Jun Hirabayashi

List of Publications by Citations

Source: https://exaly.com/author-pdf/6497186/jun-hirabayashi-publications-by-citations.pdf

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

60 12,841 105 243 h-index g-index citations papers 6.11 13,821 247 4.9 avg, IF L-index ext. papers ext. citations

#	Paper	IF	Citations
243	Galectins: a family of animal beta-galactoside-binding lectins. <i>Cell</i> , 1994 , 76, 597-8	56.2	1020
242	Oligosaccharide specificity of galectins: a search by frontal affinity chromatography. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2002 , 1572, 232-54	4	697
241	Lectin affinity capture, isotope-coded tagging and mass spectrometry to identify N-linked glycoproteins. <i>Nature Biotechnology</i> , 2003 , 21, 667-72	44.5	565
240	The family of metazoan metal-independent beta-galactoside-binding lectins: structure, function and molecular evolution. <i>Glycobiology</i> , 1993 , 3, 297-304	5.8	447
239	Evanescent-field fluorescence-assisted lectin microarray: a new strategy for glycan profiling. <i>Nature Methods</i> , 2005 , 2, 851-6	21.6	436
238	C-type lectin Mincle is an activating receptor for pathogenic fungus, Malassezia. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 1897-902	11.5	305
237	Recombinant galectin-1 and its genetic delivery suppress collagen-induced arthritis via T cell apoptosis. <i>Journal of Experimental Medicine</i> , 1999 , 190, 385-98	16.6	302
236	Growth-regulatory human galectin-1: crystallographic characterisation of the structural changes induced by single-site mutations and their impact on the thermodynamics of ligand binding. <i>Journal of Molecular Biology</i> , 2004 , 343, 957-70	6.5	244
235	Galectin-3 interaction with Thomsen-Friedenreich disaccharide on cancer-associated MUC1 causes increased cancer cell endothelial adhesion. <i>Journal of Biological Chemistry</i> , 2007 , 282, 773-81	5.4	212
234	Lectin microarrays: concept, principle and applications. <i>Chemical Society Reviews</i> , 2013 , 42, 4443-58	58.5	208
233	Lectin-based structural glycomics: glycoproteomics and glycan profiling. <i>Glycoconjugate Journal</i> , 2004 , 21, 35-40	3	205
232	Visualization of galectin-3 oligomerization on the surface of neutrophils and endothelial cells using fluorescence resonance energy transfer. <i>Journal of Biological Chemistry</i> , 2007 , 282, 1374-83	5.4	176
231	Inhibition of tumor cell-induced platelet aggregation using a novel anti-podoplanin antibody reacting with its platelet-aggregation-stimulating domain. <i>Biochemical and Biophysical Research Communications</i> , 2006 , 349, 1301-7	3.4	167
230	Galectin-1 suppresses autoimmune retinal disease by promoting concomitant Th2- and T regulatory-mediated anti-inflammatory responses. <i>Journal of Immunology</i> , 2006 , 176, 6323-32	5.3	162
229	Glycome diagnosis of human induced pluripotent stem cells using lectin microarray. <i>Journal of Biological Chemistry</i> , 2011 , 286, 20345-53	5.4	151
228	Galectin-9 increases Tim-3+ dendritic cells and CD8+ T cells and enhances antitumor immunity via galectin-9-Tim-3 interactions. <i>Journal of Immunology</i> , 2008 , 181, 7660-9	5.3	147
227	Galectin-1 acts as a soluble host factor that promotes HIV-1 infectivity through stabilization of virus attachment to host cells. <i>Journal of Immunology</i> , 2005 , 174, 4120-6	5.3	145

(2001-2007)

226	A novel strategy for mammalian cell surface glycome profiling using lectin microarray. <i>Glycobiology</i> , 2007 , 17, 1138-46	5.8	143	
225	A novel biological activity for galectin-1: inhibition of leukocyte-endothelial cell interactions in experimental inflammation. <i>American Journal of Pathology</i> , 2003 , 163, 1505-15	5.8	125	
224	Concept, strategy and realization of lectin-based glycan profiling. <i>Journal of Biochemistry</i> , 2008 , 144, 139-47	3.1	117	
223	Glycoconjugate microarray based on an evanescent-field fluorescence-assisted detection principle for investigation of glycan-binding proteins. <i>Glycobiology</i> , 2008 , 18, 789-98	5.8	117	
222	Frontal affinity chromatography: sugar-protein interactions. <i>Nature Protocols</i> , 2007 , 2, 2529-37	18.8	115	
221	Stimulation of proliferation of rat hepatic stellate cells by galectin-1 and galectin-3 through different intracellular signaling pathways. <i>Journal of Biological Chemistry</i> , 2003 , 278, 18938-44	5.4	106	
220	Nucleotide sequence of chick 14K beta-galactoside-binding lectin mRNA. <i>Biochemical and Biophysical Research Communications</i> , 1986 , 134, 51-6	3.4	96	
219	Polylactosamine on glycoproteins influences basal levels of lymphocyte and macrophage activation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 15829-34	11.5	95	
218	Focused differential glycan analysis with the platform antibody-assisted lectin profiling for glycan-related biomarker verification. <i>Molecular and Cellular Proteomics</i> , 2009 , 8, 99-108	7.6	93	
217	Specific recognition of Leishmania major poly-beta-galactosyl epitopes by galectin-9: possible implication of galectin-9 in interaction between L. major and host cells. <i>Journal of Biological Chemistry</i> , 2003 , 278, 22223-30	5.4	93	
216	Comparative analysis of core-fucose-binding lectins from Lens culinaris and Pisum sativum using frontal affinity chromatography. <i>Glycobiology</i> , 2009 , 19, 527-36	5.8	92	
215	Elucidation of binding specificity of Jacalin toward O-glycosylated peptides: quantitative analysis by frontal affinity chromatography. <i>Glycobiology</i> , 2006 , 16, 46-53	5.8	87	
214	Functional glycosylation of human podoplanin: glycan structure of platelet aggregation-inducing factor. <i>FEBS Letters</i> , 2007 , 581, 331-6	3.8	85	
213	Frontal affinity chromatography as a tool for elucidation of sugar recognition properties of lectins. <i>Methods in Enzymology</i> , 2003 , 362, 353-68	1.7	85	
212	Elimination of tumorigenic human pluripotent stem cells by a recombinant lectin-toxin fusion protein. <i>Stem Cell Reports</i> , 2015 , 4, 811-20	8	80	
211	A novel core fucose-specific lectin from the mushroom Pholiota squarrosa. <i>Journal of Biological Chemistry</i> , 2012 , 287, 33973-82	5.4	79	
210	Engineering of mucin-type human glycoproteins in yeast cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 3232-7	11.5	77	
209	Regulated expression and effect of galectin-1 on Trypanosoma cruzi-infected macrophages: modulation of microbicidal activity and survival. <i>Infection and Immunity</i> , 2001 , 69, 6804-12	3.7	77	

208	Functional analysis of the carbohydrate recognition domains and a linker peptide of galectin-9 as to eosinophil chemoattractant activity. <i>Glycobiology</i> , 2002 , 12, 191-7	5.8	77
207	Human placenta beta-galactoside-binding lectin. Purification and some properties. <i>Biochemical and Biophysical Research Communications</i> , 1984 , 122, 938-44	3.4	75
206	Wisteria floribunda agglutinin-positive mucin 1 is a sensitive biliary marker for human cholangiocarcinoma. <i>Hepatology</i> , 2010 , 52, 174-82	11.2	74
205	Phylogenetic and specificity studies of two-domain GNA-related lectins: generation of multispecificity through domain duplication and divergent evolution. <i>Biochemical Journal</i> , 2007 , 404, 51-61	3.8	73
204	Separation technologies for glycomics. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2002 , 771, 67-87	3.2	73
203	The function of rhamnose-binding lectin in innate immunity by restricted binding to Gb3. Developmental and Comparative Immunology, 2009 , 33, 187-97	3.2	72
202	Complete amino acid sequence of a beta-galactoside-binding lectin from human placenta. <i>Journal of Biochemistry</i> , 1988 , 104, 1-4	3.1	72
201	Human Milk Oligosaccharides as Essential Tools for Basic and Application Studies on Galectins. <i>Trends in Glycoscience and Glycotechnology</i> , 2018 , 30, SE51-SE65	0.1	72
200	Systematic comparison of oligosaccharide specificity of Ricinus communis agglutinin I and Erythrina lectins: a search by frontal affinity chromatography. <i>Journal of Biochemistry</i> , 2007 , 142, 459-69	3.1	71
199	Glycome project: concept, strategy and preliminary application to Caenorhabditis elegans. <i>Proteomics</i> , 2001 , 1, 295-303	4.8	70
198	Lectin microarray analysis of pluripotent and multipotent stem cells. <i>Genes To Cells</i> , 2011 , 16, 1-11	2.3	69
197	Structural analysis of the human galectin-9 N-terminal carbohydrate recognition domain reveals unexpected properties that differ from the mouse orthologue. <i>Journal of Molecular Biology</i> , 2008 , 375, 119-35	6.5	69
196	Sugar binding properties of the two lectin domains of the tandem repeat-type galectin LEC-1 (N32) of Caenorhabditis elegans. Detailed analysis by an improved frontal affinity chromatography method. <i>Journal of Biological Chemistry</i> , 2001 , 276, 3068-77	5.4	69
195	Structural and quantitative evidence for dynamic glycome shift on production of induced pluripotent stem cells. <i>Molecular and Cellular Proteomics</i> , 2012 , 11, 1913-23	7.6	68
194	Expression of endogenous galectin-1 and galectin-3 in intrahepatic cholangiocarcinoma. <i>Human Pathology</i> , 2001 , 32, 302-10	3.7	67
193	An exo-beta-1,3-galactanase having a novel beta-1,3-galactan-binding module from Phanerochaete chrysosporium. <i>Journal of Biological Chemistry</i> , 2005 , 280, 25820-9	5.4	66
192	Lectin-based structural glycomics: a practical approach to complex glycans. <i>Electrophoresis</i> , 2011 , 32, 1118-28	3.6	64
191	Mechanism by which the lectin actinohivin blocks HIV infection of target cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 15633-8	11.5	63

(2004-2009)

190	Strategy for glycoproteomics: identification of glyco-alteration using multiple glycan profiling tools. <i>Journal of Proteome Research</i> , 2009 , 8, 1358-67	5.6	63
189	Production of a recombinant mouse monoclonal antibody in transgenic silkworm cocoons. <i>FEBS Journal</i> , 2009 , 276, 5806-20	5.7	62
188	Dual specificity of Langerin to sulfated and mannosylated glycans via a single C-type carbohydrate recognition domain. <i>Journal of Biological Chemistry</i> , 2010 , 285, 6390-400	5.4	61
187	Multilectin assay for detecting fibrosis-specific glyco-alteration by means of lectin microarray. <i>Clinical Chemistry</i> , 2011 , 57, 48-56	5.5	61
186	Application of lectin microarray to crude samples: differential glycan profiling of lec mutants. <i>Journal of Biochemistry</i> , 2006 , 139, 323-7	3.1	60
185	Oligosaccharide microarrays for glycomics. <i>Trends in Biotechnology</i> , 2003 , 21, 141-3; discussion 143	15.1	60
184	Comparative analysis of carbohydrate-binding properties of two tandem repeat-type Jacalin-related lectins, Castanea crenata agglutinin and Cycas revoluta leaf lectin. <i>FEBS Journal</i> , 2005 , 272, 2784-99	5.7	60
183	Novel galactose-binding proteins in Annelida. Characterization of 29-kDa tandem repeat-type lectins from the earthworm Lumbricus terrestris. <i>Journal of Biological Chemistry</i> , 1998 , 273, 14450-60	5.4	60
182	The sugar-binding ability of human OS-9 and its involvement in ER-associated degradation. <i>Glycobiology</i> , 2010 , 20, 310-21	5.8	59
181	Galectin-1 induces chemokine production and proliferation in pancreatic stellate cells. <i>American Journal of Physiology - Renal Physiology</i> , 2006 , 290, G729-36	5.1	59
180	Affinity capturing and gene assignment of soluble glycoproteins produced by the nematode Caenorhabditis elegans. <i>Journal of Biochemistry</i> , 2002 , 132, 103-14	3.1	59
179	Development of an all-in-one technology for glycan profiling targeting formalin-embedded tissue sections. <i>Biochemical and Biophysical Research Communications</i> , 2008 , 370, 259-63	3.4	58
178	Functional and structural bases of a cysteine-less mutant as a long-lasting substitute for galectin-1. <i>Glycobiology</i> , 2008 , 18, 1065-73	5.8	58
177	Reinforcement of frontal affinity chromatography for effective analysis of lectin-oligosaccharide interactions. <i>Journal of Chromatography A</i> , 2000 , 890, 261-71	4.5	58
176	Podocalyxin is a glycoprotein ligand of the human pluripotent stem cell-specific probe rBC2LCN. <i>Stem Cells Translational Medicine</i> , 2013 , 2, 265-73	6.9	57
175	Isolation and characterization of l-rhamnose-binding lectin, which binds to microsporidian Glugea plecoglossi, from ayu (Plecoglossus altivelis) eggs. <i>Developmental and Comparative Immunology</i> , 2008 , 32, 487-99	3.2	56
174	Isolation, characterization and molecular evolution of a novel pearl shell lectin from a marine bivalve, Pteria penguin. <i>Molecular Diversity</i> , 2006 , 10, 607-18	3.1	55
173	Galectin-1 induces astrocyte differentiation, which leads to production of brain-derived neurotrophic factor. <i>Glycobiology</i> , 2004 , 14, 357-63	5.8	55

172	rBC2LCN, a new probe for live cell imaging of human pluripotent stem cells. <i>Biochemical and Biophysical Research Communications</i> , 2013 , 431, 524-9	3.4	53
171	Optimization of evanescent-field fluorescence-assisted lectin microarray for high-sensitivity detection of monovalent oligosaccharides and glycoproteins. <i>Proteomics</i> , 2008 , 8, 3042-50	4.8	51
170	Purification and molecular characterization of a novel 16-kDa galectin from the nematode Caenorhabditis elegans. <i>Journal of Biological Chemistry</i> , 1996 , 271, 2497-505	5.4	51
169	Tailoring a novel sialic acid-binding lectin from a ricin-B chain-like galactose-binding protein by natural evolution-mimicry. <i>Journal of Biochemistry</i> , 2007 , 141, 389-99	3.1	49
168	Identification and cloning of rat galectin-2: expression is predominantly in epithelial cells of the stomach. <i>Archives of Biochemistry and Biophysics</i> , 1999 , 361, 195-201	4.1	48
167	Caenorhabditis elegans galectins LEC-1-LEC-11: structural features and sugar-binding properties. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2008 , 1780, 1131-42	4	47
166	Comparative analysis by frontal affinity chromatography of oligosaccharide specificity of GlcNAc-binding lectins, Griffonia simplicifolia lectin-II (GSL-II) and Boletopsis leucomelas lectin (BLL). <i>Journal of Biochemistry</i> , 2006 , 140, 285-91	3.1	46
165	Glycoproteomic discovery of serological biomarker candidates for HCV/HBV infection-associated liver fibrosis and hepatocellular carcinoma. <i>Journal of Proteome Research</i> , 2013 , 12, 2630-40	5.6	45
164	Caenorhabditis elegans N-glycans containing a Gal-Fuc disaccharide unit linked to the innermost GlcNAc residue are recognized by C. elegans galectin LEC-6. <i>Glycobiology</i> , 2008 , 18, 882-90	5.8	45
163	Evidence that Agaricus bisporus agglutinin (ABA) has dual sugar-binding specificity. <i>Biochemical and Biophysical Research Communications</i> , 2006 , 347, 215-20	3.4	45
162	Production and purification of a recombinant human 14 kDa beta-galactoside-binding lectin. <i>FEBS Letters</i> , 1989 , 250, 161-5	3.8	45
161	Comparative analysis of oligosaccharide specificities of fucose-specific lectins from Aspergillus oryzae and Aleuria aurantia using frontal affinity chromatography. <i>Analytical Biochemistry</i> , 2009 , 386, 217-21	3.1	43
160	Application of reinforced frontal affinity chromatography and advanced processing procedure to the study of the binding property of a Caenorhabditis elegans galectin. <i>Journal of Chromatography A</i> , 2001 , 905, 337-43	4.5	43
159	Role of malectin in Glc(2)Man(9)GlcNAc(2)-dependent quality control of 🛭 -antitrypsin. <i>Molecular Biology of the Cell</i> , 2011 , 22, 3559-70	3.5	42
158	Beta3GnT2 (B3GNT2), a major polylactosamine synthase: analysis of B3GNT2-deficient mice. <i>Methods in Enzymology</i> , 2010 , 479, 185-204	1.7	41
157	Directed evolution of lectins with sugar-binding specificity for 6-sulfo-galactose. <i>Journal of Biological Chemistry</i> , 2012 , 287, 20313-20	5.4	41
156	Mannose-binding lectin from yam (Dioscorea batatas) tubers with insecticidal properties against Helicoverpa armigera (Lepidoptera: Noctuidae). <i>Journal of Agricultural and Food Chemistry</i> , 2009 , 57, 2896-902	5.7	40
155	Analysis of the sugar-binding specificity of mannose-binding-type Jacalin-related lectins by frontal affinity chromatographyan approach to functional classification. <i>FEBS Journal</i> , 2008 , 275, 1227-39	5.7	40

154	Further evidence by site-directed mutagenesis that conserved hydrophilic residues form a carbohydrate-binding site of human galectin-1. <i>Glycoconjugate Journal</i> , 1994 , 11, 437-42	3	40
153	The family 42 carbohydrate-binding module of family 54 alpha-L-arabinofuranosidase specifically binds the arabinofuranose side chain of hemicellulose. <i>Biochemical Journal</i> , 2006 , 399, 503-11	3.8	39
152	Novel carbohydrate specificity of the 16-kDa galectin from Caenorhabditis elegans: binding to blood group precursor oligosaccharides (type 1, type 2, Talpha, and Tbeta) and gangliosides. <i>Glycobiology</i> , 2002 , 12, 451-61	5.8	39
151	Carbohydrate-binding domain of the POMGnT1 stem region modulates O-mannosylation sites of Edystroglycan. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 9280-5	11.5	38
150	Glycoproteomics-based cancer marker discovery adopting dual enrichment with Wisteria floribunda agglutinin for high specific glyco-diagnosis of cholangiocarcinoma. <i>Journal of Proteomics</i> , 2013 , 85, 1-11	3.9	38
149	Cloning and nucleotide sequence of a full-length cDNA for human 14 kDa beta-galactoside-binding lectin. <i>Biochimica Et Biophysica Acta Gene Regulatory Mechanisms</i> , 1989 , 1008, 85-91		38
148	The Lectin Frontier Database (LfDB), and data generation based on frontal affinity chromatography. <i>Molecules</i> , 2015 , 20, 951-73	4.8	37
147	A versatile technology for cellular glycomics using lectin microarray. <i>Methods in Enzymology</i> , 2010 , 478, 181-95	1.7	37
146	Isolation, purification, characterization and glycan-binding profile of a d-galactoside specific lectin from the marine sponge, Halichondria okadai. <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 2008 , 150, 349-57	2.3	37
145	Apical Golgi localization of N,N'-diacetyllactosediamine synthase, beta4GalNAc-T3, is responsible for LacdiNAc expression on gastric mucosa. <i>Glycobiology</i> , 2006 , 16, 777-85	5.8	37
144	Carbohydrate-recognition domains of galectin-9 are involved in intermolecular interaction with galectin-9 itself and other members of the galectin family. <i>Glycobiology</i> , 2007 , 17, 423-32	5.8	37
143	Sugar-Binding Profiles of Chitin-Binding Lectins from the Hevein Family: A Comprehensive Study. <i>International Journal of Molecular Sciences</i> , 2017 , 18,	6.3	36
142	Lectin microarray reveals binding profiles of Lactobacillus casei strains in a comprehensive analysis of bacterial cell wall polysaccharides. <i>Applied and Environmental Microbiology</i> , 2011 , 77, 4539-46	4.8	36
141	Development of a lectin microarray based on an evanescent-field fluorescence principle. <i>Methods in Enzymology</i> , 2006 , 415, 341-51	1.7	36
140	Fragmentations of isomeric sulfated monosaccharides using electrospray ion trap mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2005 , 19, 1788-96	2.2	36
139	Lectin engineering, a molecular evolutionary approach to expanding the lectin utilities. <i>Molecules</i> , 2015 , 20, 7637-56	4.8	35
138	Characterization of an exo-beta-1,3-galactanase from Clostridium thermocellum. <i>Applied and Environmental Microbiology</i> , 2006 , 72, 3515-23	4.8	35
137	Carbohydrate-Binding Specificity of Human Galectins: An Overview by Frontal Affinity Chromatography. <i>Trends in Glycoscience and Glycotechnology</i> , 2018 , 30, SE137-SE153	0.1	35

136	Lectin structures: classification based on the 3-D structures. <i>Methods in Molecular Biology</i> , 2014 , 1200, 579-606	1.4	34
135	Purification and characterization of beta-galactoside-binding proteins from Caenorhabditis elegans. <i>Journal of Biochemistry</i> , 1992 , 111, 553-5	3.1	33
134	Human ZG16p recognizes pathogenic fungi through non-self polyvalent mannose in the digestive system. <i>Glycobiology</i> , 2012 , 22, 210-20	5.8	32
133	Enrichment strategies for glycopeptides. <i>Methods in Molecular Biology</i> , 2009 , 534, 195-203	1.4	32
132	Development and Applications of the Lectin Microarray. <i>Topics in Current Chemistry</i> , 2015 , 367, 105-24		31
131	Frontal affinity chromatography analysis of constructs of DC-SIGN, DC-SIGNR and LSECtin extend evidence for affinity to agalactosylated N-glycans. <i>FEBS Journal</i> , 2010 , 277, 4010-26	5.7	31
130	A Novel Therapeutic Strategy for Pancreatic Cancer: Targeting Cell Surface Glycan Using rBC2LC-N Lectin-Drug Conjugate (LDC). <i>Molecular Cancer Therapeutics</i> , 2018 , 17, 183-195	6.1	30
129	Desulfated galactosaminoglycans are potential ligands for galectins: evidence from frontal affinity chromatography. <i>Biochemical and Biophysical Research Communications</i> , 2008 , 373, 206-12	3.4	30
128	Mannose-specific lectin from the mushroom Hygrophorus russula. <i>Glycobiology</i> , 2012 , 22, 616-29	5.8	29
127	High-throughput analysis of lectin-oligosaccharide interactions by automated frontal affinity chromatography. <i>Methods in Enzymology</i> , 2006 , 415, 311-25	1.7	29
126	Identification, Characterization, and X-ray Crystallographic Analysis of a Novel Type of Mannose-Specific Lectin CGL1 from the Pacific Oyster Crassostrea gigas. <i>Scientific Reports</i> , 2016 , 6, 291	3 1 59	29
125	Development of a Data-mining System for Differential Profiling of Cell Glycoproteins Based on Lectin Microarray. <i>Journal of Proteomics and Bioinformatics</i> , 2008 , 01, 068-072	2.1	28
124	A practical approach to N-glycan production by hydrazinolysis using hydrazine monohydrate. Biochemical and Biophysical Research Communications, 2007 , 362, 639-45	3.4	27
123	An immunohistochemical study of the 32-kDa galectin (beta-galactoside-binding lectin) in the nematode Caenorhabditis elegans. <i>The Histochemical Journal</i> , 1996 , 28, 201-7		27
122	Lectin microarray technology identifies specific lectins related to lymph node metastasis of advanced gastric cancer. <i>Gastric Cancer</i> , 2016 , 19, 531-542	7.6	26
121	LecT-Hepa: A triplex lectin-antibody sandwich immunoassay for estimating the progression dynamics of liver fibrosis assisted by a bedside clinical chemistry analyzer and an automated pretreatment machine. <i>Clinica Chimica Acta</i> , 2011 , 412, 1767-72	6.2	26
120	Engineering of the glycan-binding specificity of Agrocybe cylindracea galectin towards (2,3)-linked sialic acid by saturation mutagenesis. <i>Journal of Biochemistry</i> , 2011 , 150, 545-52	3.1	26
119	Further characterization and structural studies on human placenta lectin. <i>Journal of Biochemistry</i> , 1987 , 101, 987-95	3.1	26

(2013-2013)

118	Tailoring GalNAcl-3Gal&pecific lectins from a multi-specific fungal galectin: dramatic change of carbohydrate specificity by a single amino-acid substitution. <i>Biochemical Journal</i> , 2013 , 453, 261-70	3.8	25	
117	The GalE(syn)-gauche configuration is required for galectin-recognition disaccharides. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2011 , 1810, 643-51	4	25	
116	The amino acids involved in the distinct carbohydrate specificities between macrophage galactose-type C-type lectins 1 and 2 (CD301a and b) of mice. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2008 , 1780, 89-100	4	25	
115	Molecular characterization and oligosaccharide-binding properties of a galectin from the argasid tick Ornithodoros moubata. <i>Glycobiology</i> , 2007 , 17, 313-23	5.8	25	
114	Regulation of adult neural progenitor cells by Galectin-1/beta1 Integrin interaction. <i>Journal of Neurochemistry</i> , 2010 , 113, 1516-24	6	24	
113	Differential glycan profiling by lectin microarray targeting tissue specimens. <i>Methods in Enzymology</i> , 2010 , 478, 165-79	1.7	24	
112	Sugar-complex structures of the C-half domain of the galactose-binding lectin EW29 from the earthworm Lumbricus terrestris. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2009 , 65, 49-57		24	
111	Difference in fine specificity to polysaccharides of Candida albicans mannoprotein between mouse SIGNR1 and human DC-SIGN. <i>Infection and Immunity</i> , 2012 , 80, 1699-706	3.7	24	
110	Sequential synthesis of chondroitin oligosaccharides by immobilized chondroitin polymerase mutants. <i>Glycoconjugate Journal</i> , 2008 , 25, 521-30	3	24	
109	Lectin engineering: the possible and the actual. <i>Interface Focus</i> , 2019 , 9, 20180068	3.9	22	
108	A medium hyperglycosylated podocalyxin enables noninvasive and quantitative detection of tumorigenic human pluripotent stem cells. <i>Scientific Reports</i> , 2014 , 4, 4069	4.9	22	
107	Glycomics, Coming of Age!. <i>Trends in Glycoscience and Glycotechnology</i> , 2000 , 12, 1-5	0.1	22	
106	Engineering of recombinant Wisteria floribunda agglutinin specifically binding to GalNAcII,4GlcNAc (LacdiNAc). <i>Glycobiology</i> , 2017 , 27, 743-754	5.8	21	
105	Expression of galectin-1, a new component of slit diaphragm, is altered in minimal change nephrotic syndrome. <i>Laboratory Investigation</i> , 2009 , 89, 178-95	5.9	21	
104	Engineering a versatile tandem repeat-type alpha2-6sialic acid-binding lectin. <i>Biochemical and Biophysical Research Communications</i> , 2009 , 384, 204-9	3.4	21	
103	Dissociation of the carbohydrate-binding and splicing activities of galectin-1. <i>Archives of Biochemistry and Biophysics</i> , 2008 , 478, 18-25	4.1	21	
102	S-nitrosylation of mouse galectin-2 prevents oxidative inactivation by hydrogen peroxide. <i>Biochemical and Biophysical Research Communications</i> , 2015 , 457, 712-7	3.4	20	
101	Analysis of O-glycans as 9-fluorenylmethyl derivatives and its application to the studies on glycan array. <i>Analytical Chemistry</i> , 2013 , 85, 3325-33	7.8	20	

100	A C-type lectin of Caenorhabditis elegans: its sugar-binding property revealed by glycoconjugate microarray analysis. <i>Biochemical and Biophysical Research Communications</i> , 2008 , 377, 303-6	3.4	20
99	Isolation and biochemical characterization of Apios tuber lectin. <i>Molecules</i> , 2015 , 20, 987-1002	4.8	19
98	Possible linkages between the inner and outer cellular states of human induced pluripotent stem cells. <i>BMC Systems Biology</i> , 2011 , 5 Suppl 1, S17	3.5	19
97	Structure of the 32-kDa galectin gene of the nematode Caenorhabditis elegans. <i>Journal of Biological Chemistry</i> , 1997 , 272, 26669-77	5.4	19
96	Comprehensive list of lectins: origins, natures, and carbohydrate specificities. <i>Methods in Molecular Biology</i> , 2014 , 1200, 555-77	1.4	19
95	Characterization and cloning of GNA-like lectin from the mushroom Marasmius oreades. <i>Glycoconjugate Journal</i> , 2012 , 29, 457-65	3	18
94	Galactose recognition by a tetrameric C-type lectin, CEL-IV, containing the EPN carbohydrate recognition motif. <i>Journal of Biological Chemistry</i> , 2011 , 286, 10305-15	5.4	18
93	Glyco-catch method: A lectin affinity technique for glycoproteomics. <i>Journal of Biomolecular Techniques</i> , 2002 , 13, 205-18	1.1	18
92	Domain composition of rhamnose-binding lectin from shishamo smelt eggs and its carbohydrate-binding profiles. <i>Fish Physiology and Biochemistry</i> , 2013 , 39, 1619-30	2.7	17
91	Determination of the affinity constants of recombinant human galectin-1 and -3 for simple saccharides by capillary affinophoresis. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2002 , 768, 199-210	3.2	17
90	Multistage mass spectrometric sequencing of keratan sulfate-related oligosaccharides. <i>Analytical Chemistry</i> , 2006 , 78, 891-900	7.8	16
89	Development of a Sensitive Microarray Platform for the Ranking of Galectin Inhibitors: Identification of a Selective Galectin-3 Inhibitor. <i>ChemBioChem</i> , 2017 , 18, 2428-2440	3.8	15
88	Conformational change of a unique sequence in a fungal galectin from Agrocybe cylindracea controls glycan ligand-binding specificity. <i>FEBS Letters</i> , 2013 , 587, 3620-5	3.8	15
87	A C-type lectin isolated from the skin of Japanese bullhead shark (Heterodontus japonicus) binds a remarkably broad range of sugars and induces blood coagulation. <i>Journal of Biochemistry</i> , 2015 , 157, 345-56	3.1	15
86	Terminal N-acetylgalactosamine-specific leguminous lectin from Wisteria japonica as a probe for human lung squamous cell carcinoma. <i>PLoS ONE</i> , 2013 , 8, e83886	3.7	15
85	N-terminal specific point-immobilization of active proteins by the one-pot NEXT-A method. <i>ChemBioChem</i> , 2009 , 10, 2460-4	3.8	15
84	Diverse sugar-binding specificities of marine invertebrate C-type lectins. <i>Bioscience, Biotechnology and Biochemistry</i> , 2007 , 71, 513-9	2.1	15
83	Mammalian Cell Surface Display as a Novel Method for Developing Engineered Lectins with Novel Characteristics. <i>Biomolecules</i> , 2015 , 5, 1540-62	5.9	14

82	Mammalian galectins bind galactosell-4fucose disaccharide, a unique structural component of protostomial N-type glycoproteins. <i>Biochemical and Biophysical Research Communications</i> , 2013 , 436, 509-13	3.4	14
81	Strict binding specificity of small-sized lectins from the red alga Hypnea japonica for core (alpha1-6) fucosylated N-glycans. <i>Bioscience, Biotechnology and Biochemistry</i> , 2009 , 73, 912-20	2.1	14
80	The Sclerotinia sclerotiorum agglutinin represents a novel family of fungal lectins remotely related to the Clostridium botulinum non-toxin haemagglutinin HA33/A. <i>Glycoconjugate Journal</i> , 2007 , 24, 143-	·5͡c	14
79	Structural and quantitative evidence of 2 -6-sialylated N-glycans as markers of the differentiation potential of human mesenchymal stem cells. <i>Glycoconjugate Journal</i> , 2017 , 34, 797-806	3	13
78	Possible involvement of glycolipids in lectin-mediated cellular transformation of symbiotic microalgae in corals. <i>Journal of Experimental Marine Biology and Ecology</i> , 2013 , 439, 129-135	2.1	13
77	Cell calcium signalling induced by endogenous lectin carbohydrate interaction in the Jurkat T cell line. <i>Glycoconjugate Journal</i> , 1996 , 13, 99-105	3	13
76	Lectin-based glycomics: how and when was the technology born?. <i>Methods in Molecular Biology</i> , 2014 , 1200, 225-42	1.4	13
75	Identification of the cysteine residue responsible for oxidative inactivation of mouse galectin-2. <i>Journal of Biochemistry</i> , 2016 , 160, 233-241	3.1	13
74	Carbohydrate recognition by the rhamnose-binding lectin SUL-I with a novel three-domain structure isolated from the venom of globiferous pedicellariae of the flower sea urchin Toxopneustes pileolus. <i>Protein Science</i> , 2017 , 26, 1574-1583	6.3	12
73	Human C21orf63 is a heparin-binding protein. <i>Journal of Biochemistry</i> , 2009 , 146, 369-73	3.1	12
72	Toxic isolectins from the mushroom Boletus venenatus. <i>Phytochemistry</i> , 2010 , 71, 648-57	4	12
71	Carbohydrate specificity of lectins from Boletopsis leucomelas and Aralia cordate. <i>Bioscience, Biotechnology and Biochemistry</i> , 2006 , 70, 542-5	2.1	12
70	Microscale preparation of even- and odd-numbered N-acetylheparosan oligosaccharides. <i>Carbohydrate Research</i> , 2006 , 341, 230-7	2.9	12
69	Xenopus galectin-VIIa binds N-glycans of members of the cortical granule lectin family (xCGL and xCGL2). <i>Glycobiology</i> , 2005 , 15, 709-20	5.8	11
68	NMR studies on the interaction of sugars with the C-terminal domain of an R-type lectin from the earthworm Lumbricus terrestris. <i>FEBS Journal</i> , 2009 , 276, 2095-105	5.7	10
67	A combined strategy for glycan profiling: a model study with pyridylaminated oligosaccharides. <i>Journal of Biochemistry</i> , 2006 , 140, 337-47	3.1	10
66	On the Origin of Glycome and Saccharide Recognition. <i>Trends in Glycoscience and Glycotechnology</i> , 2004 , 16, 63-85	0.1	10
65	Galectins from the Nematode Caenorhabditis elegans and the Genome Project <i>Trends in Glycoscience and Glycotechnology</i> , 1997 , 9, 113-122	0.1	10

64	Systematic identification of N-acetylheparosan oligosaccharides by tandem mass spectrometric fragmentation. <i>Rapid Communications in Mass Spectrometry</i> , 2006 , 20, 267-74	2.2	9
63	Mutated Leguminous Lectin Containing a Heparin-Binding like Motif in a Carbohydrate-Binding Loop Specifically Binds to Heparin. <i>PLoS ONE</i> , 2015 , 10, e0145834	3.7	8
62	Galectins from the Nematode Caenorhabditis elegans and Glycome Project <i>Trends in Glycoscience and Glycotechnology</i> , 2001 , 13, 533-549	0.1	8
61	Preparation of Glycan Arrays Using Pyridylaminated Glycans. <i>Methods in Molecular Biology</i> , 2016 , 1368, 225-35	1.4	7
60	NMR structure and dynamics of the C-terminal domain of R-type lectin from the earthworm Lumbricus terrestris. <i>FEBS Journal</i> , 2013 , 280, 70-82	5.7	7
59	Generation of monoclonal antibodies against the Gald-4Gal epitope: a key tool in studies of species-specific glycans expressed in fish, amphibians and birds. <i>Glycobiology</i> , 2013 , 23, 91-105	5.8	7
58	(1)H, (13)C, and (15)N chemical shift assignment of the C-terminal 15 kDa domain of a novel galactose-binding protein from the earthworm Lumbricus terrestris. <i>Journal of Biomolecular NMR</i> , 2004 , 30, 377-8	3	7
57	Carbohydrate Recognition Mechanism of the Mushroom Galectin ACG. <i>Trends in Glycoscience and Glycotechnology</i> , 2018 , 30, SJ33-SJ46	0.1	7
56	Differential glycan analysis of an endogenous glycoprotein: toward clinical implementationfrom sample pretreatment to data standardization. <i>Methods in Molecular Biology</i> , 2014 , 1200, 265-85	1.4	7
55	Directed evolution of lectins by an improved error-prone PCR and ribosome display method. <i>Methods in Molecular Biology</i> , 2014 , 1200, 527-38	1.4	7
54	A rationally engineered yeast pyruvyltransferase Pvg1p introduces sialylation-like properties in neo-human-type complex oligosaccharide. <i>Scientific Reports</i> , 2016 , 6, 26349	4.9	7
53	2 -6 sialylation is a marker of the differentiation potential of human mesenchymal stem cells. <i>Glycobiology</i> , 2016 , 26, 1328-1337	5.8	7
52	A Novel Probe as Surface Glycan Marker of Pluripotent Stem Cells: Research Outcomes and Application to Regenerative Medicine. <i>Advanced Healthcare Materials</i> , 2015 , 4, 2520-9	10.1	6
51	A lectin-based glycomic approach to identify characteristic features of Xenopus embryogenesis. <i>PLoS ONE</i> , 2013 , 8, e56581	3.7	6
50	Acquisition of Structural Information on Glycosaminoglycans by Using Mass Spectrometry. <i>Trends in Glycoscience and Glycotechnology</i> , 2006 , 18, 293-312	0.1	6
49	Specific isolation by anhydrotrypsin-agarose chromatography of a recombinant protein tagged with an affinity tail arginine at the C-terminus. <i>Journal of Molecular Recognition</i> , 1990 , 3, 204-7	2.6	6
48	Characterization of Isomeric Unsulfated Glycosaminoglycan Oligosaccharides by Mass Spectrometry/Mass Spectrometry. <i>Journal of the Mass Spectrometry Society of Japan</i> , 2007 , 55, 1-6	0.2	6
47	Development of a practical sandwich assay to detect human pluripotent stem cells using cell culture media. <i>Regenerative Therapy</i> , 2017 , 6, 1-8	3.7	5

(2014-2015)

46	Mannose-recognition mutant of the galactose/N-acetylgalactosamine-specific C-type lectin CEL-I engineered by site-directed mutagenesis. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2015 , 1850, 1457-65	4	5
45	Two carbohydrate recognizing domains from Cycas revoluta leaf lectin show the distinct sugar-binding specificity-A unique mannooligosaccharide recognition by N-terminal domain. <i>Journal of Biochemistry</i> , 2016 , 160, 27-35	3.1	5
44	Isolation of Rice Bran Lectins and Characterization of Their Unique Behavior in Caco-2 Cells. <i>International Journal of Molecular Sciences</i> , 2017 , 18,	6.3	5
43	Engineering of a 3'-sulpho-Gall-4GlcNAc-specific probe by a single amino acid substitution of a fungal galectin. <i>Journal of Biochemistry</i> , 2015 , 157, 197-200	3.1	5
42	Crystallization and preliminary X-ray crystallographic studies of the C-terminal domain of galactose-binding lectin EW29 from the earthworm Lumbricus terrestris. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2004 , 60, 1895-6		5
41	Distinguishing functional exosomes and other extracellular vesicles as a nucleic acid cargo by the anion-exchange method <i>Journal of Extracellular Vesicles</i> , 2022 , 11, e12205	16.4	5
40	A technique for removing tumourigenic pluripotent stem cells using rBC2LCN lectin. <i>Regenerative Therapy</i> , 2020 , 14, 306-314	3.7	4
39	Profiling the Cell Surface Glycome of Five Fungi Using Lectin Microarray. <i>Journal of Carbohydrate Chemistry</i> , 2011 , 30, 147-164	1.7	4
38	Effects of substitution of conserved amino acid residues on the sugar-binding property of the tandem-repeat 32-kDa galectin of the nematode Caenorhabditis elegans. <i>Biological and Pharmaceutical Bulletin</i> , 2001 , 24, 14-8	2.3	4
37	Galectins Have Now Been Found in the Mushroom Coprinus cinereus. <i>Trends in Glycoscience and Glycotechnology</i> , 1997 , 9, 181-182	0.1	4
36	Application of lectin microarray to bacteria including Lactobacillus casei/paracasei strains. <i>Methods in Molecular Biology</i> , 2014 , 1200, 295-311	1.4	4
35	Frontal Affinity Chromatography: Systematization for Quantitative Interaction Analysis Between Lectins and Glycans 2007 , 239-266		4
34	Fucose-specific lectin of Aspergillus fumigatus: binding properties and effects on immune response stimulation. <i>Medical Mycology</i> , 2019 , 57, 71-83	3.9	4
33	Human Milk Oligosaccharides and Innate Immunity 2021 , 389-439		4
32	Molecular clock regulates daily 🛭-2-fucosylation of the neural cell adhesion molecule (NCAM) within mouse secondary olfactory neurons. <i>Journal of Biological Chemistry</i> , 2014 , 289, 36158-65	5.4	3
31	Purification, characterization, and molecular cloning of lectin from winter buds of Lysichiton camtschatcensis (L.) Schott. <i>Bioscience, Biotechnology and Biochemistry</i> , 2012 , 76, 25-33	2.1	3
30	Crystallization and preliminary x-ray crystallographic analysis of galectin LEC-1 from Caenorhabditis elegans. <i>Protein and Peptide Letters</i> , 2008 , 15, 419-22	1.9	3
29	Two jacalin-related lectins from seeds of the African breadfruit (Treculia africana L.). <i>Bioscience, Biotechnology and Biochemistry,</i> 2014 , 78, 2036-44	2.1	2

28	Development of a high-sensitivity chromatographic separation system for pyridylaminated aldopentoses and aldohexoses. <i>Journal of Chromatography A</i> , 2009 , 1216, 5112-5	4.5	2
27	Mutations in Possible Glycosylation Genes, sqv-3,7 and 8, of C. elegans Cause Abnormal Vulval Formation <i>Trends in Glycoscience and Glycotechnology</i> , 1999 , 11, 211-212	0.1	2
26	Development of lectin microarray, an advanced system for glycan profiling. Synthesiology, 2014, 7, 105-	10.7	2
25	Evaluation of galectin binding by frontal affinity chromatography (FAC). <i>Methods in Molecular Biology</i> , 2015 , 1207, 63-74	1.4	2
24	Preparation and Detection of Glycan-Binding Activity of Influenza Virus. <i>Methods in Molecular Biology</i> , 2020 , 2132, 567-583	1.4	2
23	Lectin microarray analysis of isolated polysaccharides from Sasa veitchii. <i>Bioscience, Biotechnology and Biochemistry</i> , 2017 , 81, 1687-1689	2.1	1
22	Glycan Binding Profiling of Jacalin-Related Lectins from the Pearl Shell. <i>International Journal of Molecular Sciences</i> , 2019 , 20,	6.3	1
21	The Cellular Glycome of Human Induced Pluripotent Stem Cells and Their Specific Probe rBC2LCN. <i>Trends in Glycoscience and Glycotechnology</i> , 2014 , 26, 1-10	0.1	1
20	DCIR and its ligand asialo-biantennary N-glycan regulate DC function and osteoclastogenesis. Journal of Experimental Medicine, 2021 , 218,	16.6	1
19	Lectin Microarray 2008 , 451-454		1
18	Development of lectin microarray, an advanced system for glycan profiling. Synthesiology, 2014, 7, 105-	13.7	1
17	NMR analysis on the sialic acid-binding mechanism of an R-type lectin mutant by natural evolution-mimicry. <i>FEBS Letters</i> , 2016 , 590, 1720-8	3.8	1
16	Chromatographic and Mass Spectrometric Techniques 2010 , 161-176		O
15	Development of Urinary Diagnostic Biomarker for IgA Nephropathy by Lectin Microarray <i>American Journal of Nephrology</i> , 2021 , 1-11	4.6	O
	,		
14	A Novel Lectin-Affinity Database for Structural Glycomics 2008 , 432-434		
14			
	A Novel Lectin-Affinity Database for Structural Glycomics 2008 , 432-434	0.1	

LIST OF PUBLICATIONS

10	Mission of Structural Glycomics Seibutsu Butsuri Kagaku, 2004 , 48, 11-17	
9	Carbohydrate-Binding Specificity of Human Galectins: An Overview by Frontal Affinity Chromatography. <i>Trends in Glycoscience and Glycotechnology</i> , 2018 , 30, SJ65-SJ81	0.1
8	Glycoengineering 2019 , 145-166	
7	Carbohydrate-Binding Protein 35 Forms Functional Dimers Using a Conservative Cysteine Residue?. <i>Trends in Glycoscience and Glycotechnology</i> , 1992 , 4, 218-220	0.1
6	Identification of 37-kDa Porcine .BETAGalactoside-binding Lectin Having a Tandem-repeat Structure(Galectin-4) as a Possible Adherens Junction Protein <i>Trends in Glycoscience and Glycotechnology</i> , 1995 , 7, 73-75	0.1
5	Historical and Practical Aspects of Development of Lectin Microarray Technique Lectin microarray 2015 , 53-60	
4	Historical and Practical Aspects of the Development of the Lectin Microarray Technique 2014 , 1-7	
3	Discovery and Applications of a Novel Human Pluripotent Stem Cell-Specific Lectin Probe rBC2LCN 2015 , 95-106	
2	Frontal affinity chromatography: A unique approach for weak interaction analysis targeting lectins and oligosaccharides 2021 , 279-309	
1	Transformation of Agrocybe cylindracea Galectin into 🖸 alNAc-Specific Lectin <i>Methods in Molecular Biology</i> , 2022 , 2442, 233-245	1.4