Karl-Johan Malmberg

List of Publications by Citations

101 papers	6,888 citations	45 h-index	82 g-index
109 ext. papers	8,524 ext. citations	7.9 avg, IF	5.61 L-index

#	Paper	IF	Citations
101	Expression patterns of NKG2A, KIR, and CD57 define a process of CD56dim NK-cell differentiation uncoupled from NK-cell education. *Blood*, **2010**, 116, 3853-64	2.2	498
100	Cytomegalovirus infection drives adaptive epigenetic diversification of NK cells with altered signaling and effector function. *Immunity*, **2015**, 42, 443-56	32.3	454
99	Prospects for the use of NK cells in immunotherapy of human cancer. *Nature Reviews Immunology*, **2007**, 7, 329-39	36.5	424
98	Rapid expansion and long-term persistence of elevated NK cell numbers in humans infected with hantavirus. *Journal of Experimental Medicine*, **2011**, 208, 13-21	16.6	356
97	NK cell responses to cytomegalovirus infection lead to stable imprints in the human KIR repertoire and involve activating KIRs. *Blood*, **2013**, 121, 2678-88	2.2	348
96	Education of human natural killer cells by activating killer cell immunoglobulin-like receptors. *Blood* , **2010**, 115, 1166-74	2.2	213
95	CMV drives clonal expansion of NKG2C+ NK cells expressing self-specific KIRs in chronic hepatitis patients. *European Journal of Immunology*, **2012**, 42, 447-57	6.1	211
94	Primary human tumor cells expressing CD155 impair tumor targeting by down-regulating DNAM-1 on NK cells. *Journal of Immunology*, **2009**, 183, 4921-30	5.3	189
93	Natural killer cell immunotypes related to COVID-19 disease severity. *Science Immunology*, **2020**, 5,	28	183
92	DNAX accessory molecule-1 mediated recognition of freshly isolated ovarian carcinoma by resting natural killer cells. *Cancer Research*, **2007**, 67, 1317-25	10.1	173
91	Activated innate lymphoid cells are associated with a reduced susceptibility to graft-versus-host disease. *Blood*, **2014**, 124, 812-21	2.2	161
90	Natural killer cell-mediated immunosurveillance of human cancer. *Seminars in Immunology*, **2017**, 31, 20-29	10.7	141
89	Critical Role of CD2 Co-stimulation in Adaptive Natural Killer Cell Responses Revealed in NKG2C-Deficient Humans. *Cell Reports*, **2016**, 15, 1088-1099	10.6	135
88	CD56bright NK cells exhibit potent antitumor responses following IL-15 priming. *Journal of Clinical Investigation*, **2017**, 127, 4042-4058	15.9	131
87	Role for early-differentiated natural killer cells in infectious mononucleosis. *Blood*, **2014**, 124, 2533-43	2.2	127
86	Classification of human natural killer cells based on migration behavior and cytotoxic response. *Blood*, **2013**, 121, 1326-34	2.2	124
85	IFN-protects short-term ovarian carcinoma cell lines from CTL lysis via a CD94/NKG2A-dependent mechanism. *Journal of Clinical Investigation*, **2002**, 110, 1515-1523	15.9	122

84	Class I HLA haplotypes form two schools that educate NK cells in different ways. *Science Immunology*, **2016**, 1,	28	117
83	Effective immunotherapy against cancer: a question of overcoming immune suppression and immune escape?. *Cancer Immunology, Immunotherapy*, **2004**, 53, 879-92	7.4	110
82	Distinct infiltration of neutrophils in lesion shoulders in ApoE-/- mice. *American Journal of Pathology*, **2010**, 177, 493-500	5.8	109
81	Inhibition of activated/memory (CD45RO(+)) T cells by oxidative stress associated with block of NF-kappaB activation. *Journal of Immunology*, **2001**, 167, 2595-601	5.3	107
80	Improved survival after allogeneic hematopoietic stem cell transplantation in recent years. A single-center study. *Biology of Blood and Marrow Transplantation*, **2011**, 17, 1688-97	4.7	106
79	T cell infiltrates in the muscles of patients with dermatomyositis and polymyositis are dominated by CD28null T cells. *Journal of Immunology*, **2009**, 183, 4792-9	5.3	102
78	Estimation of the size of the alloreactive NK cell repertoire: studies in individuals homozygous for the group A KIR haplotype. *Journal of Immunology*, **2008**, 181, 6010-9	5.3	89
77	Complete Remission with Reduction of High-Risk Clones following Haploidentical NK-Cell Therapy against MDS and AML. *Clinical Cancer Research*, **2018**, 24, 1834-1844	12.9	88
76	KIR acquisition probabilities are independent of self-HLA class I ligands and increase with cellular KIR expression. *Blood*, **2009**, 114, 95-104	2.2	84
75	NKG2D performs two functions in invariant NKT cells: direct TCR-independent activation of NK-like cytolysis and co-stimulation of activation by CD1d. *European Journal of Immunology*, **2011**, 41, 1913-23	6.1	83
74	Preferential cell death of CD8+ effector memory (CCR7-CD45RA-) T cells by hydrogen peroxide-induced oxidative stress. *Journal of Immunology*, **2005**, 174, 6080-7	5.3	73
73	Metabolic Reprograming via Deletion of CISH in Human iPSC-Derived NK Cells Promotes In Vivo Persistence and Enhances Anti-tumor Activity. *Cell Stem Cell*, **2020**, 27, 224-237.e6	18	71
72	NK cells expressing inhibitory KIR for non-self-ligands remain tolerant in HLA-matched sibling stem cell transplantation. *Blood*, **2010**, 115, 2686-94	2.2	71
71	CD8 T cells express randomly selected KIRs with distinct specificities compared with NK cells. *Blood* , **2012**, 120, 3455-65	2.2	70
70	NK cell-mediated targeting of human cancer and possibilities for new means of immunotherapy. *Cancer Immunology, Immunotherapy*, **2008**, 57, 1541-52	7.4	69
69	Increased infection-related mortality in KIR-ligand-mismatched unrelated allogeneic hematopoietic stem-cell transplantation. *Transplantation*, **2004**, 78, 1081-5	1.8	69
68	Influence of KIR gene copy number on natural killer cell education. *Blood*, **2013**, 121, 4703-7	2.2	63
67	The CD16- CD56(bright) NK cell subset is resistant to reactive oxygen species produced by activated granulocytes and has higher antioxidative capacity than the CD16+ CD56(dim) subset. *Journal of Immunology*, **2007**, 179, 4513-9	5.3	63

66	Coordinated expression of DNAM-1 and LFA-1 in educated NK cells. *Journal of Immunology*, **2015**, 194, 4518-27	5.3	60
65	Remodeling of secretory lysosomes during education tunes functional potential in NK cells. *Nature Communications*, **2019**, 10, 514	17.4	59
64	Off-the-shelf cell therapy with induced pluripotent stem cell-derived natural killer cells. *Seminars in Immunopathology*, **2019**, 41, 59-68	12	59
63	Intrinsic Functional Potential of NK-Cell Subsets Constrains Retargeting Driven by Chimeric Antigen Receptors. *Cancer Immunology Research*, **2018**, 6, 467-480	12.5	49
62	Frequent loss of HLA-A2 expression in metastasizing ovarian carcinomas associated with genomic haplotype loss and HLA-A2-restricted HER-2/neu-specific immunity. *Cancer Research*, **2006**, 66, 6387-94	10.1	49
61	Activating NK-cell receptors co-stimulate CD4(+)CD28(-) T cells in patients with rheumatoid arthritis. *European Journal of Immunology*, **2010**, 40, 378-87	6.1	48
60	Characterization of natural killer cell phenotype and function during recurrent human HSV-2 infection. *PLoS ONE*, **2011**, 6, e27664	3.7	47
59	Newtonian cell interactions shape natural killer cell education. *Immunological Reviews*, **2015**, 267, 197-213	11.3	46
58	Escape from immune- and nonimmune-mediated tumor surveillance. *Seminars in Cancer Biology*, **2006**, 16, 16-31	12.7	46
57	Elevated numbers of Fc gamma RIIIA+ (CD16+) effector CD8 T cells with NK cell-like function in chronic hepatitis C virus infection. *Journal of Immunology*, **2008**, 181, 4219-28	5.3	45
56	Expanded Adaptive NK Cells Effectively Kill Primary Acute Lymphoblastic Leukemia Cells. *Cancer Immunology Research*, **2017**, 5, 654-665	12.5	44
55	Effects of HDV infection and pegylated interferon □treatment on the natural killer cell compartment in chronically infected individuals. *Gut*, **2015**, 64, 469-82	19.2	39
54	KIR-ligand mismatch in allogeneic hematopoietic stem cell transplantation. *Molecular Immunology*, **2005**, 42, 531-4	4.3	39
53	Spotlight on NKG2C and the human NK-cell response to CMV infection. *European Journal of Immunology*, **2012**, 42, 3141-5	6.1	38
52	Natural killer cell-mediated lysis of freshly isolated human tumor cells. *International Journal of Cancer*, **2009**, 124, 757-62	7.5	32
51	Selenite induces posttranscriptional blockade of HLA-E expression and sensitizes tumor cells to CD94/NKG2A-positive NK cells. *Journal of Immunology*, **2011**, 187, 3546-54	5.3	32
50	Impact of KIR and HLA Genotypes on Outcomes after Reduced-Intensity Conditioning Hematopoietic Cell Transplantation. *Biology of Blood and Marrow Transplantation*, **2015**, 21, 1589-96	4.7	31
49	Interactions of NK cell receptor KIR3DL1*004 with chaperones and conformation-specific antibody reveal a functional folded state as well as predominant intracellular retention. *Journal of Immunology*, **2011**, 186, 62-72	5.3	30

48	Harnessing adaptive natural killer cells in cancer immunotherapy. *Molecular Oncology*, **2015**, 9, 1904-17	7.9	29
47	Tracing dynamic expansion of human NK-cell subsets by high-resolution analysis of KIR repertoires and cellular differentiation. *European Journal of Immunology*, **2014**, 44, 2192-6	6.1	27
46	Application of nine-color flow cytometry for detailed studies of the phenotypic complexity and functional heterogeneity of human lymphocyte subsets. *Journal of Immunological Methods*, **2008**, 330, 64-74	2.5	27
45	A short-term dietary supplementation with high doses of vitamin E increases NK cell cytolytic activity in advanced colorectal cancer patients. *Cancer Immunology, Immunotherapy*, **2007**, 56, 973-84	7.4	27
44	Cognate HLA absence in trans diminishes human NK cell education. *Journal of Clinical Investigation*, **2016**, 126, 3772-3782	15.9	27
43	Naive Donor NK Cell Repertoires Associated with Less Leukemia Relapse after Allogeneic Hematopoietic Stem Cell Transplantation. *Journal of Immunology*, **2016**, 196, 1400-11	5.3	24
42	IFN-gamma production dominates the early human natural killer cell response to Coxsackievirus infection. *Cellular Microbiology*, **2008**, 10, 426-36	3.9	24
41	The identification of a common pathogen-specific HLA class I A*0201-restricted cytotoxic T cell epitope encoded within the heat shock protein 65. *European Journal of Immunology*, **2001**, 31, 3602-11	6.1	24
40	Microchip-Based Single-Cell Imaging Reveals That CD56dimCD57-KIR-NKG2A+ NK Cells Have More Dynamic Migration Associated with Increased Target Cell Conjugation and Probability of Killing Compared to CD56dimCD57-KIR-NKG2A- NK Cells. *Journal of Immunology*, **2015**, 195, 3374-81	5.3	23
39	Natural killer cell inhibitory receptor expression in humans and mice: a closer look. *Frontiers in Immunology*, **2013**, 4, 65	8.4	23
38	Immune selection during tumor checkpoint inhibition therapy paves way for NK-cell "missing self" recognition. *Immunogenetics*, **2017**, 69, 547-556	3.2	22
37	Regulation of interleukin-4 signaling by extracellular reduction of intramolecular disulfides. *Biochemical and Biophysical Research Communications*, **2009**, 390, 1272-7	3.4	22
36	Analysis of the KIR repertoire in human NK cells by flow cytometry. *Methods in Molecular Biology*, **2010**, 612, 353-64	1.4	22
35	Imprint of 5-azacytidine on the natural killer cell repertoire during systemic treatment for high-risk myelodysplastic syndrome. *Oncotarget*, **2015**, 6, 34178-90	3.3	21
34	Spotlight on IL-22-producing NK cell receptor-expressing mucosal lymphocytes. *Nature Immunology* , **2009**, 10, 11-2	19.1	20
33	FT596: Translation of First-of-Kind Multi-Antigen Targeted Off-the-Shelf CAR-NK Cell with Engineered Persistence for the Treatment of B Cell Malignancies. *Blood*, **2019**, 134, 301-301	2.2	19
32	Polyclonal Expansion of NKG2C(+) NK Cells in TAP-Deficient Patients. *Frontiers in Immunology*, **2015** , 6, 507	8.4	18
31	Intra-lineage Plasticity and Functional Reprogramming Maintain Natural Killer Cell Repertoire Diversity. *Cell Reports*, **2019**, 29, 2284-2294.e4	10.6	18

30	Deciphering Natural Killer Cell Homeostasis. *Frontiers in Immunology*, **2020**, 11, 812	8.4	14
29	High-dimensional profiling reveals phenotypic heterogeneity and disease-specific alterations of granulocytes in COVID-19. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	14
28	Imbalance of Genes Encoding Natural Killer Immunoglobulin-Like Receptors and Human Leukocyte Antigen in Patients With Biliary Cancer. *Gastroenterology*, **2019**, 157, 1067-1080.e9	13.3	12
27	Umbilical Cord Blood and iPSC-Derived Natural Killer Cells Demonstrate Key Differences in Cytotoxic Activity and KIR Profiles. *Frontiers in Immunology*, **2020**, 11, 561553	8.4	11
26	Tolerant and diverse natural killer cell repertoires in the absence of selection. *Experimental Cell Research*, **2010**, 316, 1309-15	4.2	10
25	Harnessing features of adaptive NK cells to generate iPSC-derived NK cells for enhanced immunotherapy. *Cell Stem Cell*, **2021**, 28, 2062-2075.e5	18	10
24	FT576: Multi-Specific Off-the-Shelf CAR-NK Cell Therapy Engineered for Enhanced Persistence, Avoidance of Self-Fratricide and Optimized Mab Combination Therapy to Prevent Antigenic Escape and Elicit a Deep and Durable Response in Multiple Myeloma. *Blood*, **2020**, 136, 4-5	2.2	9
23	TRP Channels as Interior Designers: Remodeling the Endolysosomal Compartment in Natural Killer Cells. *Frontiers in Immunology*, **2020**, 11, 753	8.4	8
22	FT538: Preclinical Development of an Off-the-Shelf Adoptive NK Cell Immunotherapy with Targeted Disruption of CD38 to Prevent Anti-CD38 Antibody-Mediated Fratricide and Enhance ADCC in Multiple Myeloma When Combined with Daratumumab. *Blood*, **2019**, 134, 133-133	2.2	7
21	Systemic and Intra-Nodal Activation of NK Cells After Rituximab Monotherapy for Follicular Lymphoma. *Frontiers in Immunology*, **2019**, 10, 2085	8.4	6
20	Induction of the BIM Short Splice Variant Sensitizes Proliferating NK Cells to IL-15 Withdrawal. *Journal of Immunology*, **2019**, 202, 736-746	5.3	5
19	Natural killer cell receptors regulate responses of HLA-E-restricted T cells. *Science Immunology*, **2021**, 6,	28	4
18	Notch Activation Rescues Exhaustion in CISH-Deleted Human iPSC-Derived Natural Killer Cells to Promote In Vivo Persistence and Enhance Anti-Tumor Activity. *Blood*, **2018**, 132, 1279-1279	2.2	3
17	PRDX-1 supports the survival and antitumor activity of primary and CAR-modified NK cells under oxidative stress. *Cancer Immunology Research*, **2021**,	12.5	3
16	Prospects for NK Cell Therapy of Sarcoma. *Cancers*, **2020**, 12,	6.6	3
15	Cellular immunotherapy with multiple infusions of in vitro-expanded haploidentical natural killer cells after autologous transplantation for patients with plasma cell myeloma. *Cytotherapy*, **2021**, 23, 329-338	4.8	3
14	Modulation of Secretory Lysosomes During NK Cell Education Leads to Accumulation of Granzyme B and Enhanced Functional Potential		2
13	Preventing a shock to the system. Two-pore channel 1 negatively regulates anaphylaxis. *Cell Calcium*, **2020**, 92, 102289	4	2

12	SARS-CoV-2 Nsp13 encodes for an HLA-E-stabilizing peptide that abrogates inhibition of NKG2A-expressing NK cells.. *Cell Reports*, **2022**, 110503	10.6	2
11	KIR Expression on inVitro-Derived Natural Killer Cells Does Not Regulate Killing of Allogeneic Targets. *Blood*, **2018**, 132, 3705-3705	2.2	1
10	The Oncometabolite 5RDeoxy-5RMethylthioadenosine Blocks Multiple Signaling Pathways of NK Cell Activation. *Frontiers in Immunology*, **2020**, 11, 2128	8.4	1
9	Bioinformatic Analysis Reveals Central Role for Tumor-Infiltrating Immune Cells in Uveal Melanoma Progression. *Journal of Immunology Research*, **2021**, 2021, 9920234	4.5	1
8	CAR19 iPSC-Derived NK Cells Utilize the Innate Functional Potential Mediated through NKG2A-Driven Education and Override the HLA-E Check Point to Effectively Target B Cell Lymphoma. *Blood*, **2020**, 136, 34-35	2.2	0
7	Toward a prime-boost regime for NK cells?. *Blood*, **2012**, 120, 4663-4	2.2	
6	Systems-Level Analysis of the Immune Repertoire in Neutropenia Reveal Arrested NK Cell Differentiation and Exhaustion. *Blood*, **2020**, 136, 24-25	2.2	
5	Innate-like Chemokine Receptor Profile and Migratory Behaviour By Terminally Differentiated and Educated NK Cells. *Blood*, **2020**, 136, 24-25	2.2	
4	System-Level Disease-Driven Immune Signatures in Patients with Diffuse Large B-Cell Lymphoma Associated with Poor Survival. *Blood*, **2019**, 134, 2897-2897	2.2	
3	Early and Transient Microchimerism Associated with Complete Remission after Adoptively Transferred Haploidentical NK Cells Against High Risk Myelodysplastic Syndrome and Refractory Acute Myeloid Leukemia. *Blood*, **2014**, 124, 1120-1120	2.2	
2	Natural Killer Cells in the Treatment of Human Cancer **2010**, 405-421		
1	A Systemic Protein Deviation Score Linked to PD-1 CD8 T Cell Expansion That Predicts Overall Survival in Diffuse Large B Cell Lymphoma.. *Med*, **2021**, 2, 180-195.e5	31.7	