Lai-Xi Wang

List of Publications by Year
in descending order

210	10,106	28242	45285
papers	citations	55 h-index	90 g-index

235	235	235	8597
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Structure of HIV-1 gp120 V1/V2 domain with broadly neutralizing antibody PG9. Nature, 2011, 480, 336-343.	13.7	794
2	Modulating IgG effector function by Fc glycan engineering. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3485-3490.	3.3	278
3	Chemoenzymatic Glycoengineering of Intact IgG Antibodies for Gain of Functions. Journal of the American Chemical Society, 2012, 134, 12308-12318.	6.6	272
4	Structural basis for diverse N-glycan recognition by HIV-1â€“neutralizing V1â€“V2â€“directed antibody PG16. Nature Structural and Molecular Biology, 2013, 20, 804-813.	3.6	257
5	Sialylation of IgG Fc domain impairs complement-dependent cytotoxicity. Journal of Clinical Investigation, 2015, 125, 4160-4170.	3.9	229
6	Mutants of Mucor hiemalis Endo-Î²-N-acetylglucosaminidase Show Enhanced Transglycosylation and Glycosynthase-like Activities. Journal of Biological Chemistry, 2008, 283, 4469-4479.	1.6	213
7	Glycosynthases Enable a Highly Efficient Chemoenzymatic Synthesis of N-Glycoproteins Carrying Intact Natural N-Glycans. Journal of the American Chemical Society, 2009, 131, 2214-2223.	6.6	174
8	A combined method for producing homogeneous glycoproteins with eukaryotic N-glycosylation. Nature Chemical Biology, 2010, 6, 264-266.	3.9	171
9	Chemoenzymatic Methods for the Synthesis of Glycoproteins. Chemical Reviews, 2018, 118, 8359-8413.	23.0	170
10	Highly Efficient Endoglycosidase-Catalyzed Synthesis of Glycopeptides Using Oligosaccharide Oxazolines as Donor Substrates. Journal of the American Chemical Society, 2005, 127, 9692-9693.	6.6	155
11	Enzymatic transglycosylation for glycoconjugate synthesis. Current Opinion in Chemical Biology, 2009, 13, 592-600.	2.8	150
12	Chemical and Chemoenzymatic Synthesis of Glycoproteins for Deciphering Functions. Chemistry and Biology, 2014, 21, 51-66.	6.2	146
13	Efficient Glycosynthase Mutant Derived from Mucor hiemalis Endo-Î²-N-acetylglucosaminidase Capable of Transferring Oligosaccharide from Both Sugar Oxazoline and Natural N-Glycan. Journal of Biological Chemistry, 2010, 285, 511-521.	1.6	140
14	Chemoenzymatic Synthesis and FcÎ³ Receptor Binding of Homogeneous Glycoforms of Antibody Fc Domain. Presence of a Bisecting Sugar Moiety Enhances the Affinity of Fc to FcÎ³IIIa Receptor. Journal of the American Chemical Society, 2011, 133, 18975-18991.	6.6	135
15	Emerging Technologies for Making Glycan-Defined Glycoproteins. ACS Chemical Biology, 2012, 7, 110-122.	1.6	131
16	Coexistence of potent HIV-1 broadly neutralizing antibodies and antibody-sensitive viruses in a viremic controller. Science Translational Medicine, 2017, 9, .	5.8	128
17	Structural Characterization of Anti-Inflammatory Immunoglobulin G Fc Proteins. Journal of Molecular Biology, 2014, 426, 3166-3179.	2.0	126
18	Toward a Carbohydrate-Based HIV-1 Vaccine:Â Synthesis and Immunological Studies of Oligomannose-Containing Glycoconjugates. Bioconjugate Chemistry, 2006, 17, 493-500.	1.8	124

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19	Structural Characterization of the Symbiotically Important Low-Molecular-Weight Succinoglycan of Sinorhizobium meliloti. Journal of Bacteriology, 1999, 181, 6788-6796.	1.0	120
20	Novel template-assembled oligosaccharide clusters as epitope mimics for HIV-neutralizing antibody 2G12. Design, synthesis, and antibody binding study. Organic and Biomolecular Chemistry, 2007, 5, 1529.	1.5	119
21	Chemoenzymatic synthesis of glycopeptides and glycoproteins through endoglycosidase-catalyzed transglycosylation. Carbohydrate Research, 2008, 343, 1509-1522.	1.1	118
22	Baculovirus-Derived Human Immunodeficiency Virus Type 1 Virus-Like Particles Activate Dendritic Cells and Induce Ex Vivo T-Cell Responses. Journal of Virology, 2006, 80, 9134-9143.	1.5	111
23	A Highly Efficient Chemoenzymatic Approach toward Glycoprotein Synthesis. Organic Letters, 2006, 8, 3081-3084.	2.4	108
24	Synthetic glycopeptides reveal the glycan specificity of HIV-neutralizing antibodies. Nature Chemical Biology, 2013, 9, 521-526.	3.9	106
25	Resveratrol glucuronides as the metabolites of resveratrol in humans: Characterization, synthesis, and anti-HIV activity. Journal of Pharmaceutical Sciences, 2004, 93, 2448-2457.	1.6	105
26	Fc-dependent expression of CD137 on human NK cells: insights into â€œagonisticâ€•effects of anti-CD137 monoclonal antibodies. Blood, 2008, 112, 699-707.	0.6	102
27	Biosynthetic control of molecular weight in the polymerization of the octasaccharide subunits of succinoglycan, a symbiotically important exopolysaccharide of Rhizobium meliloti. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 13477-13482.	3.3	99
28	Glycoengineering of Human IgG1-Fc through Combined Yeast Expression and in Vitro Chemoenzymatic Glycosylation. Biochemistry, 2008, 47, 10294-10304.	1.2	98
29	Glycosynthase Mutants of Endoglycosidase S2 Show Potent Transglycosylation Activity and Remarkably Relaxed Substrate Specificity for Antibody Glycosylation Remodeling. Journal of Biological Chemistry, 2016, 291, 16508-16518.	1.6	96
30	Realizing the promise of chemical glycobiology. Chemical Science, 2013, 4, 3381.	3.7	92
31	Expeditious Chemoenzymatic Synthesis of Homogeneous N-Glycoproteins Carrying Defined Oligosaccharide Ligands. Journal of the American Chemical Society, 2008, 130, 13790-13803.	6.6	91
32	Glycoengineering of Antibodies for Modulating Functions. Annual Review of Biochemistry, 2019, 88, 433-459.	5.0	91
33	The Chitin Catabolic Cascade in the Marine Bacterium Vibrio Cholerae: Characterization of a Unique Chitin Oligosaccharide Deacetylase. Glycobiology, 2007, 17, 1377-1387.	1.3	90
34	Efficient transfer of sialo-oligosaccharide onto proteins by combined use of a glycosynthase-like mutant of Mucor hiemalis endoglycosidase and synthetic sialo-complex-type sugar oxazoline. Biochimica Et Biophysica Acta - General Subjects, 2010, 1800, 1203-1209.	1.1	87
35	Chemoenzymatic synthesis of glycoengineered IgG antibodies and glycosite-specific antibodyâ€“drug conjugates. Nature Protocols, 2017, 12, 1702-1721.	5.5	87
36	Endo-F3 Glycosynthase Mutants Enable Chemoenzymatic Synthesis of Core-fucosylated Triantennary Complex Type Glycopeptides and Glycoproteins. Journal of Biological Chemistry, 2016, 291, 9356-9370.	1.6	84

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37	Combined Chemical and Enzymatic Synthesis of a C-Glycopeptide and Its Inhibitory Activity toward Glycoamidases. Journal of the American Chemical Society, 1997, 119, 11137-11146.	6.6	83
38	Chemoenzymatic Synthesis of HIV-1 V3 Glycopeptides Carrying TwoN-Glycans and Effects of Glycosylation on the Peptide Domain. Journal of Organic Chemistry, 2005, 70, 9990-9996.	1.7	82
39	Desialylation of airway epithelial cells during influenza virus infection enhances pneumococcal adhesion via galectin binding. Molecular Immunology, 2015, 65, 1-16.	1.0	82
40	LPS-induced cytokine production in human dendritic cells is regulated by sialidase activity. Journal of Leukocyte Biology, 2010, 88, 1227-1239.	1.5	80
41	Antibody recognition of a unique tumor-specific glycopeptide antigen. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10056-10061.	3.3	77
42	Remarkable Transglycosylation Activity of Glycosynthase Mutants of Endo-D, an Endo-Î²-N-acetylglucosaminidase from Streptococcus pneumoniae. Journal of Biological Chemistry, 2012, 287, 11272-11281.	1.6	74
43	Glycopeptide Synthesis throughendo-Glycosidase-Catalyzed Oligosaccharide Transfer of Sugar Oxazolines: Probing Substrate Structural Requirement. Chemistry - A European Journal, 2006, 12, 3355-3364.	1.7	73
44	Site-selective chemoenzymatic glycoengineering of Fab and Fc glycans of a therapeutic antibody. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12023-12027.	3.3	72
45	Recruitment of Murine Neutrophils in Vivothrough Endogenous Sialidase Activity. Journal of Biological Chemistry, 2003, 278, 4112-4120.	1.6	71
46	Binding of High-Mannose-Type Oligosaccharides and Synthetic Oligomannose Clusters to Human Antibody 2G12. Chemistry and Biology, 2004, 11, 127-134.	6.2	70
47	NEU1 Sialidase Expressed in Human Airway Epithelia Regulates Epidermal Growth Factor Receptor (EGFR) and MUC1 Protein Signaling. Journal of Biological Chemistry, 2012, 287, 8214-8231.	1.6	69
48	Arthrobacter Endoâ€Î²â€Nâ€Acetylglucosaminidase Shows Transglycosylation Activity on Complexâ€Type Nâ€Glycan Oxazolines: Oneâ€Pot Conversion of Ribonuclease B to Sialylated Ribonuclease C. ChemBioChem, 2010, 11, 1350-1355.	1.3	64
49	Convergent Synthesis of Homogeneous Glc₁Man₉GlcNAc₂-Protein and Derivatives as Ligands of Molecular Chaperones in Protein Quality Control. Journal of the American Chemical Society, 2011, 133, 14404-14417.	6.6	64
50	Chemoenzymatic Fc Glycosylation via Engineered Aldehyde Tags. Bioconjugate Chemistry, 2014, 25, 788-795.	1.8	64
51	Design and synthesis of a template-assembled oligomannose cluster as an epitope mimic for human HIV-neutralizing antibody 2G12. Organic and Biomolecular Chemistry, 2004, 2, 483.	1.5	63
52	Differential expression of endogenous sialidases of human monocytes during cellular differentiation into macrophages. FEBS Journal, 2005, 272, 2545-2556.	2.2	63
53	The Galectin CvGal1 from the Eastern Oyster (Crassostrea virginica) Binds to Blood Group A Oligosaccharides on the Hemocyte Surface*. Journal of Biological Chemistry, 2013, 288, 24394-24409.	1.6	61
54	Chemoenzymatic Synthesis of HIV-1 gp41 Glycopeptides: Effects of Glycosylation on the Anti-HIV Activity and Î±-Helix Bundle-Forming Ability of Peptide C34. ChemBioChem, 2005, 6, 1068-1074.	1.3	60

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55	Synthesis of Maleimide-Activated Carbohydrates as Chemoselective Tags for Site-Specific Glycosylation of Peptides and Proteins. Bioconjugate Chemistry, 2003, 14, 232-238.	1.8	57
56	A two-step enzymatic glycosylation of polypeptides with complex N -glycans. Bioorganic and Medicinal Chemistry, 2013, 21, 2262-2270.	1.4	56
57	Crystal structure ofStreptococcus pyogenesEndoS, an immunomodulatory endoglycosidase specific for human IgG antibodies. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 6714-6719.	3.3	56
58	FcRn, but not FcÎ³Rs, drives maternal-fetal transplacental transport of human IgG antibodies. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12943-12951.	3.3	55
59	Azido glycoside primer: a versatile building block for the biocombinatorial synthesis of glycosphingolipid analogues. Carbohydrate Research, 2000, 329, 755-763.	1.1	54
60	NEU1 and NEU3 Sialidase Activity Expressed in Human Lung Microvascular Endothelia. Journal of Biological Chemistry, 2012, 287, 15966-15980.	1.6	54
61	Structural Basis and Catalytic Mechanism for the Dual Functional Endo-Î²-N-Acetylglucosaminidase A. PLoS ONE, 2009, 4, e4658.	1.1	52
62	Mammalian Î±-1,6-Fucosyltransferase (FUT8) Is the Sole Enzyme Responsible for the N-Acetylglucosaminyltransferase I-independent Core Fucosylation of High-mannose N-Glycans. Journal of Biological Chemistry, 2016, 291, 11064-11071.	1.6	52
63	Protection against SARS-CoV-2 infection by a mucosal vaccine in rhesus macaques. JCI Insight, 2021, 6, .	2.3	52
64	The Chitin Disaccharide,N,Nâ€²-Diacetylchitobiose, Is Catabolized byEscherichia coli and Is Transported/Phosphorylated by the Phosphoenolpyruvate:Glycose Phosphotransferase System. Journal of Biological Chemistry, 2000, 275, 33084-33090.	1.6	51
65	Design and synthesis of glycoprotein-based multivalent glyco-ligands for influenza hemagglutinin and human galectin-3. Bioorganic and Medicinal Chemistry, 2013, 21, 2037-2044.	1.4	51
66	Synthetic carbohydrate antigens for HIV vaccine design. Current Opinion in Chemical Biology, 2013, 17, 997-1005.	2.8	50
67	Designer Î±1,6-Fucosidase Mutants Enable Direct Core Fucosylation of Intact N-Glycopeptides and N-Glycoproteins. Journal of the American Chemical Society, 2017, 139, 15074-15087.	6.6	49
68	Chemoenzymatic synthesis of a high-mannose-type N-glycopeptide analog with C-glycosidic linkage. Tetrahedron Letters, 1996, 37, 1975-1978.	0.7	47
69	1,6-Anhydro-Î²-D-glucopyranose derivatives as glycosyl donors for thioglycosidation reactions. Journal of the Chemical Society Perkin Transactions 1, 1990, , 1677-1682.	0.9	44
70	Enhanced Immune Recognition of Cryptic Glycan Markers in Human Tumors. Cancer Research, 2009, 69, 2018-2025.	0.4	44
71	Unusual Transglycosylation Activity of Flavobacterium meningosepticum Endoglycosidases Enables Convergent Chemoenzymatic Synthesis of Core Fucosylated Complex Nâ€Glycopeptides. ChemBioChem, 2011, 12, 932-941.	1.3	44
72	The Chitin Catabolic Cascade in the Marine Bacterium Vibrio furnissii. Journal of Biological Chemistry, 1996, 271, 33409-33413.	1.6	43

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73	Chemoenzymatic synthesis of CD52 glycoproteins carrying native N-glycans. Bioorganic and Medicinal Chemistry Letters, 2005, 15, 895-898.	1.0	43
74	Glycan Remodeling of Human Erythropoietin (EPO) Through Combined Mammalian Cell Engineering and Chemoenzymatic Transglycosylation. ACS Chemical Biology, 2017, 12, 1665-1673.	1.6	43
75	CTLA-4 expression by B-1a B cells is essential for immune tolerance. Nature Communications, 2021, 12, 525.	5.8	43
76	Design and synthesis of Î±Gal-conjugated peptide T20 as novel antiviral agent for HIV-immunotargeting. Organic and Biomolecular Chemistry, 2004, 2, 660-664.	1.5	40
77	Introducing N-glycans into natural products through a chemoenzymatic approach. Carbohydrate Research, 2008, 343, 2903-2913.	1.1	40
78	Chemoenzymatic Synthesis and Lectin Array Characterization of a Class of N-Glycan Clusters. Journal of the American Chemical Society, 2009, 131, 17963-17971.	6.6	39
79	Enzymatic Glycosylation of Triazoleâ€Linked GlcNAc/Glcâ€“Peptides: Synthesis, Stability and Antiâ€HIV Activity of Triazoleâ€Linked HIVâ€1 gp41 Glycopeptide C34 Analogues. ChemBioChem, 2009, 10, 1234-1242.	1.3	38
80	Galectin CvGal2 from the Eastern Oyster (Crassostrea virginica) Displays Unique Specificity for ABH Blood Group Oligosaccharides and Differentially Recognizes Sympatric Perkinsus Species. Biochemistry, 2015, 54, 4711-4730.	1.2	38
81	Synthetic Three-Component HIV-1 V3 Glycopeptide Immunogens Induce Glycan-Dependent Antibody Responses. Cell Chemical Biology, 2017, 24, 1513-1522.e4.	2.5	38
82	Structural basis for the recognition of complex-type N-glycans by Endoglycosidase S. Nature Communications, 2018, 9, 1874.	5.8	38
83	Quantitative Glycomics from Fluidic Glycan Microarrays. Journal of the American Chemical Society, 2009, 131, 13646-13650.	6.6	37
84	Chemoenzymatic Synthesis and Receptor Binding of Mannose-6-Phosphate (M6P)-Containing Glycoprotein Ligands Reveal Unusual Structural Requirements for M6P Receptor Recognition. Journal of the American Chemical Society, 2016, 138, 12472-12485.	6.6	37
85	Insertion of aD-glucosamine residue into the Î±-cyclodextrin skeleton; a model synthesis of â€˜chimera cyclodextrinsâ€™. Journal of the Chemical Society Chemical Communications, 1991, .	2.0	35
86	Carbohydrate-centered maleimide cluster as a new type of templates for multivalent peptide assembling. Bioorganic and Medicinal Chemistry, 2003, 11, 159-166.	1.4	35
87	A Yeast Glycoprotein Shows High-Affinity Binding to the Broadly Neutralizing Human Immunodeficiency Virus Antibody 2G12 and Inhibits gp120 Interactions with 2G12 and DC-SIGN. Journal of Virology, 2009, 83, 4861-4870.	1.5	35
88	Endo-Î²-N-acetylglucosaminidase-catalyzed polymerization of Î²-Glcp-(1â†’4)-GlcpNAc oxazoline: a revisit to enzymatic transglycosylation. Carbohydrate Research, 2009, 344, 592-598.	1.1	35
89	Revisiting the substrate specificity of mammalian Î±1,6-fucosyltransferase reveals that it catalyzes core fucosylation of N-glycans lacking Î±1,3-arm GlcNAc. Journal of Biological Chemistry, 2017, 292, 14796-14803.	1.6	35
90	Cholic acid as template for multivalent peptide assembly. Organic and Biomolecular Chemistry, 2003, 1, 3507.	1.5	34

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91	Multivalent Antigen Presentation Enhances the Immunogenicity of a Synthetic Three-Component HIV-1 V3 Glycopeptide Vaccine. ACS Central Science, 2018, 4, 582-589.	5.3	34
92	Peracetylated laminaribiose: preparation by specific degradation of curdlan and its chemical conversion into N-acetylhyalobiuronic acid. Carbohydrate Research, 1991, 219, 133-148.	1.1	33
93	Chemoenzymatic synthesis of high-mannose type HIV-1 gp120 glycopeptides. Bioorganic and Medicinal Chemistry Letters, 2003, 13, 327-330.	1.0	33
94	Conformational Heterogeneity of the HIV Envelope Glycan Shield. Scientific Reports, 2017, 7, 4435.	1.6	32
95	Modification and structureâ€“activity relationship of a small molecule HIV-1 inhibitor targeting the viral envelope glycoprotein gp120. Organic and Biomolecular Chemistry, 2005, 3, 1781.	1.5	31
96	Expeditious chemoenzymatic synthesis of CD52 glycopeptide antigens. Organic and Biomolecular Chemistry, 2010, 8, 5224.	1.5	31
97	The Amazing Transglycosylation Activity of Endo-Î²-N-Acetylglucosaminidases. Trends in Glycoscience and Glycotechnology, 2011, 23, 33-52.	0.0	31
98	Site-specific immobilization of endoglycosidases for streamlined chemoenzymatic glycan remodeling of antibodies. Carbohydrate Research, 2018, 458-459, 77-84.	1.1	31
99	Sequential Glycosylation of Proteins with Substrate-Specific N-Glycosyltransferases. ACS Central Science, 2020, 6, 144-154.	5.3	31
100	Site-Selective Chemoenzymatic Glycosylation of an HIV-1 Polypeptide Antigen with Two Distinct N-Glycans via an Orthogonal Protecting Group Strategy. Journal of Organic Chemistry, 2016, 81, 6176-6185.	1.7	30
101	Structure and dynamics of an Î±-fucosidase reveal a mechanism for highly efficient IgG transfucosylation. Nature Communications, 2020, 11, 6204.	5.8	29
102	Stereoselective synthesis of N-acetyl thiochitooligosaccharides. Different behaviours of methyl N-acetyl-Î±- and -Î²-thiochitobiosides during acetolysis. Journal of the Chemical Society Perkin Transactions 1, 1996, , 581-591.	0.9	28
103	Antiâ€Oligomannose Antibodies as Potential Serum Biomarkers of Aggressive Prostate Cancer. Drug Development Research, 2013, 74, 65-80.	1.4	28
104	Chemoenzymatic Glyco-engineering of Monoclonal Antibodies. Methods in Molecular Biology, 2015, 1321, 375-387.	0.4	28
105	Synthesis and anti-HIV activity of trivalent CD4-mimetic miniproteins. Bioorganic and Medicinal Chemistry, 2007, 15, 4220-4228.	1.4	27
106	Highly Soluble Heteroheptacene: A New Building Block for p-Type Semiconducting Polymers. Organic Letters, 2011, 13, 324-327.	2.4	27
107	Molecular Basis of Broad Spectrum N-Glycan Specificity and Processing of Therapeutic IgG Monoclonal Antibodies by Endoglycosidase S2. ACS Central Science, 2019, 5, 524-538.	5.3	27
108	Molecular Cloning and Characterization of a Unique Î²-Glucosidase from Vibrio cholerae. Journal of Biological Chemistry, 2002, 277, 29555-29560.	1.6	26

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109	Targeting host nucleotide biosynthesis with resveratrol inhibits emtricitabine-resistant HIV-1. Aids, 2014, 28, 317-323.	1.0	25
110	Isolation of a Glucosamine-specific Kinase, a Unique Enzyme ofVibrio cholerae. Journal of Biological Chemistry, 2002, 277, 15573-15578.	1.6	24
111	Systematic Synthesis and Binding Study of HIV V3 Glycopeptides Reveal the Fine Epitopes of Several Broadly Neutralizing Antibodies. ACS Chemical Biology, 2017, 12, 1566-1575.	1.6	24
112	General and Robust Chemoenzymatic Method for Glycan-Mediated Site-Specific Labeling and Conjugation of Antibodies: Facile Synthesis of Homogeneous Antibodyâ€“Drug Conjugates. ACS Chemical Biology, 2021, 16, 2502-2514.	1.6	24
113	Specific activation of ERK pathways by chitin oligosaccharides in embryonic zebrafish cell lines. Glycobiology, 2003, 13, 725-732.	1.3	23
114	Top-Down Chemoenzymatic Approach to Synthesizing Diverse High-Mannose N-Glycans and Related Neoglycoproteins for Carbohydrate Microarray Analysis. Bioconjugate Chemistry, 2018, 29, 1911-1921.	1.8	23
115	Toward oligosaccharide- and glycopeptide-based HIV vaccines. Current Opinion in Drug Discovery & Development, 2006, 9, 194-206.	1.9	23
116	Site-Specific Chemoenzymatic Conjugation of High-Affinity M6P Glycan Ligands to Antibodies for Targeted Protein Degradation. ACS Chemical Biology, 2022, 17, 3013-3023.	1.6	23
117	Modification of cyclodextrins by insertion of a heterogeneous sugar unit into their skeletons. Synthesis of 2-amino-2-deoxy-Î²-cyclodextrin from Î±-cyclodextrin. Journal of the Chemical Society Perkin Transactions 1, 1995, , 437-443.	0.9	22
118	Structural basis of mammalian high-mannose N-glycan processing by human gut Bacteroides. Nature Communications, 2020, 11, 899.	5.8	22
119	Chemical synthesis of NodRm-1: the nodulation factor involved in Rhizobium meliloti-legume symbiosis. Journal of the Chemical Society Perkin Transactions 1, 1994, , 621.	0.9	21
120	Synthetic HIV V3 Glycopeptide Immunogen Carrying a N334 N-Glycan Induces Glycan-Dependent Antibodies with Promiscuous Site Recognition. Journal of Medicinal Chemistry, 2018, 61, 10116-10125.	2.9	21
121	Synthesis and anti-HIV-1 activity of 4-[4-(4,6-bisphenylamino- [1,3,5]) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 267 Td (triazin-2-yl derivatives. Bioorganic and Medicinal Chemistry, 2004, 12, 1215-1220.	1.4	20
122	Synthetic Bivalent CD4-Mimetic Miniproteins Show Enhanced Anti-HIV Activity over the Monovalent Miniprotein. Bioconjugate Chemistry, 2004, 15, 783-789.	1.8	20
123	Determination of 2-Keto-3-deoxyoctulosonic Acid (KDO) with High-Performance Anion-Exchange Chromatography (HPAEC): Survey of Stability of KDO and Optimal Hydrolytic Conditions. Analytical Biochemistry, 1997, 245, 97-101.	1.1	19
124	Synthesis and inhibitory activity of oligosaccharide thiazolines as a class of mechanism-based inhibitors for endo-Î²-N-acetylglucosaminidases. Bioorganic and Medicinal Chemistry, 2008, 16, 4670-4675.	1.4	19
125	Expression, Glycoform Characterization, and Antibody-Binding of HIV-1 V3 Glycopeptide Domain Fused with Human IgG1-Fc. Bioconjugate Chemistry, 2010, 21, 875-883.	1.8	19
126	Characterizing human Î±-1,6-fucosyltransferase (FUT8) substrate specificity and structural similarities with related fucosyltransferases. Journal of Biological Chemistry, 2020, 295, 17027-17045.	1.6	19

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127	Glycosylation-dependent opsonophagocytic activity of staphylococcal protein A antibodies. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 22992-23000.	3.3	19
128	Chemoenzymatic synthesis and lectin recognition of a selectively fluorinated glycoprotein. Bioorganic and Medicinal Chemistry, 2013, 21, 4768-4777.	1.4	18
129	Synthetic multivalent V3 glycopeptides display enhanced recognition by glycan-dependent HIV-1 broadly neutralizing antibodies. Chemical Communications, 2017, 53, 5453-5456.	2.2	18
130	The Odd â€œRBâ€•Phageâ€”Identification of Arabinosylation as a New Epigenetic Modification of DNA in T4-Like Phage RB69. Viruses, 2018, 10, 313.	1.5	18
131	One-Pot Conversion of Free Sialoglycans to Functionalized Glycan Oxazolines and Efficient Synthesis of Homogeneous Antibodyâ€“Drug Conjugates through Site-Specific Chemoenzymatic Glycan Remodeling. Bioconjugate Chemistry, 2021, 32, 1888-1897.	1.8	18
132	Synthesis, conformation, and immunogenicity of monosaccharide-centered multivalent HIV-1 gp41 peptides containing the sequence of DP178. Bioorganic and Medicinal Chemistry, 2004, 12, 3141-3148.	1.4	17
133	Forces and Dynamics of Glucose and Inhibitor Binding to Sodium Glucose Co-transporter SGLT1 Studied by Single Molecule Force Spectroscopy. Journal of Biological Chemistry, 2014, 289, 21673-21683.	1.6	17
134	Evaluation of a glycoengineered monoclonal antibody via LC-MS analysis in combination with multiple enzymatic digestion. MAbs, 2016, 8, 340-346.	2.6	17
135	One-pot enzymatic glycan remodeling of a therapeutic monoclonal antibody by endoglycosidase S (Endo-S) from Streptococcus pyogenes. Bioorganic and Medicinal Chemistry, 2018, 26, 1347-1355.	1.4	17
136	Synthetic Fluorinated <scp>l</scp>-Fucose Analogs Inhibit Proliferation of Cancer Cells and Primary Endothelial Cells. ACS Chemical Biology, 2020, 15, 2662-2672.	1.6	17
137	Mediated Electrochemistry to Mimic Biology's Oxidative Assembly of Functional Matrices. Advanced Functional Materials, 2020, 30, 2001776.	7.8	17
138	Site-Selective Chemoenzymatic Modification on the Core Fucose of an Antibody Enhances Its FcÎ³ Receptor Affinity and ADCC Activity. Journal of the American Chemical Society, 2021, 143, 7828-7838.	6.6	17
139	Bioorganic Approaches Towards HIV Vaccine Design. Current Pharmaceutical Design, 2003, 9, 1771-1787.	0.9	16
140	Uncovering Cryptic Glycan Markers in Multiple Sclerosis (<scp>MS</scp>) and Experimental Autoimmune Encephalomyelitis (<scp>EAE</scp>). Drug Development Research, 2014, 75, 172-188.	1.4	16
141	Generation and Comparative Kinetic Analysis of New Glycosynthase Mutants from Streptococcus pyogenes Endoglycosidases for Antibody Glycoengineering. Biochemistry, 2018, 57, 5239-5246.	1.2	16
142	Î±-KDOase Activity in Oyster and Synthesis of Î±- and Î²-4-Methylumbelliferyl Ketosides of 3-Deoxy-d-manno-octulosonic Acid (KDO). Journal of Biological Chemistry, 1997, 272, 26419-26424.	1.6	15
143	Improved preparation of perallylated cyclodextrins: facile synthesis of cyclodextrin-based polycationic and polyanionic compounds. Carbohydrate Research, 2002, 337, 217-220.	1.1	15
144	Neutral, acidic, and basic derivatives of anthranilamide that confer different formal charge to reducing oligosaccharides. Carbohydrate Research, 2004, 339, 221-231.	1.1	15

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145	MUC1 glycopeptide epitopes predicted by computational glycomics. International Journal of Oncology, 2012, 41, 1977-1984.	1.4	15
146	Targeting of the Purine Biosynthesis Host Cell Pathway Enhances the Activity of Tenofovir Against Sensitive and Drug-Resistant HIV-1. Journal of Infectious Diseases, 2013, 208, 2085-2094.	1.9	14
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