

# Ajit Varki

## List of Publications by Year in Descending Order

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

316  
papers

34,357  
citations

96  
h-index

180  
g-index

336  
ext. papers

38,234  
ext. citations

9.8  
avg, IF

7.94  
L-index

#	Paper	IF	Citations
316	Sialoglycan binding patterns of bacterial AB toxin B subunits correlate with host range and toxicity, indicating evolution independent of A subunits.. <i>Journal of Biological Chemistry</i> , <b>2022</b> , 101900	5.4	0
315	Chemoenzymatic Synthesis of Sialosides Containing 7- or 7,9-Di--acetyl Sialic Acid as Stable -Acetyl Analogues for Probing Sialic Acid-Binding Proteins. <i>Journal of Organic Chemistry</i> , <b>2021</b> , 86, 14381-14397	4.2	1
314	Improved methods to characterize the length and quantity of highly unstable PolySialic acids subject category: (Carbohydrates, chromatographic techniques). <i>Analytical Biochemistry</i> , <b>2021</b> , 635, 114426	2.1	1
313	Reversible -Acetyl Migration within the Sialic Acid Side Chain and Its Influence on Protein Recognition. <i>ACS Chemical Biology</i> , <b>2021</b> , 16, 1951-1960	4.9	5
312	Sialoglycan recognition is a common connection linking acidosis, zinc, and HMGB1 in sepsis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	3
311	Ongoing selection for a uniquely human null allele of in world-wide populations may protect against the risk of advanced carcinomas. <i>FASEB BioAdvances</i> , <b>2021</b> , 3, 278-279	2.8	
310	Evolutionary conservation of human ketodeoxynonulosonic acid production is independent of sialoglycan biosynthesis. <i>Journal of Clinical Investigation</i> , <b>2021</b> , 131,	15.9	4
309	Are sialic acids involved in COVID-19 pathogenesis?. <i>Glycobiology</i> , <b>2021</b> , 31, 1068-1071	5.8	9
308	Display of the human mucinome with defined O-glycans by gene engineered cells. <i>Nature Communications</i> , <b>2021</b> , 12, 4070	17.4	26
307	Human-specific polymorphic pseudogenization of protects against advanced cancer progression. <i>FASEB BioAdvances</i> , <b>2021</b> , 3, 69-82	2.8	6
306	Human-specific microglial Siglec-11 transcript variant has the potential to affect polysialic acid-mediated brain functions at a distance. <i>Glycobiology</i> , <b>2021</b> , 31, 231-242	5.8	7
305	Serum Antibodies to N-Glycolylneuraminic Acid Are Elevated in Duchenne Muscular Dystrophy and Correlate with Increased Disease Pathology in Cmahmdx Mice. <i>American Journal of Pathology</i> , <b>2021</b> , 191, 1474-1486	5.8	
304	Dietary Neu5Ac Intervention Protects Against Atherosclerosis Associated With Human-Like Neu5Gc Loss-Brief Report. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , <b>2021</b> , 41, 2730-2739	9.4	0
303	Exploring the Impact of Ketodeoxynonulosonic Acid in Host-Pathogen Interactions Using Uptake and Surface Display by Nontypeable Haemophilus influenzae. <i>MBio</i> , <b>2021</b> , 12,	7.8	4
302	Multiple Genomic Events Altering Hominin SIGLEC Biology and Innate Immunity Predated the Common Ancestor of Humans and Archaic Hominins. <i>Genome Biology and Evolution</i> , <b>2020</b> , 12, 1040-1050	3.9	3
301	Roland Schauer (1936-2019): A tribute to Mr. Sialic Acid. <i>Glycobiology</i> , <b>2020</b> , 30, 132-133	5.8	1
300	Reply to Soulillou et al.: Difficulties in extrapolating from animal models exemplify unusual human atherosclerosis susceptibility and mechanisms via loss. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 1847-1848	11.5	1

299	Therapeutic CMP-Nonulosonates against Multidrug-Resistant. <i>Journal of Immunology</i> , <b>2020</b> , 204, 3283-3295	3.9	6
298	N-glycolyl chondroitin synthesis using metabolically engineered E. coli. <i>AMB Express</i> , <b>2020</b> , 10, 144	4.1	1
297	Maximum reproductive lifespan correlates with CD33rSIGLEC gene number: Implications for NADPH oxidase-derived reactive oxygen species in aging. <i>FASEB Journal</i> , <b>2020</b> , 34, 1928-1938	0.9	5
296	Siglec-14 Enhances NLRP3-Inflammasome Activation in Macrophages. <i>Journal of Innate Immunity</i> , <b>2020</b> , 12, 333-343	6.9	15
295	Efficacy of Antigonococcal CMP-Nonulosonate Therapeutics Require Cathelicidins. <i>Journal of Infectious Diseases</i> , <b>2020</b> , 222, 1641-1650	7	3
294	Sialic acid-binding immunoglobulin-like lectins (Siglecs) detect self-associated molecular patterns to regulate immune responses. <i>Cellular and Molecular Life Sciences</i> , <b>2020</b> , 77, 593-605	10.3	53
293	Controversies about the subcellular localization and mechanisms of action of the Alzheimer's disease-protective CD33 splice variant. <i>Acta Neuropathologica</i> , <b>2019</b> , 138, 671-672	14.3	5
292	Gut bacteria responding to dietary change encode sialidases that exhibit preference for red meat-associated carbohydrates. <i>Nature Microbiology</i> , <b>2019</b> , 4, 2082-2089	26.6	30
291	Evolution of the exclusively human pathogen : Human-specific engagement of immunoregulatory Siglecs. <i>Evolutionary Applications</i> , <b>2019</b> , 12, 337-349	4.8	14
290	Nontypeable Has Evolved Preferential Use of Acetylneuraminic Acid as a Host Adaptation. <i>MBio</i> , <b>2019</b> , 10,	7.8	15
289	Updates to the Symbol Nomenclature for Glycans guidelines. <i>Glycobiology</i> , <b>2019</b> , 29, 620-624	5.8	148
288	From "Serum Sickness" to "Xenosialitis": Past, Present, and Future Significance of the Non-human Sialic Acid Neu5Gc. <i>Frontiers in Immunology</i> , <b>2019</b> , 10, 807	8.4	53
287	Redox-Controlled Site-Specific 2-6-Sialylation. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 4547-4552	15.2	14
286	Dual actions of group B capsular sialic acid provide resistance to platelet-mediated antimicrobial killing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 7465-7470	11.5	36
285	Human species-specific loss of CMP-acetylneuraminic acid hydroxylase enhances atherosclerosis via intrinsic and extrinsic mechanisms. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 16036-16045	11.5	39
284	An Atlas of Human Glycosylation Pathways Enables Display of the Human Glycome by Gene Engineered Cells. <i>Molecular Cell</i> , <b>2019</b> , 75, 394-407.e5	17.6	108
283	A Novel Sialylation Site on Neisseria gonorrhoeae Lipooligosaccharide Links Heptose II Lactose Expression with Pathogenicity. <i>Infection and Immunity</i> , <b>2018</b> , 86,	3.7	16
282	Polyclonal human antibodies against glycans bearing red meat-derived non-human sialic acid N-glycolylneuraminic acid are stable, reproducible, complex and vary between individuals: Total antibody levels are associated with colorectal cancer risk. <i>PLoS ONE</i> , <b>2018</b> , 13, e0197464	3.7	32

281	Human evolutionary loss of epithelial Neu5Gc expression and species-specific susceptibility to cholera. <i>PLoS Pathogens</i> , <b>2018</b> , 14, e1007133	7.6	21
280	Self-associated molecular patterns mediate cancer immune evasion by engaging Siglecs on T cells. <i>Journal of Clinical Investigation</i> , <b>2018</b> , 128, 4912-4923	15.9	128
279	Polymorphic Pseudogenization of SIGLEC12 in Humans: Relationship to Late Stage Cancer Progression. <i>FASEB Journal</i> , <b>2018</b> , 32, 673.12	0.9	
278	Encoding and Estimating the Remarkable Diversity of Possible Sialyltrisaccharides in Nature. <i>FASEB Journal</i> , <b>2018</b> , 32, 673.22	0.9	
277	Rapid Evolution of Bacterial Exotoxin B Subunits Independent of A subunits: Sialic Acid Binding Preferences Correlate with Host Range and Intrinsic Toxicity. <i>FASEB Journal</i> , <b>2018</b> , 32, 673.3	0.9	
276	Siglec-7 engagement by GBS E protein suppresses pyroptotic cell death of natural killer cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 10410-10415	11.5	20
275	Human-like Cmah inactivation in mice increases running endurance and decreases muscle fatigability: implications for human evolution. <i>Proceedings of the Royal Society B: Biological Sciences</i> , <b>2018</b> , 285,	4.4	14
274	Chemoenzymatic Assembly of Mammalian O-Mannose Glycans. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 9003-9007	16.4	29
273	Paired Siglec receptors generate opposite inflammatory responses to a human-specific pathogen. <i>EMBO Journal</i> , <b>2017</b> , 36, 751-760	13	48
272	Physiological Exploration of the Long Term Evolutionary Selection against Expression of -Glycolylneuraminic Acid in the Brain. <i>Journal of Biological Chemistry</i> , <b>2017</b> , 292, 2557-2570	5.4	26
271	Loss of CMAH during Human Evolution Primed the Monocyte-Macrophage Lineage toward a More Inflammatory and Phagocytic State. <i>Journal of Immunology</i> , <b>2017</b> , 198, 2366-2373	5.3	22
270	The SIGLEC14 null allele is associated with Mycobacterium tuberculosis- and BCG-induced clinical and immunologic outcomes. <i>Tuberculosis</i> , <b>2017</b> , 104, 38-45	2.6	12
269	Biochemical, Cellular, Physiological, and Pathological Consequences of Human Loss of N-Glycolylneuraminic Acid. <i>ChemBioChem</i> , <b>2017</b> , 18, 1155-1171	3.8	44
268	Erythrocyte sialoglycoproteins engage Siglec-9 on neutrophils to suppress activation. <i>Blood</i> , <b>2017</b> , 129, 3100-3110	2.2	53
267	A Chemical Biology Solution to Problems with Studying Biologically Important but Unstable 9-O-Acetyl Sialic Acids. <i>ACS Chemical Biology</i> , <b>2017</b> , 12, 214-224	4.9	27
266	Siglec-7 restores E cell function and survival and reduces inflammation in pancreatic islets from patients with diabetes. <i>Scientific Reports</i> , <b>2017</b> , 7, 45319	4.9	22
265	Studies on the Detection, Expression, Glycosylation, Dimerization, and Ligand Binding Properties of Mouse Siglec-E. <i>Journal of Biological Chemistry</i> , <b>2017</b> , 292, 1029-1037	5.4	16
264	Evolution of host adaptation in the Salmonella typhoid toxin. <i>Nature Microbiology</i> , <b>2017</b> , 2, 1592-1599	26.6	24

263	Coevolution of Siglec-11 and Siglec-16 via gene conversion in primates. <i>BMC Evolutionary Biology</i> , <b>2017</b> , 17, 228	3	17
262	Tamm-Horsfall glycoprotein engages human Siglec-9 to modulate neutrophil activation in the urinary tract. <i>Immunology and Cell Biology</i> , <b>2017</b> , 95, 960-965	5	14
261	Distribution of O-Acetylated Sialic Acids among Target Host Tissues for Influenza Virus. <i>MSphere</i> , <b>2017</b> , 2,	5	37
260	-glycolyl groups of nonhuman chondroitin sulfates survive in ancient fossils. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, E8155-E8164	11.5	13
259	The Alzheimer's disease-protective CD33 splice variant mediates adaptive loss of function via diversion to an intracellular pool. <i>Journal of Biological Chemistry</i> , <b>2017</b> , 292, 15312-15320	5.4	36
258	Are humans prone to autoimmunity? Implications from evolutionary changes in hominin sialic acid biology. <i>Journal of Autoimmunity</i> , <b>2017</b> , 83, 134-142	15.5	25
257	Biological roles of glycans. <i>Glycobiology</i> , <b>2017</b> , 27, 3-49	5.8	1039
256	Unravelling the specificity and mechanism of sialic acid recognition by the gut symbiont <i>Ruminococcus gnavus</i> . <i>Nature Communications</i> , <b>2017</b> , 8, 2196	17.4	44
255	New and updated glycoscience-related resources at NCBI. <i>Glycobiology</i> , <b>2017</b> , 27, 993	5.8	3
254	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> , <b>2016</b> , 51, 16-30	16.7	99
253	Novel aspects of sialoglycan recognition by the Siglec-like domains of streptococcal SRR glycoproteins. <i>Glycobiology</i> , <b>2016</b> , 26, 1222-1234	5.8	43
252	Reply to Liu and Jiang: Maintenance of postreproductive cognitive capacity by inclusive fitness. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, E1591-2	11.5	2
251	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> , <b>2016</b> , 113, 74-9	11.5	50
250	Host and pathogen hyaluronan signal through human siglec-9 to suppress neutrophil activation. <i>Journal of Molecular Medicine</i> , <b>2016</b> , 94, 219-33	5.5	47
249	Acidic pH increases airway surface liquid viscosity in cystic fibrosis. <i>Journal of Clinical Investigation</i> , <b>2016</b> , 126, 879-91	15.9	160
248	Training the next generation of biomedical investigators in glycosciences. <i>Journal of Clinical Investigation</i> , <b>2016</b> , 126, 405-8	15.9	29
247	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> , <b>2016</b> , 12, e1005411	7.6	55
246	Why are there no persisting hybrids of humans with Denisovans, Neanderthals, or anyone else?. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, E2354	11.5	7

245	Striking Immune Phenotypes in Gene-Targeted Mice Are Driven by a Copy-Number Variant Originating from a Commercially Available C57BL/6 Strain. <i>Cell Reports</i> , <b>2016</b> , 15, 1901-9	10.6	45
244	<i>Streptococcus pneumoniae</i> Senses a Human-like Sialic Acid Profile via the Response Regulator CiaR. <i>Cell Host and Microbe</i> , <b>2016</b> , 20, 307-317	23.4	29
243	Reply to Mackenzie: A comparison of Neu5Gc and Hgal xenoantigens. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, E1405	11.5	2
242	Equine and Canine Influenza H3N8 Viruses Show Minimal Biological Differences Despite Phylogenetic Divergence. <i>Journal of Virology</i> , <b>2015</b> , 89, 6860-73	6.6	31
241	Symbol Nomenclature for Graphical Representations of Glycans. <i>Glycobiology</i> , <b>2015</b> , 25, 1323-4	5.8	585
240	Complexity and Diversity of the Mammalian Sialome Revealed by Nidovirus Virolectins. <i>Cell Reports</i> , <b>2015</b> , 11, 1966-78	10.6	47
239	Why Is N-Glycolylneuraminic Acid Rare in the Vertebrate Brain?. <i>Topics in Current Chemistry</i> , <b>2015</b> , 366, 31-54		45
238	Immunomodulatory activity of extracellular Hsp70 mediated via paired receptors Siglec-5 and Siglec-14. <i>EMBO Journal</i> , <b>2015</b> , 34, 2775-88	13	66
237	Rapid Trimming of Cell Surface Polysialic Acid (PolySia) by Exovesicular Sialidase Triggers Release of Preexisting Surface Neurotrophin. <i>Journal of Biological Chemistry</i> , <b>2015</b> , 290, 13202-14	5.4	65
236	On the apparent rarity of epithelial cancers in captive chimpanzees. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2015</b> , 370,	5.8	22
235	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> , <b>2015</b> , 112, 542-7	11.5	242
234	Utilizing CMP-Sialic Acid Analogs to Unravel <i>Neisseria gonorrhoeae</i> Lipooligosaccharide-Mediated Complement Resistance and Design Novel Therapeutics. <i>PLoS Pathogens</i> , <b>2015</b> , 11, e1005290	7.6	40
233	Human-specific evolutionary changes in the biology of siglecs. <i>Advances in Experimental Medicine and Biology</i> , <b>2015</b> , 842, 1-16	3.6	29
232	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> , <b>2014</b> , 111, 5998-6003	11.5	53
231	Role of macrophage sialoadhesin in host defense against the sialylated pathogen group B <i>Streptococcus</i> . <i>Journal of Molecular Medicine</i> , <b>2014</b> , 92, 951-9	5.5	32
230	Siglec-5 and Siglec-14 are polymorphic paired receptors that modulate neutrophil and amnion signaling responses to group B <i>Streptococcus</i> . <i>Journal of Experimental Medicine</i> , <b>2014</b> , 211, 1231-42	16.6	124
229	A comparative study of N-glycolylneuraminic acid (Neu5Gc) and cytotoxic T cell (CT) carbohydrate expression in normal and dystrophin-deficient dog and human skeletal muscle. <i>PLoS ONE</i> , <b>2014</b> , 9, e88226	2.7	13
228	Rapid evolution of binding specificities and expression patterns of inhibitory CD33-related Siglecs in primates. <i>FASEB Journal</i> , <b>2014</b> , 28, 1280-93	0.9	58

227	Hormesis in cancer immunology: Does the quantity of an immune reactant matter?. <i>OncImmunology</i> , <b>2014</b> , 3, e29312	7.2	14
226	Lectin galactoside-binding soluble 3 binding protein (LGALS3BP) is a tumor-associated immunomodulatory ligand for CD33-related Siglecs. <i>Journal of Biological Chemistry</i> , <b>2014</b> , 289, 33481-9154	5.4	65
225	Modulation of glycan recognition by clustered saccharide patches. <i>International Review of Cell and Molecular Biology</i> , <b>2014</b> , 308, 75-125	6	50
224	Involvement of a non-human sialic Acid in human cancer. <i>Frontiers in Oncology</i> , <b>2014</b> , 4, 33	5.3	95
223	Oral streptococci utilize a Siglec-like domain of serine-rich repeat adhesins to preferentially target platelet sialoglycans in human blood. <i>PLoS Pathogens</i> , <b>2014</b> , 10, e1004540	7.6	60
222	Group B Streptococcus engages an inhibitory Siglec through sialic acid mimicry to blunt innate immune and inflammatory responses in vivo. <i>PLoS Pathogens</i> , <b>2014</b> , 10, e1003846	7.6	85
221	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> , <b>2014</b> , 111, 14211-6	11.5	143
220	Host adaptation of a bacterial toxin from the human pathogen Salmonella Typhi. <i>Cell</i> , <b>2014</b> , 159, 1290-956.2	56.2	75
219	Hyaluronan digestion controls DC migration from the skin. <i>Journal of Clinical Investigation</i> , <b>2014</b> , 124, 1309-19	15.9	62
218	Siglec Interactions with Pathogens <b>2014</b> , 1-9		1
217	Discovering a sialic acid independent ligand for paired receptors Siglec-5 and -14 (1003.5). <i>FASEB Journal</i> , <b>2014</b> , 28, 1003.5	0.9	
216	Omics: Account for the 'dark matter' of biology. <i>Nature</i> , <b>2013</b> , 497, 565	50.4	7
215	Exploration of sialic acid diversity and biology using sialoglycan microarrays. <i>Biopolymers</i> , <b>2013</b> , 99, 650-652	652	34
214	N-Glycolylneuraminic acid deficiency worsens cardiac and skeletal muscle pathophysiology in Haploinsufficient mice. <i>Glycobiology</i> , <b>2013</b> , 23, 833-43	5.8	12
213	Quantum dot nanometal surface energy transfer based biosensing of sialic acid compositions and linkages in biological samples. <i>Analytical Chemistry</i> , <b>2013</b> , 85, 3864-70	7.8	34
212	Cell-intrinsic mechanism involving Siglec-5 associated with divergent outcomes of HIV-1 infection in human and chimpanzee CD4 T cells. <i>Journal of Molecular Medicine</i> , <b>2013</b> , 91, 261-70	5.5	10
211	Canine and feline parvoviruses preferentially recognize the non-human cell surface sialic acid N-glycolylneuraminic acid. <i>Virology</i> , <b>2013</b> , 440, 89-96	3.6	29
210	Loss of Siglec-14 reduces the risk of chronic obstructive pulmonary disease exacerbation. <i>Cellular and Molecular Life Sciences</i> , <b>2013</b> , 70, 3199-210	10.3	55

209	Sialyltransferase ST3Gal-III regulates Siglec-F ligand formation and eosinophilic lung inflammation in mice. <i>Journal of Immunology</i> , <b>2013</b> , 190, 5939-48	5.3	24
208	Enhanced T cell function in a mouse model of human glycosylation. <i>Journal of Immunology</i> , <b>2013</b> , 191, 228-37	5.3	18
207	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> , <b>2013</b> , 191, 2907-15	5.3	99
206	A simple method for assessment of human anti-Neu5Gc antibodies applied to Kawasaki disease. <i>PLoS ONE</i> , <b>2013</b> , 8, e58443	3.7	50
205	Treatment response in Kawasaki disease is associated with sialylation levels of endogenous but not therapeutic intravenous immunoglobulin G. <i>PLoS ONE</i> , <b>2013</b> , 8, e81448	3.7	45
204	Multifarious roles of sialic acids in immunity. <i>Annals of the New York Academy of Sciences</i> , <b>2012</b> , 1253, 16-36	6.5	379
203	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> , <b>2012</b> , 109, 9935-40	11.5	52
202	Evolution of genetic and genomic features unique to the human lineage. <i>Nature Reviews Genetics</i> , <b>2012</b> , 13, 853-66	30.1	102
201	LC-MS analysis of polyclonal human anti-Neu5Gc xeno-autoantibodies immunoglobulin G Subclass and partial sequence using multistep intravenous immunoglobulin affinity purification and multienzymatic digestion. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 2761-8	7.8	24
200	Production platforms for biotherapeutic glycoproteins. Occurrence, impact, and challenges of non-human sialylation. <i>Biotechnology and Genetic Engineering Reviews</i> , <b>2012</b> , 28, 147-75	4.1	223
199	Nothing in medicine makes sense, except in the light of evolution. <i>Journal of Molecular Medicine</i> , <b>2012</b> , 90, 481-94	5.5	25
198	Evolution of siglec-11 and siglec-16 genes in hominins. <i>Molecular Biology and Evolution</i> , <b>2012</b> , 29, 2073-86.3		34
197	Metabolism of vertebrate amino sugars with N-glycolyl groups: resistance of $\alpha$ -8-linked N-glycolylneuraminic acid to enzymatic cleavage. <i>Journal of Biological Chemistry</i> , <b>2012</b> , 287, 28917-31	5.4	38
196	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> , <b>2012</b> , 287, 28852-64	5.4	75
195	Metabolism of vertebrate amino sugars with N-glycolyl groups: incorporation of N-glycolylhexosamines into mammalian glycans by feeding N-glycolylgalactosamine. <i>Journal of Biological Chemistry</i> , <b>2012</b> , 287, 28898-916	5.4	28
194	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> , <b>2012</b> , 287, 28865-81	5.4	52
193	Cross-comparison of protein recognition of sialic acid diversity on two novel sialoglycan microarrays. <i>Journal of Biological Chemistry</i> , <b>2012</b> , 287, 22593-608	5.4	98
192	Metabolism of vertebrate amino sugars with N-glycolyl groups: intracellular $\alpha$ -D-linked N-glycolylglucosamine (GlcNGc), UDP-GlcNGc, and the biochemical and structural rationale for the substrate tolerance of $\alpha$ -D-linked $\beta$ -N-acetylglucosaminidase. <i>Journal of Biological Chemistry</i> , <b>2012</b> , 287, 28882-87	5.4	20



191	Intracellular fate of the non-human sialic acid N-glycolylneuraminic acid. <i>FASEB Journal</i> , <b>2012</b> , 26, 793.1	0.9	
190	Unusual chemical and enzymatic stability of polysialic acid containing N-glycolylneuraminic acid. <i>FASEB Journal</i> , <b>2012</b> , 26, 610.1	0.9	
189	Dualistic role of tumor-directed antibodies on carcinoma progression. <i>FASEB Journal</i> , <b>2012</b> , 26, 999.3	0.9	
188	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> , <b>2011</b> , 6, 365-93	34	87
187	Siglec-F inhibition reduces esophageal eosinophilia and angiogenesis in a mouse model of eosinophilic esophagitis. <i>Journal of Pediatric Gastroenterology and Nutrition</i> , <b>2011</b> , 53, 409-16	2.8	66
186	Potential impact of the non-human sialic acid N-glycolylneuraminic acid on transplant rejection risk. <i>Xenotransplantation</i> , <b>2011</b> , 18, 1-5	2.8	120
185	Human xeno-autoantibodies against a non-human sialic acid serve as novel serum biomarkers and immunotherapeutics in cancer. <i>Cancer Research</i> , <b>2011</b> , 71, 3352-63	10.1	102
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> , <b>2011</b> , 108, 17743-8	11.5	55
183	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> , <b>2011</b> , 21, 1121-4	5.8	164
182	Human Siglec-5 inhibitory receptor and immunoglobulin A (IgA) have separate binding sites in streptococcal beta protein. <i>Journal of Biological Chemistry</i> , <b>2011</b> , 286, 33981-91	5.4	14
181	Pancreatic beta-cell failure in obese mice with human-like CMP-Neu5Ac hydroxylase deficiency. <i>FASEB Journal</i> , <b>2011</b> , 25, 1887-93	0.9	25
180	SIGLEC12, a human-specific segregating (pseudo)gene, encodes a signaling molecule expressed in prostate carcinomas. <i>Journal of Biological Chemistry</i> , <b>2011</b> , 286, 23003-11	5.4	40
179	Evolutionary forces shaping the Golgi glycosylation machinery: why cell surface glycans are universal to living cells. <i>Cold Spring Harbor Perspectives in Biology</i> , <b>2011</b> , 3,	10.2	106
178	Expression of Siglec-11 by human and chimpanzee ovarian stromal cells, with uniquely human ligands: implications for human ovarian physiology and pathology. <i>Glycobiology</i> , <b>2011</b> , 21, 1038-48	5.8	22
177	Functionally defective germline variants of sialic acid acetyltransferase in autoimmunity. <i>Nature</i> , <b>2010</b> , 466, 243-7	50.4	129
176	Implications of the presence of N-glycolylneuraminic acid in recombinant therapeutic glycoproteins. <i>Nature Biotechnology</i> , <b>2010</b> , 28, 863-7	44.5	269
175	Fate of 'retired' research chimps. <i>Nature</i> , <b>2010</b> , 467, 1047	50.4	4
174	Relative over-reactivity of human versus chimpanzee lymphocytes: implications for the human diseases associated with immune activation. <i>Journal of Immunology</i> , <b>2010</b> , 184, 4185-95	5.3	36

173	Novel mechanism for the generation of human xeno-autoantibodies against the nonhuman sialic acid N-glycolylneuraminic acid. <i>Journal of Experimental Medicine</i> , <b>2010</b> , 207, 1637-46	16.6	112
172	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> , <b>2010</b> , 107 Suppl 2, 8939-46	11.5	191
171	A human-specific deletion in mouse Cmah increases disease severity in the mdx model of Duchenne muscular dystrophy. <i>Science Translational Medicine</i> , <b>2010</b> , 2, 42ra54	17.5	82
170	Advances in the biology and chemistry of sialic acids. <i>ACS Chemical Biology</i> , <b>2010</b> , 5, 163-76	4.9	382
169	The sialome--far more than the sum of its parts. <i>OMICS A Journal of Integrative Biology</i> , <b>2010</b> , 14, 455-64	3.8	156
168	O-Acetylation of sialic acid on Group B Streptococcus inhibits neutrophil suppression and virulence. <i>Biochemical Journal</i> , <b>2010</b> , 428, 163-8	3.8	34
167	Chemo-enzymatic synthesis of the carbohydrate antigen N-glycolylneuraminic acid from glucose. <i>Carbohydrate Research</i> , <b>2010</b> , 345, 1225-9	2.9	14
166	Nothing in the Biology of Glycans Makes Sense, Except in the Light of Evolution. <i>FASEB Journal</i> , <b>2010</b> , 24, 298.1	0.9	
165	Introduction of Stuart Kornfeld. <i>Journal of Clinical Investigation</i> , <b>2010</b> , 120, 2635-8	15.9	
164	Sensitive and specific detection of the non-human sialic Acid N-glycolylneuraminic acid in human tissues and biotherapeutic products. <i>PLoS ONE</i> , <b>2009</b> , 4, e4241	3.7	107
163	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> , <b>2009</b> , 206, 125-38	16.6	93
162	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> , <b>2009</b> , 106, 14739-40	11.5	50
161	Natural ligands for CD33-related Siglecs?. <i>Glycobiology</i> , <b>2009</b> , 19, 810-2	5.8	27
160	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> , <b>2009</b> , 106, 13552-7	11.5	110
159	A dietary non-human sialic acid may facilitate hemolytic-uremic syndrome. <i>Kidney International</i> , <b>2009</b> , 76, 140-4	9.9	24
158	Genetic and biochemical modulation of sialic acid O-acetylation on group B Streptococcus: phenotypic and functional impact. <i>Glycobiology</i> , <b>2009</b> , 19, 1204-13	5.8	35
157	Anti-Siglec-F antibody reduces allergen-induced eosinophilic inflammation and airway remodeling. <i>Journal of Immunology</i> , <b>2009</b> , 183, 5333-41	5.3	79
156	Group B Streptococcus suppression of phagocyte functions by protein-mediated engagement of human Siglec-5. <i>Journal of Experimental Medicine</i> , <b>2009</b> , 206, 1691-9	16.6	122

155	Heart disease is common in humans and chimpanzees, but is caused by different pathological processes. <i>Evolutionary Applications</i> , <b>2009</b> , 2, 101-12	4.8	74
154	Anti-Siglec-F antibody inhibits oral egg allergen induced intestinal eosinophilic inflammation in a mouse model. <i>Clinical Immunology</i> , <b>2009</b> , 131, 157-69	9	54
153	Multiple changes in sialic acid biology during human evolution. <i>Glycoconjugate Journal</i> , <b>2009</b> , 26, 231-45	3	145
152	Symbol nomenclature for glycan representation. <i>Proteomics</i> , <b>2009</b> , 9, 5398-9	4.8	142
151	Human uniqueness and the denial of death. <i>Nature</i> , <b>2009</b> , 460, 684	50.4	44
150	Molecular mimicry of host sialylated glycans allows a bacterial pathogen to engage neutrophil Siglec-9 and dampen the innate immune response. <i>Blood</i> , <b>2009</b> , 113, 3333-6	2.2	297
149	Evidence for a novel human-specific xeno-auto-antibody response against vascular endothelium. <i>Blood</i> , <b>2009</b> , 114, 5225-35	2.2	97
148	Incorporation of a non-human glycan mediates human susceptibility to a bacterial toxin. <i>Nature</i> , <b>2008</b> , 456, 648-52	50.4	174
147	Explaining human uniqueness: genome interactions with environment, behaviour and culture. <i>Nature Reviews Genetics</i> , <b>2008</b> , 9, 749-63	30.1	131
146	Diversity in specificity, abundance, and composition of anti-Neu5Gc antibodies in normal humans: potential implications for disease. <i>Glycobiology</i> , <b>2008</b> , 18, 818-30	5.8	256
145	Sialic acids in human health and disease. <i>Trends in Molecular Medicine</i> , <b>2008</b> , 14, 351-60	11.5	633
144	Combinatorial chemoenzymatic synthesis and high-throughput screening of sialosides. <i>ACS Chemical Biology</i> , <b>2008</b> , 3, 567-76	4.9	76
143	alpha 2-6-Linked sialic acids on N-glycans modulate carcinoma differentiation in vivo. <i>Cancer Research</i> , <b>2008</b> , 68, 388-94	10.1	139
142	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> , <b>2008</b> , 105, 18936-41	11.5	140
141	Genomic Comparisons of Humans and Chimpanzees. <i>Annual Review of Anthropology</i> , <b>2007</b> , 36, 191-209	3.6	18
140	Siglecs and their roles in the immune system. <i>Nature Reviews Immunology</i> , <b>2007</b> , 7, 255-66	36.5	1334
139	Diversity in cell surface sialic acid presentations: implications for biology and disease. <i>Laboratory Investigation</i> , <b>2007</b> , 87, 851-7	5.9	398
138	Glycan-based interactions involving vertebrate sialic-acid-recognizing proteins. <i>Nature</i> , <b>2007</b> , 446, 1023-30	30.4	658

137	N-glycolylneuraminic acid deficiency in mice: implications for human biology and evolution. <i>Molecular and Cellular Biology</i> , <b>2007</b> , 27, 4340-6	4.8	160
136	NeuA sialic acid O-acetyltransferase activity modulates O-acetylation of capsular polysaccharide in group B Streptococcus. <i>Journal of Biological Chemistry</i> , <b>2007</b> , 282, 27562-71	5.4	41
135	Human-specific expression of Siglec-6 in the placenta. <i>Glycobiology</i> , <b>2007</b> , 17, 922-31	5.8	80
134	Group B streptococcal capsular sialic acids interact with siglecs (immunoglobulin-like lectins) on human leukocytes. <i>Journal of Bacteriology</i> , <b>2007</b> , 189, 1231-7	3.5	121
133	Defining the in vivo function of Siglec-F, a CD33-related Siglec expressed on mouse eosinophils. <i>Blood</i> , <b>2007</b> , 109, 4280-7	2.2	145
132	Efficient chemoenzymatic synthesis of biotinylated human serum albumin-sialoglycoside conjugates containing O-acetylated sialic acids. <i>Organic and Biomolecular Chemistry</i> , <b>2007</b> , 5, 2458-63	3.9	33
131	Myeloid precursors and acute myeloid leukemia cells express multiple CD33-related Siglecs. <i>Experimental Hematology</i> , <b>2006</b> , 34, 728-35	3.1	38
130	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> , <b>2006</b> , 103, 7765-70	11.5	163
129	9-O-acetylation of exogenously added ganglioside GD3. The GD3 molecule induces its own O-acetylation machinery. <i>Journal of Biological Chemistry</i> , <b>2006</b> , 281, 7825-33	5.4	25
128	L-selectin facilitation of metastasis involves temporal induction of Fut7-dependent ligands at sites of tumor cell arrest. <i>Cancer Research</i> , <b>2006</b> , 66, 1536-42	10.1	127
127	Multiple hepatic receptors cooperate to eliminate secretory mucins aberrantly entering the bloodstream: are circulating cancer mucins the "tip of the iceberg"? <i>Cancer Research</i> , <b>2006</b> , 66, 2433-41	10.1	47
126	System-wide genomic and biochemical comparisons of sialic acid biology among primates and rodents: Evidence for two modes of rapid evolution. <i>Journal of Biological Chemistry</i> , <b>2006</b> , 281, 25689-70	5.4	46
125	Siglecs--the major subfamily of I-type lectins. <i>Glycobiology</i> , <b>2006</b> , 16, 1R-27R	5.8	409
124	Fixation of the human-specific CMP-N-acetylneuraminic acid hydroxylase pseudogene and implications of haplotype diversity for human evolution. <i>Genetics</i> , <b>2006</b> , 172, 1139-46	4	57
123	Discovery of Siglec-14, a novel sialic acid receptor undergoing concerted evolution with Siglec-5 in primates. <i>FASEB Journal</i> , <b>2006</b> , 20, 1964-73	0.9	122
122	The group B streptococcal sialic acid O-acetyltransferase is encoded by neuD, a conserved component of bacterial sialic acid biosynthetic gene clusters. <i>Journal of Biological Chemistry</i> , <b>2006</b> , 281, 11186-92	5.4	48
121	Nothing in glycobiology makes sense, except in the light of evolution. <i>Cell</i> , <b>2006</b> , 126, 841-5	56.2	194
120	Complement targeting of nonhuman sialic acid does not mediate cell death of human embryonic stem cells. <i>Nature Medicine</i> , <b>2006</b> , 12, 1115-1115	50.5	5

119	Genetic basis of human brain evolution: accelerating along the primate speedway. <i>Developmental Cell</i> , <b>2005</b> , 8, 2-4	10.2	3
118	Human embryonic stem cells express an immunogenic nonhuman sialic acid. <i>Nature Medicine</i> , <b>2005</b> , 11, 228-32	50.5	779
117	The ethics of research on great apes. <i>Nature</i> , <b>2005</b> , 437, 27-9	50.4	35
116	Class assignment of sequence-unrelated members of enzyme superfamilies by activity-based protein profiling. <i>Angewandte Chemie - International Edition</i> , <b>2005</b> , 44, 2400-3	16.4	27
115	Comparing the human and chimpanzee genomes: searching for needles in a haystack. <i>Genome Research</i> , <b>2005</b> , 15, 1746-58	9.7	207
114	Differential metastasis inhibition by clinically relevant levels of heparins--correlation with selectin inhibition, not antithrombotic activity. <i>Clinical Cancer Research</i> , <b>2005</b> , 11, 7003-11	12.9	177
113	Genomics. Thoughts on the future of great ape research. <i>Science</i> , <b>2005</b> , 309, 1499-501	33.3	15
112	Mechanism of uptake and incorporation of the non-human sialic acid N-glycolylneuraminic acid into human cells. <i>Journal of Biological Chemistry</i> , <b>2005</b> , 280, 4228-37	5.4	272
111	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> , <b>2005</b> , 102, 12819-24	11.5	143
110	Effects of natural human antibodies against a nonhuman sialic acid that metabolically incorporates into activated and malignant immune cells. <i>Journal of Immunology</i> , <b>2005</b> , 175, 228-36	5.3	119
109	A human-specific gene in microglia. <i>Science</i> , <b>2005</b> , 309, 1693	33.3	94
108	Genetic Differences Between Humans and Great Apes [Implications for the Evolution of Humans. <i>Symposium - International Astronomical Union</i> , <b>2004</b> , 213, 343-348		
107	Genomics. The chimpanzee genome--a bittersweet celebration. <i>Science</i> , <b>2004</b> , 305, 191-2	33.3	10
106	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> , <b>2004</b> , 101, 13251-6	11.5	134
105	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> , <b>2004</b> , 101, 11123-8	11.5	134
104	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> , <b>2004</b> , 101, 763-8	11.5	90
103	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> , <b>2004</b> , 14, 939-49	5.8	54
102	A uniquely human consequence of domain-specific functional adaptation in a sialic acid-binding receptor. <i>Glycobiology</i> , <b>2004</b> , 14, 339-46	5.8	45

101	Inhibition of Selectin-Mediated Pathologies by Clinically Tolerable Levels of Heparin - Marked Differences in Efficacy of Various Clinically-Approved Preparations.. <i>Blood</i> , <b>2004</b> , 104, 4081-4081	2.2	
100	Incorporation of the Non-Human Sialic Acid Neu5Gc into Human Leukemic Cells and Targeting by Natural Human Anti-Neu5Gc Antibodies.. <i>Blood</i> , <b>2004</b> , 104, 3866-3866	2.2	
99	Differential Expression and Function of the CD33-Related Siglecs between Humans and Great Apes.. <i>Blood</i> , <b>2004</b> , 104, 1466-1466	2.2	
98	Multiple Hepatic Clearance Receptors Facilitate Elimination of Secretory Mucins that Can Enter the Bloodstream in Pathological States and Generate Platelet-Rich Microthrombi.. <i>Blood</i> , <b>2004</b> , 104, 805-805 <sup>2,2</sup>	2.2	
97	Gene Conversion of Sialic Acid Binding Domains in CD33-Related Siglecs by Adjacent Pseudogenes: A Novel Mechanism To Change Sialic Acid Binding Specificity.. <i>Blood</i> , <b>2004</b> , 104, 1471-1471	2.2	
96	Human-specific regulation of alpha 2-6-linked sialic acids. <i>Journal of Biological Chemistry</i> , <b>2003</b> , 278, 48245-50	5.4	144
95	Probing for masked and unmasked siglecs on cell surfaces. <i>Methods in Enzymology</i> , <b>2003</b> , 363, 113-20	1.7	5
94	Recombinant influenza C hemagglutinin-esterase as a probe for sialic acid 9-O-acetylation. <i>Methods in Enzymology</i> , <b>2003</b> , 363, 489-98	1.7	14
93	Sequencing the chimpanzee genome: insights into human evolution and disease. <i>Nature Reviews Genetics</i> , <b>2003</b> , 4, 20-8	30.1	183
92	CD33/Siglec-3 binding specificity, expression pattern, and consequences of gene deletion in mice. <i>Molecular and Cellular Biology</i> , <b>2003</b> , 23, 4199-206	4.8	73
91	Genes modulated by expression of GD3 synthase in Chinese hamster ovary cells. Evidence that the Tis21 gene is involved in the induction of GD3 9-O-acetylation. <i>Journal of Biological Chemistry</i> , <b>2003</b> , 278, 7942-8	5.4	13
90	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> , <b>2003</b> , 100, 12045-50	11.5	474
89	Selectin-mucin interactions as a probable molecular explanation for the association of Trousseau syndrome with mucinous adenocarcinomas. <i>Journal of Clinical Investigation</i> , <b>2003</b> , 112, 853-62	15.9	95
88	Selectin-mucin interactions as a probable molecular explanation for the association of Trousseau syndrome with mucinous adenocarcinomas. <i>Journal of Clinical Investigation</i> , <b>2003</b> , 112, 853-862	15.9	183
87	Effects of sialic acid substitutions on recognition by Sambucus nigra agglutinin and Maackia amurensis hemagglutinin. <i>Analytical Biochemistry</i> , <b>2002</b> , 303, 98-104	3.1	48
86	Emerging opportunities and career paths for the young physician-scientist. <i>Nature Medicine</i> , <b>2002</b> , 8, 437-9	50.5	50
85	Characterization of the acid stability of glycosidically linked neuraminic acid: use in detecting de-N-acetyl-gangliosides in human melanoma. <i>Journal of Biological Chemistry</i> , <b>2002</b> , 277, 17502-10	5.4	19
84	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> , <b>2002</b> , 277, 32930-8 <sup>4</sup>	5.4	75

83	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> , <b>2002</b> , 99, 10042-7	11.5	155
82	O-acetylation of GD3: an enigmatic modification regulating apoptosis?. <i>Journal of Experimental Medicine</i> , <b>2002</b> , 196, 1529-33	16.6	33
81	Six blind men and the elephant--the many faces of heparan sulfate. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 543-5	11.5	11
80	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> , <b>2002</b> , 99, 11736-41	11.5	239
79	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> , <b>2002</b> , 28, 53-66	5.3	136
78	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> , <b>2002</b> , 277, 24466-74	5.4	138
77	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> , <b>2002</b> , 99, 2193-8	11.5	341
76	Generation of mice deficient for macrophage galactose- and N-acetylgalactosamine-specific lectin: limited role in lymphoid and erythroid homeostasis and evidence for multiple lectins. <i>Molecular and Cellular Biology</i> , <b>2002</b> , 22, 5173-81	4.8	36
75	Heparin inhibits the flow adhesion of sickle red blood cells to P-selectin. <i>Blood</i> , <b>2002</b> , 100, 3790-6	2.2	106
74	Intra- and interspecific variation in primate gene expression patterns. <i>Science</i> , <b>2002</b> , 296, 340-3	33.3	680
73	Chemical diversity in the sialic acids and related alpha-keto acids: an evolutionary perspective. <i>Chemical Reviews</i> , <b>2002</b> , 102, 439-69	68.1	992
72	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> , <b>2002</b> , 110, 127-36	15.9	115
71	P-selectin mediates the adhesion of sickle erythrocytes to the endothelium. <i>Blood</i> , <b>2001</b> , 98, 1955-62	2.2	169
70	Siglecs in the immune system. <i>Immunology</i> , <b>2001</b> , 103, 137-45	7.8	220
69	Genetic differences between humans and great apes. <i>Molecular Phylogenetics and Evolution</i> , <b>2001</b> , 18, 2-13	4.1	129
68	Loss of N-glycolylneuraminic acid in humans: Mechanisms, consequences, and implications for hominid evolution. <i>American Journal of Physical Anthropology</i> , <b>2001</b> , Suppl 33, 54-69	2.5	218
67	Proteomic comparison of human and great ape blood plasma reveals conserved glycosylation and differences in thyroid hormone metabolism. <i>American Journal of Physical Anthropology</i> , <b>2001</b> , 115, 99-109	2.5	36
66	A second uniquely human mutation affecting sialic acid biology. <i>Journal of Biological Chemistry</i> , <b>2001</b> , 276, 40282-7	5.4	59

65	Two proteins modulating transendothelial migration of leukocytes recognize novel carboxylated glycans on endothelial cells. <i>Journal of Immunology</i> , <b>2001</b> , 166, 4678-88	5.3	122
64	A novel anionic modification of N-glycans on mammalian endothelial cells is recognized by activated neutrophils and modulates acute inflammatory responses. <i>Journal of Immunology</i> , <b>2001</b> , 166, 624-32	5.3	30
63	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> , <b>2001</b> , 276, 45128-36	5.4	69
62	N-glycolylneuraminic acid deficiency in humans. <i>Biochimie</i> , <b>2001</b> , 83, 615-22	4.6	90
61	Siglecs, sialic acids and innate immunity. <i>Trends in Immunology</i> , <b>2001</b> , 22, 337-42	14.4	324
60	Loss of N-glycolylneuraminic acid in humans: Mechanisms, consequences, and implications for hominid evolution <b>2001</b> , Suppl 33, 54-69		108
59	Loss of N-glycolylneuraminic acid in human evolution. Implications for sialic acid recognition by siglecs. <i>Journal of Biological Chemistry</i> , <b>2000</b> , 275, 8633-40	5.4	124
58	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> , <b>2000</b> , 275, 8625-32	5.4	122
57	Siglec-7: a sialic acid-binding lectin of the immunoglobulin superfamily. <i>Glycobiology</i> , <b>2000</b> , 10, 431-8	5.8	97
56	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> , <b>2000</b> , 275, 22127-35	5.4	120
55	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> , <b>2000</b> , 10, 669-89	5.8	53
54	A primate genome project deserves high priority. <i>Science</i> , <b>2000</b> , 289, 1295-6	33.3	26
53	Evolutionary considerations in relating oligosaccharide diversity to biological function. <i>Glycobiology</i> , <b>1999</b> , 9, 747-55	5.8	419
52	OB-BP1/Siglec-6. a leptin- and sialic acid-binding protein of the immunoglobulin superfamily. <i>Journal of Biological Chemistry</i> , <b>1999</b> , 274, 22729-38	5.4	130
51	Lysosomal and cytosolic sialic acid 9-O-acetyltransferase activities can be encoded by one gene via differential usage of a signal peptide-encoding exon at the N terminus. <i>Journal of Biological Chemistry</i> , <b>1999</b> , 274, 25623-31	5.4	30
50	Distinct selectin ligands on colon carcinoma mucins can mediate pathological interactions among platelets, leukocytes, and endothelium. <i>American Journal of Pathology</i> , <b>1999</b> , 155, 461-72	5.8	160
49	Cryptic sialic acid binding lectins on human blood leukocytes can be unmasked by sialidase treatment or cellular activation. <i>Glycobiology</i> , <b>1999</b> , 9, 1225-34	5.8	81
48	The 1999 ASCI Presidential Address: Executive Summary of the Nerflex Commission Report. <i>Journal of Clinical Investigation</i> , <b>1999</b> , 104 Suppl, S1-10	15.9	2



47	Factors controlling the glycosylation potential of the Golgi apparatus. <i>Trends in Cell Biology</i> , <b>1998</b> , 8, 34-40	18.3	135
46	A structural difference between the cell surfaces of humans and the great apes. <i>American Journal of Physical Anthropology</i> , <b>1998</b> , 107, 187-98	2.5	138
45	P-selectin deficiency attenuates tumor growth and metastasis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>1998</b> , 95, 9325-30	11.5	378
44	Inhibition of L- and P-selectin by a rationally synthesized novel core 2-like branched structure containing GalNAc-Lewisx and Neu5Acalpha2-3Galbeta1-3GalNAc sequences. <i>Glycobiology</i> , <b>1998</b> , 8, 707-17	5.8	27
43	Great Ape Phenome Project?. <i>Science</i> , <b>1998</b> , 282, 239-40	33.3	15
42	Selectin inhibition: synthesis and evaluation of novel sialylated, sulfated and fucosylated oligosaccharides, including the major capping group of GlyCAM-1. <i>Glycobiology</i> , <b>1997</b> , 7, 79-93	5.8	93
41	An IgG monoclonal antibody against Dictyostelium discoideum glycoproteins specifically recognizes Fucalpha1,6GlcNAcbeta in the core of N-linked glycans. Localized expression of core-fucosylated glycoconjugates in human tissues. <i>Journal of Biological Chemistry</i> , <b>1997</b> , 272, 25743-52	5.4	22
40	9-O-Acetylation of sialomucins: a novel marker of murine CD4 T cells that is regulated during maturation and activation. <i>Journal of Experimental Medicine</i> , <b>1997</b> , 185, 1997-2013	16.6	41
39	Sialic acids as ligands in recognition phenomena. <i>FASEB Journal</i> , <b>1997</b> , 11, 248-55	0.9	467
38	"Unusual" modifications and variations of vertebrate oligosaccharides: are we missing the flowers for the trees?. <i>Glycobiology</i> , <b>1996</b> , 6, 707-10	5.8	26
37	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> , <b>1996</b> , 6, 191-208	5.8	52
36	Molecular cloning and characterization of lysosomal sialic acid O-acetyltransferase. <i>Journal of Biological Chemistry</i> , <b>1996</b> , 271, 13697-705	5.4	24
35	Linkage-specific action of endogenous sialic acid O-acetyltransferase in Chinese hamster ovary cells. <i>Journal of Biological Chemistry</i> , <b>1996</b> , 271, 15130-8	5.4	44
34	Regulation of sialic acid 9-O-acetylation during the growth and differentiation of murine erythroleukemia cells. <i>Journal of Biological Chemistry</i> , <b>1996</b> , 271, 31517-25	5.4	30
33	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> , <b>1996</b> , 271, 31526-32	5.4	78
32	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> , <b>1995</b> , 270, 7543-50	5.4	103
31	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> , <b>1995</b> , 270, 7523-32	5.4	93
30	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> , <b>1995</b> , 270, 7533-42	5.4	69

29	Endothelial heparan sulfate proteoglycans that bind to L-selectin have glucosamine residues with unsubstituted amino groups. <i>Journal of Biological Chemistry</i> , <b>1995</b> , 270, 12012-24	5.4	93
28	Unusual anionic N-linked oligosaccharides from bovine lung. <i>Journal of Biological Chemistry</i> , <b>1995</b> , 270, 27634-45	5.4	19
27	I-type lectins. <i>Journal of Biological Chemistry</i> , <b>1995</b> , 270, 14243-6	5.4	174
26	Oligosaccharides in vertebrate development. <i>Seminars in Developmental Biology</i> , <b>1995</b> , 6, 127-138		58
25	Expression of de-N-acetyl-gangliosides in human melanoma cells is induced by genistein or nocodazole. <i>Journal of Biological Chemistry</i> , <b>1995</b> , 270, 2921-30	5.4	47
24	Advances in the use of biotinylated diaminopyridine (BAP) as a versatile fluorescent tag for oligosaccharides. <i>Glycobiology</i> , <b>1994</b> , 4, 653-63	5.8	34
23	Metabolic radiolabeling of glycoconjugates. <i>Methods in Enzymology</i> , <b>1994</b> , 230, 16-32	1.7	50
22	Biological roles of oligosaccharides: all of the theories are correct. <i>Glycobiology</i> , <b>1993</b> , 3, 97-130	5.8	4684
21	Diversity in the sialic acids. <i>Glycobiology</i> , <b>1992</b> , 2, 25-40	5.8	519
20	Selectins and other mammalian sialic acid-binding lectins. <i>Current Opinion in Cell Biology</i> , <b>1992</b> , 4, 257-669		154
19	The synthesis of high-specific-activity UDP-[6-3H]galactose, UDP-N-[6-3H]acetylgalactosamine, and their corresponding monosaccharides. <i>Analytical Biochemistry</i> , <b>1992</b> , 201, 140-5	3.1	7
18	Of pride, prejudice, and discrimination. Why generalizations can be unfair to the individual. <i>Annals of Internal Medicine</i> , <b>1992</b> , 116, 762-4	8	8
17	Developmental abnormalities in transgenic mice expressing a sialic acid-specific 9-O-acetylerase. <i>Cell</i> , <b>1991</b> , 65, 65-74	56.2	131
16	Radioactive tracer techniques in the sequencing of glycoprotein oligosaccharides. <i>FASEB Journal</i> , <b>1991</b> , 5, 226-35	0.9	78
15	The Selectins. A Family of Sialic Acid-Binding Lectins Directly Involved in Intercellular Adhesion.. <i>Trends in Glycoscience and Glycotechnology</i> , <b>1991</b> , 3, 122-125	0.1	3
14	De-N-Acetyl Gangliosides: Do they Exist? If So, How Are They Made? What Do They Do?. <i>Trends in Glycoscience and Glycotechnology</i> , <b>1991</b> , 3, 4-9	0.1	2
13	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> , <b>1990</b> , 188, 20-32	3.1	144
12	Glycoprotein sialate 7(9)-O-acetyltransferase from rat liver Golgi vesicles. <i>Methods in Enzymology</i> , <b>1989</b> , 179, 416-22	1.7	6

11	Sialate 9-O-acetyl-esterase from rat liver. <i>Methods in Enzymology</i> , <b>1989</b> , 179, 409-15	1.7	6
10	Biochemical and genetic evidence for distinct membrane-bound and cytosolic sialic acid O-acetyl-esterases: serine-active-site enzymes. <i>Biochemical and Biophysical Research Communications</i> , <b>1987</b> , 144, 1099-108	3.4	16
9	Developmental regulation of sialic acid modifications in rat and human colon. <i>FASEB Journal</i> , <b>1987</b> , 1, 229-35	0.9	53
8	Endo-glycosidase F and peptide N-glycosidase F release the great majority of total cellular N-linked oligosaccharides: use in demonstrating that sulfated N-linked oligosaccharides are frequently found in cultured cells. <i>Biochemical and Biophysical Research Communications</i> , <b>1986</b> , 140, 967-73	3.4	30
7	Metabolic labeling of sialic acids in tissue culture cell lines: methods to identify substituted and modified radioactive neuraminic acids. <i>Analytical Biochemistry</i> , <b>1985</b> , 150, 32-46	3.1	52
6	The release and purification of sialic acids from glycoconjugates: methods to minimize the loss and migration of O-acetyl groups. <i>Analytical Biochemistry</i> , <b>1984</b> , 137, 236-47	3.1	234
5	Demonstration of the enzymatic mechanisms of alpha-N-acetyl-D-glucosamine-1-phosphodiester N-acetylglucosaminidase (formerly called alpha-N-acetylglucosaminylphosphodiesterase) and lysosomal alpha-N-acetylglucosaminidase. <i>Archives of Biochemistry and Biophysics</i> , <b>1983</b> , 222, 145-9	4.1	44
4	Detection of accessory spleens with indium 111-labeled autologous platelets. <i>American Journal of Hematology</i> , <b>1980</b> , 8, 81-6	7.1	29
3	Surface tension of amniotic fluid lipid extracts: prediction of pulmonary maturity. <i>American Journal of Obstetrics and Gynecology</i> , <b>1977</b> , 128, 591-8	6.4	16
2	Evolutionary Considerations in Studying the Sialome: Sialic Acids and the Host-Pathogen Interface	69-88	2
1	Development and applications of sialoglycan-recognizing probes (SGRPs) with defined specificities: exploring the dynamic mammalian sialoglycome		1