Marit J Van Gils

List of Publications by Year
in descending order

129 papers	11,887 citations	50170 46 h-index	35952 97 g-index
164 all docs	164 docs citations	164 times ranked	13282 citing authors

#	Article	IF	Citations
1	Potent neutralizing antibodies from COVID-19 patients define multiple targets of vulnerability. Science, 2020, 369, 643-650.	6.0	1,104
2	A Next-Generation Cleaved, Soluble HIV-1 Env Trimer, BG505 SOSIP.664 gp140, Expresses Multiple Epitopes for Broadly Neutralizing but Not Non-Neutralizing Antibodies. PLoS Pathogens, 2013, 9, e1003618.	2.1	835
3	SARS-CoV-2 evolution during treatment of chronic infection. Nature, 2021, 592, 277-282.	13.7	802
4	HIV-1 neutralizing antibodies induced by native-like envelope trimers. Science, 2015, 349, aac4223.	6.0	482
5	SARS-CoV-2 variants of concern partially escape humoral but not T cell responses in COVID-19 convalescent donors and vaccine recipients. Science Immunology, 2021, 6, .	5.6	455
6	Broad and potent HIV-1 neutralization by a human antibody that binds the gp41â€“gp120 interface. Nature, 2014, 515, 138-142.	13.7	400
7	Broadly Neutralizing HIV Antibodies Define a Glycan-Dependent Epitope on the Prefusion Conformation of gp41 on Cleaved Envelope Trimers. Immunity, 2014, 40, 657-668.	6.6	342
8	Recombinant HIV envelope trimer selects for quaternary-dependent antibodies targeting the trimer apex. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17624-17629.	3.3	324
9	Structural Delineation of a Quaternary, Cleavage-Dependent Epitope at the gp41-gp120 Interface on Intact HIV-1 Env Trimers. Immunity, 2014, 40, 669-680.	6.6	323
10	Structural and functional ramifications of antigenic drift in recent SARS-CoV-2 variants. Science, 2021, 373, 818-823.	6.0	309
11	Afucosylated IgG characterizes enveloped viral responses and correlates with COVID-19 severity. Science, 2021, 371, .	6.0	244
12	Immunization for HIV-1 Broadly Neutralizing Antibodies in Human Ig Knockin Mice. Cell, 2015, 161, 1505-1515.	13.5	239
13	Defining variant-resistant epitopes targeted by SARS-CoV-2 antibodies: A global consortium study. Science, 2021, 374, 472-478.	6.0	228
14	Holes in the Glycan Shield of the Native HIV Envelope Are a Target of Trimer-Elicited Neutralizing Antibodies. Cell Reports, 2016, 16, 2327-2338.	2.9	216
15	The effect of spike mutations on SARS-CoV-2 neutralization. Cell Reports, 2021, 34, 108890.	2.9	200
16	Cross-Neutralization of a SARS-CoV-2 Antibody to a Functionally Conserved Site Is Mediated by Avidity. Immunity, 2020, 53, 1272-1280.e5.	6.6	185
17	Improving the Immunogenicity of Native-like HIV-1 Envelope Trimers by Hyperstabilization. Cell Reports, 2017, 20, 1805-1817.	2.9	171
18	High titers and low fucosylation of early human antiâ€“SARS-CoV-2 IgG promote inflammation by alveolar macrophages. Science Translational Medicine, 2021, 13, .	5.8	166

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19	Crossâ€Reactive Neutralizing Humoral Immunity Does Not Protect from HIV Type 1 Disease Progression. Journal of Infectious Diseases, 2010, 201, 1045-1053.	1.9	156
20	Two-component spike nanoparticle vaccine protects macaques from SARS-CoV-2 infection. Cell, 2021, 184, 1188-1200.e19.	13.5	154
21	An Alternative Binding Mode of IGHV3-53 Antibodies to the SARS-CoV-2 Receptor Binding Domain. Cell Reports, 2020, 33, 108274.	2.9	152
22	Direct Probing of Germinal Center Responses Reveals Immunological Features and Bottlenecks for Neutralizing Antibody Responses to HIV Env Trimer. Cell Reports, 2016, 17, 2195-2209.	2.9	150
23	Enhancing and shaping the immunogenicity of native-like HIV-1 envelope trimers with a two-component protein nanoparticle. Nature Communications, 2019, 10, 4272.	5.8	149
24	Murine Antibody Responses to Cleaved Soluble HIV-1 Envelope Trimers Are Highly Restricted in Specificity. Journal of Virology, 2015, 89, 10383-10398.	1.5	148
25	An HIV-1 antibody from an elite neutralizer implicates the fusion peptide as a site of vulnerability. Nature Microbiology, 2017, 2, 16199.	5.9	144
26	Sequential and Simultaneous Immunization of Rabbits with HIV-1 Envelope Glycoprotein SOSIP.664 Trimers from Clades A, B and C. PLoS Pathogens, 2016, 12, e1005864.	2.1	138
27	Coexistence of potent HIV-1 broadly neutralizing antibodies and antibody-sensitive viruses in a viremic controller. Science Translational Medicine, 2017, 9, .	5.8	128
28	Structure and immunogenicity of a stabilized HIV-1 envelope trimer based on a group-M consensus sequence. Nature Communications, 2019, 10, 2355.	5.8	116
29	Prevalence of cross-reactive HIV-1-neutralizing activity in HIV-1-infected patients with rapid or slow disease progression. Aids, 2009, 23, 2405-2414.	1.0	112
30	Neutralization potency of monoclonal antibodies recognizing dominant and subdominant epitopes on SARS-CoV-2 Spike is impacted by the B.1.1.7 variant. Immunity, 2021, 54, 1276-1289.e6.	6.6	112
31	Epitopes for neutralizing antibodies induced by HIV-1 envelope glycoprotein BG505 SOSIP trimers in rabbits and macaques. PLoS Pathogens, 2018, 14, e1006913.	2.1	111
32	SARS-CoV-2 can recruit a heme metabolite to evade antibody immunity. Science Advances, 2021, 7, .	4.7	107
33	Restriction of HIV-1 Escape by a Highly Broad and Potent Neutralizing Antibody. Cell, 2020, 180, 471-489.e22.	13.5	106
34	Comparative assessment of multiple COVID-19 serological technologies supports continued evaluation of point-of-care lateral flow assays in hospital and community healthcare settings. PLoS Pathogens, 2020, 16, e1008817.	2.1	105
35	Broadly neutralizing antibodies against HIV-1: Templates for a vaccine. Virology, 2013, 435, 46-56.	1.1	104
36	Longer V1V2 Region with Increased Number of Potential N-Linked Glycosylation Sites in the HIV-1 Envelope Glycoprotein Protects against HIV-Specific Neutralizing Antibodies. Journal of Virology, 2011, 85, 6986-6995.	1.5	86

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37	Precision-Cut Liver Slices as a New Model to Study Toxicity-Induced Hepatic Stellate Cell Activation in a Physiologic Milieu. Toxicological Sciences, 2005, 85, 632-638.	1.4	85
38	Emerging SARS-CoV-2 variants of concern evade humoral immune responses from infection and vaccination. Science Advances, 2021, 7, eabj5365.	4.7	83
39	Incomplete Neutralization and Deviation from Sigmoidal Neutralization Curves for HIV Broadly Neutralizing Monoclonal Antibodies. PLoS Pathogens, 2015, 11, e1005110.	2.1	78
40	Antibody responses against SARS-CoV-2 variants induced by four different SARS-CoV-2 vaccines in health care workers in the Netherlands: A prospective cohort study. PLoS Medicine, 2022, 19, e1003991.	3.9	75
41	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. Journal of Virology, 2019, 93, .	1.5	66
42	Aberrant glycosylation of anti-SARS-CoV-2 spike IgG is a prothrombotic stimulus for platelets. Blood, 2021, 138, 1481-1489.	0.6	66
43	Rapid Escape from Preserved Cross-Reactive Neutralizing Humoral Immunity without Loss of Viral Fitness in HIV-1-Infected Progressors and Long-Term Nonprogressors. Journal of Virology, 2010, 84, 3576-3585.	1.5	64
44	Cross-reactive antibodies after SARS-CoV-2 infection and vaccination. ELife, 2021, 10, .	2.8	63
45	Similarities and differences between native HIV-1 envelope glycoprotein trimers and stabilized soluble trimer mimetics. PLoS Pathogens, 2019, 15, e1007920.	2.1	61
46	Mapping the immunogenic landscape of near-native HIV-1 envelope trimers in non-human primates. PLoS Pathogens, 2020, 16, e1008753.	2.1	61
47	Longitudinal Analysis of Early HIV-1-Specific Neutralizing Activity in an Elite Neutralizer and in Five Patients Who Developed Cross-Reactive Neutralizing Activity. Journal of Virology, 2012, 86, 2045-2055.	1.5	58
48	Visualization of the HIV-1 Env glycan shield across scales. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 28014-28025.	3.3	57
49	Autologous Antibody Responses to an HIV Envelope Glycan Hole Are Not Easily Broadened in Rabbits. Journal of Virology, 2020, 94, .	1.5	57
50	Human Milk from Previously COVID-19-Infected Mothers: The Effect of Pasteurization on Specific Antibodies and Neutralization Capacity. Nutrients, 2021, 13, 1645.	1.7	54
51	Evolution of Coronavirus Disease 2019 (COVID-19) Symptoms During the First 12 Months After Illness Onset. Clinical Infectious Diseases, 2022, 75, e482-e490.	2.9	51
52	Infection and transmission of SARSâ€CoVâ€2 depend on heparan sulfate proteoglycans. EMBO Journal, 2021, 40, e106765.	3.5	50
53	A combination of cross-neutralizing antibodies synergizes to prevent SARS-CoV-2 and SARS-CoV pseudovirus infection. Cell Host and Microbe, 2021, 29, 806-818.e6.	5.1	49
54	Networks of HIV-1 Envelope Glycans Maintain Antibody Epitopes in the Face of Glycan Additions and Deletions. Structure, 2020, 28, 897-909.e6.	1.6	46

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55	Dynamics of antibodies to SARSâ€CoVâ€2 in convalescent plasma donors. Clinical and Translational Immunology, 2021, 10, e1285.	1.7	45
56	Quantitative analysis of mRNA-1273 COVID-19 vaccination response in immunocompromised adult hematology patients. Blood Advances, 2022, 6, 1537-1546.	2.5	45
57	In vivo protection by broadly neutralizing HIV antibodies. Trends in Microbiology, 2014, 22, 550-551.	3.5	43
58	Conformational Plasticity in the HIV-1 Fusion Peptide Facilitates Recognition by Broadly Neutralizing Antibodies. Cell Host and Microbe, 2019, 25, 873-883.e5.	5.1	42
59	Stabilization of the gp120 V3 loop through hydrophobic interactions reduces the immunodominant V3-directed non-neutralizing response to HIV-1 envelope trimers. Journal of Biological Chemistry, 2018, 293, 1688-1701.	1.6	40
60	The Levels of SARS-CoV-2 Specific Antibodies in Human Milk Following Vaccination. Journal of Human Lactation, 2021, 37, 477-484.	0.8	40
61	HIV-1 envelope glycoprotein signatures that correlate with the development of cross-reactive neutralizing activity. Retrovirology, 2013, 10, 102.	0.9	39
62	Immunogenicity of the mRNA-1273 COVID-19 vaccine in adult patients with inborn errors of immunity. Journal of Allergy and Clinical Immunology, 2022, 149, 1949-1957.	1.5	39
63	Antibodies Against SARS-CoV-2 in Human Milk: Milk Conversion Rates in the Netherlands. Journal of Human Lactation, 2021, 37, 469-476.	0.8	38
64	COVA1-18 neutralizing antibody protects against SARS-CoV-2 in three preclinical models. Nature Communications, 2021, 12, 6097.	5.8	38
65	Enhancing glycan occupancy of soluble HIV-1 envelope trimers to mimic the native viral spike. Cell Reports, 2021, 35, 108933.	2.9	37
66	The potential of engineered antibodies for HIV-1 therapy and cure. Current Opinion in Virology, 2019, 38, 70-80.	2.6	34
67	Immunofocusing and enhancing autologous Tier-2 HIV-1 neutralization by displaying Env trimers on two-component protein nanoparticles. Npj Vaccines, 2021, 6, 24.	2.9	33
68	HIV-1 immunogens and strategies to drive antibody responses towards neutralization breadth. Retrovirology, 2018, 15, 74.	0.9	26
69	Saliva SARS-CoV-2 Antibody Prevalence in Children. Microbiology Spectrum, 2021, 9, e0073121.	1.2	25
70	Ephrin-Eph signaling usage by a variety of viruses. Pharmacological Research, 2020, 159, 105038.	3.1	23
71	The C3/465 glycan hole cluster in BG505 HIV-1 envelope is the major neutralizing target involved in preventing mucosal SHIV infection. PLoS Pathogens, 2021, 17, e1009257.	2.1	23
72	Changing sensitivity to broadly neutralizing antibodies b12, 2G12, 2F5, and 4E10 of primary subtype B human immunodeficiency virus type 1 variants in the natural course of infection. Virology, 2009, 390, 348-355.	1.1	22

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73	Human Milk Antibodies Against SARS-CoV-2: A Longitudinal Follow-Up Study. Journal of Human Lactation, 2021, 37, 485-491.	0.8	21
74	Genetic composition of replication competent clonal HIV-1 variants isolated from peripheral blood mononuclear cells (PBMC), HIV-1 proviral DNA from PBMC and HIV-1 RNA in serum in the course of HIV-1 infection. Virology, 2010, 405, 492-504.	1.1	20
75	HIV-1 escapes from N332-directed antibody neutralization in an elite neutralizer by envelope glycoprotein elongation and introduction of unusual disulfide bonds. Retrovirology, 2016, 13, 48.	0.9	20
76	Genome-Wide Association Study on the Development of Cross-Reactive Neutralizing Antibodies in HIV-1 Infected Individuals. PLoS ONE, 2013, 8, e54684.	1.1	20
77	Probing Affinity, Avidity, Anticooperativity, and Competition in Antibody and Receptor Binding to the SARS-CoV-2 Spike by Single Particle Mass Analyses. ACS Central Science, 2021, 7, 1863-1873.	5.3	20
78	Early development of broadly reactive HIV-1 neutralizing activity in elite neutralizers. Aids, 2014, 28, 1237-1240.	1.0	19
79	HIV envelope trimer-elicited autologous neutralizing antibodies bind a region overlapping the N332 glycan supersite. Science Advances, 2020, 6, eaba0512.	4.7	18
80	Antibody responses induced by SHIV infection are more focused than those induced by soluble native HIV-1 envelope trimers in non-human primates. PLoS Pathogens, 2021, 17, e1009736.	2.1	18
81	High prevalence of neutralizing activity against multiple unrelated human immunodeficiency virus type 1 (HIV-1) subtype B variants in sera from HIV-1 subtype B-infected individuals: evidence for subtype-specific rather than strain-specific neutralizing activity. Journal of General Virology, 2010, 91, 250-258.	1.3	16
82	Time since SARS-CoV-2 infection and humoral immune response following BNT162b2 mRNA vaccination. EBioMedicine, 2021, 72, 103589.	2.7	16
83	A single mRNA vaccine dose in COVID-19 patients boosts neutralizing antibodies against SARS-CoV-2 and variants of concern. Cell Reports Medicine, 2022, 3, 100486.	3.3	16
84	Comparing the human milk antibody response after vaccination with four COVID-19 vaccines: A prospective, longitudinal cohort study in the Netherlands. EClinicalMedicine, 2022, 47, 101393.	3.2	15
85	A third SARS-CoV-2 spike vaccination improves neutralization of variants-of-concern. Npj Vaccines, 2021, 6, 146.	2.9	14
86	Influenza A Virus Hemagglutinin Trimer, Head and Stem Proteins Identify and Quantify Different Hemagglutinin-Specific B Cell Subsets in Humans. Vaccines, 2021, 9, 717.	2.1	13
87	The Glycan Hole Area of HIV-1 Envelope Trimers Contributes Prominently to the Induction of Autologous Neutralization. Journal of Virology, 2022, 96, JVI0155221.	1.5	13
88	Distinct spatial arrangements of ACE2 and TMPRSS2 expression in Syrian hamster lung lobes dictates SARS-CoV-2 infection patterns. PLoS Pathogens, 2022, 18, e1010340.	2.1	13
89	Comparison of SARS-CoV-2-Specific Antibodies in Human Milk after mRNA-Based COVID-19 Vaccination and Infection. Vaccines, 2021, 9, 1475.	2.1	13
90	Antibody Responses Elicited by Immunization with BG505 Trimer Immune Complexes. Journal of Virology, 2019, 93, .	1.5	12

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91	Fusion peptide priming reduces immune responses to HIV-1 envelope trimer base. Cell Reports, 2021, 35, 108937.	2.9	12
92	Comparing Human Milk Antibody Response After 4 Different Vaccines for COVID-19. JAMA Pediatrics, 2022, 176, 611.	3.3	12
93	The Neutralizing Antibody Response in an Individual with Triple HIV-1 Infection Remains Directed at the First Infecting Subtype. AIDS Research and Human Retroviruses, 2016, 32, 1135-1142.	0.5	11
94	Neutralizing Antibody Responses Induced by HIV-1 Envelope Glycoprotein SOSIP Trimers Derived from Elite Neutralizers. Journal of Virology, 2020, 94, .	1.5	11
95	Development of broadly reactive influenza vaccines by targeting the conserved regions of the hemagglutinin stem and head domains. Expert Review of Vaccines, 2020, 19, 563-577.	2.0	11
96	The identification and function of a Netrin-1 mutation in a pedigree with premature atherosclerosis. Atherosclerosis, 2020, 301, 84-92.	0.4	11
97	Optimization of Anti-SARS-CoV-2 Neutralizing Antibody Therapies: Roadmap to Improve Clinical Effectiveness and Implementation. Frontiers in Medical Technology, 2022, 4, 867982.	1.3	11
98	A SARS-CoV-2 Wuhan spike virosome vaccine induces superior neutralization breadth compared to one using the Beta spike. Scientific Reports, 2022, 12, 3884.	1.6	11
99	Decreased Passive Immunity to Respiratory Viruses through Human Milk during the COVID-19 Pandemic. Microbiology Spectrum, 2022, 10, .	1.2	11
100	SARSâ€CoVâ€2 infection activates dendritic cells via cytosolic receptors rather than extracellular TLRs. European Journal of Immunology, 2022, 52, 646-655.	1.6	9
101	Emergence of monoclonal antibody b12-resistant human immunodeficiency virus type 1 variants during natural infection in the absence of humoral or cellular immune pressure. Journal of General Virology, 2010, 91, 1354-1364.	1.3	8
102	Evolution of Human Immunodeficiency Virus Type 1 in a Patient with Cross-Reactive Neutralizing Activity in Serum. Journal of Virology, 2011, 85, 8443-8448.	1.5	8
103	Atypical Antibody Dynamics During Human Coronavirus HKU1 Infections. Frontiers in Microbiology, 2022, 13, 853410.	1.5	8
104	HIV-1 Envelope Glycoprotein Resistance to Monoclonal Antibody 2G12 Is Subject-Specific and Context-Dependent in Macaques and Humans. PLoS ONE, 2013, 8, e75277.	1.1	7
105	Short Communication: Protective Efficacy of Broadly Neutralizing Antibody PGDM1400 Against HIV-1 Challenge in Humanized Mice. AIDS Research and Human Retroviruses, 2018, 34, 790-793.	0.5	7
106	Immunoassay for quantification of antigen-specific IgG fucosylation. EBioMedicine, 2022, 81, 104109.	2.7	7
107	Lower Broadly Neutralizing Antibody Responses in Female Versus Male HIV-1 Infected Injecting Drug Users. Viruses, 2019, 11, 384.	1.5	6
108	Immunization with synthetic SARS-CoV-2 S glycoprotein virus-like particles protects macaques from infection. Cell Reports Medicine, 2022, 3, 100528.	3.3	6

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109	Anti-HIV-1 Nanobody-IgG1 Constructs With Improved Neutralization Potency and the Ability to Mediate Fc Effector Functions. Frontiers in Immunology, 2022, 13, .	2.2	6
110	Correlations Between HIV-1 Clades and HIV-1 Antibody Neutralization Sensitivity: Significant for Vaccine Development?. Current HIV Research, 2010, 8, 579-586.	0.2	4
111	Hitting HIVâ€™s Harpoon. Immunity, 2018, 49, 14-15.	6.6	4
112	Production of HIV-1 Env-Specific Antibodies Mediating Innate Immune Functions Depends on Cognate Interleukin-21- Secreting CD4 ⁺ T Cells. Journal of Virology, 2021, 95, .	1.5	4
113	A Recombinant HIV Envelope Trimer Selects for Quaternary Dependent Antibodies Targeting the Trimer Apex. AIDS Research and Human Retroviruses, 2014, 30, A7-A8.	0.5	3
114	Probability of N332 glycan occupancy on HIV-1 gp120 modulates sensitivity to broadly neutralizing antibodies. Aids, 2016, 30, 2179-2184.	1.0	3
115	Natural infection as a blueprint for rational HIV vaccine design. Human Vaccines and Immunotherapeutics, 2017, 13, 229-236.	1.4	3
116	Diagnostic performance of two serological assays for the detection of SARS-CoV-2 specific antibodies: surveillance after vaccination. Diagnostic Microbiology and Infectious Disease, 2022, 102, 115650.	0.8	3
117	Broad and ultra-potent cross-clade neutralization of HIV-1 by a vaccine-induced CD4 binding site bovine antibody. Cell Reports Medicine, 2022, 3, 100635.	3.3	3
118	Maternal Stress and Human Milk Antibodies During the COVID-19 Pandemic. Frontiers in Nutrition, 0, 9, .	1.6	3
119	Opposites attract in bispecific antibody engineering. Journal of Biological Chemistry, 2017, 292, 14718-14719.	1.6	2
120	Diverse HIV-1 escape pathways from broadly neutralizing antibody PGDM1400 in humanized mice. MAbs, 2020, 12, 1845908.	2.6	2
121	From affinity selection to kinetic selection in Germinal Centre modelling. PLoS Computational Biology, 2022, 18, e1010168.	1.5	2
122	Human Milk Antibody Response After Combining Two Different COVID-19 Vaccines: Mix-and-Match. Journal of Human Lactation, 2022, 38, 401-406.	0.8	2
123	Editorial: Novel Concepts in Using Broadly Neutralizing Antibodies for HIV-1 Treatment and Prevention. Frontiers in Immunology, 2021, 12, 823576.	2.2	1
124	HIV-1 envelope characteristics that coincide with the development of cross-reactive neutralizing activity in HIV-1 infected patients. Retrovirology, 2011, 8, .	0.9	0
125	Convergent HIV-1 Evolution upon Targeted Destabilization of the gp120-gp41 Interface. Journal of Virology, 2021, 95, e0053221.	1.5	0
126	Mapping the immunogenic landscape of near-native HIV-1 envelope trimers in non-human primates. , 2020, 16, e1008753.		0

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127	Mapping the immunogenic landscape of near-native HIV-1 envelope trimers in non-human primates. , 2020, 16, e1008753.		0
128	Mapping the immunogenic landscape of near-native HIV-1 envelope trimers in non-human primates. , 2020, 16, e1008753.		0
129	Mapping the immunogenic landscape of near-native HIV-1 envelope trimers in non-human primates. , 2020, 16, e1008753.		0