Antonio Lanzavecchia

List of Publications by Year in Descending Order

120 papers	29,839 citations	61 h-index	126 g-index
126 ext. papers	34,734 ext. citations	24 avg, IF	6.8 L-index

#	Paper	IF	Citations
120	Broadly neutralizing antibodies overcome SARS-CoV-2 Omicron antigenic shift.. *Nature*, **2021**,	50.4	204
119	Broadly neutralizing antibodies overcome SARS-CoV-2 Omicron antigenic shift. **2021**,		16
118	Exceptionally potent human monoclonal antibodies are effective for prophylaxis and treatment of tetanus in mice. *Journal of Clinical Investigation*, **2021**, 131,	15.9	3
117	Structural basis of malaria RIFIN binding by LILRB1-containing antibodies. *Nature*, **2021**, 592, 639-643	50.4	5
116	Sensitivity of SARS-CoV-2 B.1.1.7 to mRNA vaccine-elicited antibodies. *Nature*, **2021**, 593, 136-141	50.4	376
115	A rationally designed oral vaccine induces immunoglobulin A in the murine gut that directs the evolution of attenuated Salmonella variants. *Nature Microbiology*, **2021**, 6, 830-841	26.6	3
114	Clonally expanded EOMES Tr1-like cells in primary and metastatic tumors are associated with disease progression. *Nature Immunology*, **2021**, 22, 735-745	19.1	10
113	Clonal analysis of immunodominance and cross-reactivity of the CD4 T cell response to SARS-CoV-2. *Science*, **2021**, 372, 1336-1341	33.3	33
112	Machine learning analyses of antibody somatic mutations predict immunoglobulin light chain toxicity. *Nature Communications*, **2021**, 12, 3532	17.4	8
111	Structural basis of LAIR1 targeting by polymorphic Plasmodium RIFINs. *Nature Communications*, **2021**, 12, 4226	17.4	
110	Broadly reactive human CD4 T cells against Enterobacteriaceae are found in the naïve repertoire and are clonally expanded in the memory repertoire. *European Journal of Immunology*, **2021**, 51, 648-661	6.1	6
109	Integrated longitudinal immunophenotypic, transcriptional and repertoire analyses delineate immune responses in COVID-19 patients. *Science Immunology*, **2021**, 6,	28	20
108	Lectins enhance SARS-CoV-2 infection and influence neutralizing antibodies. *Nature*, **2021**, 598, 342-347	50.4	63
107	Broad betacoronavirus neutralization by a stem helix-specific human antibody. *Science*, **2021**, 373, 1109-1116	33.3	80
106	SARS-CoV-2 B.1.1.7 sensitivity to mRNA vaccine-elicited, convalescent and monoclonal antibodies **2021**,		69
105	Cross-neutralization of SARS-CoV-2 by a human monoclonal SARS-CoV antibody. *Nature*, **2020**, 583, 290-295	50.4	1028
104	Structural and functional analysis of a potent sarbecovirus neutralizing antibody **2020**,		42

103	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
102	AncesTree: An interactive immunoglobulin lineage tree visualizer. *PLoS Computational Biology*, **2020**, 16, e1007731	5	4
101	Deciphering and predicting CD4+ T cell immunodominance of influenza virus hemagglutinin. *Journal of Experimental Medicine*, **2020**, 217,	16.6	11
100	AncesTree: An interactive immunoglobulin lineage tree visualizer **2020**, 16, e1007731		
99	AncesTree: An interactive immunoglobulin lineage tree visualizer **2020**, 16, e1007731		
98	AncesTree: An interactive immunoglobulin lineage tree visualizer **2020**, 16, e1007731		
97	AncesTree: An interactive immunoglobulin lineage tree visualizer **2020**, 16, e1007731		
96	Unexpected Receptor Functional Mimicry Elucidates Activation of Coronavirus Fusion. *Cell*, **2019**, 176, 1026-1039.e15	56.2	416
95	Incomplete genetic reconstitution of B cell pools contributes to prolonged immunosuppression after measles. *Science Immunology*, **2019**, 4,	28	54
94	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
93	Dissecting human antibody responses: useful, basic and surprising findings. *EMBO Molecular Medicine*, **2018**, 10,	12	13
92	A public antibody lineage that potently inhibits malaria infection through dual binding to the circumsporozoite protein. *Nature Medicine*, **2018**, 24, 401-407	50.5	110
91	Role of B cells in T cell responses in a mouse model of asthma. *Journal of Allergy and Clinical Immunology*, **2018**, 141, 1395-1410	11.5	20
90	An Unbiased Screen for Human Cytomegalovirus Identifies Neuropilin-2 as a Central Viral Receptor. *Cell*, **2018**, 174, 1158-1171.e19	56.2	106
89	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
88	T cells in patients with narcolepsy target self-antigens of hypocretin neurons. *Nature*, **2018**, 562, 63-68	50.4	161
87	Macrophage Death following Influenza Vaccination Initiates the Inflammatory Response that Promotes Dendritic Cell Function in the Draining Lymph Node. *Cell Reports*, **2017**, 18, 2427-2440	10.6	33
86	Social network architecture of human immune cells unveiled by quantitative proteomics. *Nature Immunology*, **2017**, 18, 583-593	19.1	189

85	High-avidity IgA protects the intestine by enchaining growing bacteria. *Nature*, **2017**, 544, 498-502	50.4	196
84	Protection of calves by a prefusion-stabilized bovine RSV F vaccine. *Npj Vaccines*, **2017**, 2, 7	9.5	27
83	Public antibodies to malaria antigens generated by two LAIR1 insertion modalities. *Nature*, **2017**, 548, 597-601	50.4	66
82	Immune stealth-driven O2 serotype prevalence and potential for therapeutic antibodies against multidrug resistant Klebsiella pneumoniae. *Nature Communications*, **2017**, 8, 1991	17.4	37
81	Specificity, cross-reactivity, and function of antibodies elicited by Zika virus infection. *Science*, **2016**, 353, 823-6	33.3	528
80	Structure and Function Analysis of an Antibody Recognizing All Influenza A Subtypes. *Cell*, **2016**, 166, 596-608	56.2	228
79	L-Arginine Modulates T Cell Metabolism and Enhances Survival and Anti-tumor Activity. *Cell*, **2016**, 167, 829-842.e13	56.2	631
78	Antibody-guided vaccine design: identification of protective epitopes. *Current Opinion in Immunology*, **2016**, 41, 62-67	7.8	35
77	Protective monotherapy against lethal Ebola virus infection by a potently neutralizing antibody. *Science*, **2016**, 351, 1339-42	33.3	280
76	Structural and molecular basis for Ebola virus neutralization by protective human antibodies. *Science*, **2016**, 351, 1343-6	33.3	134
75	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
74	A LAIR1 insertion generates broadly reactive antibodies against malaria variant antigens. *Nature*, **2016**, 529, 105-109	50.4	105
73	Development of broad-spectrum human monoclonal antibodies for rabies post-exposure prophylaxis. *EMBO Molecular Medicine*, **2016**, 8, 407-21	12	51
72	Rapid generation of a human monoclonal antibody to combat Middle East respiratory syndrome. *Journal of Infection and Public Health*, **2016**, 9, 231-5	7.4	33
71	ERK phosphorylation and miR-181a expression modulate activation of human memory TH17 cells. *Nature Communications*, **2015**, 6, 6431	17.4	26
70	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
69	A SARS-like cluster of circulating bat coronaviruses shows potential for human emergence. *Nature Medicine*, **2015**, 21, 1508-13	50.5	529
68	T cell immunity. Functional heterogeneity of human memory CD4+ T cell clones primed by pathogens or vaccines. *Science*, **2015**, 347, 400-6	33.3	233

67	Serum Immunoglobulin A Cross-Strain Blockade of Human Noroviruses. *Open Forum Infectious Diseases*, **2015**, 2, ofv084	1	23
66	Neutralization and clearance of GM-CSF by autoantibodies in pulmonary alveolar proteinosis. *Nature Communications*, **2015**, 6, 7375	17.4	61
65	Within-host evolution results in antigenically distinct GII.4 noroviruses. *Journal of Virology*, **2014**, 88, 7244-55	6.6	48
64	Rapid development of broadly influenza neutralizing antibodies through redundant mutations. *Nature*, **2014**, 516, 418-22	50.4	219
63	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
62	Particle conformation regulates antibody access to a conserved GII.4 norovirus blockade epitope. *Journal of Virology*, **2014**, 88, 8826-42	6.6	41
61	Cross-neutralization of four paramyxoviruses by a human monoclonal antibody. *Nature*, **2013**, 501, 439-43	50.4	175
60	Pathogen-induced human TH17 cells produce IFN-γ or IL-10 and are regulated by IL-1β. *Nature*, **2012**, 484, 514-8	50.4	664
59	Pemphigus autoantibodies generated through somatic mutations target the desmoglein-3 cis-interface. *Journal of Clinical Investigation*, **2012**, 122, 3781-90	15.9	112
58	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
57	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
56	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
55	Human monoclonal antibodies by immortalization of memory B cells. *Current Opinion in Biotechnology*, **2007**, 18, 523-8	11.4	62
54	Surface phenotype and antigenic specificity of human interleukin 17-producing T helper memory cells. *Nature Immunology*, **2007**, 8, 639-46	19.1	1437
53	An efficient method to make human monoclonal antibodies from memory B cells: potent neutralization of SARS coronavirus. *Nature Medicine*, **2004**, 10, 871-5	50.5	563
52	Maintenance of serological memory by polyclonal activation of human memory B cells. *Science*, **2002**, 298, 2199-202	33.3	1046
51	Cholera toxin induces maturation of human dendritic cells and licences them for Th2 priming. *European Journal of Immunology*, **2000**, 30, 2394-403	6.1	261
50	Dendritic cell maturation is induced by mycoplasma infection but not by necrotic cells. *European Journal of Immunology*, **2000**, 30, 705-8	6.1	80

49	The role of chemokine receptors in primary, effector, and memory immune responses. *Annual Review of Immunology*, **2000**, 18, 593-620	34.7	891
48	Dendritic cell maturation is induced by mycoplasma infection but not by necrotic cells **2000**, 30, 705		4
47	Plasmacytoid monocytes migrate to inflamed lymph nodes and produce large amounts of type I interferon. *Nature Medicine*, **1999**, 5, 919-23	50.5	1387
46	Two subsets of memory T lymphocytes with distinct homing potentials and effector functions. *Nature*, **1999**, 402, 34-38	50.4	16
45	T-cell activation and the dynamic world of rafts. *Apmis*, **1999**, 107, 615-23	3.4	32
44	Two subsets of memory T lymphocytes with distinct homing potentials and effector functions. *Nature*, **1999**, 401, 708-12	50.4	4728
43	Distinct patterns and kinetics of chemokine production regulate dendritic cell function. *European Journal of Immunology*, **1999**, 29, 1617-25	6.1	549
42	Dendritic cells up-regulate immunoproteasomes and the proteasome regulator PA28 during maturation. *European Journal of Immunology*, **1999**, 29, 4037-42	6.1	156
41	The interplay between the duration of TCR and cytokine signaling determines T cell polarization. *European Journal of Immunology*, **1999**, 29, 4092-101	6.1	155
40	T lymphocyte costimulation mediated by reorganization of membrane microdomains. *Science*, **1999** , 283, 680-2	33.3	850
39	Distinct patterns and kinetics of chemokine production regulate dendritic cell function **1999**, 29, 1617		1
38	The interplay between the duration of TCR and cytokine signaling determines T cell polarization **1999**, 29, 4092		8
37	Rapid and coordinated switch in chemokine receptor expression during dendritic cell maturation. *European Journal of Immunology*, **1998**, 28, 2760-9	6.1	949
36	Re-expression of RAG-1 and RAG-2 genes and evidence for secondary rearrangements in human germinal center B lymphocytes. *European Journal of Immunology*, **1998**, 28, 3506-13	6.1	46
35	Rapid and coordinated switch in chemokine receptor expression during dendritic cell maturation **1998**, 28, 2760		2
34	Selective expression of the eotaxin receptor CCR3 by human T helper 2 cells. *Science*, **1997**, 277, 2005-7	33.3	916
33	Inflammatory stimuli induce accumulation of MHC class II complexes on dendritic cells. *Nature*, **1997**, 388, 782-7	50.4	911
32	Agonist-induced T cell receptor down-regulation: molecular requirements and dissociation from T cell activation. *European Journal of Immunology*, **1997**, 27, 1769-73	6.1	55

31	The mannose receptor functions as a high capacity and broad specificity antigen receptor in human dendritic cells. *European Journal of Immunology*, **1997**, 27, 2417-25	6.1	330
30	A T cell receptor (TCR) antagonist competitively inhibits serial TCR triggering by low-affinity ligands, but does not affect triggering by high-affinity anti-CD3 antibodies. *European Journal of Immunology*, **1997**, 27, 3080-3	6.1	19
29	Signal extinction and T cell repolarization in T helper cell-antigen-presenting cell conjugates. *European Journal of Immunology*, **1996**, 26, 2012-6	6.1	61
28	Serial triggering of many T-cell receptors by a few peptide-MHC complexes. *Nature*, **1995**, 375, 148-51	50.4	961
27	CD40 ligand-independent B cell activation revealed by CD40 ligand-deficient T cell clones: evidence for distinct activation requirements for antibody formation and B cell proliferation. *European Journal of Immunology*, **1995**, 25, 1788-93	6.1	57
26	Professional presentation of antigen by activated human T cells. *European Journal of Immunology*, **1994**, 24, 71-5	6.1	95
25	Clonal expansions of V delta 1+ and V delta 2+ cells increase with age and limit the repertoire of human gamma delta T cells. *European Journal of Immunology*, **1994**, 24, 1914-8	6.1	52
24	T cell epitope analysis with peptides simultaneously synthesized on cellulose membranes: fine mapping of two DQ dependent epitopes. *FEBS Letters*, **1994**, 352, 167-70	3.8	20
23	Presentation of self-peptides: consequences for self nonself discrimination and allorecognition. *International Reviews of Immunology*, **1993**, 10, 321-6	4.6	
22	The set of naturally processed peptides displayed by DR molecules is tuned by polymorphism of residue 86. *European Journal of Immunology*, **1993**, 23, 425-32	6.1	102
21	Role of cAMP in regulating cytotoxic T lymphocyte adhesion and motility. *European Journal of Immunology*, **1993**, 23, 790-5	6.1	45
20	Irreversible association of peptides with class II MHC molecules in living cells. *Nature*, **1992**, 357, 249-52	50.4	156
19	T cell clones with normal or defective O-galactosylation from a patient with permanent mixed-field polyagglutinability. *European Journal of Immunology*, **1992**, 22, 1835-42	6.1	28
18	Activated human T cells express a ligand for the human B cell-associated antigen CD40 which participates in T cell-dependent activation of B lymphocytes. *European Journal of Immunology*, **1992**, 22, 2573-8	6.1	276
17	T cell activation by a bispecific anti-CD3/anti-major histocompatibility complex class I antibody. *European Journal of Immunology*, **1990**, 20, 1393-6	6.1	9
16	How many ways can a killer cell kill?. *International Reviews of Immunology*, **1989**, 4, 109-14	4.6	
15	Universally immunogenic T cell epitopes: promiscuous binding to human MHC class II and promiscuous recognition by T cells. *European Journal of Immunology*, **1989**, 19, 2237-42	6.1	631
14	In vivo localization of a bispecific antibody which targets human T lymphocytes to lyse human colon cancer cells. *International Journal of Cancer*, **1989**, 43, 501-7	7.5	21

13	T cells can present antigens such as HIV gp120 targeted to their own surface molecules. *Nature*, **1988**, 334, 530-2	50.4	278
12	The use of hybrid hybridomas to target human cytotoxic T lymphocytes. *European Journal of Immunology*, **1987**, 17, 105-11	6.1	180
11	Lysis of nonnucleated red blood cells by cytotoxic T lymphocytes. *European Journal of Immunology*, **1987**, 17, 1073-4	6.1	14
10	Antigen uptake and accumulation in antigen-specific B cells. *Immunological Reviews*, **1987**, 99, 39-51	11.3	136
9	Is the T-cell receptor involved in T-cell killing?. *Nature*, **1986**, 319, 778-80	50.4	60
8	Antigen-specific interaction between T and B cells. *Nature*, **1985**, 314, 537-9	50.4	1198
7	Broadly neutralizing antibodies overcome SARS-CoV-2 Omicron antigenic shift. *Nature*,	50.4	44
6	Defective neutralizing antibody response to SARS-CoV-2 in vaccinated dialysis patients		2
5	Structure, receptor recognition and antigenicity of the human coronavirus CCoV-HuPn-2018 spike glycoprotein		2
4	Membrane lectins enhance SARS-CoV-2 infection and influence the neutralizing activity of different classes of antibodies		18
3	A human antibody that broadly neutralizes betacoronaviruses protects against SARS-CoV-2 by blocking the fusion machinery		13
2	ACE2 engagement exposes the fusion peptide to pan-coronavirus neutralizing antibodies		3
1	Imprinted antibody responses against SARS-CoV-2 Omicron sublineages		5