Peter D Kwong

List of Publications by Year
in descending order

318 papers	54,958 citations	1799 103 h-index	1536 218 g-index
361 all docs	361 docs citations	361 times ranked	27231 citing authors

#	Article	IF	Citations
1	Structure of an HIV gp120 envelope glycoprotein in complex with the CD4 receptor and a neutralizing human antibody. Nature, 1998, 393, 648-659.	27.8	2,788
2	Antibody neutralization and escape by HIV-1. Nature, 2003, 422, 307-312.	27.8	2,233
3	Antibody resistance of SARS-CoV-2 variants B.1.351 and B.1.1.7. Nature, 2021, 593, 130-135.	27.8	1,904
4	Rational Design of Envelope Identifies Broadly Neutralizing Human Monoclonal Antibodies to HIV-1. Science, 2010, 329, 856-861.	12.6	1,600
5	Potent neutralizing antibodies against multiple epitopes on SARS-CoV-2 spike. Nature, 2020, 584, 450-456.	27.8	1,337
6	The antigenic structure of the HIV gp120 envelope glycoprotein. Nature, 1998, 393, 705-711.	27.8	1,152
7	Structural Basis for Broad and Potent Neutralization of HIV-1 by Antibody VRC01. Science, 2010, 329, 811-817.	12.6	1,050
8	Co-evolution of a broadly neutralizing HIV-1 antibody and founder virus. Nature, 2013, 496, 469-476.	27.8	961
9	Evaluation of the mRNA-1273 Vaccine against SARS-CoV-2 in Nonhuman Primates. New England Journal of Medicine, 2020, 383, 1544-1555.	27.0	936
10	HIV-1 evades antibody-mediated neutralization through conformational masking of receptor-binding sites. Nature, 2002, 420, 678-682.	27.8	832
11	A Conserved HIV gp120 Glycoprotein Structure Involved in Chemokine Receptor Binding. Science, 1998, 280, 1949-1953.	12.6	819
12	Structure-Based Design of a Fusion Glycoprotein Vaccine for Respiratory Syncytial Virus. Science, 2013, 342, 592-598.	12.6	797
13	Structure of HIV-1 gp120 V1/V2 domain with broadly neutralizing antibody PG9. Nature, 2011, 480, 336-343.	27.8	794
14	Focused Evolution of HIV-1 Neutralizing Antibodies Revealed by Structures and Deep Sequencing. Science, 2011, 333, 1593-1602.	12.6	788
15	Broad and potent neutralization of HIV-1 by a gp41-specific human antibody. Nature, 2012, 491, 406-412.	27.8	753
16	HIV vaccine design and the neutralizing antibody problem. Nature Immunology, 2004, 5, 233-236.	14.5	721
17	Structural definition of a conserved neutralization epitope on HIV-1 gp120. Nature, 2007, 445, 732-737.	27.8	715
18	Structure and immune recognition of trimeric pre-fusion HIV-1 Env. Nature, 2014, 514, 455-461.	27.8	702

#	Article	IF	Citations
19	Structure of a V3-Containing HIV-1 gp120 Core. Science, 2005, 310, 1025-1028.	12.6	696
20	Developmental pathway for potent V1V2-directed HIV-neutralizing antibodies. Nature, 2014, 509, 55-62.	27.8	681
21	Structure of RSV Fusion Glycoprotein Trimer Bound to a Prefusion-Specific Neutralizing Antibody. Science, 2013, 340, 1113-1117.	12.6	656
22	Crystal structure of an HIV-binding recombinant fragment of human CD4. Nature, 1990, 348, 419-426.	27.8	599
23	Hemagglutinin-stem nanoparticles generate heterosubtypic influenza protection. Nature Medicine, 2015, 21, 1065-1070.	30.7	567
24	The Mannose-Dependent Epitope for Neutralizing Antibody 2G12 on Human Immunodeficiency Virus Type 1 Glycoprotein gp120. Journal of Virology, 2002, 76, 7293-7305.	3.4	528
25	Increased resistance of SARS-CoV-2 variant P.1 to antibody neutralization. Cell Host and Microbe, 2021, 29, 747-751.e4.	11.0	504
26	Somatic Mutations of the Immunoglobulin Framework Are Generally Required for Broad and Potent HIV-1 Neutralization. Cell, 2013, 153, 126-138.	28.9	478
27	Structure and Mechanistic Analysis of the Anti-Human Immunodeficiency Virus Type 1 Antibody 2F5 in Complex with Its gp41 Epitope. Journal of Virology, 2004, 78, 10724-10737.	3.4	452
28	Potent SARS-CoV-2 neutralizing antibodies directed against spike N-terminal domain target a single supersite. Cell Host and Microbe, 2021, 29, 819-833.e7.	11.0	444
29	Conformational dynamics of single HIV-1 envelope trimers on the surface of native virions. Science, 2014, 346, 759-763.	12.6	439
30	Human Antibodies that Neutralize HIV-1: Identification, Structures, and B Cell Ontogenies. Immunity, 2012, 37, 412-425.	14.3	417
31	Broad and potent HIV-1 neutralization by a human antibody that binds the gp41â€“gp120 interface. Nature, 2014, 515, 138-142.	27.8	400
32	Analysis of a Clonal Lineage of HIV-1 Envelope V2/V3 Conformational Epitope-Specific Broadly Neutralizing Antibodies and Their Inferred Unmutated Common Ancestors. Journal of Virology, 2011, 85, 9998-10009.	3.4	393
33	Structures of the CCR5 N Terminus and of a Tyrosine-Sulfated Antibody with HIV-1 gp120 and CD4. Science, 2007, 317, 1930-1934.	12.6	379
34	Trimeric HIV-1-Env Structures Define Glycan Shields from Clades A, B, and G. Cell, 2016, 165, 813-826.	28.9	379
35	Vaccine Induction of Antibodies against a Structurally Heterogeneous Site of Immune Pressure within HIV-1 Envelope Protein Variable Regions 1 and 2. Immunity, 2013, 38, 176-186.	14.3	374
36	Structures of HIV-1 gp120 Envelope Glycoproteins from Laboratory-Adapted and Primary Isolates. Structure, 2000, 8, 1329-1339.	3.3	358

#	Article	IF	Citations
37	Access of Antibody Molecules to the Conserved Coreceptor Binding Site on Glycoprotein gp120 Is Sterically Restricted on Primary Human Immunodeficiency Virus Type 1. Journal of Virology, 2003, 77, 10557-10565.	3.4	343
38	Crystal structure, conformational fixation and entry-related interactions of mature ligand-free HIV-1 Env. Nature Structural and Molecular Biology, 2015, 22, 522-531.	8.2	333
39	Multidonor Analysis Reveals Structural Elements, Genetic Determinants, and Maturation Pathway for HIV-1 Neutralization by VRC01-Class Antibodies. Immunity, 2013, 39, 245-258.	14.3	332
40	Structure of Respiratory Syncytial Virus Fusion Glycoprotein in the Postfusion Conformation Reveals Preservation of Neutralizing Epitopes. Journal of Virology, 2011, 85, 7788-7796.	3.4	327
41	Cryo-EM Structures of SARS-CoV-2 Spike without and with ACE2 Reveal a pH-Dependent Switch to Mediate Endosomal Positioning of Receptor-Binding Domains. Cell Host and Microbe, 2020, 28, 867-879.e5.	11.0	316
42	Prefusion Fâ€"specific antibodies determine the magnitude of RSV neutralizing activity in human sera. Science Translational Medicine, 2015, 7, 309ra162.	12.4	312
43	Fusion peptide of HIV-1 as a site of vulnerability to neutralizing antibody. Science, 2016, 352, 828-833.	12.6	310
44	Structural Repertoire of HIV-1-Neutralizing Antibodies Targeting the CD4 Supersite in 14 Donors. Cell, 2015, 161, 1280-1292.	28.9	305
45	Maturation Pathway from Germline to Broad HIV-1 Neutralizer of a CD4-Mimic Antibody. Cell, 2016, 165, 449-463.	28.9	305
46	Structure of HIV-1 gp120 with gp41-interactive region reveals layered envelope architecture and basis of conformational mobility. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 1166-1171.	7.1	304
47	Identification of a CD4-Binding-Site Antibody to HIV that Evolved Near-Pan Neutralization Breadth. Immunity, 2016, 45, 1108-1121.	14.3	304
48	Broadly neutralizing antibodies and the search for an HIV-1 vaccine: the end of the beginning. Nature Reviews Immunology, 2013, 13, 693-701.	22.7	302
49	Antigenic conservation and immunogenicity of the HIV coreceptor binding site. Journal of Experimental Medicine, 2005, 201, 1407-1419.	8.5	296
50	Structural basis of tyrosine sulfation and VH-gene usage in antibodies that recognize the HIV type 1 coreceptor-binding site on gp120. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 2706-2711.	7.1	278
51	HIV-1 Vaccines Based on Antibody Identification, B Cell Ontogeny, and Epitope Structure. Immunity, 2018, 48, 855-871.	14.3	277
52	Structural Basis of Immune Evasion at the Site of CD4 Attachment on HIV-1 gp120. Science, 2009, 326, 1123-1127.	12.6	271
53	Molecular-level analysis of the serum antibody repertoire in young adults before and after seasonal influenza vaccination. Nature Medicine, 2016, 22, 1456-1464.	30.7	271
54	Vaccine-Induced Antibodies that Neutralize Group 1 and Group 2 Influenza A Viruses. Cell, 2016, 166, 609-623.	28.9	270

#	Article	IF	Citations
55	Cooperation of B Cell Lineages in Induction of HIV-1-Broadly Neutralizing Antibodies. Cell, 2014, 158, 481-491.	28.9	266
56	AAV-expressed eCD4-Ig provides durable protection from multiple SHIV challenges. Nature, 2015, 519, 87-91.	27.8	265
57	Highly Stable Trimers Formed by Human Immunodeficiency Virus Type 1 Envelope Glycoproteins Fused with the Trimeric Motif of T4 Bacteriophage Fibritin. Journal of Virology, 2002, 76, 4634-4642.	3.4	261
58	Elicitation of structure-specific antibodies by epitope scaffolds. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 17880-17887.	7.1	261
59	Dimeric association and segmental variability in the structure of human CD4. Nature, 1997, 387, 527-530.	27.8	259
60	Evaluation of candidate vaccine approaches for MERS-CoV. Nature Communications, 2015, 6, 7712.	12.8	258
61	Structural basis for diverse N-glycan recognition by HIV-1â€“neutralizing V1â€“V2â€“directed antibody PG16. Nature Structural and Molecular Biology, 2013, 20, 804-813.	8.2	257
62	Epitope-based vaccine design yields fusion peptide-directed antibodies that neutralize diverse strains of HIV-1. Nature Medicine, 2018, 24, 857-867.	30.7	256
63	Oligomeric Modeling and Electrostatic Analysis of the gp120 Envelope Glycoprotein of Human Immunodeficiency Virus. Journal of Virology, 2000, 74, 1961-1972.	3.4	248
64	Enhanced Potency of a Broadly Neutralizing HIV-1 Antibody <i>In Vitro</i> Improves Protection against Lentiviral Infection <i>In Vivo</i>. Journal of Virology, 2014, 88, 12669-12682.	3.4	248
65	A human monoclonal antibody prevents malaria infection by targeting a new site of vulnerability on the parasite. Nature Medicine, 2018, 24, 408-416.	30.7	235
66	InÂvitro and inÂvivo functions of SARS-CoV-2 infection-enhancing and neutralizing antibodies. Cell, 2021, 184, 4203-4219.e32.	28.9	228
67	Maturation and Diversity of the VRC01-Antibody Lineage over 15 Years of Chronic HIV-1 Infection. Cell, 2015, 161, 470-485.	28.9	226
68	Trispecific broadly neutralizing HIV antibodies mediate potent SHIV protection in macaques. Science, 2017, 358, 85-90.	12.6	225
69	Unliganded HIV-1 gp120 core structures assume the CD4-bound conformation with regulation by quaternary interactions and variable loops. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 5663-5668.	7.1	222
70	Neutralizing antibodies to HIV-1 envelope protect more effectively in vivo than those to the CD4 receptor. Science Translational Medicine, 2014, 6, 243ra88.	12.4	222
71	Viral variants that initiate and drive maturation of V1V2-directed HIV-1 broadly neutralizing antibodies. Nature Medicine, 2015, 21, 1332-1336.	30.7	215
72	Delineating Antibody Recognition in Polyclonal Sera from Patterns of HIV-1 Isolate Neutralization. Science, 2013, 340, 751-756.	12.6	213

#	Article	IF	Citations
73	Computation-Guided Backbone Grafting of a Discontinuous Motif onto a Protein Scaffold. Science, 2011, 334, 373-376.	12.6	212
74	Mosaic nanoparticle display of diverse influenza virus hemagglutinins elicits broad B cell responses. Nature Immunology, 2019, 20, 362-372.	14.5	211
75	Crystal Structure of PG16 and Chimeric Dissection with Somatically Related PG9: Structure-Function Analysis of Two Quaternary-Specific Antibodies That Effectively Neutralize HIV-1. Journal of Virology, 2010, 84, 8098-8110.	3.4	209
76	A proof of concept for structure-based vaccine design targeting RSV in humans. Science, 2019, 365, 505-509.	12.6	207
77	New Member of the V1V2-Directed CAP256-VRC26 Lineage That Shows Increased Breadth and Exceptional Potency. Journal of Virology, 2016, 90, 76-91.	3.4	205
78	Induction of HIV Neutralizing Antibody Lineages in Mice with Diverse Precursor Repertoires. Cell, 2016, 166, 1471-1484.e18.	28.9	198
79	Topological Layers in the HIV-1 gp120 Inner Domain Regulate gp41 Interaction and CD4-Triggered Conformational Transitions. Molecular Cell, 2010, 37, 656-667.	9.7	194
80	Tyrosine Sulfation of Human Antibodies Contributes to Recognition of the CCR5 Binding Region of HIV-1 gp120. Cell, 2003, 114, 161-170.	28.9	186
81	mRNA-1273 or mRNA-Omicron boost in vaccinated macaques elicits similar B cell expansion, neutralizing responses, and protection from Omicron. Cell, 2022, 185, 1556-1571.e18.	28.9	179
82	Mutagenic Stabilization and/or Disruption of a CD4-Bound State Reveals Distinct Conformations of the Human Immunodeficiency Virus Type 1 gp120 Envelope Glycoprotein. Journal of Virology, 2002, 76, 9888-9899.	3.4	177
83	Ultrapotent antibodies against diverse and highly transmissible SARS-CoV-2 variants. Science, 2021, 373, .	12.6	174
84	Envelope residue 375 substitutions in simianâ€“human immunodeficiency viruses enhance CD4 binding and replication in rhesus macaques. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E3413-22.	7.1	170
85	Structures of HIV-1 Env V1V2 with broadly neutralizing antibodies reveal commonalities that enable vaccine design. Nature Structural and Molecular Biology, 2016, 23, 81-90.	8.2	162
86	Small-Molecule CD4 Mimics Interact with a Highly Conserved Pocket on HIV-1 gp120. Structure, 2008, 16, 1689-1701.	3.3	160
87	Quantification of the Impact of the HIV-1-Glycan Shield on Antibody Elicitation. Cell Reports, 2017, 19, 719-732.	6.4	160
88	Early Low-Titer Neutralizing Antibodies Impede HIV-1 Replication and Select for Virus Escape. PLoS Pathogens, 2012, 8, e1002721.	4.7	159
89	Two Distinct Broadly Neutralizing Antibody Specificities of Different Clonal Lineages in a Single HIV-1-Infected Donor: Implications for Vaccine Design. Journal of Virology, 2012, 86, 4688-4692.	3.4	159
90	Structure-based, targeted deglycosylation of HIV-1 gp120 and effects on neutralization sensitivity and antibody recognition. Virology, 2003, 313, 387-400.	2.4	158

#	Article	IF	Citations
91	Structural basis of respiratory syncytial virus neutralization by motavizumab. Nature Structural and Molecular Biology, 2010, 17, 248-250.	8.2	156
92	Associating HIV-1 envelope glycoprotein structures with states on theÂvirus observed by smFRET. Nature, 2019, 568, 415-419.	27.8	156
93	Importance of Neutralizing Monoclonal Antibodies Targeting Multiple Antigenic Sites on the Middle East Respiratory Syndrome Coronavirus Spike Glycoprotein To Avoid Neutralization Escape. Journal of Virology, 2018, 92, .	3.4	155
94	Nanobodies from camelid mice and llamas neutralize SARS-CoV-2 variants. Nature, 2021, 595, 278-282.	27.8	154
95	Real-Time Conformational Dynamics of SARS-CoV-2 Spikes on Virus Particles. Cell Host and Microbe, 2020, 28, 880-891.e8.	11.0	153
96	Mining the antibodyome for HIV-1â€"neutralizing antibodies with next-generation sequencing and phylogenetic pairing of heavy/light chains. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 6470-6475.	7.1	142
97	Vaccine-Elicited Tier 2 HIV-1 Neutralizing Antibodies Bind to Quaternary Epitopes Involving Glycan-Deficient Patches Proximal to the CD4 Binding Site. PLoS Pathogens, 2015, 11, e1004932.	4.7	141
98	Immunoglobulin Gene Insertions and Deletions in the Affinity Maturation of HIV-1 Broadly Reactive Neutralizing Antibodies. Cell Host and Microbe, 2014, 16, 304-313.	11.0	137
99	Rational Design of Vaccines to Elicit Broadly Neutralizing Antibodies to HIV-1. Cold Spring Harbor Perspectives in Medicine, 2011, 1, a007278-a007278.	6.2	135
100	HIV-1 and influenza antibodies: seeing antigens in new ways. Nature Immunology, 2009, 10, 573-578.	14.5	128
101	HIV-1 Env trimer opens through an asymmetric intermediate in which individual protomers adopt distinct conformations. ELife, 2018, 7, .	6.0	127
102	Single-Chain Soluble BG505.SOSIP gp140 Trimers as Structural and Antigenic Mimics of Mature Closed HIV-1 Env. Journal of Virology, 2015, 89, 5318-5329.	3.4	125
103	Structural basis for potent antibody neutralization of SARS-CoV-2 variants including B.1.1.529. Science, 2022, 376, eabn8897.	12.6	119
104	Structure-Based Stabilization of HIV-1 gp120 Enhances Humoral Immune Responses to the Induced Co-Receptor Binding Site. PLoS Pathogens, 2009, 5, e1000445.	4.7	113
105	Crystal Structures of GII.10 and GII.12 Norovirus Protruding Domains in Complex with Histo-Blood Group Antigens Reveal Details for a Potential Site of Vulnerability. Journal of Virology, 2011, 85, 6687-6701.	3.4	113
106	Iterative structure-based improvement of a fusion-glycoprotein vaccine against RSV. Nature Structural and Molecular Biology, 2016, 23, 811-820.	8.2	110
107	Crystal structures of trimeric HIV envelope with entry inhibitors BMS-378806 and BMS-626529. Nature Chemical Biology, 2017, 13, 1115-1122.	8.0	110
108	Glycan Masking Focuses Immune Responses to the HIV-1 CD4-Binding Site and Enhances Elicitation of VRC01-Class Precursor Antibodies. Immunity, 2018, 49, 301-311.e5.	14.3	110

#	Article	IF	Citations
109	PGV04, an HIV-1 gp120 CD4 Binding Site Antibody, Is Broad and Potent in Neutralization but Does Not Induce Conformational Changes Characteristic of CD4. Journal of Virology, 2012, 86, 4394-4403.	3.4	109
110	Scorpion-Toxin Mimics of CD4 in Complex with Human Immunodeficiency Virus gp120. Structure, 2005, 13, 755-768.	3.3	107
111	Probability Analysis of Variational Crystallization and Its Application to gp120, The Exterior Envelope Glycoprotein of Type 1 Human Immunodeficiency Virus (HIV-1). Journal of Biological Chemistry, 1999, 274, 4115-4123.	3.4	106
112	Relationship between Antibody 2F5 Neutralization of HIV-1 and Hydrophobicity of Its Heavy Chain Third Complementarity-Determining Region. Journal of Virology, 2010, 84, 2955-2962.	3.4	106
113	Synthetic glycopeptides reveal the glycan specificity of HIV-neutralizing antibodies. Nature Chemical Biology, 2013, 9, 521-526.	8.0	106
114	Antibody Lineages with Vaccine-Induced Antigen-Binding Hotspots Develop Broad HIV Neutralization. Cell, 2019, 178, 567-584.e19.	28.9	106
115	Structure of a Major Antigenic Site on the Respiratory Syncytial Virus Fusion Glycoprotein in Complex with Neutralizing Antibody 101F. Journal of Virology, 2010, 84, 12236-12244.	3.4	105
116	De novo identification of VRC01 class HIV-1â€“neutralizing antibodies by next-generation sequencing of B-cell transcripts. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E4088-97.	7.1	105
117	Characterization of Human Immunodeficiency Virus Type 1 Monomeric and Trimeric gp120 Glycoproteins Stabilized in the CD4-Bound State: Antigenicity, Biophysics, and Immunogenicity. Journal of Virology, 2007, 81, 5579-5593.	3.4	101
118	Design and Characterization of Epitope-Scaffold Immunogens That Present the Motavizumab Epitope from Respiratory Syncytial Virus. Journal of Molecular Biology, 2011, 409, 853-866.	4.2	100
119	Broadly Neutralizing Human Immunodeficiency Virus Type 1 Antibody Gene Transfer Protects Nonhuman Primates from Mucosal Simian-Human Immunodeficiency Virus Infection. Journal of Virology, 2015, 89, 8334-8345.	3.4	100
120	Modular synthesis of N-glycans and arrays for the hetero-ligand binding analysis of HIV antibodies. Nature Chemistry, 2016, 8, 338-346.	13.6	97
121	Vaccine Induction of Heterologous Tier 2 HIV-1 Neutralizing Antibodies in Animal Models. Cell Reports, 2017, 21, 3681-3690.	6.4	97
122	Quaternary contact in the initial interaction of CD4 with the HIV-1 envelope trimer. Nature Structural and Molecular Biology, 2017, 24, 370-378.	8.2	94
123	A Universal Approach to Optimize the Folding and Stability of Prefusion-Closed HIV-1 Envelope Trimers. Cell Reports, 2018, 23, 584-595.	6.4	93
124	A broadly cross-reactive antibody neutralizes and protects against sarbecovirus challenge in mice. Science Translational Medicine, 2022, 14, eabj7125.	12.4	93
125	Sustained Delivery of a Broadly Neutralizing Antibody in Nonhuman Primates Confers Long-Term Protection against Simian/Human Immunodeficiency Virus Infection. Journal of Virology, 2015, 89, 5895-5903.	3.4	92
126	Completeness of HIV-1 Envelope Glycan Shield at Transmission Determines Neutralization Breadth. Cell Reports, 2018, 25, 893-908.e7.	6.4	91

#	Article	IF	Citations
127	Structure-Based Design, Synthesis, and Characterization of Dual Hotspot Small-Molecule HIV-1 Entry Inhibitors. Journal of Medicinal Chemistry, 2012, 55, 4382-4396.	6.4	90
128	A platform incorporating trimeric antigens into self-assembling nanoparticles reveals SARS-CoV-2-spike nanoparticles to elicit substantially higher neutralizing responses than spike alone. Scientific Reports, 2020, 10, 18149.	3.3	90
129	Structure-Based Design, Synthesis and Validation of CD4-Mimetic Small Molecule Inhibitors of HIV-1 Entry: Conversion of a Viral Entry Agonist to an Antagonist. Accounts of Chemical Research, 2014, 47, 1228-1237.	15.6	88
130	Activation and lysis of human CD4 cells latently infected with HIV-1. Nature Communications, 2015, 6, 8447.	12.8	88
131	The Î²20â€“Î²21 of gp120 is a regulatory switch for HIV-1 Env conformational transitions. Nature Communications, 2017, 8, 1049.	12.8	88
132	Broadly neutralizing antibodies targeting the HIV-1 envelope V2 apex confer protection against a clade C SHIV challenge. Science Translational Medicine, 2017, 9, .	12.4	87
133	Mechanism of Human Immunodeficiency Virus Type 1 Resistance to Monoclonal Antibody b12 That Effectively Targets the Site of CD4 Attachment. Journal of Virology, 2009, 83, 10892-10907.	3.4	86
134	Antibody mechanics on a membrane-bound HIV segment essential for GP41-targeted viral neutralization. Nature Structural and Molecular Biology, 2011, 18, 1235-1243.	8.2	86
135	Antibodies VRC01 and 10E8 Neutralize HIV-1 with High Breadth and Potency Even with Ig-Framework Regions Substantially Reverted to Germline. Journal of Immunology, 2014, 192, 1100-1106.	0.8	86
136	Computational prediction of N-linked glycosylation incorporating structural properties and patterns. Bioinformatics, 2012, 28, 2249-2255.	4.1	85
137	Preferential induction of cross-group influenza A hemagglutinin stemâ€“specific memory B cells after H7N9 immunization in humans. Science Immunology, 2017, 2, .	11.9	84
138	Free Energy Perturbation Calculation of Relative Binding Free Energy between Broadly Neutralizing Antibodies and the gp120 Glycoprotein of HIV-1. Journal of Molecular Biology, 2017, 429, 930-947.	4.2	82
139	Gene-Specific Substitution Profiles Describe the Types and Frequencies of Amino Acid Changes during Antibody Somatic Hypermutation. Frontiers in Immunology, 2017, 8, 537.	4.8	82
140	Structure-Based Design of a Soluble Prefusion-Closed HIV-1 Env Trimer with Reduced CD4 Affinity and Improved Immunogenicity. Journal of Virology, 2017, 91, .	3.4	81
141	Virus-like Particles Identify an HIV V1V2 Apex-Binding Neutralizing Antibody that Lacks a Protruding Loop. Immunity, 2017, 46, 777-791.e10.	14.3	81
142	Mimicry of an HIV broadly neutralizing antibody epitope with a synthetic glycopeptide. Science Translational Medicine, 2017, 9, .	12.4	81
143	Cross-Reactive HIV-1-Neutralizing Human Monoclonal Antibodies Identified from a Patient with 2F5-Like Antibodies. Journal of Virology, 2011, 85, 11401-11408.	3.4	80
144	Longitudinal Analysis Reveals Early Development of Three MPER-Directed Neutralizing Antibody Lineages from an HIV-1-Infected Individual. Immunity, 2019, 50, 677-691.e13.	14.3	77

#	Article	IF	Citations
145	Epitope mapping and characterization of a novel CD4-induced human monoclonal antibody capable of neutralizing primary HIV-1 strains. Virology, 2003, 315, 124-134.	2.4	76
146	A Short Segment of the HIV-1 gp120 V1/V2 Region Is a Major Determinant of Resistance to V1/V2 Neutralizing Antibodies. Journal of Virology, 2012, 86, 8319-8323.	3.4	76
147	Enhancing Protein Crystallization through Precipitant Synergy. Structure, 2003, 11, 1061-1070.	3.3	75
148	Structural Basis for Broad Detection of Genogroup II Noroviruses by a Monoclonal Antibody That Binds to a Site Occluded in the Viral Particle. Journal of Virology, 2012, 86, 3635-3646.	3.4	75
149	Induction of Antibodies in Rhesus Macaques That Recognize a Fusion-Intermediate Conformation of HIV-1 gp41. PLoS ONE, 2011, 6, e27824.	2.5	75
150	Sera Antibody Repertoire Analyses Reveal Mechanisms of Broad and Pandemic Strain Neutralizing Responses after Human Norovirus Vaccination. Immunity, 2019, 50, 1530-1541.e8.	14.3	71
151	Somatic populations of PGT135â€"137 HIV-1-neutralizing antibodies identified by 454 pyrosequencing and bioinformatic. Frontiers in Microbiology, 2012, 3, 315.	3.5	70
152	Structure-based design of a quadrivalent fusion glycoprotein vaccine for human parainfluenza virus types 1â€"4. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12265-12270.	7.1	70
153	Stapled HIV-1 peptides recapitulate antigenic structures and engage broadly neutralizing antibodies. Nature Structural and Molecular Biology, 2014, 21, 1058-1067.	8.2	69
154	Soluble Prefusion Closed DS-SOSIP.664-Env Trimers of Diverse HIV-1 Strains. Cell Reports, 2017, 21, 2992-3002.	6.4	69
155	Structural Survey of Broadly Neutralizing Antibodies Targeting the HIV-1 Env Trimer Delineates Epitope Categories and Characteristics of Recognition. Structure, 2019, 27, 196-206.e6.	3.3	69
156	Soluble Mimetics of Human Immunodeficiency Virus Type 1 Viral Spikes Produced by Replacement of the Native Trimerization Domain with aHeterologous Trimerization Motif: Characterization and Ligand Binding Analysis. Journal of Virology, 2005, 79, 9954-9969.	3.4	67
157	Human Immunodeficiency Virus Type 2 (HIV-2)/HIV-1 Envelope Chimeras Detect High Titers of Broadly Reactive HIV-1 V3-Specific Antibodies in Human Plasma. Journal of Virology, 2009, 83, 1240-1259.	3.4	67
158	Expression-System-Dependent Modulation of HIV-1 Envelope Glycoprotein Antigenicity and Immunogenicity. Journal of Molecular Biology, 2010, 403, 131-147.	4.2	67
159	SONAR: A High-Throughput Pipeline for Inferring Antibody Ontogenies from Longitudinal Sequencing of B Cell Transcripts. Frontiers in Immunology, 2016, 7, 372.	4.8	67
160	cAb-Rep: A Database of Curated Antibody Repertoires for Exploring Antibody Diversity and Predicting Antibody Prevalence. Frontiers in Immunology, 2019, 10, 2365.	4.8	67
161	Safety and pharmacokinetics of broadly neutralising human monoclonal antibody VRC07-523LS in healthy adults: a phase 1 dose-escalation clinical trial. Lancet HIV,the, 2019, 6, e667-e679.	4.7	67
162	How HIV-1 entry mechanism and broadly neutralizing antibodies guide structure-based vaccine design. Current Opinion in HIV and AIDS, 2017, 12, 229-240.	3.8	66

#	Article	IF	Citations
163	A Neutralizing Antibody Recognizing Primarily N-Linked Glycan Targets the Silent Face of the HIV Envelope. Immunity, 2018, 48, 500-513.e6.	14.3	66
164	Two-Component Ferritin Nanoparticles for Multimerization of Diverse Trimeric Antigens. ACS Infectious Diseases, 2018, 4, 788-796.	3.8	65
165	A V3 Loop-Dependent gp120 Element Disrupted by CD4 Binding Stabilizes the Human Immunodeficiency Virus Envelope Glycoprotein Trimer. Journal of Virology, 2010, 84, 3147-3161.	3.4	64
166	Residue-Level Prediction of HIV-1 Antibody Epitopes Based on Neutralization of Diverse Viral Strains. Journal of Virology, 2013, 87, 10047-10058.	3.4	64
167	Optimization of the Solubility of HIV-1-Neutralizing Antibody 10E8 through Somatic Variation and Structure-Based Design. Journal of Virology, 2016, 90, 5899-5914.	3.4	62
168	Inference of the HIV-1 VRC01 Antibody Lineage Unmutated Common Ancestor Reveals Alternative Pathways to Overcome a Key Glycan Barrier. Immunity, 2018, 49, 1162-1174.e8.	14.3	61
169	HIV-1 Envelope and MPER Antibody Structures in Lipid Assemblies. Cell Reports, 2020, 31, 107583.	6.4	60
170	Role of humoral immunity against hepatitis B virus core antigen in the pathogenesis of acute liver failure. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E11369-E11378.	7.1	59
171	Structure-Based Design with Tag-Based Purification and In-Process Biotinylation Enable Streamlined Development of SARS-CoV-2 Spike Molecular Probes. Cell Reports, 2020, 33, 108322.	6.4	59
172	Enhanced Neutralizing Antibody Response Induced by Respiratory Syncytial Virus Prefusion F Protein Expressed by a Vaccine Candidate. Journal of Virology, 2015, 89, 9499-9510.	3.4	58
173	Immunogenicity of a Prefusion HIV-1 Envelope Trimer in Complex with a Quaternary-Structure-Specific Antibody. Journal of Virology, 2016, 90, 2740-2755.	3.4	58
174	Synthesis, Antiviral Potency, in Vitro ADMET, and X-ray Structure of Potent CD4 Mimics as Entry Inhibitors That Target the Phe43 Cavity of HIV-1 gp120. Journal of Medicinal Chemistry, 2017, 60, 3124-3153.	6.4	58
175	Fab-dimerized glycan-reactive antibodies are a structural category of natural antibodies. Cell, 2021, 184, 2955-2972.e25.	28.9	57
176	Analysis of the Interaction of Antibodies with a Conserved, Enzymatically Deglycosylated Core of the HIV Type 1 Envelope Glycoprotein 120. AIDS Research and Human Retroviruses, 1998, 14, 191-198.	1.1	56
177	Neutralization-guided design of HIV-1 envelope trimers with high affinity for the unmutated common ancestor of CH235 lineage CD4bs broadly neutralizing antibodies. PLoS Pathogens, 2019, 15, e1008026.	4.7	56
178	Protective antibodies elicited by SARS-CoV-2 spike protein vaccination are boosted in the lung after challenge in nonhuman primates. Science Translational Medicine, 2021, 13, .	12.4	56
179	Broad and Potent Neutralizing Antibody Responses Elicited in Natural HIV-2 Infection. Journal of Virology, 2012, 86, 947-960.	3.4	55
180	Subnanometer structures of HIV-1 envelope trimers on aldrithiol-2-inactivated virus particles. Nature Structural and Molecular Biology, 2020, 27, 726-734.	8.2	55

#	Article	IF	Citations
181	Modular basis for potent SARS-CoV-2 neutralization by a prevalent VH1-2-derived antibody class. Cell Reports, 2021, 35, 108950.	6.4	54
182	Structure of Super-Potent Antibody CAP256-VRC26.25 in Complex with HIV-1 Envelope Reveals a Combined Mode of Trimer-Apex Recognition. Cell Reports, 2020, 31, 107488.	6.4	53
183	Surface-Matrix Screening Identifies Semi-specific Interactions that Improve Potency of a Near Pan-reactive HIV-1-Neutralizing Antibody. Cell Reports, 2018, 22, 1798-1809.	6.4	52
184	Structural basis for accommodation of emerging B.1.351 and B.1.1.7 variants by two potent SARS-CoV-2 neutralizing antibodies. Structure, 2021, 29, 655-663.e4.	3.3	52
185	Neutralizing antibody 5-7 defines a distinct site of vulnerability in SARS-CoV-2 spike N-terminal domain. Cell Reports, 2021, 37, 109928.	6.4	52
186	Cocrystal Structures of Antibody N60-i3 and Antibody JR4 in Complex with gp120 Define More Cluster A Epitopes Involved in Effective Antibody-Dependent Effector Function against HIV-1. Journal of Virology, 2015, 89, 8840-8854.	3.4	51
187	Targeted Isolation of Antibodies Directed against Major Sites of SIV Env Vulnerability. PLoS Pathogens, 2016, 12, e1005537.	4.7	51
188	Mapping Polyclonal HIV-1 Antibody Responses via Next-Generation Neutralization Fingerprinting. PLoS Pathogens, 2017, 13, e1006148.	4.7	51
189	Transplanting Supersites of HIV-1 Vulnerability. PLoS ONE, 2014, 9, e99881.	2.5	51
190	Progress in the rational design of an AIDS vaccine. Philosophical Transactions of the Royal Society B: Biological Sciences, 2011, 366, 2759-2765.	4.0	50
191	Lattice engineering enables definition of molecular features allowing for potent small-molecule inhibition of HIV-1 entry. Nature Communications, 2019, 10, 47.	12.8	50
192	Crystal Structures of HIV-1 gp120 Envelope Glycoprotein in Complex with NBD Analogues That Target the CD4-Binding Site. PLoS ONE, 2014, 9, e85940.	2.5	49
193	Recapitulation of HIV-1 Env-antibody coevolution in macaques leading to neutralization breadth. Science, 2021, 371, .	12.6	49
194	SARS-CoV-2 Variants Increase Kinetic Stability of Open Spike Conformations as an Evolutionary Strategy. MBio, 2022, 13, e0322721.	4.1	48
195	The changing face of HIV vaccine research. Journal of the International AIDS Society, 2012, 15, 17407.	3.0	47
196	Crystal Structure of Human Antibody 2909 Reveals Conserved Features of Quaternary Structure-Specific Antibodies That Potently Neutralize HIV-1. Journal of Virology, 2011, 85, 2524-2535.	3.4	46
197	Complete functional mapping of infection- and vaccine-elicited antibodies against the fusion peptide of HIV. PLoS Pathogens, 2018, 14, e1007159.	4.7	46
198	Developmental Pathway of the MPER-Directed HIV-1-Neutralizing Antibody 10E8. PLoS ONE, 2016, 11, e0157409.	2.5	44

#	Article	IF	Citations
199	Enhanced Exposure of the CD4-Binding Site to Neutralizing Antibodies by Structural Design of a Membrane-Anchored Human Immunodeficiency Virus Type 1 gp120 Domain. Journal of Virology, 2009, 83, 5077-5086.	3.4	43
200	Immunotypes of a Quaternary Site of HIV-1 Vulnerability and Their Recognition by Antibodies. Journal of Virology, 2011, 85, 4578-4585.	3.4	43
201	Hyperglycosylated Stable Core Immunogens Designed To Present the CD4 Binding Site Are Preferentially Recognized by Broadly Neutralizing Antibodies. Journal of Virology, 2014, 88, 14002-14016.	3.4	43
202	Interdomain Stabilization Impairs CD4 Binding and Improves Immunogenicity of the HIV-1 Envelope Trimer. Cell Host and Microbe, 2018, 23, 832-844.e6.	11.0	43
203	Crystal structure of a fully glycosylated HIV-1 gp120 core reveals a stabilizing role for the glycan at Asn262. Proteins: Structure, Function and Bioinformatics, 2015, 83, 590-596.	2.6	42
204	Microsecond Dynamics and Network Analysis of the HIV-1 SOSIP Env Trimer Reveal Collective Behavior and Conserved Microdomains of the Glycan Shield. Structure, 2017, 25, 1631-1639.e2.	3.3	42
205	Sequence intrinsic somatic mutation mechanisms contribute to affinity maturation of VRC01-class HIV-1 broadly neutralizing antibodies. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 8614-8619.	7.1	42
206	Adjuvants and the vaccine response to the DS-Cav1-stabilized fusion glycoprotein of respiratory syncytial virus. PLoS ONE, 2017, 12, e0186854.	2.5	42
207	Structural Basis for HIV-1 Neutralization by 2F5-Like Antibodies m66 and m66.6. Journal of Virology, 2014, 88, 2426-2441.	3.4	41
208	Consistent elicitation of cross-clade HIV-neutralizing responses achieved in guinea pigs after fusion peptide priming by repetitive envelope trimer boosting. PLoS ONE, 2019, 14, e0215163.	2.5	41
209	Prolonged evolution of the memory B cell response induced by a replicating adenovirus-influenza H5 vaccine. Science Immunology, 2019, 4, .	11.9	40
210	Low-dose in vivo protection and neutralization across SARS-CoV-2 variants by monoclonal antibody combinations. Nature Immunology, 2021, 22, 1503-1514.	14.5	40
211	N332-Directed Broadly Neutralizing Antibodies Use Diverse Modes of HIV-1 Recognition: Inferences from Heavy-Light Chain Complementation of Function. PLoS ONE, 2013, 8, e55701.	2.5	38
212	A Cysteine Zipper Stabilizes a Pre-Fusion F Glycoprotein Vaccine for Respiratory Syncytial Virus. PLoS ONE, 2015, 10, e0128779.	2.5	38
213	Protection of calves by a prefusion-stabilized bovine RSV F vaccine. Npj Vaccines, 2017, 2, 7.	6.0	38
214	Paired heavy- and light-chain signatures contribute to potent SARS-CoV-2 neutralization in public antibody responses. Cell Reports, 2021, 37, 109771.	6.4	38
215	Vaccination with prefusion-stabilized respiratory syncytial virus fusion protein induces genetically and antigenically diverse antibody responses. Immunity, 2021, 54, 769-780.e6.	14.3	37
216	Preclinical Development of a Fusion Peptide Conjugate as an HIV Vaccine Immunogen. Scientific Reports, 2020, 10, 3032.	3.3	36

#	Article	IF	Citations
217	Vaccination induces maturation in a mouse model of diverse unmutated VRC01-class precursors to HIV-neutralizing antibodies with >50% breadth. Immunity, 2021, 54, 324-339.e8.	14.3	36
218	Conformational characterization of aberrant disulfide-linked HIV-1 gp120 dimers secreted from overexpressing cells. Journal of Virological Methods, 2010, 168, 155-161.	2.1	35
219	Effects of Darwinian Selection and Mutability on Rate of Broadly Neutralizing Antibody Evolution during HIV-1 Infection. PLoS Computational Biology, 2016, 12, e1004940.	3.2	35
220	Somatic Hypermutation-Induced Changes in the Structure and Dynamics of HIV-1 Broadly Neutralizing Antibodies. Structure, 2016, 24, 1346-1357.	3.3	35
221	Refolding the envelope. Nature, 2005, 433, 815-816.	27.8	34
222	Outer Domain of HIV-1 gp120: Antigenic Optimization, Structural Malleability, and Crystal Structure with Antibody VRC-PG04. Journal of Virology, 2013, 87, 2294-2306.	3.4	34
223	HIV-1 gp120 as a therapeutic target: navigating a moving labyrinth. Expert Opinion on Therapeutic Targets, 2015, 19, 765-783.	3.4	34
224	High-throughput, single-copy sequencing reveals SARS-CoV-2 spike variants coincident with mounting humoral immunity during acute COVID-19. PLoS Pathogens, 2021, 17, e1009431.	4.7	34
225	Unprecedented Role of Hybrid <i>N-</i>Glycans as Ligands for HIV-1 Broadly Neutralizing Antibodies. Journal of the American Chemical Society, 2018, 140, 5202-5210.	13.7	33
226	Structure and Recognition of a Novel HIV-1 gp120-gp41 Interface Antibody that Caused MPER Exposure through Viral Escape. PLoS Pathogens, 2017, 13, e1006074.	4.7	33
227	Local Conformational Stability of HIV-1 gp120 in Unliganded and CD4-Bound States as Defined by Amide Hydrogen/Deuterium Exchange. Journal of Virology, 2010, 84, 10311-10321.	3.4	32
228	Structure of an N276-Dependent HIV-1 Neutralizing Antibody Targeting a Rare V5 Glycan Hole Adjacent to the CD4 Binding Site. Journal of Virology, 2016, 90, 10220-10235.	3.4	32
229	Antibodyomics: bioinformatics technologies for understanding Bâ€cell immunity to <scp>HIV</scp>â€1. Immunological Reviews, 2017, 275, 108-128.	6.0	32
230	Automated Design by Structure-Based Stabilization and Consensus Repair to Achieve Prefusion-Closed Envelope Trimers in a Wide Variety of HIV Strains. Cell Reports, 2020, 33, 108432.	6.4	32
231	Germline VRC01 antibody recognition of a modified clade C HIV-1 envelope trimer and a glycosylated HIV-1 gp120 core. ELife, 2018, 7, .	6.0	32
232	Structure-Based Identification and Neutralization Mechanism of Tyrosine Sulfate Mimetics That Inhibit HIV-1 Entry. ACS Chemical Biology, 2011, 6, 1069-1077.	3.4	31
233	Blocking Î± ₄ Î² ₇ integrin binding to SIV does not improve virologic control. Science, 2019, 365, 1033-1036.	12.6	31
234	An antibody class with a common CDRH3 motif broadly neutralizes sarbecoviruses. Science Translational Medicine, 2022, 14, eabn6859.	12.4	31

#	Article	IF	Citations
235	Improved Prefusion Stability, Optimized Codon Usage, and Augmented Virion Packaging Enhance the Immunogenicity of Respiratory Syncytial Virus Fusion Protein in a Vectored-Vaccine Candidate. Journal of Virology, 2017, 91, .	3.4	30
236	Accurate Prediction for Antibody Resistance of Clinical HIV-1 Isolates. Scientific Reports, 2019, 9, 14696.	3.3	30
237	Interfacial metal and antibody recognition. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 14575-14580.	7.1	29
238	Structural Basis for Highly Effective HIV-1 Neutralization by CD4-Mimetic Miniproteins Revealed by 1.5ÂÃ… Cocrystal Structure of gp120 and M48U1. Structure, 2013, 21, 1018-1029.	3.3	29
239	Antibody-guided structure-based vaccines. Seminars in Immunology, 2020, 50, 101428.	5.6	29
240	Epitope Mapping of Broadly Neutralizing HIV-2 Human Monoclonal Antibodies. Journal of Virology, 2012, 86, 12115-12128.	3.4	27
241	Elicitation of HIV-1-neutralizing antibodies against the CD4-binding site. Current Opinion in HIV and AIDS, 2013, 8, 382-392.	3.8	27
242	Improvement of antibody functionality by structure-guided paratope engraftment. Nature Communications, 2019, 10, 721.	12.8	27
243	Structure-Based Design of Head-Only Fusion Glycoprotein Immunogens for Respiratory Syncytial Virus. PLoS ONE, 2016, 11, e0159709.	2.5	27
244	CD4 Binding Site Antibodies Inhibit Human Immunodeficiency Virus gp120 Envelope Glycoprotein Interaction with CCR5. Journal of Virology, 2003, 77, 713-718.	3.4	26
245	Crystal Structure and Immunogenicity of the DS-Cav1-Stabilized Fusion Glycoprotein From Respiratory Syncytial Virus Subtype B. Pathogens and Immunity, 2019, 4, 294.	3.1	26
246	Neutralization Properties of Simian Immunodeficiency Viruses Infecting Chimpanzees and Gorillas. MBio, 2015, 6, .	4.1	25
247	What Are the Most Powerful Immunogen Design Vaccine Strategies?. Cold Spring Harbor Perspectives in Biology, 2017, 9, a029470.	5.5	25
248	A monoclonal antibody that neutralizes SARS-CoV-2 variants, SARS-CoV, and other sarbecoviruses. Emerging Microbes and Infections, 2022, 11, 147-157.	6.5	25
249	Peptides from Second Extracellular Loop of C-C Chemokine Receptor Type 5 (CCR5) Inhibit Diverse Strains of HIV-1. Journal of Biological Chemistry, 2012, 287, 15076-15086.	3.4	24
250	Newcastle Disease Virus-Like Particles Displaying Prefusion-Stabilized SARS-CoV-2 Spikes Elicit Potent Neutralizing Responses. Vaccines, 2021, 9, 73.	4.4	24
251	Characterization of broadly neutralizing antibody responses to HIV-1 in a cohort of long term non-progressors. PLoS ONE, 2018, 13, e0193773.	2.5	24
252	VRC34-Antibody Lineage Development Reveals How a Required Rare Mutation Shapes the Maturation of a Broad HIV-Neutralizing Lineage. Cell Host and Microbe, 2020, 27, 531-543.e6.	11.0	23

#	Article	IF	Citations
253	Heavy Chain-Only IgG2b Llama Antibody Effects Near-Pan HIV-1 Neutralization by Recognizing a CD4-Induced Epitope That Includes Elements of Coreceptor- and CD4-Binding Sites. Journal of Virology, 2013, 87, 10173-10181.	3.4	22
254	CD4 receptor diversity in chimpanzees protects against SIV infection. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3229-3238.	7.1	21
255	Development of a 3Mut-Apex-Stabilized Envelope Trimer That Expands HIV-1 Neutralization Breadth When Used To Boost Fusion Peptide-Directed Vaccine-Elicited Responses. Journal of Virology, 2020, 94, .	3.4	21
256	Mutational fitness landscapes reveal genetic and structural improvement pathways for a vaccine-elicited HIV-1 broadly neutralizing antibody. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	21
257	Rational design and in vivo selection of SHIVs encoding transmitted/founder subtype C HIV-1 envelopes. PLoS Pathogens, 2019, 15, e1007632.	4.7	20
258	Interprotomer disulfide-stabilized variants of the human metapneumovirus fusion glycoprotein induce high titer-neutralizing responses. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	20
259	Vaccination in a humanized mouse model elicits highly protective PfCSP-targeting anti-malarial antibodies. Immunity, 2021, 54, 2859-2876.e7.	14.3	19
260	Mammalian production of an isotopically enriched outer domain of the HIV-1 gp120 glycoprotein for NMR spectroscopy. Journal of Biomolecular NMR, 2011, 50, 197-207.	2.8	18
261	Insights from NMR Spectroscopy into the Conformational Properties of Manâ€9 and Its Recognition by Two HIV Binding Proteins. ChemBioChem, 2017, 18, 764-771.	2.6	18
262	Molecular probes of spike ectodomain and its subdomains for SARS-CoV-2 variants, Alpha through Omicron. PLoS ONE, 2022, 17, e0268767.	2.5	18
263	NEP: web server for epitope prediction based on antibody neutralization of viral strains with diverse sequences. Nucleic Acids Research, 2014, 42, W64-W71.	14.5	16
264	Anti-V2 antibodies virus vulnerability revealed by envelope V1 deletion in HIV vaccine candidates. IScience, 2021, 24, 102047.	4.1	16
265	Design of Alphavirus Virus-Like Particles Presenting Circumsporozoite Junctional Epitopes That Elicit Protection against Malaria. Vaccines, 2021, 9, 272.	4.4	16
266	A single residue in influenza virus H2 hemagglutinin enhances the breadth of the B cell response elicited by H2 vaccination. Nature Medicine, 2022, 28, 373-382.	30.7	16
267	Attenuated Human Parainfluenza Virus Type 1 Expressing the Respiratory Syncytial Virus (RSV) Fusion (F) Glycoprotein from an Added Gene: Effects of Prefusion Stabilization and Packaging of RSV F. Journal of Virology, 2017, 91, .	3.4	15
268	Immune Monitoring Reveals Fusion Peptide Priming to Imprint Cross-Clade HIV-Neutralizing Responses with a Characteristic Early B Cell Signature. Cell Reports, 2020, 32, 107981.	6.4	15
269	A Single Shot Pre-fusion-Stabilized Bovine RSV F Vaccine is Safe and Effective in Newborn Calves with Maternally Derived Antibodies. Vaccines, 2020, 8, 231.	4.4	14
270	Isolation and Structure of an Antibody that Fully Neutralizes Isolate SIVmac239 Reveals Functional Similarity of SIV and HIV Glycan Shields. Immunity, 2019, 51, 724-734.e4.	14.3	13

#	Article	IF	Citations
271	Identification and Structure of a Multidonor Class of Head-Directed Influenza-Neutralizing Antibodies Reveal the Mechanism for Its Recurrent Elicitation. Cell Reports, 2020, 32, 108088.	6.4	13
272	Protective antibodies against human parainfluenza virus type 3 infection. MAbs, 2021, 13, 1912884.	5.2	13
273	A non-affinity purification process for GMP production of prefusion-closed HIV-1 envelope trimers from clades A and C for clinical evaluation. Vaccine, 2021, 39, 3379-3387.	3.8	13
274	N-terminal Transmembrane-Helix Epitope Tag for X-ray Crystallography and Electron Microscopy of Small Membrane Proteins. Journal of Molecular Biology, 2021, 433, 166909.	4.2	13
275	Safety and immunogenicity of an HIV-1 prefusion-stabilized envelope trimer (Trimer 4571) vaccine in healthy adults: A first-in-human open-label, randomized, dose-escalation, phase 1 clinical trial. EClinicalMedicine, 2022, 48, 101477.	7.1	13
276	Vaccine-elicited murine antibody WS6 neutralizes diverse beta-coronaviruses by recognizing a helical stem supersite of vulnerability. Structure, 2022, 30, 1233-1244.e7.	3.3	13
277	Virus-Like Particle Based Vaccines Elicit Neutralizing Antibodies against the HIV-1 Fusion Peptide. Vaccines, 2020, 8, 765.	4.4	12
278	Fusion peptide priming reduces immune responses to HIV-1 envelope trimer base. Cell Reports, 2021, 35, 108937.	6.4	12
279	Eliminating antibody polyreactivity through addition of <i>N</i>â€linked glycosylation. Protein Science, 2015, 24, 1019-1030.	7.6	11
280	Sequencing HIV-neutralizing antibody exons and introns reveals detailed aspects of lineage maturation. Nature Communications, 2018, 9, 4136.	12.8	11
281	A matrix of structure-based designs yields improved VRC01-class antibodies for HIV-1 therapy and prevention. MAbs, 2021, 13, 1946918.	5.2	11
282	Blocking Î± ₄ Î² ₇ integrin delays viral rebound in SHIV _{SF162P3} -infected macaques treated with anti-HIV broadly neutralizing antibodies. Science Translational Medicine, 2021, 13, .	12.4	11
283	Mammalian Expression of Isotopically Labeled Proteins for NMR Spectroscopy. Advances in Experimental Medicine and Biology, 2012, 992, 197-211.	1.6	10
284	Effective Isotope Labeling of Proteins in a Mammalian Expression System. Methods in Enzymology, 2015, 565, 289-307.	1.0	9
285	SARS-CoV-2 S2P spike ages through distinct states with altered immunogenicity. Journal of Biological Chemistry, 2021, 297, 101127.	3.4	9
286	Antigenic analysis of the HIV-1 envelope trimer implies small differences between structural states 1 and 2. Journal of Biological Chemistry, 2022, 298, 101819.	3.4	9
287	Highly protective antimalarial antibodies via precision library generation and yeast display screening. Journal of Experimental Medicine, 2022, 219, .	8.5	9
288	Single-Shot Vaccines against Bovine Respiratory Syncytial Virus (BRSV): Comparative Evaluation of Long-Term Protection after Immunization in the Presence of BRSV-Specific Maternal Antibodies. Vaccines, 2021, 9, 236.	4.4	8

#	Article	IF	Citations
289	Structural basis of malaria RIFIN binding by LILRB1-containing antibodies. Nature, 2021, 592, 639-643.	27.8	8
290	Tyrosine O-sulfation proteoforms affect HIV-1 monoclonal antibody potency. Scientific Reports, 2022, 12, 8433.	3.3	8
291	Somatic hypermutation to counter a globally rare viral immunotype drove off-track antibodies in the CAP256-VRC26 HIV-1 V2-directed bNAb lineage. PLoS Pathogens, 2019, 15, e1008005.	4.7	6
292	Disulfide stabilization of human norovirus GI.1 virus-like particles focuses immune response toward blockade epitopes. Npj Vaccines, 2020, 5, 110.	6.0	6
293	Broad coverage of neutralization-resistant SIV strains by second-generation SIV-specific antibodies targeting the region involved in binding CD4. PLoS Pathogens, 2022, 18, e1010574.	4.7	6
294	Nextâ€generation sequencing of the intrahepatic antibody repertoire delineates a unique Bâ€cell response in HBVâ€associated acute liver failure. Journal of Viral Hepatitis, 2020, 27, 847-851.	2.0	5
295	Structural basis of glycan276-dependent recognition by HIV-1 broadly neutralizing antibodies. Cell Reports, 2021, 37, 109922.	6.4	5
296	Vaccine Design Reaches the Atomic Level. Science Translational Medicine, 2011, 3, 91ps29.	12.4	4
297	Glycan Positioning Impacts HIV-1 Env Glycan-Shield Density, Function, and Recognition by Antibodies. IScience, 2020, 23, 101711.	4.1	4
298	Removal of variable domain <i>N</i>-linked glycosylation as a means to improve the homogeneity of HIV-1 broadly neutralizing antibodies. MAbs, 2020, 12, 1836719.	5.2	4
299	Distinct disease features in chimpanzees infected with a precore HBV mutant associated with acute liver failure in humans. PLoS Pathogens, 2020, 16, e1008793.	4.7	4
300	The covalent SNAP tag for protein display quantification and low-pH protein engineering. Journal of Biotechnology, 2020, 320, 50-56.	3.8	4
301	Antibody screening at reduced <scp>pH</scp> enables preferential selection of potently neutralizing antibodies targeting <scp>SARSâ€CoV</scp>â€2. AIChE Journal, 2021, 67, e17440.	3.6	4
302	Structural Biology and the Design of Effective Vaccines for HIV-1 and Other Viruses. , 2010, , 387-402.		4
303	Structural basis for llama nanobody recognition and neutralization of HIV-1 at the CD4-binding site. Structure, 2022, 30, 862-875.e4.	3.3	4
304	The 447-52D Antibody: Hitting HIV-1 Where Its Armor Is Thickest. Structure, 2004, 12, 173-174.	3.3	3
305	Rational Engraftment of Quaternary-Interactive Acidic Loops for Anti-HIV-1 Antibody Improvement. Journal of Virology, 2021, 95, .	3.4	3
306	Structure-Based Design with Tag-Based Purification and In-Process Biotinylation Enable Streamlined Development of SARS-CoV-2 Spike Molecular Probes. SSRN Electronic Journal, 2020, , 3639618.	0.4	3

#	Article	IF	Citations
307	Extended antibody-framework-to-antigen distance observed exclusively with broad HIV-1-neutralizing antibodies recognizing glycan-dense surfaces. Nature Communications, 2021, 12, 6470.	12.8	3
308	Structural Basis of Antibody Conformation and Stability Modulation by Framework Somatic Hypermutation. Frontiers in Immunology, 2021, 12, 811632.	4.8	3
309	Development of Neutralization Breadth against Diverse HIVâ€1 by Increasing Abâ€"Ag Interface on V2. Advanced Science, 2022, , 2200063.	11.2	3
310	Structures of HIV-1 Neutralizing Antibody 10E8 Delineate the Mechanistic Basis of Its Multi-Peak Behavior on Size-Exclusion Chromatography. Antibodies, 2021, 10, 23.	2.5	2
311	GLYCO: a tool to quantify glycan shielding of glycosylated proteins. Bioinformatics, 2022, 38, 1152-1154.	4.1	2
312	Structural basis of LAIR1 targeting by polymorphic Plasmodium RIFINs. Nature Communications, 2021, 12, 4226.	12.8	1
313	Structure of an influenza group 2-neutralizing antibody targeting the hemagglutinin stem supersite. Structure, 2022, , .	3.3	1
314	<i>C</i>₃-Symmetric Aromatic Core of Griffithsin Is Essential for Potent Anti-HIV Activity. ACS Chemical Biology, 2022, 17, 1450-1459.	3.4	1
315	Sequence-Signature Optimization Enables Improved Identification of Human HV6-1-Derived Class Antibodies That Neutralize Diverse Influenza A Viruses. Frontiers in Immunology, 2021, 12, 662909.	4.8	0
316	HIV-1 Receptor Interactions. , 2003, , 99-104.		0
317	HIV-1â€"Receptor Interactions. , 2010, , 97-101.		0
318	Penetrating the Glycan Shield on HIVâ€1. FASEB Journal, 2015, 29, 106.3.	0.5	0