

Christopher W Cairo

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8791020/publications.pdf>

Version: 2024-02-01

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	Influencing Receptor-Ligand Binding Mechanisms with Multivalent Ligand Architecture. <i>Journal of the American Chemical Society</i> , 2002, 124, 14922-14933.	6.6	657
2	Control of Multivalent Interactions by Binding Epitope Density. <i>Journal of the American Chemical Society</i> , 2002, 124, 1615-1619.	6.6	372
3	Cytoskeletal Regulation Couples LFA-1 Conformational Changes to Receptor Lateral Mobility and Clustering. <i>Immunity</i> , 2006, 25, 297-308.	6.6	127
4	Affinity-Based Inhibition of β -Amyloid Toxicity. <i>Biochemistry</i> , 2002, 41, 8620-8629.	1.2	115
5	A Hidden Markov Model for Single Particle Tracks Quantifies Dynamic Interactions between LFA-1 and the Actin Cytoskeleton. <i>PLoS Computational Biology</i> , 2009, 5, e1000556.	1.5	113
6	Interlaboratory Study on Differential Analysis of Protein Glycosylation by Mass Spectrometry: The ABRF Glycoprotein Research Multi-Institutional Study 2012. <i>Molecular and Cellular Proteomics</i> , 2013, 12, 2935-2951.	2.5	103
7	NIST Interlaboratory Study on Glycosylation Analysis of Monoclonal Antibodies: Comparison of Results from Diverse Analytical Methods. <i>Molecular and Cellular Proteomics</i> , 2020, 19, 11-30.	2.5	87
8	Cell Aggregation by Scaffolded Receptor Clusters. <i>Chemistry and Biology</i> , 2002, 9, 163-169.	6.2	81
9	Analysis of Two-Dimensional Dissociation Constant of Laterally Mobile Cell Adhesion Molecules. <i>Biophysical Journal</i> , 2007, 92, 1022-1034.	0.2	77
10	Positive Regulation of Insulin Signaling by Neuraminidase 1. <i>Diabetes</i> , 2013, 62, 2338-2346.	0.3	74
11	Hitting the sweet spot. <i>Nature Biotechnology</i> , 2002, 20, 234-235.	9.4	73
12	A Monomeric Photoconvertible Fluorescent Protein for Imaging of Dynamic Protein Localization. <i>Journal of Molecular Biology</i> , 2010, 401, 776-791.	2.0	73
13	Structural Basis for Substrate Specificity of Mammalian Neuraminidases. <i>PLoS ONE</i> , 2014, 9, e106320.	1.1	72
14	Selective Immobilization of Multivalent Ligands for Surface Plasmon Resonance and Fluorescence Microscopy. <i>Analytical Biochemistry</i> , 2002, 305, 149-155.	1.1	70
15	Photophysical characterization of triazole-substituted coumarin fluorophores. <i>Dyes and Pigments</i> , 2009, 82, 196-203.	2.0	70
16	Fluorescent small-molecule probes of biochemistry at the plasma membrane. <i>Current Opinion in Chemical Biology</i> , 2010, 14, 57-63.	2.8	59
17	Insight into substrate recognition and catalysis by the human neuraminidase 3 (NEU3) through molecular modeling and site-directed mutagenesis. <i>Glycobiology</i> , 2010, 20, 1127-1138.	1.3	51
18	Neuraminidase 1 activates insulin receptor and reverses insulin resistance in obese mice. <i>Molecular Metabolism</i> , 2018, 12, 76-88.	3.0	50

#	ARTICLE	IF	CITATIONS
19	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
20	Detection of Cellular Sialic Acid Content Using Nitrobenzoxadiazole Carbonyl-Reactive Chromophores. Bioconjugate Chemistry, 2012, 23, 363-371.	1.8	47
21	Protein-Glycosphingolipid Interactions Revealed Using Catch-and-Release Mass Spectrometry. Analytical Chemistry, 2012, 84, 7618-7621.	3.2	47
22	A FRET Probe for Cell-Based Imaging of Ganglioside-Processing Enzyme Activity and High-Throughput Screening. Angewandte Chemie - International Edition, 2015, 54, 5389-5393.	7.2	44
23	Substrate Recognition of the Membrane-Associated Sialidase NEU3 Requires a Hydrophobic Aglycone. Biochemistry, 2011, 50, 6753-6762.	1.2	43
24	Selective Inhibitors of Human Neuraminidase 3. Journal of Medicinal Chemistry, 2018, 61, 1990-2008.	2.9	43
25	Mechanisms of Cellular Avidity Regulation in CD28-CD58-Mediated T Cell Adhesion. ACS Chemical Biology, 2006, 1, 649-658.	1.6	42
26	Selective Inhibitors of Human Neuraminidase 1 (NEU1). Journal of Medicinal Chemistry, 2018, 61, 11261-11279.	2.9	40
27	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
28	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
29	Designed potent multivalent chemoattractants for Escherichia coli. Bioorganic and Medicinal Chemistry, 2001, 9, 2387-2393.	1.4	36
30	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
31	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
32	Identification of Selective Nanomolar Inhibitors of the Human Neuraminidase, NEU4. ACS Medicinal Chemistry Letters, 2013, 4, 532-537.	1.3	34
33	Synthetic Strategies for Modified Glycosphingolipids and Their Design as Probes. Chemical Reviews, 2018, 118, 8188-8241.	23.0	34
34	Inhibitors of the human neuraminidase enzymes. MedChemComm, 2014, 5, 1067-1074.	3.5	31
35	A Modular Synthesis of Alkynyl-Phosphocholine Headgroups for Labeling Sphingomyelin and Phosphatidylcholine. Journal of Organic Chemistry, 2009, 74, 8669-8674.	1.7	30
36	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

#	ARTICLE	IF	CITATIONS
37	Neuraminidases 1 and 3 Trigger Atherosclerosis by Desialylating Low-Density Lipoproteins and Increasing Their Uptake by Macrophages. <i>Journal of the American Heart Association</i> , 2021, 10, e018756.	1.6	29
38	Mycobacterial Phenolic Glycolipids with a Simplified Lipid Aglycone Modulate Cytokine Levels through Toll-Like Receptor 2. <i>ChemBioChem</i> , 2013, 14, 2153-2159.	1.3	27
39	Sialidase NEU4 is involved in glioblastoma stem cell survival. <i>Cell Death and Disease</i> , 2014, 5, e1381-e1381.	2.7	27
40	Picodiscs for Facile Protein-Glycolipid Interaction Analysis. <i>Analytical Chemistry</i> , 2015, 87, 4402-4408.	3.2	27
41	Human Neuraminidase Isoenzymes Show Variable Activities for 9-O-Acetyl-sialoside Substrates. <i>ACS Chemical Biology</i> , 2018, 13, 922-932.	1.6	27
42	Molecular dynamics simulations of viral neuraminidase inhibitors with the human neuraminidase enzymes: Insights into isoenzyme selectivity. <i>Bioorganic and Medicinal Chemistry</i> , 2018, 26, 5349-5358.	1.4	25
43	A protected l-bromophosphonomethylphenylalanine amino acid derivative (BrPmp) for synthesis of irreversible protein tyrosine phosphatase inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2010, 18, 8679-8686.	1.4	24
44	Conjugation of Synthetic N-Acetyl-Lactosamine to Azide-Containing Proteins Using the Staudinger Ligation. <i>Bioconjugate Chemistry</i> , 2010, 21, 1842-1849.	1.8	24
45	A quantitative, high-throughput method identifies protein-glycan interactions via mass spectrometry. <i>Communications Biology</i> , 2019, 2, 268.	2.0	24
46	Therapeutic Effect of Neuraminidase-1 Selective Inhibition in Mouse Models of Bleomycin-Induced Pulmonary Inflammation and Fibrosis. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2021, 376, 136-146.	1.3	24
47	Analysis of Molecular Diffusion by First-Passage Time Variance Identifies the Size of Confinement Zones. <i>Biophysical Journal</i> , 2011, 100, 1463-1472.	0.2	23
48	Identification of fluorogenic and quenched benzoxadiazole reactive chromophores. <i>Dyes and Pigments</i> , 2011, 88, 95-102.	2.0	22
49	Galectin-3 alters the lateral mobility and clustering of β 1-integrin receptors. <i>PLoS ONE</i> , 2017, 12, e0184378.	1.1	21
50	Screening Glycolipids Against Proteins in Vitro Using Picodiscs and Catch-and-Release Electrospray Ionization-Mass Spectrometry. <i>Analytical Chemistry</i> , 2016, 88, 4742-4750.	3.2	20
51	Persistent reduction in sialylation of cerebral glycoproteins following postnatal inflammatory exposure. <i>Journal of Neuroinflammation</i> , 2018, 15, 336.	3.1	20
52	Enhanced Cross-Linking of Diazirine-Modified Sialylated Glycoproteins Enabled through Profiling of Sialidase Specificities. <i>ACS Chemical Biology</i> , 2016, 11, 185-192.	1.6	19
53	Crystal structures of human lysosomal EPDR1 reveal homology with the superfamily of bacterial lipoprotein transporters. <i>Communications Biology</i> , 2019, 2, 52.	2.0	18
54	Integrin-mediated cell migration is blocked by inhibitors of human neuraminidase. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2016, 1861, 1170-1179.	1.2	16

#	ARTICLE	IF	CITATIONS
55	New Answers to Old Conundrums. <i>Transplantation</i> , 2018, 102, 209-214.	0.5	16
56	Construction of Multivalent Homo- and Heterofunctional ABO Blood Group Glycoconjugates Using a Trifunctional Linker Strategy. <i>Bioconjugate Chemistry</i> , 2018, 29, 343-362.	1.8	16
57	Characterization of ABH-subtype donor-specific antibodies in ABO-A-incompatible kidney transplantation. <i>American Journal of Transplantation</i> , 2021, 21, 3649-3662.	2.6	16
58	T cell adhesion mechanisms revealed by receptor lateral mobility. <i>Biopolymers</i> , 2008, 89, 409-419.	1.2	14
59	A tyrosine sulfation-dependent HLA-I modification identifies memory B cells and plasma cells. <i>Science Advances</i> , 2018, 4, eaar7653.	4.7	13
60	Neuraminidase-3 Is a Negative Regulator of LFA-1 Adhesion. <i>Frontiers in Chemistry</i> , 2019, 7, 791.	1.8	13
61	Substituted Benzoxadiazoles as Fluorogenic Probes: A Computational Study of Absorption and Fluorescence. <i>Journal of Physical Chemistry A</i> , 2012, 116, 46-54.	1.1	12
62	Practical Labeling Methodology for Choline-Derived Lipids and Applications in Live Cell Fluorescence Imaging. <i>Photochemistry and Photobiology</i> , 2014, 90, 686-695.	1.3	12
63	Signaling by Committee: Receptor Clusters Determine Pathways of Cellular Activation. <i>ACS Chemical Biology</i> , 2007, 2, 652-655.	1.6	11
64	Synthesis of β -brominated phosphonates and their application as phosphate bioisosteres. <i>MedChemComm</i> , 2014, 5, 1619-1633.	3.5	9
65	Conjugation of A and B Blood Group Structures to Silica Microparticles for the Detection of Antigen-Specific B Cells. <i>Bioconjugate Chemistry</i> , 2016, 27, 705-715.	1.8	9
66	Selection of galectin-3 ligands derived from genetically encoded glycopeptide libraries. <i>Peptide Science</i> , 2019, 111, e24097.	1.0	9
67	Isoenzyme-Selective Inhibitors of Human Neuraminidases Reveal Distinct Effects on Cell Migration. <i>ACS Chemical Biology</i> , 2020, 15, 1328-1339.	1.6	9
68	The Janus-like role of neuraminidase isoenzymes in inflammation. <i>FASEB Journal</i> , 2022, 36, e22285.	0.2	9
69	Immobilization of carbohydrate epitopes for surface plasmon resonance using the Staudinger ligation. <i>Carbohydrate Research</i> , 2010, 345, 2641-2647.	1.1	8
70	Protecting group-free immobilization of glycans for affinity chromatography using glycosylsulfonohydrazide donors. <i>Carbohydrate Research</i> , 2015, 417, 109-116.	1.1	8
71	Mapping substrate interactions of the human membrane-associated neuraminidase, NEU3, using STD NMR. <i>Glycobiology</i> , 2015, 25, 284-293.	1.3	8
72	Human neuraminidases have reduced activity towards modified sialic acids on glycoproteins. <i>Carbohydrate Research</i> , 2020, 497, 108139.	1.1	6

#	ARTICLE	IF	CITATIONS
73	A Fluorogenic Aromatic Nucleophilic Substitution Reaction for Demonstrating Normal-Phase Chromatography and Isolation of Nitrobenzoxadiazole Chromophores. <i>Journal of Chemical Education</i> , 2011, 88, 98-100.	1.1	5
74	±-Bromophosphonate analogs of glucose-6-phosphate are inhibitors of glucose-6-phosphatase. <i>Carbohydrate Research</i> , 2013, 381, 123-132.	1.1	5
75	Conformational analysis of peramivir reveals critical differences between free and enzyme-bound states. <i>MedChemComm</i> , 2014, 5, 1483-1488.	3.5	5
76	7,7-((3,3-Dibenzyl-3H,3H-4,4-bi-1,2,3-triazole-5,5-diyl)bis(4-methyl-2H-chromen-2-one)). <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2008, 64, o1910-o1910.	0.2	4
77	Visualization and Characterization of Receptor Clusters by Transmission Electron Microscopy. <i>Methods in Enzymology</i> , 2003, 362, 301-312.	0.4	3
78	Inhibitors of Human Neuraminidase Enzymes Block Transmigration in vitro. <i>Frontiers in Molecular Biosciences</i> , 2022, 9, 835757.	1.6	3
79	5-(4-Hexyl-1H-1,2,3-triazol-1-yl)-2,1,3-benzoxadiazole. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2012, 68, o3128-o3129.	0.2	2
80	5-(1-Benzyl-1H-1,2,3-triazol-4-yl)-2,1,3-benzoxadiazole. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2012, 68, o3130-o3131.	0.2	2
81	1-[1-(2,1,3-Benzoxadiazol-5-ylmethyl)-1H-1,2,3-triazol-4-yl]hexan-1-one. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2012, 68, o3132-o3132.	0.2	2
82	Profiling of glycosphingolipids with SCDase digestion and HPLC-FLD-MS. <i>Analytical Biochemistry</i> , 2021, 631, 114361.	1.1	2
83	Glycoform Remodeling Generates a Synthetic T Cell Phenotype. <i>Bioconjugate Chemistry</i> , 2013, 24, 907-914.	1.8	1
84	MHC-Matched A-Expressing Blood Cells Induce ABO Tolerance in Infant and Adult Mice. <i>Transplantation</i> , 2018, 102, S292.	0.5	1
85	Human Neuraminidase Enzymes alter the Lateral Mobility and Function of Integrin Receptors. <i>Biophysical Journal</i> , 2015, 108, 31a.	0.2	0