

# Emily M Mace

## List of Publications by Year in descending order

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Version: 2024-02-01

112  
papers

6,640  
citations

66343

42  
h-index

71685

76  
g-index

130  
all docs

130  
docs citations

130  
times ranked

11105  
citing authors

#	ARTICLE	IF	CITATIONS
1	GATA2 deficiency: a protean disorder of hematopoiesis, lymphatics, and immunity. <i>Blood</i> , 2014, 123, 809-821.	1.4	599
2	Early-onset lymphoproliferation and autoimmunity caused by germline STAT3 gain-of-function mutations. <i>Blood</i> , 2015, 125, 591-599.	1.4	436
3	Distinct antibody responses to SARS-CoV-2 in children and adults across the COVID-19 clinical spectrum. <i>Nature Immunology</i> , 2021, 22, 25-31.	14.5	403
4	COPA mutations impair ER-Golgi transport and cause hereditary autoimmune-mediated lung disease and arthritis. <i>Nature Genetics</i> , 2015, 47, 654-660.	21.4	302
5	Primary immunodeficiency diseases: Genomic approaches delineate heterogeneous Mendelian disorders. <i>Journal of Allergy and Clinical Immunology</i> , 2017, 139, 232-245.	2.9	261
6	Mutations in GATA2 cause human NK cell deficiency with specific loss of the CD56bright subset. <i>Blood</i> , 2013, 121, 2669-2677.	1.4	208
7	Natural Killer Cell Lytic Granule Secretion Occurs through a Pervasive Actin Network at the Immune Synapse. <i>PLoS Biology</i> , 2011, 9, e1001151.	5.6	196
8	Cell biological steps and checkpoints in accessing NK cell cytotoxicity. <i>Immunology and Cell Biology</i> , 2014, 92, 245-255.	2.3	171
9	Genetic and mechanistic diversity in pediatric hemophagocytic lymphohistiocytosis. <i>Blood</i> , 2018, 132, 89-100.	1.4	139
10	A novel disorder involving dyshematopoiesis, inflammation, and HLH due to aberrant CDC42 function. <i>Journal of Experimental Medicine</i> , 2019, 216, 2778-2799.	8.5	132
11	Heterozygous Truncating Variants in POMP Escape Nonsense-Mediated Decay and Cause a Unique Immune Dysregulatory Syndrome. <i>American Journal of Human Genetics</i> , 2018, 102, 1126-1142.	6.2	128
12	Diversity of peripheral blood human NK cells identified by single-cell RNA sequencing. <i>Blood Advances</i> , 2020, 4, 1388-1406.	5.2	125
13	Emerging insights into human health and <sc>NK</sc> cell biology from the study of <sc>NK</sc> cell deficiencies. <i>Immunological Reviews</i> , 2019, 287, 202-225.	6.0	123
14	A Cell-Autonomous Mammalian 12Âhr Clock Coordinates Metabolic and Stress Rhythms. <i>Cell Metabolism</i> , 2017, 25, 1305-1319.e9.	16.2	119
15	Biallelic loss-of-function mutation in NIK causes a primary immunodeficiency with multifaceted aberrant lymphoid immunity. <i>Nature Communications</i> , 2014, 5, 5360.	12.8	116
16	RASGRP1 deficiency causes immunodeficiency with impaired cytoskeletal dynamics. <i>Nature Immunology</i> , 2016, 17, 1352-1360.	14.5	115
17	Defective actin accumulation impairs human natural killer cell function in patients with dedicator of cytokinesis 8 deficiency. <i>Journal of Allergy and Clinical Immunology</i> , 2013, 131, 840-848.	2.9	113
18	Lytic immune synapse function requires filamentous actin deconstruction by Coronin 1A. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 6708-6713.	7.1	102

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19	Nanoscale Dynamism of Actin Enables Secretory Function in Cytolytic Cells. <i>Current Biology</i> , 2018, 28, 489-502.e9.	3.9	101
20	Practical NK cell phenotyping and variability in healthy adults. <i>Immunologic Research</i> , 2015, 62, 341-356.	2.9	95
21	Cytoskeletal abnormalities and neutrophil dysfunction in WDR1 deficiency. <i>Blood</i> , 2016, 128, 2135-2143.	1.4	94
22	Glycolytic requirement for NK cell cytotoxicity and cytomegalovirus control. <i>JCI Insight</i> , 2017, 2, .	5.0	90
23	NK cells converge lytic granules to promote cytotoxicity and prevent bystander killing. <i>Journal of Cell Biology</i> , 2016, 215, 875-889.	5.2	87
24	A combined immunodeficiency with severe infections, inflammation, and allergy caused by ARPC1B deficiency. <i>Journal of Allergy and Clinical Immunology</i> , 2019, 143, 2296-2299.	2.9	87
25	CD56 Expression Marks Human Group 2 Innate Lymphoid Cell Divergence from a Shared NK Cell and Group 3 Innate Lymphoid Cell Developmental Pathway. <i>Immunity</i> , 2018, 49, 464-476.e4.	14.3	86
26	Ruxolitinib partially reverses functional natural killer cell deficiency in patients with signal transducer and activator of transcription 1 (STAT1) gain-of-function mutations. <i>Journal of Allergy and Clinical Immunology</i> , 2018, 141, 2142-2155.e5.	2.9	79
27	Compound Heterozygous CORO1A Mutations in Siblings with a Mucocutaneous-Immunodeficiency Syndrome of Epidermodyplasia Verruciformis-HPV, Molluscum Contagiosum and Granulomatous Tuberculoid Leprosy. <i>Journal of Clinical Immunology</i> , 2014, 34, 871-890.	3.8	78
28	Biallelic mutations in IRF8 impair human NK cell maturation and function. <i>Journal of Clinical Investigation</i> , 2016, 127, 306-320.	8.2	76
29	IL-2 induces a WAVE2-dependent pathway for actin reorganization that enables WASp-independent human NK cell function. <i>Journal of Clinical Investigation</i> , 2011, 121, 1535-1548.	8.2	75
30	Evaluation of Patients and Families With Concern for Predispositions to Hematologic Malignancies Within the Hereditary Hematologic Malignancy Clinic (HHMC). <i>Clinical Lymphoma, Myeloma and Leukemia</i> , 2016, 16, 417-428.e2.	0.4	74
31	Genetic Causes of Human NK Cell Deficiency and Their Effect on NK Cell Subsets. <i>Frontiers in Immunology</i> , 2016, 7, 545.	4.8	69
32	Complex Autoinflammatory Syndrome Unveils Fundamental Principles of JAK1 Kinase Transcriptional and Biochemical Function. <i>Immunity</i> , 2020, 53, 672-684.e11.	14.3	66
33	HEM1 deficiency disrupts mTORC2 and F-actin control in inherited immunodysregulatory disease. <i>Science</i> , 2020, 369, 202-207.	12.6	65
34	Elucidation of the integrin LFA-1-mediated signaling pathway of actin polarization in natural killer cells. <i>Blood</i> , 2010, 116, 1272-1279.	1.4	64
35	Transcription of the activating receptor NKG2D in natural killer cells is regulated by STAT3 tyrosine phosphorylation. <i>Blood</i> , 2014, 124, 403-411.	1.4	63
36	Antibody targeting of anaplastic lymphoma kinase induces cytotoxicity of human neuroblastoma. <i>Oncogene</i> , 2012, 31, 4859-4867.	5.9	61

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37	Human NK cell development requires CD56-mediated motility and formation of the developmental synapse. <i>Nature Communications</i> , 2016, 7, 12171.	12.8	59
38	A Dual Role for Talin in NK Cell Cytotoxicity: Activation of LFA-1-Mediated Cell Adhesion and Polarization of NK Cells. <i>Journal of Immunology</i> , 2009, 182, 948-956.	0.8	58
39	Rapid activation receptor-induced lytic granule convergence in human natural killer cells requires Src, but not downstream signaling. <i>Blood</i> , 2013, 121, 2627-2637.	1.4	54
40	Phosphorylation of the myosin IIA tailpiece regulates single myosin IIA molecule association with lytic granules to promote NK-cell cytotoxicity. <i>Blood</i> , 2011, 118, 5862-5871.	1.4	50
41	Quantitative Imaging Approaches to Study the CAR Immunological Synapse. <i>Molecular Therapy</i> , 2017, 25, 1757-1768.	8.2	49
42	High-resolution phenotyping identifies NK cell subsets that distinguish healthy children from adults. <i>PLoS ONE</i> , 2017, 12, e0181134.	2.5	49
43	Human DEF6 deficiency underlies an immunodeficiency syndrome with systemic autoimmunity and aberrant CTLA-4 homeostasis. <i>Nature Communications</i> , 2019, 10, 3106.	12.8	48
44	DNA hypermethylation during tuberculosis dampens host immune responsiveness. <i>Journal of Clinical Investigation</i> , 2020, 130, 3113-3123.	8.2	47
45	Human NK cell deficiency as a result of biallelic mutations in MCM10. <i>Journal of Clinical Investigation</i> , 2020, 130, 5272-5286.	8.2	44
46	Schistosomiasis Induces Persistent DNA Methylation and Tuberculosis-Specific Immune Changes. <i>Journal of Immunology</i> , 2018, 201, 124-133.	0.8	41
47	PTEN Is a Negative Regulator of NK Cell Cytolytic Function. <i>Journal of Immunology</i> , 2015, 194, 1832-1840.	0.8	37
48	GATA2 deficiency underlying severe blastomycosis and fatal herpes simplex virus-associated hemophagocytic lymphohistiocytosis. <i>Journal of Allergy and Clinical Immunology</i> , 2016, 137, 638-640.	2.9	36
49	Mutations in PI3K110 $\beta$ cause impaired natural killer cell function partially rescued by rapamycin treatment. <i>Journal of Allergy and Clinical Immunology</i> , 2018, 142, 605-617.e7.	2.9	36
50	NK Cell Lytic Granules Are Highly Motile at the Immunological Synapse and Require F-Actin for Post-Degranulation Persistence. <i>Journal of Immunology</i> , 2012, 189, 4870-4880.	0.8	35
51	Phosphoinositide-3-Kinase Signaling in Human Natural Killer Cells: New Insights from Primary Immunodeficiency. <i>Frontiers in Immunology</i> , 2018, 9, 445.	4.8	33
52	Genome-wide analyses and functional profiling of human NK cell lines. <i>Molecular Immunology</i> , 2019, 115, 64-75.	2.2	33
53	Murine natural killer immunoreceptors use distinct proximal signaling complexes to direct cell function. <i>Blood</i> , 2013, 121, 3135-3146.	1.4	32
54	CD56 regulates human NK cell cytotoxicity through Pyk2. <i>ELife</i> , 2020, 9, .	6.0	30

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55	Tumor-priming converts NK cells to memory-like NK cells. <i>Oncolimmunology</i> , 2017, 6, e1317411.	4.6	28
56	Autoimmune regulator (AIRE) contributes to Dectin-1-induced TNF production and complexes with caspase recruitment domain-containing protein 9 (CARD9), spleen tyrosine kinase (Syk), and Dectin-1. <i>Journal of Allergy and Clinical Immunology</i> , 2012, 129, 464-472.e3.	2.9	26
57	Severe cutaneous human papillomavirus infection associated with natural killer cell deficiency following stem cell transplantation for severe combined immunodeficiency. <i>Journal of Allergy and Clinical Immunology</i> , 2014, 134, 1451-1453.e1.	2.9	26
58	Acquisition of cell migration defines NK cell differentiation from hematopoietic stem cell precursors. <i>Molecular Biology of the Cell</i> , 2017, 28, 3573-3581.	2.1	25
59	The Autoimmune Regulator (AIRE), Which Is Defective in Autoimmune Polyendocrinopathy-Candidiasis-Ectodermal Dystrophy Patients, Is Expressed in Human Epidermal and Follicular Keratinocytes and Associates With the Intermediate Filament Protein Cytokeratin 17. <i>American Journal of Pathology</i> , 2011, 178, 983-988.	3.8	24
60	Human signal transducer and activator of transcription 5b (STAT5b) mutation causes dysregulated human natural killer cell maturation and impaired lytic function. <i>Journal of Allergy and Clinical Immunology</i> , 2020, 145, 345-357.e9.	2.9	24
61	Natural Killer Cell Integrins and Their Functions in Tissue Residency. <i>Frontiers in Immunology</i> , 2021, 12, 647358.	4.8	24
62	New views of the human NK cell immunological synapse: recent advances enabled by super- and high-resolution imaging techniques. <i>Frontiers in Immunology</i> , 2012, 3, 421.	4.8	23
63	Warts and DADA2: a Mere Coincidence?. <i>Journal of Clinical Immunology</i> , 2018, 38, 836-843.	3.8	23
64	CD2 Promotes Human Natural Killer Cell Membrane Nanotube Formation. <i>PLoS ONE</i> , 2012, 7, e47664.	2.5	23
65	Dual channel STED nanoscopy of lytic granules on actin filaments in natural killer cells. <i>Communicative and Integrative Biology</i> , 2012, 5, 184-186.	1.4	22
66	A novel Rab27a mutation binds melanophilin, but not Munc13-4, causing immunodeficiency without albinism. <i>Journal of Allergy and Clinical Immunology</i> , 2016, 138, 599-601.e3.	2.9	22
67	Bi-allelic MCM10 variants associated with immune dysfunction and cardiomyopathy cause telomere shortening. <i>Nature Communications</i> , 2021, 12, 1626.	12.8	22
68	Treatment of Relapsing HPV Diseases by Restored Function of Natural Killer Cells. <i>New England Journal of Medicine</i> , 2021, 385, 921-929.	27.0	22
69	Schistosome Soluble Egg Antigen Decreases <i>Mycobacterium tuberculosis</i> -Specific CD4 <sup>+</sup> T-Cell Effector Function With Concomitant Arrest of Macrophage Phago-Lysosome Maturation. <i>Journal of Infectious Diseases</i> , 2016, 214, 479-488.	4.0	21
70	Early Signaling in Primary T Cells Activated by Antigen Presenting Cells Is Associated with a Deep and Transient Lamellal Actin Network. <i>PLoS ONE</i> , 2015, 10, e0133299.	2.5	19
71	Novel Heterozygous Mutation in NFKB2 Is Associated With Early Onset CVID and a Functional Defect in NK Cells Complicated by Disseminated CMV Infection and Severe Nephrotic Syndrome. <i>Frontiers in Pediatrics</i> , 2019, 7, 303.	1.9	18
72	Multiple distinct NK-cell synapses. <i>Blood</i> , 2011, 118, 6475-6476.	1.4	17

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73	Notch Regulates Innate Lymphoid Cell Plasticity during Human NK Cell Development. <i>Journal of Immunology</i> , 2020, 205, 2679-2693.	0.8	17
74	Myeloid malignancies with somatic GATA2 mutations can be associated with an immunodeficiency phenotype. <i>Leukemia and Lymphoma</i> , 2019, 60, 2025-2033.	1.3	15
75	AHR Regulates NK Cell Migration via ASB2-Mediated Ubiquitination of Filamin A. <i>Frontiers in Immunology</i> , 2021, 12, 624284.	4.8	14
76	Quantification of natural killer cell polarization and visualization of synaptic granule externalization by imaging flow cytometry. <i>Clinical Immunology</i> , 2017, 177, 70-75.	3.2	12
77	The Role of AIRE in the Immunity Against <i>Candida Albicans</i> in a Model of Human Macrophages. <i>Frontiers in Immunology</i> , 2018, 9, 567.	4.8	12
78	Human NK cells prime inflammatory DC precursors to induce Tc17 differentiation. <i>Blood Advances</i> , 2020, 4, 3990-4006.	5.2	12
79	NK cells in treated HIV-infected children display altered phenotype and function. <i>Journal of Allergy and Clinical Immunology</i> , 2019, 144, 294-303.e13.	2.9	11
80	Fc $\gamma$ 3 receptor IIIa/CD16a processing correlates with the expression of glycan-related genes in human natural killer cells. <i>Journal of Biological Chemistry</i> , 2021, 296, 100183.	3.4	11
81	From stem cell to immune effector: how adhesion, migration, and polarity shape T-cell and natural killer cell lymphocyte development in vitro and in vivo. <i>Molecular Biology of the Cell</i> , 2020, 31, 981-991.	2.1	10
82	High- and Super-Resolution Microscopy Imaging of the NK Cell Immunological Synapse. <i>Methods in Molecular Biology</i> , 2016, 1441, 141-150.	0.9	9
83	Differential Integrin Adhesome Expression Defines Human NK Cell Residency and Developmental Stage. <i>Journal of Immunology</i> , 2021, 207, 950-965.	0.8	9
84	Visualization of the Immunological Synapse by Dual Color Time-gated Stimulated Emission Depletion (STED) Nanoscopy. <i>Journal of Visualized Experiments</i> , 2014, , .	0.3	8
85	Modest Interference with Actin Dynamics in Primary T Cell Activation by Antigen Presenting Cells Preferentially Affects Lamellar Signaling. <i>PLoS ONE</i> , 2015, 10, e0133231.	2.5	8
86	Comment on: Evidence of innate lymphoid cell redundancy in humans. <i>Nature Immunology</i> , 2018, 19, 788-789.	14.5	8
87	Immunodeficiency, centromeric instability, and facial anomalies (ICF) syndrome with NK dysfunction and EBV-driven malignancy treated with stem cell transplantation. <i>Journal of Allergy and Clinical Immunology: in Practice</i> , 2020, 8, 1103-1106.e3.	3.8	8
88	Identification and Targeting of the Developmental Blockade in Extranodal Natural Killer/T-cell Lymphoma. <i>Blood Cancer Discovery</i> , 2022, 3, 154-169.	5.0	8
89	Insights into primary immune deficiency from quantitative microscopy. <i>Journal of Allergy and Clinical Immunology</i> , 2015, 136, 1150-1162.	2.9	7
90	Requirements for human natural killer cell development informed by primary immunodeficiency. <i>Current Opinion in Allergy and Clinical Immunology</i> , 2016, 16, 541-548.	2.3	7

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91	Generation of cell-derived matrices that support human NK cell migration and differentiation. <i>Journal of Leukocyte Biology</i> , 2020, 108, 1369-1378.	3.3	7
92	Genetic errors of immunity distinguish pediatric nonmalignant lymphoproliferative disorders. <i>Journal of Allergy and Clinical Immunology</i> , 2022, 149, 758-766.	2.9	6
93	Primary Human NK Cell Gene-Editing Reveals a Critical Role for NKG2A in Cytokine-Induced Memory-like NK Cell Responses. <i>Blood</i> , 2019, 134, 3237-3237.	1.4	6
94	The coordinating role of IQGAP1 in the regulation of local, endosome-specific actin networks. <i>Biology Open</i> , 2017, 6, 785-799.	1.2	5
95	Diversity of human NK cell developmental pathways defined by single-cell analyses. <i>Current Opinion in Immunology</i> , 2022, 74, 106-111.	5.5	5
96	A research-driven approach to the identification of novel natural killer cell deficiencies affecting cytotoxic function. <i>Blood</i> , 2020, 135, 629-637.	1.4	4
97	Tumorigenic adenovirus 12 cells evade NK cell lysis by reducing the expression of NKG2D ligands. <i>Immunology Letters</i> , 2012, 144, 16-23.	2.5	3
98	HIV Progression Perturbs the Balance of the Cell-Mediated and Anti-Inflammatory Adaptive and Innate Mycobacterial Immune Response. <i>Mediators of Inflammation</i> , 2016, 2016, 1-6.	3.0	3
99	Membrane and Actin Tethering Transitions Help IQGAP1 Coordinate GTPase and Lipid Messenger Signaling. <i>Biophysical Journal</i> , 2020, 118, 586-599.	0.5	3
100	Three-Dimensional Printing of Super-Resolution Microscopy Images. <i>Microscopy Today</i> , 2015, 23, 26-29.	0.3	2
101	LFA-1 Binding to Ligand Induces Talin-Mediated Reorganization of the Actin Cytoskeleton in Cytotoxic T Cells. <i>The Open Immunology Journal</i> , 2008, 1, 51-61.	1.5	2
102	Undetectable NK Cells due to the FCGR3A Variant, L66H, Which May Not Be Directly Disease-Causing. <i>Journal of Clinical Immunology</i> , 2021, 41, 1957-1959.	3.8	1
103	Hemophagocytic Lymphohistiocytosis Associated with NK Cell Dysfunction and Disseminated Herpesvirus Infection in GATA2 Deficiency/Monomac Syndrome. <i>Blood</i> , 2014, 124, 4978-4978.	1.4	1
104	Profiling natural killers in COVID-19. <i>Journal of Allergy and Clinical Immunology</i> , 2022, , .	2.9	1
105	Discovering the Cause of Wiskott-Aldrich Syndrome and Laying the Foundation for Understanding Immune Cell Structuring. <i>Journal of Immunology</i> , 2018, 200, 3667-3670.	0.8	0
106	Editorial: Molecular and Cellular Pathways in NK Cell Development. <i>Frontiers in Immunology</i> , 2020, 11, 1448.	4.8	0
107	4547 Understanding the molecular mechanism of natural killer cell deficiency to improve natural killer cell <i>in vitro</i> differentiation for therapeutics. <i>Journal of Clinical and Translational Science</i> , 2020, 4, 20-20.	0.6	0
108	NK Cell Deficiency in Job's Syndrome Patients. <i>Blood</i> , 2012, 120, 3293-3293.	1.4	0

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109	NK Cell Deficiency In Job Syndrome Patients With Dominant Negative STAT3 Mutations. <i>Blood</i> , 2013, 122, 3476-3476.	1.4	0
110	Genomic Characterization of a Pediatric Cohort with Non-Malignant Lymphoproliferative Disorders. <i>Blood</i> , 2019, 134, 83-83.	1.4	0
111	A WICB 50th Favorite: Rapid lytic granule convergence to the MTOC in natural killer cells is dependent on dynein but not cytolytic commitment. <i>Molecular Biology of the Cell</i> , 2022, 33, fe2.	2.1	0
112	Quantifying Human Natural Killer Cell Migration by Imaging and Image Analysis. <i>Methods in Molecular Biology</i> , 2022, 2463, 129-151.	0.9	0