Christopher W Cairo

List of Publications by Year
in descending order

85 papers	3,681 citations	147726 31 h-index	138417 58 g-index
97 all docs	97 docs citations	97 times ranked	5076 citing authors

#	Article	IF	Citations
1	Inhibitors of Human Neuraminidase Enzymes Block Transmigration in vitro. Frontiers in Molecular Biosciences, 2022, 9, 835757.	1.6	3
2	The Janusâ€like role of neuraminidase isoenzymes inÂinflammation. FASEB Journal, 2022, 36, e22285.	0.2	9
3	Therapeutic Effect of Neuraminidase-1â€“Selective Inhibition in Mouse Models of Bleomycin-Induced Pulmonary Inflammation and Fibrosis. Journal of Pharmacology and Experimental Therapeutics, 2021, 376, 136-146.	1.3	24
4	Neuraminidases 1 and 3 Trigger Atherosclerosis by Desialylating Lowâ€Ðensity Lipoproteins and Increasing Their Uptake by Macrophages. Journal of the American Heart Association, 2021, 10, e018756.	1.6	29
5	Characterization of ABH-subtype donor-specific antibodies in ABO-A-incompatible kidney transplantation. American Journal of Transplantation, 2021, 21, 3649-3662.	2.6	16
6	Profiling of glycosphingolipids with SCDase digestion and HPLC-FLD-MS. Analytical Biochemistry, 2021, 631, 114361.	1.1	2
7	NIST Interlaboratory Study on Glycosylation Analysis of Monoclonal Antibodies: Comparison of Results from Diverse Analytical Methods. Molecular and Cellular Proteomics, 2020, 19, 11-30.	2.5	87
8	Human neuraminidases have reduced activity towards modified sialic acids on glycoproteins. Carbohydrate Research, 2020, 497, 108139.	1.1	6
9	Isoenzyme-Selective Inhibitors of Human Neuraminidases Reveal Distinct Effects on Cell Migration. ACS Chemical Biology, 2020, 15, 1328-1339.	1.6	9
10	A quantitative, high-throughput method identifies proteinâ€“glycan interactions via mass spectrometry. Communications Biology, 2019, 2, 268.	2.0	24
11	Crystal structures of human lysosomal EPDR1 reveal homology with the superfamily of bacterial lipoprotein transporters. Communications Biology, 2019, 2, 52.	2.0	18
12	Neuraminidase-3 Is a Negative Regulator of LFA-1 Adhesion. Frontiers in Chemistry, 2019, 7, 791.	1.8	13
13	Selection of galectinâ€3 ligands derived from genetically encoded glycopeptide libraries. Peptide Science, 2019, 111, e24097.	1.0	9
14	Human Neuraminidase Isoenzymes Show Variable Activities for 9-O-Acetyl-sialoside Substrates. ACS Chemical Biology, 2018, 13, 922-932.	1.6	27
15	Selective Inhibitors of Human Neuraminidase 3. Journal of Medicinal Chemistry, 2018, 61, 1990-2008.	2.9	43
16	New Answers to Old Conundrums. Transplantation, 2018, 102, 209-214.	0.5	16
17	Construction of Multivalent Homo- and Heterofunctional ABO Blood Group Glycoconjugates Using a Trifunctional Linker Strategy. Bioconjugate Chemistry, 2018, 29, 343-362.	1.8	16
18	MHC-Matched A-Expressing Blood Cells Induce ABO Tolerance in Infant and Adult Mice. Transplantation, 2018, 102, S292.	0.5	1

#	Article	IF	Citations
19	Selective Inhibitors of Human Neuraminidase 1 (NEU1). Journal of Medicinal Chemistry, 2018, 61, 11261-11279.	2.9	40
20	A tyrosine sulfationâ€“dependent HLA-I modification identifies memory B cells and plasma cells. Science Advances, 2018, 4, eaar7653.	4.7	13
21	Persistent reduction in sialylation of cerebral glycoproteins following postnatal inflammatory exposure. Journal of Neuroinflammation, 2018, 15, 336.	3.1	20
22	Molecular dynamics simulations of viral neuraminidase inhibitors with the human neuraminidase enzymes: Insights into isoenzyme selectivity. Bioorganic and Medicinal Chemistry, 2018, 26, 5349-5358.	1.4	25
23	Neuraminidase 1 activates insulin receptor and reverses insulin resistance in obese mice. Molecular Metabolism, 2018, 12, 76-88.	3.0	50
24	Synthetic Strategies for Modified Glycosphingolipids and Their Design as Probes. Chemical Reviews, 2018, 118, 8188-8241.	23.0	34
25	Galectin-3 alters the lateral mobility and clustering of Î²1-integrin receptors. PLoS ONE, 2017, 12, e0184378.	1.1	21
26	ABH-Glycan Microarray Characterizes ABO Subtype Antibodies: Fine Specificity of Immune Tolerance After ABO-Incompatible Transplantation. American Journal of Transplantation, 2016, 16, 1548-1558.	2.6	36
27	Screening Glycolipids Against Proteins in Vitro Using Picodiscs and Catch-and-Release Electrospray Ionization-Mass Spectrometry. Analytical Chemistry, 2016, 88, 4742-4750.	3.2	20
28	Integrin-mediated cell migration is blocked by inhibitors of human neuraminidase. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2016, 1861, 1170-1179.	1.2	16
29	Enhanced Cross-Linking of Diazirine-Modified Sialylated Glycoproteins Enabled through Profiling of Sialidase Specificities. ACS Chemical Biology, 2016, 11, 185-192.	1.6	19
30	Conjugation of A and B Blood Group Structures to Silica Microparticles for the Detection of Antigen-Specific B Cells. Bioconjugate Chemistry, 2016, 27, 705-715.	1.8	9
31	Human Neuraminidase Enzymes alter the Lateral Mobility and Function of Integrin Receptors. Biophysical Journal, 2015, 108, 31a.	0.2	0
32	A FRET Probe for Cellâ€Based Imaging of Ganglioside€Processing Enzyme Activity and Highâ€Throughput Screening. Angewandte Chemie - International Edition, 2015, 54, 5389-5393.	7.2	44
33	Picodiscs for Facile Protein-Glycolipid Interaction Analysis. Analytical Chemistry, 2015, 87, 4402-4408.	3.2	27
34	Protecting group-free immobilization of glycans for affinity chromatography using glycosylsulfonohydrazide donors. Carbohydrate Research, 2015, 417, 109-116.	1.1	8
35	Mapping substrate interactions of the human membrane-associated neuraminidase, NEU3, using STD NMR. Glycobiology, 2015, 25, 284-293.	1.3	8
36	Detection of Diffusion Heterogeneity in Single Particle Tracking Trajectories Using a Hidden Markov Model with Measurement Noise Propagation. PLoS ONE, 2015, 10, e0140759.	1.1	38

#	Article	IF	Citations
37	Sialidase NEU4 is involved in glioblastoma stem cell survival. Cell Death and Disease, 2014, 5, e1381-e1381.	2.7	27
38	Practical Labeling Methodology for Cholineâ€Derived Lipids and Applications in Live Cell Fluorescence Imaging. Photochemistry and Photobiology, 2014, 90, 686-695.	1.3	12
39	Synthesis of Î±-brominated phosphonates and their application as phosphate bioisosteres. MedChemComm, 2014, 5, 1619-1633.	3.5	9
40	Conformational analysis of peramivir reveals critical differences between free and enzyme-bound states. MedChemComm, 2014, 5, 1483-1488.	3.5	5
41	Inhibitors of the human neuraminidase enzymes. MedChemComm, 2014, 5, 1067-1074.	3.5	31
42	Structural Basis for Substrate Specificity of Mammalian Neuraminidases. PLoS ONE, 2014, 9, e106320.	1.1	72
43	Identification of Selective Inhibitors for Human Neuraminidase Isoenzymes Using C4,C7-Modified 2-Deoxy-2,3-didehydro-N-acetylneuraminic Acid (DANA) Analogues. Journal of Medicinal Chemistry, 2013, 56, 2948-2958.	2.9	38
44	Î±-Bromophosphonate analogs of glucose-6-phosphate are inhibitors of glucose-6-phosphatase. Carbohydrate Research, 2013, 381, 123-132.	1.1	5
45	Mycobacterial Phenolic Glycolipids with a Simplified Lipid Aglycone Modulate Cytokine Levels through Tollâ€Like Receptor 2. ChemBioChem, 2013, 14, 2153-2159.	1.3	27
46	Identification of Selective Nanomolar Inhibitors of the Human Neuraminidase, NEU4. ACS Medicinal Chemistry Letters, 2013, 4, 532-537.	1.3	34
47	Glycoform Remodeling Generates a Synthetic T Cell Phenotype. Bioconjugate Chemistry, 2013, 24, 907-914.	1.8	1
48	Positive Regulation of Insulin Signaling by Neuraminidase 1. Diabetes, 2013, 62, 2338-2346.	0.3	74
49	Interlaboratory Study on Differential Analysis of Protein Glycosylation by Mass Spectrometry: The ABRF Glycoprotein Research Multi-Institutional Study 2012. Molecular and Cellular Proteomics, 2013, 12, 2935-2951.	2.5	103
50	5-(4-Hexyl-1H-1,2,3-triazol-1-yl)-2,1,3-benzoxadiazole. Acta Crystallographica Section E: Structure Reports Online, 2012, 68, o3128-o3129.	0.2	2
51	5-(1-Benzyl-1H-1,2,3-triazol-4-yl)-2,1,3-benzoxadiazole. Acta Crystallographica Section E: Structure Reports Online, 2012, 68, o3130-o3131.	0.2	2
52	1-[1-(2,1,3-Benzoxadiazol-5-ylmethyl)-1H-1,2,3-triazol-4-yl]hexan-1-one. Acta Crystallographica Section E: Structure Reports Online, 2012, 68, o3132-o3132.	0.2	2
53	Detection of Cellular Sialic Acid Content Using Nitrobenzoxadiazole Carbonyl-Reactive Chromophores. Bioconjugate Chemistry, 2012, 23, 363-371.	1.8	47
54	Proteinâ€“Glycosphingolipid Interactions Revealed Using Catch-and-Release Mass Spectrometry. Analytical Chemistry, 2012, 84, 7618-7621.	3.2	47

#	Article	IF	Citations
55	Substituted Benzoxadiazoles as Fluorogenic Probes: A Computational Study of Absorption and Fluorescence. Journal of Physical Chemistry A, 2012, 116, 46-54.	1.1	12
56	A Fluorogenic Aromatic Nucleophilic Substitution Reaction for Demonstrating Normal-Phase Chromatography and Isolation of Nitrobenzoxadiazole Chromophores. Journal of Chemical Education, 2011, 88, 98-100.	1.1	5
57	Analysis of Molecular Diffusion by First-Passage Time Variance Identifies the Size of Confinement Zones. Biophysical Journal, 2011, 100, 1463-1472.	0.2	23
58	Substrate Recognition of the Membrane-Associated Sialidase NEU3 Requires a Hydrophobic Aglycone. Biochemistry, 2011, 50, 6753-6762.	1.2	43
59	Identification of fluorogenic and quenched benzoxadiazole reactive chromophores. Dyes and Pigments, 2011, 88, 95-102.	2.0	22
60	Inhibitor selectivity of a new class of oseltamivir analogs against viral neuraminidase over human neuraminidase enzymes. Bioorganic and Medicinal Chemistry, 2011, 19, 2817-2822.	1.4	35
61	A protected l-bromophosphonomethylphenylalanine amino acid derivative (BrPmp) for synthesis of irreversible protein tyrosine phosphatase inhibitors. Bioorganic and Medicinal Chemistry, 2010, 18, 8679-8686.	1.4	24
62	Fluorescent small-molecule probes of biochemistry at the plasma membrane. Current Opinion in Chemical Biology, 2010, 14, 57-63.	2.8	59
63	Inhibition of human neuraminidase 3 (NEU3) by C9-triazole derivatives of 2,3-didehydro-N-acetyl-neuraminic acid. Bioorganic and Medicinal Chemistry Letters, 2010, 20, 7529-7533.	1.0	30
64	Immobilization of carbohydrate epitopes for surface plasmon resonance using the Staudinger ligation. Carbohydrate Research, 2010, 345, 2641-2647.	1.1	8
65	Dynamic Regulation of CD45 Lateral Mobility by the Spectrin-Ankyrin Cytoskeleton of T Cells*. Journal of Biological Chemistry, 2010, 285, 11392-11401.	1.6	47
66	Insight into substrate recognition and catalysis by the human neuraminidase 3 (NEU3) through molecular modeling and site-directed mutagenesis. Glycobiology, 2010, 20, 1127-1138.	1.3	51
67	Conjugation of Synthetic N-Acetyl-Lactosamine to Azide-Containing Proteins Using the Staudinger Ligation. Bioconjugate Chemistry, 2010, 21, 1842-1849.	1.8	24
68	A Monomeric Photoconvertible Fluorescent Protein for Imaging of Dynamic Protein Localization. Journal of Molecular Biology, 2010, 401, 776-791.	2.0	73
69	A Hidden Markov Model for Single Particle Tracks Quantifies Dynamic Interactions between LFA-1 and the Actin Cytoskeleton. PLoS Computational Biology, 2009, 5, e1000556.	1.5	113
70	Photophysical characterization of triazole-substituted coumarin fluorophores. Dyes and Pigments, 2009, 82, 196-203.	2.0	70
71	A Modular Synthesis of Alkynyl-Phosphocholine Headgroups for Labeling Sphingomyelin and Phosphatidylcholine. Journal of Organic Chemistry, 2009, 74, 8669-8674.	1.7	30
72	T cell adhesion mechanisms revealed by receptor lateral mobility. Biopolymers, 2008, 89, 409-419.	1.2	14

#	Article	IF	Citations
73	7,7â€²-(3,3â€²-Dibenzyl-3H,3â€²H-4,4â€²-bi-1,2,3-triazole-5,5â€²-diyl)bis(4-methyl-2H-chromen-2-one). Acta Crystallographica Section E: Structure Reports Online, 2008, 64, o1910-o1910.	0.2	4
74	Signaling by Committee: Receptor Clusters Determine Pathways of Cellular Activation. ACS Chemical Biology, 2007, 2, 652-655.	1.6	11
75	Analysis of Two-Dimensional Dissociation Constant of Laterally Mobile Cell Adhesion Molecules. Biophysical Journal, 2007, 92, 1022-1034.	0.2	77
76	Mechanisms of Cellular Avidity Regulation in CD2â€“CD58-Mediated T Cell Adhesion. ACS Chemical Biology, 2006, 1, 649-658.	1.6	42
77	Cytoskeletal Regulation Couples LFA-1 Conformational Changes to Receptor Lateral Mobility and Clustering. Immunity, 2006, 25, 297-308.	6.6	127
78	Visualization and Characterization of Receptor Clusters by Transmission Electron Microscopy. Methods in Enzymology, 2003, 362, 301-312.	0.4	3
79	Control of Multivalent Interactions by Binding Epitope Density. Journal of the American Chemical Society, 2002, 124, 1615-1619.	6.6	372
80	Influencing Receptorâ^'Ligand Binding Mechanisms with Multivalent Ligand Architecture. Journal of the American Chemical Society, 2002, 124, 14922-14933.	6.6	657
81	Selective Immobilization of Multivalent Ligands for Surface Plasmon Resonance and Fluorescence Microscopy. Analytical Biochemistry, 2002, 305, 149-155.	1.1	70
82	Cell Aggregation by Scaffolded Receptor Clusters. Chemistry and Biology, 2002, 9, 163-169.	6.2	81
83	Hitting the sweet spot. Nature Biotechnology, 2002, 20, 234-235.	9.4	73
84	Affinity-Based Inhibition of Î²-Amyloid Toxicity. Biochemistry, 2002, 41, 8620-8629.	1.2	115
85	Designed potent multivalent chemoattractants for Escherichia coli. Bioorganic and Medicinal Chemistry, 2001, 9, 2387-2393.	1.4	36