Carlito B Lebrilla

List of Publications by Year
in descending order

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240 papers	18,639 citations	10986 71 h-index	15266 126 g-index
242 all docs	242 docs citations	242 times ranked	15112 citing authors

#	Article	IF	Citations
1	Microbiota-activated PPAR-Î³ signaling inhibits dysbiotic Enterobacteriaceae expansion. Science, 2017, 357, 570-575.	12.6	796
2	Depletion of Butyrate-Producing Clostridia from the Gut Microbiota Drives an Aerobic Luminal Expansion of Salmonella. Cell Host and Microbe, 2016, 19, 443-454.	11.0	600
3	Human milk glycobiome and its impact on the infant gastrointestinal microbiota. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 4653-4658.	7.1	566
4	Sialylated Milk Oligosaccharides Promote Microbiota-Dependent Growth in Models of Infant Undernutrition. Cell, 2016, 164, 859-871.	28.9	497
5	Bacteroides in the Infant Gut Consume Milk Oligosaccharides via Mucus-Utilization Pathways. Cell Host and Microbe, 2011, 10, 507-514.	11.0	474
6	Consumption of Human Milk Oligosaccharides by Gut-Related Microbes. Journal of Agricultural and Food Chemistry, 2010, 58, 5334-5340.	5.2	453
7	A Strategy for Annotating the Human Milk Glycome. Journal of Agricultural and Food Chemistry, 2006, 54, 7471-7480.	5.2	427
8	Glycans in the immune system and The Altered Glycan Theory of Autoimmunity: A critical review. Journal of Autoimmunity, 2015, 57, 1-13.	6.5	370
9	Breast Milk Oligosaccharides: Structure-Function Relationships in the Neonate. Annual Review of Nutrition, 2014, 34, 143-169.	10.1	332
10	Maternal fucosyltransferase 2 status affects the gut bifidobacterial communities of breastfed infants. Microbiome, 2015, 3, 13.	11.1	319
11	Glycoprofiling of Bifidobacterial Consumption of Human Milk Oligosaccharides Demonstrates Strain Specific, Preferential Consumption of Small Chain Glycans Secreted in Early Human Lactation. Journal of Agricultural and Food Chemistry, 2007, 55, 8914-8919.	5.2	313
12	Oligosaccharide Analysis by Mass Spectrometry: A Review of Recent Developments. Analytical Chemistry, 2014, 86, 196-212.	6.5	311
13	Bifidobacterium longum subspecies infantis: champion colonizer of the infant gut. Pediatric Research, 2015, 77, 229-235.	2.3	297
14	Mass Spectrometry Approaches to Glycomic and Glycoproteomic Analyses. Chemical Reviews, 2018, 118, 7886-7930.	47.7	277
15	Glycans and glycoproteins as specific biomarkers for cancer. Analytical and Bioanalytical Chemistry, 2017, 409, 395-410.	3.7	275
16	Development of an Annotated Library of Neutral Human Milk Oligosaccharides. Journal of Proteome Research, 2010, 9, 4138-4151.	3.7	263
17	High-Mannose Glycans are Elevated during Breast Cancer Progression. Molecular and Cellular Proteomics, 2011, 10, M110.002717.	3.8	253
18	Glycomics and disease markers. Current Opinion in Chemical Biology, 2009, 13, 601-607.	6.1	251

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19	Annotation and Structural Analysis of Sialylated Human Milk Oligosaccharides. Journal of Proteome Research, 2011, 10, 856-868.	3.7	233
20	Determination of N-Glycosylation Sites and Site Heterogeneity in Glycoproteins. Analytical Chemistry, 2003, 75, 5628-5637.	6.5	232
21	Determination of glycosylation sites and site-specific heterogeneity in glycoproteins. Current Opinion in Chemical Biology, 2009, 13, 421-426.	6.1	229
22	Ion-molecule reactions as probes of gas-phase structures of peptides and proteins. Mass Spectrometry Reviews, 1997, 16, 53-71.	5.4	227
23	Coordination of Alkali Metals to Oligosaccharides Dictates Fragmentation Behavior in Matrix Assisted Laser Desorption Ionization/Fourier Transform Mass Spectrometry. Journal of the American Chemical Society, 1996, 118, 6736-6745.	13.7	223
24	A microbial perspective of human developmental biology. Nature, 2016, 535, 48-55.	27.8	215
25	Profiling of Glycans in Serum for the Discovery of Potential Biomarkers for Ovarian Cancer. Journal of Proteome Research, 2006, 5, 1626-1635.	3.7	212
26	A Serum Glycomics Approach to Breast Cancer Biomarkers. Molecular and Cellular Proteomics, 2007, 6, 43-55.	3.8	207
27	Bifidobacterium longum subsp. infantis ATCC 15697 Î±-Fucosidases Are Active on Fucosylated Human Milk Oligosaccharides. Applied and Environmental Microbiology, 2012, 78, 795-803.	3.1	204
28	Human Milk Oligosaccharides: Evolution, Structures and Bioselectivity as Substrates for Intestinal Bacteria. Nestle Nutrition Workshop Series Paediatric Programme, 2008, 62, 205-222.	1.5	192
29	Comprehensive Profiles of Human Milk Oligosaccharides Yield Highly Sensitive and Specific Markers for Determining Secretor Status in Lactating Mothers. Journal of Proteome Research, 2012, 11, 6124-6133.	3.7	175
30	Comparison of the Human and Bovine Milk N-Glycome via High-Performance Microfluidic Chip Liquid Chromatography and Tandem Mass Spectrometry. Journal of Proteome Research, 2012, 11, 2912-2924.	3.7	162
31	Persistence of Supplemented Bifidobacterium longum subsp. infantis EVC001 in Breastfed Infants. MSphere, 2017, 2, .	2.9	158
32	Human milk oligosaccharides in premature infants: absorption, excretion, and influence on the intestinal microbiota. Pediatric Research, 2015, 78, 670-677.	2.3	155
33	Growth and Morbidity of Gambian Infants are Influenced by Maternal Milk Oligosaccharides and Infant Gut Microbiota. Scientific Reports, 2017, 7, 40466.	3.3	152
34	Glycosylation of Human Milk Lactoferrin Exhibits Dynamic Changes During Early Lactation Enhancing Its Role in Pathogenic Bacteria-Host Interactions. Molecular and Cellular Proteomics, 2012, 11, M111.015248.	3.8	143
35	Application of Fourier transform ion cyclotron resonance mass spectrometry to oligosaccharides. Mass Spectrometry Reviews, 2005, 24, 232-264.	5.4	140
36	Comprehensive native glycan profiling with isomer separation and quantitation for the discovery of cancer biomarkers. Analyst, The, 2011, 136, 3663.	3.5	138

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37	Comparison of Methods for Profiling O-Glycosylation. Molecular and Cellular Proteomics, 2010, 9, 719-727.	3.8	136
38	Developments in the Identification of Glycan Biomarkers for the Detection of Cancer. Molecular and Cellular Proteomics, 2013, 12, 846-855.	3.8	130
39	The Gas-Phase Chemistry of Cyclodextrin Inclusion Complexes. Accounts of Chemical Research, 2001, 34, 653-661.	15.6	127
40	Absolute Quantitation of Human Milk Oligosaccharides Reveals Phenotypic Variations during Lactation. Journal of Nutrition, 2017, 147, 117-124.	2.9	122
41	Fragmentation Reactions in the Mass Spectrometry Analysis of Neutral Oligosaccharides. Analytical Chemistry, 1999, 71, 3206-3218.	6.5	118
42	Simultaneous and Extensive Site-specific N- and O-Glycosylation Analysis in Protein Mixtures. Journal of Proteome Research, 2011, 10, 2612-2624.	3.7	117
43	Indole-3-lactic acid associated with Bifidobacterium-dominated microbiota significantly decreases inflammation in intestinal epithelial cells. BMC Microbiology, 2020, 20, 357.	3.3	117
44	A Mass Spectrometry Method for the Determination of Enantiomeric Excess in Mixtures ofd,l-Amino Acids. Analytical Chemistry, 2000, 72, 4275-4281.	6.5	113
45	Annotation of a Serum N-Glycan Library for Rapid Identification of Structures. Journal of Proteome Research, 2012, 11, 1958-1968.	3.7	112
46	Absolute Quantitation of Immunoglobulin G and Its Glycoforms Using Multiple Reaction Monitoring. Analytical Chemistry, 2013, 85, 8585-8593.	6.5	111
47	The development of retrosynthetic glycan libraries to profile and classify the human serum Nâ€linked glycome. Proteomics, 2009, 9, 2986-2994.	2.2	110
48	Gas-Phase Chiral Differentiation of Amino Acid Guests in Cyclodextrin Hosts. Journal of the American Chemical Society, 1998, 120, 7387-7388.	13.7	109
49	Evidence for the Formation of Gas-Phase Inclusion Complexes with Cyclodextrins and Amino Acids. Journal of the American Chemical Society, 2000, 122, 6884-6890.	13.7	109
50	Site-specific protein glycosylation analysis with glycan isomer differentiation. Analytical and Bioanalytical Chemistry, 2012, 403, 1291-1302.	3.7	104
51	Enantiomeric Analysis of Pharmaceutical Compounds by Ion/Molecule Reactions. Analytical Chemistry, 2001, 73, 1684-1691.	6.5	98
52	Structure elucidation of native Nâ€•and Oâ€linked glycans by tandem mass spectrometry (tutorial). Mass Spectrometry Reviews, 2011, 30, 560-578.	5.4	97
53	Extensive Determination of Glycan Heterogeneity Reveals an Unusual Abundance of High Mannose Glycans in Enriched Plasma Membranes of Human Embryonic Stem Cells. Molecular and Cellular Proteomics, 2012, 11, M111.010660.	3.8	94
54	Effects of Cations and Charge Types on the Metastable Decay Rates of Oligosaccharides. Analytical Chemistry, 1994, 66, 692-698.	6.5	91

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55	Chiral recognition in gas-phase cyclodextrin: Amino acid complexesâ€"Is the three point interaction still valid in the gas phase?. Journal of the American Society for Mass Spectrometry, 2001, 12, 278-287.	2.8	90
56	The prospects of glycanbiomarkers for the diagnosis of diseases. Molecular BioSystems, 2009, 5, 17-20.	2.9	90
57	Protein-Specific Differential Glycosylation of Immunoglobulins in Serum of Ovarian Cancer Patients. Journal of Proteome Research, 2016, 15, 1002-1010.	3.7	87
58	The Gut Microbiota, Food Science, and Human Nutrition: A Timely Marriage. Cell Host and Microbe, 2017, 22, 134-141.	11.0	87
59	NIST Interlaboratory Study on Glycosylation Analysis of Monoclonal Antibodies: Comparison of Results from Diverse Analytical Methods. Molecular and Cellular Proteomics, 2020, 19, 11-30.	3.8	87
60	Alkaline Degradation of Oligosaccharides Coupled with Matrix-Assisted Laser Desorption/Ionization Fourier Transform Mass Spectrometry:â€‰ A Method for Sequencing Oligosaccharides. Analytical Chemistry, 1998, 70, 663-672.	6.5	86
61	A quantitative and comprehensive method to analyze human milk oligosaccharide structures in the urine and feces of infants. Analytical and Bioanalytical Chemistry, 2013, 405, 4089-4105.	3.7	86
62	Catalog-Library Approach for the Rapid and Sensitive Structural Elucidation of Oligosaccharides. Analytical Chemistry, 1999, 71, 3747-3754.	6.5	84
63	A Peptidomic Analysis of Human Milk Digestion in the Infant Stomach Reveals Protein-Specific Degradation Patterns. Journal of Nutrition, 2014, 144, 815-820.	2.9	83
64	Label-Free Absolute Quantitation of Oligosaccharides Using Multiple Reaction Monitoring. Analytical Chemistry, 2014, 86, 2640-2647.	6.5	80
65	Collision-Induced Dissociation of Branched Oligosaccharide Ions with Analysis and Calculation of Relative Dissociation Thresholds. Analytical Chemistry, 1996, 68, 2331-2339.	6.5	79
66	Advances in Analysis of Human Milk Oligosaccharides. Advances in Nutrition, 2012, 3, 406S-414S.	6.4	79
67	Isomer-specific chromatographic profiling yields highly sensitive and specific potential N-glycan biomarkers for epithelial ovarian cancer. Journal of Chromatography A, 2013, 1279, 58-67.	3.7	79
68	Glycomic Approach for Potential Biomarkers on Prostate Cancer: Profiling of N-Linked Glycans in Human Sera and pRNS Cell Lines. Disease Markers, 2008, 25, 243-258.	1.3	78
69	Glycoprofiling Bifidobacterial Consumption of Galacto-Oligosaccharides by Mass Spectrometry Reveals Strain-Specific, Preferential Consumption of Glycans. Applied and Environmental Microbiology, 2009, 75, 7319-7325.	3.1	78
70	Identification of Oligosaccharides in Feces of Breast-fed Infants and Their Correlation with the Gut Microbial Community. Molecular and Cellular Proteomics, 2016, 15, 2987-3002.	3.8	77
71	Factors That Influence Fragmentation Behavior of N-Linked Glycopeptide Ions. Analytical Chemistry, 2008, 80, 3684-3692.	6.5	74
72	Infrared Multiphoton Dissociation of O-Linked Mucin-Type Oligosaccharides. Analytical Chemistry, 2005, 77, 208-214.	6.5	73

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73	Evaluating microbiome-directed fibre snacks in gnotobiotic mice and humans. Nature, 2021, 595, 91-95.	27.8	70
74	Automated Assignments of N- and O-Site Specific Glycosylation with Extensive Glycan Heterogeneity of Glycoprotein Mixtures. Analytical Chemistry, 2013, 85, 5666-5675.	6.5	69
75	Mechanistic Peptidomics: Factors That Dictate Specificity in the Formation of Endogenous Peptides in Human Milk. Molecular and Cellular Proteomics, 2014, 13, 3343-3351.	3.8	67
76	Strategy for Structural Elucidation of Polysaccharides: Elucidation of a Maize Mucilage that Harbors Diazotrophic Bacteria. Analytical Chemistry, 2019, 91, 7254-7265.	6.5	67
77	A Method for Comprehensive Glycosite-Mapping and Direct Quantitation of Serum Glycoproteins. Journal of Proteome Research, 2015, 14, 5179-5192.	3.7	66
78	Salmonella Degrades the Host Glycocalyx Leading to Altered Infection and Glycan Remodeling. Scientific Reports, 2016, 6, 29525.	3.3	66
79	Site specificity in the H-D exchange reactions of gas-phase protonated amino acids with CH3OD. Organic Mass Spectrometry, 1993, 28, 1632-1639.	1.3	65
80	Oceanapiside, an Antifungal Bis-Î±,Ï‰-amino Alcohol Glycoside from the Marine SpongeOceanapiaphillipensis. Journal of Natural Products, 1999, 62, 1678-1681.	3.0	65
81	Human Serum Processing and Analysis Methods for Rapid and Reproducible N-Glycan Mass Profiling. Journal of Proteome Research, 2010, 9, 4952-4959.	3.7	65
82	A Method for In-Depth Structural Annotation of Human Serum Glycans That Yields Biological Variations. Analytical Chemistry, 2015, 87, 7754-7762.	6.5	65
83	Recent Advances in the Mass Spectrometry Methods for Glycomics and Cancer. Analytical Chemistry, 2018, 90, 208-224.	6.5	64
84	Metastasis of cholangiocarcinoma is promoted by extended high-mannose glycans. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 7633-7644.	7.1	63
85	Site-Specific Glycosylation of Secretory Immunoglobulin A from Human Colostrum. Journal of Proteome Research, 2015, 14, 1335-1349.	3.7	62
86	Mass spectrometric methods for analysis of oligosaccharides in human milk. Nutrition Reviews, 2009, 67, S216-S226.	5.8	61
87	N-Glycan Profiling of Dried Blood Spots. Analytical Chemistry, 2012, 84, 396-402.	6.5	60
88	Revisiting monosaccharide analysis â€“ quantitation of a comprehensive set of monosaccharides using dynamic multiple reaction monitoring. Analyst, The, 2018, 143, 200-207.	3.5	60
89	Differential N-Glycosylation Patterns in Lung Adenocarcinoma Tissue. Journal of Proteome Research, 2015, 14, 4538-4549.	3.7	59
90	Interrogation of N-Linked Oligosaccharides Using Infrared Multiphoton Dissociation in FT-ICR Mass Spectrometry. Analytical Chemistry, 2006, 78, 4990-4997.	6.5	58

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91	Novel High-Molecular Weight Fucosylated Milk Oligosaccharides Identified in Dairy Streams. PLoS ONE, 2014, 9, e96040.	2.5	58
92	Electrophoresis Separation in Open Microchannels. A Method for Coupling Electrophoresis with MALDI-MS. Analytical Chemistry, 2001, 73, 2147-2151.	6.5	57
93	A New Computer Program (GlycoX) To Determine Simultaneously the Glycosylation Sites and Oligosaccharide Heterogeneity of Glycoproteins. Journal of Proteome Research, 2006, 5, 2800-2808.	3.7	57
94	Composition and Variation of Macronutrients, Immune Proteins, and Human Milk Oligosaccharides in Human Milk From Nonprofit and Commercial Milk Banks. Journal of Human Lactation, 2018, 34, 120-129.	1.6	55
95	Anion Dopant for Oligosaccharides in Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry. Analytical Chemistry, 1999, 71, 205-211.	6.5	54
96	Rapid-throughput glycomics applied to human milk oligosaccharide profiling for large human studies. Analytical and Bioanalytical Chemistry, 2014, 406, 7925-7935.	3.7	54
97	Direct Analysis of Sugar Alcohol Borate Complexes in Plant Extracts by Matrix-Assisted Laser Desorption/Ionization Fourier Transform Mass Spectrometry. Analytical Chemistry, 1997, 69, 2471-2477.	6.5	53
98	Rapid profiling of bovine and human milk gangliosides by matrix-assisted laser desorption/ionization Fourier transform ion cyclotron resonance mass spectrometry. International Journal of Mass Spectrometry, 2011, 305, 138-150.	1.5	53
99	The use of heated capillary dissociation and collision-induced dissociation to determine the strength of noncovalent bonding interactions in gas-phase peptide-cyclodextrin complexes. Journal of the American Society for Mass Spectrometry, 1997, 8, 244-252.	2.8	52
100	Characteristic Changes in Cell Surface Glycosylation Accompany Intestinal Epithelial Cell (IEC) Differentiation: High Mannose Structures Dominate the Cell Surface Glycome of Undifferentiated Enterocytes. Molecular and Cellular Proteomics, 2015, 14, 2910-2921.	3.8	52
101	Liquid Chromatographyâ€“Tandem Mass Spectrometry Approach for Determining Glycosidic Linkages. Analytical Chemistry, 2018, 90, 13073-13080.	6.5	51
102	Resolving the micro-heterogeneity and structural integrity of monoclonal antibodies by hybrid mass spectrometric approaches. MAbs, 2017, 9, 638-645.	5.2	49
103	Biallelic Mutations in FUT8 Cause a Congenital Disorder of Glycosylation with Defective Fucosylation. American Journal of Human Genetics, 2018, 102, 188-195.	6.2	49
104	A nonenzymatic method for cleaving polysaccharides to yield oligosaccharides for structural analysis. Nature Communications, 2020, 11, 3963.	12.8	49
105	Exploiting Differential Dissociation Chemistries of O-Linked Glycopeptide Ions for the Localization of Mucin-Type Protein Glycosylation. Journal of Proteome Research, 2009, 8, 493-501.	3.7	48
106	Genetic Ablation of Butyrate Utilization Attenuates Gastrointestinal Salmonella Disease. Cell Host and Microbe, 2018, 23, 266-273.e4.	11.0	48
107	Nodâ€like receptors are critical for gutâ€“brain axis signalling in mice. Journal of Physiology, 2019, 597, 5777-5797.	2.9	48
108	Nano-LCâ€“MS/MS of Glycopeptides Produced by Nonspecific Proteolysis Enables Rapid and Extensive Site-Specific Glycosylation Determination. Analytical Chemistry, 2011, 83, 5541-5547.	6.5	46

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109	Comprehensive peptidomic and glycomic evaluation reveals that sweet whey permeate from colostrum is a source of milk protein-derived peptides and oligosaccharides. Food Research International, 2014, 63, 203-209.	6.2	46
110	Differentiation of Cancer Cell Origin and Molecular Subtype by Plasma Membrane N-Glycan Profiling. Journal of Proteome Research, 2014, 13, 961-968.	3.7	45
111	The serum immunoglobulin G glycosylation signature of gastric cancer. EuPA Open Proteomics, 2015, 6, 1-9.	2.5	45
112	Comprehensive structural glycomic characterization of the glycocalyxes of cells and tissues. Nature Protocols, 2020, 15, 2668-2704.	12.0	45
113	Intrinsic basicity of oligomeric peptides that contain glycine, alanine, and valineâ€"The effects of the alkyl side chain on proton transfer reactions. Journal of the American Society for Mass Spectrometry, 1995, 6, 91-101.	2.8	42
114	In-Depth Method for the Characterization of Glycosylation in Manufactured Recombinant Monoclonal Antibody Drugs. Analytical Chemistry, 2014, 86, 5661-5666.	6.5	42
115	Membrane glycomics reveal heterogeneity and quantitative distribution of cell surface sialylation. Chemical Science, 2018, 9, 6271-6285.	7.4	42
116	Achieving High Detection Sensitivity (14 zmol) of Biomolecular Ions in Bioaerosol Mass Spectrometry. Analytical Chemistry, 2005, 77, 4734-4741.	6.5	41
117	Quantitation of human milk proteins and their glycoforms using multiple reaction monitoring (MRM). Analytical and Bioanalytical Chemistry, 2017, 409, 589-606.	3.7	41
118	Site-Specific Glycosylation Quantitation of 50 Serum Glycoproteins Enhanced by Predictive Glycopeptidomics for Improved Disease Biomarker Discovery. Analytical Chemistry, 2019, 91, 5433-5445.	6.5	41
119	Hï£¿D exchange kinetics of alcohols and protonated peptides: Effects of structure and proton affinity. Journal of Mass Spectrometry, 1995, 30, 1103-1110.	1.6	40
120	Evaluation of Glycomic Profiling as a Diagnostic Biomarker for Epithelial Ovarian Cancer. Cancer Epidemiology Biomarkers and Prevention, 2014, 23, 611-621.	2.5	40
121	Peptidomic analysis of healthy and subclinically mastitic bovine milk. International Dairy Journal, 2015, 46, 46-52.	3.0	40
122	Mass Spectrometric and Computational Studies of Heterofullerenes ([C58Pt]-, [C59Pt]+) Obtained by Laser Ablation of Electrochemically Deposited Films. Journal of Physical Chemistry A, 2004, 108, 2192-2198.	2.5	39
123	Chiral Recognition Is Observed in the Deprotonation Reaction of Cytochromecby (2R)- and (2S)-2-Butylamine. Journal of the American Chemical Society, 1996, 118, 8751-8752.	13.7	38
124	A Glycomics Approach to the Discovery of Potential Cancer Biomarkers. Methods in Molecular Biology, 2010, 600, 199-213.	0.9	38
125	Salmonella Typhimurium Enzymatically Landscapes the Host Intestinal Epithelial Cell (IEC) Surface Glycome to Increase Invasion. Molecular and Cellular Proteomics, 2016, 15, 3653-3664.	3.8	38
126	Selection of Anionic Dopant for Quantifying Desialylation Reactions with MALDI-FTMS. Analytical Chemistry, 2000, 72, 1419-1425.	6.5	37

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127	Streptococcal Siglec-like adhesins recognize different subsets of human plasma glycoproteins: implications for infective endocarditis. Glycobiology, 2018, 28, 601-611.	2.5	37
128	Multiple Reaction Monitoring for the Quantitation of Serum Protein Glycosylation Profiles: Application to Ovarian Cancer. Journal of Proteome Research, 2018, 17, 222-233.	3.7	37
129	T-cell derived acetylcholine aids host defenses during enteric bacterial infection with Citrobacter rodentium. PLoS Pathogens, 2019, 15, e1007719.	4.7	36
130	A rapid-throughput adaptable method for determining the monosaccharide composition of polysaccharides. International Journal of Mass Spectrometry, 2019, 438, 22-28.	1.5	36
131	Chip-based nLC-TOF-MS is a highly stable technology for large-scale high-throughput analyses. Analytical and Bioanalytical Chemistry, 2013, 405, 4953-4958.	3.7	35
132	Atmospheric Pressure MALDI Fourier Transform Mass Spectrometry of Labile Oligosaccharides. Analytical Chemistry, 2005, 77, 4429-4438.	6.5	34
133	Employment of Tandem Mass Spectrometry for the Accurate and Specific Identification of Oligosaccharide Structures. Analytical Chemistry, 2012, 84, 7456-7462.	6.5	34
134	Enrichment strategies in glycomicsâ€based lung cancer biomarker development. Proteomics - Clinical Applications, 2013, 7, 664-676.	1.6	34
135	Transient Expression of Tetrameric Recombinant Human Butyrylcholinesterase in Nicotiana benthamiana. Frontiers in Plant Science, 2016, 7, 743.	3.6	33
136	Identification of potential sialic acid binding proteins on cell membranes by proximity chemical labeling. Chemical Science, 2019, 10, 6199-6209.	7.4	33
137	Combined High-Density Lipoprotein Proteomic and Glycomic Profiles in Patients at Risk for Coronary Artery Disease. Journal of Proteome Research, 2015, 14, 5109-5118.	3.7	32
138	The N-glycome regulates the endothelial-to-hematopoietic transition. Science, 2020, 370, 1186-1191.	12.6	32
139	Associations of human milk oligosaccharides and bioactive proteins with infant growth and development among Malawian mother-infant dyads. American Journal of Clinical Nutrition, 2021, 113, 209-220.	4.7	32
140	A Dual Vacuum Chamber Fourier Transform Mass Spectrometer with Rapidly Interchangeable LSIMS, MALDI, and ESI Sources:Â Initial Results with LSIMS and MALDI. Analytical Chemistry, 1996, 68, 1798-1804.	6.5	31
141	Glycomic Analysis of High Density Lipoprotein Shows a Highly Sialylated Particle. Journal of Proteome Research, 2014, 13, 681-691.	3.7	31
142	Enterocyte glycosylation is responsive to changes in extracellular conditions: implications for membrane functions. Glycobiology, 2017, 27, 847-860.	2.5	31
143	Quantitative Analysis of Gangliosides in Bovine Milk and Colostrum-Based Dairy Products by Ultrahigh Performance Liquid Chromatography-Tandem Mass Spectrometry. Journal of Agricultural and Food Chemistry, 2013, 61, 130930141525008.	5.2	30
144	Quantitation of Site-Specific Glycosylation in Manufactured Recombinant Monoclonal Antibody Drugs. Analytical Chemistry, 2016, 88, 7091-7100.	6.5	29

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145	Effects of N-Glycosylation on the Structure, Function, and Stability of a Plant-Made Fc-Fusion Anthrax Decoy Protein. Frontiers in Plant Science, 2019, 10, 768.	3.6	29
146	Targeted use of exoglycosidase digestion for the structural elucidation of neutral O-linked oligosaccharides. Journal of the American Society for Mass Spectrometry, 2001, 12, 877-884.	2.8	28
147	Applications of Multiple Reaction Monitoring to Clinical Glycomics. Chromatographia, 2015, 78, 335-342.	1.3	28
148	Glycoproteomic Analysis of Malignant Ovarian Cancer Ascites Fluid Identifies Unusual Glycopeptides. Journal of Proteome Research, 2016, 15, 3358-3376.	3.7	28
149	HDL Glycoprotein Composition and Site-Specific Glycosylation Differentiates Between Clinical Groups and Affects IL-6 Secretion in Lipopolysaccharide-Stimulated Monocytes. Scientific Reports, 2017, 7, 43728.	3.3	28
150	Infection-generated electric field in gut epithelium drives bidirectional migration of macrophages. PLoS Biology, 2019, 17, e3000044.	5.6	28
151	A General Method for Producing Bioaffinity MALDI Probes. Analytical Chemistry, 1999, 71, 2014-2020.	6.5	27
152	Recognition of specific sialoglycan structures by oral streptococci impacts the severity of endocardial infection. PLoS Pathogens, 2019, 15, e1007896.	4.7	27
153	Strain-level functional variation in the human gut microbiota based on bacterial binding to artificial food particles. Cell Host and Microbe, 2021, 29, 664-673.e5.	11.0	27
154	MALDI-FTMS characterization of oligosaccharides labeled with 9-aminofluorene. Journal of the American Society for Mass Spectrometry, 2001, 12, 1254-1261.	2.8	26
155	O-GlcNAcylation mediates metastasis of cholangiocarcinoma through FOXO3 and MAN1A1. Oncogene, 2018, 37, 5648-5665.	5.9	26
156	Characterization of Cell Glycocalyx with Mass Spectrometry Methods. Cells, 2019, 8, 882.	4.1	26
157	The complexation of protonated peptides with saccharides in the gas phase decreases the rates of hydrogen/deuterium exchange reactions. Journal of the American Society for Mass Spectrometry, 1995, 6, 1247-1251.	2.8	25
158	Peptides Complexed to Cyclodextrin Fragment Rather than Dissociate When Subjected to Blackbody Infrared Radiation. Journal of Physical Chemistry B, 1998, 102, 9119-9126.	2.6	25
159	FGF2 Induces Migration of Human Bone Marrow Stromal Cells by Increasing Core Fucosylations on N-Glycans of Integrins. Stem Cell Reports, 2018, 11, 325-333.	4.8	25
160	Function without Structures: The Need for In-Depth Analysis of Dietary Carbohydrates. Journal of Agricultural and Food Chemistry, 2019, 67, 4418-4424.	5.2	25
161	Targeted Measurements of O- and N-Glycopeptides Show That Proteins in High Density Lipoprotein Particles Are Enriched with Specific Glycosylation Compared to Plasma. Journal of Proteome Research, 2018, 17, 834-845.	3.7	24
162	Oâ€Glc<scp>NA</scp>câ€induced nuclear translocation of hn<scp>RNP</scp>â€K is associated with progression and metastasis of cholangiocarcinoma. Molecular Oncology, 2019, 13, 338-357.	4.6	24

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163	Site-Specific Glycoprofiles of HDL-Associated ApoE are Correlated with HDL Functional Capacity and Unaffected by Short-Term Diet. Journal of Proteome Research, 2019, 18, 3977-3984.	3.7	23
164	Deep Structural Analysis and Quantitation of O-Linked Glycans on Cell Membrane Reveal High Abundances and Distinct Glycomic Profiles Associated with Cell Type and Stages of Differentiation. Analytical Chemistry, 2020, 92, 3758-3768.	6.5	23
165	Development of an Extensive Linkage Library for Characterization of Carbohydrates. Analytical Chemistry, 2019, 91, 13022-13031.	6.5	22
166	Determination of the glycoprotein specificity of lectins on cell membranes through oxidative proteomics. Chemical Science, 2020, 11, 9501-9512.	7.4	22
167	Evidence for an Intermolecular Proton-Transfer Reaction Induced by Collision in Gas-Phase Noncovalently Bound Complexes. Journal of the American Chemical Society, 1999, 121, 4726-4727.	13.7	21
168	Lipid-Based Nutrient Supplements During Pregnancy and Lactation Did Not Affect Human Milk Oligosaccharides and Bioactive Proteins in a Randomized Trial. Journal of Nutrition, 2017, 147, 1867-1874.	2.9	20
169	Sensory and monosaccharide analysis of drip brew coffee fractions versus brewing time. Journal of the Science of Food and Agriculture, 2020, 100, 2953-2962.	3.5	20
170	Profiling with structural elucidation of the neutral and anionic O-linked oligosaccharides in the egg jelly coat of Xenopus laevis by Fourier transform mass spectrometry. Glycoconjugate Journal, 2001, 18, 309-320.	2.7	19
171	Unveiling the metabolic fate of monosaccharides in cell membranes with glycomic and glycoproteomic analyses. Chemical Science, 2019, 10, 6992-7002.	7.4	19
172	Region-Specific Cell Membrane N-Glycome of Functional Mouse Brain Areas Revealed by nanoLC-MS Analysis. Molecular and Cellular Proteomics, 2021, 20, 100130.	3.8	19
173	Human Milk Oligosaccharide Compositions Illustrate Global Variations in Early Nutrition. Journal of Nutrition, 2022, 152, 1239-1253.	2.9	19
174	Fucosylated Human Milk Oligosaccharide Foraging within the Species Bifidobacterium pseudocatenulatum Is Driven by Glycosyl Hydrolase Content and Specificity. Applied and Environmental Microbiology, 2022, 88, AEM0170721.	3.1	18
175	Discovery of Serotransferrin Glycoforms: Novel Markers for Diagnosis of Liver Periductal Fibrosis and Prediction of Cholangiocarcinoma. Biomolecules, 2019, 9, 538.	4.0	17
176	Immunoglobulin A N-glycosylation Presents Important Body Fluid-specific Variations in Lactating Mothers. Molecular and Cellular Proteomics, 2019, 18, 2165-2177.	3.8	17
177	Suppression of sialylated by sulfated oligosaccharides in negative MALDI-FTMS. Israel Journal of Chemistry, 2001, 41, 117-128.	2.3	16
178	Purification, characterization, and Nâ€glycosylation of recombinant butyrylcholinesterase from transgenic rice cell suspension cultures. Biotechnology and Bioengineering, 2018, 115, 1301-1310.	3.3	16
179	Variation among populations in the immune protein composition of motherâ€™s milk reflects subsistence pattern. Evolution, Medicine and Public Health, 2018, 2018, 230-245.	2.5	16
180	Intact glycosphingolipidomic analysis of the cell membrane during differentiation yields extensive glycan and lipid changes. Scientific Reports, 2018, 8, 10993.	3.3	16

#	Article	IF	Citations
181	â€œSlowâ€•metastable decomposition of oligosaccharide cations produced in an external source fourier transform mass spectrometer. Journal of the American Society for Mass Spectrometry, 1993, 4, 210-215.	2.8	15
182	Top-Down Analysis of Highly Post-Translationally Modified Peptides by Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2015, 26, 453-459.	2.8	15
183	Serum Glycans as Risk Markers for Nonâ€“Small Cell Lung Cancer. Cancer Prevention Research, 2016, 9, 317-323.	1.5	15
184	Metabolic flux analysis of the neural cell glycocalyx reveals differential utilization of monosaccharides. Glycobiology, 2020, 30, 859-871.	2.5	15
185	Analysis of Milk Oligosaccharides by Mass Spectrometry. Methods in Molecular Biology, 2017, 1503, 121-129.	0.9	14
186	A site-specific map of the human plasma glycome and its age and gender-associated alterations. Scientific Reports, 2020, 10, 17505.	3.3	14
187	Glycanâ€“protein cross-linking mass spectrometry reveals sialic acid-mediated protein networks on cell surfaces. Chemical Science, 2021, 12, 8767-8777.	7.4	14
188	Polysaccharide identification through oligosaccharide fingerprinting. Carbohydrate Polymers, 2021, 257, 117570.	10.2	14
189	UDP-glucose pyrophosphorylase 2, a regulator of glycogen synthesis and glycosylation, is critical for pancreatic cancer growth. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2103592118.	7.1	14
190	High-throughput glycomic analyses reveal unique oligosaccharide profiles of canine and feline milk samples. PLoS ONE, 2020, 15, e0243323.	2.5	14
191	Protein-Linked Glycan Degradation in Infants Fed Human Milk. Journal of Glycomics & Lipidomics, 2012, s1, 002.	0.4	14
192	Antitumor activity of a lectibody targeting cancer-associated high-mannose glycans. Molecular Therapy, 2022, 30, 1523-1535.	8.2	14
193	Isolation of HDL by sequential flotation ultracentrifugation followed by size exclusion chromatography reveals size-based enrichment of HDL-associated proteins. Scientific Reports, 2021, 11, 16086.	3.3	13
194	The impact of freeze-drying infant fecal samples on measures of their bacterial community profiles and milk-derived oligosaccharide content. PeerJ, 2016, 4, e1612.	2.0	13
195	An approach for evaluating the effects of dietary fiber polysaccharides on the human gut microbiome and plasma proteome. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2123411119.	7.1	12
196	Glycomic profiling and the mammalian brain. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2022238118.	7.1	11
197	Host Cell Glycocalyx Remodeling Reveals SARS-CoV-2 Spike Protein Glycomic Binding Sites. Frontiers in Molecular Biosciences, 2022, 9, 799703.	3.5	11
198	Diet affects glycosylation of serum proteins in women at risk for cardiometabolic disease. European Journal of Nutrition, 2021, 60, 3727-3741.	3.9	10

#	Article	IF	Citations
199	Mesenchymal Stromal Cells Regulate Sialylations of N-Glycans, Affecting Cell Migration and Survival. International Journal of Molecular Sciences, 2021, 22, 6868.	4.1	10
200	The DNA repair enzyme MUTYH potentiates cytotoxicity of the alkylating agent MNNG by interacting with abasic sites. Journal of Biological Chemistry, 2020, 295, 3692-3707.	3.4	10
201	Fragmentation behavior of disaccharides during desorption-ionization. Organic Mass Spectrometry, 1992, 27, 639-643.	1.3	9
202	Effects of Kifunensine on Production and N-Glycosylation Modification of Butyrylcholinesterase in a Transgenic Rice Cell Culture Bioreactor. International Journal of Molecular Sciences, 2020, 21, 6896.	4.1	9
203	Associations of Human Milk Oligosaccharides and Bioactive Proteins with Infant Morbidity and Inflammation in Malawian Mother-Infant Dyads. Current Developments in Nutrition, 2021, 5, nzab072.	0.3	9
204	N-Glycomic Analysis of the Cell Shows Specific Effects of Glycosyl Transferase Inhibitors. Cells, 2021, 10, 2318.	4.1	9
205	Synthesis and End Group Structure of 2-Deoxydextrans Prepared via the Cationic Ring-Opening Polymerization of an Anhydro Sugar. Macromolecules, 2002, 35, 3402-3412.	4.8	8
206	Changes in cellular glycosylation of leukemia cells upon treatment with acridone derivatives yield insight into drug action. Proteomics, 2016, 16, 2977-2988.	2.2	8
207	High-throughput mutagenesis reveals unique structural features of human ADAR1. Nature Communications, 2020, 11, 5130.	12.8	8
208	Dietary supplementation with Bifidobacterium longum subsp. infantis (B. infantis) in healthy breastfed infants: study protocol for a randomised controlled trial. Trials, 2016, 17, 340.	1.6	7
209	High Mannose N-Glycans Promote Migration of Bone-Marrow-Derived Mesenchymal Stromal Cells. International Journal of Molecular Sciences, 2020, 21, 7194.	4.1	7
210	Lipid-Based Nutrient Supplementation Increases High-Density Lipoprotein (HDL) Cholesterol Efflux Capacity and Is Associated with Changes in the HDL Glycoproteome in Children. ACS Omega, 2021, 6, 32022-32031.	3.5	7
211	A proximity labeling method for proteinâ€“protein interactions on cell membrane. Chemical Science, 2022, 13, 6028-6038.	7.4	7
212	A Multidimensional Mass Spectrometry-Based Workflow for De Novo Structural Elucidation of Oligosaccharides from Polysaccharides. Journal of the American Society for Mass Spectrometry, 2021, 32, 2175-2185.	2.8	6
213	In silicoscreening-based discovery of inhibitors against glycosylation proteins dysregulated in cancer. Journal of Biomolecular Structure and Dynamics, 2023, 41, 1540-1552.	3.5	6
214	Glycosylation alterations in serum of Alzheimer's disease patients show widespread changes in Nâ€glycosylation of proteins related to immune function, inflammation, and lipoprotein metabolism. Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring, 2022, 14, e12309.	2.4	6
215	High-Density Lipoprotein Changes in Alzheimerâ€™s Disease Are APOE Genotype-Specific. Biomedicines, 2022, 10, 1495.	3.2	6
216	An Integrated Mass Spectrometry-Based Glycomics-Driven Glycoproteomics Analytical Platform to Functionally Characterize Glycosylation Inhibitors. Molecules, 2022, 27, 3834.	3.8	6

#	Article	IF	Citations
217	Glycosylated proteins preserved over millennia: N-glycan analysis of Tyrolean Iceman, Scythian Princess and Warrior. Scientific Reports, 2014, 4, 4963.	3.3	5
218	Glycomic analysis of antibody indicates distinctive glycosylation profile in patients with autoimmune cholangitis. Journal of Autoimmunity, 2020, 113, 102503.	6.5	5
219	Mass Spectrometric Analyses of Î²-Ketolactone Oligomers, Macrocyclic or Catenane Structures?. Analytical Chemistry, 1996, 68, 38-45.	6.5	4
220	Serum glycosylation characterization of osteonecrosis of the femoral head by mass spectrometry. European Journal of Mass Spectrometry, 2018, 24, 178-187.	1.0	4
221	Origins of glycan selectivity in streptococcal Siglec-like adhesins suggest mechanisms of receptor adaptation. Nature Communications, 2022, 13, 2753.	12.8	4
222	Ion-Molecule Reactions and H/D Exchange for Structural Characterization of Biomolecules. , 2006, , 119-145.		3
223	N-glycosylation profiling of serum immunoglobulin in opisthorchiasis patients. Journal of Proteomics, 2021, 230, 103980.	2.4	3
224	Proteoglycan 4 (lubricin) is a highly sialylated glycoprotein associated with cardiac valve damage in animal models of infective endocarditis. Glycobiology, 2021, , .	2.5	3
225	Is High Throughput Glycomics Possible?. Mass Spectrometry, 2013, 2, S0016-S0016.	0.6	3
226	Glycomic Mapping of the Maize Plant Points to Greater Utilization of the Entire Plant. ACS Food Science & Technology, 0, , .	2.7	3
227	The Development of the Davis Food Glycopediaâ€"A Glycan Encyclopedia of Food. Nutrients, 2022, 14, 1639.	4.1	3
228	Milk: A Scientific Model for Diet and Health Research in the 21st Century. Frontiers in Nutrition, 0, 9, .	3.7	3
229	Selective Proteolysis of Î±â€Lactalbumin by Endogenous Enzymes of Human Milk at Acidic pH. Molecular Nutrition and Food Research, 2019, 63, 1900259.	3.3	2
230	Omics Forecasting: Predictive Calculations Permit the Rapid Interpretation of High-Resolution Mass Spectral Data from Complex Mixtures. Journal of Agricultural and Food Chemistry, 2019, 67, 13318-13326.	5.2	2
231	Analysis of site-specific glycan profiles of serum proteins in patients with multiple sclerosis or neuromyelitis optica spectrum disorderâ€"a pilot study. Glycobiology, 2021, 31, 1230-1238.	2.5	2
232	Glycan biomarkers of autoimmunity and bile acid-associated alterations of the human glycome: Primary biliary cirrhosis and primary sclerosing cholangitis-specific glycans. Clinical Immunology, 2021, 230, 108825.	3.2	2
233	Ion-molecule reactions as probes of gas-phase structures of peptides and proteins. , 0, .		1
234	System Metaglycomes: Mapping Dynamic Cell Surface Nâ€glycome, Oâ€glycome and Glycolipidome by Mass Spectrometry. FASEB Journal, 2018, 32, 673.11.	0.5	1

#	Article	IF	Citations
235	Multiâ€omics Studies Reveal Altered Hippocampal Nâ€Glycosylation in High Fat Dietâ€Induced Obese Mice. FASEB Journal, 2020, 34, 1-1.	0.5	1
236	Examination of Carbohydrate Products in Feces Reveals Potential Biomarkers Distinguishing Exclusive and Nonexclusive Breastfeeding Practices in Infants. Journal of Nutrition, 2020, 150, 1051-1057.	2.9	0
237	Normalâ€phase chromatographic separation of pigmented wine tannin by nanoâ€HPLC quadrupole timeâ€ofâ€flight tandem mass spectrometry and identification of candidate molecular features. Journal of the Science of Food and Agriculture, 2021, 101, 4699-4704.	3.5	0
238	The glycoproteomics of hawk and caiman tears. BMC Veterinary Research, 2021, 17, 381.	1.9	0
239	The psoriasis glycome: differential expression of cholesterol particle glycans and IgA glycans linked to disease severity. Journal of Investigative Dermatology, 2022, , .	0.7	0
240	Quantitative glycoproteomics of high-density lipoproteins. RSC Advances, 2022, 12, 18450-18456.	3.6	0