

Lectin microarrays: concept, principle and applications

Chemical Society Reviews

42, 4443

DOI: 10.1039/c3cs35419a

Citation Report

#	ARTICLE	IF	CITATIONS
1	Fungal lectins: structure, function and potential applications. Current Opinion in Structural Biology, 2013, 23, 678-685.	5.7	116
2	Ultrasensitive Impedimetric Lectin Biosensors with Efficient Antifouling Properties Applied in Glycoprofiling of Human Serum Samples. Analytical Chemistry, 2013, 85, 7324-7332.	6.5	80
3	Recent advances in computational predictions of NMR parameters for the structure elucidation of carbohydrates: methods and limitations. Chemical Society Reviews, 2013, 42, 8376.	38.1	113
4	Classification of Lectins by Pattern Recognition Using Glyconanoparticles. Analytical Chemistry, 2013, 85, 10277-10281.	6.5	31
5	Conformational change of a unique sequence in a fungal galectin from <i>Agrocybe cylindracea</i> controls glycan ligand-binding specificity. FEBS Letters, 2013, 587, 3620-3625.	2.8	18
6	Elucidation of Carbohydrate Molecular Interaction Mechanism of Recombinant and Native ArtinM. Journal of Physical Chemistry B, 2013, 117, 8360-8369.	2.6	6
7	Analytical Tools for the Study of Cellular Glycosylation in the Immune System. Frontiers in Immunology, 2013, 4, 451.	4.8	18
9	The Cellular Glycome of Human Induced Pluripotent Stem Cells and Their Specific Probe rBC2LCN. Trends in Glycoscience and Glycotechnology, 2014, 26, 1-10.	0.1	1
10	Biophysical characterization of lectin-glycan interactions for therapeutics, vaccines and targeted drug-delivery. Future Medicinal Chemistry, 2014, 6, 2113-2129.	2.3	11
11	Molecular Clock Regulates Daily $\pm 1\%$ Fucosylation of the Neural Cell Adhesion Molecule (NCAM) within Mouse Secondary Olfactory Neurons. Journal of Biological Chemistry, 2014, 289, 36158-36165.	3.4	4
12	Applications of Glycan Microarrays to Functional Glycomics. Comprehensive Analytical Chemistry, 2014, 63, 281-303.	1.3	2
13	Functional Glycomics Analysis. Comprehensive Analytical Chemistry, 2014, , 255-280.	1.3	1
14	Glycan profiling of gestational choriocarcinoma using a lectin microarray. Oncology Reports, 2014, 31, 1121-1126.	2.6	13
15	Microarray-Based Identification of Lectins for the Purification of Human Urinary Extracellular Vesicles Directly from Urine Samples. ChemBioChem, 2014, 15, 1621-1626.	2.6	59
16	Wisteria floribunda agglutinin-binding glycan expression is decreased in endometriomata. Reproductive Biology and Endocrinology, 2014, 12, 100.	3.3	3
17	Protein Microarrays with Novel Microfluidic Methods: Current Advances. Microarrays (Basel,) Tj ETQq1 1 0.784314 19gBT /Overlock 10 Tf	1.4	14
18	Recent advances in the fabrication and detection of lectin microarrays and their application in glycobiology analysis. Analytical Methods, 2014, 6, 2003-2014.	2.7	10
19	Mammalian protein glycosylation - structure versus function. Analyst, The, 2014, 139, 2944-2967.	3.5	33

#	ARTICLE	IF	CITATIONS
20	Sequential glycan profiling at single cell level with the microfluidic lab-in-a-trench platform: a new era in experimental cell biology. <i>Lab on A Chip</i> , 2014, 14, 3629-3639.	6.0	10
21	Nanoscale-controlled architecture for the development of ultrasensitive lectin biosensors applicable in glycomics. <i>Analytical Methods</i> , 2014, 6, 4922.	2.7	33
22	Glycosylation Characterization of Human and Porcine Fibrinogen Proteins by Lectin-Binding Biophotonic Microarray Imaging. <i>Analytical Chemistry</i> , 2014, 86, 621-628.	6.5	11
23	Two jacalin-related lectins from seeds of the African breadfruit (<i>Treculia africana</i> L.). <i>Bioscience, Biotechnology and Biochemistry</i> , 2014, 78, 2036-2044.	1.3	2
24	Kinetics for the thermal stability of lectin from black turtle bean. <i>Journal of Food Engineering</i> , 2014, 142, 132-137.	5.2	13
25	Recent Advances in Mass Spectrometry-Based Glycoproteomics. <i>Advances in Protein Chemistry and Structural Biology</i> , 2014, 95, 71-123.	2.3	18
26	Lectins. <i>Methods in Molecular Biology</i> , 2014, , .	0.9	7
27	Cancer glycan biomarkers and their detection â€“ past, present and future. <i>Analytical Methods</i> , 2014, 6, 3918-3936.	2.7	59
28	Development of M2BPGi: a novel fibrosis serum glyco-biomarker for chronic hepatitis/cirrhosis diagnostics. <i>Expert Review of Proteomics</i> , 2015, 12, 683-693.	3.0	55
29	Boronateâ€™Affinity Glycanâ€™Oriented Surface Imprinting: A New Strategy to Mimic Lectins for the Recognition of an Intact Glycoprotein and Its Characteristic Fragments. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 10211-10215.	13.8	315
31	Mammalian Cell Surface Display as a Novel Method for Developing Engineered Lectins with Novel Characteristics. <i>Biomolecules</i> , 2015, 5, 1540-1562.	4.0	18
32	Dynamic regulation of innate immune responses in <i>Drosophila</i> by Senju-mediated glycosylation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 5809-5814.	7.1	23
33	A Multichannel Biosensor for Rapid Determination of Cell Surface Glycomic Signatures. <i>ACS Central Science</i> , 2015, 1, 191-197.	11.3	42
34	Toxic proteins in plants. <i>Phytochemistry</i> , 2015, 117, 51-64.	2.9	103
35	Identification of sialylated glycoproteins from metabolically oligosaccharide engineered pancreatic cells. <i>Clinical Proteomics</i> , 2015, 12, 11.	2.1	33
36	Electrochemistry of Nonconjugated Proteins and Glycoproteins. Toward Sensors for Biomedicine and Glycomics. <i>Chemical Reviews</i> , 2015, 115, 2045-2108.	47.7	273
37	Sugar Chains. , 2015, , .		3
38	Glycoprofiling of cancer biomarkers: Label-free electrochemical lectin-based biosensors. <i>Open Chemistry</i> , 2015, 13, 636-655.	1.9	48

#	ARTICLE	IF	CITATIONS
39	Glycome as Biomarkers. Biomarkers in Disease, 2015, , 111-140.	0.1	7
40	Comparison of orthogonal chromatographic and lectin-affinity microarray methods for glycan profiling of a therapeutic monoclonal antibody. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2015, 997, 162-178.	2.3	21
41	Thiol-ene immobilisation of carbohydrates onto glass slides as a simple alternative to gold-thiol monolayers, amines or lipid binding. Biomaterials Science, 2015, 3, 175-181.	5.4	16
42	Label-Free Glycoprofiling with Multiplex Surface Plasmon Resonance: A Tool To Quantify Sialylation of Erythropoietin. Analytical Chemistry, 2015, 87, 8115-8122.	6.5	19
43	Can glycoprofiling be helpful in detecting prostate cancer?. Chemical Papers, 2015, 69, 90-111.	2.2	14
44	Lectin RCA-I specifically binds to metastasis-associated cell surface glycans in triple-negative breast cancer. Breast Cancer Research, 2015, 17, 36.	5.0	48
45	The Lectin Frontier Database (LfDB), and Data Generation Based on Frontal Affinity Chromatography. Molecules, 2015, 20, 951-973.	3.8	56
46	A Novel Probe as Surface Glycan Marker of Pluripotent Stem Cells: Research Outcomes and Application to Regenerative Medicine. Advanced Healthcare Materials, 2015, 4, 2520-2529.	7.6	7
47	A Cancer-specific Monoclonal Antibody Recognizes the Aberrantly Glycosylated Podoplanin. Scientific Reports, 2014, 4, 5924.	3.3	163
48	Pattern Recognition of Monosaccharides via a Virtual Lectin Array Constructed by Boronate Affinity-Based pH-Featured Encoding. Analytical Chemistry, 2015, 87, 4442-4447.	6.5	29
49	Glycan-based diagnostic devices: current progress, challenges and perspectives. Chemical Communications, 2015, 51, 16750-16762.	4.1	31
50	Lectin Microarray-Based Sero-Biomarker Verification Targeting Aberrant <i>O</i> -Linked Glycosylation on Mucin 1. Analytical Chemistry, 2015, 87, 7274-7281.	6.5	46
51	A Quantitative Microtiter Assay for Sialylated Glycoform Analyses Using Lectin Complexes. Journal of Biomolecular Screening, 2015, 20, 768-778.	2.6	8
52	Bacteria microarrays as sensitive tools for exploring pathogen surface epitopes and recognition by host receptors. RSC Advances, 2015, 5, 7173-7181.	3.6	12
53	Site-specific structural characterization of O-glycosylation and identification of phosphorylation sites of recombinant osteopontin. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2015, 1854, 581-591.	2.3	19
54	Glycoprofiling as a novel tool in serological assays of systemic sclerosis: A comparative study with three bioanalytical methods. Analytica Chimica Acta, 2015, 853, 555-562.	5.4	22
55	A guide into glycosciences: How chemistry, biochemistry and biology cooperate to crack the sugar code. Biochimica Et Biophysica Acta - General Subjects, 2015, 1850, 186-235.	2.4	188
56	Datura stramonium agglutinin: Cloning, molecular characterization and recombinant production in Arabidopsis thaliana. Glycobiology, 2015, 25, 157-169.	2.5	11

#	ARTICLE	IF	CITATIONS
57	The role of N-glycans in colorectal cancer progression: potential biomarkers and therapeutic applications. <i>Oncotarget</i> , 2016, 7, 19395-19413.	1.8	61
58	Glycomic Approaches for the Discovery of Targets in Gastrointestinal Cancer. <i>Frontiers in Oncology</i> , 2016, 6, 55.	2.8	47
59	Aberrant Glycosylation in the Left Ventricle and Plasma of Rats with Cardiac Hypertrophy and Heart Failure. <i>PLoS ONE</i> , 2016, 11, e0150210.	2.5	37
60	Role of lectin microarrays in cancer diagnosis. <i>Proteomics</i> , 2016, 16, 1257-1265.	2.2	68
61	Development of a chip fully automated immunoassay system to measure the changes in glycosylation profiles of alpha-fetoprotein in patients with hepatocellular carcinoma. <i>Proteomics</i> , 2016, 16, 3056-3061.	2.2	7
62	Development and Applications of Lectins as Biological Tools in Biomedical Research. <i>Medicinal Research Reviews</i> , 2016, 36, 221-247.	10.5	101
63	NMR analysis on the sialic acid-binding mechanism of an R-type lectin mutant by natural evolution-mimicry. <i>FEBS Letters</i> , 2016, 590, 1720-1728.	2.8	1
64	Integrated Microfluidic Lectin Barcode Platform for High-Performance Focused Glycomic Profiling. <i>Scientific Reports</i> , 2016, 6, 20297.	3.3	43
65	Targeting label free carbohydrate-protein interactions for biosensor design. <i>Analytical Methods</i> , 2016, 8, 3410-3418.	2.7	6
66	±6 sialylation is a marker of the differentiation potential of human mesenchymal stem cells. <i>Glycobiology</i> , 2016, 26, cww039.	2.5	15
67	Systems Vaccinology: Applications, Trends, and Perspectives. <i>Methods in Molecular Biology</i> , 2016, 1403, 107-130.	0.9	2
68	Glycan heterogeneity on gold nanoparticles increases lectin discrimination capacity in label-free multiplexed bioassays. <i>Analyst</i> , The, 2016, 141, 4305-4312.	3.5	36
69	DNA-mediated cell surface engineering for multiplexed glycan profiling using MALDI-TOF mass spectrometry. <i>Chemical Science</i> , 2016, 7, 5448-5452.	7.4	52
70	Rapid and sensitive analysis of N-glycans by MALDI-MS using permanent charge derivatization and methylation. <i>Talanta</i> , 2016, 161, 554-559.	5.5	23
71	Selectivity and Specificity: Pros and Cons in Sensing. <i>ACS Sensors</i> , 2016, 1, 1282-1285.	7.8	153
72	Current landscape of protein glycosylation analysis and recent progress toward a novel paradigm of glycoscience research. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2016, 130, 273-300.	2.8	34
73	Lectin-based protein microarray analysis of differences in serum alpha-2-macroglobulin glycosylation between patients with colorectal cancer and persons without cancer. <i>Biotechnology and Applied Biochemistry</i> , 2016, 63, 457-464.	3.1	18
74	Capturing red blood cells from the blood by lectin recognition on a glycopolymer-patterned surface. <i>Journal of Materials Chemistry B</i> , 2016, 4, 4130-4137.	5.8	13

#	ARTICLE	IF	CITATIONS
75	The Glycome Analytics Platform: an integrative framework for glycobioinformatics. <i>Bioinformatics</i> , 2016, 32, 3005-3011.	4.1	5
76	Fucosylation is associated with the malignant transformation of intraductal papillary mucinous neoplasms: a lectin microarray-based study. <i>Surgery Today</i> , 2016, 46, 1217-1223.	1.5	15
77	Detection, quantification, and profiling of PSA: current microarray technologies and future directions. <i>RSC Advances</i> , 2016, 6, 7599-7609.	3.6	11
78	A Multivalent Marine Lectin from <i>Crenomytilus grayanus</i> Possesses Anti-cancer Activity through Recognizing Globotriose Gb3. <i>Journal of the American Chemical Society</i> , 2016, 138, 4787-4795.	13.7	51
79	Two carbohydrate recognizing domains from <i>Cycas revoluta</i> leaf lectin show the distinct sugar-binding specificity—A unique manno oligosaccharide recognition by N-terminal domain. <i>Journal of Biochemistry</i> , 2016, 160, 27-35.	1.7	5
80	The use of lectin microarray for assessing glycosylation of therapeutic proteins. <i>MAbs</i> , 2016, 8, 524-535.	5.2	73
81	Glycan analysis of therapeutic glycoproteins. <i>MAbs</i> , 2016, 8, 205-215.	5.2	156
82	Glycosylated gold nanoparticle libraries for label-free multiplexed lectin biosensing. <i>Journal of Materials Chemistry B</i> , 2016, 4, 3046-3053.	5.8	43
83	Serum Glycopatterns as Novel Potential Biomarkers for Diagnosis of Acute-on-Chronic Hepatitis B Liver Failure. <i>Scientific Reports</i> , 2017, 7, 45957.	3.3	8
84	An oxime-based glycocluster microarray. <i>Organic and Biomolecular Chemistry</i> , 2017, 15, 5135-5139.	2.8	11
85	Analysis of changes in the glycan composition of serum, cytosol and membrane glycoprotein biomarkers of colorectal cancer using a lectin-based protein microarray. <i>Analytical Methods</i> , 2017, 9, 2660-2666.	2.7	11
86	Glycopeptides as Targets for Dendritic Cells: Exploring MUC1 Glycopeptides Binding Profile toward Macrophage Galactose-Type Lectin (MGL) Orthologs. <i>Journal of Medicinal Chemistry</i> , 2017, 60, 9012-9021.	6.4	24
87	Glycan profiling analysis using evanescent-field fluorescence-assisted lectin array: Importance of sugar recognition for cellular uptake of exosomes from mesenchymal stem cells. <i>Biochemical and Biophysical Research Communications</i> , 2017, 491, 701-707.	2.1	109
88	Nanotechnology in Glycomics: Applications in Diagnostics, Therapy, Imaging, and Separation Processes. <i>Medicinal Research Reviews</i> , 2017, 37, 514-626.	10.5	45
89	Identification of sperm equatorial segment protein 1 in the acrosome as the primary binding target of peanut agglutinin (PNA) in the mouse testis. <i>Histochemistry and Cell Biology</i> , 2017, 147, 27-38.	1.7	17
90	An Automated Micro-Total Immunoassay System for Measuring Cancer-Associated α 2,3-linked Sialyl N-Glycan-Carrying Prostate-Specific Antigen May Improve the Accuracy of Prostate Cancer Diagnosis. <i>International Journal of Molecular Sciences</i> , 2017, 18, 470.	4.1	37
91	Lectins as Bioactive Proteins in Foods and Feeds. <i>Food Science and Technology Research</i> , 2017, 23, 487-494.	0.6	26
92	A Boronic Acid Assay for the Detection of Mucin-1 Glycoprotein from Cancer Cells. <i>ChemBioChem</i> , 2017, 18, 1578-1582.	2.6	4

#	ARTICLE	IF	CITATIONS
93	Perspectives of Carbohydrates in Drug Discovery. , 2017, , 577-610.		8
94	Supramolecular self-assemblies for bacterial cell agglutination driven by directional charge-transfer interactions. Chemical Communications, 2018, 54, 2922-2925.	4.1	4
95	Glycome analysis of extracellular vesicles derived from human induced pluripotent stem cells using lectin microarray. Scientific Reports, 2018, 8, 3997.	3.3	28
96	Application of lectin microarrays for the analysis of seminal plasma glycome. Andrologia, 2018, 50, e13018.	2.1	7
97	Synchronous detection of ebolavirus conserved RNA sequences and ebolavirus-encoded miRNA-like fragment based on a zwitterionic copper (II) metal-organic framework. Talanta, 2018, 180, 396-402.	5.5	50
98	<i>Wisteria floribunda</i> agglutinin positive glycobiomarkers: a unique lectin as a serum biomarker probe in various diseases. Expert Review of Proteomics, 2018, 15, 183-190.	3.0	20
99	Analytical Application of Lectins. Critical Reviews in Analytical Chemistry, 2018, 48, 279-292.	3.5	48
100	Prospects in non-invasive assessment of liver fibrosis: Liquid biopsy as the future gold standard?. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2018, 1864, 1024-1036.	3.8	41
101	Mass spectrometry based proteomics as foodomics tool in research and assurance of food quality and safety. Trends in Food Science and Technology, 2018, 77, 100-119.	15.1	42
102	Glycosylation of extracellular vesicles: current knowledge, tools and clinical perspectives. Journal of Extracellular Vesicles, 2018, 7, 1442985.	12.2	173
103	Altered plasma protein glycosylation in a mouse model of depression and in patients with major depression. Journal of Affective Disorders, 2018, 233, 79-85.	4.1	23
104	Specificity versus selectivity: twin aims of aptasensors in bioanalysis. Bioanalysis, 2018, 10, 1549-1551.	1.5	2
105	Clinical application of quantitative glycomics. Expert Review of Proteomics, 2018, 15, 1007-1031.	3.0	40
106	Current Technologies for Complex Glycoproteomics and Their Applications to Biology/Disease-Driven Glycoproteomics. Journal of Proteome Research, 2018, 17, 4097-4112.	3.7	60
107	Boronic acid-functionalized iron oxide magnetic nanoparticles <i>via</i> distillation-precipitation polymerization and thiol-ene click chemistry for the enrichment of glycoproteins. New Journal of Chemistry, 2018, 42, 17331-17338.	2.8	18
108	Biochemical and structural characterization of a mannose binding jacalin-related lectin with two-sugar binding sites from pineapple (<i>Ananas comosus</i>) stem. Scientific Reports, 2018, 8, 11508.	3.3	17
109	Lectin Microarray Combined with Mass Spectrometry Identifies Haptoglobin-Related Protein (HPR) as a Potential Serologic Biomarker for Separating Nonbacterial Pneumonia from Bacterial Pneumonia in Childhood. Proteomics - Clinical Applications, 2018, 12, e1800030.	1.6	15
110	Focused Glycomic Profiling With an Integrated Microfluidic Lectin Barcode System. Methods in Enzymology, 2018, 598, 169-196.	1.0	1

#	ARTICLE	IF	CITATIONS
111	Bauhinia lectins: Biochemical properties and biotechnological applications. International Journal of Biological Macromolecules, 2018, 119, 811-820.	7.5	28
112	Identification of Novel Urinary Biomarkers for Predicting Renal Prognosis in Patients With Type 2 Diabetes by Glycan Profiling in a Multicenter Prospective Cohort Study: U-CARE Study 1. Diabetes Care, 2018, 41, 1765-1775.	8.6	13
113	Aberrant glycosylation and cancer biomarker discovery: a promising and thorny journey. Clinical Chemistry and Laboratory Medicine, 2019, 57, 407-416.	2.3	111
114	Lectin Bead Array in a Single Tip Facilitates Fully Automatic Glycoprotein Profiling. Analytical Chemistry, 2019, 91, 11162-11169.	6.5	6
115	Glycans and Glycan-Binding Proteins in Atherosclerosis. Thrombosis and Haemostasis, 2019, 119, 1265-1273.	3.4	11
116	LM-GlycomeAtlas Ver. 1.0: A Novel Visualization Tool for Lectin Microarray-Based Glycomic Profiles of Mouse Tissue Sections. Molecules, 2019, 24, 2962.	3.8	11
117	Microbe-focused glycan array screening platform. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1958-1967.	7.1	71
118	Analysis of a lectin microarray identifies altered sialylation of mouse serum glycoproteins induced by whole-body radiation exposure. Journal of Radiation Research, 2019, 60, 189-196.	1.6	6
119	Synthetic glycopeptides reveal specific binding pattern and conformational change at O-mannosylated position of I±-dystroglycan by POMGnT1 catalyzed GlcNAc modification. Bioorganic and Medicinal Chemistry, 2019, 27, 2822-2831.	3.0	10
120	“Clickable lectins”™: bioorthogonal reactive handles facilitate the directed conjugation of lectins in a modular fashion. Interface Focus, 2019, 9, 20180072.	3.0	9
121	Glycosylation-dependent antitumor therapeutic monoclonal antibodies. Progress in Molecular Biology and Translational Science, 2019, 163, 471-485.	1.7	4
122	Sequential binary protein patterning on surface domains of thermo-responsive polymer blends cast by horizontal-dipping. Materials Science and Engineering C, 2019, 99, 1477-1484.	7.3	4
123	Array-basierte Sensorik mit der “chemischen Nase” in der Diagnostik und Wirkstoffentdeckung. Angewandte Chemie, 2019, 131, 5244-5255.	2.0	13
124	An Improved Method for Cell Type-Selective Glycomic Analysis of Tissue Sections Assisted by Fluorescence Laser Microdissection. International Journal of Molecular Sciences, 2019, 20, 700.	4.1	10
125	Cell Profiling Based on Sugar “Chain”-Cell Binding Interaction and Its Application to Typing and Quality Verification of Cells. ChemBioChem, 2019, 20, 1810-1816.	2.6	3
126	Increased Mac-2 binding protein glycan isomer in patients at risk for late nonrelapse mortality after HSCT. Blood Advances, 2019, 3, 3287-3296.	5.2	2
127	Lectin biosensors in cancer glycan biomarker detection. Advances in Clinical Chemistry, 2019, 93, 1-61.	3.7	27
128	The challenges of glycan recognition with natural and artificial receptors. Chemical Society Reviews, 2019, 48, 5488-5505.	38.1	108

#	ARTICLE	IF	CITATIONS
129	The Bacterial Glycome: From Monomers to Complex Carbohydrate Polymers. , 2019, , .		0
130	Bacterial expression, purification and biophysical characterization of wheat germ agglutinin and its four heveinâ€like domains. Biopolymers, 2019, 110, e23242.	2.4	3
131	Arrayâ€based â€Chemical Noseâ€Sensing in Diagnostics and Drug Discovery. Angewandte Chemie - International Edition, 2019, 58, 5190-5200.	13.8	165
132	Sensitive glycoprofiling of insulin-like growth factor receptors isolated from colon tissue of patients with colorectal carcinoma using lectin-based protein microarray. International Journal of Biological Macromolecules, 2020, 144, 932-937.	7.5	7
133	PEGylation of metal-organic framework for selective isolation of glycoprotein immunoglobulin G. Talanta, 2020, 208, 120433.	5.5	18
134	ELLSA based profiling of surface glycosylation in microorganisms reveals that Å“glucan rich yeastsâ€™ surfaces are selectively recognized with recombinant banana lectin. Glycoconjugate Journal, 2020, 37, 95-105.	2.7	7
135	Structure and engineering of tandem repeat lectins. Current Opinion in Structural Biology, 2020, 62, 39-47.	5.7	29
136	Glycomic Signatures of Plasma IgG Improve Preoperative Prediction of the Invasiveness of Small Lung Nodules. Molecules, 2020, 25, 28.	3.8	11
137	Affinity Control of Monosaccharide Conjugated Peptides against Lectins with a Set of Amino Acid Substitutions on Î±-Helical Structures. Bioconjugate Chemistry, 2020, 31, 2533-2540.	3.6	2
138	Quantification of binding affinity of glyconanomaterials with lectins. Chemical Communications, 2020, 56, 13491-13505.	4.1	20
139	Glycome profiling by lectin microarray reveals dynamic glycan alterations during epidermal stem cell aging. Aging Cell, 2020, 19, e13190.	6.7	23
140	Recent Advancements in Arrayed Technologies and Emerging Themes in the Identification of Glycan-Protein Interactions. ACS Symposium Series, 2020, , 1-21.	0.5	2
141	Predictive modeling of complex ABO glycan phenotypes by lectin microarrays. Blood Advances, 2020, 4, 3960-3970.	5.2	2
142	Sialyl-LewisX Glycoantigen Is Enriched on Cells with Persistent HIV Transcription during Therapy. Cell Reports, 2020, 32, 107991.	6.4	16
143	Glycan Nanobiosensors. Nanomaterials, 2020, 10, 1406.	4.1	20
144	High-throughput fluorescence-activated cell sorting for cell wall-deficient microalgal mutants screening. Algal Research, 2020, 50, 102011.	4.6	14
145	130 years of Plant Lectin Research. Glycoconjugate Journal, 2020, 37, 533-551.	2.7	103
146	Status Quo of Glycosylation in Cancer: What Is, What Is Not and What Is to Be. Applied Sciences (Switzerland), 2020, 10, 8401.	2.5	0

#	ARTICLE	IF	CITATIONS
147	Analysis of serum glycome by lectin microarrays for prostate cancer patients - a search for aberrant glycoforms. <i>Glycoconjugate Journal</i> , 2020, 37, 703-711.	2.7	9
148	Synthetic Glycobiology: Parts, Systems, and Applications. <i>ACS Synthetic Biology</i> , 2020, 9, 1534-1562.	3.8	52
149	Dual-Probe Approach for Mass Spectrometric Quantification of MUC1-Specific Terminal Gal/GalNAc <i>in Situ</i> . <i>Analytical Chemistry</i> , 2020, 92, 8340-8349.	6.5	16
150	Altered glycosylation associated with dedifferentiation of hepatocellular carcinoma: a lectin microarray-based study. <i>BMC Cancer</i> , 2020, 20, 192.	2.6	26
151	Glutathione-modified ordered mesoporous silicas for enrichment of N-linked glycopeptides by hydrophilic interaction chromatography. <i>Talanta</i> , 2020, 217, 121082.	5.5	22
152	Alterations in serum protein glycopatterns related to small cell lung cancer, adenocarcinoma and squamous carcinoma of the lung. <i>RSC Advances</i> , 2020, 10, 7181-7193.	3.6	5
153	GlycoBIST: A System for Automatic Glycan Profiling of a Target Protein Using Milli [®] Bead Array in a Tip. <i>Current Protocols in Protein Science</i> , 2020, 99, e103.	2.8	2
154	Lectin microarrays for glycoproteomics: an overview of their use and potential. <i>Expert Review of Proteomics</i> , 2020, 17, 27-39.	3.0	29
155	Application of Lectin Microarrays for Biomarker Discovery. <i>ChemistryOpen</i> , 2020, 9, 285-300.	1.9	57
156	Influence of media composition on recombinant monoclonal IgA1 glycosylation analysed by lectin-based protein microarray and MALDI-MS. <i>Journal of Biotechnology</i> , 2020, 314-315, 34-40.	3.8	14
157	Discovery of Pancreatic Ductal Adenocarcinoma-Related Aberrant Glycosylations: A Multilateral Approach of Lectin Microarray-Based Tissue Glycomic Profiling With Public Transcriptomic Datasets. <i>Frontiers in Oncology</i> , 2020, 10, 338.	2.8	19
158	Platelet-derived extracellular vesicles are increased in sera of Alzheimer's disease patients, as revealed by Tim4-based assays. <i>FEBS Open Bio</i> , 2021, 11, 741-752.	2.3	8
159	Separation based characterization methods for the N-glycosylation analysis of prostate-specific antigen. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2021, 194, 113797.	2.8	7
160	Application of Glycan-Related Microarrays. , 2021, , 134-148.		1
161	Glycosylation in Cholangiocarcinoma Development and Metastasis: Diagnostic and Therapeutic Considerations. , 2021, , 527-553.		1
162	Glycosylated biomarker sensors: advancements in prostate cancer diagnosis. <i>Chemical Communications</i> , 2021, 57, 9640-9655.	4.1	8
163	Novel urinary glycan profiling by lectin array serves as the biomarkers for predicting renal prognosis in patients with IgA nephropathy. <i>Scientific Reports</i> , 2021, 11, 3394.	3.3	9
164	cDNA cloning of a novel lectin that induce cell apoptosis from <i>Artocarpus hypargyreus</i> . <i>Chinese Journal of Natural Medicines</i> , 2021, 19, 81-89.	1.3	0

#	ARTICLE	IF	CITATIONS
165	The Abnormal Glycopatterns of Salivary Glycoproteins in Esophageal Squamous Cell Carcinoma Patients. <i>Frontiers in Chemistry</i> , 2021, 9, 637730.	3.6	7
166	Antibody glycosylation in autoimmune diseases. <i>Autoimmunity Reviews</i> , 2021, 20, 102804.	5.8	26
167	Glycosylation Biomarkers Associated with Age-Related Diseases and Current Methods for Glycan Analysis. <i>International Journal of Molecular Sciences</i> , 2021, 22, 5788.	4.1	24
168	Changes of Serum IgG Glycosylation Patterns in Primary Biliary Cholangitis Patients. <i>Frontiers in Immunology</i> , 2021, 12, 669137.	4.8	16
169	Comprehensive analysis of glycosphingolipid glycans by lectin microarrays and MALDI-TOF mass spectrometry. <i>Nature Protocols</i> , 2021, 16, 3470-3491.	12.0	10
170	Multiple lectin assays in detecting glycol-alteration status of serum NRG1 in papillary thyroid cancer. <i>Translational Cancer Research</i> , 2021, 10, 3218-3224.	1.0	2
171	Protein Core Fucosylation Regulates Planarian Head Regeneration via Neoblast Proliferation. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 625823.	3.7	2
172	Detection of Lectin Protein Allergen of Kidney Beans (<i>Phaseolus vulgaris</i> L.) and Desensitization Food Processing Technology. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 14723-14741.	5.2	13
173	Precision N-Glycoproteomic Profiling of Murine Peritoneal Macrophages After Different Stimulations. <i>Frontiers in Immunology</i> , 2021, 12, 722293.	4.8	5
174	Integrated analysis of glycan and RNA in single cells. <i>IScience</i> , 2021, 24, 102882.	4.1	30
175	Systematic Optimisation of Microtiter Plate Lectin Assay to Improve Sialic Acid Linkage Detection. <i>Combinatorial Chemistry and High Throughput Screening</i> , 2021, 24, .	1.1	0
176	Graphene functionalized with structurally complementary amino acids for sensitive recognition of N-linked glycopeptides. <i>Journal of Chromatography A</i> , 2021, 1655, 462505.	3.7	9
177	Protein Glycopatterns in Bronchoalveolar Lavage Fluid as Novel Potential Biomarkers for Diagnosis of Lung Cancer. <i>Frontiers in Oncology</i> , 2020, 10, 568433.	2.8	2
179	Lectin-Based Glycomics: How and When Was the Technology Born?. <i>Methods in Molecular Biology</i> , 2014, 1200, 225-242.	0.9	16
180	Differential Glycan Analysis of an Endogenous Glycoprotein: Toward Clinical Implementation”From Sample Pretreatment to Data Standardization. <i>Methods in Molecular Biology</i> , 2014, 1200, 265-285.	0.9	8
181	Application of Lectin Microarray to Bacteria Including <i>Lactobacillus casei/paracasei</i> Strains. <i>Methods in Molecular Biology</i> , 2014, 1200, 295-311.	0.9	5
182	Perspectives in Glycomics and Lectin Engineering. <i>Methods in Molecular Biology</i> , 2014, 1200, 421-445.	0.9	11
183	Bisphosphorylated fructose-modified magnetic Zr-Organic framework: A dual-hydrophilic sorbent for selective adsorption of immunoglobulin G. <i>Analytica Chimica Acta</i> , 2020, 1112, 16-23.	5.4	14

#	ARTICLE	IF	CITATIONS
184	Rapid and sensitive glycan targeting by lectin-SERS assay. Molecular Omics, 2020, 16, 339-344.	2.8	6
186	Animal Galectins and Plant Lectins as Tools for Studies in Neurosciences. Current Neuropharmacology, 2020, 18, 202-215.	2.9	10
187	Carbohydrate-Binding Specificity of Human Galectins: An Overview by Frontal Affinity Chromatography. Trends in Glycoscience and Glycotechnology, 2018, 30, SE137-SE153.	0.1	44
188	Electrochemical Biosensing Strategies to Detect Serum Glycobiomarkers. Advances in Research, 2016, 6, 1-17.	0.3	4
189	Carbohydrate Microarray Technology. Techniques in Life Science and Biomedicine for the Non-expert, 2021, , 245-252.	0.2	0
190	Molecular Probes for Protein Glycosylation. , 2013, , .		1
191	Development of lectin microarray, an advanced system for glycan profiling. Synthesiology, 2014, 7, 105-117.	0.2	1
193	Discovery and Applications of a Novel Human Pluripotent Stem Cell-Specific Lectin Probe rBC2LCN. , 2015, , 95-106.		0
194	Glycome as Biomarkers. , 2014, , 1-23.		0
195	Historical and Practical Aspects of Development of Lectin Microarray Technique Lectin microarray. , 2015, , 53-60.		0
196	CHAPTER 10. Chemical Approaches to Image Protein Glycosylation. Chemical Biology, 2017, , 282-299.	0.2	0
197	Possible role of sialylation of retinal protein glycans in the regulation of electroretinogram response in mice. International Journal of Ophthalmology, 2017, 10, 1217-1222.	1.1	2
198	Methods for the High Resolution Analysis of Glycoconjugates. , 2018, , 225-267.		2
199	ç ³ –éŽ–ā, ¢āf–ā, āā ^{1/2} •ā«ā ^{1/2} ;āā, ¢ā@ā. Kagaku To Seibutsu, 2017, 55, 788-791.	0.0	0
200	Evaluation of the quality of antibody drugs and cell therapy products using lectin microarray. Denki Eido, 2018, 62, 27-30.	0.0	0
201	Carbohydrate-Binding Specificity of Human Galectins: An Overview by Frontal Affinity Chromatography. Trends in Glycoscience and Glycotechnology, 2018, 30, SJ65-SJ81.	0.1	0
202	An insight into pluripotency and cellular aging through glycan analysis. Journal of Stem Cells and Regenerative Medicine, 2018, 14, 86-86.	2.2	0
203	Lectin and Liquid Chromatography-Based Methods for Immunoglobulin (G) Glycosylation Analysis. Experientia Supplementum (2012), 2021, 112, 29-72.	0.9	0

#	ARTICLE	IF	CITATIONS
204	Tissue Glycome Mapping: Lectin Microarray-Based Differential Glycomic Analysis of Formalin-Fixed Paraffin-Embedded Tissue Sections. <i>Methods in Molecular Biology</i> , 2022, 2460, 161-180.	0.9	1
205	Lectin-Based Protein Microarray for the Glycan Analysis of Colorectal Cancer Biomarkers: The Insulin-Like Growth Factor System. <i>Methods in Molecular Biology</i> , 2022, 2460, 207-222.	0.9	2
206	Engineering the Ligand Specificity of the Human Galectin-1 by Incorporation of Tryptophan Analogues. <i>ChemBioChem</i> , 2022, , .	2.6	2
207	Molecularly imprinted polymers outperform lectin counterparts and enable more precise cancer diagnosis. <i>Chemical Science</i> , 2022, 13, 4589-4597.	7.4	28
208	Abnormal ECA-Binding Membrane Glycans and Galactosylated CAT and P4HB in Lesion Tissues as Potential Biomarkers for Hepatocellular Carcinoma Diagnosis. <i>Frontiers in Oncology</i> , 2022, 12, 855952.	2.8	3
209	Quantitative evaluation of glycan-binding specificity of recombinant concanavalin A produced in lettuce (<i>Lactuca sativa</i>). <i>Biotechnology and Bioengineering</i> , 2022, 119, 1781-1791.	3.3	2
210	Advances in the adsorption/enrichment of proteins/peptides by metal-organic frameworks-affinity adsorbents. <i>TrAC - Trends in Analytical Chemistry</i> , 2022, 153, 116627.	11.4	18
211	Features, modulation and analysis of glycosylation patterns of therapeutic recombinant immunoglobulin A. <i>Biotechnology and Genetic Engineering Reviews</i> , 2022, 38, 247-269.	6.2	4
212	Highly sensitive multiplex detection of foodborne pathogens using a SERS immunosensor combined with novel covalent organic frameworks based biologic interference-free Raman tags. <i>Talanta</i> , 2022, 243, 123369.	5.5	26
213	Development of Urinary Diagnostic Biomarker for IgA Nephropathy by Lectin Microarray. <i>American Journal of Nephrology</i> , 2022, 53, 10-20.	3.1	1
214	Identification of Whole-Serum Glycobiomarkers for Colorectal Carcinoma Using Reverse-Phase Lectin Microarray. <i>Frontiers in Oncology</i> , 2021, 11, 735338.	2.8	10
215	Glycosyl Exchange of Unactivated Glycosidic Bonds: Suppressing or Embracing Side Reactivity in Catalytic Glycosylations. <i>Journal of Organic Chemistry</i> , 2022, 87, 5817-5826.	3.2	2
217	Glycan Profiling by Sequencing to Uncover Multicellular Communication: Launching Glycobiology in Single Cells and Microbiomes. <i>Frontiers in Cell and Developmental Biology</i> , 2022, 10, .	3.7	4
218	Prostate-Specific Membrane Antigen (PSMA)-Positive Extracellular Vesicles in Urine: A Potential Liquid Biopsy Strategy for Prostate Cancer Diagnosis?. <i>Cancers</i> , 2022, 14, 2987.	3.7	7
219	High-Throughput Glycomic Methods. <i>Chemical Reviews</i> , 2022, 122, 15865-15913.	47.7	30
220	Structural elucidation approaches in carbohydrates: A comprehensive review on techniques and future trends. <i>Food Chemistry</i> , 2023, 400, 134118.	8.2	3
221	Changes in Serum IgG Glycosylation Patterns for Abdominal Aortic Aneurysm Patients. <i>Journal of Cardiovascular Development and Disease</i> , 2022, 9, 291.	1.6	3
222	IgG Glycosylation Profiling of Peripheral Artery Diseases with Lectin Microarray. <i>Journal of Clinical Medicine</i> , 2022, 11, 5727.	2.4	5

#	ARTICLE	IF	CITATIONS
223	Basic Research on Bullfrog Egg-derived Sialic Acid-binding Lectin for Cancer Treatment. Yakugaku Zasshi, 2022, 142, 1045-1053.	0.2	0
225	Efficient TurboID-based proximity labelling method for identifying terminal sialic acid glycosylation in living cells. Acta Biochimica Et Biophysica Sinica, 2022, , .	2.0	0
226	Key changes in bovine milk immunoglobulin G during lactation: NeuAc sialylation is a hallmark of colostrum immunoglobulin G<i>N</i>-glycosylation. Glycobiology, 2023, 33, 115-125.	2.5	6
227	Retrospective screening of serum IgG glycosylation biomarker for primary Sjögren's syndrome using lectin microarray. PeerJ, 0, 11, e14853.	2.0	0
228	Changes of serum IgG glycosylation patterns in rheumatoid arthritis. Clinical Proteomics, 2023, 20, .	2.1	2
229	rBC2LCN-reactive SERPINA3 is a glycobiomarker candidate for pancreatic ductal adenocarcinoma. Glycobiology, 2023, 33, 342-352.	2.5	1
230	Altered glycosylation profiles of serum IgG in Takayasu arteritis. European Journal of Medical Research, 2023, 28, .	2.2	1
231	Effects of Bullfrog Sialic Acid's Binding Lectin in Cancer Cells. , 2023, , 125-147.		0
232	Stereoselective synthesis of photoactivatable Man(1,4)GlcNAc-based bioorthogonal probes. Tetrahedron Letters, 2023, 122, 154521.	1.4	0
233	Lectin Blotting of Cell Lysates. Current Protocols, 2023, 3, .	2.9	0
234	Single-Cell Glycan and RNA Sequencing (scGR-seq). Current Protocols, 2023, 3, .	2.9	0
235	ã,ãf³ãf•ãf«ã,ãf³ã,ã,ã,ãf«ã,ã®é³¥ãžãf-ã,»ãf—ã,ãf¹/4æœã†ªã«ãšãã,«è«ã•é¡E. Uirusu, 2021, 71, 175-184.	0.1	0
236	Electrochemical Biosensors for Whole Blood Analysis: Recent Progress, Challenges, and Future Perspectives. Chemical Reviews, 2023, 123, 7953-8039.	47.7	24
237	An improved evanescent fluorescence scanner suitable for high-resolution glycome mapping of formalin-fixed paraffin-embedded tissue sections. Analytical and Bioanalytical Chemistry, 0, , .	3.7	1
239	Electrochemical Biosensors and the Signaling. , 2023, , 17-37.		0
240	Harnessing aptamers for the biosensing of cell surface glycans " A review. Analytica Chimica Acta, 2024, 1288, 342044.	5.4	0
241	Structural Analysis and Characterization of an Antiproliferative Lectin from Canavalia villosa Seeds. International Journal of Molecular Sciences, 2023, 24, 15966.	4.1	0
242	Biosensors Based on Stanniocalcin-1 Protein Antibodies Thin Films for Prostate Cancer Diagnosis. Biosensors, 2023, 13, 981.	4.7	0

#	ARTICLE	IF	CITATIONS
244	Cell-Surface Glycan Labeling and Sensing. , 2024, 2, 1-31.		0
245	Glycan-specific molecularly imprinted polymers towards cancer diagnostics: merits, applications, and future perspectives. Chemical Society Reviews, 2024, 53, 1870-1891.	38.1	0
246	Development of glycosensors and their applications. , 2024, , 341-361.		0
247	In Situ Glycan Analysis and Editing in Living Systems. Jacs Au, 2024, 4, 384-401.	7.9	0
248	Lectins and their applications in biomedical research. , 2024, , 37-53.		0
249	A tailored lectin microarray for rapid glycan profiling of therapeutic monoclonal antibodies. MAbs, 2024, 16, .	5.2	0
250	Interdigitated impedimetric-based Maackia amurensis lectin biosensor for prostate cancer biomarker. Mikrochimica Acta, 2024, 191, .	5.0	0
251	Lectin-conjugated nanotags with high SERS stability: selective probes for glycans. Analyst, The, 2024, 149, 1774-1783.	3.5	0
252	Elucidating the glycan-binding specificity and structure of <i>Cucumis melo</i> agglutinin, a new R-type lectin. Beilstein Journal of Organic Chemistry, 0, 20, 306-320.	2.2	0
253	Glyphosate Pattern Recognition Using Microwave-Interdigitated Sensors and Principal Component Analysis. AgriEngineering, 2024, 6, 526-538.	3.2	0
254	Nanosensor based approaches for quantitative detection of heparin. Talanta, 2024, 273, 125873.	5.5	0