

Richard D Cummings

List of Publications by Year in descending order

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227
papers

15,352
citations

19657

61
h-index

21540

114
g-index

240
all docs

240
docs citations

240
times ranked

14481
citing authors

#	ARTICLE	IF	CITATIONS
1	Printed covalent glycan array for ligand profiling of diverse glycan binding proteins. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 17033-17038.	7.1	1,039
2	Symbol Nomenclature for Graphical Representations of Glycans. Glycobiology, 2015, 25, 1323-1324.	2.5	818
3	Protein Glycosylation in Cancer. Annual Review of Pathology: Mechanisms of Disease, 2015, 10, 473-510.	22.4	624
4	A unique molecular chaperone Cosmc required for activity of the mammalian core 1 β -galactosyltransferase. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 16613-16618.	7.1	433
5	The repertoire of glycan determinants in the human glycome. Molecular BioSystems, 2009, 5, 1087.	2.9	429
6	Galectin-1, -2, and -3 Exhibit Differential Recognition of Sialylated Glycans and Blood Group Antigens. Journal of Biological Chemistry, 2008, 283, 10109-10123.	3.4	374
7	The Challenge and Promise of Glycomics. Chemistry and Biology, 2014, 21, 1-15.	6.0	334
8	Increased susceptibility to colitis and colorectal tumors in mice lacking core 3 α -derived O-glycans. Journal of Experimental Medicine, 2007, 204, 1417-1429.	8.5	294
9	Updates to the Symbol Nomenclature for Glycans guidelines. Glycobiology, 2019, 29, 620-624.	2.5	292
10	The Tn Antigen α -Structural Simplicity and Biological Complexity. Angewandte Chemie - International Edition, 2011, 50, 1770-1791.	13.8	283
11	The dendritic cell-specific C-type lectin DC-SIGN is a receptor for Schistosoma mansoni egg antigens and recognizes the glycan antigen Lewis x. Glycobiology, 2003, 13, 471-478.	2.5	279
12	Innate immune lectins kill bacteria expressing blood group antigen. Nature Medicine, 2010, 16, 295-301.	30.7	267
13	Cloning and Expression of Human Core 1 β 1,3-Galactosyltransferase. Journal of Biological Chemistry, 2002, 277, 178-186.	3.4	258
14	Human Tumor Antigens Tn and Sialyl Tn Arise from Mutations in <i>Cosmc</i> . Cancer Research, 2008, 68, 1636-1646.	0.9	248
15	Chaperone mutation in Tn syndrome. Nature, 2005, 437, 1252-1252.	27.8	245
16	Novel Fluorescent Glycan Microarray Strategy Reveals Ligands for Galectins. Chemistry and Biology, 2009, 16, 36-47.	6.0	218
17	Microbial glycan microarrays define key features of host-microbial interactions. Nature Chemical Biology, 2014, 10, 470-476.	8.0	191
18	IFN- γ -independent immune markers of Mycobacterium tuberculosis exposure. Nature Medicine, 2019, 25, 977-987.	30.7	186

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19	Simple Sugars to Complex Disease—Mucin-Type O-Glycans in Cancer. <i>Advances in Cancer Research</i> , 2015, 126, 53-135.	5.0	185
20	Binding of Glycosulfopeptides to P-selectin Requires Stereospecific Contributions of Individual Tyrosine Sulfate and Sugar Residues. <i>Journal of Biological Chemistry</i> , 2000, 275, 39569-39578.	3.4	184
21	Cosmc is an essential chaperone for correct protein O-glycosylation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 9228-9233.	7.1	181
22	Shotgun glycomics: a microarray strategy for functional glycomics. <i>Nature Methods</i> , 2011, 8, 85-90.	19.0	176
23	Versatile fluorescent derivatization of glycans for glycomic analysis. <i>Nature Methods</i> , 2005, 2, 845-850.	19.0	166
24	Oxidative release of natural glycans for functional glycomics. <i>Nature Methods</i> , 2016, 13, 528-534.	19.0	153
25	Receptor binding specificity of recent human H3N2 influenza viruses. <i>Virology Journal</i> , 2007, 4, 42.	3.4	146
26	Altered O-glycosylation and sulfation of airway mucins associated with cystic fibrosis. <i>Glycobiology</i> , 2005, 15, 747-775.	2.5	145
27	Intestinal epithelial glycosylation in homeostasis and gut microbiota interactions in IBD. <i>Nature Reviews Gastroenterology and Hepatology</i> , 2020, 17, 597-617.	17.8	138
28	Mucin glycans attenuate the virulence of <i>Pseudomonas aeruginosa</i> in infection. <i>Nature Microbiology</i> , 2019, 4, 2146-2154.	13.3	137
29	Recognition of microbial glycans by human intelectin-1. <i>Nature Structural and Molecular Biology</i> , 2015, 22, 603-610.	8.2	133
30	Tn and sialyl-Tn antigens, aberrant O-glycomics as human disease markers. <i>Proteomics - Clinical Applications</i> , 2013, 7, 618-631.	1.6	131
31	A Sialylated Glycan Microarray Reveals Novel Interactions of Modified Sialic Acids with Proteins and Viruses. <i>Journal of Biological Chemistry</i> , 2011, 286, 31610-31622.	3.4	125
32	GlyYouCan: an accessible glycan structure repository. <i>Glycobiology</i> , 2017, 27, 915-919.	2.5	123
33	GlyGen: Computational and Informatics Resources for Glycoscience. <i>Glycobiology</i> , 2020, 30, 72-73.	2.5	123
34	Regulation of protein O-glycosylation by the endoplasmic reticulum-localized molecular chaperone Cosmc. <i>Journal of Cell Biology</i> , 2008, 182, 531-542.	5.2	116
35	Cross-comparison of Protein Recognition of Sialic Acid Diversity on Two Novel Sialoglycan Microarrays. <i>Journal of Biological Chemistry</i> , 2012, 287, 22593-22608.	3.4	116
36	The Cosmc connection to the Tn antigen in cancer. <i>Cancer Biomarkers</i> , 2014, 14, 63-81.	1.7	115

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37	Cross-platform comparison of glycan microarray formats. <i>Glycobiology</i> , 2014, 24, 507-517.	2.5	114
38	Human Milk Contains Novel Glycans That Are Potential Decoy Receptors for Neonatal Rotaviruses. <i>Molecular and Cellular Proteomics</i> , 2014, 13, 2944-2960.	3.8	113
39	Generation of fully functional hepatocyte-like organoids from human induced pluripotent stem cells mixed with Endothelial Cells. <i>Scientific Reports</i> , 2019, 9, 8920.	3.3	113
40	The selectin family of carbohydrate-binding proteins: Structure and importance of carbohydrate ligands for cell adhesion. <i>BioEssays</i> , 1992, 14, 849-856.	2.5	112
41	Purification, Characterization, and Subunit Structure of Rat Core 1 β 1,3-Galactosyltransferase. <i>Journal of Biological Chemistry</i> , 2002, 277, 169-177.	3.4	105
42	A Useful Guide to Lectin Binding: Machine-Learning Directed Annotation of 57 Unique Lectin Specificities. <i>ACS Chemical Biology</i> , 2022, 17, 2993-3012.	3.4	103
43	Human H3N2 Influenza Viruses Isolated from 1968 To 2012 Show Varying Preference for Receptor Substructures with No Apparent Consequences for Disease or Spread. <i>PLoS ONE</i> , 2013, 8, e66325.	2.5	101
44	Shotgun glycomics of pig lung identifies natural endogenous receptors for influenza viruses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E2241-50.	7.1	97
45	Functional Glycomic Analysis of Human Milk Glycans Reveals the Presence of Virus Receptors and Embryonic Stem Cell Biomarkers. <i>Journal of Biological Chemistry</i> , 2012, 287, 44784-44799.	3.4	90
46	The human IgG anti-carbohydrate repertoire exhibits a universal architecture and contains specificity for microbial attachment sites. <i>Science Translational Medicine</i> , 2015, 7, 269ra1.	12.4	87
47	GlyYouCan 1.0 – The international glycan structure repository. <i>Nucleic Acids Research</i> , 2016, 44, D1237-D1242.	14.5	83
48	The SARS-CoV-2 receptor-binding domain preferentially recognizes blood group A. <i>Blood Advances</i> , 2021, 5, 1305-1309.	5.2	83
49	Platelet biogenesis and functions require correct protein O-glycosylation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 16143-16148.	7.1	82
50	Cellular O-Glycome Reporter/Amplification to explore O-glycans of living cells. <i>Nature Methods</i> , 2016, 13, 81-86.	19.0	81
51	<i>Cosmc</i> is an X-linked inflammatory bowel disease risk gene that spatially regulates gut microbiota and contributes to sex-specific risk. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 14787-14792.	7.1	77
52	“Stuck on sugars” how carbohydrates regulate cell adhesion, recognition, and signaling. <i>Glycoconjugate Journal</i> , 2019, 36, 241-257.	2.7	77
53	Thermodynamics of Carbohydrate Binding to Galectin-1 from Chinese Hamster Ovary Cells and Two Mutants. A Comparison with Four Galactose-Specific Plant Lectins. <i>Biochemistry</i> , 1996, 35, 15236-15243.	2.5	73
54	Preparation and Analysis of Glycan Microarrays. <i>Current Protocols in Protein Science</i> , 2011, 64, Unit12.10.	2.8	73

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55	Immobilized Lotus tetragonolobus agglutinin binds oligosaccharides containing the Le(x) determinant. <i>Glycoconjugate Journal</i> , 1997, 14, 45-55.	2.7	71
56	Comparison of the receptor binding properties of contemporary swine isolates and early human pandemic H1N1 isolates (Novel 2009 H1N1). <i>Virology</i> , 2011, 413, 169-182.	2.4	71
57	Glycopeptide analogues of PSGL-1 inhibit P-selectin in vitro and in vivo. <i>Nature Communications</i> , 2015, 6, 6387.	12.8	69
58	Structural characterisation of neutrophil glycans by ultra sensitive mass spectrometric glycomics methodology. <i>Glycoconjugate Journal</i> , 2009, 26, 975-986.	2.7	68
59	Characterization of Monomeric Forms of Galectin-1 Generated by Site-Directed Mutagenesis. <i>Biochemistry</i> , 1996, 35, 13081-13088.	2.5	67
60	Human DC-SIGN binds specific human milk glycans. <i>Biochemical Journal</i> , 2016, 473, 1343-1353.	3.7	66
61	Multiplex glycan bead array for high throughput and high content analyses of glycan binding proteins. <i>Nature Communications</i> , 2018, 9, 258.	12.8	66
62	Human IgA binds a diverse array of commensal bacteria. <i>Journal of Experimental Medicine</i> , 2020, 217, .	8.5	65
63	Influenza binds phosphorylated glycans from human lung. <i>Science Advances</i> , 2019, 5, eaav2554.	10.3	64
64	Human Parainfluenza Viruses hPIV1 and hPIV3 Bind Oligosaccharides with α 2-3-Linked Sialic Acids That Are Distinct from Those Bound by H5 Avian Influenza Virus Hemagglutinin. <i>Journal of Virology</i> , 2007, 81, 8341-8345.	3.4	63
65	The Endoplasmic Reticulum Chaperone Cosmc Directly Promotes in Vitro Folding of T-synthase. <i>Journal of Biological Chemistry</i> , 2010, 285, 2456-2462.	3.4	63
66	Application of Microarrays for Deciphering the Structure and Function of the Human Glycome. <i>Molecular and Cellular Proteomics</i> , 2013, 12, 902-912.	3.8	63
67	Unique Binding Specificities of Proteins toward Isomeric Asparagine-Linked Glycans. <i>Cell Chemical Biology</i> , 2019, 26, 535-547.e4.	5.2	63
68	Cation-independent Mannose 6-Phosphate Receptor. <i>Journal of Biological Chemistry</i> , 2009, 284, 35215-35226.	3.4	62
69	Serum N-glycan and O-glycan analysis by mass spectrometry for diagnosis of congenital disorders of glycosylation. <i>Analytical Biochemistry</i> , 2013, 442, 178-185.	2.4	61
70	Epigenetic Silencing of the Chaperone Cosmc in Human Leukocytes Expressing Tn Antigen. <i>Journal of Biological Chemistry</i> , 2012, 287, 41523-41533.	3.4	60
71	Chemistry of natural glycan microarrays. <i>Current Opinion in Chemical Biology</i> , 2014, 18, 70-77.	6.1	59
72	Glycan Microarrays as Chemical Tools for Identifying Glycan Recognition by Immune Proteins. <i>Frontiers in Chemistry</i> , 2019, 7, 833.	3.6	59

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73	Structural Characterization by Multistage Mass Spectrometry (MSn) of Human Milk Glycans Recognized by Human Rotaviruses. <i>Molecular and Cellular Proteomics</i> , 2014, 13, 2961-2974.	3.8	58
74	Using glycan microarrays to understand immunity. <i>Current Opinion in Chemical Biology</i> , 2014, 18, 55-61.	6.1	58
75	Glycan Microarray Analysis of P-type Lectins Reveals Distinct Phosphomannose Glycan Recognition. <i>Journal of Biological Chemistry</i> , 2009, 284, 35201-35214.	3.4	57
76	Analysis of Influenza Virus Hemagglutinin Receptor Binding Mutants with Limited Receptor Recognition Properties and Conditional Replication Characteristics. <i>Journal of Virology</i> , 2011, 85, 12387-12398.	3.4	55
77	Deciphering Structural Elements of Mucin Glycoprotein Recognition. <i>ACS Chemical Biology</i> , 2012, 7, 1031-1039.	3.4	53
78	The whipworm (<i>Trichuris suis</i>) secretes prostaglandin E2 to suppress proinflammatory properties in human dendritic cells. <i>FASEB Journal</i> , 2017, 31, 719-731.	0.5	52
79	The Human Lung Glycome Reveals Novel Glycan Ligands for Influenza A Virus. <i>Scientific Reports</i> , 2020, 10, 5320.	3.3	51
80	Automated Motif Discovery from Glycan Array Data. <i>OMICS A Journal of Integrative Biology</i> , 2012, 16, 497-512.	2.0	50
81	Structural basis of glycan specificity in neonate-specific bovine-human reassortant rotavirus. <i>Nature Communications</i> , 2015, 6, 8346.	12.8	50
82	O-glycan recognition and function in mice and human cancers. <i>Biochemical Journal</i> , 2020, 477, 1541-1564.	3.7	47
83	Mammalian brain glycoproteins exhibit diminished glycan complexity compared to other tissues. <i>Nature Communications</i> , 2022, 13, 275.	12.8	47
84	Glycobiology and schizophrenia: a biological hypothesis emerging from genomic research. <i>Molecular Psychiatry</i> , 2020, 25, 3129-3139.	7.9	46
85	Mucin Glycans Signal through the Sensor Kinase RetS to Inhibit Virulence-Associated Traits in <i>Pseudomonas aeruginosa</i> . <i>Current Biology</i> , 2021, 31, 90-102.e7.	3.9	45
86	Identification of core 1 O-glycan T-synthase from <i>Caenorhabditis elegans</i> . <i>Glycobiology</i> , 2006, 16, 947-958.	2.5	44
87	Galectins are human milk glycan receptors. <i>Glycobiology</i> , 2016, 26, 655-669.	2.5	44
88	The Sweet-Side of Leukocytes: Galectins as Master Regulators of Neutrophil Function. <i>Frontiers in Immunology</i> , 2019, 10, 1762.	4.8	44
89	Aberrant glycosylation in schizophrenia: a review of 25 years of post-mortem brain studies. <i>Molecular Psychiatry</i> , 2020, 25, 3198-3207.	7.9	44
90	GlycoPattern: a web platform for glycan array mining. <i>Bioinformatics</i> , 2014, 30, 3417-3418.	4.1	43

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91	A Novel N-Tetrasaccharide in Patients with Congenital Disorders of Glycosylation, Including Asparagine-Linked Glycosylation Protein 1, Phosphomannomutase 2, and Mannose Phosphate Isomerase Deficiencies. <i>Clinical Chemistry</i> , 2016, 62, 208-217.	3.2	43
92	The schizophrenia risk locus in SLC39A8 alters brain metal transport and plasma glycosylation. <i>Scientific Reports</i> , 2020, 10, 13162.	3.3	43
93	Schistosoma mansoni-infected mice produce antibodies that cross-react with plant, insect, and mammalian glycoproteins and recognize the truncated biantennaryN-glycan Man3GlcNAc2-R. <i>Glycobiology</i> , 2003, 13, 217-225.	2.5	42
94	Differential expression of Cosmc, T-synthase and mucins in Tn-positive colorectal cancers. <i>BMC Cancer</i> , 2018, 18, 827.	2.6	42
95	Molecular cloning and expression of a novel glycolipid sulfotransferase in Mycobacterium tuberculosis The GenBank/EMBL/DDBJ accession number for the sequence (gene Rv1373) reported in this paper is Z81011.. <i>Microbiology (United Kingdom)</i> , 2002, 148, 783-792.	1.8	41
96	A novel fluorescent assay for T-synthase activity. <i>Glycobiology</i> , 2011, 21, 352-362.	2.5	40
97	Galectin-1 Exerts Inhibitory Effects during DENV-1 Infection. <i>PLoS ONE</i> , 2014, 9, e112474.	2.5	39
98	IVIg regulates the survival of human but not mouse neutrophils. <i>Scientific Reports</i> , 2017, 7, 1296.	3.3	38
99	Investigating virus-glycan interactions using glycan microarrays. <i>Current Opinion in Virology</i> , 2014, 7, 79-87.	5.4	37
100	Human B Cell Differentiation Is Characterized by Progressive Remodeling of O-Linked Glycans. <i>Frontiers in Immunology</i> , 2018, 9, 2857.	4.8	37
101	Glycosylation of Zika Virus is Important in Host-Virus Interaction and Pathogenic Potential. <i>International Journal of Molecular Sciences</i> , 2019, 20, 5206.	4.1	37
102	The Mannose Receptor in Regulation of Helminth-Mediated Host Immunity. <i>Frontiers in Immunology</i> , 2017, 8, 1677.	4.8	36
103	GLAD: GLYcan Array Dashboard, a visual analytics tool for glycan microarrays. <i>Bioinformatics</i> , 2019, 35, 3536-3537.	4.1	36
104	GlycoGlyph: a glycan visualizing, drawing and naming application. <i>Bioinformatics</i> , 2020, 36, 3613-3614.	4.1	36
105	Antigenic Pressure on H3N2 Influenza Virus Drift Strains Imposes Constraints on Binding to Sialylated Receptors but Not Phosphorylated Glycans. <i>Journal of Virology</i> , 2019, 93, .	3.4	34
106	Schistosoma mansoni Soluble Egg Antigens Induce Expression of the Negative Regulators SOCS1 and SHP1 in Human Dendritic Cells via Interaction with the Mannose Receptor. <i>PLoS ONE</i> , 2015, 10, e0124089.	2.5	34
107	History and future of shotgun glycomics. <i>Biochemical Society Transactions</i> , 2019, 47, 1-11.	3.4	33
108	Tight Complex Formation between Cosmc Chaperone and Its Specific Client Non-native T-synthase Leads to Enzyme Activity and Client-driven Dissociation. <i>Journal of Biological Chemistry</i> , 2012, 287, 15317-15329.	3.4	32

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109	Differential expression of anti-glycan antibodies in schistosome-infected humans, rhesus monkeys and mice. <i>Glycobiology</i> , 2014, 24, 602-618.	2.5	32
110	Glycan array analysis of influenza H1N1 binding and release. <i>Cancer Biomarkers</i> , 2014, 14, 43-53.	1.7	31
111	Deletion of Atbf1/Zfhx3 In Mouse Prostate Causes Neoplastic Lesions, Likely by Attenuation of Membrane and Secretory Proteins and Multiple Signaling Pathways. <i>Neoplasia</i> , 2014, 16, 377-389.	5.3	31
112	Identification of a fourth mannose 6-phosphate binding site in the cation-independent mannose 6-phosphate receptor. <i>Glycobiology</i> , 2015, 25, 591-606.	2.5	29
113	Characterizing Emerging Canine H3 Influenza Viruses. <i>PLoS Pathogens</i> , 2020, 16, e1008409.	4.7	29
114	Identification of Distinct Glycoforms of IgA1 in Plasma from Patients with Immunoglobulin A (IgA) Nephropathy and Healthy Individuals. <i>Molecular and Cellular Proteomics</i> , 2014, 13, 3097-3113.	3.8	28
115	Identification of Antigenic Glycans from <i>Schistosoma mansoni</i> by Using a Shotgun Egg Glycan Microarray. <i>Infection and Immunity</i> , 2016, 84, 1371-1386.	2.2	27
116	Structural Insights into VLR Fine Specificity for Blood Group Carbohydrates. <i>Structure</i> , 2017, 25, 1667-1678.e4.	3.3	27
117	Development of smart anti-glycan reagents using immunized lampreys. <i>Communications Biology</i> , 2020, 3, 91.	4.4	27
118	Glycan microarrays of fluorescently-tagged natural glycans. <i>Glycoconjugate Journal</i> , 2015, 32, 465-473.	2.7	26
119	Synthetic 1,2,3-triazole-linked glycoconjugates bind with high affinity to human galectin-3. <i>Bioorganic and Medicinal Chemistry</i> , 2015, 23, 3414-3425.	3.0	26
120	Emerging patterns of tyrosine sulfation and O-glycosylation cross-talk and co-localization. <i>Current Opinion in Structural Biology</i> , 2020, 62, 102-111.	5.7	26
121	Treatment with <i>Trichuris suis</i> soluble products during monocyte-to-macrophage differentiation reduces inflammatory responses through epigenetic remodeling. <i>FASEB Journal</i> , 2016, 30, 2826-2836.	0.5	25
122	Targeting of Neutrophil Lewis X Blocks Transepithelial Migration and Increases Phagocytosis and Degranulation. <i>American Journal of Pathology</i> , 2016, 186, 297-311.	3.8	25
123	A PSGL-1 glycomimetic reduces thrombus burden without affecting hemostasis. <i>Blood</i> , 2021, 138, 1182-1193.	1.4	25
124	Probing Virus-Glycan Interactions Using Glycan Microarrays. <i>Methods in Molecular Biology</i> , 2012, 808, 251-267.	0.9	25
125	Immunization with recombinantly expressed glycan antigens from <i>Schistosoma mansoni</i> induces glycan-specific antibodies against the parasite. <i>Glycobiology</i> , 2014, 24, 619-637.	2.5	24
126	O-glycans on death receptors in cells modulate their sensitivity to TRAIL-induced apoptosis through affecting on their stability and oligomerization. <i>FASEB Journal</i> , 2020, 34, 11786-11801.	0.5	24

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127	Natural and Synthetic Sialylated Glycan Microarrays and Their Applications. <i>Frontiers in Molecular Biosciences</i> , 2019, 6, 88.	3.5	23
128	The mannose receptor ligands and the macrophage glycome. <i>Current Opinion in Structural Biology</i> , 2022, 75, 102394.	5.7	23
129	Microarray analysis of the human antibody response to synthetic <i>Cryptosporidium</i> glycopeptides. <i>International Journal for Parasitology</i> , 2013, 43, 901-907.	3.1	22
130	A library of chemically defined human N-glycans synthesized from microbial oligosaccharide precursors. <i>Scientific Reports</i> , 2017, 7, 15907.	3.3	22
131	Isotopic labeling with cellular O-glycome reporter/amplification (ICORA) for comparative O-glycomics of cultured cells. <i>Glycobiology</i> , 2018, 28, 214-222.	2.5	22
132	Mucin O-glycans are natural inhibitors of <i>Candida albicans</i> pathogenicity. <i>Nature Chemical Biology</i> , 2022, 18, 762-773.	8.0	22
133	Identification of a Novel Protein Binding Motif within the T-synthase for the Molecular Chaperone Cosmc. <i>Journal of Biological Chemistry</i> , 2014, 289, 11630-11641.	3.4	21
134	Galectins: An Ancient Family of Carbohydrate Binding Proteins with Modern Functions. <i>Methods in Molecular Biology</i> , 2022, 2442, 1-40.	0.9	21
135	Galatrox is a C-type lectin in <i>Bothrops atrox</i> snake venom that selectively binds LacNAc-terminated glycans and can induce acute inflammation. <i>Glycobiology</i> , 2014, 24, 1010-1021.	2.5	20
136	<i>Trichuris suis</i> induces human non-classical patrolling monocytes via the mannose receptor and PKC: implications for multiple sclerosis. <i>Acta Neuropathologica Communications</i> , 2015, 3, 45.	5.2	20
137	Regulation of neutrophil function by selective targeting of glycan epitopes expressed on the integrin CD11b/CD18. <i>FASEB Journal</i> , 2020, 34, 2326-2343.	0.5	20
138	The Transmembrane Domain of the Molecular Chaperone Cosmc Directs Its Localization to the Endoplasmic Reticulum. <i>Journal of Biological Chemistry</i> , 2011, 286, 11529-11542.	3.4	19
139	Development and characterization of a specific IgG monoclonal antibody toward the Lewis x antigen using splenocytes of <i>Schistosoma mansoni</i> -infected mice. <i>Glycobiology</i> , 2013, 23, 877-892.	2.5	19
140	Proteomic and functional analysis identifies galectin-1 as a novel regulatory component of the cytotoxic granule machinery. <i>Cell Death and Disease</i> , 2017, 8, e3176-e3176.	6.3	19
141	The architecture of the IgG anti-carbohydrate repertoire in primary antibody deficiencies. <i>Blood</i> , 2019, 134, 1941-1950.	1.4	19
142	Cosmc controls B cell homing. <i>Nature Communications</i> , 2020, 11, 3990.	12.8	19
143	Promoters of Human Cosmc and T-synthase Genes Are Similar in Structure, Yet Different in Epigenetic Regulation. <i>Journal of Biological Chemistry</i> , 2015, 290, 19018-19033.	3.4	18
144	Novel Reversible Fluorescent Glycan Linker for Functional Glycomics. <i>Bioconjugate Chemistry</i> , 2019, 30, 2897-2908.	3.6	18

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145	Identification of Tn Antigen O-GalNAc-expressing glycoproteins in human carcinomas using novel anti-Tn recombinant antibodies. <i>Glycobiology</i> , 2019, 30, 282-300.	2.5	18
146	Unique repertoire of anti-carbohydrate antibodies in individual human serum. <i>Scientific Reports</i> , 2020, 10, 15436.	3.3	18
147	Differential recognition of oligomannose isomers by glycan-binding proteins involved in innate and adaptive immunity. <i>Science Advances</i> , 2021, 7, .	10.3	18
148	Cosmc-dependent mucin-type O-linked glycosylation is essential for podocyte function. <i>American Journal of Physiology - Renal Physiology</i> , 2020, 318, F518-F530.	2.7	17
149	Glycosulfopeptides modeled on Pâ€selectin glycoprotein ligandâ€1 inhibit Pâ€selectinâ€dependent leukocyte rolling in vivo. <i>FASEB Journal</i> , 2002, 16, 1461-1462.	0.5	16
150	Galectin-1 modulation of neutrophil reactive oxygen species production depends on the cell activation state. <i>Molecular Immunology</i> , 2019, 116, 80-89.	2.2	16
151	Antibodies from Lampreys as Smart Anti-Glycan Reagents (SAGRs): Perspectives on Their Specificity, Structure, and Glyco-genomics. <i>Biochemistry</i> , 2020, 59, 3111-3122.	2.5	16
152	Computational approaches to define a human milk metaglycome. <i>Bioinformatics</i> , 2016, 32, 1471-1478.	4.1	15
153	A comprehensive <i>Caenorhabditis elegans</i> N-glycan shotgun array. <i>Glycobiology</i> , 2018, 28, 223-232.	2.5	15
154	Targeting epithelium-expressed sialyl Lewis glycans improves colonic mucosal wound healing and protects against colitis. <i>JCI Insight</i> , 2020, 5, .	5.0	15
155	Full-Length Galectin-3 Is Required for High Affinity Microbial Interactions and Antimicrobial Activity. <i>Frontiers in Microbiology</i> , 2021, 12, 731026.	3.5	15
156	Acceptor specificities and selective inhibition of recombinant human Gal- and GlcNAc-transferases that synthesize core structures 1, 2, 3 and 4 of O-glycans. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2013, 1830, 4274-4281.	2.4	14
157	Biochemical characterization of functional domains of the chaperone Cosmc. <i>PLoS ONE</i> , 2017, 12, e0180242.	2.5	14
158	GlyMDB: Glycan Microarray Database and analysis toolset. <i>Bioinformatics</i> , 2020, 36, 2438-2442.	4.1	14
159	Profiling of Glycan Receptors for Minute Virus of Mice in Permissive Cell Lines Towards Understanding the Mechanism of Cell Recognition. <i>PLoS ONE</i> , 2014, 9, e86909.	2.5	14
160	Intact Reducing Glycan Promotes the Specific Immune Response to Lacto-N-neotetraose-BSA Neoglycoconjugates. <i>Bioconjugate Chemistry</i> , 2015, 26, 559-571.	3.6	13
161	Tumor cells express pauci- and oligomannosidic N-glycans in glycoproteins recognized by the mannose receptor (CD206). <i>Cellular and Molecular Life Sciences</i> , 2021, 78, 5569-5585.	5.4	13
162	Novel lamprey antibody recognizes terminal sulfated galactose epitopes on mammalian glycoproteins. <i>Communications Biology</i> , 2021, 4, 674.	4.4	13

#	ARTICLE	IF	CITATIONS
163	Molecular factors in dendritic cell responses to adsorbed glycoconjugates. <i>Biomaterials</i> , 2014, 35, 5862-5874.	11.4	12
164	Expression of Lewis-a glycans on polymorphonuclear leukocytes augments function by increasing transmigration. <i>Journal of Leukocyte Biology</i> , 2017, 102, 753-762.	3.3	12
165	Galectin-3 aggravates experimental polymicrobial sepsis by impairing neutrophil recruitment to the infectious focus. <i>Journal of Infection</i> , 2018, 77, 391-397.	3.3	12
166	Amplification and Preparation of Cellular O-Glycomes for Functional Glycomics. <i>Analytical Chemistry</i> , 2020, 92, 10390-10401.	6.5	12
167	SARS-CoV-2 and other coronaviruses bind to phosphorylated glycans from the human lung. <i>Virology</i> , 2021, 562, 142-148.	2.4	12
168	Preparation of a Mannose-6-Phosphate Glycan Microarray Through Fluorescent Derivatization, Phosphorylation, and Immobilization of Natural High-Mannose N-Glycans and Application in Ligand Identification of P-Type Lectins. <i>Methods in Molecular Biology</i> , 2012, 808, 137-148.	0.9	12
169	The ruminant parasite <i>Haemonchus contortus</i> expresses an alpha1,3-fucosyltransferase capable of synthesizing the Lewis x and sialyl Lewis x antigens. <i>Glycoconjugate Journal</i> , 1998, 15, 789-798.	2.7	11
170	L-Fucose treatment of FUT8-CDG. <i>Molecular Genetics and Metabolism Reports</i> , 2020, 25, 100680.	1.1	11
171	Galectin-9 recognizes and exhibits antimicrobial activity toward microbes expressing blood group a€“like antigens. <i>Journal of Biological Chemistry</i> , 2022, 298, 101704.	3.4	11
172	The schizophrenia-associated variant in SLC39A8 alters protein glycosylation in the mouse brain. <i>Molecular Psychiatry</i> , 2022, 27, 1405-1415.	7.9	11
173	Tools for generating and analyzing glycan microarray data. <i>Beilstein Journal of Organic Chemistry</i> , 2020, 16, 2260-2271.	2.2	10
174	A Fluorescence-Based Assay for Core 1 β 3Galactosyltransferase (T-Synthase) Activity. <i>Methods in Molecular Biology</i> , 2013, 1022, 15-28.	0.9	9
175	Parallel Glyco-SPOT Synthesis of Glycopeptide Libraries. <i>Cell Chemical Biology</i> , 2020, 27, 1207-1219.e9.	5.2	9
176	T Cells Are Smad a€™ly in Love with Galectin-9. <i>Immunity</i> , 2014, 41, 171-173.	14.3	8
177	Single-chain antibody-fragment M6P-1 possesses a mannose 6-phosphate monosaccharide-specific binding pocket that distinguishes N-glycan phosphorylation in a branch-specific manner. <i>Glycobiology</i> , 2016, 26, 181-192.	2.5	8
178	Convergent Synthesis of Sialyl LewisX-O-Core-1 Threonine. <i>Journal of Organic Chemistry</i> , 2018, 83, 4963-4972.	3.2	8
179	N-glycome analysis detects dysglycosylation missed by conventional methods in SLC39A8 deficiency. <i>Journal of Inherited Metabolic Disease</i> , 2020, 43, 1370-1381.	3.6	8
180	Different glycoforms of alpha-1-acid glycoprotein contribute to its functional alterations in platelets and neutrophils. <i>Journal of Leukocyte Biology</i> , 2021, 109, 915-930.	3.3	8

#	ARTICLE	IF	CITATIONS
181	Resident and elicited murine macrophages differ in expression of their glycomes and glycan-binding proteins. <i>Cell Chemical Biology</i> , 2021, 28, 567-582.e4.	5.2	8
182	Major differences in glycosylation and fucosyltransferase expression in low-grade versus high-grade bladder cancer cell lines. <i>Glycobiology</i> , 2021, 31, 1444-1463.	2.5	8
183	ST6Gal1 in plasma is dispensable for IgG sialylation. <i>Glycobiology</i> , 0, , .	2.5	8
184	Schistosoma mansoni 1,3-fucosyltransferase-F generates the Lewis X antigen. <i>Glycobiology</i> , 2015, 26, cwv103.	2.5	7
185	Various N-glycoforms differentially upregulate E-NTPDase activity of the NTPDase3/CD39L3 ecto-enzymatic domain. <i>Purinergic Signalling</i> , 2017, 13, 601-609.	2.2	7
186	Synthesis and Characterization of Versatile O-Glycan Precursors for Cellular O-Glycomics. <i>ACS Synthetic Biology</i> , 2019, 8, 2507-2513.	3.8	7
187	Better survival is observed in cervical cancer patients positive for specific anti-glycan antibodies and receiving brachytherapy. <i>Gynecologic Oncology</i> , 2020, 157, 181-187.	1.4	7
188	Posttranslational Modifications in Thyroid Cancer: Implications for Pathogenesis, Diagnosis, Classification, and Treatment. <i>Cancers</i> , 2022, 14, 1610.	3.7	7
189	Cosmc is required for T cell persistence in the periphery. <i>Glycobiology</i> , 2019, 29, 776-788.	2.5	6
190	Molecular epidemiology and glycomics of swine influenza viruses circulating in commercial swine farms in the southeastern and midwest United States. <i>Veterinary Microbiology</i> , 2020, 251, 108914.	1.9	6
191	Endogenous galectin-3 is required for skeletal muscle repair. <i>Glycobiology</i> , 2021, 31, 1295-1307.	2.5	6
192	Sialoglycans on lymphatic endothelial cells augment interactions with Siglec-1 (CD169) of lymph node macrophages. <i>FASEB Journal</i> , 2021, 35, e22017.	0.5	6
193	Synthesis of Lewis X - O -Core-1 threonine: A building block for O -linked Lewis X glycopeptides. <i>Carbohydrate Research</i> , 2017, 452, 47-53.	2.3	5
194	Evidence of Alternative Modes of B Cell Activation Involving Acquired Fab Regions of N-glycosylation in Antibody-Secreting Cells Infiltrating the Labial Salivary Glands of Patients With Sjögren's Syndrome. <i>Arthritis and Rheumatology</i> , 2018, 70, 1102-1113.	5.6	5
195	Cosmc deficiency causes spontaneous autoimmunity by breaking B cell tolerance. <i>Science Advances</i> , 2021, 7, eabg9118.	10.3	5
196	Examining Galectin Binding Specificity Using Glycan Microarrays. <i>Methods in Molecular Biology</i> , 2022, 2442, 151-168.	0.9	5
197	Enhanced Pro-apoptotic Effects of Fe(II)-Modified IVIG on Human Neutrophils. <i>Frontiers in Immunology</i> , 2020, 11, 973.	4.8	4
198	Identification of Glycan-Specific Variable Lymphocyte Receptors Using Yeast Surface Display and Glycan Microarrays. <i>Methods in Molecular Biology</i> , 2022, 2421, 73-89.	0.9	4

#	ARTICLE	IF	CITATIONS
199	Evaluation of the Bactericidal Activity of Galectins. <i>Methods in Molecular Biology</i> , 2022, 2442, 517-531.	0.9	4
200	Targeting the Laminated Layer of <i>Echinococcus multilocularis</i> as a Potential Therapeutic Strategy. <i>Pharmacology</i> , 2021, 106, 1-2.	2.2	2
201	Examination of Whole-Cell Galectin Binding by Solid Phase and Flow Cytometric Analysis. <i>Methods in Molecular Biology</i> , 2022, 2442, 187-203.	0.9	2
202	Alkylation of Galectin-1 with Iodoacetamide and Mass Spectrometric Mapping of the Sites of Incorporation. <i>Methods in Molecular Biology</i> , 2022, 2442, 75-87.	0.9	2
203	If it is methylated it must be Tectonic. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 9669-9670.	7.1	1
204	The Haystack Is Full of Needles: Technology Rescues Sugars!. <i>Molecular Cell</i> , 2017, 68, 827-829.	9.7	1
205	Cellular Glycome Reporter/Amplification (COR): Analytical and Preparative Tools to Study Mucin Type Glycans of Living Cells. <i>Current Protocols</i> , 2021, 1, e142.	2.9	1
206	Glycosylation. , 2005, , .		0
207	P-187 Targeting of PMN Lewis X Blocks PMN Transepithelial Migration and Increases Phagocytosis and Degranulation. <i>Inflammatory Bowel Diseases</i> , 2016, 22, S66.	1.9	0
208	Lipids Glycan-Dependent Cell Adhesion Processes. , 2021, , 654-662.		0
209	Tools and Methods to Study the Human Glycome. , 2021, , 416-431.		0
210	Non-apoptotic phosphatidylserine externalization induced by galectin in leukocytes is distinct from that accompanying apoptotic cell death.. <i>FASEB Journal</i> , 2006, 20, A914.	0.5	0
211	Cosmc Is Essential for O-Glycosylation of Platelet Glycoproteins and Platelet Function. <i>Blood</i> , 2010, 116, 383-383.	1.4	0
212	Cosmc Is Silenced in Human Tn4 B Cells through Hypermethylation of the Gene Promoter. <i>FASEB Journal</i> , 2012, 26, 928.7.	0.5	0
213	Human Cosmc and Tsynthase Genes Are Transcriptionally Regulated by SP1/SP3 Transcription Factors. <i>FASEB Journal</i> , 2012, 26, 931.13.	0.5	0
214	Molecular Regulation of Protein Glycosylation and Relevance to Disease and Development. <i>FASEB Journal</i> , 2013, 27, 211.1.	0.5	0
215	Targeting Epithelial Expressed Sialyl Lewis A Improves Intestinal Mucosal Wound Healing and Protects Against Colitis. <i>FASEB Journal</i> , 2019, 33, 34.4.	0.5	0
216	Regulation of Neutrophil Function by Selective Targeting of Glycan Epitopes Expressed on the Integrin CD11b/CD18. <i>FASEB Journal</i> , 2020, 34, 1-1.	0.5	0

#	ARTICLE	IF	CITATIONS
217	Investigation of in Frozen Tissue and Mammalian Cell Culture Using Confocal Microscopy. <i>Methods in Molecular Biology</i> , 2022, 2442, 289-306.	0.9	0
218	Detection of Reactive Oxygen Species in Human Neutrophils Under Various Conditions of Exposure to Galectin. <i>Methods in Molecular Biology</i> , 2022, 2442, 549-564.	0.9	0
219	Detection of Phosphatidylserine Exposure on Leukocytes Following Treatment with Human Galectins. <i>Methods in Molecular Biology</i> , 2022, 2442, 533-548.	0.9	0
220	Molecular Imaging for In Vivo Tracking and Detection of Galectin Binding Partners. <i>Methods in Molecular Biology</i> , 2022, 2442, 339-352.	0.9	0
221	Characterizing Emerging Canine H3 Influenza Viruses. , 2020, 16, e1008409.		0
222	Characterizing Emerging Canine H3 Influenza Viruses. , 2020, 16, e1008409.		0
223	Characterizing Emerging Canine H3 Influenza Viruses. , 2020, 16, e1008409.		0
224	Characterizing Emerging Canine H3 Influenza Viruses. , 2020, 16, e1008409.		0
225	Characterizing Emerging Canine H3 Influenza Viruses. , 2020, 16, e1008409.		0
226	Characterizing Emerging Canine H3 Influenza Viruses. , 2020, 16, e1008409.		0
227	Sialylation of CD11b/CD18 regulates Neutrophil Transepithelial Migration and Neutrophil Inflammatory function in the Intestine. <i>FASEB Journal</i> , 2022, 36, .	0.5	0