

Ajit Varki

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316
papers

34,357
citations

96
h-index

180
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336
ext. papers

38,234
ext. citations

9.8
avg. IF

7.94
L-index

#	Paper	IF	Citations
316	Biological roles of oligosaccharides: all of the theories are correct. <i>Glycobiology</i> , 1993 , 3, 97-130	5.8	4684
315	Siglecs and their roles in the immune system. <i>Nature Reviews Immunology</i> , 2007 , 7, 255-66	36.5	1334
314	Biological roles of glycans. <i>Glycobiology</i> , 2017 , 27, 3-49	5.8	1039
313	Chemical diversity in the sialic acids and related alpha-keto acids: an evolutionary perspective. <i>Chemical Reviews</i> , 2002 , 102, 439-69	68.1	992
312	Human embryonic stem cells express an immunogenic nonhuman sialic acid. <i>Nature Medicine</i> , 2005 , 11, 228-32	50.5	779
311	Intra- and interspecific variation in primate gene expression patterns. <i>Science</i> , 2002 , 296, 340-3	33.3	680
310	Glycan-based interactions involving vertebrate sialic-acid-recognizing proteins. <i>Nature</i> , 2007 , 446, 1023-30	30.4	658
309	Sialic acids in human health and disease. <i>Trends in Molecular Medicine</i> , 2008 , 14, 351-60	11.5	633
308	Symbol Nomenclature for Graphical Representations of Glycans. <i>Glycobiology</i> , 2015 , 25, 1323-4	5.8	585
307	Diversity in the sialic acids. <i>Glycobiology</i> , 1992 , 2, 25-40	5.8	519
306	Human uptake and incorporation of an immunogenic nonhuman dietary sialic acid. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 12045-50	11.5	474
305	Sialic acids as ligands in recognition phenomena. <i>FASEB Journal</i> , 1997 , 11, 248-55	0.9	467
304	Evolutionary considerations in relating oligosaccharide diversity to biological function. <i>Glycobiology</i> , 1999 , 9, 747-55	5.8	419
303	Siglecs--the major subfamily of I-type lectins. <i>Glycobiology</i> , 2006 , 16, 1R-27R	5.8	409
302	Diversity in cell surface sialic acid presentations: implications for biology and disease. <i>Laboratory Investigation</i> , 2007 , 87, 851-7	5.9	398
301	Advances in the biology and chemistry of sialic acids. <i>ACS Chemical Biology</i> , 2010 , 5, 163-76	4.9	382
300	Multifarious roles of sialic acids in immunity. <i>Annals of the New York Academy of Sciences</i> , 2012 , 1253, 16-36	6.5	379

299	P-selectin deficiency attenuates tumor growth and metastasis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1998 , 95, 9325-30	11.5	378
298	Synergistic effects of L- and P-selectin in facilitating tumor metastasis can involve non-mucin ligands and implicate leukocytes as enhancers of metastasis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 2193-8	11.5	341
297	Siglecs, sialic acids and innate immunity. <i>Trends in Immunology</i> , 2001 , 22, 337-42	14.4	324
296	Molecular mimicry of host sialylated glycans allows a bacterial pathogen to engage neutrophil Siglec-9 and dampen the innate immune response. <i>Blood</i> , 2009 , 113, 3333-6	2.2	297
295	Mechanism of uptake and incorporation of the non-human sialic acid N-glycolylneuraminic acid into human cells. <i>Journal of Biological Chemistry</i> , 2005 , 280, 4228-37	5.4	272
294	Implications of the presence of N-glycolylneuraminic acid in recombinant therapeutic glycoproteins. <i>Nature Biotechnology</i> , 2010 , 28, 863-7	44.5	269
293	Diversity in specificity, abundance, and composition of anti-Neu5Gc antibodies in normal humans: potential implications for disease. <i>Glycobiology</i> , 2008 , 18, 818-30	5.8	256
292	A red meat-derived glycan promotes inflammation and cancer progression. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 542-7	11.5	242
291	Inactivation of CMP-N-acetylneuraminic acid hydroxylase occurred prior to brain expansion during human evolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 11736-41	11.5	239
290	The release and purification of sialic acids from glycoconjugates: methods to minimize the loss and migration of O-acetyl groups. <i>Analytical Biochemistry</i> , 1984 , 137, 236-47	3.1	234
289	Production platforms for biotherapeutic glycoproteins. Occurrence, impact, and challenges of non-human sialylation. <i>Biotechnology and Genetic Engineering Reviews</i> , 2012 , 28, 147-75	4.1	223
288	Siglecs in the immune system. <i>Immunology</i> , 2001 , 103, 137-45	7.8	220
287	Loss of N-glycolylneuraminic acid in humans: Mechanisms, consequences, and implications for hominid evolution. <i>American Journal of Physical Anthropology</i> , 2001 , Suppl 33, 54-69	2.5	218
286	Comparing the human and chimpanzee genomes: searching for needles in a haystack. <i>Genome Research</i> , 2005 , 15, 1746-58	9.7	207
285	Nothing in glycobiology makes sense, except in the light of evolution. <i>Cell</i> , 2006 , 126, 841-5	56.2	194
284	Colloquium paper: uniquely human evolution of sialic acid genetics and biology. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107 Suppl 2, 8939-46	11.5	191
283	Sequencing the chimpanzee genome: insights into human evolution and disease. <i>Nature Reviews Genetics</i> , 2003 , 4, 20-8	30.1	183
282	Selectin-mucin interactions as a probable molecular explanation for the association of Trousseau syndrome with mucinous adenocarcinomas. <i>Journal of Clinical Investigation</i> , 2003 , 112, 853-862	15.9	183

281	Differential metastasis inhibition by clinically relevant levels of heparins--correlation with selectin inhibition, not antithrombotic activity. <i>Clinical Cancer Research</i> , 2005 , 11, 7003-11	12.9	177
280	Incorporation of a non-human glycan mediates human susceptibility to a bacterial toxin. <i>Nature</i> , 2008 , 456, 648-52	50.4	174
279	I-type lectins. <i>Journal of Biological Chemistry</i> , 1995 , 270, 14243-6	5.4	174
278	P-selectin mediates the adhesion of sickle erythrocytes to the endothelium. <i>Blood</i> , 2001 , 98, 1955-62	2.2	169
277	Since there are PAMPs and DAMPs, there must be SAMPs? Glycan self-associated molecular patterns dampen innate immunity, but pathogens can mimic them. <i>Glycobiology</i> , 2011 , 21, 1121-4	5.8	164
276	Loss of Siglec expression on T lymphocytes during human evolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 7765-70	11.5	163
275	N-glycolylneuraminic acid deficiency in mice: implications for human biology and evolution. <i>Molecular and Cellular Biology</i> , 2007 , 27, 4340-6	4.8	160
274	Distinct selectin ligands on colon carcinoma mucins can mediate pathological interactions among platelets, leukocytes, and endothelium. <i>American Journal of Pathology</i> , 1999 , 155, 461-72	5.8	160
273	Acidic pH increases airway surface liquid viscosity in cystic fibrosis. <i>Journal of Clinical Investigation</i> , 2016 , 126, 879-91	15.9	160
272	The sialome--far more than the sum of its parts. <i>OMICS A Journal of Integrative Biology</i> , 2010 , 14, 455-64	3.8	156
271	Sialyltransferase ST3Gal-IV operates as a dominant modifier of hemostasis by concealing asialoglycoprotein receptor ligands. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 10042-7	11.5	155
270	Selectins and other mammalian sialic acid-binding lectins. <i>Current Opinion in Cell Biology</i> , 1992 , 4, 257-66	9	154
269	Updates to the Symbol Nomenclature for Glycans guidelines. <i>Glycobiology</i> , 2019 , 29, 620-624	5.8	148
268	Multiple changes in sialic acid biology during human evolution. <i>Glycoconjugate Journal</i> , 2009 , 26, 231-45	3	145
267	Defining the in vivo function of Siglec-F, a CD33-related Siglec expressed on mouse eosinophils. <i>Blood</i> , 2007 , 109, 4280-7	2.2	145
266	Human-specific regulation of alpha 2-6-linked sialic acids. <i>Journal of Biological Chemistry</i> , 2003 , 278, 48245-50	5.4	144
265	High-pressure liquid chromatography of sialic acids on a pellicular resin anion-exchange column with pulsed amperometric detection: a comparison with six other systems. <i>Analytical Biochemistry</i> , 1990 , 188, 20-32	3.1	144
264	Engagement of myelomonocytic Siglecs by tumor-associated ligands modulates the innate immune response to cancer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 14211-6	11.5	143

263	Evolution of human-chimpanzee differences in malaria susceptibility: relationship to human genetic loss of N-glycolylneuraminic acid. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 12819-24	11.5	143
262	Symbol nomenclature for glycan representation. <i>Proteomics</i> , 2009 , 9, 5398-9	4.8	142
261	Evidence for a human-specific mechanism for diet and antibody-mediated inflammation in carcinoma progression. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 18936-41	11.5	140
260	alpha 2-6-Linked sialic acids on N-glycans modulate carcinoma differentiation in vivo. <i>Cancer Research</i> , 2008 , 68, 388-94	10.1	139
259	A structural difference between the cell surfaces of humans and the great apes. <i>American Journal of Physical Anthropology</i> , 1998 , 107, 187-98	2.5	138
258	Cloning and characterization of human Siglec-11. A recently evolved signaling molecule that can interact with SHP-1 and SHP-2 and is expressed by tissue macrophages, including brain microglia. <i>Journal of Biological Chemistry</i> , 2002 , 277, 24466-74	5.4	138
257	Heparin inhibition of selectin-mediated interactions during the hematogenous phase of carcinoma metastasis: rationale for clinical studies in humans. <i>Seminars in Thrombosis and Hemostasis</i> , 2002 , 28, 53-66	5.3	136
256	Factors controlling the glycosylation potential of the Golgi apparatus. <i>Trends in Cell Biology</i> , 1998 , 8, 34-40	18.3	135
255	Large-scale sequencing of the CD33-related Siglec gene cluster in five mammalian species reveals rapid evolution by multiple mechanisms. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004 , 101, 13251-6	11.5	134
254	Discovery and characterization of sialic acid O-acetylation in group B Streptococcus. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004 , 101, 11123-8	11.5	134
253	Explaining human uniqueness: genome interactions with environment, behaviour and culture. <i>Nature Reviews Genetics</i> , 2008 , 9, 749-63	30.1	131
252	Developmental abnormalities in transgenic mice expressing a sialic acid-specific 9-O-acetyltransferase. <i>Cell</i> , 1991 , 65, 65-74	56.2	131
251	OB-BP1/Siglec-6. a leptin- and sialic acid-binding protein of the immunoglobulin superfamily. <i>Journal of Biological Chemistry</i> , 1999 , 274, 22729-38	5.4	130
250	Functionally defective germline variants of sialic acid acetyltransferase in autoimmunity. <i>Nature</i> , 2010 , 466, 243-7	50.4	129
249	Genetic differences between humans and great apes. <i>Molecular Phylogenetics and Evolution</i> , 2001 , 18, 2-13	4.1	129
248	Self-associated molecular patterns mediate cancer immune evasion by engaging Siglecs on T cells. <i>Journal of Clinical Investigation</i> , 2018 , 128, 4912-4923	15.9	128
247	L-selectin facilitation of metastasis involves temporal induction of Fut7-dependent ligands at sites of tumor cell arrest. <i>Cancer Research</i> , 2006 , 66, 1536-42	10.1	127
246	Siglec-5 and Siglec-14 are polymorphic paired receptors that modulate neutrophil and amnion signaling responses to group B Streptococcus. <i>Journal of Experimental Medicine</i> , 2014 , 211, 1231-42	16.6	124

245	Loss of N-glycolylneuraminic acid in human evolution. Implications for sialic acid recognition by siglecs. <i>Journal of Biological Chemistry</i> , 2000 , 275, 8633-40	5.4	124
244	Group B Streptococcus suppression of phagocyte functions by protein-mediated engagement of human Siglec-5. <i>Journal of Experimental Medicine</i> , 2009 , 206, 1691-9	16.6	122
243	Discovery of Siglec-14, a novel sialic acid receptor undergoing concerted evolution with Siglec-5 in primates. <i>FASEB Journal</i> , 2006 , 20, 1964-73	0.9	122
242	Two proteins modulating transendothelial migration of leukocytes recognize novel carboxylated glycans on endothelial cells. <i>Journal of Immunology</i> , 2001 , 166, 4678-88	5.3	122
241	New aspects of siglec binding specificities, including the significance of fucosylation and of the sialyl-Tn epitope. Sialic acid-binding immunoglobulin superfamily lectins. <i>Journal of Biological Chemistry</i> , 2000 , 275, 8625-32	5.4	122
240	Group B streptococcal capsular sialic acids interact with siglecs (immunoglobulin-like lectins) on human leukocytes. <i>Journal of Bacteriology</i> , 2007 , 189, 1231-7	3.5	121
239	Potential impact of the non-human sialic acid N-glycolylneuraminic acid on transplant rejection risk. <i>Xenotransplantation</i> , 2011 , 18, 1-5	2.8	120
238	Cloning, characterization, and phylogenetic analysis of siglec-9, a new member of the CD33-related group of siglecs. Evidence for co-evolution with sialic acid synthesis pathways. <i>Journal of Biological Chemistry</i> , 2000 , 275, 22127-35	5.4	120
237	Effects of natural human antibodies against a nonhuman sialic acid that metabolically incorporates into activated and malignant immune cells. <i>Journal of Immunology</i> , 2005 , 175, 228-36	5.3	119
236	Heparin's anti-inflammatory effects require glucosamine 6-O-sulfation and are mediated by blockade of L- and P-selectins. <i>Journal of Clinical Investigation</i> , 2002 , 110, 127-36	15.9	115
235	Novel mechanism for the generation of human xeno-autoantibodies against the nonhuman sialic acid N-glycolylneuraminic acid. <i>Journal of Experimental Medicine</i> , 2010 , 207, 1637-46	16.6	112
234	Innovations in host and microbial sialic acid biosynthesis revealed by phylogenomic prediction of nonulosonic acid structure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 13552-7	11.5	110
233	An Atlas of Human Glycosylation Pathways Enables Display of the Human Glycome by Gene Engineered Cells. <i>Molecular Cell</i> , 2019 , 75, 394-407.e5	17.6	108
232	Loss of N-glycolylneuraminic acid in humans: Mechanisms, consequences, and implications for hominid evolution 2001 , Suppl 33, 54-69		108
231	Sensitive and specific detection of the non-human sialic Acid N-glycolylneuraminic acid in human tissues and biotherapeutic products. <i>PLoS ONE</i> , 2009 , 4, e4241	3.7	107
230	Evolutionary forces shaping the Golgi glycosylation machinery: why cell surface glycans are universal to living cells. <i>Cold Spring Harbor Perspectives in Biology</i> , 2011 , 3,	10.2	106
229	Heparin inhibits the flow adhesion of sickle red blood cells to P-selectin. <i>Blood</i> , 2002 , 100, 3790-6	2.2	106
228	Binding of human plasma sialoglycoproteins by the B cell-specific lectin CD22. Selective recognition of immunoglobulin M and haptoglobin. <i>Journal of Biological Chemistry</i> , 1995 , 270, 7543-50	5.4	103

227	Evolution of genetic and genomic features unique to the human lineage. <i>Nature Reviews Genetics</i> , 2012 , 13, 853-66	30.1	102
226	Human xeno-autoantibodies against a non-human sialic acid serve as novel serum biomarkers and immunotherapeutics in cancer. <i>Cancer Research</i> , 2011 , 71, 3352-63	10.1	102
225	Human risk of diseases associated with red meat intake: Analysis of current theories and proposed role for metabolic incorporation of a non-human sialic acid. <i>Molecular Aspects of Medicine</i> , 2016 , 51, 16-30	16.7	99
224	Long-term IgG response to porcine Neu5Gc antigens without transmission of PERV in burn patients treated with porcine skin xenografts. <i>Journal of Immunology</i> , 2013 , 191, 2907-15	5.3	99
223	Cross-comparison of protein recognition of sialic acid diversity on two novel sialoglycan microarrays. <i>Journal of Biological Chemistry</i> , 2012 , 287, 22593-608	5.4	98
222	Evidence for a novel human-specific xeno-auto-antibody response against vascular endothelium. <i>Blood</i> , 2009 , 114, 5225-35	2.2	97
221	Siglec-7: a sialic acid-binding lectin of the immunoglobulin superfamily. <i>Glycobiology</i> , 2000 , 10, 431-8	5.8	97
220	Involvement of a non-human sialic Acid in human cancer. <i>Frontiers in Oncology</i> , 2014 , 4, 33	5.3	95
219	Selectin-mucin interactions as a probable molecular explanation for the association of Trousseau syndrome with mucinous adenocarcinomas. <i>Journal of Clinical Investigation</i> , 2003 , 112, 853-62	15.9	95
218	A human-specific gene in microglia. <i>Science</i> , 2005 , 309, 1693	33.3	94
217	B cell antigen receptor signal strength and peripheral B cell development are regulated by a 9-O-acetyl sialic acid esterase. <i>Journal of Experimental Medicine</i> , 2009 , 206, 125-38	16.6	93
216	Selectin inhibition: synthesis and evaluation of novel sialylated, sulfated and fucosylated oligosaccharides, including the major capping group of GlyCAM-1. <i>Glycobiology</i> , 1997 , 7, 79-93	5.8	93
215	Characterization of sialyloligosaccharide binding by recombinant soluble and native cell-associated CD22. Evidence for a minimal structural recognition motif and the potential importance of multisite binding. <i>Journal of Biological Chemistry</i> , 1995 , 270, 7523-32	5.4	93
214	Endothelial heparan sulfate proteoglycans that bind to L-selectin have glucosamine residues with unsubstituted amino groups. <i>Journal of Biological Chemistry</i> , 1995 , 270, 12012-24	5.4	93
213	Increased primary tumor growth in mice null for beta3- or beta3/beta5-integrins or selectins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004 , 101, 763-8	11.5	90
212	N-glycolylneuraminic acid deficiency in humans. <i>Biochimie</i> , 2001 , 83, 615-22	4.6	90
211	Biomedical differences between human and nonhuman hominids: potential roles for uniquely human aspects of sialic acid biology. <i>Annual Review of Pathology: Mechanisms of Disease</i> , 2011 , 6, 365-93 ³⁴		87
210	Group B Streptococcus engages an inhibitory Siglec through sialic acid mimicry to blunt innate immune and inflammatory responses in vivo. <i>PLoS Pathogens</i> , 2014 , 10, e1003846	7.6	85

209	A human-specific deletion in mouse Cmah increases disease severity in the mdx model of Duchenne muscular dystrophy. <i>Science Translational Medicine</i> , 2010 , 2, 42ra54	17.5	82
208	Cryptic sialic acid binding lectins on human blood leukocytes can be unmasked by sialidase treatment or cellular activation. <i>Glycobiology</i> , 1999 , 9, 1225-34	5.8	81
207	Human-specific expression of Siglec-6 in the placenta. <i>Glycobiology</i> , 2007 , 17, 922-31	5.8	80
206	Anti-Siglec-F antibody reduces allergen-induced eosinophilic inflammation and airway remodeling. <i>Journal of Immunology</i> , 2009 , 183, 5333-41	5.3	79
205	Sialic acid 9-O-acetylation on murine erythroleukemia cells affects complement activation, binding to I-type lectins, and tissue homing. <i>Journal of Biological Chemistry</i> , 1996 , 271, 31526-32	5.4	78
204	Radioactive tracer techniques in the sequencing of glycoprotein oligosaccharides. <i>FASEB Journal</i> , 1991 , 5, 226-35	0.9	78
203	Combinatorial chemoenzymatic synthesis and high-throughput screening of sialosides. <i>ACS Chemical Biology</i> , 2008 , 3, 567-76	4.9	76
202	Host adaptation of a bacterial toxin from the human pathogen Salmonella Typhi. <i>Cell</i> , 2014 , 159, 1290-9	56.2	75
201	Metabolism of vertebrate amino sugars with N-glycolyl groups: mechanisms underlying gastrointestinal incorporation of the non-human sialic acid xeno-autoantigen N-glycolylneuraminic acid. <i>Journal of Biological Chemistry</i> , 2012 , 287, 28852-64	5.4	75
200	Genetically altered mice with different sialyltransferase deficiencies show tissue-specific alterations in sialylation and sialic acid 9-O-acetylation. <i>Journal of Biological Chemistry</i> , 2002 , 277, 32930-8	5.4	75
199	Heart disease is common in humans and chimpanzees, but is caused by different pathological processes. <i>Evolutionary Applications</i> , 2009 , 2, 101-12	4.8	74
198	CD33/Siglec-3 binding specificity, expression pattern, and consequences of gene deletion in mice. <i>Molecular and Cellular Biology</i> , 2003 , 23, 4199-206	4.8	73
197	Cloning and characterization of a novel mouse Siglec, mSiglec-F: differential evolution of the mouse and human (CD33) Siglec-3-related gene clusters. <i>Journal of Biological Chemistry</i> , 2001 , 276, 45128-36	5.4	69
196	CD22-mediated cell adhesion to cytokine-activated human endothelial cells. Positive and negative regulation by alpha 2-6-sialylation of cellular glycoproteins. <i>Journal of Biological Chemistry</i> , 1995 , 270, 7533-42	5.4	69
195	Immunomodulatory activity of extracellular Hsp70 mediated via paired receptors Siglec-5 and Siglec-14. <i>EMBO Journal</i> , 2015 , 34, 2775-88	13	66
194	Siglec-F inhibition reduces esophageal eosinophilia and angiogenesis in a mouse model of eosinophilic esophagitis. <i>Journal of Pediatric Gastroenterology and Nutrition</i> , 2011 , 53, 409-16	2.8	66
193	Rapid Trimming of Cell Surface Polysialic Acid (PolySia) by Exovesicular Sialidase Triggers Release of Preexisting Surface Neurotrophin. <i>Journal of Biological Chemistry</i> , 2015 , 290, 13202-14	5.4	65
192	Lectin galactoside-binding soluble 3 binding protein (LGALS3BP) is a tumor-associated immunomodulatory ligand for CD33-related Siglecs. <i>Journal of Biological Chemistry</i> , 2014 , 289, 33481-91	5.4	65

191	Hyaluronan digestion controls DC migration from the skin. <i>Journal of Clinical Investigation</i> , 2014 , 124, 1309-19	15.9	62
190	Oral streptococci utilize a Siglec-like domain of serine-rich repeat adhesins to preferentially target platelet sialoglycans in human blood. <i>PLoS Pathogens</i> , 2014 , 10, e1004540	7.6	60
189	A second uniquely human mutation affecting sialic acid biology. <i>Journal of Biological Chemistry</i> , 2001 , 276, 40282-7	5.4	59
188	Rapid evolution of binding specificities and expression patterns of inhibitory CD33-related Siglecs in primates. <i>FASEB Journal</i> , 2014 , 28, 1280-93	0.9	58
187	Oligosaccharides in vertebrate development. <i>Seminars in Developmental Biology</i> , 1995 , 6, 127-138		58
186	Fixation of the human-specific CMP-N-acetylneuraminic acid hydroxylase pseudogene and implications of haplotype diversity for human evolution. <i>Genetics</i> , 2006 , 172, 1139-46	4	57
185	Loss of Siglec-14 reduces the risk of chronic obstructive pulmonary disease exacerbation. <i>Cellular and Molecular Life Sciences</i> , 2013 , 70, 3199-210	10.3	55
184	Sexual selection by female immunity against paternal antigens can fix loss of function alleles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 17743-8	11.5	55
183	An Open Receptor-Binding Cavity of Hemagglutinin-Esterase-Fusion Glycoprotein from Newly-Identified Influenza D Virus: Basis for Its Broad Cell Tropism. <i>PLoS Pathogens</i> , 2016 , 12, e1005411	7.6	55
182	Anti-Siglec-F antibody inhibits oral egg allergen induced intestinal eosinophilic inflammation in a mouse model. <i>Clinical Immunology</i> , 2009 , 131, 157-69	9	54
181	Cell surface sialic acids do not affect primary CD22 interactions with CD45 and surface IgM nor the rate of constitutive CD22 endocytosis. <i>Glycobiology</i> , 2004 , 14, 939-49	5.8	54
180	Erythrocyte sialoglycoproteins engage Siglec-9 on neutrophils to suppress activation. <i>Blood</i> , 2017 , 129, 3100-3110	2.2	53
179	From "Serum Sickness" to "Xenosialitis": Past, Present, and Future Significance of the Non-human Sialic Acid Neu5Gc. <i>Frontiers in Immunology</i> , 2019 , 10, 807	8.4	53
178	Inverse hormesis of cancer growth mediated by narrow ranges of tumor-directed antibodies. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 5998-6003	11.5	53
177	Exploring the glycan repertoire of genetically modified mice by isolation and profiling of the major glycan classes and nano-NMR analysis of glycan mixtures. <i>Glycobiology</i> , 2000 , 10, 669-89	5.8	53
176	Developmental regulation of sialic acid modifications in rat and human colon. <i>FASEB Journal</i> , 1987 , 1, 229-35	0.9	53
175	Sialic acid-binding immunoglobulin-like lectins (Siglecs) detect self-associated molecular patterns to regulate immune responses. <i>Cellular and Molecular Life Sciences</i> , 2020 , 77, 593-605	10.3	53
174	Specific inactivation of two immunomodulatory SIGLEC genes during human evolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 9935-40	11.5	52

173	Metabolism of vertebrate amino sugars with N-glycolyl groups: elucidating the intracellular fate of the non-human sialic acid N-glycolylneuraminic acid. <i>Journal of Biological Chemistry</i> , 2012 , 287, 28865-81	5.4	52
172	Subsets of sialylated, sulfated mucins of diverse origins are recognized by L-selectin. Lack of evidence for unique oligosaccharide sequences mediating binding. <i>Glycobiology</i> , 1996 , 6, 191-208	5.8	52
171	Metabolic labeling of sialic acids in tissue culture cell lines: methods to identify substituted and modified radioactive neuraminic acids. <i>Analytical Biochemistry</i> , 1985 , 150, 32-46	3.1	52
170	Human-specific derived alleles of CD33 and other genes protect against postreproductive cognitive decline. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 74-9	11.5	50
169	Modulation of glycan recognition by clustered saccharide patches. <i>International Review of Cell and Molecular Biology</i> , 2014 , 308, 75-125	6	50
168	A simple method for assessment of human anti-Neu5Gc antibodies applied to Kawasaki disease. <i>PLoS ONE</i> , 2013 , 8, e58443	3.7	50
167	Human-specific evolution of sialic acid targets: explaining the malignant malaria mystery?. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 14739-40	11.5	50
166	Emerging opportunities and career paths for the young physician-scientist. <i>Nature Medicine</i> , 2002 , 8, 437-9	50.5	50
165	Metabolic radiolabeling of glycoconjugates. <i>Methods in Enzymology</i> , 1994 , 230, 16-32	1.7	50
164	Paired Siglec receptors generate opposite inflammatory responses to a human-specific pathogen. <i>EMBO Journal</i> , 2017 , 36, 751-760	13	48
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