Raymond Allen Dwek

List of Publications by Year
in descending order

75 papers	10,043 citations	81839 39 h-index	76872 74 g-index
76 all docs	76 docs citations	76 times ranked	9148 citing authors

#	Article	IF	Citations
1	Glycobiology:â€‰ Toward Understanding the Function of Sugars. Chemical Reviews, 1996, 96, 683-720.	23.0	2,750
2	Glycosylation changes of IgG associated with rheumatooid arthritis can activate complement via the mannose-binding protein. Nature Medicine, 1995, 1, 237-243.	15.2	729
3	Concepts and Principles of O-Linked Glycosylation. Critical Reviews in Biochemistry and Molecular Biology, 1998, 33, 151-208.	2.3	633
4	Antibodies inhibit prion propagation and clear cell cultures of prion infectivity. Nature, 2001, 412, 739-743.	13.7	503
5	Complete structure of the glycosyl phosphatidylinositol membrane anchor of rat brain Thy-1 glycoprotein. Nature, 1988, 333, 269-272.	13.7	463
6	Targeting glycosylation as a therapeutic approach. Nature Reviews Drug Discovery, 2002, 1, 65-75.	21.5	409
7	Glycosylation: Heterogeneity and the 3D Structure of Proteins. Critical Reviews in Biochemistry and Molecular Biology, 1997, 32, 1-100.	2.3	394
8	The Mannose Receptor Mediates Dengue Virus Infection of Macrophages. PLoS Pathogens, 2008, 4, e17.	2.1	350
9	Inhibition of HIV replication by amino-sugar derivatives. FEBS Letters, 1988, 237, 128-132.	1.3	338
10	Concepts and principles of glycobiology. FASEB Journal, 1993, 7, 1330-1337.	0.2	213
11	Variations in Oligosaccharideâ^'Protein Interactions in Immunoglobulin G Determine the Site-Specific Glycosylation Profiles and Modulate the Dynamic Motion of the Fc Oligosaccharides. Biochemistry, 1997, 36, 1370-1380.	1.2	188
12	The beta1 2-d-xylose and alpha1 3-l-fucose substituted N-linked oligosaccharides from Erythrina cristagalli lectin. Isolation, characterisation and comparison with other legume lectins. FEBS Journal, 1987, 166, 311-320.	0.2	150
13	Characterization of the cross-reacting determinant (CRD) of the glycosyl-phosphatidylinositol membrane anchor of Trypanosoma brucei variant surface glycoprotein. FEBS Journal, 1988, 176, 527-534.	0.2	148
14	Site-specific glycosylation of human immunoglobulin G is altered in four rheumatoid arthritis patients. Biochemical Journal, 1996, 314, 621-630.	1.7	148
15	Oligosaccharide sequencing technology. Nature, 1997, 388, 205-207.	13.7	144
16	The high degree of internal flexibility observed for an oligomannose oligosaccharide does not alter the overall topology of the molecule. FEBS Journal, 1998, 258, 372-386.	0.2	131
17	Genes contributing to prion pathogenesis. Journal of General Virology, 2008, 89, 1777-1788.	1.3	116
18	The conformational effects of N-glycosylation on the tailpiece from serum IgM. FEBS Journal, 1991, 198, 131-139.	0.2	99

#	Article	IF	Citations
19	Effects of glycosylation on protein structure and dynamics in ribonuclease B and some of its individual glycoforms. FEBS Journal, 1993, 218, 239-244.	0.2	95
20	Introduction:â€‰GlycobiologyUnderstanding the Language and Meaning of Carbohydrates. Chemical Reviews, 2002, 102, 283-284.	23.0	92
21	COVID-19 therapeutics: Challenges and directions for the future. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2119893119.	3.3	92
22	Effects of glycosylation on protein conformation and amide proton exchange rates in RNase B. FEBS Letters, 1992, 307, 343-346.	1.3	87
23	Identification of a monoclonal antibody to abscission tissue that recognises xylose/fucose-containing N-linked oligosaccharides from higher plants. Planta, 1988, 175, 506-512.	1.6	85
24	Protein surface oligosaccharides and protein function. Nature Structural Biology, 1994, 1, 499-501.	9.7	84
25	An iminosugar with potent inhibition of dengue virus infection in vivo. Antiviral Research, 2013, 98, 35-43.	1.9	83
26	Antiviral Effect ofN-Butyldeoxynojirimycin against Bovine Viral Diarrhea Virus Correlates with Misfolding of E2 Envelope Proteins and Impairment of Their Association into E1-E2 Heterodimers. Journal of Virology, 2001, 75, 3527-3536.	1.5	79
27	Iminosugar antivirals: the therapeutic sweet spot. Biochemical Society Transactions, 2017, 45, 571-582.	1.6	78
28	Sialylated N-glycans in adult rat brain tissue. A widespread distribution of disialylated antennae in complex and hybrid structures. FEBS Journal, 1998, 258, 243-270.	0.2	76
29	Peptide anchor residue glycosylation: effect on class I major histocompatibility complex binding and cytotoxic T lymphocyte recognition. European Journal of Immunology, 1995, 25, 3270-3276.	1.6	74
30	Iminosugars Inhibit Dengue Virus Production via Inhibition of ER Alpha-Glucosidasesâ€”Not Glycolipid Processing Enzymes. PLoS Neglected Tropical Diseases, 2016, 10, e0004524.	1.3	69
31	Assessing Antigen Structural Integrity through Glycosylation Analysis of the SARS-CoV-2 Viral Spike. ACS Central Science, 2021, 7, 586-593.	5.3	68
32	Characterisation of the asparagine-linked oligosaccharides from Trypanosoma brucei type-I variant surface glycoproteins. FEBS Journal, 1990, 187, 657-663.	0.2	65
33	Identification of highly fucosylated N-linked oligosaccharides from the human parotid gland. FEBS Journal, 1998, 258, 623-656.	0.2	64
34	Structural determination ofN-linked carbohydrates by matrix-assisted laser desorption/ionization-mass spectrometry following enzymatic release within sodium dodecyl sulphate-polyacrylamide electrophoresis gels: Application to species-specific glycosylation of Î±1-acid glycoprotein. Electrophoresis, 1998, 19, 1950-1959.	1.3	63
35	Inhibition of endoplasmic reticulum glucosidases is required for inÂvitro and inÂvivo dengue antiviral activity by the iminosugar UV-4. Antiviral Research, 2016, 129, 93-98.	1.9	52
36	Reduction of the infectivity of hepatitis C virus pseudoparticles by incorporation of misfolded glycoproteins induced by glucosidase inhibitors. Journal of General Virology, 2007, 88, 1133-1143.	1.3	51

#	Article	IF	Citations
37	The combining site of the dinitrophenyl-binding immunoglobulin A myeloma protein MOPC 315. Biochemical Journal, 1977, 165, 207-223.	1.7	44
38	Antiviral effect of Î±-glucosidase inhibitors on viral morphogenesis and binding properties of hepatitis C virus-like particles. Journal of General Virology, 2006, 87, 861-871.	1.3	43
39	Protein specific N-glycosylation of tyrosinase and tyrosinase-related protein-1 in B16 mouse melanoma cells. Biochemical Journal, 1999, 344, 659-665.	1.7	42
40	The Mechanism of Water-Proton Relaxation in Enzyme . Paramagnetic-Ion Complexes. 1. The Gd(III) . Lysozyme Complex. FEBS Journal, 1974, 47, 271-283.	0.2	40
41	Structural Studies on the Combining Site of the Myeloma Protein MOPC 315. FEBS Journal, 1975, 53, 25-39.	0.2	37
42	The effect of aglycosylation on the binding of mouse IgG to staphylococcal protein A. FEBS Letters, 1983, 164, 227-230.	1.3	37
43	The identification of abnormal glycoforms of serum transferrin in carbohydrate deficient glycoprotein syndrome type i by capillary zone electrophoresis. Glycoconjugate Journal, 1996, 13, 1031-1042.	1.4	37
44	Targeting Endoplasmic Reticulum Î±-Glucosidase I with a Single-Dose Iminosugar Treatment Protects against Lethal Influenza and Dengue Virus Infections. Journal of Medicinal Chemistry, 2020, 63, 4205-4214.	2.9	37
45	Specific spin labelling of the Fc region of immunoglobulins. FEBS Letters, 1977, 80, 133-136.	1.3	32
46	The gross architecture of an antibody-combining site as determined by spin-label mapping. Biochemical Journal, 1977, 165, 177-197.	1.7	31
47	Structural analysis of the CD5 antigen. Expression, disulphide bond analysis and physical characterisation of CD5 scavenger receptor superfamily domain 1. FEBS Journal, 1998, 257, 131-141.	0.2	25
48	Soluble human TLR2 ectodomain binds diacylglycerol from microbial lipopeptides and glycolipids. Innate Immunity, 2015, 21, 175-193.	1.1	25
49	Some recent applications of the use of paramagnetic centres to probe biological systems using nuclear magnetic resonance. Quarterly Reviews of Biophysics, 1977, 10, 421-484.	2.4	24
50	Glycoproteins: Rapid Sequencing Technology for N-linked and GPI Anchor Glycans. Biotechnology and Genetic Engineering Reviews, 1999, 16, 1-22.	2.4	23
51	Difficulties in Determining Accurate Molecular Motion Parameters from Proton Relaxation Enhancement Measurements as Illustrated by the Immunoglobulin G . Gd(III) System. FEBS Journal, 1976, 71, 519-528.	0.2	21
52	Comparison of the dimensions of the combining sites of the dinitrophenyl-binding immunoglobulin A myeloma proteins MOPC 315, MOPC 460 and XRPC 25 by spin-label mapping. Biochemical Journal, 1977, 165, 199-206.	1.7	20
53	The glycan processing and site occupancy of recombinant Thy-1 is markedly affected by the presence of a glycosylphosphatidylinositol anchor. Glycobiology, 1999, 9, 1381-1387.	1.3	20
54	Heterotropic Interactions of Ligands with Phosphorylase b. FEBS Journal, 1976, 61, 243-251.	0.2	18

#	Article	IF	Citations
55	The binding of 2,4,6-trinitrophenyl derivatives to the mouse myeloma immunoglobulin A protein MOPC 315. Biochemical Journal, 1978, 169, 179-188.	1.7	18
56	Conformational Changes in Glycogen Phosphorylase Studied with a Spin-Label Probe. FEBS Journal, 1976, 61, 237-242.	0.2	17
57	Cell surface oligosaccharides on Dictyostelium during development. Journal of Cell Science, 1991, 99, 485-495.	1.2	15
58	The Determination of Molecular-Motion Parameters from Proton-Relaxation-Enhancement Measurements in a Number of Gd(III) . antibody-fragment Complexes. A Comparative Study. FEBS Journal, 1977, 75, 445-453.	0.2	14
59	Neutralizing Antibodies to SARSâ€CoVâ€2 Selected from a Human Antibody Library Constructed Decades Ago. Advanced Science, 2022, 9, e2102181.	5.6	14
60	Host-targeting oral antiviral drugs to prevent pandemics. Lancet, The, 2022, 399, 1381-1382.	6.3	14
61	Structural Basis of Recognition in the Immune Response. Biochemical Society Transactions, 1978, 6, 1126-1131.	1.6	13
62	Molecular characterization of Limulus Polyphemus C-reactive protein. II. Asparagine-linked oligosaccharides. FEBS Journal, 1993, 214, 99-110.	0.2	13
63	The Mechanism of Water-Proton Relaxation in Enzyme . Paramagnetic-Ion Complexes. 2. The Mn(II) . ATP . Phosphofructokinase Ternary Complex. FEBS Journal, 1974, 47, 285-293.	0.2	12
64	Spin-Labelled Phosphofructokinase. A Simple and Direct Approach to the Study of Allosteric Equilibria under Near-Physiological Conditions. FEBS Journal, 1975, 60, 187-198.	0.2	12
65	A family of novel, acidic N-glycans in Bowes melanoma tissue plasminogen activator have L2/HNK-1-bearing antennae, many with sulfation of the fucosylated chitobiose core. FEBS Journal, 2001, 268, 4063-4078.	0.2	12
66	Minimal In Vivo Efficacy of Iminosugars in a Lethal Ebola Virus Guinea Pig Model. PLoS ONE, 2016, 11, e0167018.	1.1	11
67	Journeys in Science: Glycobiology and Other Paths. Annual Review of Biochemistry, 2014, 83, 1-44.	5.0	10
68	Productive Folding of Tyrosinase Ectodomain Is Controlled by the Transmembrane Anchor. Journal of Biological Chemistry, 2006, 281, 21682-21689.	1.6	9
69	Pathogenâ€induced inflammation is attenuated by the iminosugar M O Nâ€DNJ via modulation of the unfolded protein response. Immunology, 2021, 164, 587-601.	2.0	6
70	The preparation and properties of pyruvate kinase from yeast. Biochemical Journal, 1974, 139, 665-675.	1.7	5
71	Investigation of hapten-antibody interactions in McPC603 by 1 H and 31 P NMR spectroscopy. FEBS Letters, 1977, 84, 87-91.	1.3	5
72	The Role of Oligosaccharides in Modifying Protein Function. Novartis Foundation Symposium, 1989, 145, 241-256.	1.2	5

#	Article	IF	Citations
73	Characterisation of tissue-specific oligosaccharides from rat brain and kidney membrane preparations enriched in Na+,K+-ATPase. Glycoconjugate Journal, 1999, 16, 437-456.	1.4	4
74	Role of Nonbonded Interactions in Determining Solution Conformations of Oligosaccharides. ACS Symposium Series, 1994, , 252-268.	0.5	4
75	Nuclear Magnetic Resonance Studies of Macromolecules with Fluorine Nuclei as Probes. Novartis Foundation Symposium, 1972, 2, 239-279.	1.2	0