

Andrew B Ward

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

337 papers	28,222 citations	89 h-index	162 g-index
394 ext. papers	35,136 ext. citations	16.3 avg, IF	7.15 L-index

#	Paper	IF	Citations
337	Structure of P-glycoprotein reveals a molecular basis for poly-specific drug binding. <i>Science</i> , 2009 , 323, 1718-22	33.3	1586
336	Potent neutralizing antibodies from COVID-19 patients define multiple targets of vulnerability. <i>Science</i> , 2020 , 369, 643-650	33.3	724
335	Crystal structure of a soluble cleaved HIV-1 envelope trimer. <i>Science</i> , 2013 , 342, 1477-83	33.3	687
334	Structure of HIV-1 gp120 V1/V2 domain with broadly neutralizing antibody PG9. <i>Nature</i> , 2011 , 480, 336-43	50.4	682
333	A next-generation cleaved, soluble HIV-1 Env trimer, BG505 SOSIP.664 gp140, expresses multiple epitopes for broadly neutralizing but not non-neutralizing antibodies. <i>PLoS Pathogens</i> , 2013 , 9, e1003618	7.6	644
332	Flexibility in the ABC transporter MsbA: Alternating access with a twist. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 19005-10	11.5	638
331	Immunogenicity and structures of a rationally designed prefusion MERS-CoV spike antigen. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E7348-E7357	11.5	615
330	A potent and broad neutralizing antibody recognizes and penetrates the HIV glycan shield. <i>Science</i> , 2011 , 334, 1097-103	33.3	576
329	Cryo-EM structure of a fully glycosylated soluble cleaved HIV-1 envelope trimer. <i>Science</i> , 2013 , 342, 1484-90	50.4	573
328	Highly conserved protective epitopes on influenza B viruses. <i>Science</i> , 2012 , 337, 1343-8	33.3	543
327	Developmental pathway for potent V1V2-directed HIV-neutralizing antibodies. <i>Nature</i> , 2014 , 509, 55-62	50.4	537
326	Rational HIV immunogen design to target specific germline B cell receptors. <i>Science</i> , 2013 , 340, 711-6	33.3	519
325	Pre-fusion structure of a human coronavirus spike protein. <i>Nature</i> , 2016 , 531, 118-21	50.4	474
324	Structure of the SARS-CoV nsp12 polymerase bound to nsp7 and nsp8 co-factors. <i>Nature Communications</i> , 2019 , 10, 2342	17.4	466
323	SARS-CoV-2 Infection Depends on Cellular Heparan Sulfate and ACE2. <i>Cell</i> , 2020 , 183, 1043-1057.e15	56.2	454
322	HIV-1 VACCINES. HIV-1 neutralizing antibodies induced by native-like envelope trimers. <i>Science</i> , 2015 , 349, aac4223	33.3	394
321	A stable trimeric influenza hemagglutinin stem as a broadly protective immunogen. <i>Science</i> , 2015 , 349, 1301-6	33.3	364

320	Cross-neutralization of influenza A viruses mediated by a single antibody loop. <i>Nature</i> , 2012 , 489, 526-32	50.4	344
319	Broad and potent HIV-1 neutralization by a human antibody that binds the gp41-gp120 interface. <i>Nature</i> , 2014 , 515, 138-42	50.4	330
318	Cryo-EM structure of a native, fully glycosylated, cleaved HIV-1 envelope trimer. <i>Science</i> , 2016 , 351, 1043-8	33.3	319
317	A Blueprint for HIV Vaccine Discovery. <i>Cell Host and Microbe</i> , 2012 , 12, 396-407	23.4	302
316	Hepatitis C virus E2 envelope glycoprotein core structure. <i>Science</i> , 2013 , 342, 1090-4	33.3	300
315	Broadly neutralizing HIV antibodies define a glycan-dependent epitope on the prefusion conformation of gp41 on cleaved envelope trimers. <i>Immunity</i> , 2014 , 40, 657-68	32.3	286
314	Supersite of immune vulnerability on the glycosylated face of HIV-1 envelope glycoprotein gp120. <i>Nature Structural and Molecular Biology</i> , 2013 , 20, 796-803	17.6	274
313	Structural delineation of a quaternary, cleavage-dependent epitope at the gp41-gp120 interface on intact HIV-1 Env trimers. <i>Immunity</i> , 2014 , 40, 669-80	32.3	267
312	Stabilized coronavirus spikes are resistant to conformational changes induced by receptor recognition or proteolysis. <i>Scientific Reports</i> , 2018 , 8, 15701	4.9	259
311	Immunogenicity of Stabilized HIV-1 Envelope Trimers with Reduced Exposure of Non-neutralizing Epitopes. <i>Cell</i> , 2015 , 163, 1702-15	56.2	251
310	Recombinant HIV envelope trimer selects for quaternary-dependent antibodies targeting the trimer apex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 17624-9	11.5	239
309	Broadly neutralizing antibody PGT121 allosterically modulates CD4 binding via recognition of the HIV-1 gp120 V3 base and multiple surrounding glycans. <i>PLoS Pathogens</i> , 2013 , 9, e1003342	7.6	235
308	HIV Vaccine Design to Target Germline Precursors of Glycan-Dependent Broadly Neutralizing Antibodies. <i>Immunity</i> , 2016 , 45, 483-496	32.3	232
307	Structure of the mechanically activated ion channel Piezo1. <i>Nature</i> , 2018 , 554, 481-486	50.4	224
306	Fusion peptide of HIV-1 as a site of vulnerability to neutralizing antibody. <i>Science</i> , 2016 , 352, 828-33	33.3	218
305	Asymmetric recognition of the HIV-1 trimer by broadly neutralizing antibody PG9. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 4351-6	11.5	214
304	Maturation Pathway from Germline to Broad HIV-1 Neutralizer of a CD4-Mimic Antibody. <i>Cell</i> , 2016 , 165, 449-63	56.2	209
303	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	32.3	204

302	Structures of P-glycoprotein reveal its conformational flexibility and an epitope on the nucleotide-binding domain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 13386-91	11.5	197
301	Composition and Antigenic Effects of Individual Glycan Sites of a Trimeric HIV-1 Envelope Glycoprotein. <i>Cell Reports</i> , 2016 , 14, 2695-706	10.6	193
300	A native-like SOSIP.664 trimer based on an HIV-1 subtype B env gene. <i>Journal of Virology</i> , 2015 , 89, 3380-3385	10.6	191
299	Antibody 8ANC195 reveals a site of broad vulnerability on the HIV-1 envelope spike. <i>Cell Reports</i> , 2014 , 7, 785-95	10.6	180
298	The HIV-1 envelope glycoprotein structure: nailing down a moving target. <i>Immunological Reviews</i> , 2017 , 275, 21-32	11.3	178
297	Tailored Immunogens Direct Affinity Maturation toward HIV Neutralizing Antibodies. <i>Cell</i> , 2016 , 166, 1459-1470.e11	56.2	178
296	Biochemistry. Integrative structural biology. <i>Science</i> , 2013 , 339, 913-5	33.3	177
295	Vulnerabilities in coronavirus glycan shields despite extensive glycosylation. <i>Nature Communications</i> , 2020 , 11, 2688	17.4	174
294	Affinity Maturation of a Potent Family of HIV Antibodies Is Primarily Focused on Accommodating or Avoiding Glycans. <i>Immunity</i> , 2015 , 43, 1053-63	32.3	170
293	Holes in the Glycan Shield of the Native HIV Envelope Are a Target of Trimer-Elicited Neutralizing Antibodies. <i>Cell Reports</i> , 2016 , 16, 2327-38	10.6	163
292	A common solution to group 2 influenza virus neutralization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 445-50	11.5	161
291	Open and closed structures reveal allostery and pliability in the HIV-1 envelope spike. <i>Nature</i> , 2017 , 547, 360-363	50.4	155
290	Isolation of potent neutralizing antibodies from a survivor of the 2014 Ebola virus outbreak. <i>Science</i> , 2016 , 351, 1078-83	33.3	153
289	Structural analysis of full-length SARS-CoV-2 spike protein from an advanced vaccine candidate. <i>Science</i> , 2020 , 370, 1089-1094	33.3	153
288	Cleavage strongly influences whether soluble HIV-1 envelope glycoprotein trimers adopt a native-like conformation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 18256-61	11.5	151
287	Structural and functional ramifications of antigenic drift in recent SARS-CoV-2 variants. <i>Science</i> , 2021 , 373, 818-823	33.3	148
286	Structural evolution of glycan recognition by a family of potent HIV antibodies. <i>Cell</i> , 2014 , 159, 69-79	56.2	147
285	A Broadly Neutralizing Antibody Targets the Dynamic HIV Envelope Trimer Apex via a Long, Rigidified, and Anionic B-Hairpin Structure. <i>Immunity</i> , 2017 , 46, 690-702	32.3	146

284	Structures of protective antibodies reveal sites of vulnerability on Ebola virus. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 17182-7	11.5	146
283	Cleavage-independent HIV-1 Env trimers engineered as soluble native spike mimetics for vaccine design. <i>Cell Reports</i> , 2015 , 11, 539-50	10.6	145
282	Slow Delivery Immunization Enhances HIV Neutralizing Antibody and Germinal Center Responses via Modulation of Immunodominance. <i>Cell</i> , 2019 , 177, 1153-1171.e28	56.2	143
281	Understanding polyspecificity of multidrug ABC transporters: closing in on the gaps in ABCB1. <i>Trends in Biochemical Sciences</i> , 2010 , 35, 36-42	10.3	135
280	Cross-Reactive and Potent Neutralizing Antibody Responses in Human Survivors of Natural Ebolavirus Infection. <i>Cell</i> , 2016 , 164, 392-405	56.2	126
279	Systematic Analysis of Monoclonal Antibodies against Ebola Virus GP Defines Features that Contribute to Protection. <i>Cell</i> , 2018 , 174, 938-952.e13	56.2	126
278	Differential binding of neutralizing and non-neutralizing antibodies to native-like soluble HIV-1 Env trimers, uncleaved Env proteins, and monomeric subunits. <i>Retrovirology</i> , 2014 , 11, 41	3.6	121
277	OSCA/TMEM63 are an Evolutionarily Conserved Family of Mechanically Activated Ion Channels. <i>ELife</i> , 2018 , 7,	8.9	121
276	Mechanism of human antibody-mediated neutralization of Marburg virus. <i>Cell</i> , 2015 , 160, 893-903	56.2	114
275	Antibodies from a Human Survivor Define Sites of Vulnerability for Broad Protection against Ebolaviruses. <i>Cell</i> , 2017 , 169, 878-890.e15	56.2	112
274	Improving the Immunogenicity of Native-like HIV-1 Envelope Trimers by Hyperstabilization. <i>Cell Reports</i> , 2017 , 20, 1805-1817	10.6	112
273	Cross-Neutralization of a SARS-CoV-2 Antibody to a Functionally Conserved Site Is Mediated by Avidity. <i>Immunity</i> , 2020 , 53, 1272-1280.e5	32.3	112
272	Presenting native-like HIV-1 envelope trimers on ferritin nanoparticles improves their immunogenicity. <i>Retrovirology</i> , 2015 , 12, 82	3.6	111
271	Steroid-based facial amphiphiles for stabilization and crystallization of membrane proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, E1203-11	11.5	111
270	Electron-Microscopy-Based Epitope Mapping Defines Specificities of Polyclonal Antibodies Elicited during HIV-1 BG505 Envelope Trimer Immunization. <i>Immunity</i> , 2018 , 49, 288-300.e8	32.3	110
269	Cross-reactive serum and memory B-cell responses to spike protein in SARS-CoV-2 and endemic coronavirus infection. <i>Nature Communications</i> , 2021 , 12, 2938	17.4	110
268	A Site of Vulnerability on the Influenza Virus Hemagglutinin Head Domain Trimer Interface. <i>Cell</i> , 2019 , 177, 1136-1152.e18	56.2	107
267	Antibody recognition of the pandemic H1N1 Influenza virus hemagglutinin receptor binding site. <i>Journal of Virology</i> , 2013 , 87, 12471-80	6.6	107

266	An Alternative Binding Mode of IGHV3-53 Antibodies to the SARS-CoV-2 Receptor Binding Domain. <i>Cell Reports</i> , 2020 , 33, 108274	10.6	107
265	Universal protection against influenza infection by a multidomain antibody to influenza hemagglutinin. <i>Science</i> , 2018 , 362, 598-602	33.3	106
264	Murine Antibody Responses to Cleaved Soluble HIV-1 Envelope Trimers Are Highly Restricted in Specificity. <i>Journal of Virology</i> , 2015 , 89, 10383-98	6.6	105
263	An HIV-1 antibody from an elite neutralizer implicates the fusion peptide as a site of vulnerability. <i>Nature Microbiology</i> , 2016 , 2, 16199	26.6	103
262	Structural Constraints Determine the Glycosylation of HIV-1 Envelope Trimers. <i>Cell Reports</i> , 2015 , 11, 1604-13	10.6	101
261	Sequential and Simultaneous Immunization of Rabbits with HIV-1 Envelope Glycoprotein SOSIP.664 Trimers from Clades A, B and C. <i>PLoS Pathogens</i> , 2016 , 12, e1005864	7.6	101
260	Presenting native-like trimeric HIV-1 antigens with self-assembling nanoparticles. <i>Nature Communications</i> , 2016 , 7, 12041	17.4	101
259	Design and crystal structure of a native-like HIV-1 envelope trimer that engages multiple broadly neutralizing antibody precursors in vivo. <i>Journal of Experimental Medicine</i> , 2017 , 214, 2573-2590	16.6	100
258	Rapid elicitation of broadly neutralizing antibodies to HIV by immunization in cows. <i>Nature</i> , 2017 , 548, 108-111	50.4	99
257	Glycan clustering stabilizes the mannose patch of HIV-1 and preserves vulnerability to broadly neutralizing antibodies. <i>Nature Communications</i> , 2015 , 6, 7479	17.4	97
256	Design and structure of two HIV-1 clade C SOSIP.664 trimers that increase the arsenal of native-like Env immunogens. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 11947-52	11.5	97
255	A Prominent Site of Antibody Vulnerability on HIV Envelope Incorporates a Motif Associated with CCR5 Binding and Its Camouflaging Glycans. <i>Immunity</i> , 2016 , 45, 31-45	32.3	97
254	Structure-based design of native-like HIV-1 envelope trimers to silence non-neutralizing epitopes and eliminate CD4 binding. <i>Nature Communications</i> , 2017 , 8, 1655	17.4	96
253	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	32.3	96
252	Development of Clinical-Stage Human Monoclonal Antibodies That Treat Advanced Ebola Virus Disease in Nonhuman Primates. <i>Journal of Infectious Diseases</i> , 2018 , 218, S612-S626	7	92
251	Extremely potent human monoclonal antibodies from COVID-19 convalescent patients. <i>Cell</i> , 2021 , 184, 1821-1835.e16	56.2	90
250	Antibody responses to viral infections: a structural perspective across three different enveloped viruses. <i>Nature Microbiology</i> , 2019 , 4, 734-747	26.6	89
249	A generalized HIV vaccine design strategy for priming of broadly neutralizing antibody responses. <i>Science</i> , 2019 , 366,	33.3	89

248	Designing facial amphiphiles for the stabilization of integral membrane proteins. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 7023-5	16.4	89
247	Structure-Guided Redesign Increases the Propensity of HIV Env To Generate Highly Stable Soluble Trimers. <i>Journal of Virology</i> , 2015 , 90, 2806-17	6.6	89
246	Differential processing of HIV envelope glycans on the virus and soluble recombinant trimer. <i>Nature Communications</i> , 2018 , 9, 3693	17.4	87
245	Uncleaved prefusion-optimized gp140 trimers derived from analysis of HIV-1 envelope metastability. <i>Nature Communications</i> , 2016 , 7, 12040	17.4	86
244	Comprehensive antigenic map of a cleaved soluble HIV-1 envelope trimer. <i>PLoS Pathogens</i> , 2015 , 11, e1004767	7.6	85
243	Characterization of a broadly neutralizing monoclonal antibody that targets the fusion domain of group 2 influenza A virus hemagglutinin. <i>Journal of Virology</i> , 2014 , 88, 13580-92	6.6	85
242	Computational design of trimeric influenza-neutralizing proteins targeting the hemagglutinin receptor binding site. <i>Nature Biotechnology</i> , 2017 , 35, 667-671	44.5	84
241	Discoveries in structure and physiology of mechanically activated ion channels. <i>Nature</i> , 2020 , 587, 567-576	36.4	84
240	Immunization-Elicited Broadly Protective Antibody Reveals Ebolavirus Fusion Loop as a Site of Vulnerability. <i>Cell</i> , 2017 , 169, 891-904.e15	56.2	83
239	Structure and Immune Recognition of the HIV Glycan Shield. <i>Annual Review of Biophysics</i> , 2018 , 47, 499-523	23.1	81
238	Enhancing and shaping the immunogenicity of native-like HIV-1 envelope trimers with a two-component protein nanoparticle. <i>Nature Communications</i> , 2019 , 10, 4272	17.4	80
237	Engineered immunogen binding to alum adjuvant enhances humoral immunity. <i>Nature Medicine</i> , 2020 , 26, 430-440	50.5	80
236	Insights into the trimeric HIV-1 envelope glycoprotein structure. <i>Trends in Biochemical Sciences</i> , 2015 , 40, 101-7	10.3	78
235	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	7.6	78
234	Structures of Ebola virus GP and sGP in complex with therapeutic antibodies. <i>Nature Microbiology</i> , 2016 , 1, 16128	26.6	78
233	Epitopes for neutralizing antibodies induced by HIV-1 envelope glycoprotein BG505 SOSIP trimers in rabbits and macaques. <i>PLoS Pathogens</i> , 2018 , 14, e1006913	7.6	78
232	Human antibodies that neutralize respiratory droplet transmissible H5N1 influenza viruses. <i>Journal of Clinical Investigation</i> , 2013 , 123, 4979-4979	15.9	78
231	Model Building and Refinement of a Natively Glycosylated HIV-1 Env Protein by High-Resolution Cryoelectron Microscopy. <i>Structure</i> , 2015 , 23, 1943-1951	5.2	77

230	A gene optimization strategy that enhances production of fully functional P-glycoprotein in <i>Pichia pastoris</i> . <i>PLoS ONE</i> , 2011 , 6, e22577	3.7	77
229	Human germinal centres engage memory and naive B cells after influenza vaccination. <i>Nature</i> , 2020 , 586, 127-132	50.4	73
228	HIV Envelope Glycoform Heterogeneity and Localized Diversity Govern the Initiation and Maturation of a V2 Apex Broadly Neutralizing Antibody Lineage. <i>Immunity</i> , 2017 , 47, 990-1003.e9	32.3	71
227	Influences on trimerization and aggregation of soluble, cleaved HIV-1 SOSIP envelope glycoprotein. <i>Journal of Virology</i> , 2013 , 87, 9873-85	6.6	71
226	Structural basis for antibody recognition of the NANP repeats in circumsporozoite protein. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E10438-E10445	11.5	70
225	X-ray diffraction evidence for myosin-troponin connections and tropomyosin movement during stretch activation of insect flight muscle. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 120-5	11.5	69
224	Structure and immunogenicity of a stabilized HIV-1 envelope trimer based on a group-M consensus sequence. <i>Nature Communications</i> , 2019 , 10, 2355	17.4	68
223	Antibody Treatment of Ebola and Sudan Virus Infection via a Uniquely Exposed Epitope within the Glycoprotein Receptor-Binding Site. <i>Cell Reports</i> , 2016 , 15, 1514-1526	10.6	68
222	Two-component spike nanoparticle vaccine protects macaques from SARS-CoV-2 infection. <i>Cell</i> , 2021 , 184, 1188-1200.e19	56.2	68
221	Structural characterization of cleaved, soluble HIV-1 envelope glycoprotein trimers. <i>Journal of Virology</i> , 2013 , 87, 9865-72	6.6	67
220	Influences on the Design and Purification of Soluble, Recombinant Native-Like HIV-1 Envelope Glycoprotein Trimers. <i>Journal of Virology</i> , 2015 , 89, 12189-210	6.6	66
219	Cryo-EM structure of the mechanically activated ion channel OSCA1.2. <i>ELife</i> , 2018 , 7,	8.9	64
218	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	11.5	63
217	Antibodies to a conformational epitope on gp41 neutralize HIV-1 by destabilizing the Env spike. <i>Nature Communications</i> , 2015 , 6, 8167	17.4	62
216	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, 939-50	32.3	62
215	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	32.3	62
214	Structure of the human volume regulated anion channel. <i>ELife</i> , 2018 , 7,	8.9	61
213	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	32.3	59

212	A structurally distinct human mycoplasma protein that generically blocks antigen-antibody union. <i>Science</i> , 2014 , 343, 656-661	33.3	57
211	Thermostability of Well-Ordered HIV Spikes Correlates with the Elicitation of Autologous Tier 2 Neutralizing Antibodies. <i>PLoS Pathogens</i> , 2016 , 12, e1005767	7.6	57
210	cGMP production and analysis of BG505 SOSIP.664, an extensively glycosylated, trimeric HIV-1 envelope glycoprotein vaccine candidate. <i>Biotechnology and Bioengineering</i> , 2018 , 115, 885-899	4.9	56
209	Cooperativity Enables Non-neutralizing Antibodies to Neutralize Ebolavirus. <i>Cell Reports</i> , 2017 , 19, 413-424	12.6	53
208	Structural Definition of a Neutralization-Sensitive Epitope on the MERS-CoV S1-NTD. <i>Cell Reports</i> , 2019 , 28, 3395-3405.e6	10.6	53
207	Structure of 2G12 Fab2 in complex with soluble and fully glycosylated HIV-1 Env by negative-stain single-particle electron microscopy. <i>Journal of Virology</i> , 2014 , 88, 10177-88	6.6	53
206	Tailored design of protein nanoparticle scaffolds for multivalent presentation of viral glycoprotein antigens. <i>ELife</i> , 2020 , 9,	8.9	51
205	Virus-like Particles Identify an HIV V1V2 Apex-Binding Neutralizing Antibody that Lacks a Protruding Loop. <i>Immunity</i> , 2017 , 46, 777-791.e10	32.3	50
204	Closing and Opening Holes in the Glycan Shield of HIV-1 Envelope Glycoprotein SOSIP Trimers Can Redirect the Neutralizing Antibody Response to the Newly Unmasked Epitopes. <i>Journal of Virology</i> , 2019 , 93,	6.6	50
203	Mapping Polyclonal Antibody Responses in Non-human Primates Vaccinated with HIV Env Trimer Subunit Vaccines. <i>Cell Reports</i> , 2020 , 30, 3755-3765.e7	10.6	49
202	Structural flexibility at a major conserved antibody target on hepatitis C virus E2 antigen. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 12768-12773	11.5	48
201	Multifunctional Pan-ebolavirus Antibody Recognizes a Site of Broad Vulnerability on the Ebolavirus Glycoprotein. <i>Immunity</i> , 2018 , 49, 363-374.e10	32.3	47
200	Broadly neutralizing antibodies from human survivors target a conserved site in the Ebola virus glycoprotein HR2-MPER region. <i>Nature Microbiology</i> , 2018 , 3, 670-677	26.6	47
199	Glycosylation of Human IgA Directly Inhibits Influenza A and Other Sialic-Acid-Binding Viruses. <i>Cell Reports</i> , 2018 , 23, 90-99	10.6	45
198	Partial enzymatic deglycosylation preserves the structure of cleaved recombinant HIV-1 envelope glycoprotein trimers. <i>Journal of Biological Chemistry</i> , 2012 , 287, 24239-54	5.4	45
197	A multifunctional human monoclonal neutralizing antibody that targets a unique conserved epitope on influenza HA. <i>Nature Communications</i> , 2018 , 9, 2669	17.4	44
196	Antibody-dependent enhancement of influenza disease promoted by increase in hemagglutinin stem flexibility and virus fusion kinetics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 15194-15199	11.5	44
195	Rational design of a trisppecific antibody targeting the HIV-1 Env with elevated anti-viral activity. <i>Nature Communications</i> , 2018 , 9, 877	17.4	43

194	HIV-1 vaccine design through minimizing envelope metastability. <i>Science Advances</i> , 2018 , 4, eaau6769	14.3	43
193	Analysis of a Therapeutic Antibody Cocktail Reveals Determinants for Cooperative and Broad Ebola virus Neutralization. <i>Immunity</i> , 2020 , 52, 388-403.e12	32.3	42
192	Stable 293T and CHO cell lines expressing cleaved, stable HIV-1 envelope glycoprotein trimers for structural and vaccine studies. <i>Retrovirology</i> , 2014 , 11, 33	3.6	42
191	Similarities and differences between native HIV-1 envelope glycoprotein trimers and stabilized soluble trimer mimetics. <i>PLoS Pathogens</i> , 2019 , 15, e1007920	7.6	41
190	Potent neutralizing antibodies from COVID-19 patients define multiple targets of vulnerability		41
189	Isolation and characterization of cross-neutralizing coronavirus antibodies from COVID-19+ subjects. <i>Cell Reports</i> , 2021 , 36, 109353	10.6	41
188	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	10.6	40
187	Cross-reactive serum and memory B cell responses to spike protein in SARS-CoV-2 and endemic coronavirus infection 2020 ,		40
186	In vitro evolution of an influenza broadly neutralizing antibody is modulated by hemagglutinin receptor specificity. <i>Nature Communications</i> , 2017 , 8, 15371	17.4	38
185	Mapping the immunogenic landscape of near-native HIV-1 envelope trimers in non-human primates. <i>PLoS Pathogens</i> , 2020 , 16, e1008753	7.6	37
184	Co-evolution of HIV Envelope and Apex-Targeting Neutralizing Antibody Lineage Provides Benchmarks for Vaccine Design. <i>Cell Reports</i> , 2018 , 23, 3249-3261	10.6	36
183	A Computationally Designed Hemagglutinin Stem-Binding Protein Provides In Vivo Protection from Influenza Independent of a Host Immune Response. <i>PLoS Pathogens</i> , 2016 , 12, e1005409	7.6	36
182	Reducing V3 Antigenicity and Immunogenicity on Soluble, Native-Like HIV-1 Env SOSIP Trimers. <i>Journal of Virology</i> , 2017 , 91,	6.6	33
181	A natural mutation between SARS-CoV-2 and SARS-CoV determines neutralization by a cross-reactive antibody. <i>PLoS Pathogens</i> , 2020 , 16, e1009089	7.6	33
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48	Single-component multilayered self-assembling nanoparticles presenting rationally designed glycoprotein trimers as Ebola virus vaccines		2
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3	Mapping the immunogenic landscape of near-native HIV-1 envelope trimers in non-human primates 2020 , 16, e1008753	
2	Mapping the immunogenic landscape of near-native HIV-1 envelope trimers in non-human primates 2020 , 16, e1008753	
1	Mapping the immunogenic landscape of near-native HIV-1 envelope trimers in non-human primates 2020 , 16, e1008753	