

Maxim N Artyomov

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2937692/publications.pdf>

Version: 2024-02-01

114
papers

22,180
citations

20817

60
h-index

20961

115
g-index

132
all docs

132
docs citations

132
times ranked

36156
citing authors

#	ARTICLE	IF	CITATIONS
1	Checkpoint blockade cancer immunotherapy targets tumour-specific mutant antigens. <i>Nature</i> , 2014, 515, 577-581.	27.8	1,705
2	Network Integration of Parallel Metabolic and Transcriptional Data Reveals Metabolic Modules that Regulate Macrophage Polarization. <i>Immunity</i> , 2015, 42, 419-430.	14.3	1,423
3	Itaconate Links Inhibition of Succinate Dehydrogenase with Macrophage Metabolic Remodeling and Regulation of Inflammation. <i>Cell Metabolism</i> , 2016, 24, 158-166.	16.2	944
4	Distinct patterns of somatic genome alterations in lung adenocarcinomas and squamous cell carcinomas. <i>Nature Genetics</i> , 2016, 48, 607-616.	21.4	933
5	TLR-driven early glycolytic reprogramming via the kinases TBK1-IRF3 supports the anabolic demands of dendritic cell activation. <i>Nature Immunology</i> , 2014, 15, 323-332.	14.5	861
6	Cell-intrinsic lysosomal lipolysis is essential for alternative activation of macrophages. <i>Nature Immunology</i> , 2014, 15, 846-855.	14.5	856
7	TREM2 Maintains Microglial Metabolic Fitness in Alzheimer's Disease. <i>Cell</i> , 2017, 170, 649-663.e13.	28.9	741
8	Human and mouse single-nucleus transcriptomics reveal TREM2-dependent and TREM2-independent cellular responses in Alzheimer's disease. <i>Nature Medicine</i> , 2020, 26, 131-142.	30.7	641
9	MHC-II neoantigens shape tumour immunity and response to immunotherapy. <i>Nature</i> , 2019, 574, 696-701.	27.8	563
10	Tumor neoantigens: building a framework for personalized cancer immunotherapy. <i>Journal of Clinical Investigation</i> , 2015, 125, 3413-3421.	8.2	502
11	Tissue-resident natural killer (NK) cells are cell lineages distinct from thymic and conventional splenic NK cells. <i>ELife</i> , 2014, 3, e01659.	6.0	478
12	Electrophilic properties of itaconate and derivatives regulate the IRF3-ATF3 inflammatory axis. <i>Nature</i> , 2018, 556, 501-504.	27.8	438
13	Tissue Resident CCR2 ^{hi} and CCR2 ⁺ Cardiac Macrophages Differentially Orchestrate Monocyte Recruitment and Fate Specification Following Myocardial Injury. <i>Circulation Research</i> , 2019, 124, 263-278.	4.5	424
14	Polyreactivity increases the apparent affinity of anti-HIV antibodies by heterologation. <i>Nature</i> , 2010, 467, 591-595.	27.8	393
15	The microbial metabolite desaminotyrosine protects from influenza through type I interferon. <i>Science</i> , 2017, 357, 498-502.	12.6	391
16	Commensal microbes and interferon- γ determine persistence of enteric murine norovirus infection. <i>Science</i> , 2015, 347, 266-269.	12.6	386
17	T cell sensing of antigen dose governs interactive behavior with dendritic cells and sets a threshold for T cell activation. <i>Nature Immunology</i> , 2008, 9, 282-291.	14.5	375
18	Itaconate: the poster child of metabolic reprogramming in macrophage function. <i>Nature Reviews Immunology</i> , 2019, 19, 273-281.	22.7	359

#	ARTICLE	IF	CITATIONS
19	TREM2 Modulation Remodels the Tumor Myeloid Landscape Enhancing Anti-PD-1 Immunotherapy. <i>Cell</i> , 2020, 182, 886-900.e17.	28.9	309
20	Interferon- γ cures persistent murine norovirus infection in the absence of adaptive immunity. <i>Science</i> , 2015, 347, 269-273.	12.6	308
21	High-Dimensional Analysis Delineates Myeloid and Lymphoid Compartment Remodeling during Successful Immune-Checkpoint Cancer Therapy. <i>Cell</i> , 2018, 175, 1014-1030.e19.	28.9	292
22	Transcriptome Analysis Reveals Nonfoamy Rather Than Foamy Plaque Macrophages Are Proinflammatory in Atherosclerotic Murine Models. <i>Circulation Research</i> , 2018, 123, 1127-1142.	4.5	275
23	Comprehensive Profiling of an Aging Immune System Reveals Clonal GZMK+ CD8+ T Cells as Conserved Hallmark of Inflammaging. <i>Immunity</i> , 2021, 54, 99-115.e12.	14.3	258
24	Dietary Intake Regulates the Circulating Inflammatory Monocyte Pool. <i>Cell</i> , 2019, 178, 1102-1114.e17.	28.9	254
25	Type 1 Interferons Induce Changes in Core Metabolism that Are Critical for Immune Function. <i>Immunity</i> , 2016, 44, 1325-1336.	14.3	248
26	Heterogeneity of meningeal B cells reveals a lymphopoietic niche at the CNS borders. <i>Science</i> , 2021, 373, .	12.6	218
27	Mitochondrial Phosphoenolpyruvate Carboxykinase Regulates Metabolic Adaptation and Enables Glucose-Independent Tumor Growth. <i>Molecular Cell</i> , 2015, 60, 195-207.	9.7	200
28	An Immunocompetent Mouse Model of Zika Virus Infection. <i>Cell Host and Microbe</i> , 2018, 23, 672-685.e6.	11.0	192
29	γ expression in myeloid cells prevents immunopathology during <i>M. tuberculosis</i> infection. <i>Journal of Experimental Medicine</i> , 2018, 215, 1035-1045.	8.5	190
30	Methionine Metabolism Shapes T Helper Cell Responses through Regulation of Epigenetic Reprogramming. <i>Cell Metabolism</i> , 2020, 31, 250-266.e9.	16.2	182
31	Systematic Discovery of TLR Signaling Components Delineates Viral-Sensing Circuits. <i>Cell</i> , 2011, 147, 853-867.	28.9	177
32	CD4 and CD8 binding to MHC molecules primarily acts to enhance Lck delivery. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 16916-16921.	7.1	167
33	Dynamic Shifts in the Composition of Resident and Recruited Macrophages Influence Tissue Remodeling in NASH. <i>Cell Reports</i> , 2021, 34, 108626.	6.4	164
34	Comparative evaluation of itaconate and its derivatives reveals divergent inflammasome and type I interferon regulation in macrophages. <i>Nature Metabolism</i> , 2020, 2, 594-602.	11.9	163
35	Gata6 regulates aspartoacylase expression in resident peritoneal macrophages and controls their survival. <i>Journal of Experimental Medicine</i> , 2014, 211, 1525-1531.	8.5	159
36	Selective removal of astrocytic APOE4 strongly protects against tau-mediated neurodegeneration and decreases synaptic phagocytosis by microglia. <i>Neuron</i> , 2021, 109, 1657-1674.e7.	8.1	151

#	ARTICLE	IF	CITATIONS
37	Subsets of ILC3 ⁺ ILC1-like cells generate a diversity spectrum of innate lymphoid cells in human mucosal tissues. <i>Nature Immunology</i> , 2019, 20, 980-991.	14.5	141
38	Integrating immunometabolism and macrophage diversity. <i>Seminars in Immunology</i> , 2016, 28, 417-424.	5.6	137
39	Immune ageing at single-cell resolution. <i>Nature Reviews Immunology</i> , 2022, 22, 484-498.	22.7	128
40	Single-cell transcriptomics reveals cell-type-specific diversification in human heart failure. , 2022, 1, 263-280.		124
41	Deep Sequencing of the Murine <i>Igh</i> Repertoire Reveals Complex Regulation of Nonrandom V Gene Rearrangement Frequencies. <i>Journal of Immunology</i> , 2013, 191, 2393-2402.	0.8	120
42	Caloric restriction in humans reveals immunometabolic regulators of health span. <i>Science</i> , 2022, 375, 671-677.	12.6	118
43	Immunometabolism in the Single-Cell Era. <i>Cell Metabolism</i> , 2020, 32, 710-725.	16.2	116
44	Limited proliferation capacity of aortic intima resident macrophages requires monocyte recruitment for atherosclerotic plaque progression. <i>Nature Immunology</i> , 2020, 21, 1194-1204.	14.5	115
45	Purely stochastic binary decisions in cell signaling models without underlying deterministic bistabilities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 18958-18963.	7.1	109
46	Ketogenesis activates metabolically protective β T cells in visceral adipose tissue. <i>Nature Metabolism</i> , 2020, 2, 50-61.	11.9	107
47	Itaconate confers tolerance to late NLRP3 inflammasome activation. <i>Cell Reports</i> , 2021, 34, 108756.	6.4	105
48	Defining the Transcriptional and Cellular Landscape of Type 1 Diabetes in the NOD Mouse. <i>PLoS ONE</i> , 2013, 8, e59701.	2.5	101
49	Targeting dendritic cells to accelerate T-cell activation overcomes a bottleneck in tuberculosis vaccine efficacy. <i>Nature Communications</i> , 2016, 7, 13894.	12.8	100
50	The Intestinal Microbiome Restricts Alphavirus Infection and Dissemination through a Bile Acid-Type I IFN Signaling Axis. <i>Cell</i> , 2020, 182, 901-918.e18.	28.9	98
51	The immune landscape in tuberculosis reveals populations linked to disease and latency. <i>Cell Host and Microbe</i> , 2021, 29, 165-178.e8.	11.0	98
52	Single-cell analyses of Crohn's disease tissues reveal intestinal intraepithelial T cells heterogeneity and altered subset distributions. <i>Nature Communications</i> , 2021, 12, 1921.	12.8	96
53	Bhlhe40 is an essential repressor of IL-10 during <i>Mycobacterium tuberculosis</i> infection. <i>Journal of Experimental Medicine</i> , 2018, 215, 1823-1838.	8.5	95
54	<i>Toxoplasma gondii</i> infection drives conversion of NK cells into ILC1-like cells. <i>ELife</i> , 2019, 8, .	6.0	91

#	ARTICLE	IF	CITATIONS
55	Mycobacterium tuberculosis carrying a rifampicin drug resistance mutation reprograms macrophage metabolism through cell wall lipid changes. <i>Nature Microbiology</i> , 2018, 3, 1099-1108.	13.3	90
56	The islet-resident macrophage is in an inflammatory state and senses microbial products in blood. <i>Journal of Experimental Medicine</i> , 2017, 214, 2369-2385.	8.5	89
57	Endogenous Neoantigen-Specific CD8 T Cells Identified in Two Glioblastoma Models Using a Cancer Immunogenomics Approach. <i>Cancer Immunology Research</i> , 2016, 4, 1007-1015.	3.4	84
58	Homeostatic Control of Innate Lung Inflammation by Vici Syndrome Gene Epg5 and Additional Autophagy Genes Promotes Influenza Pathogenesis. <i>Cell Host and Microbe</i> , 2016, 19, 102-113.	11.0	83
59	Interferon lambda protects the female reproductive tract against Zika virus infection. <i>Nature Communications</i> , 2019, 10, 280.	12.8	83
60	GAM: a web-service for integrated transcriptional and metabolic network analysis. <i>Nucleic Acids Research</i> , 2016, 44, W194-W200.	14.5	81
61	IL-1 α -induced Bhlhe40 identifies pathogenic T helper cells in a model of autoimmune neuroinflammation. <i>Journal of Experimental Medicine</i> , 2016, 213, 251-271.	8.5	81
62	Complete deconvolution of cellular mixtures based on linearity of transcriptional signatures. <i>Nature Communications</i> , 2019, 10, 2209.	12.8	74
63	Opposing Roles of Dendritic Cell Subsets in Experimental GN. <i>Journal of the American Society of Nephrology: JASN</i> , 2018, 29, 138-154.	6.1	65
64	Single-cell RNA-seq analysis of human CSF microglia and myeloid cells in neuroinflammation. <i>Neurology: Neuroimmunology and NeuroInflammation</i> , 2020, 7, .	6.0	65
65	End Sequence Analysis Toolkit (ESAT) expands the extractable information from single-cell RNA-seq data. <i>Genome Research</i> , 2016, 26, 1397-1410.	5.5	63
66	Bhlhe40 mediates tissue-specific control of macrophage proliferation in homeostasis and type 2 immunity. <i>Nature Immunology</i> , 2019, 20, 687-700.	14.5	62
67	Radiation-induced neoantigens broaden the immunotherapeutic window of cancers with low mutational loads. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	62
68	The miR-17 \sim 92 microRNA Cluster Is a Global Regulator of Tumor Metabolism. <i>Cell Reports</i> , 2016, 16, 1915-1928.	6.4	58
69	Overexpressing low-density lipoprotein receptor reduces tau-associated neurodegeneration in relation to apoE-linked mechanisms. <i>Neuron</i> , 2021, 109, 2413-2426.e7.	8.1	57
70	Myocardial B cells are a subset of circulating lymphocytes with delayed transit through the heart. <i>JCI Insight</i> , 2020, 5, .	5.0	57
71	Autophagy Genes Enhance Murine Gammaherpesvirus 68 Reactivation from Latency by Preventing Virus-Induced Systemic Inflammation. <i>Cell Host and Microbe</i> , 2016, 19, 91-101.	11.0	56
72	ImmGen at 15. <i>Nature Immunology</i> , 2020, 21, 700-703.	14.5	55

#	ARTICLE	IF	CITATIONS
73	Unifying model for molecular determinants of the preselection VÎ² repertoire. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E3206-15.	7.1	50
74	Detection of neoantigen-specific T cells following a personalized vaccine in a patient with glioblastoma. Oncoimmunology, 2019, 8, e1561106.	4.6	50
75	In Vivo Imaging of T Cell PrimingA presentation from the 11th Joint Meeting of the Signal Transduction Society (STS), Signal Transduction: Receptors, Mediators and Genes, Weimar, Germany, 1 to 3 November 2007.. Science Signaling, 2008, 1, pt2.	3.6	49
76	A Model for Genetic and Epigenetic Regulatory Networks Identifies Rare Pathways for Transcription Factor Induced Pluripotency. PLoS Computational Biology, 2010, 6, e1000785.	3.2	49
77	Modular expression analysis reveals functional conservation between human Langerhans cells and mouse cross-priming dendritic cells. Journal of Experimental Medicine, 2015, 212, 743-757.	8.5	46
78	Interleukin-17 limits hypoxia-inducible factor 1Î± and development of hypoxic granulomas during tuberculosis. JCI Insight, 2017, 2, .	5.0	45
79	IL-33 causes thermogenic failure in aging by expanding dysfunctional adipose ILC2. Cell Metabolism, 2021, 33, 2277-2287.e5.	16.2	42
80	Ketogenic diet restrains aging-induced exacerbation of coronavirus infection in mice. ELife, 2021, 10, .	6.0	37
81	Select autophagy genes maintain quiescence of tissue-resident macrophages and increase susceptibility to Listeria monocytogenes. Nature Microbiology, 2020, 5, 272-281.	13.3	36
82	Autophagy genes in myeloid cells counteract IFNÎ³-induced TNF-mediated cell death and fatal TNF-induced shock. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 16497-16506.	7.1	35
83	Comparing the Biological Impact of Glatiramer Acetate with the Biological Impact of a Generic. PLoS ONE, 2014, 9, e83757.	2.5	35
84	LKB1 expressed in dendritic cells governs the development and expansion of thymus-derived regulatory T cells. Cell Research, 2019, 29, 406-419.	12.0	34
85	Cancer immunogenomic approach to neoantigen discovery in a checkpoint blockade responsive murine model of oral cavity squamous cell carcinoma. Oncotarget, 2018, 9, 4109-4119.	1.8	34
86	Barrier-to-Autointegration Factor 1 Protects against a Basal cGAS-STING Response. MBio, 2020, 11, .	4.1	33
87	Coreceptor affinity for MHC defines peptide specificity requirements for TCR interaction with coagonist peptideâ€MHC. Journal of Experimental Medicine, 2013, 210, 1807-1821.	8.5	32
88	Non-canonical glutamine transamination sustains efferocytosis by coupling redox buffering to oxidative phosphorylation. Nature Metabolism, 2021, 3, 1313-1326.	11.9	31
89	Enhanced epigenetic profiling of classical human monocytes reveals a specific signature of healthy aging in the DNA methylome. Nature Aging, 2021, 1, 124-141.	11.6	30
90	Myeloid cell interferon responses correlate with clearance of SARS-CoV-2. Nature Communications, 2022, 13, 679.	12.8	30

#	ARTICLE	IF	CITATIONS
91	Structural basis for human respiratory syncytial virus NS1-mediated modulation of host responses. <i>Nature Microbiology</i> , 2017, 2, 17101.	13.3	29
92	Interaction of Streptavidin-Based Peptide-MHC Oligomers (Tetramers) with Cell-Surface TCRs. <i>Journal of Immunology</i> , 2011, 187, 6281-6290.	0.8	28
93	Homeostatic interferon-lambda response to bacterial microbiota stimulates preemptive antiviral defense within discrete pockets of intestinal epithelium. <i>ELife</i> , 2022, 11, .	6.0	25
94	Targeted Chromatin Profiling Reveals Novel Enhancers in Ig H and Ig L Chain Loci. <i>Journal of Immunology</i> , 2014, 192, 1064-1070.	0.8	23
95	Cellular and plasma proteomic determinants of COVID-19 and non-COVID-19 pulmonary diseases relative to healthy aging. <i>Nature Aging</i> , 2021, 1, 535-549.	11.6	22
96	<i>Mycobacterium tuberculosis</i> infection drives a type I IFN signature in lung lymphocytes. <i>Cell Reports</i> , 2022, 39, 110983.	6.4	20
97	STING Gain-of-Function Disrupts Lymph Node Organogenesis and Innate Lymphoid Cell Development in Mice. <i>Cell Reports</i> , 2020, 31, 107771.	6.4	18
98	Lattice models of ionic systems with charge asymmetry. <i>Journal of Chemical Physics</i> , 2003, 118, 6394-6402.	3.0	16
99	A sustained type I IFN-neutrophil-IL-18 axis drives pathology during mucosal viral infection. <i>ELife</i> , 2021, 10, .	6.0	15
100	Compressible models of equilibrium polymerization. <i>Journal of Chemical Physics</i> , 2005, 123, 194906.	3.0	14
101	Tonic TCR Signaling Inversely Regulates the Basal Metabolism of CD4 ⁺ T Cells. <i>ImmunoHorizons</i> , 2020, 4, 485-497.	1.8	14
102	Regulation of olfactomedin 4 by <i>Porphyromonas gingivalis</i> in a community context. <i>ISME Journal</i> , 2021, 15, 2627-2642.	9.8	12
103	Microbiome-mediated incapacitation of interferon lambda production in the oral mucosa. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	12
104	Defining the 5 ^h , and 3 ^h , landscape of the <i>Drosophila</i> transcriptome with Exo-seq and RNaseH-seq. <i>Nucleic Acids Research</i> , 2017, 45, e95-e95.	14.5	11
105	CD11c ⁺ CD88 ⁺ CD317 ⁺ myeloid cells are critical mediators of persistent CNS autoimmunity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	11
106	Lung Epithelial Signaling Mediates Early Vaccine-Induced CD4 ⁺ T Cell Activation and <i>Mycobacterium tuberculosis</i> Control. <i>MBio</i> , 2021, 12, e0146821.	4.1	11
107	Altered ratio of dendritic cell subsets in skin-draining lymph nodes promotes Th2-driven contact hypersensitivity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	7
108	Requisite Chromatin Remodeling for Myeloid and Erythroid Lineage Differentiation from Erythromyeloid Progenitors. <i>Cell Reports</i> , 2020, 33, 108395.	6.4	6

#	ARTICLE	IF	CITATIONS
109	Loss of Mir146b with aging contributes to inflammation and mitochondrial dysfunction in thioglycollate-elicited peritoneal macrophages. ELife, 2021, 10, .	6.0	6
110	Semi-supervised peak calling with SPAN and JBR genome browser. Bioinformatics, 2021, , .	4.1	4
111	An Agonistic Anti-CD137 Antibody Disrupts Lymphoid Follicle Structure and T-Cell-Dependent Antibody Responses. Cell Reports Medicine, 2020, 1, 100035.	6.5	3
112	Shiny GATOM: omics-based identification of regulated metabolic modules in atom transition networks. Nucleic Acids Research, 2022, 50, W690-W696.	14.5	3
113	FARM. , 2021, , .		0
114	SPAN and JBR. , 2021, , .		0