Dissecting the Cholera Toxinâ^'Ganglioside GM1 Interac Calorimetry

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#	Article	IF	Citations
2	Synthesis, Conformational Studies and Mannosidase Stability of a Mimic of 1,2-Mannobioside. European Journal of Organic Chemistry, 2004, 2004, 5119-5225.	1.2	29
3	Synthesis and cholera toxin binding properties of multivalent GM1 mimicsElectronic supplementary information (ESI) available: characterization of the polyvalent compounds ? imide by-products. See http://www.rsc.org/suppdata/ob/b4/b405344c/. Organic and Biomolecular Chemistry, 2004, 2, 2113.	1.5	77
4	Structural basis of high-affinity glycan recognition by bacterial and fungal lectins. Current Opinion in Structural Biology, 2005, 15, 525-534.	2.6	88
5	Probing the Binding Entropy of Ligand-Protein Interactions by NMR. ChemBioChem, 2005, 6, 1585-1591.	1.3	45
6	A Synthetic Divalent Cholera Toxin Glycocalix[4]arene Ligand Having Higher Affinity than Natural GM1 Oligosaccharide. Journal of the American Chemical Society, 2005, 127, 3660-3661.	6.6	79
7	Investigation of the interaction between peanut agglutinin and synthetic glycopolymeric multivalent ligands. Organic and Biomolecular Chemistry, 2005, 3, 1476.	1.5	86
8	Multivalency and Cooperativity in Supramolecular Chemistry. Accounts of Chemical Research, 2005, 38, 723-732.	7.6	609
9	Nonantibody-based recognition: alternative molecules for detection of pathogens. Expert Review of Proteomics, 2006, 3, 511-524.	1.3	65
10	Microcalorimetry. , 2006, , 199-230.		15
11	Thermodynamic Penalty Arising from Burial of a Ligand Polar Group Within a Hydrophobic Pocket of a Protein Receptor. Journal of Molecular Biology, 2006, 362, 994-1003.	2.0	39
13	Simultaneous determination of kinetic parameters for the binding of cholera toxin to immobilized sialic acid and monoclonal antibody using an array biosensor. Biosensors and Bioelectronics, 2006, 22, 124-130.	5.3	21
14	Biomimetic Particles for Isolation and Reconstitution of Receptor Function. Cell Biochemistry and Biophysics, 2006, 44, 446-452.	0.9	21
15	Modelling of carbohydrateâ€“aromatic interactions: ab initio energetics and force field performance. Journal of Computer-Aided Molecular Design, 2006, 19, 887-901.	1.3	58
16	Detection of bacterial toxins with monosaccharide arrays. Biosensors and Bioelectronics, 2006, 21, 1195-1201.	5.3	70
17	Contribution of Ligand Desolvation to Binding Thermodynamics in a Ligandâ€“Protein Interaction. Angewandte Chemie - International Edition, 2006, 45, 6374-6376.	7.2	37
18	Survey of the year 2004: literature on applications of isothermal titration calorimetry. Journal of Molecular Recognition, 2006, 19, 79-89.	1.1	74
20	Glyconanoparticles for the Colorimetric Detection of Cholera Toxin. Analytical Chemistry, 2007, 79, 1356-1361.	3.2	219
21	Global Changes in Local Protein Dynamics Reduce the Entropic Cost of Carbohydrate Binding in the Arabinose-binding Protein. Journal of Molecular Biology, 2007, 368, 822-832.	2.0	66

#	Article	IF	Citations
22	Blood Group Antigen Recognition by Escherichia coli Heat-labile Enterotoxin. Journal of Molecular Biology, 2007, 371, 754-764.	2.0	61
23	Strong inhibition of cholera toxin binding by galactose dendrimers. Chemical Communications, 2007, , 5043.	2.2	75
24	GM1Clustering Inhibits Cholera Toxin Binding in Supported Phospholipid Membranes. Journal of the American Chemical Society, 2007, 129, 5954-5961.	6.6	175
25	Fundamentals of Lectinâ€“Carbohydrate Interactions. , 2007, , 397-452.		8
26	Strong Inhibition of Cholera Toxin by Multivalent GM1 Derivatives. ChemBioChem, 2007, 8, 1500-1503.	1.3	101
27	Water, water everywhere â€" except where it matters?. Drug Discovery Today, 2007, 12, 534-539.	3.2	145
28	First round of a focused library of cholera toxin inhibitors. Carbohydrate Research, 2007, 342, 1651-1660.	1.1	18
29	Sialyloligosaccharides inhibit cholera toxin binding to the GM1 receptor. Carbohydrate Research, 2008, 343, 2589-2594.	1.1	26
30	Interfering with the Sugar Code: Design and Synthesis of Oligosaccharide Mimics. Chemistry - A European Journal, 2008, 14, 7434-7441.	1.7	69
31	Glycosyltransferase-catalyzed synthesis of bioactive oligosaccharides. Biotechnology Advances, 2008, 26, 436-456.	6.0	154
32	Phage-display derived single-chain fragment variable (scFv) antibodies recognizing conformational epitopes of Escherichia coli heat-labile enterotoxin B-subunit. Journal of Immunological Methods, 2008, 339, 115-123.	0.6	10
33	Nanodiscs for Immobilization of Lipid Bilayers and Membrane Receptors: Kinetic Analysis of Cholera Toxin Binding to a Glycolipid Receptor. Analytical Chemistry, 2008, 80, 6245-6252.	3.2	70
34	Measurement of the Binding of Cholera Toxin to GM1 Gangliosides on Solid Supported Lipid Bilayer Vesicles and Inhibition by Europium (III) Chloride. Journal of the American Chemical Society, 2008, 130, 6438-6443.	6.6	27
35	GM1-Induced Structural Changes of Bovine Serum Albumin after Chemical and Thermal Disruption of the Secondary Structure: A Spectroscopic Comparison. Biomacromolecules, 2008, 9, 974-983.	2.6	55
36	Array Biosensor for Toxin Detection: Continued Advances. Sensors, 2008, 8, 8361-8377.	2.1	56
37	Multivalent Presentation Strategies in Novel Inhibitors of Bacterial (Toxin) Adhesion and Synthetic Vaccines. Anti-Infective Agents in Medicinal Chemistry, 2008, 7, 193-200.	0.6	7
38	The Influence of Ligand Valency on Aggregation Mechanisms for Inhibiting Bacterial Toxins. ChemBioChem, 2009, 10, 329-337.	1.3	59
39	Cholera Toxin Inhibitors Studied with Highâ€Performance Liquid Affinity Chromatography: A Robust Method to Evaluate Receptorâ€“Ligand Interactions. Chemical Biology and Drug Design, 2009, 73, 132-141.	1.5	27

#	Article	IF	Citations
40	Ordering transitions in micrometer-thick films of nematic liquid crystals driven by self-assembly of ganglioside GM1. Journal of Colloid and Interface Science, 2009, 336, 90-99.	5.0	20
41	Multivalent ligand presentation as a central concept to study intricate carbohydrateâ€“protein interactions. Chemical Society Reviews, 2009, 38, 3463.	18.7	202
42	The repertoire of glycan determinants in the human glycome. Molecular BioSystems, 2009, 5, 1087.	2.9	429
43	STD-NMR Used To Elucidate the Fine Binding Specificity of Pathogenic Anti-Ganglioside Antibodies Directly in Patient Serum. Biochemistry, 2009, 48, 220-222.	1.2	16
44	Galactooligosaccharides (GOS) Inhibit Vibrio cholerae Toxin Binding to Its GM1 Receptor. Journal of Agricultural and Food Chemistry, 2009, 57, 3113-3119.	2.4	55
45	Rigid Duplex Î±-Cyclodextrin Reversibly Connected With Disulfide Bonds. Synthesis and Inclusion Complexes. Journal of Organic Chemistry, 2009, 74, 1082-1092.	1.7	36
46	Carbohydrate-based anti-adhesive inhibition of Vibrio cholerae toxin binding to GM1-OS immobilized into artificial planar lipid membranes. Carbohydrate Research, 2009, 344, 1968-1974.	1.1	9
47	Calixarene and Calixresorcarene Glycosides: Their Synthesis and Biological Applications. Chemical Reviews, 2010, 110, 4949-4977.	23.0	208
48	Rapid Screening of Lectins for Multivalency Effects with a Glycodendrimer Microarray. ChemBioChem, 2010, 11, 1896-1904.	1.3	65
49	Synthesis and Affinity Evaluation of a Small Library of Bidentate Cholera Toxin Ligands: Towards Nonhydrolyzable Ganglioside Mimics. Chemistry - A European Journal, 2010, 16, 1951-1967.	1.7	30
50	Glycanâ€based highâ€affinity ligands for toxins and pathogen receptors. Medicinal Research Reviews, 2010, 30, 327-393.	5.0	60
51	GM1 structure determines SV40-induced membrane invagination and infection. Nature Cell Biology, 2010, 12, 11-18.	4.6	535
52	Contributions of Computational Chemistry and Biophysical Techniques to Fragment-Based Drug Discovery. Current Medicinal Chemistry, 2010, 17, 1769-1794.	1.2	38
53	Comparison of Entropic Contributions to Binding in a â€œHydrophilicâ€•versus â€œHydrophobicâ€• Ligandâ^'Protein Interaction. Journal of the American Chemical Society, 2010, 132, 8682-8689.	6.6	46
54	Carbohydrate binding specificities and crystal structure of the cholera toxin-like B-subunit from Citrobacter freundii. Biochimie, 2010, 92, 482-490.	1.3	15
55	Tether influence on the binding properties of tRNALys3 ligands designed by a fragment-based approach. Organic and Biomolecular Chemistry, 2010, 8, 1154.	1.5	47
56	Interactive Configuration through Force Analysis of GM1 Pentasaccharide-Vibrio cholera Toxin Interaction. Analytical Chemistry, 2011, 83, 6011-6017.	3.2	9
58	Thermodynamics of Ligand-Protein Interactions: Implications for Molecular Design. , 0, , .		17

#	Article	IF	Citations
59	Studies on the synthesis of Lewis-y oligosaccharides. Carbohydrate Research, 2011, 346, 2113-2120.	1.1	15
60	Tetraphenylethyleneâ€based Glycoconjugate as a Fluorescence â€œTurnâ€Onâ€•Sensor for Cholera Toxin. Chemistry - an Asian Journal, 2011, 6, 2376-2381.	1.7	59
61	Multifunctional multivalency: a focused library of polymeric cholera toxin antagonists. Organic and Biomolecular Chemistry, 2011, 9, 3658.	1.5	36
62	Binding assay for cholera toxin based on sequestration electrochemistry using lactose labeled with an electroactive compound. Analyst, The, 2011, 136, 2373.	1.7	14
64	Thermodynamics and chemical characterization of proteinâ€“carbohydrate interactions: The multivalency issue. Comptes Rendus Chimie, 2011, 14, 74-95.	0.2	56
65	Lipid-Mediated Endocytosis. Cold Spring Harbor Perspectives in Biology, 2011, 3, a004721-a004721.	2.3	154
67	The GM2 Glycan Serves as a Functional Coreceptor for Serotype 1 Reovirus. PLoS Pathogens, 2012, 8, e1003078.	2.1	93
68	Mutations in the GM1 Binding Site of Simian Virus 40 VP1 Alter Receptor Usage and Cell Tropism. Journal of Virology, 2012, 86, 7028-7042.	1.5	26
69	Characterization of the GM1 pentasaccharideâ€“Vibrio cholera toxin interaction using a carbohydrate-based electrochemical system. Analyst, The, 2012, 137, 2860.	1.7	5
70	Functional Interaction Analysis of GM1-Related Carbohydrates and Vibrio cholerae Toxins Using Carbohydrate Microarray. Analytical Chemistry, 2012, 84, 6884-6890.	3.2	25
71	Spontaneous curvature of ganglioside GM1 â€“ Effect of cross-linking. Biochemical and Biophysical Research Communications, 2012, 422, 776-779.	1.0	6
73	Multivalency as a Chemical Organization and Action Principle. Angewandte Chemie - International Edition, 2012, 51, 10472-10498.	7.2	854
74	Proteinâ€“Glycosphingolipid Interactions Revealed Using Catch-and-Release Mass Spectrometry. Analytical Chemistry, 2012, 84, 7618-7621.	3.2	47
75	Conformational analysis of GT1B ganglioside and its interaction with botulinum neurotoxin type B: a study by molecular modeling and molecular dynamics. Journal of Biomolecular Structure and Dynamics, 2012, 30, 255-268.	2.0	8
76	Pathogen and Toxin Entry - How Pathogens and Toxins Induce and Harness Endocytotic Mechanisms. , 2012, , .		6
77	Structure Based Design of Cholera Toxin Antagonists. , 2012, , .		3
79	Towards a Structural Basis for the Relationship Between Blood Group and the Severity of El Tor Cholera. Angewandte Chemie - International Edition, 2012, 51, 5143-5146.	7.2	33
80	Binding efficiencies of carbohydrate ligands with different genotypes of cholera toxin B: molecular modeling, dynamics and docking simulation studies. Journal of Molecular Modeling, 2012, 18, 1-10.	0.8	28

#	Article	IF	Citations
81	Applications of Glyconanoparticles as â€œSweetâ€•Glycobiological Therapeutics and Diagnostics. Advances in Polymer Science, 2013, , 297-341.	0.4	16
82	Synthesis, Biological Evaluation, WAC and NMR Studies of Sâ€Galactosides and Nonâ€Carbohydrate Ligands of Cholera Toxin Based on Polyhydroxyalkylfuroate Moieties. Chemistry - A European Journal, 2013, 19, 17989-18003.	1.7	15
84	Multifaceted Development and Application of Biopolymers for Biology, Biomedicine and Nanotechnology. Advances in Polymer Science, 2013, , .	0.4	12
85	Picomolar inhibition of cholera toxin by a pentavalent ganglioside GM1os-calix[5]arene. Organic and Biomolecular Chemistry, 2013, 11, 4340-4349.	1.5	50
86	Bacterial toxininhibitors based on multivalent scaffolds. Chemical Society Reviews, 2013, 42, 4613-4622.	18.7	115
87	Dissociation of Multisubunit Proteinâ€“Ligand Complexes in the Gas Phase. Evidence for Ligand Migration. Journal of the American Society for Mass Spectrometry, 2013, 24, 1573-1583.	1.2	15
88	Self-referenced silicon nitride array microring biosensor for toxin detection using glycans at visible wavelength. Proceedings of SPIE, 2013, , .	0.8	11
89	Enzymatic Synthesis of Oligosaccharides: A Powerful Tool for a Sweet Challenge. Current Organic Chemistry, 2013, 17, 701-718.	0.9	19
90	A Biophysical Study with Carbohydrate Derivatives Explains the Molecular Basis of Monosaccharide Selectivity of the Pseudomonas aeruginosa Lectin LecB. PLoS ONE, 2014, 9, e112822.	1.1	31
91	A Proteinâ€Based Pentavalent Inhibitor of the Cholera Toxin Bâ€Subunit. Angewandte Chemie - International Edition, 2014, 53, 8323-8327.	7.2	57
93	Measuring Positive Cooperativity Using the Direct ESI-MS Assay. Cholera Toxin B Subunit Homopentamer Binding to GM1 Pentasaccharide. Journal of the American Society for Mass Spectrometry, 2014, 25, 104-110.	1.2	47
94	Glycopolymers with secondary binding motifs mimic glycan branching and display bacterial lectin selectivity in addition to affinity. Chemical Science, 2014, 5, 1611-1616.	3.7	69
95	Elements and Modulation of Functional Dynamics. Journal of Medicinal Chemistry, 2014, 57, 7819-7837.	2.9	14
96	Comprehensive analysis of blood group antigen binding to classical and El Tor cholera toxin B-pentamers by NMR. Glycobiology, 2014, 24, 766-778.	1.3	34
97	The Tyrosine Gate of the Bacterial Lectin FimH: A Conformational Analysis by NMR Spectroscopy and Xâ€ray Crystallography. ChemBioChem, 2015, 16, 1235-1246.	1.3	42
98	Recognition of human milk oligosaccharides by bacterial exotoxins. Glycobiology, 2015, 25, 845-854.	1.3	37
99	Vibrio cholerae and Escherichia coli heat-labile enterotoxins and beyond. , 2015, , 195-229.		20
100	Polymer antidotes for toxin sequestration. Advanced Drug Delivery Reviews, 2015, 90, 81-100.	6.6	31

#	Article	IF	Citations
101	A nano-scale probing system with a gold nano-dot array for measurement of a single biomolecular interaction force. RSC Advances, 2015, 5, 105727-105730.	1.7	1
102	Thermodynamic signatures of fragment binding: Validation of direct versus displacement ITC titrations. Biochimica Et Biophysica Acta - General Subjects, 2015, 1850, 647-656.	1.1	36
103	Molecular insights into the binding of coenzyme <scp>F₄₂₀</scp> to the conserved protein <scp>R</scp>v1155 from <scp>M</scp>ycobacterium tuberculosis. Protein Science, 2015, 24, 729-740.	3.1	16
104	Proteinâ€“Glycolipid Interactions Studied in Vitro Using ESI-MS and Nanodiscs: Insights into the Mechanisms and Energetics of Binding. Analytical Chemistry, 2015, 87, 4888-4896.	3.2	30
105	Glycomimetics versus Multivalent Glycoconjugates for the Design of High Affinity Lectin Ligands. Chemical Reviews, 2015, 115, 525-561.	23.0	439
106	Self-assembly of lipid domains in the extracellular leaflet of the plasma membrane and models thereof. Current Opinion in Colloid and Interface Science, 2016, 22, 65-72.	3.4	8
107	Detecting Proteinâ€“Glycolipid Interactions Using Glycomicelles and CaR-ESI-MS. Journal of the American Society for Mass Spectrometry, 2016, 27, 1878-1886.	1.2	11
108	Fighting Cholera One-on-One: The Development and Efficacy of Multivalent Cholera-Toxin-Binding Molecules. Accounts of Chemical Research, 2016, 49, 274-285.	7.6	28
109	Influence of Sulfolane on ESI-MS Measurements of Proteinâ€“Ligand Affinities. Journal of the American Society for Mass Spectrometry, 2016, 27, 498-506.	1.2	21
110	Biocatalytic Process Optimization for the Production of Highâ€Addedâ€Value 6â€Oâ€Hydroxy and 3â€Oâ€Hydroxy Glycosyl Building Blocks. ChemCatChem, 2017, 9, 2536-2543.	1.8	3
111	Towards new cholera prophylactics and treatment: Crystal structures of bacterial enterotoxins in complex with GM1 mimics. Scientific Reports, 2017, 7, 2326.	1.6	10
112	Haemolytic actinoporins interact with carbohydrates using their lipid-binding module. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160216.	1.8	9
113	Histo-blood group antigens as mediators of infections. Current Opinion in Structural Biology, 2017, 44, 190-200.	2.6	72
114	Detachment of Membrane Bound Virions by Competitive Ligand Binding Induced Receptor Depletion. Langmuir, 2017, 33, 4049-4056.	1.6	18
115	Hetero-multivalent binding of cholera toxin subunit B with glycolipid mixtures. Colloids and Surfaces B: Biointerfaces, 2017, 160, 281-288.	2.5	27
116	Constrained saccharides: a review of structure, biology, and synthesis. Natural Product Reports, 2018, 35, 220-229.	5.2	17
117	Fucosylated Molecules Competitively Interfere with Cholera Toxin Binding to Host Cells. ACS Infectious Diseases, 2018, 4, 758-770.	1.8	42
118	Dynamic Modeling of Binding Kinetics Between GD1b Ganglioside and Cholera Toxin Subunit B. , 2018, , .		2

#	Article	IF	Citations
119	The study of multivalent carbohydrateâ€“protein interactions by bio-layer interferometry. Organic and Biomolecular Chemistry, 2018, 16, 8899-8903.	1.5	21
120	Kinetic Monte Carlo modeling of multivalent binding of CTB proteins with GM1 receptors. Computers and Chemical Engineering, 2018, 118, 283-295.	2.0	22
121	An integrated numerical and experimental framework for modeling of CTB and GD1b ganglioside binding kinetics. AICHE Journal, 2018, 64, 3882-3893.	1.8	17
122	Synthetic Strategies for Modified Glycosphingolipids and Their Design as Probes. Chemical Reviews, 2018, 118, 8188-8241.	23.0	34
123	Carbohydrate inhibitors of cholera toxin. Beilstein Journal of Organic Chemistry, 2018, 14, 484-498.	1.3	23
124	Single-Molecule Detection with Lightguiding Nanowires: Determination of Protein Concentration and Diffusivity in Supported Lipid Bilayers. Nano Letters, 2019, 19, 6182-6191.	4.5	11
125	A quantitative, high-throughput method identifies proteinâ€“glycan interactions via mass spectrometry. Communications Biology, 2019, 2, 268.	2.0	24
126	Microgels Sopping Up Toxinsâ€”GM1a-Functionalized Microgels as Scavengers for Cholera Toxin. ACS Applied Materials & Interfaces, 2019, 11, 25017-25023.	4.0	12
127	BrÃ¸nsted acid-catalysed hydroarylation of unactivated alkynes in a fluoroalcoholâ€“hydrocarbon biphasic system: construction of phenanthrene frameworks. Chemical Communications, 2019, 55, 9267-9270.	2.2	40
128	Influence of brain gangliosides on the formation and properties of supported lipid bilayers. Colloids and Surfaces B: Biointerfaces, 2019, 183, 110442.	2.5	10
129	Crystal structures of cholera toxin in complex with fucosylated receptors point to importance of secondary binding site. Scientific Reports, 2019, 9, 12243.	1.6	32
130	Synthesis of water-soluble fluorescent polymeric glycoconjugate for the detection of cholera toxin. Designed Monomers and Polymers, 2019, 22, 150-158.	0.7	4
131	Functional Glyco-Nanogels for Multivalent Interaction with Lectins. Molecules, 2019, 24, 1865.	1.7	20
132	Hydroxyl Groups in Synthetic and Natural-Product-Derived Therapeutics: A Perspective on a Common Functional Group. Journal of Medicinal Chemistry, 2019, 62, 8915-8930.	2.9	91
133	The influence of heteromultivalency on lectinâ€“glycan binding behavior. Glycobiology, 2019, 29, 397-408.	1.3	17
134	A â€˜catch-and-releaseâ€™ receptor for the cholera toxin. Faraday Discussions, 2019, 219, 112-127.	1.6	7
135	Cell type and receptor identity regulate cholera toxin subunit B (CTB) internalization. Interface Focus, 2019, 9, 20180076.	1.5	25
136	Specificity of Escherichia coli Heat-Labile Enterotoxin Investigated by Single-Site Mutagenesis and Crystallography. International Journal of Molecular Sciences, 2019, 20, 703.	1.8	7

#	Article	IF	Citations
137	Glycopolymers Mimicking GM1 Gangliosides: Cooperativity of Galactose and Neuraminic Acid for Cholera Toxin Recognition. Chemistry - an Asian Journal, 2019, 14, 1021-1027.	1.7	11
138	Quantitative Detection of Biological Nanoparticles in Solution via Their Mediation of Colocalization of Fluorescent Liposomes. Physical Review Applied, 2019, 12, .	1.5	1
139	Screening of a Glycopolymer Library of GM1 Mimics Containing Hydrophobic Units Using Surface Plasmon Resonance Imaging. ACS Omega, 2019, 4, 20690-20696.	1.6	8
140	Strong Inhibition of Cholera Toxin B Subunit by Affordable, Polymer-Based Multivalent Inhibitors. Bioconjugate Chemistry, 2019, 30, 785-792.	1.8	20
141	Targeting Multiple Binding Sites on Cholera Toxin B with Glycomimetic Polymers Promotes the Formation of Proteinâ€“Polymer Aggregates. Biomacromolecules, 2020, 21, 4878-4887.	2.6	2
142	Glycan-Gold Nanoparticles as Multifunctional Probes for Multivalent Lectinâ€“Carbohydrate Binding: Implications for Blocking Virus Infection and Nanoparticle Assembly. Journal of the American Chemical Society, 2020, 142, 18022-18034.	6.6	49
143	Probing Heteromultivalent Proteinâ€“Glycosphingolipid Interactions using Native Mass Spectrometry and Nanodiscs. Analytical Chemistry, 2020, 92, 3923-3931.	3.2	8
144	A Regenerable Biosensing Platform for Bacterial Toxins. Biomacromolecules, 2021, 22, 441-453.	2.6	8
145	Molecular and Mechanistic Basis of Lectin-Glycan Interactions. , 2021, , 346-404.		0
146	Screening of a glycopolymer library for GM1 mimetics synthesized by the â€œcarbohydrate module methodâ€. Chemical Communications, 2021, 57, 10871-10874.	2.2	6
147	Cholera Toxin as a Probe for Membrane Biology. Toxins, 2021, 13, 543.	1.5	30
148	Hybrid PDEâ€kMC modeling approach to simulate multivalent lectinâ€glycan binding process. AICHE Journal, 0, , e17453.	1.8	1
149	Sphingomyelinaseâ€Mediated Multitimescale Clustering of Ganglioside GM1 in Heterogeneous Lipid Membranes. Advanced Science, 2021, 8, 2101766.	5.6	5
150	Piggybacking on the Cholera Toxin: Identification of a CTB-Binding Protein as an Approach for Targeted Delivery of Proteins to Motor Neurons. Bioconjugate Chemistry, 2021, 32, 2205-2212.	1.8	10
151	Exploring Multiâ€Subsite Binding Pockets in Proteins: DEEPâ€STD NMR Fingerprinting and Molecular Dynamics Unveil a Cryptic Subsite at the GM1 Binding Pocket of Cholera Toxinâ€...B. Chemistry - A European Journal, 2020, 26, 10024-10034.	1.7	7
152	Rapid and sensitive glycan targeting by lectin-SERS assay. Molecular Omics, 2020, 16, 339-344.	1.4	6
154	Binding Cooperativity Matters: A GM1-Like Ganglioside-Cholera Toxin B Subunit Binding Study Using a Nanocube-Based Lipid Bilayer Array. PLoS ONE, 2016, 11, e0153265.	1.1	35
155	High-Resolution Crystal Structures Elucidate the Molecular Basis of Cholera Blood Group Dependence. PLoS Pathogens, 2016, 12, e1005567.	2.1	51

#	Article	IF	Citations
156	Detection of Ganglioside-Specific Toxin Binding with Biomembrane-Based Bioelectronic Sensors. ACS Applied Bio Materials, 2021, 4, 7942-7950.	2.3	7
157	Toward Glycomaterials with Selectivity as Well as Affinity. Jacs Au, 2021, 1, 2089-2099.	3.6	15
158	Bordetella Adenylate Cyclase Toxin Can Bind Ganglioside GM1. Bio, 2011, 1, 67-71.	0.6	4
160	Viral Protein Interaction with Host Cells GSLs. , 2020, , 53-92.		0
162	Aptamers from random sequence space: Accomplishments, gaps and future considerations. Analytica Chimica Acta, 2022, 1196, 339511.	2.6	44
163	Structureâ€“function relationship of a novel fucoside-binding fruiting body lectin from Coprinopsis cinerea exhibiting nematotoxic activity. Glycobiology, 2022, , .	1.3	2
164	Facile Preparation of a Glycopolymer Library by PET-RAFT Polymerization for Screening the Polymer Structures of GM1 Mimics. ACS Omega, 2022, 7, 13254-13259.	1.6	5
165	Enhancing cell membrane phase separation for inhibiting cancer metastasis with a stimuli-responsive DNA nanodevice. Chemical Science, 2022, 13, 6303-6308.	3.7	10
166	In-Depth Characterization of a Re-Engineered Cholera Toxin Manufacturing Process Using Growth-Decoupled Production in Escherichia coli. Toxins, 2022, 14, 396.	1.5	2
167	Bioorthogonal, Bifunctional Linker for Engineering Synthetic Glycoproteins. Jacs Au, 2022, 2, 2038-2047.	3.6	3
168	Membrane Fusion Mediated by Non-covalent Binding of Re-engineered Cholera Toxin Assemblies to Glycolipids. ACS Synthetic Biology, 2022, 11, 3929-3938.	1.9	5
169	Polymer-tethered glyconanoparticle colourimetric biosensors for lectin binding: structural and experimental parameters to ensure a robust output. RSC Advances, 2022, 12, 33080-33090.	1.7	1
174	Mechanism of multivalent glycoconjugateâ€“lectin interaction: An update. Advances in Carbohydrate Chemistry and Biochemistry, 2023, , 1-21.	0.4	0