Gillian M Air

List of Publications by Year
in descending order

92	6,094	71102 41	71685 76
papers	citations	h-index	g-index

94	94	94	6040
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Rapid cloning of high-affinity human monoclonal antibodies against influenza virus. Nature, 2008, 453, 667-671.	27.8	959
2	Epitopes on protein antigens: Misconceptions and realities. Cell, 1990, 61, 553-556.	28.9	550
3	The neuraminidase of influenza virus. Proteins: Structure, Function and Bioinformatics, 1989, 6, 341-356.	2.6	286
4	Glycomic Analysis of Human Respiratory Tract Tissues and Correlation with Influenza Virus Infection. PLoS Pathogens, 2013, 9, e1003223.	4.7	209
5	Influenza neuraminidase. Influenza and Other Respiratory Viruses, 2012, 6, 245-256.	3.4	202
6	Evolving complexities of influenza virus and its receptors. Trends in Microbiology, 2008, 16, 149-157.	7.7	185
7	Three-dimensional Structure of Influenza A N9 Neuraminidase and Its Complex with the Inhibitor 2-Deoxy 2,3-Dehydro-N-Acetyl Neuraminic Acid. Journal of Molecular Biology, 1993, 232, 1069-1083.	4.2	146
8	Receptor binding specificity of recent human H3N2 influenza viruses. Virology Journal, 2007, 4, 42.	3.4	146
9	Nucleotide sequence coding for the â€œsignal peptideâ€•and N terminus of the hemagglutinin from an Asian (H2N2) strain of influenza virus. Virology, 1979, 97, 468-472.	2.4	145
10	Molecular Basis for the Resistance of Influenza Viruses to 4-Guanidino-Neu5Ac2en. Virology, 1995, 214, 642-646.	2.4	125
11	A Sialylated Glycan Microarray Reveals Novel Interactions of Modified Sialic Acids with Proteins and Viruses. Journal of Biological Chemistry, 2011, 286, 31610-31622.	3.4	125
12	Selection and Characterization of a Neuraminidase-Minus Mutant of Influenza Virus and Its Rescue by Cloned Neuraminidase Genes. Virology, 1993, 194, 403-407.	2.4	124
13	Site-directed mutation of the active site of influenza neuraminidase and implications for the catalytic mechanism. Biochemistry, 1987, 26, 5351-5358.	2.5	105
14	Structures of Aromatic Inhibitors of Influenza Virus Neuraminidase. Biochemistry, 1995, 34, 3144-3151.	2.5	101
15	Human H3N2 Influenza Viruses Isolated from 1968 To 2012 Show Varying Preference for Receptor Substructures with No Apparent Consequences for Disease or Spread. PLoS ONE, 2013, 8, e66325.	2.5	101
16	Structure of Influenza Virus Neuraminidase B/Lee/40 Complexed with Sialic Acid and a Dehydro Analog at 1.8-.ANG. Resolution: Implications for the Catalytic Mechanism. Biochemistry, 1994, 33, 8172-8179.	2.5	98
17	Immunodominance of Antigenic Site B over Site A of Hemagglutinin of Recent H3N2 Influenza Viruses. PLoS ONE, 2012, 7, e41895.	2.5	92
18	Antibody Epitopes on the Neuraminidase of a Recent H3N2 Influenza Virus (A/Memphis/31/98). Journal of Virology, 2002, 76, 12274-12280.	3.4	90

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19	Functional Glycomic Analysis of Human Milk Glycans Reveals the Presence of Virus Receptors and Embryonic Stem Cell Biomarkers. Journal of Biological Chemistry, 2012, 287, 44784-44799.	3.4	90
20	Glycomic Characterization of Respiratory Tract Tissues of Ferrets. Journal of Biological Chemistry, 2014, 289, 28489-28504.	3.4	82
21	A Sialic Acid-derived Phosphonate Analog Inhibits Different Strains of Influenza Virus Neuraminidase with Different Efficiencies. Journal of Molecular Biology, 1995, 245, 623-634.	4.2	76
22	Structure-Based Inhibitors of Influenza Virus Sialidase. A Benzoic Acid Lead with Novel Interaction. Journal of Medicinal Chemistry, 1995, 38, 3217-3225.	6.4	74
23	Human Parainfluenza Viruses hPIV1 and hPIV3 Bind Oligosaccharides with Î±2-3-Linked Sialic Acids That Are Distinct from Those Bound by H5 Avian Influenza Virus Hemagglutinin. Journal of Virology, 2007, 81, 8341-8345.	3.4	63
24	The prototype HIV-1 maturation inhibitor, bevirimat, binds to the CA-SP1 cleavage site in immature Gag particles. Retrovirology, 2011, 8, 101.	2.0	63
25	Influenza vaccination responses in human systemic lupus erythematosus: Impact of clinical and demographic features. Arthritis and Rheumatism, 2011, 63, 2396-2406.	6.7	63
26	Nucleotide Sequence Coding for the N-Terminal Region of the Matrix Protein of Influenza Virus. FEBS Journal, 1979, 96, 363-372.	0.2	61
27	Variation in the membrane-insertion and "stalk" sequences in eight subtypes of influenza type A virus neuraminidase. Biochemistry, 1982, 21, 4001-4007.	2.5	61
28	Identification of critical contact residues in the NC41 epitope of a subtype N9 influenza virus neuraminidase. Proteins: Structure, Function and Bioinformatics, 1993, 15, 121-132.	2.6	61
29	Novel aromatic inhibitors of influenza virus neuraminidase make selective interactions with conserved residues and water molecules in the active site 1 1Edited by I. A. Wilson. Journal of Molecular Biology, 1999, 293, 1107-1119.	4.2	61
30	HLA class I molecules consistently present internal influenza epitopes. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 540-545.	7.1	61
31	Potent Inhibition of Influenza Sialidase by a Benzoic Acid Containing a 2-Pyrrolidinone Substituent. Journal of Medicinal Chemistry, 1999, 42, 2332-2343.	6.4	60
32	An Epidemiologically Significant Epitope of a 1998 Human Influenza Virus Neuraminidase Forms a Highly Hydrated Interface in the NAâ€“Antibody Complex. Journal of Molecular Biology, 2006, 356, 651-663.	4.2	57
33	Distribution of sequence differences in influenza N9 neuraminidase of tern and whale viruses and crystallization of the whale neuraminidase complexed with antibodies. Virology, 1987, 160, 346-354.	2.4	55
34	Apoptosis by influenza viruses correlates with efficiency of viral mRNA synthesis. Virus Research, 2001, 77, 3-17.	2.2	54
35	Amount and avidity of serum antibodies against native glycoproteins and denatured virus after repeated influenza whole-virus vaccination. Vaccine, 2005, 23, 1414-1425.	3.8	51
36	Site-directed mutagenesis of catalytic residues of influenza virus neuraminidase as an aid to drug design. FEBS Journal, 1998, 258, 320-331.	0.2	50

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37	Antibody quantity versus quality after influenza vaccination. Vaccine, 2009, 27, 6358-6362.	3.8	50
38	Hemagglutinin Specificity and Neuraminidase Coding Capacity of Neuraminidase-Deficient Influenza Viruses. Virology, 1997, 229, 155-165.	2.4	47
39	A strategy for theoretical binding constant,Ki, calculations for neuraminidase aromatic inhibitors designed on the basis of the active site structure of influenza virus neuraminidase. Proteins: Structure, Function and Bioinformatics, 1995, 23, 264-277.	2.6	45
40	Mismatched hemagglutinin and neuraminidase specificities in recent human H3N2 influenza viruses. Virology, 2005, 339, 12-20.	2.4	45
41	Evaluations for In Vitro Correlates of Immunogenicity of Inactivated Influenza A H5, H7 and H9 Vaccines in Humans. PLoS ONE, 2012, 7, e50830.	2.5	44
42	Antigenic, sequence, and crystal variation in influenza B neuraminidase. Virology, 1990, 177, 578-587.	2.4	43
43	Glycosylation changes in the globular head of H3N2 influenza hemagglutinin modulate receptor binding without affecting virus virulence. Scientific Reports, 2016, 6, 36216.	3.3	43
44	The Molecular Basis of Antigenic Variation in Influenza Virus. Advances in Virus Research, 1986, 31, 53-102.	2.1	41
45	Generation and Characterization of a Mutant of Influenza A Virus Selected with the Neuraminidase Inhibitor BCX-140. Antimicrobial Agents and Chemotherapy, 1998, 42, 801-807.	3.2	40
46	Binding of influenza viruses to sialic acids: reassortant viruses with A/NWS/33 hemagglutinin bind to Î±2,8-linked sialic acid. Virology, 2004, 325, 340-350.	2.4	39
47	Transfer of the hemagglutinin activity of influenza virus neuraminidase subtype N9 into an N2 neuraminidase background. Virology, 1991, 183, 496-504.	2.4	38
48	Influenza virusâ€“glycan interactions. Current Opinion in Virology, 2014, 7, 128-133.	5.4	38
49	Hydrophobic benzoic acids as inhibitors of influenza neuraminidase. Bioorganic and Medicinal Chemistry, 1999, 7, 2487-2497.	3.0	36
50	Influenza Virus Sequence Feature Variant Type Analysis: Evidence of a Role for NS1 in Influenza Virus Host Range Restriction. Journal of Virology, 2012, 86, 5857-5866.	3.4	35
51	Deletions of neuraminidase and resistance to oseltamivir may be a consequence of restricted receptor specificity in recent H3N2 influenza viruses. Virology Journal, 2009, 6, 22.	3.4	34
52	Design of benzoic acid inhibitors of influenza neuraminidase containing a cyclic substitution for the N-acetyl grouping. Bioorganic and Medicinal Chemistry Letters, 1999, 9, 1901-1906.	2.2	32
53	Glycan array analysis of influenza H1N1 binding and release. Cancer Biomarkers, 2014, 14, 43-53.	1.7	31
54	Influenza virus antigenicity and broadly neutralizing epitopes. Current Opinion in Virology, 2015, 11, 113-121.	5.4	29

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55	Red Cells Bound to Influenza Virus N9 Neuraminidase Are Not Released by the N9 Neuraminidase Activity. Virology, 1995, 211, 278-284.	2.4	28
56	Pyrrolidinobenzoic acid inhibitors of influenza virus neuraminidase: modifications of essential pyrrolidinone ring substituents. Bioorganic and Medicinal Chemistry, 2003, 11, 2739-2749.	3.0	28
57	Probing Virusâ€“Glycan Interactions Using Glycan Microarrays. Methods in Molecular Biology, 2012, 808, 251-267.	0.9	25
58	Loss of enzyme activity in a site-directed mutant of influenza neuraminidase compared to expressed wild-type protein. Virology, 1986, 148, 74-83.	2.4	23
59	Fixation of Oligosaccharides to a Surface May Increase the Susceptibility to Human Parainfluenza Virus 1, 2, or 3 Hemagglutinin-Neuraminidase. Journal of Virology, 2011, 85, 12146-12159.	3.4	21
60	Sialic acid is cleaved from glycoconjugates at the cell surface when influenza virus neuraminidases are expressed from recombinant vaccinia viruses. Virology, 1989, 170, 346-351.	2.4	20
61	Contacts between Influenza Virus N9 Neuraminidase and Monoclonal Antibody NC10. Virology, 2002, 300, 255-268.	2.4	20
62	Amino acid sequences from the gene F(Capsid) protein of bacteriophage Ï†X174. Journal of Molecular Biology, 1976, 107, 433-443.	4.2	19
63	Influenza Neuraminidase as Target for Antivirals. Advances in Virus Research, 1999, 54, 375-402.	2.1	19
64	Quantitative Comparison of Human Parainfluenza Virus Hemagglutinin-Neuraminidase Receptor Binding and Receptor Cleavage. Journal of Virology, 2013, 87, 8962-8970.	3.4	19
65	Effects of site-specific mutation on structure and activity of influenza virus B/Lee/40 neuraminidase. Virology, 1987, 156, 253-258.	2.4	18
66	DNA-dependent RNA polymerase from the thermophilic bacteriumThermus aquaticus. FEBS Letters, 1974, 38, 277-281.	2.8	16
67	Nucleotide and deduced amino acid sequence of the influenza neuraminidase genes of two equine serotypes. Virology, 1986, 155, 460-468.	2.4	15
68	Interaction between a 1998 human influenza virus N2 neuraminidase and monoclonal antibody Mem5. Virology, 2006, 345, 424-433.	2.4	14
69	Increased antibodies against unfolded viral antigens in the elderly after influenza vaccination. Influenza and Other Respiratory Viruses, 2007, 1, 147-156.	3.4	14
70	Pyrrolidinobenzoic acid inhibitors of influenza virus neuraminidase: The hydrophobic side chain influences type A subtype selectivity. Bioorganic and Medicinal Chemistry, 2012, 20, 4582-4589.	3.0	14
71	Possible basis for the emergence of H1N1 viruses with pandemic potential from avian hosts. Emerging Microbes and Infections, 2015, 4, 1-10.	6.5	14
72	Correlation between a Coat Protein Amino-terminal Sequence and a Ribosome-binding DNA Sequence from Ï†X 174. Nature: New Biology, 1973, 241, 40-41.	4.5	13

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73	Probing the Structure of Influenza B Hemagglutinin Using Site-Directed Mutagenesis. Virology, 1995, 206, 787-795.	2.4	12
74	Critical Interactions in Binding Antibody NC41 to Influenza N9 Neuraminidase:Â Amino Acid Contacts on the Antibody Heavy Chainâ€. Biochemistry, 1998, 37, 10660-10670.	2.5	12
75	Influenza Type B Neuraminidase Can Replace the Function of Type A Neuraminidase. Virology, 1999, 264, 265-277.	2.4	11
76	Crystal structure of a new benzoic acid inhibitor of influenza neuraminidase bound with a new tilt induced by overpacking subsite C6. BMC Structural Biology, 2012, 12, 7.	2.3	11
77	New crystalline forms of neuraminidase of type B human influenza virus. Journal of Molecular Biology, 1990, 214, 639-640.	4.2	10
78	A correction to the sequence of the alpha chains of horse haemoglobin. Journal of Molecular Biology, 1976, 103, 675-677.	4.2	8
79	Rapid DNA Sequence Analysi. CRC Critical Reviews in Biochemistry, 1979, 6, 1-33.	2.0	8
80	Defining the Requirements for an Antibody Epitope on Influenza Virus Neuraminidase:. Journal of Molecular Biology, 1994, 235, 747-759.	4.2	8
81	Individual Antibody and T Cell Responses to Vaccination and Infection with the 2009 Pandemic Swine-Origin H1N1 Influenza Virus. Journal of Clinical Immunology, 2011, 31, 900-912.	3.8	7
82	Antigenicity of influenza virus hemagglutinin following chemical modification. Virology, 1981, 111, 538-548.	2.4	5
83	Influenza Virus Antiviral Targets. , 0, , 187-207.		5
84	A benzoic acid inhibitor induces a novel conformational change in the active site ofInfluenza B virusneuraminidase. Acta Crystallographica Section D: Biological Crystallography, 2004, 60, 1017-1023.	2.5	4
85	CONSERVATION AND VARIATION IN INFLUENZA GENE SEQUENCES. , 1981, , 29-44.		4
86	DNA Sequencing of Viral Genomes. , 1979, , 205-292.		2
87	The Glycobiology of Influenza Viruses. , 0, , 839-850.		1
88	Novel isoforms of influenza virus PA-X and PB1-F2 indicated by automatic annotation. Virus Research, 2021, 304, 198545.	2.2	1
89	Evaluation of influenza A virus receptors. International Congress Series, 2001, 1219, 487-502.	0.2	0
90	Editorial overview: virusâ€“glycan interactions and pathogenesis. Current Opinion in Virology, 2014, 7, v-vi.	5.4	0

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91	Variability in HLA class I viral peptide presentation during infection with two different Influenza A H1N1 strains. FASEB Journal, 2008, 22, 1068.2.	0.5	0
92	Crystal Structures of Influenza Virus Neuraminidase Complexed with Monoclonal Antibody Fab Fragments. , 1990, , 49-60.		0