Michael Farzan

List of Publications by Citations

163 papers	28,484 citations	72 h-index	168 g-index
172 ext. papers	33,170 ext. citations	12.5 avg, IF	6.79 L-index

#	Paper	IF	Citations
163	Angiotensin-converting enzyme 2 is a functional receptor for the SARS coronavirus. *Nature*, **2003**, 426, 450-4	50.4	3969
162	The beta-chemokine receptors CCR3 and CCR5 facilitate infection by primary HIV-1 isolates. *Cell*, **1996**, 85, 1135-48	56.2	2099
161	The lymphocyte chemoattractant SDF-1 is a ligand for LESTR/fusin and blocks HIV-1 entry. *Nature*, **1996**, 382, 829-33	50.4	1754
160	Structure of SARS coronavirus spike receptor-binding domain complexed with receptor. *Science*, **2005**, 309, 1864-8	33.3	1383
159	SARS-CoV-2 Receptor ACE2 Is an Interferon-Stimulated Gene in Human Airway Epithelial Cells and Is Detected in Specific Cell Subsets across Tissues. *Cell*, **2020**, 181, 1016-1035.e19	56.2	1326
158	The IFITM proteins mediate cellular resistance to influenza A H1N1 virus, West Nile virus, and dengue virus. *Cell*, **2009**, 139, 1243-54	56.2	921
157	CCR3 and CCR5 are co-receptors for HIV-1 infection of microglia. *Nature*, **1997**, 385, 645-9	50.4	821
156	Receptor and viral determinants of SARS-coronavirus adaptation to human ACE2. *EMBO Journal*, **2005**, 24, 1634-43	13	710
155	Influenza A virus NS1 targets the ubiquitin ligase TRIM25 to evade recognition by the host viral RNA sensor RIG-I. *Cell Host and Microbe*, **2009**, 5, 439-49	23.4	600
154	ACE2 receptor expression and severe acute respiratory syndrome coronavirus infection depend on differentiation of human airway epithelia. *Journal of Virology*, **2005**, 79, 14614-21	6.6	593
153	Tyrosine sulfation of the amino terminus of CCR5 facilitates HIV-1 entry. *Cell*, **1999**, 96, 667-76	56.2	589
152	A 193-amino acid fragment of the SARS coronavirus S protein efficiently binds angiotensin-converting enzyme 2. *Journal of Biological Chemistry*, **2004**, 279, 3197-201	5.4	528
151	Potent neutralization of severe acute respiratory syndrome (SARS) coronavirus by a human mAb to S1 protein that blocks receptor association. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 2536-41	11.5	481
150	The broad-spectrum antiviral functions of IFIT and IFITM proteins. *Nature Reviews Immunology*, **2013**, 13, 46-57	36.5	478
149	SARS-CoV-2 spike-protein D614G mutation increases virion spike density and infectivity. *Nature Communications*, **2020**, 11, 6013	17.4	450
148	Distinct patterns of IFITM-mediated restriction of filoviruses, SARS coronavirus, and influenza A virus. *PLoS Pathogens*, **2011**, 7, e1001258	7.6	417
147	BACE2, a beta -secretase homolog, cleaves at the beta site and within the amyloid-beta region of the amyloid-beta precursor protein. *Proceedings of the National Academy of Sciences of the United States of America*, **2000**, 97, 9712-7	11.5	335

146	Receptor-binding domain of SARS-CoV spike protein induces highly potent neutralizing antibodies: implication for developing subunit vaccine. *Biochemical and Biophysical Research Communications*, **2004**, 324, 773-81	3.4	316
145	Transferrin receptor 1 is a cellular receptor for New World haemorrhagic fever arenaviruses. *Nature* , **2007**, 446, 92-6	50.4	314
144	The D614G mutation in the SARS-CoV-2 spike protein reduces S1 shedding and increases infectivity **2020**,		294
143	IFITM-Family Proteins: The Cell's First Line of Antiviral Defense. *Annual Review of Virology*, **2014**, 1, 261-283	18.6	262
142	SARS coronavirus, but not human coronavirus NL63, utilizes cathepsin L to infect ACE2-expressing cells. *Journal of Biological Chemistry*, **2006**, 281, 3198-203	5.4	261
141	Two orphan seven-transmembrane segment receptors which are expressed in CD4-positive cells support simian immunodeficiency virus infection. *Journal of Experimental Medicine*, **1997**, 186, 405-11	16.6	257
140	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, 2706-11	11.5	236
139	Mechanisms of SARS-CoV-2 entry into cells. *Nature Reviews Molecular Cell Biology*, **2021**,	48.7	228
138	The antiviral effector IFITM3 disrupts intracellular cholesterol homeostasis to block viral entry. *Cell Host and Microbe*, **2013**, 13, 452-64	23.4	225
137	TIM-family proteins promote infection of multiple enveloped viruses through virion-associated phosphatidylserine. *PLoS Pathogens*, **2013**, 9, e1003232	7.6	223
136	AAV-expressed eCD4-Ig provides durable protection from multiple SHIV challenges. *Nature*, **2015**, 519, 87-91	50.4	211
135	Animal origins of the severe acute respiratory syndrome coronavirus: insight from ACE2-S-protein interactions. *Journal of Virology*, **2006**, 80, 4211-9	6.6	206
134	Retroviruses pseudotyped with the severe acute respiratory syndrome coronavirus spike protein efficiently infect cells expressing angiotensin-converting enzyme 2. *Journal of Virology*, **2004**, 78, 10628-35	6.6	197
133	Increased CCR5 affinity and reduced CCR5/CD4 dependence of a neurovirulent primary human immunodeficiency virus type 1 isolate. *Journal of Virology*, **2002**, 76, 6277-92	6.6	197
132	Structural basis of neutralization by a human anti-severe acute respiratory syndrome spike protein antibody, 80R. *Journal of Biological Chemistry*, **2006**, 281, 34610-6	5.4	174
131	Ligand-independent dimerization of CXCR4, a principal HIV-1 coreceptor. *Journal of Biological Chemistry*, **2003**, 278, 3378-85	5.4	173
130	A tyrosine-rich region in the N terminus of CCR5 is important for human immunodeficiency virus type 1 entry and mediates an association between gp120 and CCR5. *Journal of Virology*, **1998**, 72, 1160-4	6.6	173
129	Recombinant modified vaccinia virus Ankara expressing the spike glycoprotein of severe acute respiratory syndrome coronavirus induces protective neutralizing antibodies primarily targeting the receptor binding region. *Journal of Virology*, **2005**, 79, 2678-88	6.6	171

128	The Triggering Receptor Expressed on Myeloid Cells 2 Binds Apolipoprotein E. *Journal of Biological Chemistry*, **2015**, 290, 26033-42	5.4	167
127	Ifitm3 limits the severity of acute influenza in mice. *PLoS Pathogens*, **2012**, 8, e1002909	7.6	167
126	Tyrosine sulfation of human antibodies contributes to recognition of the CCR5 binding region of HIV-1 gp120. *Cell*, **2003**, 114, 161-70	56.2	166
125	HIV-1 entry and macrophage inflammatory protein-1beta-mediated signaling are independent functions of the chemokine receptor CCR5. *Journal of Biological Chemistry*, **1997**, 272, 6854-7	5.4	164
124	The role of post-translational modifications of the CXCR4 amino terminus in stromal-derived factor 1 alpha association and HIV-1 entry. *Journal of Biological Chemistry*, **2002**, 277, 29484-9	5.4	163
123	The orphan seven-transmembrane receptor apj supports the entry of primary T-cell-line-tropic and dualtropic human immunodeficiency virus type 1. *Journal of Virology*, **1998**, 72, 6113-8	6.6	158
122	Characterization of stable, soluble trimers containing complete ectodomains of human immunodeficiency virus type 1 envelope glycoproteins. *Journal of Virology*, **2000**, 74, 5716-25	6.6	156
121	Evolution of a TRIM5-CypA splice isoform in old world monkeys. *PLoS Pathogens*, **2008**, 4, e1000003	7.6	152
120	Antibody responses against SARS coronavirus are correlated with disease outcome of infected individuals. *Journal of Medical Virology*, **2006**, 78, 1-8	19.7	152
119	Efficient replication of severe acute respiratory syndrome coronavirus in mouse cells is limited by murine angiotensin-converting enzyme 2. *Journal of Virology*, **2004**, 78, 11429-33	6.6	139
118	Adaptation of a CCR5-using, primary human immunodeficiency virus type 1 isolate for CD4-independent replication. *Journal of Virology*, **1999**, 73, 8120-6	6.6	136
117	Envelope residue 375 substitutions in simian-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	11.5	132
116	A Single Immunization with Nucleoside-Modified mRNA Vaccines Elicits Strong Cellular and Humoral Immune Responses against SARS-CoV-2 in Mice. *Immunity*, **2020**, 53, 724-732.e7	32.3	132
115	A tyrosine-sulfated peptide based on the N terminus of CCR5 interacts with a CD4-enhanced epitope of the HIV-1 gp120 envelope glycoprotein and inhibits HIV-1 entry. *Journal of Biological Chemistry*, **2000**, 275, 33516-21	5.4	130
114	Evaluation of human monoclonal antibody 80R for immunoprophylaxis of severe acute respiratory syndrome by an animal study, epitope mapping, and analysis of spike variants. *Journal of Virology*, **2005**, 79, 5900-6	6.6	129
113	Sialylated O-glycans and sulfated tyrosines in the NH2-terminal domain of CC chemokine receptor 5 contribute to high affinity binding of chemokines. *Journal of Experimental Medicine*, **2001**, 194, 1661-73	16.6	127
112	The S proteins of human coronavirus NL63 and severe acute respiratory syndrome coronavirus bind overlapping regions of ACE2. *Virology*, **2007**, 367, 367-74	3.6	119
111	Sulphated tyrosines mediate association of chemokines and Plasmodium vivax Duffy binding protein with the Duffy antigen/receptor for chemokines (DARC). *Molecular Microbiology*, **2005**, 55, 1413-22	4.1	118

110	Enhanced expression, native purification, and characterization of CCR5, a principal HIV-1 coreceptor. *Journal of Biological Chemistry*, **1999**, 274, 28745-50	5.4	118
109	Protein evolution with an expanded genetic code. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 17688-93	11.5	116
108	CD4-independent binding of SIV gp120 to rhesus CCR5. *Science*, **1997**, 278, 1470-3	33.3	111
107	Paramagnetic proteoliposomes containing a pure, native, and oriented seven-transmembrane segment protein, CCR5. *Nature Biotechnology*, **2000**, 18, 649-54	44.5	107
106	Structural basis for receptor recognition by New World hemorrhagic fever arenaviruses. *Nature Structural and Molecular Biology*, **2010**, 17, 438-44	17.6	105
105	Influenza A virus neuraminidase limits viral superinfection. *Journal of Virology*, **2008**, 82, 4834-43	6.6	104
104	Conserved receptor-binding domains of Lake Victoria marburgvirus and Zaire ebolavirus bind a common receptor. *Journal of Biological Chemistry*, **2006**, 281, 15951-8	5.4	104
103	Receptor determinants of zoonotic transmission of New World hemorrhagic fever arenaviruses. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 2664-9	11.5	99
102	Conformational states of the severe acute respiratory syndrome coronavirus spike protein ectodomain. *Journal of Virology*, **2006**, 80, 6794-800	6.6	96
101	Palmitoylation of the cysteine-rich endodomain of the SARS-coronavirus spike glycoprotein is important for spike-mediated cell fusion. *Virology*, **2007**, 360, 264-74	3.6	93
100	Cross-neutralization of human and palm civet severe acute respiratory syndrome coronaviruses by antibodies targeting the receptor-binding domain of spike protein. *Journal of Immunology*, **2006**, 176, 6085-92	5.3	93
99	Associating HIV-1 envelope glycoprotein structures with states on the virus observed by smFRET. *Nature*, **2019**, 568, 415-419	50.4	92
98	IFITM-2 and IFITM-3 but not IFITM-1 restrict Rift Valley fever virus. *Journal of Virology*, **2013**, 87, 8451-64	6.6	90
97	Dual host-virus arms races shape an essential housekeeping protein. *PLoS Biology*, **2013**, 11, e1001571	9.7	89
96	Mapping binding residues in the Plasmodium vivax domain that binds Duffy antigen during red cell invasion. *Molecular Microbiology*, **2005**, 55, 1423-34	4.1	88
95	Virion-associated phosphatidylethanolamine promotes TIM1-mediated infection by Ebola, dengue, and West Nile viruses. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 14682-7	11.5	85
94	Host-species transferrin receptor 1 orthologs are cellular receptors for nonpathogenic new world clade B arenaviruses. *PLoS Pathogens*, **2009**, 5, e1000358	7.6	85
93	Hydroxychloroquine-mediated inhibition of SARS-CoV-2 entry is attenuated by TMPRSS2. *PLoS Pathogens*, **2021**, 17, e1009212	7.6	85

92	Apelin, the natural ligand of the orphan seven-transmembrane receptor APJ, inhibits human immunodeficiency virus type 1 entry. *Journal of Virology*, **2000**, 74, 11972-6	6.6	79
91	Evidence for ACE2-utilizing coronaviruses (CoVs) related to severe acute respiratory syndrome CoV in bats. *Journal of Virology*, **2012**, 86, 6350-3	6.6	72
90	Sulfated tyrosines contribute to the formation of the C5a docking site of the human C5a anaphylatoxin receptor. *Journal of Experimental Medicine*, **2001**, 193, 1059-66	16.6	72
89	Stabilization of human immunodeficiency virus type 1 envelope glycoprotein trimers by disulfide bonds introduced into the gp41 glycoprotein ectodomain. *Journal of Virology*, **1998**, 72, 7620-5	6.6	69
88	Mechanism for Selective Synaptic Wiring of Rod Photoreceptors into the Retinal Circuitry and Its Role in Vision. *Neuron*, **2015**, 87, 1248-1260	13.9	68
87	Stimulation of enveloped virus infection by beta-amyloid fibrils. *Journal of Biological Chemistry*, **2002**, 277, 35019-24	5.4	65
86	A highly conserved arginine in gp120 governs HIV-1 binding to both syndecans and CCR5 via sulfated motifs. *Journal of Biological Chemistry*, **2005**, 280, 39493-504	5.4	64
85	Interferon-induced transmembrane protein 3 is a type II transmembrane protein. *Journal of Biological Chemistry*, **2013**, 288, 32184-32193	5.4	63
84	The Interferon-Stimulated Gene Ifitm3 Restricts West Nile Virus Infection and Pathogenesis. *Journal of Virology*, **2016**, 90, 8212-25	6.6	63
83	The SARS-CoV-2 receptor-binding domain elicits a potent neutralizing response without antibody-dependent enhancement		59
82	Genetic analysis of the SARS-coronavirus spike glycoprotein functional domains involved in cell-surface expression and cell-to-cell fusion. *Virology*, **2005**, 341, 215-30	3.6	57
81	Lectin-dependent enhancement of Ebola virus infection via soluble and transmembrane C-type lectin receptors. *PLoS ONE*, **2013**, 8, e60838	3.7	56
80	The antiviral restriction factors IFITM1, 2 and 3 do not inhibit infection of human papillomavirus, cytomegalovirus and adenovirus. *PLoS ONE*, **2014**, 9, e96579	3.7	55
79	Generation and characterization of human monoclonal neutralizing antibodies with distinct binding and sequence features against SARS coronavirus using XenoMouse. *Virology*, **2007**, 361, 93-102	3.6	54
78	CD4-induced T-20 binding to human immunodeficiency virus type 1 gp120 blocks interaction with the CXCR4 coreceptor. *Journal of Virology*, **2004**, 78, 5448-57	6.6	54
77	Human Mast cell progenitors can be infected by macrophagetropic human immunodeficiency virus type 1 and retain virus with maturation in vitro. *Journal of Virology*, **2001**, 75, 10808-14	6.6	54
76	The Interferon-Stimulated Gene IFITM3 Restricts Infection and Pathogenesis of Arthritogenic and Encephalitic Alphaviruses. *Journal of Virology*, **2016**, 90, 8780-94	6.6	54
75	A tyrosine-sulfated peptide derived from the heavy-chain CDR3 region of an HIV-1-neutralizing antibody binds gp120 and inhibits HIV-1 infection. *Journal of Biological Chemistry*, **2006**, 281, 28529-35	5.4	52

74	Structural interactions between chemokine receptors, gp120 Env and CD4. *Seminars in Immunology*, **1998**, 10, 249-57	10.7	49
73	Tyrosine-sulfated peptides functionally reconstitute a CCR5 variant lacking a critical amino-terminal region. *Journal of Biological Chemistry*, **2002**, 277, 40397-402	5.4	48
72	Rational design of aptazyme riboswitches for efficient control of gene expression in mammalian cells. *ELife*, **2016**, 5,	8.9	48
71	SARS-CoV-2 and Three Related Coronaviruses Utilize Multiple ACE2 Orthologs and Are Potently Blocked by an Improved ACE2-Ig. *Journal of Virology*, **2020**, 94,	6.6	48
70	A trimeric human angiotensin-converting enzyme 2 as an anti-SARS-CoV-2 agent. *Nature Structural and Molecular Biology*, **2021**, 28, 202-209	17.6	46
69	Envelope Glycoprotein Internalization Protects Human and Simian Immunodeficiency Virus-Infected Cells from Antibody-Dependent Cell-Mediated Cytotoxicity. *Journal of Virology*, **2015**, 89, 10648-55	6.6	45
68	Cpf1 proteins excise CRISPR RNAs from mRNA transcripts in mammalian cells. *Nature Chemical Biology*, **2017**, 13, 839-841	11.7	42
67	Transferrin receptor 1 in the zoonosis and pathogenesis of New World hemorrhagic fever arenaviruses. *Current Opinion in Microbiology*, **2011**, 14, 476-82	7.9	42
66	An antibody recognizing the apical domain of human transferrin receptor 1 efficiently inhibits the entry of all new world hemorrhagic Fever arenaviruses. *Journal of Virology*, **2012**, 86, 4024-8	6.6	41
65	Changes in the V3 region of gp120 contribute to unusually broad coreceptor usage of an HIV-1 isolate from a CCR5 Delta32 heterozygote. *Virology*, **2007**, 362, 163-78	3.6	39
64	Ebolavirus delta-peptide immunoadhesins inhibit marburgvirus and ebolavirus cell entry. *Journal of Virology*, **2011**, 85, 8502-13	6.6	38
63	N-linked glycosylation in the CXCR4 N-terminus inhibits binding to HIV-1 envelope glycoproteins. *Virology*, **2004**, 324, 140-50	3.6	37
62	IFITM proteins restrict antibody-dependent enhancement of dengue virus infection. *PLoS ONE*, **2012**, 7, e34508	3.7	36
61	Functional importance of the D614G mutation in the SARS-CoV-2 spike protein. *Biochemical and Biophysical Research Communications*, **2021**, 538, 108-115	3.4	36
60	IFITM3 polymorphism rs12252-C restricts influenza A viruses. *PLoS ONE*, **2014**, 9, e110096	3.7	35
59	Functional mimicry of a human immunodeficiency virus type 1 coreceptor by a neutralizing monoclonal antibody. *Journal of Virology*, **2005**, 79, 6068-77	6.6	32
58	Mutagenesis and evolution of sulfated antibodies using an expanded genetic code. *Biochemistry*, **2009**, 48, 8891-8	3.2	29
57	Chapter 7. Tyrosine sulfation of HIV-1 coreceptors and other chemokine receptors. *Methods in Enzymology*, **2009**, 461, 147-70	1.7	28

56	Identification of a new region of SARS-CoV S protein critical for viral entry. *Journal of Molecular Biology*, **2009**, 394, 600-5	6.5	26
55	A reversible RNA on-switch that controls gene expression of AAV-delivered therapeutics in vivo. *Nature Biotechnology*, **2020**, 38, 169-175	44.5	26
54	Anti-drug Antibody Responses Impair Prophylaxis Mediated by AAV-Delivered HIV-1 Broadly Neutralizing Antibodies. *Molecular Therapy*, **2019**, 27, 650-660	11.7	25
53	UVRAG is required for virus entry through combinatorial interaction with the class C-Vps complex and SNAREs. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 2716-21	11.5	25
52	Zika Virus-Immune Plasmas from Symptomatic and Asymptomatic Individuals Enhance Zika Pathogenesis in Adult and Pregnant Mice. *MBio*, **2019**, 10,	7.8	23
51	The bis-azo compound FP-21399 inhibits HIV-1 replication by preventing viral entry. *Virology*, **1998**, 244, 530-41	3.6	23
50	Infection of human airway epithelia by SARS coronavirus is associated with ACE2 expression and localization. *Advances in Experimental Medicine and Biology*, **2006**, 581, 479-84	3.6	22
49	Enhanced recognition and neutralization of HIV-1 by antibody-derived CCR5-mimetic peptide variants. *Journal of Virology*, **2012**, 86, 12417-21	6.6	21
48	Potential host range of multiple SARS-like coronaviruses and an improved ACE2-Fc variant that is potent against both SARS-CoV-2 and SARS-CoV-1		21
47	High-Throughput Screening for Drugs That Inhibit Papain-Like Protease in SARS-CoV-2. *SLAS Discovery*, **2020**, 25, 1152-1161	3.4	21
46	SARS-CoV, but not HCoV-NL63, utilizes cathepsins to infect cells: viral entry. *Advances in Experimental Medicine and Biology*, **2006**, 581, 335-8	3.6	21
45	AAV-delivered eCD4-Ig protects rhesus macaques from high-dose SIVmac239 challenges. *Science Translational Medicine*, **2019**, 11,	17.5	20
44	A New World primate deficient in tetherin-mediated restriction of human immunodeficiency virus type 1. *Journal of Virology*, **2009**, 83, 8771-80	6.6	20
43	Mutations derived from horseshoe bat ACE2 orthologs enhance ACE2-Fc neutralization of SARS-CoV-2. *PLoS Pathogens*, **2021**, 17, e1009501	7.6	20
42	Neutralization properties of simian immunodeficiency viruses infecting chimpanzees and gorillas. *MBio*, **2015**, 6,	7.8	19
41	IFITM3 functions as a PIP3 scaffold to amplify PI3K signalling in B cells. *Nature*, **2020**, 588, 491-497	50.4	19
40	A Bispecific Antibody That Simultaneously Recognizes the V2- and V3-Glycan Epitopes of the HIV-1 Envelope Glycoprotein Is Broader and More Potent than Its Parental Antibodies. *MBio*, **2020**, 11,	7.8	19
39	eCD4-Ig promotes ADCC activity of sera from HIV-1-infected patients. *PLoS Pathogens*, **2017**, 13, e1006786	7.6	19

38	Use of murine CXCR-4 as a second receptor by some T-cell-tropic human immunodeficiency viruses. *Journal of Virology*, **1998**, 72, 1652-6	6.6	18
37	A tyrosine-sulfated CCR5-mimetic peptide promotes conformational transitions in the HIV-1 envelope glycoprotein. *Journal of Virology*, **2011**, 85, 7563-71	6.6	17
36	eCD4-Ig Variants That More Potently Neutralize HIV-1. *Journal of Virology*, **2018**, 92,	6.6	16
35	Mutations from bat ACE2 orthologs markedly enhance ACE2-Fc neutralization of SARS-CoV-2 **2020**,		16
34	Insights from the association of SARS-CoV S-protein with its receptor, ACE2. *Advances in Experimental Medicine and Biology*, **2006**, 581, 209-18	3.6	16
33	eCD4-Ig Limits HIV-1 Escape More Effectively than CD4-Ig or a Broadly Neutralizing Antibody. *Journal of Virology*, **2019**, 93,	6.6	15
32	Conditional Regulation of Gene Expression by Ligand-Induced Occlusion of a MicroRNA Target Sequence. *Molecular Therapy*, **2018**, 26, 1277-1286	11.7	15
31	Effect of SARS-CoV-2 spike mutations on animal ACE2 usage and in vitro neutralization sensitivity		15
30	Engineering antibody-like inhibitors to prevent and treat HIV-1 infection. *Current Opinion in HIV and AIDS*, **2017**, 12, 294-301	4.2	14
29	An alternative conformation of the gp41 heptad repeat 1 region coiled coil exists in the human immunodeficiency virus (HIV-1) envelope glycoprotein precursor. *Virology*, **2005**, 338, 133-43	3.6	14
28	Circumventing cellular immunity by miR142-mediated regulation sufficiently supports rAAV-delivered OVA expression without activating humoral immunity. *JCI Insight*, **2019**, 5,	9.9	14
27	A double-mimetic peptide efficiently neutralizes HIV-1 by bridging the CD4- and coreceptor-binding sites of gp120. *Journal of Virology*, **2014**, 88, 3353-8	6.6	13
26	CD4-Induced Antibodies Promote Association of the HIV-1 Envelope Glycoprotein with CD4-Binding Site Antibodies. *Journal of Virology*, **2016**, 90, 7822-32	6.6	13
25	Severe Acute Respiratory Syndrome Coronavirus Entry as a Target of Antiviral Therapies. *Antiviral Therapy*, **2007**, 12, 639-650	1.6	12
24	How SARS-CoV-2 first adapted in humans. *Science*, **2021**, 372, 466-467	33.3	11
23	The SARS Coronavirus receptor ACE 2 A potential target for antiviral therapy **2006**, 397-418		11
22	Interactions between SARS coronavirus and its receptor. *Advances in Experimental Medicine and Biology*, **2006**, 581, 229-34	3.6	11
21	Investigating the mutational landscape of the SARS-CoV-2 Omicron variant via ab initio quantum mechanical modeling		10

20	Diverse pathways of escape from all well-characterized VRC01-class broadly neutralizing HIV-1 antibodies. *PLoS Pathogens*, **2018**, 14, e1007238	7.6	9
19	Direct expression and validation of phage-selected peptide variants in mammalian cells. *Journal of Biological Chemistry*, **2013**, 288, 18803-10	5.4	9
18	Hydroxychloroquine-mediated inhibition of SARS-CoV-2 entry is attenuated by TMPRSS2		8
17	JLK inhibitors: isocoumarin compounds as putative probes to selectively target the gamma-secretase pathway. *Current Alzheimer Research*, **2005**, 2, 327-34	3	6
16	An Engineered Receptor-Binding Domain Improves the Immunogenicity of Multivalent SARS-CoV-2 Vaccines. *MBio*, **2021**, 12,	7.8	6
15	A more efficient CRISPR-Cas12a variant derived from MA2020. *Molecular Therapy - Nucleic Acids*, **2021**, 24, 40-53	10.7	6
14	Identification of potent small molecule inhibitors of SARS-CoV-2 entry.. *SLAS Discovery*, **2021**,	3.4	4
13	An engineered receptor-binding domain improves the immunogenicity of multivalent SARS-CoV-2 vaccines **2020**,		4
12	Riboswitches for Controlled Expression of Therapeutic Transgenes Delivered by Adeno-Associated Viral Vectors. *Pharmaceuticals*, **2021**, 14,	5.2	4
11	Simian Immunodeficiency Virus SIVmac239, but Not SIVmac316, Binds and Utilizes Human CD4 More Efficiently than Rhesus CD4. *Journal of Virology*, **2017**, 91,	6.6	3
10	Anticipating future SARS-CoV-2 variants of concern through ab initio quantum mechanical modeling		2
9	Selection of High-Affinity RNA Aptamers That Distinguish between Doxycycline and Tetracycline. *Biochemistry*, **2020**, 59, 3473-3486	3.2	2
8	Donor Anti-Spike Immunity is Related to Recipient Recovery and Can Predict the Efficacy of Convalescent Plasma Units **2021**,		2
7	AAV vectors engineered to target insulin receptor greatly enhance intramuscular gene delivery. *Molecular Therapy - Methods and Clinical Development*, **2020**, 19, 496-506	6.4	1
6	Predicting the efficacy of COVID-19 convalescent plasma donor units with the Lumit Dx anti-receptor binding domain assay. *PLoS ONE*, **2021**, 16, e0253551	3.7	1
5	A Coreceptor-Mimetic Peptide Enhances the Potency of V3-Glycan Antibodies. *Journal of Virology*, **2019**, 93,	6.6	1
4	Identification of Potent Small Molecule Inhibitors of SARS-CoV-2 Entry		1
3	Angiotensin-Converting Enzyme 2, the Cellular Receptor for Severe Acute Respiratory Syndrome Coronavirus and Human Coronavirus NL63 **2014**, 147-156		

2	Estimation of the in vivo neutralization potency of eCD4Ig and conditions for AAV-mediated production for SHIV long-term remission.. *Science Advances*, **2022**, 8, eabj5666	14.3
1	HIV-1 inhibitory properties of eCD4-Igmim2 determined using an Env-mediated membrane fusion assay. *PLoS ONE*, **2018**, 13, e0206365	3.7