106	Extracellular sialyltransferase st6gal1 in breast tumor cell growth and invasiveness. Cancer Gene Therapy, 2022, 29, 1662-1675.	4.6	21
107	Loss of expression of <i>N</i>â€acetylglucosaminyltransferase Va results in altered gene expression of glycosyltransferases and galectins. FEBS Letters, 2008, 582, 527-535.	2.8	19
108	Characterizing human Î±-1,6-fucosyltransferase (FUT8) substrate specificity and structural similarities with related fucosyltransferases. Journal of Biological Chemistry, 2020, 295, 17027-17045.	3.4	19

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109	Metabolic glycoengineering of mesenchymal stromal cells with N-propanoylmannosamine. Glycobiology, 2013, 23, 1004-1012.	2.5	18
110	Sparse labeling of proteins: Structural characterization from long range constraints. Journal of Magnetic Resonance, 2014, 241, 32-40.	2.1	18
111	Recombinant Sialyltransferase Infusion Mitigates Infection-Driven Acute Lung Inflammation. Frontiers in Immunology, 2019, 10, 48.	4.8	18
112	Direct Visualization of Live Zebrafish Glycans via Singleâ€Step Metabolic Labeling with Fluorophoreâ€Tagged Nucleotide Sugars. Angewandte Chemie - International Edition, 2019, 58, 14327-14333.	13.8	17
113	HNK-1 sulfotransferase modulates Î±-dystroglycan glycosylation by 3-O-sulfation of glucuronic acid on matriglycan. Glycobiology, 2020, 30, 817-829.	2.5	17
114	A validated collection of mouse monoclonal antibodies to human glycosyltransferases functioning in mucin-type O-glycosylation. Glycobiology, 2019, 29, 645-656.	2.5	16
115	Chemoenzymatic synthesis of the oligosaccharide moiety of the tumor-associated antigen disialosyl globopentaosylceramide. Organic and Biomolecular Chemistry, 2019, 17, 7304-7308.	2.8	15
116	Comparison of human poly-N-acetyl-lactosamine synthase structure with GT-A fold glycosyltransferases supports a modular assembly of catalytic subsites. Journal of Biological Chemistry, 2021, 296, 100110.	3.4	15
117	Molecular cloning and expression of an Î±-mannosidase gene in Mycobacterium tuberculosis. Microbial Pathogenesis, 2001, 30, 9-18.	2.9	14
118	The C-terminal fragment of axon guidance molecule Slit3 binds heparin and neutralizes heparin's anticoagulant activity. Glycobiology, 2012, 22, 1183-1192.	2.5	14
119	Biochemical characterization of functional domains of the chaperone Cosmc. PLoS ONE, 2017, 12, e0180242.	2.5	14
120	Structural Characterization of a Heparan Sulfate Pentamer Interacting with LAR-Ig1-2. Biochemistry, 2018, 57, 2189-2199.	2.5	14
121	Enriched blood IgG sialylation attenuates IgG-mediated and IgG-controlled-IgE-mediated allergic reactions. Journal of Allergy and Clinical Immunology, 2021, 147, 763-767.	2.9	14
122	Spin-Labeled Analogs of CMP-NeuAc as NMR Probes of the Î±-2,6-Sialyltransferase ST6Gal I. Chemistry and Biology, 2007, 14, 409-418.	6.0	13
123	A Traveling Wave Ion Mobility Spectrometry (TWIMS) Study of the Robo1-Heparan Sulfate Interaction. Journal of the American Society for Mass Spectrometry, 2018, 29, 1153-1165.	2.8	12
124	Paramagnetic Tag for Glycosylation Sites in Glycoproteins: Structural Constraints on Heparan Sulfate Binding to Robo1. ACS Chemical Biology, 2018, 13, 2560-2567.	3.4	12
125	Downstream Products are Potent Inhibitors of the Heparan Sulfate 2-O-Sulfotransferase. Scientific Reports, 2018, 8, 11832.	3.3	11
126	Integrated Chemoenzymatic Approach to Streamline the Assembly of Complex Glycopeptides in the Liquid Phase. Journal of the American Chemical Society, 2022, 144, 9057-9065.	13.7	11

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127	Differentiation-related glycan epitopes identify discrete domains of the muscle glycocalyx. Glycobiology, 2016, 26, 1120-1132.	2.5	10
128	Guanidinylated Neomycin Conjugation Enhances Intranasal Enzyme Replacement in the Brain. Molecular Therapy, 2017, 25, 2743-2752.	8.2	10
129	Selective Engineering of Linkageâ€Specific Î±2,6â€N â€Linked Sialoproteins Using Sydnoneâ€Modified Sialic Acid Bioorthogonal Reporters. Angewandte Chemie, 2019, 131, 4325-4329.	2.0	10
130	Structural mechanism of cooperative regulation of calcium-sensing receptor-mediated cellular signaling. Current Opinion in Physiology, 2020, 17, 269-277.	1.8	10
131	Sparse isotope labeling for nuclear magnetic resonance (NMR) of glycoproteins using 13C-glucose. Glycobiology, 2021, 31, 425-435.	2.5	10
132	Modulation of the NOTCH1 Pathway by LUNATIC FRINGE Is Dominant over That of MANIC or RADICAL FRINGE. Molecules, 2021, 26, 5942.	3.8	10
133	Enzymatic Synthesis of Xylan Microparticles with Tunable Morphologies. ACS Materials Au, 2022, 2, 440-452.	6.0	9
134	Fringe GlcNAc-transferases differentially extend O-fucose on endogenous NOTCH1 in mouse activated T cells. Journal of Biological Chemistry, 2022, 298, 102064.	3.4	9
135	NMR assignments of sparsely labeled proteins using a genetic algorithm. Journal of Biomolecular NMR, 2017, 67, 283-294.	2.8	8
136	NMR Resonance Assignment Methodology: Characterizing Large Sparsely Labeled Glycoproteins. Journal of Molecular Biology, 2019, 431, 2369-2382.	4.2	8
137	Cell Line-, Protein-, and Sialoglycosite-Specific Control of Flux-Based Sialylation in Human Breast Cells: Implications for Cancer Progression. Frontiers in Chemistry, 2020, 8, 13.	3.6	8
138	AtFUT4 and AtFUT6 Are Arabinofuranose-Specific Fucosyltransferases. Frontiers in Plant Science, 2021, 12, 589518.	3.6	8
139	Harnessing galactose oxidase in the development of a chemoenzymatic platform for glycoconjugate vaccine design. Journal of Biological Chemistry, 2021, , 101453.	3.4	8
140	O-fucosylation of thrombospondin type 1 repeats is essential for ECM remodeling and signaling during bone development. Matrix Biology, 2022, 107, 77-96.	3.6	8
141	Measurement of residual dipolar couplings in methyl groups via carbon detection. Journal of Biomolecular NMR, 2019, 73, 191-198.	2.8	7
142	Heterologous expression of plant glycosyltransferases for biochemistry and structural biology. Methods in Cell Biology, 2020, 160, 145-165.	1.1	7
143	CUPRA-ZYME: An Assay for Measuring Carbohydrate-Active Enzyme Activities, Pathways, and Substrate Specificities. Analytical Chemistry, 2020, 92, 3228-3236.	6.5	6
144	Impacting Bacterial Sialidase Activity by Incorporating Bioorthogonal Chemical Reporters onto Mammalian Cell-Surface Sialosides. ACS Chemical Biology, 2021, 16, 2307-2314.	3.4	6

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145	Appropriate aglycone modification significantly expands the glycan substrate acceptability of Î±1,6-fucosyltransferase (FUT8). Biochemical Journal, 2021, 478, 1571-1583.	3.7	5
146	Purification, crystallization and preliminary X-ray crystallographic analysis of recombinant murine Golgi mannosidase IA, a class I Î±-mannosidase involved in Asn-linked oligosaccharide maturation. Acta Crystallographica Section D: Biological Crystallography, 1999, 55, 571-573.	2.5	4
147	Modulating Cellâ€Surface Receptor Signaling and Ion Channel Functions by Inâ€…Situ Glycan Editing. Angewandte Chemie, 2018, 130, 979-983.	2.0	4
148	hFUT1-Based Live-Cell Assay To Profile Î±1-2-Fucoside-Enhanced Influenza Virus A Infection. ACS Chemical Biology, 2020, 15, 819-823.	3.4	4
149	Rational enzyme design for controlled functionalization of acetylated xylan for cell-free polymer biosynthesis. Carbohydrate Polymers, 2021, 273, 118564.	10.2	4
150	Robo4 is constitutively shed by ADAMs from endothelial cells and the shed Robo4 functions to inhibit Slit3-induced angiogenesis. Scientific Reports, 2022, 12, 4352.	3.3	4
151	Defective mucin-type glycosylation on Î±-dystroglycan in COG-deficient cells increases its susceptibility to bacterial proteases. Journal of Biological Chemistry, 2018, 293, 14534-14544.	3.4	3
152	Modularity of the hydrophobic core and evolution of functional diversity in fold A glycosyltransferases. Journal of Biological Chemistry, 2022, 298, 102212.	3.4	3
153	Mannosidase, Alpha, Class 1 (MAN1A1 (Golgi Alpha-Mannnosidase IA), Man1A2 (Golgi Alpha-Mannosidase) Tj ETQq1 1 0.784314 rgBT /		2
154	Crystal structures of Î²-1,4-<i>N</i>-acetylglucosaminyltransferase 2: structural basis for inherited muscular dystrophies. Acta Crystallographica Section D: Structural Biology, 2021, 77, 486-495.	2.3	1
155	Quantifying Carbohydrate-Active Enzyme Activity with Glycoprotein Substrates Using Electrospray Ionization Mass Spectrometry and Center-of-Mass Monitoring. Analytical Chemistry, 2021, 93, 15262-15270.	6.5	1
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161	Cover Feature: A Clickable Bioorthogonal Sydnoneâ€Aglycone for the Facile Preparation of a Core 1 <i>O</i>â€Glycanâ€Array (Eur. J. Org. Chem. 27/2022). European Journal of Organic Chemistry, 2022, 2022, .	2.4	0