Christophe Benoist

List of Publications by Citations

124 papers	23,988 citations	71 h-index	132 g-index
132 ext. papers	28,456 ext. citations	21.3 avg, IF	6.76 L-index

#	Paper	IF	Citations
124	Projection of an immunological self shadow within the thymus by the aire protein. *Science*, **2002**, 298, 1395-401	33.3	1841
123	Lean, but not obese, fat is enriched for a unique population of regulatory T cells that affect metabolic parameters. *Nature Medicine*, **2009**, 15, 930-9	50.5	1479
122	The Immunological Genome Project: networks of gene expression in immune cells. *Nature Immunology*, **2008**, 9, 1091-4	19.1	1098
121	The Human Cell Atlas. *ELife*, **2017**, 6,	8.9	937
120	FOXP3 controls regulatory T cell function through cooperation with NFAT. *Cell*, **2006**, 126, 375-87	56.2	878
119	Mice lacking MHC class II molecules. *Cell*, **1991**, 66, 1051-66	56.2	798
118	PPAR-γ is a major driver of the accumulation and phenotype of adipose tissue Treg cells. *Nature*, **2012**, 486, 549-53	50.4	762
117	Organ-specific disease provoked by systemic autoimmunity. *Cell*, **1996**, 87, 811-22	56.2	731
116	beta-Cell death during progression to diabetes. *Nature*, **2001**, 414, 792-8	50.4	725
115	A special population of regulatory T cells potentiates muscle repair. *Cell*, **2013**, 155, 1282-95	56.2	693
114	Mast cells: a cellular link between autoantibodies and inflammatory arthritis. *Science*, **2002**, 297, 1689-92	33.3	642
113	From systemic T cell self-reactivity to organ-specific autoimmune disease via immunoglobulins. *Immunity*, **1999**, 10, 451-61	32.3	572
112	Arthritis critically dependent on innate immune system players. *Immunity*, **2002**, 16, 157-68	32.3	564
111	Stability of the regulatory T cell lineage in vivo. *Science*, **2010**, 329, 1667-71	33.3	514
110	The cellular mechanism of Aire control of T cell tolerance. *Immunity*, **2005**, 23, 227-39	32.3	494
109	MUCOSAL IMMUNOLOGY. Individual intestinal symbionts induce a distinct population of RORγ+ regulatory T cells. *Science*, **2015**, 349, 993-7	33.3	487
108	Foxp3 transcription-factor-dependent and -independent regulation of the regulatory T cell transcriptional signature. *Immunity*, **2007**, 27, 786-800	32.3	474

107	Treg cells expressing the coinhibitory molecule TIGIT selectively inhibit proinflammatory Th1 and Th17 cell responses. *Immunity*, **2014**, 40, 569-81	32.3	456
106	Foxp3+ regulatory T cells: differentiation, specification, subphenotypes. *Nature Immunology*, **2009**, 10, 689-95	19.1	403
105	Mining the Human Gut Microbiota for Immunomodulatory Organisms. *Cell*, **2017**, 168, 928-943.e11	56.2	356
104	Autoimmunity provoked by infection: how good is the case for T cell epitope mimicry?. *Nature Immunology*, **2001**, 2, 797-801	19.1	319
103	Tissue Tregs. *Annual Review of Immunology*, **2016**, 34, 609-33	34.7	305
102	Critical roles for interleukin 1 and tumor necrosis factor alpha in antibody-induced arthritis. *Journal of Experimental Medicine*, **2002**, 196, 77-85	16.6	278
101	Microbial bile acid metabolites modulate gut RORregulatory T cell homeostasis. *Nature*, **2020**, 577, 410-415	50.4	278
100	Immune tolerance. Regulatory T cells generated early in life play a distinct role in maintaining self-tolerance. *Science*, **2015**, 348, 589-94	33.3	272
99	Poor Repair of Skeletal Muscle in Aging Mice Reflects a Defect in Local, Interleukin-33-Dependent Accumulation of Regulatory T Cells. *Immunity*, **2016**, 44, 355-67	32.3	256
98	Regulatory T cells in nonlymphoid tissues. *Nature Immunology*, **2013**, 14, 1007-13	19.1	247
97	Antigen- and cytokine-driven accumulation of regulatory T cells in visceral adipose tissue of lean mice. *Cell Metabolism*, **2015**, 21, 543-57	24.6	237
96	Mast cells in autoimmune disease. *Nature*, **2002**, 420, 875-8	50.4	237
95	Identifying species of symbiont bacteria from the human gut that, alone, can induce intestinal Th17 cells in mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E8141-E8150	11.5	230
94	A multiply redundant genetic switch locks inthe transcriptional signature of regulatory T cells. *Nature Immunology*, **2012**, 13, 972-80	19.1	205
93	Single-cell gene expression reveals a landscape of regulatory T cell phenotypes shaped by the TCR. *Nature Immunology*, **2018**, 19, 291-301	19.1	203
92	The role of CD8+ T cells in the initiation of insulin-dependent diabetes mellitus. *European Journal of Immunology*, **1996**, 26, 1762-9	6.1	194
91	Major histocompatibility complex class I molecules are required for the development of insulitis in non-obese diabetic mice. *European Journal of Immunology*, **1993**, 23, 3358-60	6.1	185
90	Genomic definition of multiple ex vivo regulatory T cell subphenotypes. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 5919-24	11.5	180

89	Modifier loci condition autoimmunity provoked by Aire deficiency. *Journal of Experimental Medicine* , **2005**, 202, 805-15	16.6	177
88	How punctual ablation of regulatory T cells unleashes an autoimmune lesion within the pancreatic islets. *Immunity*, **2009**, 31, 654-64	32.3	176
87	Intersection of population variation and autoimmunity genetics in human T cell activation. *Science*, **2014**, 345, 1254665	33.3	175
86	Genetic inversion in mast cell-deficient (Wsh) mice interrupts corin and manifests as hematopoietic and cardiac aberrancy. *American Journal of Pathology*, **2008**, 173, 1693-701	5.8	171
85	The cis-Regulatory Atlas of the Mouse Immune System. *Cell*, **2019**, 176, 897-912.e20	56.2	161
84	Particularities of the vasculature can promote the organ specificity of autoimmune attack. *Nature Immunology*, **2006**, 7, 284-92	19.1	152
83	Parsing the Interferon Transcriptional Network and Its Disease Associations. *Cell*, **2016**, 164, 564-78	56.2	151
82	Adaptation of TCR repertoires to self-peptides in regulatory and nonregulatory CD4+ T cells. *Journal of Immunology*, **2007**, 178, 7032-41	5.3	151
81	Mast cells contribute to initiation of autoantibody-mediated arthritis via IL-1. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 2325-30	11.5	144
80	Aire unleashes stalled RNA polymerase to induce ectopic gene expression in thymic epithelial cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 535-40	11.5	139
79	An Intestinal Organ Culture System Uncovers a Role for the Nervous System in Microbe-Immune Crosstalk. *Cell*, **2017**, 168, 1135-1148.e12	56.2	127
78	Neonatal tolerance revisited: a perinatal window for Aire control of autoimmunity. *Journal of Experimental Medicine*, **2009**, 206, 1245-52	16.6	125
77	Aire controls gene expression in the thymic epithelium with ordered stochasticity. *Nature Immunology*, **2015**, 16, 942-9	19.1	121
76	The immune system involvement in obesity-driven type 2 diabetes. *Seminars in Immunology*, **2012**, 24, 436-42	10.7	116
75	Appearance and disappearance of the mRNA signature characteristic of Treg cells in visceral adipose tissue: age, diet, and PPAR effects. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 482-7	11.5	115
74	Endoscopic photoconversion reveals unexpectedly broad leukocyte trafficking to and from the gut. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 6696-701	11.5	106
73	Structure of a domain-swapped FOXP3 dimer on DNA and its function in regulatory T cells. *Immunity*, **2011**, 34, 479-91	32.3	106
72	Regulatory T cells control NK cells in an insulitic lesion by depriving them of IL-2. *Journal of Experimental Medicine*, **2013**, 210, 1153-65	16.6	105

71	Tissular T(regs): a unique population of adipose-tissue-resident Foxp3+CD4+ T cells that impacts organismal metabolism. *Seminars in Immunology*, **2011**, 23, 431-7	10.7	99
70	Distinct immunocyte-promoting and adipocyte-generating stromal components coordinate adipose tissue immune and metabolic tenors. *Science Immunology*, **2019**, 4,	28	98
69	Noninvasive mapping of pancreatic inflammation in recent-onset type-1 diabetes patients. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 2139-44	11.5	98
68	TCR Transgenic Mice Reveal Stepwise, Multi-site Acquisition of the Distinctive Fat-Treg Phenotype. *Cell*, **2018**, 174, 285-299.e12	56.2	96
67	Treg cells, life history, and diversity. *Cold Spring Harbor Perspectives in Biology*, **2012**, 4, a007021	10.2	94
66	The role of antibodies in mouse models of rheumatoid arthritis, and relevance to human disease. *Advances in Immunology*, **2004**, 82, 217-48	5.6	91
65	, a long noncoding RNA, modulates Foxp3 expression and autoimmunity. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E3472-E3480	11.5	89
64	An N-terminal mutation of the Foxp3 transcription factor alleviates arthritis but exacerbates diabetes. *Immunity*, **2012**, 36, 731-41	32.3	87
63	Neutrophils in a mouse model of autoantibody-mediated arthritis: critical producers of Fc receptor gamma, the receptor for C5a, and lymphocyte function-associated antigen 1. *Arthritis and Rheumatism*, **2010**, 62, 753-64		81
62	Interindividual variation in human T regulatory cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, E1111-20	11.5	80
61	Nuclear receptor Nr4a1 modulates both regulatory T-cell (Treg) differentiation and clonal deletion. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 3891-6	11.5	80
60	Molecular diversification of regulatory T cells in nonlymphoid tissues. *Science Immunology*, **2018**, 3,	28	78
59	Early window of diabetes determinism in NOD mice, dependent on the complement receptor CRIg, identified by noninvasive imaging. *Nature Immunology*, **2012**, 13, 361-8	19.1	77
58	Inflammatory arthritis can be reined in by CpG-induced DC-NK cell cross talk. *Journal of Experimental Medicine*, **2007**, 204, 1911-22	16.6	76
57	Genetic determinants of co-accessible chromatin regions in activated T cells across humans. *Nature Genetics*, **2018**, 50, 1140-1150	36.3	74
56	Different molecular complexes that mediate transcriptional induction and repression by FoxP3. *Nature Immunology*, **2017**, 18, 1238-1248	19.1	74
55	The K/BxN mouse model of inflammatory arthritis: theory and practice. *Methods in Molecular Medicine*, **2007**, 136, 269-82		72
54	Identification and validation of a tumor-infiltrating Treg transcriptional signature conserved across species and tumor types. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E10672-E10681	11.5	72

53	T cells limit IFN-γ production to control macrophage accrual and phenotype during skeletal muscle regeneration. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E2585-E2593	11.5	69
52	Fibroblast Growth Factor 21 (FGF21) Protects against High Fat Diet Induced Inflammation and Islet Hyperplasia in Pancreas. *PLoS ONE*, **2016**, 11, e0148252	3.7	69
51	The transcriptional regulator Aire binds to and activates super-enhancers. *Nature Immunology*, **2017**, 18, 263-273	19.1	64
50	Population dynamics of islet-infiltrating cells in autoimmune diabetes. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 1511-6	11.5	61
49	Convergent and divergent effects of costimulatory molecules in conventional and regulatory CD4+ T cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 1023-8	11.5	56
48	Singular role for T-BET+CXCR3+ regulatory T cells in protection from autoimmune diabetes. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 14103-14108	11.5	54
47	Epigenetic modulation of type-1 diabetes via a dual effect on pancreatic macrophages and β cells. *ELife*, **2014**, 3, e04631	8.9	53
46	Protective major histocompatibility complex allele prevents type 1 diabetes by shaping the intestinal microbiota early in ontogeny. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 9671-9676	11.5	48
45	An Immunologic Mode of Multigenerational Transmission Governs a Gut Treg Setpoint. *Cell*, **2020**, 181, 1276-1290.e13	56.2	46
44	Global relevance of Aire binding to hypomethylated lysine-4 of histone-3. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 13016-21	11.5	45
43	A plaidoyer for Systems immunology*Immunological Reviews*, **2006**, 210, 229-34	11.3	45
42	Single-cell mass cytometry of TCR signaling: amplification of small initial differences results in low ERK activation in NOD mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 16466-71	11.5	44
41	Network pharmacology of JAK inhibitors. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 9852-7	11.5	44
40	Imbalanced signal transduction in regulatory T cells expressing the transcription factor FoxP3. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 14942-7	11.5	42
39	ImmVar project: Insights and design considerations for future studies of "healthy" immune variation. *Seminars in Immunology*, **2015**, 27, 51-7	10.7	39
38	Denervation protects limbs from inflammatory arthritis via an impact on the microvasculature. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 11419-24	11.5	38
37	Fluorescent exendin-4 derivatives for pancreatic β cell analysis. *Bioconjugate Chemistry*, **2014**, 25, 171-7	6.3	35
36	Brd4 bridges the transcriptional regulators, Aire and P-TEFb, to promote elongation of peripheral-tissue antigen transcripts in thymic stromal cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E4448-57	11.5	34

35	Gut CD4 T cell phenotypes are a continuum molded by microbes, not by T archetypes. *Nature Immunology*, **2021**, 22, 216-228	19.1	34
34	A pharmacogenetic study implicates SLC9a9 in multiple sclerosis disease activity. *Annals of Neurology*, **2015**, 78, 115-27	9.4	33
33	Aire Inhibits the Generation of a Perinatal Population of Interleukin-17A-Producing □T Cells to Promote Immunologic Tolerance. *Immunity*, **2016**, 45, 999-1012	32.3	33
32	Genomic responses to inflammation in mouse models mimic humans: we concur, apples to oranges comparisons won□ do. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E346	11.5	33
31	Imaging the emergence and natural progression of spontaneous autoimmune diabetes. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E7776-E7785	11.5	31
30	Variation and genetic control of gene expression in primary immunocytes across inbred mouse strains. *Journal of Immunology*, **2014**, 193, 4485-96	5.3	28
29	Developmental and cellular age direct conversion of CD4+ T cells into RORγ or Helios+ colon Treg cells. *Journal of Experimental Medicine*, **2020**, 217,	16.6	28
28	Immunology. Flow cytometry, amped up. *Science*, **2011**, 332, 677-8	33.3	27
27	Profound Treg perturbations correlate with COVID-19 severity. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	24
26	Unstable FoxP3+ T regulatory cells in NZW mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 1345-50	11.5	20
25	Circulating C3 is necessary and sufficient for induction of autoantibody-mediated arthritis in a mouse model. *Arthritis and Rheumatism*, **2007**, 56, 2968-74		19
24	Interleukin-6 produced by enteric neurons regulates the number and phenotype of microbe-responsive regulatory T□cells in the gut. *Immunity*, **2021**, 54, 499-513.e5	32.3	19
23	T cell receptor specificity drives accumulation of a reparative population of regulatory T cells within acutely injured skeletal muscle. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**,	11.5	18
22	T cell anergy in perinatal mice is promoted by T reg cells and prevented by IL-33. *Journal of Experimental Medicine*, **2019**, 216, 1328-1344	16.6	17
21	The NF-B RelA Transcription Factor Is Critical for Regulatory T Cell Activation and Stability. *Frontiers in Immunology*, **2019**, 10, 2487	8.4	17
20	Neuronal, stromal, and T-regulatory cell crosstalk in murine skeletal muscle. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 5402-5408	11.5	14
19	FoxP3 scanning mutagenesis reveals functional variegation and mild mutations with atypical autoimmune phenotypes. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E253-E262	11.5	14
18	Deep learning of immune cell differentiation. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 25655-25666	11.5	13

17	Rapid, high efficiency isolation of pancreatic β cells. *Scientific Reports*, **2015**, 5, 13681	4.9	12
16	The neuropeptide neuromedin U promotes autoantibody-mediated arthritis. *Arthritis Research and Therapy*, **2012**, 14, R29	5.7	11
15	Profound Treg perturbations correlate with COVID-19 severity **2020**,		11
14	Interferon-β producing plasmacytoid dendritic cells drive the loss of adipose tissue regulatory T cells during obesity. *Cell Metabolism*, **2021**, 33, 1610-1623.e5	24.6	9
13	CD4 teff cell heterogeneity: the perspective from single-cell transcriptomics. *Current Opinion in Immunology*, **2020**, 63, 61-67	7.8	7
12	Discovery of surrogate agonists for visceral fat Treg cells that modulate metabolic indices in vivo. *ELife*, **2020**, 9,	8.9	7
11	PPARγ marks splenic precursors of multiple nonlymphoid-tissue Treg compartments. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	6
10	Single-cell analysis of FOXP3 deficiencies in humans and mice unmasks intrinsic and extrinsic CD4 T cell perturbations. *Nature Immunology*, **2021**, 22, 607-619	19.1	6
9	Yes, it does. *Nature Reviews Immunology*, **2007**, 7, 1-1	36.5	5
8	Allelic variation in class I HLA determines CD8 T cell repertoire shape and cross-reactive memory responses to SARS-CoV-2. *Science Immunology*, **2021**, eabk3070	28	4
7	Aire regulates chromatin looping by evicting CTCF from domain boundaries and favoring accumulation of cohesin on superenhancers. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	3
6	A combination of cyclophosphamide and interleukin-2 allows CD4+ T cells converted to Tregs to control scurfy syndrome. *Blood*, **2021**, 137, 2326-2336	2.2	2
5	Promiscuity Promotes Tolerance. *Journal of Immunology*, **2016**, 196, 2913-4	5.3	1
4	Single cell analysis of FOXP3 deficiencies in humans and mice unmasks intrinsic and extrinsic CD4+ T cell perturbations		1
3	The ImmGen consortium OpenSource T cell project.. *Nature Immunology*, **2022**,	19.1	0
2	FoxP3 associates with enhancer-promoter loops to regulate T-specific gene expression.. *Science Immunology*, **2022**, 7, eabj9836	28	0
1	O3-04-05: EXPRESSION QTL ANALYSIS FROM PRIMARY IMMUNE CELLS IDENTIFIES NOVEL REGULATORY EFFECTS UNDERLYING ALZHEIMER'S DISEASE SUSCEPTIBILITY **2014**, 10, P216-P216		