Richard T Wyatt

List of Publications by Year
in descending order

57 papers	11,481 citations	34 h-index (117625)	56 g-index (149698)
60 all docs	60 docs citations	60 times ranked	7832 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	Rational Design of Envelope Identifies Broadly Neutralizing Human Monoclonal Antibodies to HIV-1. Science, 2010, 329, 856-861.	12.6	1,600
3	CD4-induced interaction of primary HIV-1 gp120 glycoproteins with the chemokine receptor CCR-5. Nature, 1996, 384, 179-183.	27.8	1,224
4	The antigenic structure of the HIV gp120 envelope glycoprotein. Nature, 1998, 393, 705-711.	27.8	1,152
5	Structural definition of a conserved neutralization epitope on HIV-1 gp120. Nature, 2007, 445, 732-737.	27.8	715
6	Proof of principle for epitope-focused vaccine design. Nature, 2014, 507, 201-206.	27.8	451
7	Broad and potent HIV-1 neutralization by a human antibody that binds the gp41â€“gp120 interface. Nature, 2014, 515, 138-142.	27.8	400
8	Elicitation of Robust Tier 2 Neutralizing Antibody Responses in Nonhuman Primates by HIV Envelope Trimer Immunization Using Optimized Approaches. Immunity, 2017, 46, 1073-1088.e6.	14.3	286
9	Cleavage-Independent HIV-1 Env Trimers Engineered as Soluble Native Spike Mimetics for Vaccine Design. Cell Reports, 2015, 11, 539-550.	6.4	211
10	Structure-based, targeted deglycosylation of HIV-1 gp120 and effects on neutralization sensitivity and antibody recognition. Virology, 2003, 313, 387-400.	2.4	158
11	Vaccine-Induced Protection from Homologous Tier 2 SHIV Challenge in Nonhuman Primates Depends on Serum-Neutralizing Antibody Titers. Immunity, 2019, 50, 241-252.e6.	14.3	153
12	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
13	High-Density Array of Well-Ordered HIV-1 Spikes on Synthetic Liposomal Nanoparticles Efficiently Activate B Cells. Cell Reports, 2016, 15, 1986-1999.	6.4	127
14	Structure-Guided Redesign Increases the Propensity of HIV Env To Generate Highly Stable Soluble Trimers. Journal of Virology, 2016, 90, 2806-2817.	3.4	126
15	Differential processing of HIV envelope glycans on the virus and soluble recombinant trimer. Nature Communications, 2018, 9, 3693.	12.8	124
16	Vaccination with Glycan-Modified HIV NFL Envelope Trimer-Liposomes Elicits Broadly Neutralizing Antibodies to Multiple Sites of Vulnerability. Immunity, 2019, 51, 915-929.e7.	14.3	111
17	Particulate Array of Well-Ordered HIV Clade C Env Trimers Elicits Neutralizing Antibodies that Display a Unique V2 Cap Approach. Immunity, 2017, 46, 804-817.e7.	14.3	107
18	Well-Ordered Trimeric HIV-1 Subtype B and C Soluble Spike Mimetics Generated by Negative Selection Display Native-like Properties. PLoS Pathogens, 2015, 11, e1004570.	4.7	106

#	Article	IF	Citations
19	Glycine Substitution at Helix-to-Coil Transitions Facilitates the Structural Determination of a Stabilized Subtype C HIV Envelope Glycoprotein. Immunity, 2017, 46, 792-803.e3.	14.3	96
20	Key gp120 Glycans Pose Roadblocks to the Rapid Development of VRC01-Class Antibodies in an HIV-1-Infected Chinese Donor. Immunity, 2016, 44, 939-950.	14.3	85
21	Route of Vaccine Administration Alters Antigen Trafficking but Not Innate or Adaptive Immunity. Cell Reports, 2020, 30, 3964-3971.e7.	6.4	83
22	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
23	Heterologous Epitope-Scaffold Primeâˆ¶Boosting Immuno-Focuses B Cell Responses to the HIV-1 gp41 2F5 Neutralization Determinant. PLoS ONE, 2011, 6, e16074.	2.5	75
24	Thermostability of Well-Ordered HIV Spikes Correlates with the Elicitation of Autologous Tier 2 Neutralizing Antibodies. PLoS Pathogens, 2016, 12, e1005767.	4.7	72
25	Covalent Linkage of HIV-1 Trimers to Synthetic Liposomes Elicits Improved B Cell and Antibody Responses. Journal of Virology, 2017, 91, .	3.4	71
26	Vaccine-elicited primate antibodies use a distinct approach to the HIV-1 primary receptor binding site informing vaccine redesign. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E738-47.	7.1	66
27	HIV-1 Neutralizing Antibodies Display Dual Recognition of the Primary and Coreceptor Binding Sites and Preferential Binding to Fully Cleaved Envelope Glycoproteins. Journal of Virology, 2012, 86, 11231-11241.	3.4	61
28	Elicitation of Neutralizing Antibodies Targeting the V2 Apex of the HIV Envelope Trimer in a Wild-Type Animal Model. Cell Reports, 2017, 21, 222-235.	6.4	58
29	Targeted N-glycan deletion at the receptor-binding site retains HIV Env NFL trimer integrity and accelerates the elicited antibody response. PLoS Pathogens, 2017, 13, e1006614.	4.7	58
30	Dense Array of Spikes on HIV-1 Virion Particles. Journal of Virology, 2017, 91, .	3.4	53
31	Targeted Isolation of Antibodies Directed against Major Sites of SIV Env Vulnerability. PLoS Pathogens, 2016, 12, e1005537.	4.7	51
32	Biochemically Defined HIV-1 Envelope Glycoprotein Variant Immunogens Display Differential Binding and Neutralizing Specificities to the CD4-binding Site. Journal of Biological Chemistry, 2012, 287, 5673-5686.	3.4	50
33	Structure of a cleavage-independent HIV Env recapitulates the glycoprotein architecture of the native cleaved trimer. Nature Communications, 2018, 9, 1956.	12.8	50
34	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
35	Structure-Guided Redesign Improves NFL HIV Env Trimer Integrity and Identifies an Inter-Protomer Disulfide Permitting Post-Expression Cleavage. Frontiers in Immunology, 2018, 9, 1631.	4.8	37
36	The HIV-1 Envelope Glycoprotein C3/V4 Region Defines a Prevalent Neutralization Epitope following Immunization. Cell Reports, 2019, 27, 586-598.e6.	6.4	32

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37	Rhesus Macaque B-Cell Responses to an HIV-1 Trimer Vaccine Revealed by Unbiased Longitudinal Repertoire Analysis. MBio, 2015, 6, e01375-15.	4.1	31
38	Evolution of B cell analysis and Env trimer redesign. Immunological Reviews, 2017, 275, 183-202.	6.0	31
39	Targeting the HIV-1 Spike and Coreceptor with Bi- and Trispecific Antibodies for Single-Component Broad Inhibition of Entry. Journal of Virology, 2018, 92, .	3.4	31
40	Structure-guided Alterations of the gp41-directed HIV-1 Broadly Neutralizing Antibody 2F5 Reveal New Properties Regarding its Neutralizing Function. PLoS Pathogens, 2012, 8, e1002806.	4.7	30
41	Cleavage-Independent HIV-1 Trimers From CHO Cell Lines Elicit Robust Autologous Tier 2 Neutralizing Antibodies. Frontiers in Immunology, 2018, 9, 1116.	4.8	27
42	High-Resolution Longitudinal Study of HIV-1 Env Vaccineâ€"Elicited B Cell Responses to the Virus Primary Receptor Binding Site Reveals Affinity Maturation and Clonal Persistence. Journal of Immunology, 2016, 196, 3729-3743.	0.8	26
43	Overcoming Steric Restrictions of VRC01 HIV-1 Neutralizing Antibodies through Immunization. Cell Reports, 2019, 29, 3060-3072.e7.	6.4	26
44	Diverse Antibody Genetic and Recognition Properties Revealed following HIV-1 Envelope Glycoprotein Immunization. Journal of Immunology, 2015, 194, 5903-5914.	0.8	24
45	HIV-1 Receptor Binding Site-Directed Antibodies Using a VH1-2 Gene Segment Orthologue Are Activated by Env Trimer Immunization. PLoS Pathogens, 2014, 10, e1004337.	4.7	23
46	Extensive dissemination and intraclonal maturation of HIV Env vaccine-induced B cell responses. Journal of Experimental Medicine, 2020, 217, .	8.5	23
47	Calcium Phosphate Nanoparticle-Based Vaccines as a Platform for Improvement of HIV-1 Env Antibody Responses by Intrastructural Help. Nanomaterials, 2019, 9, 1389.	4.1	21
48	An HIV-1 Envâ€"Antibody Complex Focuses Antibody Responses to Conserved Neutralizing Epitopes. Journal of Immunology, 2016, 197, 3982-3998.	0.8	17
49	Primate immune responses to HIV-1 Env formulated in the saponin-based adjuvant AbISCO-100 in the presence or absence of TLR9 co-stimulation. Scientific Reports, 2015, 5, 8925.	3.3	15
50	HIV-1 Cross-Reactive Primary Virus Neutralizing Antibody Response Elicited by Immunization in Nonhuman Primates. Journal of Virology, 2017, 91, .	3.4	15
51	Phosphoserine acidic cluster motifs bind distinct basic regions on the Î¼ subunits of clathrin adaptor protein complexes. Journal of Biological Chemistry, 2018, 293, 15678-15690.	3.4	10
52	Glutaraldehyde Cross-linking of HIV-1 Env Trimers Skews the Antibody Subclass Response in Mice. Frontiers in Immunology, 2017, 8, 1654.	4.8	9
53	Sudan Ebolavirus VP35-NP Crystal Structure Reveals a Potential Target for Pan-Filovirus Treatment. MBio, 2019, 10, .	4.1	7
54	Structurally related but genetically unrelated antibody lineages converge on an immunodominant HIV-1 Env neutralizing determinant following trimer immunization. PLoS Pathogens, 2021, 17, e1009543.	4.7	5

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55	Ligand accessibility to the HIV-1 Env co-receptor binding site can occur prior to CD4 engagement and is independent of viral tier category. Virology, 2018, 519, 99-105.	2.4	4
56	Design and Functional Characterization of HIV-1 Envelope Protein-Coupled T Helper Liposomes. Pharmaceutics, 2022, 14, 1385.	4.5	3
57	Correction for Chakrabarti et al., Robust Neutralizing Antibodies Elicited by HIV-1 JRFL Envelope Glycoprotein Trimers in Nonhuman Primates. Journal of Virology, 2015, 89, 887-887.	3.4	0