Janko Nikolich-Zugich

List of Publications by Year
in descending order

134	10,355	36303	37204
papers	citations	51 h-index	96 g-index

149	149	149	15126
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The twilight of immunity: emerging concepts in aging of the immune system. Nature Immunology, 2018, 19, 10-19.	14.5	708
2	The many important facets of T-cell repertoire diversity. Nature Reviews Immunology, 2004, 4, 123-132.	22.7	568
3	SARS-CoV-2 and COVID-19 in older adults: what we may expect regarding pathogenesis, immune responses, and outcomes. GeroScience, 2020, 42, 505-514.	4.6	404
4	Ageing and life-long maintenance of T-cell subsets in the face of latent persistent infections. Nature Reviews Immunology, 2008, 8, 512-522.	22.7	391
5	MIFlowCyt: The minimum information about a flow cytometry experiment. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2008, 73A, 926-930.	1.5	381
6	Direct Link Between mhc Polymorphism, T Cell Avidity, and Diversity in Immune Defense. Science, 2002, 298, 1797-1800.	12.6	304
7	Orthogonal SARS-CoV-2 Serological Assays Enable Surveillance of Low-Prevalence Communities and Reveal Durable Humoral Immunity. Immunity, 2020, 53, 925-933.e4.	14.3	301
8	Aging and Cytomegalovirus Infection Differentially and Jointly Affect Distinct Circulating T Cell Subsets in Humans. Journal of Immunology, 2014, 192, 2143-2155.	0.8	297
9	IRF-3, IRF-5, and IRF-7 Coordinately Regulate the Type I IFN Response in Myeloid Dendritic Cells Downstream of MAVS Signaling. PLoS Pathogens, 2013, 9, e1003118.	4.7	270
10	Age-related CD8 T Cell Clonal Expansions Constrict CD8 T Cell Repertoire and Have the Potential to Impair Immune Defense. Journal of Experimental Medicine, 2004, 200, 1347-1358.	8.5	229
11	Aging of the T Cell Compartment in Mice and Humans: From No Naive Expectations to Foggy Memories. Journal of Immunology, 2014, 193, 2622-2629.	0.8	223
12	Delay of T cell senescence by caloric restriction in aged long-lived nonhuman primates. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 19448-19453.	7.1	217
13	West Nile Virus Infection Activates the Unfolded Protein Response, Leading to CHOP Induction and Apoptosis. Journal of Virology, 2007, 81, 10849-10860.	3.4	197
14	Immune responses to two and three doses of the BNT162b2 mRNA vaccine in adults with solid tumors. Nature Medicine, 2021, 27, 2002-2011.	30.7	167
15	CMV and Immunosenescence: from basics to clinics. Immunity and Ageing, 2012, 9, 23.	4.2	158
16	Global analyses revealed ageâ€related alterations in innate immune responses after stimulation of pathogen recognition receptors. Aging Cell, 2015, 14, 421-432.	6.7	155
17	Human memory T cells with a naive phenotype accumulate with aging and respond to persistent viruses. Nature Immunology, 2016, 17, 966-975.	14.5	144
18	West Nile Virus-Specific CD4 T Cells Exhibit Direct Antiviral Cytokine Secretion and Cytotoxicity and Are Sufficient for Antiviral Protection. Journal of Immunology, 2008, 181, 8568-8575.	0.8	143

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19	Key role of T cell defects in age-related vulnerability to West Nile virus. Journal of Experimental Medicine, 2009, 206, 2735-2745.	8.5	139
20	Loss of Naive T Cells and Repertoire Constriction Predict Poor Response to Vaccination in Old Primates. Journal of Immunology, 2010, 184, 6739-6745.	0.8	130
21	West Nile Virus Entry Requires Cholesterol-Rich Membrane Microdomains and Is Independent of Î±vÎ²3 Integrin. Journal of Virology, 2008, 82, 5212-5219.	3.4	129
22	Dramatic increase in naÃ¯ve T cell turnover is linked to loss of naÃ¯ve T cells from old primates. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 19960-19965.	7.1	126
23	Nonrandom attrition of the naive CD8 ⁺ T-cell pool with aging governed by T-cell receptor:pMHC interactions. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 13694-13699.	7.1	125
24	Transcriptome-wide characterization of human cytomegalovirus in natural infection and experimental latency. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E10586-E10595.	7.1	124
25	Cytomegalovirus Infection Impairs Immune Responses and Accentuates T-cell Pool Changes Observed in Mice with Aging. PLoS Pathogens, 2012, 8, e1002849.	4.7	121
26	Protective capacity and epitope specificity of CD8+ T cells responding to lethal West Nile virus infection. European Journal of Immunology, 2007, 37, 1855-1863.	2.9	120
27	Sex Differences in T-Lymphocyte Tissue Infiltration and Development of Angiotensin II Hypertension. Hypertension, 2014, 64, 384-390.	2.7	118
28	Human Monocyte Subsets Are Transcriptionally and Functionally Altered in Aging in Response to Pattern Recognition Receptor Agonists. Journal of Immunology, 2017, 199, 1405-1417.	0.8	118
29	Age-related changes in CD8 T cell homeostasis and immunity to infection. Seminars in Immunology, 2012, 24, 356-364.	5.6	110
30	Mice and flies and monkeys too: Caloric restriction rejuvenates the aging immune system of non-human primates. Experimental Gerontology, 2005, 40, 884-893.	2.8	106
31	T cell aging. Journal of Experimental Medicine, 2005, 201, 837-840.	8.5	97
32	Simian Varicella Virus Infection of Rhesus Macaques Recapitulates Essential Features of Varicella Zoster Virus Infection in Humans. PLoS Pathogens, 2009, 5, e1000657.	4.7	95
33	Two Separate Defects Affecting True Naive or Virtual Memory T Cell Precursors Combine To Reduce Naive T Cell Responses with Aging. Journal of Immunology, 2014, 192, 151-159.	0.8	85
34	Lifespanâ€extending caloric restriction or m<scp>TOR</scp> inhibition impair adaptive immunity of old mice by distinct mechanisms. Aging Cell, 2015, 14, 130-138.	6.7	84
35	Lifelong Persistent Viral Infection Alters the Naive T Cell Pool, Impairing CD8 T Cell Immunity in Late Life. Journal of Immunology, 2012, 189, 5356-5366.	0.8	79
36	Affinity-Restricted Memory B Cells Dominate Recall Responses to Heterologous Flaviviruses. Immunity, 2020, 53, 1078-1094.e7.	14.3	76

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37	A critical role for the cytoplasmic tail of pTÎ± in T lymphocyte development. Nature Immunology, 2002, 3, 483-488.	14.5	75
38	Age-Associated Increase of Low-Avidity Cytomegalovirus-Specific CD8+ T Cells That Re-Express CD45RA. Journal of Immunology, 2013, 190, 5363-5372.	0.8	75
39	Phenotypic and functional T-cell aging in rhesus macaques (Macaca mulatta): differential behavior of CD4 and CD8 subsets. Blood, 2003, 102, 3244-3251.	1.4	74
40	The Frailty Syndrome: Clinical measurements and basic underpinnings in humans and animals. Experimental Gerontology, 2014, 54, 6-13.	2.8	73
41	Antibody Responses to SARS-CoV-2: Letâ€™s Stick to Known Knowns. Journal of Immunology, 2020, 205, 2342-2350.	0.8	69
42	Evolution of the Antigen-Specific CD8+ TCR Repertoire across the Life Span: Evidence for Clonal Homogenization of the Old TCR Repertoire. Journal of Immunology, 2011, 186, 2056-2064.	0.8	68
43	Ageâ€associated alterations in CD8Î±+ dendritic cells impair CD8 Tâ€cell expansion in response to an intracellular bacterium. Aging Cell, 2012, 11, 968-977.	6.7	67
44	Cytomegalovirus-Specific T Cell Immunity Is Maintained in Immunosenescent Rhesus Macaques. Journal of Immunology, 2011, 187, 1722-1732.	0.8	61
45	Induction of the Cellular MicroRNA, Hs_154, by West Nile Virus Contributes to Virus-Mediated Apoptosis through Repression of Antiapoptotic Factors. Journal of Virology, 2012, 86, 5278-5287.	3.4	61
46	Development and Migration of Protective CD8+T Cells into the Nervous System following Ocular Herpes Simplex Virus-1 Infection. Journal of Immunology, 2005, 174, 2919-2925.	0.8	58
47	Functional and Homeostatic Impact of Age-Related Changes in Lymph Node Stroma. Frontiers in Immunology, 2017, 8, 706.	4.8	58
48	Premature TCRÎ±Î² Expression and Signaling in Early Thymocytes Impair Thymocyte Expansion and Partially Block Their Development. Journal of Immunology, 2001, 166, 3184-3193.	0.8	57
49	Increased apoptosis, curtailed expansion and incomplete differentiation of CD8⁺ T cells combine to decrease clearance of L. monocytogenes in old mice. European Journal of Immunology, 2011, 41, 1352-1364.	2.9	57
50	West Nile Virus Capsid Degradation of Claudin Proteins Disrupts Epithelial Barrier Function. Journal of Virology, 2009, 83, 6125-6134.	3.4	55
51	Immune memory and aging: an infinite or finite resource?. Current Opinion in Immunology, 2010, 22, 535-540.	5.5	55
52	Lymph nodes as barriers to Tâ€cell rejuvenation in aging mice and nonhuman primates. Aging Cell, 2019, 18, e12865.	6.7	54
53	Optimal window of caloric restriction onset limits its beneficial impact on Tâ€cell senescence in primates. Aging Cell, 2008, 7, 908-919.	6.7	53
54	Lifelong CMV infection improves immune defense in old mice by broadening the mobilized TCR repertoire against third-party infection. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E6817-E6825.	7.1	52

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55	Impact of CMV upon immune aging: facts and fiction. Medical Microbiology and Immunology, 2019, 208, 263-269.	4.8	52
56	Varicella Zosterâ€“Specific CD4+Foxp3+ T Cells Accumulate after Cutaneous Antigen Challenge in Humans. Journal of Immunology, 2013, 190, 977-986.	0.8	50
57	Immune responses in the skin in old age. Current Opinion in Immunology, 2011, 23, 525-531.	5.5	49
58	Molecular, Cellular, and Antigen Requirements for Development of Age-Associated T Cell Clonal Expansions In Vivo. Journal of Immunology, 2006, 176, 301-308.	0.8	48
59	Dysregulated TGF-Î² Production Underlies the Age-Related Vulnerability to Chikungunya Virus. PLoS Pathogens, 2016, 12, e1005891.	4.7	48
60	The role of mhc polymorphism in anti-microbial resistance. Microbes and Infection, 2004, 6, 501-512.	1.9	46
61	The Contribution of Cytomegalovirus Infection to Immune Senescence Is Set by the Infectious Dose. Frontiers in Immunology, 2018, 8, 1953.	4.8	46
62	Effect of IL-7 Therapy on Naive and Memory T Cell Homeostasis in Aged Rhesus Macaques. Journal of Immunology, 2015, 195, 4292-4305.	0.8	45
63	Age-Related CD8+ T Cell Clonal Expansions Express Elevated Levels of CD122 and CD127 and Display Defects in Perceiving Homeostatic Signals. Journal of Immunology, 2006, 177, 2784-2792.	0.8	44
64	Inflation and Long-Term Maintenance of CD8 T Cells Responding to a Latent Herpesvirus Depend upon Establishment of Latency and Presence of Viral Antigens. Journal of Immunology, 2009, 183, 8077-8087.	0.8	43
65	NaÃ¯ve and memory CD8 T cell pool homeostasis in advanced aging: impact of age and of antigen-specific responses to cytomegalovirus. Age, 2014, 36, 625-640.	3.0	40
66	Cytomegalovirus (CMV) research in immune senescence comes of age: overview of the 6th International Workshop on CMV and Immunosenescence. GeroScience, 2017, 39, 245-249.	4.6	40
67	Age-Related Dysregulation of CD8+ T Cell Memory Specific for a Persistent Virus Is Independent of Viral Replication. Journal of Immunology, 2008, 180, 4848-4857.	0.8	39
68	Translational research in immune senescence: Assessing the relevance of current models. Seminars in Immunology, 2012, 24, 373-382.	5.6	39
69	Known unknowns: how might the persistent herpesvirome shape immunity and aging?. Current Opinion in Immunology, 2017, 48, 23-30.	5.5	39
70	Frailty as a prognostic factor for the critically ill older adult trauma patients. American Journal of Surgery, 2019, 218, 484-489.	1.8	39
71	Functional CD8 T Cell Memory Responding to Persistent Latent Infection Is Maintained for Life. Journal of Immunology, 2011, 187, 3759-3768.	0.8	38
72	Repeated In Vivo Stimulation of T and B Cell Responses in Old Mice Generates Protective Immunity against Lethal West Nile Virus Encephalitis. Journal of Immunology, 2011, 186, 3882-3891.	0.8	37

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73	Report from the second cytomegalovirus and immunosenescence workshop. Immunity and Ageing, 2011, 8, 10.	4.2	35
74	COVID-19 Infection, Reinfection, and Vaccine Effectiveness in Arizona Frontline and Essential Workers: Protocol for a Longitudinal Cohort Study. JMIR Research Protocols, 2021, 10, e28925.	1.0	33
75	Intrinsic and extrinsic contributors to defective CD8+ T cell responses with aging. Experimental Gerontology, 2018, 105, 140-145.	2.8	32
76	Immune Protection against Virus Challenge in Aging Mice Is Not Affected by Latent Herpesviral Infections. Journal of Virology, 2015, 89, 11715-11717.	3.4	31
77	Age-Related Differences in T-Cell Subsets in a Nationally Representative Sample of People Older Than Age 55: Findings From the Health and Retirement Study. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2022, 77, 927-933.	3.6	31
78	Defects in Antiviral T Cell Responses Inflicted by Aging-Associated miR-181a Deficiency. Cell Reports, 2019, 29, 2202-2216.e5.	6.4	30
79	Immune Memoryâ€"Boosting Dose of Rapamycin Impairs Macrophage Vesicle Acidification and Curtails Glycolysis in Effector CD8 Cells, Impairing Defense against Acute Infections. Journal of Immunology, 2014, 193, 757-763.	0.8	29
80	Calorie restriction induces reversible lymphopenia and lymphoid organ atrophy due to cell redistribution. GeroScience, 2018, 40, 279-291.	4.6	29
81	Advances in cytomegalovirus (CMV) biology and its relationship to health, diseases, and aging. GeroScience, 2020, 42, 495-504.	4.6	29
82	Acute Neonatal Infections â€˜Lock-Inâ€™ a Suboptimal CD8+ T Cell Repertoire with Impaired Recall Responses. PLoS Pathogens, 2013, 9, e1003572.	4.7	27
83	Histone Deacetylation Critically Determines T Cell Subset Radiosensitivity. Journal of Immunology, 2014, 193, 1451-1458.	0.8	27
84	The acute inflammatory response after trauma is heightened by frailty: A prospective evaluation of inflammatory and endocrine system alterations in frailty. Journal of Trauma and Acute Care Surgery, 2019, 87, 54-60.	2.1	26
85	Smartphone-based sensitive detection of SARS-CoV-2 from saline gargle samples via flow profile analysis on a paper microfluidic chip. Biosensors and Bioelectronics, 2022, 207, 114192.	10.1	26
86	Effective Control of Chronic Î³-Herpesvirus Infection by Unconventional MHC Class Iaâ€"Independent CD8 T Cells. PLoS Pathogens, 2006, 2, e37.	4.7	24
87	Role of Cell-Intrinsic and Environmental Age-Related Changes in Altered Maintenance of Murine T Cells in Lymphoid Organs. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2018, 73, 1018-1026.	3.6	24
88	Prospective evaluation of frailty and functional independence in older adult trauma patients. American Journal of Surgery, 2018, 216, 1070-1075.	1.8	24
89	Increased Efficiency of Phorbol Ester-Induced Lytic Reactivation of Kaposi's Sarcoma-Associated Herpesvirus during S Phase. Journal of Virology, 2005, 79, 2626-2630.	3.4	23
90	Key Research Opportunities in Immune System Aging. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2009, 64A, 183-186.	3.6	23

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91	Direct capture and smartphone quantification of airborne SARS-CoV-2 on a paper microfluidic chip. Biosensors and Bioelectronics, 2022, 200, 113912.	10.1	23
92	An interlaboratory comparison of dosimetry for a multi-institutional radiobiological research project: Observations, problems, solutions and lessons learned. International Journal of Radiation Biology, 2016, 92, 59-70.	1.8	22
93	Cooperation between p27 and p107 during Endochondral Ossification Suggests a Genetic Pathway Controlled by p27 and p130. Molecular and Cellular Biology, 2007, 27, 5161-5171.	2.3	21
94	Diversity of the CD8+ T Cell Repertoire Elicited against an Immunodominant Epitope Does Not Depend on the Context of Infection. Journal of Immunology, 2010, 184, 2958-2965.	0.8	20
95	Non-human primate models of T-cell reconstitution. Seminars in Immunology, 2007, 19, 310-317.	5.6	19
96	The aging immune system: Challenges for the 21st century. Seminars in Immunology, 2012, 24, 301-302.	5.6	19
97	Immune Response to the West Nile Virus in Aged Non-Human Primates. PLoS ONE, 2010, 5, e15514.	2.5	19
98	Dysregulated Expression of Pre-TÎ± Reveals the Opposite Effects of Pre-TCR at Successive Stages of T Cell Development. Journal of Immunology, 2001, 167, 5689-5696.	0.8	18
99	Life-long control of cytomegalovirus (CMV) by T resident memory cells in the adipose tissue results in inflammation and hyperglycemia. PLoS Pathogens, 2019, 15, e1007890.	4.7	18
100	Structural Basis for the Restoration of TCR Recognition of an MHC Allelic Variant by Peptide Secondary Anchor Substitution. Journal of Experimental Medicine, 2004, 200, 1445-1454.	8.5	17
101	Cutting Edge: TLR Ligands Increase TCR Triggering by Slowing Peptide-MHC Class I Decay Rates. Journal of Immunology, 2008, 181, 5199-5203.	0.8	15
102	Infection-induced type I interferons critically modulate the homeostasis and function of CD8+ naÃ¯ve T cells. Nature Communications, 2021, 12, 5303.	12.8	15
103	Lost in translation: mice, men and cutaneous immunity in old age. Biogerontology, 2015, 16, 203-208.	3.9	14
104	IL-6 can singlehandedly drive many features of frailty in mice. GeroScience, 2021, 43, 539-549.	4.6	13
105	Immune response to COVID-19 in older adults. Journal of Heart and Lung Transplantation, 2021, 40, 1082-1089.	0.6	13
106	Cutting Edge: The Aging Immune System Reveals the Biological Impact of Direct Antigen Presentation on CD8 T Cell Responses. Journal of Immunology, 2017, 199, 403-407.	0.8	12
107	Changes of T Cell Receptor (TCR) Î±Î² Repertoire in the Face of Aging and Persistent Infections. , 2018, , 1-24.		12
108	Competent immune responses to SARS-CoV-2 variants in older adults following two doses of mRNA vaccination. Nature Communications, 2022, 13, .	12.8	12

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109	Defective Transcriptional Programming of Effector CD8 T Cells in Aged Mice Is Cell-Extrinsic and Can Be Corrected by Administration of IL-12 and IL-18. Frontiers in Immunology, 2019, 10, 2206.	4.8	11
110	Functional Evidence That Conserved TCR CDRÎ±3 Loop Docking Governs the Cross-Recognition of Closely Related Peptide:Class I Complexes. Journal of Immunology, 2001, 167, 836-843.	0.8	10
111	Sultam Thiourea Inhibition of West Nile Virus. Antimicrobial Agents and Chemotherapy, 2007, 51, 2642-2645.	3.2	10
112	Acute systemic DNA damage in youth does not impair immune defense with aging. Aging Cell, 2016, 15, 686-693.	6.7	10
113	Cutting Edge: T Cell Responses to B.1.1.529 (Omicron) SARS-CoV-2 Variant Induced by COVID-19 Infection and/or mRNA Vaccination Are Largely Preserved. Journal of Immunology, 2022, 208, 2461-2465.	0.8	10
114	Contrasting effects of chronic, systemic treatment with mTOR inhibitors rapamycin and metformin on adult neural progenitors in mice. Age, 2014, 36, 199-212.	3.0	8
115	Immunity to acute virus infections with advanced age. Current Opinion in Virology, 2021, 46, 45-58.	5.4	8
116	Impact of early life exposure to ionizing radiation on influenza vaccine response in an elderly Japanese cohort. Vaccine, 2018, 36, 6650-6659.	3.8	7
117	Early ageâ€“related atrophy of cutaneous lymph nodes precipitates an early functional decline in skin immunity in mice with aging. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2121028119.	7.1	7
118	High specificity, not degeneracy, allows T cell alloresponses. Nature Immunology, 2007, 8, 335-337.	14.5	6
119	Quantitative restoration of immune defense in old animals determined by naive antigenâ€specific CD8 Tâ€cell numbers. Aging Cell, 2022, 21, e13582.	6.7	6
120	Aging alters antiviral signaling pathways resulting in functional impairment in innate immunity in response to pattern recognition receptor agonists. GeroScience, 2022, 44, 2555-2572.	4.6	5
121	Cytomegalovirus and Your Health: Not a Matter of the Heart, Nor of Life and Death. Journal of Infectious Diseases, 2021, 223, 181-183.	4.0	4
122	Age-associated T-cell Clonal Expansions (TCE) in vivoâ€”Implications for Pathogen Resistance. , 2009, , 219-233.		4
123	Aging of the Immune System Across Different Species. , 2010, , 353-376.		4
124	Do cytomegalovirus-specific memory T cells interfere with new immune responses in lymphoid tissues?. GeroScience, 2019, 41, 155-163.	4.6	2
125	The Global Thymus Network: past, present and future. Trends in Immunology, 2009, 30, 191-192.	6.8	1
126	A disconnect between precursor frequency, expansion potential, and site-specific CD4+ T cell responses in aged mice. PLoS ONE, 2018, 13, e0198354.	2.5	1

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127	The role of cytomegalovirus in organismal and immune aging. , 2021, , 319-328.		1
128	Correction: Loss of Naive T Cells and Repertoire Constriction Predict Poor Response to Vaccination in Old Primates. Journal of Immunology, 2010, 185, 4509-4509.	0.8	0
129	Charles D. Surh 1961â€“2017. Nature Immunology, 2017, 18, 1273-1273.	14.5	0
130	Changes of T Cell Receptor (TCR) Î±Î² Repertoire in the Face of Aging and Persistent Infections. , 2019, , 425-448.		0
131	Growing Old and Immunity to Viruses. , 0, , 403-411.		0
132	Age-Related Changes in the Murine Immune System. , 2019, , 1-10.		0
133	Age-Related Changes in the Murine Immune System. , 2021, , 195-204.		0
134	Lifelong cytomegalovirus and earlyâ€LIFE irradiation synergistically potentiate ageâ€related defects in response to vaccination and infection. Aging Cell, 2022, 21, .	6.7	0