

Richard T Wyatt

List of Publications by Year in descending order

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57
papers

11,481
citations

117619

34
h-index

149686

56
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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. <i>Nature</i> , 1998, 393, 648-659.	27.8	2,788
2	Rational Design of Envelope Identifies Broadly Neutralizing Human Monoclonal Antibodies to HIV-1. <i>Science</i> , 2010, 329, 856-861.	12.6	1,600
3	CD4-induced interaction of primary HIV-1 gp120 glycoproteins with the chemokine receptor CCR-5. <i>Nature</i> , 1996, 384, 179-183.	27.8	1,224
4	The antigenic structure of the HIV gp120 envelope glycoprotein. <i>Nature</i> , 1998, 393, 705-711.	27.8	1,152
5	Structural definition of a conserved neutralization epitope on HIV-1 gp120. <i>Nature</i> , 2007, 445, 732-737.	27.8	715
6	Proof of principle for epitope-focused vaccine design. <i>Nature</i> , 2014, 507, 201-206.	27.8	451
7	Broad and potent HIV-1 neutralization by a human antibody that binds the gp41-gp120 interface. <i>Nature</i> , 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. <i>Immunity</i> , 2017, 46, 1073-1088.e6.	14.3	286
9	Cleavage-Independent HIV-1 Env Trimers Engineered as Soluble Native Spike Mimetics for Vaccine Design. <i>Cell Reports</i> , 2015, 11, 539-550.	6.4	211
10	Structure-based, targeted deglycosylation of HIV-1 gp120 and effects on neutralization sensitivity and antibody recognition. <i>Virology</i> , 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. <i>Immunity</i> , 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. <i>PLoS Pathogens</i> , 2015, 11, e1004932.	4.7	141
13	High-Density Array of Well-Ordered HIV-1 Spikes on Synthetic Liposomal Nanoparticles Efficiently Activate B Cells. <i>Cell Reports</i> , 2016, 15, 1986-1999.	6.4	127
14	Structure-Guided Redesign Increases the Propensity of HIV Env To Generate Highly Stable Soluble Trimers. <i>Journal of Virology</i> , 2016, 90, 2806-2817.	3.4	126
15	Differential processing of HIV envelope glycans on the virus and soluble recombinant trimer. <i>Nature Communications</i> , 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. <i>Immunity</i> , 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. <i>Immunity</i> , 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. <i>PLoS Pathogens</i> , 2015, 11, e1004570.	4.7	106

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19	Glycine Substitution at Helix-to-Coil Transitions Facilitates the Structural Determination of a Stabilized Subtype C HIV Envelope Glycoprotein. <i>Immunity</i> , 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. <i>Immunity</i> , 2016, 44, 939-950.	14.3	85
21	Route of Vaccine Administration Alters Antigen Trafficking but Not Innate or Adaptive Immunity. <i>Cell Reports</i> , 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. <i>Immunity</i> , 2017, 46, 777-791.e10.	14.3	81
23	Heterologous Epitope-Scaffold Prime Boosting Immuno-Focuses B Cell Responses to the HIV-1 gp41 2F5 Neutralization Determinant. <i>PLoS ONE</i> , 2011, 6, e16074.	2.5	75
24	Thermostability of Well-Ordered HIV Spikes Correlates with the Elicitation of Autologous Tier 2 Neutralizing Antibodies. <i>PLoS Pathogens</i> , 2016, 12, e1005767.	4.7	72
25	Covalent Linkage of HIV-1 Trimers to Synthetic Liposomes Elicits Improved B Cell and Antibody Responses. <i>Journal of Virology</i> , 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. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 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. <i>Journal of Virology</i> , 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. <i>Cell Reports</i> , 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. <i>PLoS Pathogens</i> , 2017, 13, e1006614.	4.7	58
30	Dense Array of Spikes on HIV-1 Virion Particles. <i>Journal of Virology</i> , 2017, 91, .	3.4	53
31	Targeted Isolation of Antibodies Directed against Major Sites of SIV Env Vulnerability. <i>PLoS Pathogens</i> , 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. <i>Journal of Biological Chemistry</i> , 2012, 287, 5673-5686.	3.4	50
33	Structure of a cleavage-independent HIV Env recapitulates the glycoprotein architecture of the native cleaved trimer. <i>Nature Communications</i> , 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. <i>Journal of Virology</i> , 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. <i>Frontiers in Immunology</i> , 2018, 9, 1631.	4.8	37
36	The HIV-1 Envelope Glycoprotein C3/V4 Region Defines a Prevalent Neutralization Epitope following Immunization. <i>Cell Reports</i> , 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. <i>MBio</i> , 2015, 6, e01375-15.	4.1	31
38	Evolution of B cell analysis and Env trimer redesign. <i>Immunological Reviews</i> , 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. <i>Journal of Virology</i> , 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. <i>PLoS Pathogens</i> , 2012, 8, e1002806.	4.7	30
41	Cleavage-Independent HIV-1 Trimers From CHO Cell Lines Elicit Robust Autologous Tier 2 Neutralizing Antibodies. <i>Frontiers in Immunology</i> , 2018, 9, 1116.	4.8	27
42	High-Resolution Longitudinal Study of HIV-1 Env Vaccine-elicited B Cell Responses to the Virus Primary Receptor Binding Site Reveals Affinity Maturation and Clonal Persistence. <i>Journal of Immunology</i> , 2016, 196, 3729-3743.	0.8	26
43	Overcoming Steric Restrictions of VRC01 HIV-1 Neutralizing Antibodies through Immunization. <i>Cell Reports</i> , 2019, 29, 3060-3072.e7.	6.4	26
44	Diverse Antibody Genetic and Recognition Properties Revealed following HIV-1 Envelope Glycoprotein Immunization. <i>Journal of Immunology</i> , 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. <i>PLoS Pathogens</i> , 2014, 10, e1004337.	4.7	23
46	Extensive dissemination and intraclonal maturation of HIV Env vaccine-induced B cell responses. <i>Journal of Experimental Medicine</i> , 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. <i>Nanomaterials</i> , 2019, 9, 1389.	4.1	21
48	An HIV-1 Env-Antibody Complex Focuses Antibody Responses to Conserved Neutralizing Epitopes. <i>Journal of Immunology</i> , 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. <i>Scientific Reports</i> , 2015, 5, 8925.	3.3	15
50	HIV-1 Cross-Reactive Primary Virus Neutralizing Antibody Response Elicited by Immunization in Nonhuman Primates. <i>Journal of Virology</i> , 2017, 91, .	3.4	15
51	Phosphoserine acidic cluster motifs bind distinct basic regions on the β subunits of clathrin adaptor protein complexes. <i>Journal of Biological Chemistry</i> , 2018, 293, 15678-15690.	3.4	10
52	Glutaraldehyde Cross-linking of HIV-1 Env Trimers Skews the Antibody Subclass Response in Mice. <i>Frontiers in Immunology</i> , 2017, 8, 1654.	4.8	9
53	Sudan Ebolavirus VP35-NP Crystal Structure Reveals a Potential Target for Pan-Filovirus Treatment. <i>MBio</i> , 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. <i>PLoS Pathogens</i> , 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. <i>Virology</i> , 2018, 519, 99-105.	2.4	4
56	Design and Functional Characterization of HIV-1 Envelope Protein-Coupled T Helper Liposomes. <i>Pharmaceutics</i> , 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. <i>Journal of Virology</i> , 2015, 89, 887-887.	3.4	0