Davide Corti

List of Publications by Citations

121 papers	12,649 citations	55 h-index	112 g-index
129 ext. papers	19,719 ext. citations	27.5 avg, IF	6.53 L-index

#	Paper	IF	Citations
121	Cross-neutralization of SARS-CoV-2 by a human monoclonal SARS-CoV antibody. *Nature*, **2020**, 583, 290-295	50.4	1028
120	A neutralizing antibody selected from plasma cells that binds to group 1 and group 2 influenza A hemagglutinins. *Science*, **2011**, 333, 850-6	33.3	891
119	Mapping Neutralizing and Immunodominant Sites on the SARS-CoV-2 Spike Receptor-Binding Domain by Structure-Guided High-Resolution Serology. *Cell*, **2020**, 183, 1024-1042.e21	56.2	601
118	Specificity, cross-reactivity, and function of antibodies elicited by Zika virus infection. *Science*, **2016**, 353, 823-6	33.3	528
117	Resistance of SARS-CoV-2 variants to neutralization by monoclonal and serum-derived polyclonal antibodies. *Nature Medicine*, **2021**, 27, 717-726	50.5	497
116	Unexpected Receptor Functional Mimicry Elucidates Activation of Coronavirus Fusion. *Cell*, **2019**, 176, 1026-1039.e15	56.2	416
115	N-terminal domain antigenic mapping reveals a site of vulnerability for SARS-CoV-2. *Cell*, **2021**, 184, 2332-2347.e16	56.2	391
114	Sensitivity of SARS-CoV-2 B.1.1.7 to mRNA vaccine-elicited antibodies. *Nature*, **2021**, 593, 136-141	50.4	376
113	Broadly neutralizing antiviral antibodies. *Annual Review of Immunology*, **2013**, 31, 705-42	34.7	351
112	SARS-CoV-2 B.1.617.2 Delta variant replication and immune evasion. *Nature*, **2021**, 599, 114-119	50.4	334
111	Circulating SARS-CoV-2 spike N439K variants maintain fitness while evading antibody-mediated immunity. *Cell*, **2021**, 184, 1171-1187.e20	56.2	331
110	Ultrapotent human antibodies protect against SARS-CoV-2 challenge via multiple mechanisms. *Science*, **2020**, 370, 950-957	33.3	314
109	A perspective on potential antibody-dependent enhancement of SARS-CoV-2. *Nature*, **2020**, 584, 353-363	50.4	289
108	Protective monotherapy against lethal Ebola virus infection by a potently neutralizing antibody. *Science*, **2016**, 351, 1339-42	33.3	280
107	SARS-like WIV1-CoV poised for human emergence. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 3048-53	11.5	279
106	Neutralizing Antibody and Soluble ACE2 Inhibition of a Replication-Competent VSV-SARS-CoV-2 and a Clinical Isolate of SARS-CoV-2. *Cell Host and Microbe*, **2020**, 28, 475-485.e5	23.4	252
105	Structure and Function Analysis of an Antibody Recognizing All Influenza A Subtypes. *Cell*, **2016**, 166, 596-608	56.2	228

104	Rapid development of broadly influenza neutralizing antibodies through redundant mutations. *Nature*, **2014**, 516, 418-22	50.4	219
103	Broadly neutralizing antibodies overcome SARS-CoV-2 Omicron antigenic shift.. *Nature*, **2021**,	50.4	204
102	SARS-CoV-2 immune evasion by the B.1.427/B.1.429 variant of concern. *Science*, **2021**, 373, 648-654	33.3	197
101	Cross-neutralization of four paramyxoviruses by a human monoclonal antibody. *Nature*, **2013**, 501, 439-43	50.4	175
100	Recurrent emergence of SARS-CoV-2 spike deletion H69/V70 and its role in the Alpha variant B.1.1.7. *Cell Reports*, **2021**, 35, 109292	10.6	172
99	Prophylactic and postexposure efficacy of a potent human monoclonal antibody against MERS coronavirus. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 10473-8	11.5	170
98	Spread of a SARS-CoV-2 variant through Europe in the summer of 2020. *Nature*, **2021**, 595, 707-712	50.4	168
97	Clonal dissection of the human memory B-cell repertoire following infection and vaccination. *European Journal of Immunology*, **2009**, 39, 1260-70	6.1	149
96	Emergence and spread of a SARS-CoV-2 variant through Europe in the summer of 2020 **2021**,		142
95	Antibody-based assay discriminates Zika virus infection from other flaviviruses. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 8384-8389	11.5	129
94	Structural basis for potent cross-neutralizing human monoclonal antibody protection against lethal human and zoonotic severe acute respiratory syndrome coronavirus challenge. *Journal of Virology*, **2008**, 82, 3220-35	6.6	128
93	SARS-CoV-2 RBD antibodies that maximize breadth and resistance to escape. *Nature*, **2021**, 597, 97-102	50.4	118
92	Platelet-derived growth factor-receptor is the cellular receptor for human cytomegalovirus gHgLgO trimer. *Nature Microbiology*, **2016**, 1, 16082	26.6	115
91	Tackling COVID-19 with neutralizing monoclonal antibodies. *Cell*, **2021**, 184, 3086-3108	56.2	108
90	Recurrent emergence and transmission of a SARS-CoV-2 spike deletion H69/V70		106
89	A LAIR1 insertion generates broadly reactive antibodies against malaria variant antigens. *Nature*, **2016**, 529, 105-109	50.4	105
88	An infectious SARS-CoV-2 B.1.1.529 Omicron virus escapes neutralization by therapeutic monoclonal antibodies.. *Nature Medicine*, **2022**,	50.5	102
87	Antibody-driven design of a human cytomegalovirus gHgLpUL128L subunit vaccine that selectively elicits potent neutralizing antibodies. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 17965-70	11.5	96

86	Tackling influenza with broadly neutralizing antibodies. *Current Opinion in Virology*, **2017**, 24, 60-69	7.5	95
85	Altered TMPRSS2 usage by SARS-CoV-2 Omicron impacts tropism and fusogenicity.. *Nature*, **2022**,	50.4	95
84	Broad sarbecovirus neutralization by a human monoclonal antibody. *Nature*, **2021**, 597, 103-108	50.4	94
83	In vivo monoclonal antibody efficacy against SARS-CoV-2 variant strains. *Nature*, **2021**, 596, 103-108	50.4	91
82	Structure-guided covalent stabilization of coronavirus spike glycoprotein trimers in the closed conformation. *Nature Structural and Molecular Biology*, **2020**, 27, 942-949	17.6	89
81	A Human Bi-specific Antibody against Zika Virus with High Therapeutic Potential. *Cell*, **2017**, 171, 229-241e15	36.2	85
80	Broad betacoronavirus neutralization by a stem helix-specific human antibody. *Science*, **2021**, 373, 1109-1116	33.3	80
79	Escape from human monoclonal antibody neutralization affects in vitro and in vivo fitness of severe acute respiratory syndrome coronavirus. *Journal of Infectious Diseases*, **2010**, 201, 946-55	7	79
78	The dual function monoclonal antibodies VIR-7831 and VIR-7832 demonstrate potent in vitro and in vivo activity against SARS-CoV-2		72
77	Structural basis of SARS-CoV-2 Omicron immune evasion and receptor engagement.. *Science*, **2022**, 375, eabn8652	33.3	71
76	SARS-CoV-2 B.1.1.7 sensitivity to mRNA vaccine-elicited, convalescent and monoclonal antibodies **2021**,		69
75	After the pandemic: perspectives on the future trajectory of COVID-19. *Nature*, **2021**, 596, 495-504	50.4	68
74	Crystal structure and size-dependent neutralization properties of HK20, a human monoclonal antibody binding to the highly conserved heptad repeat 1 of gp41. *PLoS Pathogens*, **2010**, 6, e1001195	7.6	67
73	Molecular basis of immune evasion by the Delta and Kappa SARS-CoV-2 variants. *Science*, **2021**, eabl8506	33.3	65
72	Lectins enhance SARS-CoV-2 infection and influence neutralizing antibodies. *Nature*, **2021**, 598, 342-347	50.4	63
71	Human monoclonal antibodies by immortalization of memory B cells. *Current Opinion in Biotechnology*, **2007**, 18, 523-8	11.4	62
70	SARS-CoV-2 immune evasion by variant B.1.427/B.1.429 **2021**,		62
69	SARS-CoV-2 B.1.617.2 Delta variant replication, sensitivity to neutralising antibodies and vaccine breakthrough		62

68	Neutralization and clearance of GM-CSF by autoantibodies in pulmonary alveolar proteinosis. *Nature Communications*, **2015**, 6, 7375	17.4	61
67	Influenza hemagglutinin membrane anchor. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 10112-10117	11.5	61
66	The circulating SARS-CoV-2 spike variant N439K maintains fitness while evading antibody-mediated immunity		53
65	Development of broad-spectrum human monoclonal antibodies for rabies post-exposure prophylaxis. *EMBO Molecular Medicine*, **2016**, 8, 407-21	12	51
64	Comparison of Four Serological Methods and Two Reverse Transcription-PCR Assays for Diagnosis and Surveillance of Zika Virus Infection. *Journal of Clinical Microbiology*, **2018**, 56,	9.7	50
63	Persistent Antibody Clonotypes Dominate the Serum Response to Influenza over Multiple Years and Repeated Vaccinations. *Cell Host and Microbe*, **2019**, 25, 367-376.e5	23.4	47
62	Broadly neutralizing antibodies overcome SARS-CoV-2 Omicron antigenic shift. *Nature*,	50.4	44
61	Capsid protein structure in Zika virus reveals the flavivirus assembly process. *Nature Communications*, **2020**, 11, 895	17.4	43
60	Structural and functional analysis of a potent sarbecovirus neutralizing antibody **2020**,		42
59	Structure-based design of a quadrivalent fusion glycoprotein vaccine for human parainfluenza virus types 1-4. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 12265-12270	11.5	41
58	Fc-optimized antibodies elicit CD8 immunity to viral respiratory infection. *Nature*, **2020**, 588, 485-490	50.4	40
57	SARS-CoV-2 variants show resistance to neutralization by many monoclonal and serum-derived polyclonal antibodies **2021**,		39
56	Immune stealth-driven O2 serotype prevalence and potential for therapeutic antibodies against multidrug resistant Klebsiella pneumoniae. *Nature Communications*, **2017**, 8, 1991	17.4	37
55	Antibody-guided vaccine design: identification of protective epitopes. *Current Opinion in Immunology*, **2016**, 41, 62-67	7.8	35
54	Structures of complexes formed by H5 influenza hemagglutinin with a potent broadly neutralizing human monoclonal antibody. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 9430-5	11.5	34
53	N-terminal domain antigenic mapping reveals a site of vulnerability for SARS-CoV-2 **2021**,		34
52	Elicitation of broadly protective sarbecovirus immunity by receptor-binding domain nanoparticle vaccines. *Cell*, **2021**, 184, 5432-5447.e16	56.2	34
51	Structural Basis for Broad HIV-1 Neutralization by the MPER-Specific Human Broadly Neutralizing Antibody LN01. *Cell Host and Microbe*, **2019**, 26, 623-637.e8	23.4	33

50	Molecular basis of immune evasion by the delta and kappa SARS-CoV-2 variants **2021**,		31
49	Efficient Methods To Isolate Human Monoclonal Antibodies from Memory B Cells and Plasma Cells. *Microbiology Spectrum*, **2014**, 2,	8.9	30
48	Risk assessment and seroprevalence of SARS-CoV-2 infection in healthcare workers of COVID-19 and non-COVID-19 hospitals in Southern Switzerland. *Lancet Regional Health - Europe, The*, **2021**, 1, 100013		29
47	Protection of calves by a prefusion-stabilized bovine RSV F vaccine. *Npj Vaccines*, **2017**, 2, 7	9.5	27
46	Antibody-mediated broad sarbecovirus neutralization through ACE2 molecular mimicry.. *Science*, **2022**, 375, eabm8143	33.3	23
45	SARS-CoV-2 Omicron spike mediated immune escape and tropism shift		23
44	An infectious SARS-CoV-2 B.1.1.529 Omicron virus escapes neutralization by therapeutic monoclonal antibodies. **2021**,		22
43	SARS-CoV-2 breakthrough infections elicit potent, broad, and durable neutralizing antibody responses.. *Cell*, **2022**,	56.2	21
42	Anti-LPS antibodies protect against Klebsiella pneumoniae by empowering neutrophil-mediated clearance without neutralizing TLR4. *JCI Insight*, **2017**, 2,	9.9	19
41	Membrane lectins enhance SARS-CoV-2 infection and influence the neutralizing activity of different classes of antibodies		18
40	Broadly neutralizing antibodies overcome SARS-CoV-2 Omicron antigenic shift. **2021**,		16
39	Alternative conformations of a major antigenic site on RSV F. *PLoS Pathogens*, **2019**, 15, e1007944	7.6	15
38	Therapeutic Administration of Broadly Neutralizing FI6 Antibody Reveals Lack of Interaction Between Human IgG1 and Pig Fc Receptors. *Frontiers in Immunology*, **2018**, 9, 865	8.4	14
37	Structural basis for broad sarbecovirus neutralization by a human monoclonal antibody **2021**,		14
36	Structure of the prefusion-locking broadly neutralizing antibody RVC20 bound to the rabies virus glycoprotein. *Nature Communications*, **2020**, 11, 596	17.4	13
35	A human antibody that broadly neutralizes betacoronaviruses protects against SARS-CoV-2 by blocking the fusion machinery		13
34	Neutralizing Antibody and Soluble ACE2 Inhibition of a Replication-Competent VSV-SARS-CoV-2 and a Clinical Isolate of SARS-CoV-2. *SSRN Electronic Journal*, **2020**, 3606354	1	12
33	Antibodies to the SARS-CoV-2 receptor-binding domain that maximize breadth and resistance to viral escape **2021**,		12

32	Structural basis of SARS-CoV-2 Omicron immune evasion and receptor engagement		11
31	An infectious SARS-CoV-2 B.1.1.529 Omicron virus escapes neutralization by several therapeutic monoclonal antibodies		10
30	Neutralizing antibody and soluble ACE2 inhibition of a replication-competent VSV-SARS-CoV-2 and a clinical isolate of SARS-CoV-2 **2020**,		10
29	Predicting the mutational drivers of future SARS-CoV-2 variants of concern.. *Science Translational Medicine*, **2022**, 14, eabk3445	17.5	9
28	Discovery and Characterization of Spike N-Terminal Domain-Binding Aptamers for Rapid SARS-CoV-2 Detection. *Angewandte Chemie - International Edition*, **2021**, 60, 21211-21215	16.4	9
27	Prophylactic efficacy of a human monoclonal antibody against MERS-CoV in the common marmoset. *Antiviral Research*, **2019**, 163, 70-74	10.8	8
26	A SARS-CoV-2 variant elicits an antibody response with a shifted immunodominance hierarchy.. *PLoS Pathogens*, **2022**, 18, e1010248	7.6	7
25	Antibody-mediated broad sarbecovirus neutralization through ACE2 molecular mimicry **2021**,		7
24	Closing coronavirus spike glycoproteins by structure-guided design **2020**,		7
23	A combination of two human monoclonal antibodies cures symptomatic rabies. *EMBO Molecular Medicine*, **2020**, 12, e12628	12	7
22	SARS-CoV-2 spike conformation determines plasma neutralizing activity. **2021**,		6
21	Predicting the mutational drivers of future SARS-CoV-2 variants of concern		6
20	Shifting mutational constraints in the SARS-CoV-2 receptor-binding domain during viral evolution		6
19	A SARS-CoV-2 variant elicits an antibody response with a shifted immunodominance hierarchy **2021** ,		5
18	Imprinted antibody responses against SARS-CoV-2 Omicron sublineages		5
17	AncesTree: An interactive immunoglobulin lineage tree visualizer. *PLoS Computational Biology*, **2020**, 16, e1007731	5	4
16	Exceptionally potent human monoclonal antibodies are effective for prophylaxis and treatment of tetanus in mice. *Journal of Clinical Investigation*, **2021**, 131,	15.9	3
15	Resilience of S309 and AZD7442 monoclonal antibody treatments against infection by SARS-CoV-2 Omicron lineage strains		3

14	Omicron BA.1 and BA.2 neutralizing activity elicited by a comprehensive panel of human vaccines. **2022**,		3
13	ACE2 engagement exposes the fusion peptide to pan-coronavirus neutralizing antibodies		3
12	Structural changes in the SARS-CoV-2 spike E406W mutant escaping a clinical monoclonal antibody cocktail. **2022**,		2
11	Poor neutralization and rapid decay of antibodies to SARS-CoV-2 variants in vaccinated dialysis patients.. *PLoS ONE*, **2022**, 17, e0263328	3.7	2
10	Defective neutralizing antibody response to SARS-CoV-2 in vaccinated dialysis patients		2
9	Structure, receptor recognition and antigenicity of the human coronavirus CCoV-HuPn-2018 spike glycoprotein		2
8	In vivo monoclonal antibody efficacy against SARS-CoV-2 variant strains **2021**,		2
7	Discovery and Characterization of Spike N-Terminal Domain-Binding Aptamers for Rapid SARS-CoV-2 Detection. *Angewandte Chemie*, **2021**, 133, 21381-21385	3.6	1
6	Monoclonal antibodies against rabies: current uses in prophylaxis and in therapy.. *Current Opinion in Virology*, **2022**, 53, 101204	7.5	0
5	Efficient Methods To Isolate Human Monoclonal Antibodies from Memory B Cells and Plasma Cells	129-139	
4	AncesTree: An interactive immunoglobulin lineage tree visualizer **2020**, 16, e1007731		
3	AncesTree: An interactive immunoglobulin lineage tree visualizer **2020**, 16, e1007731		
2	AncesTree: An interactive immunoglobulin lineage tree visualizer **2020**, 16, e1007731		
1	AncesTree: An interactive immunoglobulin lineage tree visualizer **2020**, 16, e1007731		