Ruslan Medzhitov

List of Publications by Citations

125 papers	68,031 citations	70 h-index	138 g-index
138 ext. papers	76,898 ext. citations	26.7 avg, IF	8.6 L-index

#	Paper	IF	Citations
125	Innate immune recognition. *Annual Review of Immunology*, **2002**, 20, 197-216	34.7	5854
124	Recognition of double-stranded RNA and activation of NF-kappaB by Toll-like receptor 3. *Nature*, **2001**, 413, 732-8	50.4	4755
123	A human homologue of the Drosophila Toll protein signals activation of adaptive immunity. *Nature*, **1997**, 388, 394-7	50.4	4204
122	Origin and physiological roles of inflammation. *Nature*, **2008**, 454, 428-35	50.4	3569
121	Toll-like receptor control of the adaptive immune responses. *Nature Immunology*, **2004**, 5, 987-95	19.1	3232
120	Recognition of commensal microflora by toll-like receptors is required for intestinal homeostasis. *Cell*, **2004**, 118, 229-41	56.2	3222
119	Toll-like receptors and innate immunity. *Nature Reviews Immunology*, **2001**, 1, 135-45	36.5	3047
118	Innate immunity: the virtues of a nonclonal system of recognition. *Cell*, **1997**, 91, 295-8	56.2	1904
117	Recognition of microorganisms and activation of the immune response. *Nature*, **2007**, 449, 819-26	50.4	1894
116	Toll pathway-dependent blockade of CD4+CD25+ T cell-mediated suppression by dendritic cells. *Science*, **2003**, 299, 1033-6	33.3	1763
115	Decoding the patterns of self and nonself by the innate immune system. *Science*, **2002**, 296, 298-300	33.3	1635
114	Regulation of adaptive immunity by the innate immune system. *Science*, **2010**, 327, 291-5	33.3	1447
113	Functional polarization of tumour-associated macrophages by tumour-derived lactic acid. *Nature*, **2014**, 513, 559-63	50.4	1318
112	MyD88 is an adaptor protein in the hToll/IL-1 receptor family signaling pathways. *Molecular Cell*, **1998**, 2, 253-8	17.6	1275
111	Toll-like receptors control activation of adaptive immune responses. *Nature Immunology*, **2001**, 2, 947-50	19.1	1164
110	IRAK-M is a negative regulator of Toll-like receptor signaling. *Cell*, **2002**, 110, 191-202	56.2	1148
109	Regulation of lung injury and repair by Toll-like receptors and hyaluronan. *Nature Medicine*, **2005**, 11, 1173-9	50.5	1133

108	Control of adaptive immunity by the innate immune system. *Nature Immunology*, **2015**, 16, 343-53	19.1	1078
107	Innate immune recognition: mechanisms and pathways. *Immunological Reviews*, **2000**, 173, 89-97	11.3	1067
106	Toll-like receptor signaling pathways. *Science*, **2003**, 300, 1524-5	33.3	1032
105	Disease tolerance as a defense strategy. *Science*, **2012**, 335, 936-41	33.3	1016
104	The microbial metabolite butyrate regulates intestinal macrophage function via histone deacetylase inhibition. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 2247-52	11.5	987
103	Toll-like receptor 9-mediated recognition of Herpes simplex virus-2 by plasmacytoid dendritic cells. *Journal of Experimental Medicine*, **2003**, 198, 513-20	16.6	968
102	Gene-specific control of inflammation by TLR-induced chromatin modifications. *Nature*, **2007**, 447, 972-8	50.4	915
101	Inflammation 2010: new adventures of an old flame. *Cell*, **2010**, 140, 771-6	56.2	909
100	Longitudinal analyses reveal immunological misfiring in severe COVID-19. *Nature*, **2020**, 584, 463-469	50.4	901
99	TIRAP: an adapter molecule in the Toll signaling pathway. *Nature Immunology*, **2001**, 2, 835-41	19.1	809
98	Recognition of cytosolic DNA activates an IRF3-dependent innate immune response. *Immunity*, **2006**, 24, 93-103	32.3	777
97	Transcriptional control of the inflammatory response. *Nature Reviews Immunology*, **2009**, 9, 692-703	36.5	749
96	A mechanism for the initiation of allergen-induced T helper type 2 responses. *Nature Immunology*, **2008**, 9, 310-8	19.1	719
95	The adaptor molecule TIRAP provides signalling specificity for Toll-like receptors. *Nature*, **2002**, 420, 329-33	50.4	684
94	Toll-like receptors and cancer. *Nature Reviews Cancer*, **2009**, 9, 57-63	31.3	664
93	Toll-dependent selection of microbial antigens for presentation by dendritic cells. *Nature*, **2006**, 440, 808-12	50.4	643
92	Structural basis for signal transduction by the Toll/interleukin-1 receptor domains. *Nature*, **2000**, 408, 111-5	50.4	613
91	Homeostasis, inflammation, and disease susceptibility. *Cell*, **2015**, 160, 816-827	56.2	596

90	Anti-inflammatory effect of IL-10 mediated by metabolic reprogramming of macrophages. *Science*, **2017**, 356, 513-519	33.3	574
89	Tissue-specific signals control reversible program of localization and functional polarization of macrophages. *Cell*, **2014**, 157, 832-44	56.2	572
88	Pattern recognition receptors and control of adaptive immunity. *Immunological Reviews*, **2009**, 227, 221-33	11.3	519
87	Control of inducible gene expression by signal-dependent transcriptional elongation. *Cell*, **2009**, 138, 129-45	56.2	518
86	Recognition of microbial infection by Toll-like receptors. *Current Opinion in Immunology*, **2003**, 15, 396-401	7.8	466
85	Cutting edge: MyD88 is required for resistance to Toxoplasma gondii infection and regulates parasite-induced IL-12 production by dendritic cells. *Journal of Immunology*, **2002**, 168, 5997-6001	5.3	393
84	Stress, inflammation, and defense of homeostasis. *Molecular Cell*, **2014**, 54, 281-8	17.6	381
83	Hyporesponsiveness to vaccination with Borrelia burgdorferi OspA in humans and in TLR1- and TLR2-deficient mice. *Nature Medicine*, **2002**, 8, 878-84	50.5	356
82	Tissue biology perspective on macrophages. *Nature Immunology*, **2016**, 17, 9-17	19.1	351
81	Toll-dependent control mechanisms of CD4 T cell activation. *Immunity*, **2004**, 21, 733-41	32.3	317
80	Control of T helper 2 responses by transcription factor IRF4-dependent dendritic cells. *Immunity*, **2013**, 39, 722-32	32.3	307
79	Control of adaptive immune responses by Toll-like receptors. *Current Opinion in Immunology*, **2002**, 14, 380-3	7.8	287
78	Opposing Effects of Fasting Metabolism on Tissue Tolerance in Bacterial and Viral Inflammation. *Cell*, **2016**, 166, 1512-1525.e12	56.2	286
77	Allergic host defences. *Nature*, **2012**, 484, 465-72	50.4	270
76	Harnessing innate immunity in cancer therapy. *Nature*, **2019**, 574, 45-56	50.4	254
75	Approaching the asymptote: 20 years later. *Immunity*, **2009**, 30, 766-75	32.3	246
74	Evolution of inflammatory diseases. *Current Biology*, **2012**, 22, R733-40	6.3	214
73	Recognition of CpG DNA is mediated by signaling pathways dependent on the adaptor protein MyD88. *Current Biology*, **2000**, 10, 1139-42	6.3	204

72	A Yersinia effector protein promotes virulence by preventing inflammasome recognition of the type III secretion system. *Cell Host and Microbe*, **2010**, 7, 376-87	23.4	201
71	Role of tissue protection in lethal respiratory viral-bacterial coinfection. *Science*, **2013**, 340, 1230-4	33.3	191
70	The control of adaptive immune responses by the innate immune system. *Advances in Immunology*, **2011**, 109, 87-124	5.6	180
69	Toll-like receptors and acquired immunity. *Seminars in Immunology*, **2004**, 16, 23-6	10.7	161
68	GDF15 Is an Inflammation-Induced Central Mediator of Tissue Tolerance. *Cell*, **2019**, 178, 1231-1244.e11	56.2	160
67	An evolutionary perspective on immunometabolism. *Science*, **2019**, 363,	33.3	160
66	Gene-specific control of the TLR-induced inflammatory response. *Clinical Immunology*, **2009**, 130, 7-15	9	159
65	Circuit Design Features of a Stable Two-Cell System. *Cell*, **2018**, 172, 744-757.e17	56.2	143
64	Bee venom phospholipase A2 induces a primary type 2 response that is dependent on the receptor ST2 and confers protective immunity. *Immunity*, **2013**, 39, 976-85	32.3	141
63	Inflammation-dependent cerebrospinal fluid hypersecretion by the choroid plexus epithelium in posthemorrhagic hydrocephalus. *Nature Medicine*, **2017**, 23, 997-1003	50.5	140
62	Macrophages monitor tissue osmolarity and induce inflammatory response through NLRP3 and NLRC4 inflammasome activation. *Nature Communications*, **2015**, 6, 6931	17.4	122
61	Influenza virus-induced glucocorticoids compromise innate host defense against a secondary bacterial infection. *Cell Host and Microbe*, **2010**, 7, 103-14	23.4	120
60	Toll-like receptors: balancing host resistance with immune tolerance. *Current Opinion in Immunology*, **2003**, 15, 677-82	7.8	113
59	MyD88 signalling in colonic mononuclear phagocytes drives colitis in IL-10-deficient mice. *Nature Communications*, **2012**, 3, 1120	17.4	105
58	T cell-intrinsic role of IL-6 signaling in primary and memory responses. *ELife*, **2014**, 3, e01949	8.9	93
57	Signaling through the adaptor molecule MyD88 in CD4+ T cells is required to overcome suppression by regulatory T cells. *Immunity*, **2014**, 40, 78-90	32.3	77
56	Highlights of 10 years of immunology in Nature Reviews Immunology. *Nature Reviews Immunology*, **2011**, 11, 693-702	36.5	75
55	TLR-mediated innate immune recognition. *Seminars in Immunology*, **2007**, 19, 1-2	10.7	70

54	The Effect of Sustained Inflammation on Hepatic Mevalonate Pathway Results in Hyperglycemia. *Cell*, **2016**, 165, 343-56	56.2	68
53	Evolutionary perspective on innate immune recognition. *Journal of Cell Biology*, **2001**, 155, 705-10	7.3	66
52	Analysis of gene-environment interactions in postnatal development of the mammalian intestine. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 1929-36	11.5	63
51	Intrinsic sensor of oncogenic transformation induces a signal for innate immunosurveillance. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 1686-91	11.5	63
50	Food Fight: Role of Itaconate and Other Metabolites in Antimicrobial Defense. *Cell Metabolism*, **2016**, 24, 379-387	24.6	62
49	Reduced secretion of YopJ by Yersinia limits in vivo cell death but enhances bacterial virulence. *PLoS Pathogens*, **2008**, 4, e1000067	7.6	62
48	Role of caspase-1 in regulation of triglyceride metabolism. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 4810-5	11.5	56
47	Innate immunity: quo vadis?. *Nature Immunology*, **2010**, 11, 551-3	19.1	53
46	Emerging Principles of Gene Expression Programs and Their Regulation. *Molecular Cell*, **2018**, 71, 389-397	17.6	43
45	A role for the ITAM signaling module in specifying cytokine-receptor functions. *Nature Immunology*, **2014**, 15, 333-42	19.1	39
44	Pattern recognition theory and the launch of modern innate immunity. *Journal of Immunology*, **2013**, 191, 4473-4	5.3	39
43	Investigate the origins of COVID-19. *Science*, **2021**, 372, 694	33.3	39
42	Two-signal requirement for growth-promoting function of Yap in hepatocytes. *ELife*, **2015**, 4,	8.9	38
41	Glucose metabolism mediates disease tolerance in cerebral malaria. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 11042-11047	11.5	36
40	Damage control in host-pathogen interactions. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 15525-6	11.5	35
39	Role of ITAM signaling module in signal integration. *Current Opinion in Immunology*, **2012**, 24, 58-66	7.8	34
38	Long-Term Programming of CD8 T Cell Immunity by Perinatal Exposure to Glucocorticoids. *Cell*, **2020**, 180, 847-861.e15	56.2	32
37	Principles of Cell Circuits for Tissue Repair and Fibrosis. *IScience*, **2020**, 23, 100841	6.1	30

36	Specific sequences of infectious challenge lead to secondary hemophagocytic lymphohistiocytosis-like disease in mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 2200-2209	11.5	26
35	The origins of tumor-promoting inflammation. *Cancer Cell*, **2013**, 24, 143-4	24.3	26
34	Signaling pathways activated by a protease allergen in basophils. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, E4963-71	11.5	26
33	T cells regulate the intestinal response to nutrient sensing. *Science*, **2021**, 371,	33.3	26
32	Tissue Homeostasis and Inflammation. *Annual Review of Immunology*, **2021**, 39, 557-581	34.7	26
31	Integrated innate mechanisms involved in airway allergic inflammation to the serine protease subtilisin. *Journal of Immunology*, **2015**, 194, 4621-30	5.3	25
30	Functional categories of immune inhibitory receptors. *Nature Reviews Immunology*, **2020**, 20, 771-780	36.5	24
29	Endocytosis as a stabilizing mechanism for tissue homeostasis. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E1926-E1935	11.5	24
28	Septic shock: on the importance of being tolerant. *Immunity*, **2013**, 39, 799-800	32.3	19
27	HIV immunology needs a new direction. *Nature*, **2008**, 455, 591	50.4	19
26	Infection and inflammation in somatic maintenance, growth and longevity. *Evolutionary Applications*, **2009**, 2, 132-41	4.8	18
25	Food allergy as a biological food quality control system. *Cell*, **2021**, 184, 1440-1454	56.2	18
24	Desynchronization of the molecular clock contributes to the heterogeneity of the inflammatory response. *Science Signaling*, **2019**, 12,	8.8	17
23	Mitochondrial protein Fus1/Tusc2 in premature aging and age-related pathologies: critical roles of calcium and energy homeostasis. *Aging*, **2017**, 9, 627-649	5.6	15
22	Counting Calories: The Cost of Inflammation. *Cell*, **2019**, 177, 223-224	56.2	14
21	Vitamin B12 and folic acid alleviate symptoms of nutritional deficiency by antagonizing aryl hydrocarbon receptor. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 15837-15845	11.5	14
20	Adiponectin and related C1q/TNF-related proteins bind selectively to anionic phospholipids and sphingolipids. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 17381-17388	11.5	14
19	Longitudinal immunological analyses reveal inflammatory misfiring in severe COVID-19 patients		14

18	Reply to Toll-like receptors and phagosome maturation *Nature Immunology*, **2007**, 8, 217-218	19.1	13
17	Control strategies in systemic metabolism. *Nature Metabolism*, **2019**, 1, 947-957	14.6	12
16	The spectrum of inflammatory responses. *Science*, **2021**, 374, 1070-1075	33.3	10
15	Wormhole Travel for Macrophages. *Cell*, **2016**, 165, 518-9	56.2	9
14	Bringing Warburg to lymphocytes. *Nature Reviews Immunology*, **2015**, 15, 598	36.5	6
13	How the immune system spots tumors. *ELife*, **2014**, 3, e04476	8.9	6
12	Tissue remodeling by an opportunistic pathogen triggers allergic inflammation.. *Immunity*, **2022**,	32.3	4
11	Control of infection by pyroptosis and autophagy: role of TLR and NLR **2010**, 67, 1643		3
10	RUNX Binding Sites Are Enriched in Herpesvirus Genomes, and RUNX1 Overexpression Leads to Herpes Simplex Virus 1 Suppression. *Journal of Virology*, **2020**, 94,	6.6	3
9	Hepatic FGF21 preserves thermoregulation and cardiovascular function during bacterial inflammation. *Journal of Experimental Medicine*, **2021**, 218,	16.6	3
8	Not the usual suspect: type I interferon-responsive T cells drive infection-induced cachexia. *Nature Immunology*, **2019**, 20, 666-667	19.1	2
7	Fly immunity: great expectations. *Genome Biology*, **2000**, 1, REVIEWS106	18.3	2
6	Principles of Cell Circuits for Tissue Repair and Fibrosis		2
5	GENE EXPRESSION. Unwinding inducible gene expression. *Science*, **2016**, 352, 1058-9	33.3	2
4	Honor thy Go(na)ds. *Immunology and Cell Biology*, **2013**, 91, 597-8	5	1
3	Toll-Like Receptors and Control of Adaptive Immunity271-285		1
2	Role of toll-like receptor ommensal interactions in intestinal inflammation. *International Congress Series*, **2005**, 1285, 3-9		
1	Untangling iNKT Cell Function in Adipose Tissue Homeostasis. *Cell Metabolism*, **2020**, 32, 148-149	24.6	