

# Anne Imberty

## List of Publications by Year in descending order

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338  
papers

19,656  
citations

8159

76  
h-index

17546

121  
g-index

363  
all docs

363  
docs citations

363  
times ranked

15060  
citing authors

#	ARTICLE	IF	CITATIONS
1	Structures and mechanisms of glycosyltransferases. <i>Glycobiology</i> , 2006, 16, 29R-37R.	1.3	572
2	The double-helical nature of the crystalline part of A-starch. <i>Journal of Molecular Biology</i> , 1988, 201, 365-378.	2.0	541
3	A revisit to the three-dimensional structure of B-type starch. <i>Biopolymers</i> , 1988, 27, 1205-1221.	1.2	511
4	Multivalent glycoconjugates as anti-pathogenic agents. <i>Chemical Society Reviews</i> , 2013, 42, 4709-4727.	18.7	464
5	Recent Advances in Knowledge of Starch Structure. <i>Starch/Staerke</i> , 1991, 43, 375-384.	1.1	450
6	Glycomimetics versus Multivalent Glycoconjugates for the Design of High Affinity Lectin Ligands. <i>Chemical Reviews</i> , 2015, 115, 525-561.	23.0	439
7	Structures of the lectins from <i>Pseudomonas aeruginosa</i> : insights into the molecular basis for host glycan recognition. <i>Microbes and Infection</i> , 2004, 6, 221-228.	1.0	271
8	Role of LecA and LecB Lectins in <i>Pseudomonas aeruginosa</i> -Induced Lung Injury and Effect of Carbohydrate Ligands. <i>Infection and Immunity</i> , 2009, 77, 2065-2075.	1.0	262
9	Structure, Conformation, and Dynamics of Bioactive Oligosaccharides: A Theoretical Approaches and Experimental Validations. <i>Chemical Reviews</i> , 2000, 100, 4567-4588.	23.0	256
10	Microbial recognition of human cell surface glycoconjugates. <i>Current Opinion in Structural Biology</i> , 2008, 18, 567-576.	2.6	253
11	Structural basis for oligosaccharide-mediated adhesion of <i>Pseudomonas aeruginosa</i> in the lungs of cystic fibrosis patients. <i>Nature Structural Biology</i> , 2002, 9, 918-921.	9.7	247
12	Glycomimetics and Glycodendrimers as High Affinity Microbial Anti-adhesins. <i>Chemistry - A European Journal</i> , 2008, 14, 7490-7499.	1.7	235
13	Structural diversity of heparan sulfate binding domains in chemokines. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 1229-1234.	3.3	230
14	Structural view of glycosaminoglycan-protein interactions. <i>Carbohydrate Research</i> , 2007, 342, 430-439.	1.1	192
15	Characterization of the Stromal Cell-derived Factor-1-Heparin Complex. <i>Journal of Biological Chemistry</i> , 2001, 276, 8288-8296.	1.6	189
16	Structure/function studies of glycosyltransferases. <i>Current Opinion in Structural Biology</i> , 1999, 9, 563-571.	2.6	177
17	Structural basis of calcium and galactose recognition by the lectin PA-IL of <i>Pseudomonas aeruginosa</i> . <i>FEBS Letters</i> , 2003, 555, 297-301.	1.3	175
18	Achieving High Affinity towards a Bacterial Lectin through Multivalent Topological Isomers of Calix[4]arene Glycoconjugates. <i>Chemistry - A European Journal</i> , 2009, 15, 13232-13240.	1.7	175

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19	Heparan Sulfate/Heparin Oligosaccharides Protect Stromal Cell-derived Factor-1 (SDF-1)/CXCL12 against Proteolysis Induced by CD26/Dipeptidyl Peptidase IV. <i>Journal of Biological Chemistry</i> , 2004, 279, 43854-43860.	1.6	172
20	Crystal Structure of Fungal Lectin. <i>Journal of Biological Chemistry</i> , 2003, 278, 27059-27067.	1.6	164
21	The Fucose-binding Lectin from <i>Ralstonia solanacearum</i> . <i>Journal of Biological Chemistry</i> , 2005, 280, 27839-27849.	1.6	160
22	A new bioinformatic approach to detect common 3D sites in protein structures. <i>Proteins: Structure, Function and Bioinformatics</i> , 2003, 52, 137-145.	1.5	154
23	Molecular modelling of protein-carbohydrate interactions. Docking of monosaccharides in the binding site of concanavalin A. <i>Glycobiology</i> , 1991, 1, 631-642.	1.3	152
24	Binding sugars: from natural lectins to synthetic receptors and engineered neolectins. <i>Chemical Society Reviews</i> , 2013, 42, 4798.	18.7	151
25	A comparison and chemometric analysis of several molecular mechanics force fields and parameter sets applied to carbohydrates. <i>Carbohydrate Research</i> , 1998, 314, 141-155.	1.1	150
26	<i>N</i> -Glycolyl GM1 Ganglioside as a Receptor for Simian Virus 40. <i>Journal of Virology</i> , 2007, 81, 12846-12858.	1.5	150
27	Interactions between Flavan-3-ols and Poly( <i>L</i> -proline) Studied by Isothermal Titration Calorimetry: Effect of the Tannin Structure. <i>Journal of Agricultural and Food Chemistry</i> , 2007, 55, 9235-9240.	2.4	143
28	Sequence-Function Relationships of Prokaryotic and Eukaryotic Galactosyltransferases. <i>Journal of Biochemistry</i> , 1998, 123, 1000-1009.	0.9	140
29	Isolation and characterization of <i>Populus</i> isoperoxidases involved in the last step of lignin formation. <i>Planta</i> , 1985, 164, 221-226.	1.6	136
30	Current trends in the structure-activity relationships of sialyltransferases. <i>Glycobiology</i> , 2011, 21, 716-726.	1.3	134
31	Helical epitope of the group B meningococcal $\alpha$ -(2-8)-linked sialic acid polysaccharide. <i>Biochemistry</i> , 1992, 31, 4996-5004.	1.2	133
32	Structural Basis of the Preferential Binding for Globo-Series Glycosphingolipids Displayed by <i>Pseudomonas aeruginosa</i> Lectin I. <i>Journal of Molecular Biology</i> , 2008, 383, 837-853.	2.0	133
33	Conserved structural features in eukaryotic and prokaryotic fucosyltransferases. <i>Glycobiology</i> , 1998, 8, 87-94.	1.3	130
34	Structural basis for the interaction between human milk oligosaccharides and the bacterial lectin PA-IIL of <i>Pseudomonas aeruginosa</i> . <i>Biochemical Journal</i> , 2005, 389, 325-332.	1.7	129
35	Biochemical and Structural Analysis of <i>Helix pomatia</i> Agglutinin. <i>Journal of Biological Chemistry</i> , 2006, 281, 20171-20180.	1.6	129
36	A lipid zipper triggers bacterial invasion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 12895-12900.	3.3	127

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37	An Unusual Carbohydrate Binding Site Revealed by the Structures of Two Maackia amurensis Lectins Complexed with Sialic Acid-containing Oligosaccharides. <i>Journal of Biological Chemistry</i> , 2000, 275, 17541-17548.	1.6	125
38	Computer simulation of histo-blood group oligosaccharides: energy maps of all constituting disaccharides and potential energy surfaces of 14 ABH and Lewis carbohydrate antigens. <i>Glycoconjugate Journal</i> , 1995, 12, 331-349.	1.4	124
39	Carbohydrate binding, quaternary structure and a novel hydrophobic binding site in two legume lectin oligomers from <i>Dolichos biflorus</i> 1 Edited by R. Huber. <i>Journal of Molecular Biology</i> , 1999, 286, 1161-1177.	2.0	121
40	Interactions between a Non Glycosylated Human Proline-Rich Protein and Flavan-3-ols Are Affected by Protein Concentration and Polyphenol/Protein Ratio. <i>Journal of Agricultural and Food Chemistry</i> , 2007, 55, 4895-4901.	2.4	120
41	Characterization of Endostatin Binding to Heparin and Heparan Sulfate by Surface Plasmon Resonance and Molecular Modeling. <i>Journal of Biological Chemistry</i> , 2004, 279, 2927-2936.	1.6	119
42	Antiadhesive Properties of Glycoclusters against <i>Pseudomonas aeruginosa</i> Lung Infection. <i>Journal of Medicinal Chemistry</i> , 2014, 57, 10275-10289.	2.9	117
43	Fungal lectins: structure, function and potential applications. <i>Current Opinion in Structural Biology</i> , 2013, 23, 678-685.	2.6	116
44	Synthesis of Dodecavalent Fullerene-Based Glycoclusters and Evaluation of Their Binding Properties towards a Bacterial Lectin. <i>Chemistry - A European Journal</i> , 2011, 17, 3252-3261.	1.7	114
45	Binding interactions between barley thaumatin-like proteins and (1,3)- $\beta$ -D-glucans. <i>FEBS Journal</i> , 2001, 268, 4190-4199.	0.2	113
46	Electronic Detection of Lectins Using Carbohydrate-Functionalized Nanostructures: Graphene versus Carbon Nanotubes. <i>ACS Nano</i> , 2012, 6, 760-770.	7.3	112
47	Heparan Sulfate Targets the HIV-1 Envelope Glycoprotein gp120 Coreceptor Binding Site. <i>Journal of Biological Chemistry</i> , 2005, 280, 21353-21357.	1.6	108
48	Selectivity among Two Lectins: Probing the Effect of Topology, Multivalency and Flexibility of Clicked Multivalent Glycoclusters. <i>Chemistry - A European Journal</i> , 2011, 17, 2146-2159.	1.7	108
49	New three-dimensional structure for A-type starch. <i>Macromolecules</i> , 1987, 20, 2634-2636.	2.2	105
50	T4 Phage $\beta$ -Glucosyltransferase: Substrate Binding and Proposed Catalytic Mechanism. <i>Journal of Molecular Biology</i> , 1999, 292, 717-730.	2.0	104
51	High affinity fucose binding of <i>Pseudomonas aeruginosa</i> lectin PA-III: 1.0 Å... resolution crystal structure of the complex combined with thermodynamics and computational chemistry approaches. <i>Proteins: Structure, Function and Bioinformatics</i> , 2004, 58, 735-746.	1.5	104
52	Structure-Function Analysis of the Human Sialyltransferase ST3Gal I. <i>Journal of Biological Chemistry</i> , 2004, 279, 13461-13468.	1.6	102
53	Rational Design and Synthesis of Optimized Glycoclusters for Multivalent Lectin-Carbohydrate Interactions: Influence of the Linker Arm. <i>Chemistry - A European Journal</i> , 2012, 18, 6250-6263.	1.7	100
54	Interactions between Pectic Compounds and Procyanidins are Influenced by Methylation Degree and Chain Length. <i>Biomacromolecules</i> , 2013, 14, 709-718.	2.6	97

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55	Glycomimetic, Orally Bioavailable LecB Inhibitors Block Biofilm Formation of <i>Pseudomonas aeruginosa</i> . <i>Journal of the American Chemical Society</i> , 2018, 140, 2537-2545.	6.6	97
56	Conformational behavior of sucrose and its deoxy analog in water as determined by NMR and molecular modeling. <i>Journal of the American Chemical Society</i> , 1991, 113, 3720-3727.	6.6	96
57	Fucosylated Pentaerythrityl Phosphodiester Oligomers (PePOs): Automated Synthesis of DNA-Based Glycoclusters and Binding to <i>Pseudomonas aeruginosa</i> Lectin (PA-III). <i>Bioconjugate Chemistry</i> , 2007, 18, 1637-1643.	1.8	96
58	Nanoelectronic Detection of Lectin-Carbohydrate Interactions Using Carbon Nanotubes. <i>Nano Letters</i> , 2011, 11, 170-175.	4.5	96
59	Binding of different monosaccharides by lectin PA-III from <i>Pseudomonas aeruginosa</i> : Thermodynamics data correlated with X-ray structures. <i>FEBS Letters</i> , 2006, 580, 982-987.	1.3	94
60	Combining Glycomimetic and Multivalent Strategies toward Designing Potent Bacterial Lectin Inhibitors. <i>Chemistry - A European Journal</i> , 2011, 17, 6545-6562.	1.7	94
61	Molecular Basis of the Differences in Binding Properties of the Highly Related C-type Lectins DC-SIGN and L-SIGN to Lewis X Trisaccharide and <i>Schistosoma mansoni</i> Egg Antigens. <i>Journal of Biological Chemistry</i> , 2004, 279, 33161-33167.	1.6	93
62	Catalytic Key Amino Acids and UDP-Sugar Donor Specificity of a Plant Glucuronosyltransferase, UGT94B1: Molecular Modeling Substantiated by Site-Specific Mutagenesis and Biochemical Analyses. <i>Plant Physiology</i> , 2008, 148, 1295-1308.	2.3	93
63	Fucose-binding Lectin from Opportunistic Pathogen <i>Burkholderia ambifaria</i> Binds to Both Plant and Human Oligosaccharidic Epitopes. <i>Journal of Biological Chemistry</i> , 2012, 287, 4335-4347.	1.6	92
64	Overcoming antibiotic resistance in <i>Pseudomonas aeruginosa</i> biofilms using glycopeptide dendrimers. <i>Chemical Science</i> , 2016, 7, 166-182.	3.7	92
65	Relaxed potential energy surfaces of maltose. <i>Biopolymers</i> , 1989, 28, 679-690.	1.2	89
66	Crystal and molecular structure of a histo-blood group antigen involved in cell adhesion: the Lewis x trisaccharide. <i>Glycobiology</i> , 1996, 6, 537-542.	1.3	88
67	Solution conformations of pectin polysaccharides: Determination of chain characteristics by small angle neutron scattering, viscometry, and molecular modeling. , 1998, 39, 339-351.		88
68	Structural basis of high-affinity glycan recognition by bacterial and fungal lectins. <i>Current Opinion in Structural Biology</i> , 2005, 15, 525-534.	2.6	88
69	DC-SIGN Mediates Binding of Dendritic Cells to Authentic Pseudo-Lewis <sup>Y</sup> Glycolipids of <i>Schistosoma mansoni</i> Cercariae, the First Parasite-specific Ligand of DC-SIGN. <i>Journal of Biological Chemistry</i> , 2005, 280, 37349-37359.	1.6	87
70	A Soluble Fucose-Specific Lectin from <i>Aspergillus fumigatus</i> Conidia - Structure, Specificity and Possible Role in Fungal Pathogenicity. <i>PLoS ONE</i> , 2013, 8, e83077.	1.1	87
71	A LecA Ligand Identified from a Galactoside Conjugate Array Inhibits Host Cell Invasion by <i>Pseudomonas aeruginosa</i> . <i>Angewandte Chemie - International Edition</i> , 2014, 53, 8885-8889.	7.2	85
72	LysM domains of <i>Medicago truncatula</i> NFP protein involved in Nod factor perception. Glycosylation state, molecular modeling and docking of chitooligosaccharides and Nod factors. <i>Glycobiology</i> , 2006, 16, 801-809.	1.3	84

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73	Discovery of Two Classes of Potent Glycomimetic Inhibitors of <i>Pseudomonas aeruginosa</i> LecB with Distinct Binding Modes. <i>ACS Chemical Biology</i> , 2013, 8, 1775-1784.	1.6	83
74	Lipo-chitooligosaccharidic Symbiotic Signals Are Recognized by LysM Receptor-Like Kinase LYR3 in the Legume <i>Medicago truncatula</i> . <i>ACS Chemical Biology</i> , 2013, 8, 1900-1906.	1.6	83
75	Data bank of three-dimensional structures of disaccharides, a tool to build 3-D structures of oligosaccharides. <i>Glycoconjugate Journal</i> , 1990, 7, 27-54.	1.4	82
76	UniLectin3D, a database of carbohydrate binding proteins with curated information on 3D structures and interacting ligands. <i>Nucleic Acids Research</i> , 2019, 47, D1236-D1244.	6.5	82
77	Aromatic thioglycoside inhibitors against the virulence factor LecA from <i>Pseudomonas aeruginosa</i> . <i>Organic and Biomolecular Chemistry</i> , 2013, 11, 6906.	1.5	81
78	Multivalent Gold Glycoclusters: High Affinity Molecular Recognition by Bacterial Lectin PA-IL. <i>Chemistry - A European Journal</i> , 2012, 18, 4264-4273.	1.7	80
79	Î <sup>2</sup> -Propeller Crystal Structure of <i>Psathyrella velutina</i> Lectin: An Integrin-like Fungal Protein Interacting with Monosaccharides and Calcium. <i>Journal of Molecular Biology</i> , 2006, 357, 1575-1591.	2.0	77
80	Polyester Nanoparticles Presenting Mannose Residues: Toward the Development of New Vaccine Delivery Systems Combining Biodegradability and Targeting Properties. <i>Biomacromolecules</i> , 2009, 10, 651-657.	2.6	77
81	Glyco3D: A Portal for Structural Glycosciences. <i>Methods in Molecular Biology</i> , 2015, 1273, 241-258.	0.4	77
82	Oligosaccharide structures: theory versus experiment. <i>Current Opinion in Structural Biology</i> , 1997, 7, 617-623.	2.6	76
83	A TNF-like Trimeric Lectin Domain from <i>Burkholderia cenocepacia</i> with Specificity for Fucosylated Human Histo-Blood Group Antigens. <i>Structure</i> , 2010, 18, 59-72.	1.6	76
84	Neutral sugar side chains of pectins limit interactions with procyanidins. <i>Carbohydrate Polymers</i> , 2014, 99, 527-536.	5.1	75
85	Structural basis for mannose recognition by a lectin from opportunistic bacteria <i>Burkholderia cenocepacia</i> . <i>Biochemical Journal</i> , 2008, 411, 307-318.	1.7	74
86	A Kinetics and Modeling Study of RANTES(9 <sup>~</sup> 68) Binding to Heparin Reveals a Mechanism of Cooperative Oligomerization. <i>Biochemistry</i> , 2002, 41, 14779-14789.	1.2	73
87	Tetramethylbenzidine and p-phenylenediamine-pyrocatechol for peroxidase histochemistry and biochemistry: Two new, non-carcinogenic chromogens for investigating lignification process. <i>Plant Science Letters</i> , 1984, 35, 103-108.	1.9	72
88	Histo-blood group antigens as mediators of infections. <i>Current Opinion in Structural Biology</i> , 2017, 44, 190-200.	2.6	72
89	Conformational analysis and molecular modelling of the branching point of amylopectin. <i>International Journal of Biological Macromolecules</i> , 1989, 11, 177-185.	3.6	71
90	Relaxed potential energy surfaces of N-linked oligosaccharides: The mannose-Î±(1-3)-mannose case. <i>Journal of Computational Chemistry</i> , 1990, 11, 205-216.	1.5	70

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91	A new <i>Ralstonia solanacearum</i> high-affinity mannose-binding lectin RS-III structurally resembling the <i>Pseudomonas aeruginosa</i> fucose-specific lectin PA-III. <i>Molecular Microbiology</i> , 2004, 52, 691-700.	1.2	70
92	Characterization of Four Lectin-Like Receptor Kinases Expressed in Roots of <i>Medicago truncatula</i> . Structure, Location, Regulation of Expression, and Potential Role in the Symbiosis with <i>Sinorhizobium meliloti</i> A. <i>Plant Physiology</i> , 2003, 133, 1893-1910.	2.3	69
93	NMR, Molecular Modeling, and Crystallographic Studies of Lentil Lectin-Sucrose Interaction. <i>Journal of Biological Chemistry</i> , 1995, 270, 25619-25628.	1.6	68
94	Data bank of three-dimensional structures of disaccharides: Part II, N-acetyllactosaminic type N-glycans. Comparison with the crystal structure of a biantennary octasaccharide. <i>Glycoconjugate Journal</i> , 1991, 8, 456-483.	1.4	64
95	Structural Studies of Langerin and Birbeck Granule: A Macromolecular Organization Model. <i>Biochemistry</i> , 2009, 48, 2684-2698.	1.2	64
96	Pillar[5]arene-Based Glycoclusters: Synthesis and Multivalent Binding to Pathogenic Bacterial Lectins. <i>Chemistry - A European Journal</i> , 2016, 22, 2955-2963.	1.7	64
97	Biologically Active Heteroglycoclusters Constructed on a Pillar[5]arene-Containing [2]Rotaxane Scaffold. <i>Chemistry - A European Journal</i> , 2016, 22, 88-92.	1.7	62
98	Rules of Engagement of Protein-Glycoconjugate Interactions: A Molecular View Achievable by using NMR Spectroscopy and Molecular Modeling. <i>ChemistryOpen</i> , 2016, 5, 274-296.	0.9	62
99	Conformational analysis and flexibility of carbohydrates using the CICADA approach with MM3. <i>Journal of Computational Chemistry</i> , 1995, 16, 296-310.	1.5	61
100	X-ray Structures and Thermodynamics of the Interaction of PA-III from <i>Pseudomonas aeruginosa</i> with Disaccharide Derivatives. <i>ChemMedChem</i> , 2007, 2, 1328-1338.	1.6	61
101	AFM investigation of <i>Pseudomonas aeruginosa</i> lectin LecA (PA-IL) filaments induced by multivalent glycoclusters. <i>Chemical Communications</i> , 2011, 47, 9483.	2.2	61
102	<i>Burkholderia cenocepacia</i> BC2L-C Is a Super Lectin with Dual Specificity and Proinflammatory Activity. <i>PLoS Pathogens</i> , 2011, 7, e1002238.	2.1	61
103	Langerin-Heparin Interaction: Two Binding Sites for Small and Large Ligands As Revealed by a Combination of NMR Spectroscopy and Cross-Linking Mapping Experiments. <i>Journal of the American Chemical Society</i> , 2015, 137, 4100-4110.	6.6	61
104	The $\beta$ -Glucosidases Responsible for Bioactivation of Hydroxynitrile Glucosides in <i>Lotus japonicus</i> . <i>Plant Physiology</i> , 2008, 147, 1072-1091.	2.3	60
105	Structural basis of carbohydrate recognition by lectin II from <i>Ulex europaeus</i> , a protein with a promiscuous carbohydrate-binding site 1 Edited by R. Huber. <i>Journal of Molecular Biology</i> , 2000, 301, 987-1002.	2.0	59
106	Determination of Catalytic Key Amino Acids and UDP Sugar Donor Specificity of the Cyanohydrin Glycosyltransferase UGT85B1 from <i>Sorghum bicolor</i> . <i>Molecular Modeling Substantiated by Site-Specific Mutagenesis and Biochemical Analyses</i> . <i>Plant Physiology</i> , 2005, 139, 664-673.	2.3	59
107	Impact of Processing on the Noncovalent Interactions between Procyanidin and Apple Cell Wall. <i>Journal of Agricultural and Food Chemistry</i> , 2012, 60, 9484-9494.	2.4	59
108	Synthesis of Multivalent Carbohydrate-Centered Glycoclusters as Nanomolar Ligands of the Bacterial Lectin LecA from <i>Pseudomonas aeruginosa</i> . <i>Chemistry - A European Journal</i> , 2013, 19, 9272-9285.	1.7	59



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109	Synthesis and binding properties of divalent and trivalent clusters of the Lewis a disaccharide moiety to <i>Pseudomonas aeruginosa</i> lectin PA-III. <i>Organic and Biomolecular Chemistry</i> , 2007, 5, 2953.	1.5	58
110	Structure-Function Similarities between a Plant Receptor-like Kinase and the Human Interleukin-1 Receptor-associated Kinase-4. <i>Journal of Biological Chemistry</i> , 2011, 286, 11202-11210.	1.6	58
111	Molecular modelling of protein-carbohydrate interactions. Understanding the specificities of two legume lectins towards oligosaccharides. <i>Glycobiology</i> , 1994, 4, 351-366.	1.3	57
112	Investigation of the complexation of (+)-catechin by $\beta$ -cyclodextrin by a combination of NMR, microcalorimetry and molecular modeling techniques. <i>Organic and Biomolecular Chemistry</i> , 2003, 1, 2590-2595.	1.5	57
113	Structural basis for recognition of breast and colon cancer epitopes Tn antigen and Forssman disaccharide by <i>Helix pomatia</i> lectin. <i>Glycobiology</i> , 2007, 17, 1077-1083.	1.3	56
114	Covalent Lectin Inhibition and Application in Bacterial Biofilm Imaging. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 16559-16564.	7.2	56
115	Transglutaminase-2 Interaction with Heparin. <i>Journal of Biological Chemistry</i> , 2012, 287, 18005-18017.	1.6	55
116	Solution conformation of a pectin fragment disaccharide using molecular modelling and nuclear magnetic resonance. <i>International Journal of Biological Macromolecules</i> , 1992, 14, 313-320.	3.6	54
117	High Affinity Glycodendrimers for the Lectin LecB from <i>Pseudomonas aeruginosa</i> . <i>Bioconjugate Chemistry</i> , 2013, 24, 1598-1611.	1.8	54
118	CuAAC synthesis of resorcin[4]arene-based glycoclusters as multivalent ligands of lectins. <i>Organic and Biomolecular Chemistry</i> , 2011, 9, 6587.	1.5	53
119	Membrane Deformation by Neoelectins with Engineered Glycolipid Binding Sites. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 9267-9270.	7.2	53
120	Structural Insight into Multivalent Galactoside Binding to <i>Pseudomonas aeruginosa</i> Lectin LecA. <i>ACS Chemical Biology</i> , 2015, 10, 2455-2462.	1.6	52
121	Crystal structure and conformational features of $\alpha$ -D-glucopyranose. <i>Carbohydrate Research</i> , 1988, 181, 41-55.	1.1	51
122	Isolectins I-A and I-B of <i>Griffonia (Bandeiraea) simplicifolia</i> . <i>Journal of Biological Chemistry</i> , 2002, 277, 6608-6614.	1.6	51
123	Crystal Structure of <i>Pterocarpus angolensis</i> Lectin in Complex with Glucose, Sucrose, and Turanose. <i>Journal of Biological Chemistry</i> , 2003, 278, 16297-16303.	1.6	50
124	Three-dimensional representations of complex carbohydrates and polysaccharides--SweetUnityMol: A video game-based computer graphic software. <i>Glycobiology</i> , 2015, 25, 483-491.	1.3	50
125	The virulence factor LecB varies in clinical isolates: consequences for ligand binding and drug discovery. <i>Chemical Science</i> , 2016, 7, 4990-5001.	3.7	50
126	Modelling of arabinofuranose and arabinan. Part 1: conformational flexibility of the arabinofuranose ring. <i>Carbohydrate Research</i> , 1993, 248, 81-93.	1.1	49



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127	Production, Properties and Specificity of a New Bacterial L-Fucose-and D-Arabinose-Binding Lectin of the Plant Aggressive Pathogen <i>Ralstonia solanacearum</i> , and Its Comparison to Related Plant and Microbial Lectins. <i>Journal of Biochemistry</i> , 2002, 132, 353-358.	0.9	48
128	Structural basis of the affinity for oligomannosides and analogs displayed by BC2L-A, a <i>Burkholderia cenocepacia</i> soluble lectin. <i>Glycobiology</i> , 2010, 20, 87-98.	1.3	48
129	Lectin-mediated protocell crosslinking to mimic cell-cell junctions and adhesion. <i>Scientific Reports</i> , 2018, 8, 1932.	1.6	48
130	Mannosylated Poly(ethylene oxide)-b-Poly( $\mu$ -caprolactone) Diblock Copolymers: Synthesis, Characterization, and Interaction with a Bacterial Lectin. <i>Biomacromolecules</i> , 2007, 8, 2717-2725.	2.6	46
131	Structure of <i>Penicillium citrinum</i> $\beta$ -1,2-Mannosidase Reveals the Basis for Differences in Specificity of the Endoplasmic Reticulum and Golgi Class I Enzymes. <i>Journal of Biological Chemistry</i> , 2002, 277, 5620-5630.	1.6	45
132	<sup>13</sup> C-Labeled Heparan Sulfate Analogue as a Tool To Study Protein/Heparan Sulfate Interactions by NMR Spectroscopy: Application to the CXCL12 Chemokine. <i>Journal of the American Chemical Society</i> , 2011, 133, 9642-9645.	6.6	45
133	Anti-biofilm Agents against <i>Pseudomonas aeruginosa</i> : A Structure-Activity Relationship Study of C-Glycosidic LecB Inhibitors. <i>Journal of Medicinal Chemistry</i> , 2019, 62, 9201-9216.	2.9	45
134	Molecular modeling of the interaction between heparan sulfate and cellular growth factors: Bringing pieces together. <i>Glycobiology</i> , 2011, 21, 1181-1193.	1.3	44
135	Multivalency effects on <i>Pseudomonas aeruginosa</i> biofilm inhibition and dispersal by glycopeptide dendrimers targeting lectin LecA. <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 138-148.	1.5	44
136	X-ray structure determination and modeling of the cyclic tetrasaccharide $\beta$ -D-GlcNAc <sub>4</sub> . <i>Carbohydrate Research</i> , 2000, 329, 655-665.	1.1	43
137	Biochemical Characterization of the Histidine Triad Protein PhtD as a Cell Surface Zinc-Binding Protein of <i>Pneumococcus</i> . <i>Biochemistry</i> , 2011, 50, 3551-3558.	1.2	43
138	Molecular Basis of Arabinobio-hydrolase Activity in Phytopathogenic Fungi. <i>Journal of Biological Chemistry</i> , 2009, 284, 12285-12296.	1.6	42
139	Tetravalent glycocyclopeptide with nanomolar affinity to wheat germ agglutinin. <i>Organic and Biomolecular Chemistry</i> , 2013, 11, 7113.	1.5	42
140	Fucofullerenes as tight ligands of RSL and LecB, two bacterial lectins. <i>Organic and Biomolecular Chemistry</i> , 2015, 13, 6482-6492.	1.5	42
141	Pentavalent pillar[5]arene-based glycoclusters and their multivalent binding to pathogenic bacterial lectins. <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 3476-3481.	1.5	42
142	The <i>Pseudomonas aeruginosa</i> lectin LecA triggers host cell signalling by glycosphingolipid-dependent phosphorylation of the adaptor protein CrkII. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2017, 1864, 1236-1245.	1.9	42
143	Toward a Better Understanding of the Basis of the Molecular Mimicry of Polysaccharide Antigens by Peptides. <i>Journal of Biological Chemistry</i> , 2006, 281, 2317-2332.	1.6	41
144	Engineering of PA-IIL lectin from <i>Pseudomonas aeruginosa</i> : Unravelling the role of the specificity loop for sugar preference. <i>BMC Structural Biology</i> , 2007, 7, 36.	2.3	40

#	ARTICLE	IF	CITATIONS
145	Insights into the Mechanism by Which Interferon- $\beta$ Basic Amino Acid Clusters Mediate Protein Binding to Heparan Sulfate. <i>Journal of the American Chemical Society</i> , 2013, 135, 9384-9390.	6.6	40
146	<i>Pseudomonas aeruginosa</i> lectin LecB inhibits tissue repair processes by triggering $\beta$ -catenin degradation. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2016, 1863, 1106-1118.	1.9	40
147	The monosaccharide binding site of lentil lectin: an X-ray and molecular modelling study. <i>Glycoconjugate Journal</i> , 1994, 11, 507-517.	1.4	39
148	Reduction of Lectin Valency Drastically Changes Glycolipid Dynamics in Membranes but Not Surface Avidity. <i>ACS Chemical Biology</i> , 2013, 8, 1918-1924.	1.6	39
149	Genomic Rearrangements and Functional Diversification of <i>lecA</i> and <i>lecB</i> Lectin-Coding Regions Impacting the Efficacy of Glycomimetics Directed against <i>Pseudomonas aeruginosa</i> . <i>Frontiers in Microbiology</i> , 2016, 7, 811.	1.5	39
150	Experimental Proof for the Structure of a Thrombin-Inhibiting Heparin Molecule. <i>Chemistry - A European Journal</i> , 2001, 7, 858-873.	1.7	38
151	Molecular Modeling and Site-directed Mutagenesis of Plant Chloroplast Monogalactosyldiacylglycerol Synthase Reveal Critical Residues for Activity. <i>Journal of Biological Chemistry</i> , 2005, 280, 34691-34701.	1.6	38
152	Conformational Studies on Five Octasaccharides Isolated from Chondroitin Sulfate Using NMR Spectroscopy and Molecular Modeling. <i>Biochemistry</i> , 2007, 46, 1167-1175.	1.2	38
153	Dynamic Cooperative Glycan Assembly Blocks the Binding of Bacterial Lectins to Epithelial Cells. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 6762-6766.	7.2	38
154	Development of isoperoxidases along the growth gradient in the mung bean hypocotyl. <i>Phytochemistry</i> , 1986, 25, 1271-1274.	1.4	37
155	Conformational Analysis of Blood Group A Trisaccharide in Solution and in the Binding Site of <i>Dolichos biflorus</i> Lectin Using Transient and Transferred Nuclear Overhauser Enhancement (NOE) and Rotating-Frame NOE Experiments. <i>FEBS Journal</i> , 1996, 239, 710-719.	0.2	37
156	Role of Water Molecules in Structure and Energetics of <i>Pseudomonas aeruginosa</i> Lectin I Interacting with Disaccharides. <i>Journal of Biological Chemistry</i> , 2010, 285, 20316-20327.	1.6	37
157	The Hidden Conformation of Lewis x, a Human Histo-Blood Group Antigen, Is a Determinant for Recognition by Pathogen Lectins. <i>ACS Chemical Biology</i> , 2016, 11, 2011-2020.	1.6	37
158	Modeling of arabinofuranose and arabinan, II. Nmr and Conformational analysis of arabinobiose and arabinan. <i>Biopolymers</i> , 1994, 34, 1433-1447.	1.2	36
159	Synthesis and Conformational Analysis of a Conformationally Constrained Trisaccharide, and Complexation Properties with Concanavalin A. <i>Chemistry - A European Journal</i> , 1999, 5, 2281-2294.	1.7	36
160	Unusual Entropy-Driven Affinity of <i>Chromobacterium violaceum</i> Lectin CV-III toward Fucose and Mannose,. <i>Biochemistry</i> , 2006, 45, 7501-7510.	1.2	36
161	Synthesis of lactosylated glycoclusters and inhibition studies with plant and human lectins. <i>Carbohydrate Research</i> , 2012, 356, 132-141.	1.1	36
162	PNA-Encoded Synthesis (PES) of a 10 <sup>6</sup> -Member Hetero-Glycoconjugate Library and Microarray Analysis of Diverse Lectins. <i>ChemBioChem</i> , 2014, 15, 2058-2065.	1.3	36

#	ARTICLE	IF	CITATIONS
163	Molecular modelling of the <i>Dolichos biflorus</i> seed lectin and its specific interactions with carbohydrates: ?-D-N-acetyl-galactosamine, Forssman disaccharide and blood group A trisaccharide. <i>Glycoconjugate Journal</i> , 1994, 11, 400-413.	1.4	35
164	Potential Energy Hypersurfaces of Nucleotide Sugars: Ab Initio Calculations, Force-Field Parametrization, and Exploration of the Flexibility. <i>Journal of the American Chemical Society</i> , 1999, 121, 5535-5547.	6.6	35
165	Conformational behavior of chondroitin and chondroitin sulfate in relation to their physical properties as inferred by molecular modeling. <i>Biopolymers</i> , 2003, 69, 15-28.	1.2	35
166	High Affinity Interaction between a Bivalve C-type Lectin and a Biantennary Complex-type N-Glycan Revealed by Crystallography and Microcalorimetry. <i>Journal of Biological Chemistry</i> , 2008, 283, 30112-30120.	1.6	35
167	Cinnamide Derivatives of <i>α</i> -D-Glucopyranosyl-(1→6)-Mannose as Inhibitors of the Bacterial Virulence Factor LecB from <i>Pseudomonas aeruginosa</i> . <i>ChemistryOpen</i> , 2015, 4, 756-767.	0.9	35
168	Mannose-centered aromatic galactoclusters inhibit the biofilm formation of <i>Pseudomonas aeruginosa</i> . <i>Organic and Biomolecular Chemistry</i> , 2015, 13, 8433-8444.	1.5	35
169	Human Bronchial Epithelial Cells Inhibit <i>Aspergillus fumigatus</i> Germination of Extracellular Conidia via FleA Recognition. <i>Scientific Reports</i> , 2018, 8, 15699.	1.6	35
170	Carbohydrate-dependent B cell activation by fucose-binding bacterial lectins. <i>Science Signaling</i> , 2019, 12, .	1.6	35
171	Conformational Studies of the O-specific Polysaccharide of <i>Shigella flexneri</i> 5a and of Four Related Synthetic Pentasaccharide Fragments Using NMR and Molecular Modeling. <i>Journal of Biological Chemistry</i> , 2003, 278, 47928-47936.	1.6	34
172	Monovalent and bivalent N-fucosyl amides as high affinity ligands for <i>Pseudomonas aeruginosa</i> PA-III lectin. <i>Carbohydrate Research</i> , 2010, 345, 1400-1407.	1.1	34
173	Discoidin I from <i>Dictyostelium discoideum</i> and Interactions with Oligosaccharides: Specificity, Affinity, Crystal Structures, and Comparison with Discoidin II. <i>Journal of Molecular Biology</i> , 2010, 400, 540-554.	2.0	34
174	Gb3-binding lectins as potential carriers for transcellular drug delivery. <i>Expert Opinion on Drug Delivery</i> , 2017, 14, 141-153.	2.4	34
175	The living factory: in vivo production of N-acetylglucosamine containing carbohydrates in <i>E. coli</i> . <i>Glycoconjugate Journal</i> , 1999, 16, 205-212.	1.4	33
176	Recognition of the blood group H type 2 trisaccharide epitope by 28 monoclonal antibodies and three lectins. <i>Glycoconjugate Journal</i> , 1996, 13, 263-271.	1.4	32
177	Enzyme-Catalyzed Sialylations of Conformationally Constrained Oligosaccharides. <i>Journal of the American Chemical Society</i> , 2002, 124, 5964-5973.	6.6	32
178	Mapping of heparin/heparan sulfate binding sites on $\alpha_2\beta_1$ integrin by molecular docking. <i>Journal of Molecular Recognition</i> , 2013, 26, 76-85.	1.1	32
179	Characterization of a high-affinity sialic acid-specific CBM40 from <i>Clostridium perfringens</i> and engineering of a divalent form. <i>Biochemical Journal</i> , 2016, 473, 2109-2118.	1.7	32
180	Stereoselective Synthesis of Fluorinated Galactopyranosides as Potential Molecular Probes for Galactophilic Proteins: Assessment of Monofluorogalactoside-LecA Interactions. <i>Chemistry - A European Journal</i> , 2019, 25, 4478-4490.	1.7	32

#	ARTICLE	IF	CITATIONS
181	Enhancement of Plant and Bacterial Lectin Binding Affinities by Three-Dimensional Organized Cluster Glycosides Constructed on Helical Poly(phenylacetylene) Backbones. <i>ChemBioChem</i> , 2010, 11, 2399-2408.	1.3	31
182	Burkholderia cenocepacia lectin A binding to heptoses from the bacterial lipopolysaccharide. <i>Glycobiology</i> , 2012, 22, 1387-1398.	1.3	31
183	The Pseudomonas aeruginosa Lectin LecB Causes Integrin Internalization and Inhibits Epithelial Wound Healing. <i>MBio</i> , 2020, 11, .	1.8	31
184	LectomeXplore, an update of UniLectin for the discovery of carbohydrate-binding proteins based on a new lectin classification. <i>Nucleic Acids Research</i> , 2021, 49, D1548-D1554.	6.5	31
185	Comparison of docking methods for carbohydrate binding in calcium-dependent lectins and prediction of the carbohydrate binding mode to sea cucumber lectin CEL-III. <i>Molecular Simulation</i> , 2008, 34, 469-479.	0.9	30
186	Combination of Several Bioinformatics Approaches for the Identification of New Putative Glycosyltransferases in Arabidopsis. <i>Journal of Proteome Research</i> , 2009, 8, 743-753.	1.8	30
187	Tailor-made Janus lectin with dual avidity assembles glycoconjugate multilayers and crosslinks protocells. <i>Chemical Science</i> , 2018, 9, 7634-7641.	3.7	30
188	Production and properties of the native Chromobacterium violaceum fucose-binding lectin (CV-III) compared to homologous lectins of Pseudomonas aeruginosa (PA-III) and Ralstonia solanacearum (RS-III). <i>Microbiology (United Kingdom)</i> , 2006, 152, 457-463.	0.7	29
189	Structure and engineering of tandem repeat lectins. <i>Current Opinion in Structural Biology</i> , 2020, 62, 39-47.	2.6	29
190	Molecular modeling of glycosyltransferases involved in the biosynthesis of blood group A, blood group B, Forssman, and iGb3 antigens and their interaction with substrates. <i>Glycobiology</i> , 2003, 13, 377-386.	1.3	28
191	NMR and Molecular Modeling Studies of the Interaction between Wheat Germ Agglutinin and the Î²-d-GlcpNAc-(1â†’6)-Î±-d-Manp Epitope Present in Glycoproteins of Tumor Cells. <i>Biochemistry</i> , 2004, 43, 9647-9654.	1.2	28
192	Bacteria love our sugars: Interaction between soluble lectins and human fucosylated glycans, structures, thermodynamics and design of competing glycoconjugates. <i>Comptes Rendus Chimie</i> , 2013, 16, 482-490.	0.2	28
193	Flexibility in a tetrasaccharide fragment from the high mannose type of N-linked oligosaccharides. <i>International Journal of Biological Macromolecules</i> , 1993, 15, 17-23.	3.6	27
194	Structural insights into Aspergillus fumigatus lectin specificity: AFL binding sites are functionally non-equivalent. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2015, 71, 442-453.	2.5	27
195	Architecture and Evolution of Blade Assembly in Î²-propeller Lectins. <i>Structure</i> , 2019, 27, 764-775.e3.	1.6	27
196	A Lectin from Platypodium elegans with Unusual Specificity and Affinity for Asymmetric Complex N-Glycans. <i>Journal of Biological Chemistry</i> , 2012, 287, 26352-26364.	1.6	26
197	Synthesis of a selective inhibitor of a fucose binding bacterial lectin from Burkholderia ambifaria. <i>Organic and Biomolecular Chemistry</i> , 2013, 11, 4086.	1.5	26
198	The interplay of autophagy and Î²-Catenin signaling regulates differentiation in acute myeloid leukemia. <i>Cell Death Discovery</i> , 2015, 1, 15031.	2.0	26

#	ARTICLE	IF	CITATIONS
199	Structure determination of discoidin II from <i>Dictyostelium discoideum</i> and carbohydrate binding properties of the lectin domain. <i>Proteins: Structure, Function and Bioinformatics</i> , 2008, 73, 43-52.	1.5	25
200	Insights on the conformational properties of hyaluronic acid by using NMR residual dipolar couplings and MD simulations. <i>Glycobiology</i> , 2010, 20, 1208-1216.	1.3	25
201	Deciphering the Glycan Preference of Bacterial Lectins by Glycan Array and Molecular Docking with Validation by Microcalorimetry and Crystallography. <i>PLoS ONE</i> , 2013, 8, e71149.	1.1	25
202	Multivalent Glycomimetics with Affinity and Selectivity toward Fucose-Binding Receptors from Emerging Pathogens. <i>Bioconjugate Chemistry</i> , 2018, 29, 83-88.	1.8	25
203	Tetraphenylethylene-based glycoclusters with aggregation-induced emission (AIE) properties as high-affinity ligands of bacterial lectins. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 8804-8809.	1.5	25
204	A Recombinant Fungal Lectin for Labeling Truncated Glycans on Human Cancer Cells. <i>PLoS ONE</i> , 2015, 10, e0128190.	1.1	25
205	Molecular Modelling of the Interaction Between the Catalytic Site of Pig Pancreatic alpha-Amylase and Amylose Fragments. <i>FEBS Journal</i> , 1995, 232, 284-293.	0.2	24
206	Combined NMR and molecular modeling study of an iduronic acid-containing trisaccharide related to antithrombotic heparin fragments. <i>Bioorganic and Medicinal Chemistry</i> , 1997, 5, 1301-1309.	1.4	24
207	The C-type lectin L-SIGN differentially recognizes glycan antigens on egg glycosphingolipids and soluble egg glycoproteins from <i>Schistosoma mansoni</i> . <i>Glycobiology</i> , 2007, 17, 1104-1119.	1.3	24
208	Influence of ligand presentation density on the molecular recognition of mannose-functionalised glyconanoparticles by bacterial lectin BC2L-A. <i>Glycoconjugate Journal</i> , 2013, 30, 747-757.	1.4	24
209	Importance of the polarity of the glycosaminoglycan chain on the interaction with FGF-1. <i>Glycobiology</i> , 2014, 24, 1004-1009.	1.3	24
210	Comparative aspects of glycosyltransferases. <i>Biochemical Society Symposia</i> , 2002, 69, 23-32.	2.7	24
211	Crystal Structure of Tricolorin A: Molecular Rationale for the Biological Properties of Resin Glycosides Found in Some Mexican Herbal Remedies. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 5918-5922.	7.2	23
212	Structural Diversities of Lectins Binding to the Glycosphingolipid Gb3. <i>Frontiers in Molecular Biosciences</i> , 2021, 8, 704685.	1.6	23
213	Lipopolysaccharides at Solid and Liquid Interfaces: Models for Biophysical Studies of the Gram-negative Bacterial Outer Membrane. <i>Advances in Colloid and Interface Science</i> , 2022, 301, 102603.	7.0	23
214	Solvent effect on the stability of isomaltose conformers. <i>Biopolymers</i> , 1990, 30, 369-379.	1.2	22
215	Polymorphism in the Crystal Structure of the Cellulose Fragment Analogue Methyl 4-O-Methyl- $\beta$ -D-Glucopyranosyl-(1-4)- $\beta$ -D-Glucopyranoside. <i>Angewandte Chemie - International Edition</i> , 2002, 41, 4277-4281.	7.2	22
216	Combining fold recognition and exploratory data analysis for searching for glycosyltransferases in the genome of <i>Mycobacterium tuberculosis</i> . <i>Biochimie</i> , 2003, 85, 691-700.	1.3	22

#	ARTICLE	IF	CITATIONS
217	Recombinant fungal lectin as a new tool to investigate <i>O</i> -GlcNAcylation processes. <i>Glycobiology</i> , 2017, 27, 123-128.	1.3	22
218	Effect of Noncanonical Amino Acids on Protein-Carbohydrate Interactions: Structure, Dynamics, and Carbohydrate Affinity of a Lectin Engineered with Fluorinated Tryptophan Analogs. <i>ACS Chemical Biology</i> , 2018, 13, 2211-2219.	1.6	22
219	Internal motion in carbohydrates as probed by n.m.r. spectroscopy. <i>International Journal of Biological Macromolecules</i> , 1993, 15, 52-55.	3.6	21
220	Knowledge-based modeling of a legume lectin and docking of the carbohydrate ligand: The <i>Ulex europaeus</i> lectin I and its interaction with fucose. <i>Journal of Molecular Graphics</i> , 1996, 14, 322-327.	1.7	20
221	Molecular dynamics study of <i>Pseudomonas aeruginosa</i> lectin complexed with monosaccharides. <i>Proteins: Structure, Function and Bioinformatics</i> , 2008, 72, 382-392.	1.5	20
222	Simulation of Carbohydrates, from Molecular Docking to Dynamics in Water. <i>Methods in Molecular Biology</i> , 2013, 924, 469-483.	0.4	20
223	Development of a competitive binding assay for the <i>Burkholderia cenocepacia</i> lectin BC2L-A and structure activity relationship of natural and synthetic inhibitors. <i>MedChemComm</i> , 2016, 7, 519-530.	3.5	20
224	Transferred Nuclear Overhauser Enhancement (NOE) and Rotating-Frame NOE Experiments Reflect the Size of the Bound Segment of the Forssman Pentasaccharide in the Binding Site of Dolichos Biflorus Lectin. <i>FEBS Journal</i> , 1997, 244, 242-250.	0.2	19
225	Validation of two conformational searching methods applied to sucrose: simulation of NMR and chiro-optical data. <i>Computational and Theoretical Chemistry</i> , 1997, 395-396, 211-224.	1.5	19
226	Fold recognition study of alpha3-galactosyltransferase and molecular modeling of the nucleotide sugar-binding domain. <i>Glycobiology</i> , 1999, 9, 713-722.	1.3	19
227	How a Plant Lectin Recognizes High Mannose Oligosaccharides. <i>Plant Physiology</i> , 2007, 144, 1733-1741.	2.3	19
228	Conformational Preferences of the Aglycon Moiety in Models and Analogs of GlcNAc-Asn Linkage: Crystal Structures and ab Initio Quantum Chemical Calculations of N-(1,2-d-Glycopyranosyl)haloacetamides. <i>Journal of the American Chemical Society</i> , 2008, 130, 8317-8325.	6.6	19
229	Molecular model of human heparanase with proposed binding mode of a heparan sulfate oligosaccharide and catalytic amino acids. <i>Biopolymers</i> , 2012, 97, 21-34.	1.2	19
230	A rapid synthesis of low-nanomolar divalent LecA inhibitors in four linear steps from <i>d</i> -galactose pentaacetate. <i>Chemical Communications</i> , 2020, 56, 8822-8825.	2.2	19
231	A Comprehensive Phylogenetic and Bioinformatics Survey of Lectins in the Fungal Kingdom. <i>Journal of Fungi</i> (Basel, Switzerland), 2021, 7, 453.	1.5	19
232	How do antibodies and lectins recognize histo-blood group antigens? A 3D-QSAR study by comparative molecular field analysis (CoMFA). <i>Bioorganic and Medicinal Chemistry</i> , 1996, 4, 1979-1988.	1.4	18
233	Stereochemical analysis of <i>d</i> -glucopyranosyl-sulfoxides via a combined NMR, molecular modeling and X-ray crystallographic approach. <i>Tetrahedron: Asymmetry</i> , 1999, 10, 2881-2889.	1.8	18
234	Solution structure of two xenoantigens: Gal-LacNAc and Gal-Lewis X. <i>Glycobiology</i> , 2002, 12, 241-250.	1.3	18



#	ARTICLE	IF	CITATIONS
235	Production of recombinant xenotransplantation antigen in Escherichia coli. Biochemical and Biophysical Research Communications, 2003, 302, 620-624.	1.0	18
236	Organization of Human Interferon $\beta$ -Heparin Complexes from Solution Properties and Hydrodynamics. Biochemistry, 2006, 45, 13227-13238.	1.2	18
237	Synthesis of branched-phosphodiester and mannose-centered fucosylated glycoclusters and their binding studies with Burkholderia ambifaria lectin (BambL). RSC Advances, 2013, 3, 19515.	1.7	18
238	Linear and cyclic oligo- $\beta$ -(1 $\rightarrow$ 6)-D-glucosamines: Synthesis, conformations, and applications for design of a vaccine and oligodentate glycoconjugates. Pure and Applied Chemistry, 2013, 85, 1879-1891.	0.9	18
239	Secondary sugar binding site identified for LecA lectin from <i>Pseudomonas aeruginosa</i> . Proteins: Structure, Function and Bioinformatics, 2014, 82, 1060-1065.	1.5	18
240	Selective high-resolution DNP-enhanced NMR of biomolecular binding sites. Chemical Science, 2019, 10, 3366-3374.	3.7	18
241	Molecular dynamics simulations of solvated UDP-glucose in interaction with Mg <sup>2+</sup> cations. FEBS Journal, 2001, 268, 5365-5374.	0.2	17
242	Algal lectin binding to core (1 $\rightarrow$ 6) fucosylated N-glycans: Structural basis for specificity and production of recombinant protein. Glycobiology, 2015, 25, 607-616.	1.3	17
243	Heteroglycoclusters With Dual Nanomolar Affinities for the Lectins LecA and LecB From <i>Pseudomonas aeruginosa</i> . Frontiers in Chemistry, 2019, 7, 666.	1.8	17
244	Non-Carbohydrate Glycomimetics as Inhibitors of Calcium(II)-Binding Lectins. Angewandte Chemie - International Edition, 2021, 60, 8104-8114.	7.2	17
245	Carcinoma-associated fucosylated antigens are markers of the epithelial state and can contribute to cell adhesion through CLEC17A (Prolectin). Oncotarget, 2016, 7, 14064-14082.	0.8	17
246	A conformational study of the xyloglucan oligomer, XXXG, by NMR spectroscopy and molecular modeling. Biopolymers, 2000, 54, 11-26.	1.2	16
247	Synthesis of Mannosylated Glycodendrimers and Evaluation against BC2L Lectin from <i>Burkholderia Cenocepacia</i> . ChemPlusChem, 2017, 82, 390-398.	1.3	16
248	GAG-DB, the New Interface of the Three-Dimensional Landscape of Glycosaminoglycans. Biomolecules, 2020, 10, 1660.	1.8	16
249	Practical Tools for Molecular Modeling of Complex Carbohydrates and Their Interactions with Proteins. Jerusalem Symposia on Quantum Chemistry and Biochemistry, 1995, , 425-454.	0.2	16
250	Solvent-dependent conformational behaviour of lipochitoligosaccharides related to Nod factors. Carbohydrate Research, 1999, 318, 10-19.	1.1	15
251	Carbohydrate binding specificities and crystal structure of the cholera toxin-like B-subunit from <i>Citrobacter freundii</i> . Biochimie, 2010, 92, 482-490.	1.3	15
252	Comparison of force-fields parametrizations as applied to conformational analysis of ribofuranosides. Computational and Theoretical Chemistry, 1998, 424, 269-280.	1.5	14



#	ARTICLE	IF	CITATIONS
253	Convergent Synthesis, NMR and Conformational Analysis of Tetra- and Pentasaccharide Haptens of the <i>Shigella flexneri</i> Serotype 5a O-Specific Polysaccharide. <i>European Journal of Organic Chemistry</i> , 2002, 2002, 2486.	1.2	14
254	Dramatic effect of PSE clamping on the behaviour of d-glucal under Ferrier I conditions. <i>Tetrahedron Letters</i> , 2008, 49, 3484-3488.	0.7	14
255	Molecular arrangement between multivalent glycocluster and <i>Pseudomonas aeruginosa</i> LecA (PA $\alpha$ HL) by atomic force microscopy: influence of the glycocluster concentration. <i>Journal of Molecular Recognition</i> , 2013, 26, 694-699.	1.1	14
256	Perylenediimide-based glycoclusters as high affinity ligands of bacterial lectins: synthesis, binding studies and anti-adhesive properties. <i>Organic and Biomolecular Chemistry</i> , 2017, 15, 10037-10043.	1.5	14
257	Conformational behavior of nucleotide-sugar in solution: Molecular dynamics and NMR study of solvated uridine diphosphate-glucose in the presence of monovalent cations. <i>Biopolymers</i> , 2001, 58, 617-635.	1.2	13
258	Molecular dynamics simulations of glycosyltransferase LgtC. <i>Carbohydrate Research</i> , 2004, 339, 995-1006.	1.1	13
259	The relative orientation of the lipid and carbohydrate moieties of lipochitooligosaccharides related to nodulation factors depends on lipid chain saturation. <i>Organic and Biomolecular Chemistry</i> , 2005, 3, 1381-1386.	1.5	13
260	Structural basis for the recognition of complex-type biantennary oligosaccharides by <i>Pterocarpus angolensis</i> lectin. <i>FEBS Journal</i> , 2006, 273, 2407-2420.	2.2	13
261	The flexibility of the LeaLex Tumor Associated Antigen central fragment studied by systematic and stochastic searches as well as dynamic simulations. <i>Bioorganic and Medicinal Chemistry</i> , 2009, 17, 1514-1526.	1.4	13
262	Expeditive synthesis of trithiotriazine-cored glycoclusters and inhibition of <i>Pseudomonas aeruginosa</i> biofilm formation. <i>Beilstein Journal of Organic Chemistry</i> , 2014, 10, 1981-1990.	1.3	13
263	PNA-Based Dynamic Combinatorial Libraries (PDCL) and screening of lectins. <i>Bioorganic and Medicinal Chemistry</i> , 2020, 28, 115458.	1.4	13
264	Neutron crystallography reveals mechanisms used by <i>Pseudomonas aeruginosa</i> for host-cell binding. <i>Nature Communications</i> , 2022, 13, 194.	5.8	13
265	Covalent Lectin Inhibition and Application in Bacterial Biofilm Imaging. <i>Angewandte Chemie</i> , 2017, 129, 16786-16791.	1.6	12
266	Druggable Allosteric Sites in $\beta$ -Propeller Lectins. <i>Angewandte Chemie - International Edition</i> , 2022, 61, e202109339.	7.2	12
267	The Two Sweet Sides of Janus Lectin Drive Crosslinking of Liposomes to Cancer Cells and Material Uptake. <i>Toxins</i> , 2021, 13, 792.	1.5	12
268	Targeting the Central Pocket of the <i>Pseudomonas aeruginosa</i> Lectin LecA. <i>ChemBioChem</i> , 2021, , .	1.3	12
269	Chemo-enzymatic synthesis of conformationally constrained oligosaccharides. <i>Organic and Biomolecular Chemistry</i> , 2003, 1, 3891-3899.	1.5	11
270	Conformational Preferences of the O-Antigen Polysaccharides of <i>Escherichia coli</i> O5ac and O5ab Using NMR Spectroscopy and Molecular Modeling. <i>Biomacromolecules</i> , 2013, 14, 2215-2224.	2.6	11

#	ARTICLE	IF	CITATIONS
271	Proteome-wide prediction of bacterial carbohydrate-binding proteins as a tool for understanding commensal and pathogen colonisation of the vaginal microbiome. <i>Npj Biofilms and Microbiomes</i> , 2021, 7, 49.	2.9	11
272	Pillar[5]arene-Based Polycationic Glyco[2]rotaxanes Designed as <i>Pseudomonas aeruginosa</i> Antibiofilm Agents. <i>Journal of Medicinal Chemistry</i> , 2021, 64, 14728-14744.	2.9	11
273	Three-dimensional structure analysis of the crystalline moiety of A-starch. <i>Food Hydrocolloids</i> , 1987, 1, 455-459.	5.6	10
274	Stereochemical analysis of d-galacto-sulfoxides using (S)-1±-methoxyphenylacetic acid. <i>Tetrahedron: Asymmetry</i> , 1997, 8, 1959-1961.	1.8	10
275	Spectroscopic Characterization of the Metal-Binding Sites in the Periplasmic Metal-Sensor Domain of CnrX from <i>Cupriavidus metallidurans</i> CH34. <i>Biochemistry</i> , 2011, 50, 9036-9045.	1.2	10
276	NMR and molecular modeling reveal key structural features of synthetic nodulation factors. <i>Glycobiology</i> , 2011, 21, 824-833.	1.3	10
277	Biophysical characterization and structural determination of the potent cytotoxic <i>Psathyrella asperospora</i> lectin. <i>Proteins: Structure, Function and Bioinformatics</i> , 2017, 85, 969-975.	1.5	10
278	Specific Targeting of Plant and Apicomplexa Parasite Tubulin through Differential Screening Using In Silico and Assay-Based Approaches. <i>International Journal of Molecular Sciences</i> , 2018, 19, 3085.	1.8	10
279	Structural Database for Lectins and the UniLectin Web Platform. <i>Methods in Molecular Biology</i> , 2020, 2132, 1-14.	0.4	10
280	Practical tools for molecular modeling of complex carbohydrates and their interactions with proteins. <i>Molecular Engineering</i> , 1995, 5, 271-300.	0.2	9
281	Structure and Conformation of Mannoamidines by Nmr and Molecular Modeling: are They Good Transition State Mimics?. <i>Journal of Carbohydrate Chemistry</i> , 1996, 15, 985-1000.	0.4	9
282	A novel seven-membered carbohydrate phostone. <i>Tetrahedron Letters</i> , 2003, 44, 8797-8800.	0.7	9
283	Examination of the effect of structural variation on the N-glycosidic torsion ( $\phi$ ) among N-(1 <sup>2</sup> -d-glycopyranosyl)acetamido and propionamido derivatives of monosaccharides based on crystallography and quantum chemical calculations. <i>Carbohydrate Research</i> , 2009, 344, 355-361.	1.1	9
284	Low-Temperature Neutron Diffraction Structures of N-Glycoprotein Linkage Models and Analogues: Structure Refinement and Trifurcated Hydrogen Bonds. <i>Journal of the American Chemical Society</i> , 2011, 133, 10042-10045.	6.6	9
285	Biochemical and structural characterization of the novel sialic acid-binding site of <i>Escherichia coli</i> heat-labile enterotoxin LT-IIb. <i>Biochemical Journal</i> , 2016, 473, 3923-3936.	1.7	9
286	Dynamic Cooperative Glycan Assembly Blocks the Binding of Bacterial Lectins to Epithelial Cells. <i>Angewandte Chemie</i> , 2017, 129, 6866-6870.	1.6	9
287	Virtual Screening Against Carbohydrate-Binding Proteins: Evaluation and Application to Bacterial <i>Burkholderia ambifaria</i> Lectin. <i>Journal of Chemical Information and Modeling</i> , 2018, 58, 1976-1989.	2.5	9
288	The Five Bacterial Lectins (PA-IL, PA-IIL, RSL, RS-IIL, and CV-IIL): Interactions with Diverse Animal Cells and Glycoproteins. <i>Advances in Experimental Medicine and Biology</i> , 2011, 705, 155-211.	0.8	9

#	ARTICLE	IF	CITATIONS
289	Targeting undruggable carbohydrate recognition sites through focused fragment library design. <i>Communications Chemistry</i> , 2022, 5, .	2.0	9
290	Conformational analysis of biantennary glycans and molecular modeling of their complexes with lentil lectin. <i>Journal of Molecular Graphics and Modelling</i> , 1997, 15, 37-42.	1.3	8
291	Molecular Simulations of Carbohydrates with a Fucose-Binding Burkholderia ambifaria Lectin Suggest Modulation by Surface Residues Outside the Fucose-Binding Pocket. <i>Frontiers in Pharmacology</i> , 2017, 8, 393.	1.6	8
292	Fucosylated ubiquitin and orthogonally glycosylated mutant A28C: conceptually new ligands for <i>Burkholderia ambifaria</i> lectin (BambL). <i>Chemical Science</i> , 2020, 11, 12662-12670.	3.7	8
293	Visualization of hydrogen atoms in a perdeuterated lectin-fucose complex reveals key details of protein-carbohydrate interactions. <i>Structure</i> , 2021, 29, 1003-1013.e4.	1.6	8
294	LecA (PA-IL): A Galactose-Binding Lectin from <i>Pseudomonas aeruginosa</i> . <i>Methods in Molecular Biology</i> , 2020, 2132, 257-266.	0.4	8
295	A Bacterial Mannose Binding Lectin as a Tool for the Enrichment of C- and O-Mannosylated Peptides. <i>Analytical Chemistry</i> , 2022, 94, 7329-7338.	3.2	8
296	Combined NMR, grid search/MM3 and Metropolis Monte Carlo/GEGOP studies of two l-fucose containing disaccharides: $\alpha$ -l-Fuc-(1,4)- $\beta$ -d-GlcNAc-OMe and $\alpha$ -l-Fuc-(1,6)- $\beta$ -d-GlcNAc-OMe. <i>Computational and Theoretical Chemistry</i> , 1997, 395-396, 297-311.	1.5	7
297	Single-coordinate-driving method for molecular docking: application to modeling of guest inclusion in cyclodextrin. <i>Journal of Molecular Graphics and Modelling</i> , 2000, 18, 108-118.	1.3	6
298	Molecular Modeling of Glycosyltransferases. , 2006, 347, 145-156.		6
299	Monitoring Lectin Interactions with Carbohydrates. <i>Methods in Molecular Biology</i> , 2014, 1149, 403-414.	0.4	6
300	$\alpha$ -Alkylated heavy atom carbohydrate probes for protein X-ray crystallography: Studies towards the synthesis of methyl 2- $\alpha$ -methyl-L-selenofucopyranoside. <i>Beilstein Journal of Organic Chemistry</i> , 2016, 12, 2828-2833.	1.3	6
301	Cyclotrimeratrylene-Based Glycoclusters as High Affinity Ligands of Bacterial Lectins from <i>Pseudomonas aeruginosa</i> and <i>Burkholderia ambifaria</i> . <i>ChemistrySelect</i> , 2016, 1, 5863-5868.	0.7	6
302	Induction of rare conformation of oligosaccharide by binding to calcium-dependent bacterial lectin: X-ray crystallography and modelling study. <i>European Journal of Medicinal Chemistry</i> , 2019, 177, 212-220.	2.6	6
303	Production of perdeuterated fucose from glyco-engineered bacteria. <i>Glycobiology</i> , 2021, 31, 151-158.	1.3	6
304	Prediction and Validation of a Druggable Site on Virulence Factor of Drug Resistant <i>Burkholderia cenocepacia</i> . <i>Chemistry - A European Journal</i> , 2021, 27, 10341-10348.	1.7	6
305	Adsorption characterization of various modified $\beta$ -cyclodextrins onto TEMPO-oxidized cellulose nanofibril membranes and cryogels. <i>Sustainable Chemistry and Pharmacy</i> , 2021, 24, 100523.	1.6	6
306	Predicting helical structures of the exopolysaccharide produced by <i>Lactobacillus sake</i> . <i>Carbohydrate Research</i> , 1996, 288, 57-74.	1.1	5

#	ARTICLE	IF	CITATIONS
307	The crystal and molecular structure of a diglycosylamine: the N-analogue of peracetylated $\beta$ , $\beta$ -trehalose. <i>Carbohydrate Research</i> , 1998, 311, 135-146.	1.1	5
308	Synthetic glycobiology. <i>Interface Focus</i> , 2019, 9, 20190004.	1.5	5
309	Expeditious Synthesis of $\alpha$ -Glycosyl Barbiturate Ligands of Bacterial Lectins: From Monomer Design to Glycoclusters and Glycopolymers. <i>Bioconjugate Chemistry</i> , 2019, 30, 647-656.	1.8	5
310	Characterization of novel lectins from <i>Burkholderia pseudomallei</i> and <i>Chromobacterium violaceum</i> with seven-bladed $\beta$ -propeller fold. <i>International Journal of Biological Macromolecules</i> , 2020, 152, 1113-1124.	3.6	5
311	Specific Time Course of Peroxidase Oxidation in the Presence of SH-Containing Inhibitors. Comparison with the Inhibition of Polyphenoloxidase Activities. <i>Plant and Cell Physiology</i> , 1984, 25, 1389-1394.	1.5	4
312	Synthesis of D-Galactopyranosylphosphonic and (D-Galactopyranosylmethyl)phosphonic Acids as Intermediates of Inhibitors of Galactosyltransferases. <i>Collection of Czechoslovak Chemical Communications</i> , 2006, 71, 1659-1672.	1.0	4
313	A Bioinformatics View of Glycan-Virus Interactions. <i>Viruses</i> , 2019, 11, 374.	1.5	4
314	UniLectin, A One-Stop Shop to Explore and Study Carbohydrate-Binding Proteins. <i>Current Protocols</i> , 2021, 1, e305.	1.3	4
315	Carbohydrates and glycoconjugates. <i>Current Opinion in Structural Biology</i> , 1999, 9, 547-548.	2.6	3
316	Effect of Cation Concentration on Molecular Dynamics Simulations of UDP-Glucose. <i>Molecular Simulation</i> , 2000, 24, 325-340.	0.9	3
317	Structures of a human blood group glycosyltransferase in complex with a photo-activatable UDP-Gal derivative reveal two different binding conformations. <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2014, 70, 1015-1021.	0.4	3
318	Glyco3D: A Suite of Interlinked Databases of 3D Structures of Complex Carbohydrates, Lectins, Antibodies, and Glycosyltransferases. , 2017, , 133-161.		3
319	Non-Carbohydrate Glycomimetics as Inhibitors of Calcium(II)-Binding Lectins. <i>Angewandte Chemie</i> , 2021, 133, 8185-8195.	1.6	3
320	Crystal and Molecular Structures of Two AZA-Heterocyclic Derivatives of 6-Thio-D-Galactopyranose. <i>Journal of Carbohydrate Chemistry</i> , 1998, 17, 923-936.	0.4	2
321	Carbohydrate binding, quaternary structure and a novel hydrophobic binding site in two legume lectin oligomers from <i>Dolichos biflorus</i> . <i>Journal of Molecular Biology</i> , 1999, 288, 1037.	2.0	2
322	Crystal Structure of Tricolorin A: Molecular Rationale for the Biological Properties of Resin Glycosides Found in Some Mexican Herbal Remedies. <i>Angewandte Chemie</i> , 2004, 116, 6044-6048.	1.6	2
323	Molecular Basis for the Biosynthesis of Oligo- and Polysaccharides. , 2008, , 2265-2323.		2
324	3D-Lectin Database. , 2014, , 1-7.		2

#	ARTICLE	IF	CITATIONS
325	Predicting helical structures of the exopolysaccharide produced by <i>Lactobacillus sake</i> O-1. <i>Carbohydrate Research</i> , 1996, 288, 57-74.	1.1	2
326	Engineering the Ligand Specificity of the Human Galectin-1 by Incorporation of Tryptophan Analogues. <i>ChemBioChem</i> , 2022, , .	1.3	2
327	(4R,9S)-4-Hydroxymethyl-3,8-dioxo-1,6-diazaspiro[4.4]nonane-2,7-dithione monohydrate. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2004, 60, o2399-o2401.	0.2	1
328	Detection of Lectins using Glyco-Functionalized Nanosensors. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1451, 191-196.	0.1	1
329	Pillar[5]arene-Based Glycoclusters: Synthesis and Multivalent Binding to Pathogenic Bacterial Lectins. <i>Chemistry - A European Journal</i> , 2016, 22, 2837-2837.	1.7	1
330	The Lectin LecB Induces Patches with Basolateral Characteristics at the Apical Membrane to Promote <i>Pseudomonas aeruginosa</i> Host Cell Invasion. <i>MBio</i> , 2022, 13, e0081922.	1.8	1
331	Conformations of cell surface oligosaccharides and recognition by lectins from pathogens. <i>International Journal of Experimental Pathology</i> , 2004, 85, A50-A51.	0.6	0
332	Crystallography and Lectin Structure Database. , 2007, , 15-50.		0
333	Molecular Modeling Study of the Carbohydrate Region of the Endotoxin from <i>Burkholderia cenocepacia</i> . <i>European Journal of Organic Chemistry</i> , 2011, 2011, 5114-5122.	1.2	0
334	High affinity binding strategies for bacterial lectins interacting with eukaryotic carbohydrates. <i>FASEB Journal</i> , 2006, 20, A58.	0.2	0
335	Bacterial Lectins and Adhesins: Structures, Ligands and Functions. , 2012, , 3-11.		0
336	3D-Lectin Database. , 2015, , 283-289.		0
337	LecB, a High Affinity Soluble Fucose-Binding Lectin from <i>Pseudomonas aeruginosa</i> . <i>Methods in Molecular Biology</i> , 2020, 2132, 475-482.	0.4	0
338	Druggable Allosteric sites in $\beta$ -propeller lectins. <i>Angewandte Chemie</i> , 2022, 134, e202109339.	1.6	0