Peter D Kwong

List of Publications by Year
in descending order

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318 papers	54,958 citations	1792 103 h-index	1527 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.	13.7	2,788
2	Antibody neutralization and escape by HIV-1. Nature, 2003, 422, 307-312.	13.7	2,233
3	Antibody resistance of SARS-CoV-2 variants B.1.351 and B.1.1.7. Nature, 2021, 593, 130-135.	13.7	1,904
4	Rational Design of Envelope Identifies Broadly Neutralizing Human Monoclonal Antibodies to HIV-1. Science, 2010, 329, 856-861.	6.0	1,600
5	Potent neutralizing antibodies against multiple epitopes on SARS-CoV-2 spike. Nature, 2020, 584, 450-456.	13.7	1,337
6	The antigenic structure of the HIV gp120 envelope glycoprotein. Nature, 1998, 393, 705-711.	13.7	1,152
7	Structural Basis for Broad and Potent Neutralization of HIV-1 by Antibody VRC01. Science, 2010, 329, 811-817.	6.0	1,050
8	Co-evolution of a broadly neutralizing HIV-1 antibody and founder virus. Nature, 2013, 496, 469-476.	13.7	961
9	Evaluation of the mRNA-1273 Vaccine against SARS-CoV-2 in Nonhuman Primates. New England Journal of Medicine, 2020, 383, 1544-1555.	13.9	936
10	HIV-1 evades antibody-mediated neutralization through conformational masking of receptor-binding sites. Nature, 2002, 420, 678-682.	13.7	832
11	A Conserved HIV gp120 Glycoprotein Structure Involved in Chemokine Receptor Binding. Science, 1998, 280, 1949-1953.	6.0	819
12	Structure-Based Design of a Fusion Glycoprotein Vaccine for Respiratory Syncytial Virus. Science, 2013, 342, 592-598.	6.0	797
13	Structure of HIV-1 gp120 V1/V2 domain with broadly neutralizing antibody PG9. Nature, 2011, 480, 336-343.	13.7	794
14	Focused Evolution of HIV-1 Neutralizing Antibodies Revealed by Structures and Deep Sequencing. Science, 2011, 333, 1593-1602.	6.0	788
15	Broad and potent neutralization of HIV-1 by a gp41-specific human antibody. Nature, 2012, 491, 406-412.	13.7	753
16	HIV vaccine design and the neutralizing antibody problem. Nature Immunology, 2004, 5, 233-236.	7.0	721
17	Structural definition of a conserved neutralization epitope on HIV-1 gp120. Nature, 2007, 445, 732-737.	13.7	715
18	Structure and immune recognition of trimeric pre-fusion HIV-1 Env. Nature, 2014, 514, 455-461.	13.7	702

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19	Structure of a V3-Containing HIV-1 gp120 Core. Science, 2005, 310, 1025-1028.	6.0	696
20	Developmental pathway for potent V1V2-directed HIV-neutralizing antibodies. Nature, 2014, 509, 55-62.	13.7	681
21	Structure of RSV Fusion Glycoprotein Trimer Bound to a Prefusion-Specific Neutralizing Antibody. Science, 2013, 340, 1113-1117.	6.0	656
22	Crystal structure of an HIV-binding recombinant fragment of human CD4. Nature, 1990, 348, 419-426.	13.7	599
23	Hemagglutinin-stem nanoparticles generate heterosubtypic influenza protection. Nature Medicine, 2015, 21, 1065-1070.	15.2	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.	1.5	528
25	Increased resistance of SARS-CoV-2 variant P.1 to antibody neutralization. Cell Host and Microbe, 2021, 29, 747-751.e4.	5.1	504
26	Somatic Mutations of the Immunoglobulin Framework Are Generally Required for Broad and Potent HIV-1 Neutralization. Cell, 2013, 153, 126-138.	13.5	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.	1.5	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.	5.1	444
29	Conformational dynamics of single HIV-1 envelope trimers on the surface of native virions. Science, 2014, 346, 759-763.	6.0	439
30	Human Antibodies that Neutralize HIV-1: Identification, Structures, and B Cell Ontogenies. Immunity, 2012, 37, 412-425.	6.6	417
31	Broad and potent HIV-1 neutralization by a human antibody that binds the gp41â€“gp120 interface. Nature, 2014, 515, 138-142.	13.7	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.	1.5	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.	6.0	379
34	Trimeric HIV-1-Env Structures Define Glycan Shields from Clades A, B, and G. Cell, 2016, 165, 813-826.	13.5	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.	6.6	374
36	Structures of HIV-1 gp120 Envelope Glycoproteins from Laboratory-Adapted and Primary Isolates. Structure, 2000, 8, 1329-1339.	1.6	358

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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.	1.5	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.	3.6	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.	6.6	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.	1.5	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.	5.1	316
42	Prefusion Fâ€“specific antibodies determine the magnitude of RSV neutralizing activity in human sera. Science Translational Medicine, 2015, 7, 309ra162.	5.8	312
43	Fusion peptide of HIV-1 as a site of vulnerability to neutralizing antibody. Science, 2016, 352, 828-833.	6.0	310
44	Structural Repertoire of HIV-1-Neutralizing Antibodies Targeting the CD4 Supersite in 14 Donors. Cell, 2015, 161, 1280-1292.	13.5	305
45	Maturation Pathway from Germline to Broad HIV-1 Neutralizer of a CD4-Mimic Antibody. Cell, 2016, 165, 449-463.	13.5	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.	3.3	304
47	Identification of a CD4-Binding-Site Antibody to HIV that Evolved Near-Pan Neutralization Breadth. Immunity, 2016, 45, 1108-1121.	6.6	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.	10.6	302
49	Antigenic conservation and immunogenicity of the HIV coreceptor binding site. Journal of Experimental Medicine, 2005, 201, 1407-1419.	4.2	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.	3.3	278
51	HIV-1 Vaccines Based on Antibody Identification, B Cell Ontogeny, and Epitope Structure. Immunity, 2018, 48, 855-871.	6.6	277
52	Structural Basis of Immune Evasion at the Site of CD4 Attachment on HIV-1 gp120. Science, 2009, 326, 1123-1127.	6.0	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.	15.2	271
54	Vaccine-Induced Antibodies that Neutralize Group 1 and Group 2 Influenza A Viruses. Cell, 2016, 166, 609-623.	13.5	270

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55	Cooperation of B Cell Lineages in Induction of HIV-1-Broadly Neutralizing Antibodies. Cell, 2014, 158, 481-491.	13.5	266
56	AAV-expressed eCD4-Ig provides durable protection from multiple SHIV challenges. Nature, 2015, 519, 87-91.	13.7	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.	1.5	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.	3.3	261
59	Dimeric association and segmental variability in the structure of human CD4. Nature, 1997, 387, 527-530.	13.7	259
60	Evaluation of candidate vaccine approaches for MERS-CoV. Nature Communications, 2015, 6, 7712.	5.8	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.	3.6	257
62	Epitope-based vaccine design yields fusion peptide-directed antibodies that neutralize diverse strains of HIV-1. Nature Medicine, 2018, 24, 857-867.	15.2	256
63	Oligomeric Modeling and Electrostatic Analysis of the gp120 Envelope Glycoprotein of Human Immunodeficiency Virus. Journal of Virology, 2000, 74, 1961-1972.	1.5	248
64	Enhanced Potency of a Broadly Neutralizing HIV-1 Antibody In Vitro Improves Protection against Lentiviral Infection In Vivo. Journal of Virology, 2014, 88, 12669-12682.	1.5	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.	15.2	235
66	InÂvitro and inÂvivo functions of SARS-CoV-2 infection-enhancing and neutralizing antibodies. Cell, 2021, 184, 4203-4219.e32.	13.5	228
67	Maturation and Diversity of the VRC01-Antibody Lineage over 15 Years of Chronic HIV-1 Infection. Cell, 2015, 161, 470-485.	13.5	226
68	Trispecific broadly neutralizing HIV antibodies mediate potent SHIV protection in macaques. Science, 2017, 358, 85-90.	6.0	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.	3.3	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.	5.8	222
71	Viral variants that initiate and drive maturation of V1V2-directed HIV-1 broadly neutralizing antibodies. Nature Medicine, 2015, 21, 1332-1336.	15.2	215
72	Delineating Antibody Recognition in Polyclonal Sera from Patterns of HIV-1 Isolate Neutralization. Science, 2013, 340, 751-756.	6.0	213

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73	Computation-Guided Backbone Grafting of a Discontinuous Motif onto a Protein Scaffold. Science, 2011, 334, 373-376.	6.0	212
74	Mosaic nanoparticle display of diverse influenza virus hemagglutinins elicits broad B cell responses. Nature Immunology, 2019, 20, 362-372.	7.0	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.	1.5	209
76	A proof of concept for structure-based vaccine design targeting RSV in humans. Science, 2019, 365, 505-509.	6.0	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.	1.5	205
78	Induction of HIV Neutralizing Antibody Lineages in Mice with Diverse Precursor Repertoires. Cell, 2016, 166, 1471-1484.e18.	13.5	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.	4.5	194
80	Tyrosine Sulfation of Human Antibodies Contributes to Recognition of the CCR5 Binding Region of HIV-1 gp120. Cell, 2003, 114, 161-170.	13.5	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.	13.5	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.	1.5	177
83	Ultrapotent antibodies against diverse and highly transmissible SARS-CoV-2 variants. Science, 2021, 373, .	6.0	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.	3.3	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.	3.6	162
86	Small-Molecule CD4 Mimics Interact with a Highly Conserved Pocket on HIV-1 gp120. Structure, 2008, 16, 1689-1701.	1.6	160
87	Quantification of the Impact of the HIV-1-Glycan Shield on Antibody Elicitation. Cell Reports, 2017, 19, 719-732.	2.9	160
88	Early Low-Titer Neutralizing Antibodies Impede HIV-1 Replication and Select for Virus Escape. PLoS Pathogens, 2012, 8, e1002721.	2.1	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.	1.5	159
90	Structure-based, targeted deglycosylation of HIV-1 gp120 and effects on neutralization sensitivity and antibody recognition. Virology, 2003, 313, 387-400.	1.1	158

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91	Structural basis of respiratory syncytial virus neutralization by motavizumab. Nature Structural and Molecular Biology, 2010, 17, 248-250.	3.6	156
92	Associating HIV-1 envelope glycoprotein structures with states on theÂvirus observed by smFRET. Nature, 2019, 568, 415-419.	13.7	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, .	1.5	155
94	Nanobodies from camelid mice and llamas neutralize SARS-CoV-2 variants. Nature, 2021, 595, 278-282.	13.7	154
95	Real-Time Conformational Dynamics of SARS-CoV-2 Spikes on Virus Particles. Cell Host and Microbe, 2020, 28, 880-891.e8.	5.1	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.	3.3	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.	2.1	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.	5.1	137
99	Rational Design of Vaccines to Elicit Broadly Neutralizing Antibodies to HIV-1. Cold Spring Harbor Perspectives in Medicine, 2011, 1, a007278-a007278.	2.9	135
100	HIV-1 and influenza antibodies: seeing antigens in new ways. Nature Immunology, 2009, 10, 573-578.	7.0	128
101	HIV-1 Env trimer opens through an asymmetric intermediate in which individual protomers adopt distinct conformations. ELife, 2018, 7, .	2.8	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.	1.5	125
103	Structural basis for potent antibody neutralization of SARS-CoV-2 variants including B.1.1.529. Science, 2022, 376, eabn8897.	6.0	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.	2.1	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.	1.5	113
106	Iterative structure-based improvement of a fusion-glycoprotein vaccine against RSV. Nature Structural and Molecular Biology, 2016, 23, 811-820.	3.6	110
107	Crystal structures of trimeric HIV envelope with entry inhibitors BMS-378806 and BMS-626529. Nature Chemical Biology, 2017, 13, 1115-1122.	3.9	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.	6.6	110

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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.	1.5	109
110	Scorpion-Toxin Mimics of CD4 in Complex with Human Immunodeficiency Virus gp120. Structure, 2005, 13, 755-768.	1.6	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.	1.6	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.	1.5	106
113	Synthetic glycopeptides reveal the glycan specificity of HIV-neutralizing antibodies. Nature Chemical Biology, 2013, 9, 521-526.	3.9	106
114	Antibody Lineages with Vaccine-Induced Antigen-Binding Hotspots Develop Broad HIV Neutralization. Cell, 2019, 178, 567-584.e19.	13.5	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.	1.5	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.	3.3	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.	1.5	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.	2.0	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.	1.5	100
120	Modular synthesis of N-glycans and arrays for the hetero-ligand binding analysis of HIV antibodies. Nature Chemistry, 2016, 8, 338-346.	6.6	97
121	Vaccine Induction of Heterologous Tier 2 HIV-1 Neutralizing Antibodies in Animal Models. Cell Reports, 2017, 21, 3681-3690.	2.9	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.	3.6	94
123	A Universal Approach to Optimize the Folding and Stability of Prefusion-Closed HIV-1 Envelope Trimers. Cell Reports, 2018, 23, 584-595.	2.9	93
124	A broadly cross-reactive antibody neutralizes and protects against sarbecovirus challenge in mice. Science Translational Medicine, 2022, 14, eabj7125.	5.8	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.	1.5	92
126	Completeness of HIV-1 Envelope Glycan Shield at Transmission Determines Neutralization Breadth. Cell Reports, 2018, 25, 893-908.e7.	2.9	91

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127	Structure-Based Design, Synthesis, and Characterization of Dual Hotspot Small-Molecule HIV-1 Entry Inhibitors. Journal of Medicinal Chemistry, 2012, 55, 4382-4396.	2.9	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.	1.6	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.	7.6	88
130	Activation and lysis of human CD4 cells latently infected with HIV-1. Nature Communications, 2015, 6, 8447.	5.8	88
131	The Î²20â€“Î²21 of gp120 is a regulatory switch for HIV-1 Env conformational transitions. Nature Communications, 2017, 8, 1049.	5.8	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, .	5.8	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.	1.5	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.	3.6	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.	0.4	86
136	Computational prediction of N-linked glycosylation incorporating structural properties and patterns. Bioinformatics, 2012, 28, 2249-2255.	1.8	85
137	Preferential induction of cross-group influenza A hemagglutinin stemâ€“specific memory B cells after H7N9 immunization in humans. Science Immunology, 2017, 2, .	5.6	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.	2.0	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.	2.2	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, .	1.5	81
141	Virus-like Particles Identify an HIV V1V2 Apex-Binding Neutralizing Antibody that Lacks a Protruding Loop. Immunity, 2017, 46, 777-791.e10.	6.6	81
142	Mimicry of an HIV broadly neutralizing antibody epitope with a synthetic glycopeptide. Science Translational Medicine, 2017, 9, .	5.8	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.	1.5	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.	6.6	77

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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.	1.1	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.	1.5	76
147	Enhancing Protein Crystallization through Precipitant Synergy. Structure, 2003, 11, 1061-1070.	1.6	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.	1.5	75
149	Induction of Antibodies in Rhesus Macaques That Recognize a Fusion-Intermediate Conformation of HIV-1 gp41. PLoS ONE, 2011, 6, e27824.	1.1	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.	6.6	71
151	Somatic populations of PGT135â€“137 HIV-1-neutralizing antibodies identified by 454 pyrosequencing and bioinformatic. Frontiers in Microbiology, 2012, 3, 315.	1.5	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.	3.3	70
153	Stapled HIV-1 peptides recapitulate antigenic structures and engage broadly neutralizing antibodies. Nature Structural and Molecular Biology, 2014, 21, 1058-1067.	3.6	69
154	Soluble Prefusion Closed DS-SOSIP.664-Env Trimers of Diverse HIV-1 Strains. Cell Reports, 2017, 21, 2992-3002.	2.9	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.	1.6	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.	1.5	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.	1.5	67
158	Expression-System-Dependent Modulation of HIV-1 Envelope Glycoprotein Antigenicity and Immunogenicity. Journal of Molecular Biology, 2010, 403, 131-147.	2.0	67
159	SONAR: A High-Throughput Pipeline for Inferring Antibody Ontogenies from Longitudinal Sequencing of B Cell Transcripts. Frontiers in Immunology, 2016, 7, 372.	2.2	67
160	cAb-Rep: A Database of Curated Antibody Repertoires for Exploring Antibody Diversity and Predicting Antibody Prevalence. Frontiers in Immunology, 2019, 10, 2365.	2.2	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.	2.1	67
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