Mindy Tsai

List of Publications by Citations

125 papers	15,043 citations	58 h-index	122 g-index
130 ext. papers	16,955 ext. citations	10.6 avg, IF	6.62 L-index

#	Paper	IF	Citations
125	The development of allergic inflammation. *Nature*, **2008**, 454, 445-54	50.4	1210
124	IgE and mast cells in allergic disease. *Nature Medicine*, **2012**, 18, 693-704	50.5	1060
123	Mast cells as "tunable" effector and immunoregulatory cells: recent advances. *Annual Review of Immunology*, **2005**, 23, 749-86	34.7	1017
122	Mast cells in the development of adaptive immune responses. *Nature Immunology*, **2005**, 6, 135-42	19.1	1004
121	Immunomodulatory mast cells: negative, as well as positive, regulators of immunity. *Nature Reviews Immunology*, **2008**, 8, 478-86	36.5	580
120	Mast cell-deficient W-sash c-kit mutant Kit W-sh/W-sh mice as a model for investigating mast cell biology in vivo. *American Journal of Pathology*, **2005**, 167, 835-48	5.8	448
119	Mast cell-derived interleukin 10 limits skin pathology in contact dermatitis and chronic irradiation with ultraviolet B. *Nature Immunology*, **2007**, 8, 1095-104	19.1	378
118	Induction of mast cell proliferation, maturation, and heparin synthesis by the rat c-kit ligand, stem cell factor. *Proceedings of the National Academy of Sciences of the United States of America*, **1991**, 88, 6382-6	11.5	353
117	Peanut oral immunotherapy results in increased antigen-induced regulatory T-cell function and hypomethylation of forkhead box protein 3 (FOXP3). *Journal of Allergy and Clinical Immunology*, **2014**, 133, 500-10	11.5	325
116	Mast cells enhance T cell activation: importance of mast cell costimulatory molecules and secreted TNF. *Journal of Immunology*, **2006**, 176, 2238-48	5.3	312
115	Mast cells as sources of cytokines, chemokines, and growth factors. *Immunological Reviews*, **2018**, 282, 121-150	11.3	297
114	Regulation of mast cell survival by IgE. *Immunity*, **2001**, 14, 791-800	32.3	280
113	Mast cells can secrete vascular permeability factor/ vascular endothelial cell growth factor and exhibit enhanced release after immunoglobulin E-dependent upregulation of fc epsilon receptor I expression. *Journal of Experimental Medicine*, **1998**, 188, 1135-45	16.6	280
112	Roles of mast cells and basophils in innate and acquired immunity. *Current Opinion in Immunology*, **2000**, 12, 624-31	7.8	274
111	Mast cells can enhance resistance to snake and honeybee venoms. *Science*, **2006**, 313, 526-30	33.3	272
110	Mast cells in allergy and infection: versatile effector and regulatory cells in innate and adaptive immunity. *European Journal of Immunology*, **2010**, 40, 1843-51	6.1	271
109	The rat c-kit ligand, stem cell factor, induces the development of connective tissue-type and mucosal mast cells in vivo. Analysis by anatomical distribution, histochemistry, and protease phenotype. *Journal of Experimental Medicine*, **1991**, 174, 125-31	16.6	260

108	Mast cells promote homeostasis by limiting endothelin-1-induced toxicity. *Nature*, **2004**, 432, 512-6	50.4	249
107	Mast cells in the promotion and limitation of chronic inflammation. *Immunological Reviews*, **2007**, 217, 304-28	11.3	244
106	Evidence that IgE molecules mediate a spectrum of effects on mast cell survival and activation via aggregation of the FcepsilonRI. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 12911-6	11.5	230
105	Identification of mast cell progenitors in adult mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 11408-13	11.5	226
104	Mast cell-associated TNF promotes dendritic cell migration. *Journal of Immunology*, **2006**, 176, 4102-12	5.3	209
103	Mast cells can promote the development of multiple features of chronic asthma in mice. *Journal of Clinical Investigation*, **2006**, 116, 1633-41	15.9	207
102	Mast cells enhance T cell activation: Importance of mast cell-derived TNF. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 6467-72	11.5	197
101	Different activation signals induce distinct mast cell degranulation strategies. *Journal of Clinical Investigation*, **2016**, 126, 3981-3998	15.9	194
100	Mast cells: versatile regulators of inflammation, tissue remodeling, host defense and homeostasis. *Journal of Dermatological Science*, **2008**, 49, 7-19	4.3	178
99	Immune sensitization in the skin is enhanced by antigen-independent effects of IgE. *Immunity*, **2004** , 20, 381-92	32.3	162
98	An unexpected version of horror autotoxicus: anaphylactic shock to a self-peptide. *Nature Immunology*, **2001**, 2, 216-22	19.1	161
97	Reduced mast cell and basophil numbers and function in Cpa3-Cre; Mcl-1fl/fl mice. *Blood*, **2011**, 118, 6930-8	2.2	145
96	Expression of Functional TrkA Receptor Tyrosine Kinase in the HMC-1 Human Mast Cell Line and in Human Mast Cells. *Blood*, **1997**, 90, 1807-1820	2.2	135
95	The rat c-kit ligand, stem cell factor, induces c-kit receptor-dependent mouse mast cell activation in vivo. Evidence that signaling through the c-kit receptor can induce expression of cellular function. *Journal of Experimental Medicine*, **1992**, 175, 245-55	16.6	126
94	A beneficial role for immunoglobulin E in host defense against honeybee venom. *Immunity*, **2013**, 39, 963-75	32.3	121
93	Mast cell-derived TNF can exacerbate mortality during severe bacterial infections in C57BL/6-KitW-sh/W-sh mice. *American Journal of Pathology*, **2010**, 176, 926-38	5.8	116
92	Mast cells: potential positive and negative roles in tumor biology. *Cancer Immunology Research*, **2013**, 1, 269-79	12.5	113
91	Multiple elements of the allergic arm of the immune response modulate autoimmune demyelination. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 1867-72	11.5	113

90	Mast cell chymase reduces the toxicity of Gila monster venom, scorpion venom, and vasoactive intestinal polypeptide in mice. *Journal of Clinical Investigation*, **2011**, 121, 4180-91	15.9	109
89	Sustained outcomes in oral immunotherapy for peanut allergy (POISED study): a large, randomised, double-blind, placebo-controlled, phase 2 study. *Lancet, The*, **2019**, 394, 1437-1449	40	106
88	Neurotensin increases mortality and mast cells reduce neurotensin levels in a mouse model of sepsis. *Nature Medicine*, **2008**, 14, 392-8	50.5	104
87	IgE and mast cells in host defense against parasites and venoms. *Seminars in Immunopathology*, **2016**, 38, 581-603	12	103
86	Differential Release of Mast Cell Interleukin-6 Via c-kit. *Blood*, **1997**, 89, 2654-2663	2.2	99
85	Regulation of mouse and human mast cell development, survival and function by stem cell factor, the ligand for the c-kit receptor. *International Archives of Allergy and Immunology*, **1995**, 107, 51-3	3.7	98
84	House dust mites activate nociceptor-mast cell clusters to drive type 2 skin inflammation. *Nature Immunology*, **2019**, 20, 1435-1443	19.1	98
83	Evidence questioning cromolyn's effectiveness and selectivity as a mast cell stabilizer in mice. *Laboratory Investigation*, **2012**, 92, 1472-82	5.9	95
82	Identification of an IFN-γ–mast cell axis in a mouse model of chronic asthma. *Journal of Clinical Investigation*, **2011**, 121, 3133-43	15.9	95
81	Effector and potential immunoregulatory roles of mast cells in IgE-associated acquired immune responses. *Current Opinion in Immunology*, **2006**, 18, 751-60	7.8	91
80	TNF can contribute to multiple features of ovalbumin-induced allergic inflammation of the airways in mice. *Journal of Allergy and Clinical Immunology*, **2007**, 119, 680-6	11.5	88
79	Activation of MAP kinases, pp90rsk and pp70-S6 kinases in mouse mast cells by signaling through the c-kit receptor tyrosine kinase or Fc epsilon RI: rapamycin inhibits activation of pp70-S6 kinase and proliferation in mouse mast cells. *European Journal of Immunology*, **1993**, 23, 3286-91	6.1	83
78	In vivo immunological function of mast cells derived from embryonic stem cells: an approach for the rapid analysis of even embryonic lethal mutations in adult mice in vivo. *Proceedings of the National Academy of Sciences of the United States of America*, **2000**, 97, 9186-90	11.5	81
77	The chymase mouse mast cell protease 4 degrades TNF, limits inflammation, and promotes survival in a model of sepsis. *American Journal of Pathology*, **2012**, 181, 875-86	5.8	78
76	Mast cell-derived tumor necrosis factor can promote nerve fiber elongation in the skin during contact hypersensitivity in mice. *American Journal of Pathology*, **2006**, 169, 1713-21	5.8	78
75	Mast cells and immunoregulation/immunomodulation. *Advances in Experimental Medicine and Biology*, **2011**, 716, 186-211	3.6	76
74	Mast cell anaphylatoxin receptor expression can enhance IgE-dependent skin inflammation in mice. *Journal of Allergy and Clinical Immunology*, **2013**, 131, 541-8.e1-9	11.5	72
73	Selective ablation of mast cells or basophils reduces peanut-induced anaphylaxis in mice. *Journal of Allergy and Clinical Immunology*, **2013**, 132, 881-8.e1-11	11.5	70

72	Approaches for analyzing the roles of mast cells and their proteases in vivo. *Advances in Immunology*, **2015**, 126, 45-127	5.6	69
71	Monomeric IgE enhances human mast cell chemokine production: IL-4 augments and dexamethasone suppresses the response. *Journal of Allergy and Clinical Immunology*, **2005**, 116, 1357-63	11.5	65
70	Mast Cells in Inflammation and Disease: Recent Progress and Ongoing Concerns. *Annual Review of Immunology*, **2020**, 38, 49-77	34.7	61
69	Assessing basophil activation by using flow cytometry and mass cytometry in blood stored 24 hours before analysis. *Journal of Allergy and Clinical Immunology*, **2017**, 139, 889-899.e11	11.5	59
68	RabGEF1 is a negative regulator of mast cell activation and skin inflammation. *Nature Immunology*, **2004**, 5, 844-52	19.1	59
67	Identification of A3 receptor- and mast cell-dependent and -independent components of adenosine-mediated airway responsiveness in mice. *Journal of Immunology*, **2003**, 171, 331-7	5.3	58
66	Rapid desensitization induces internalization of antigen-specific IgE on mouse mast cells. *Journal of Allergy and Clinical Immunology*, **2013**, 132, 922-32.e1-16	11.5	56
65	Analyzing mast cell development and function using mice carrying mutations at W/c-kit or Sl/MGF (SCF) loci. *Annals of the New York Academy of Sciences*, **1992**, 664, 69-88	6.5	53
64	Basophil CD203c levels are increased at baseline and can be used to monitor omalizumab treatment in subjects with nut allergy. *International Archives of Allergy and Immunology*, **2011**, 154, 318-27	3.7	52
63	Using mast cell knock-in mice to analyze the roles of mast cells in allergic responses in vivo. *Chemical Immunology and Allergy*, **2005**, 87, 179-197		49
62	IL-3 is required for increases in blood basophils in nematode infection in mice and can enhance IgE-dependent IL-4 production by basophils in vitro. *Laboratory Investigation*, **2008**, 88, 1134-42	5.9	47
61	Mast cells and IgE in defense against venoms: Possible "good side" of allergy?. *Allergology International*, **2016**, 65, 3-15	4.4	47
60	Origins and clonal convergence of gastrointestinal IgE B cells in human peanut allergy. *Science Immunology*, **2020**, 5,	28	45
59	Contribution of mast cell-derived interleukin-1 to uric acid crystal-induced acute arthritis in mice. *Arthritis and Rheumatology*, **2014**, 66, 2881-91	9.5	45
58	Transcriptional response of human mast cells stimulated via the Fc(epsilon)RI and identification of mast cells as a source of IL-11. *BMC Immunology*, **2002**, 3, 5	3.7	45
57	Mast cells derived from embryonic stem cells: a model system for studying the effects of genetic manipulations on mast cell development, phenotype, and function in vitro and in vivo. *International Journal of Hematology*, **2002**, 75, 345-9	2.3	45
56	Evidence that meningeal mast cells can worsen stroke pathology in mice. *American Journal of Pathology*, **2014**, 184, 2493-504	5.8	43
55	Sustained successful peanut oral immunotherapy associated with low basophil activation and peanut-specific IgE. *Journal of Allergy and Clinical Immunology*, **2020**, 145, 885-896.e6	11.5	43

54	Severe anaphylactic reactions to glutamic acid decarboxylase (GAD) self peptides in NOD mice that spontaneously develop autoimmune type 1 diabetes mellitus. *BMC Immunology*, **2003**, 4, 2	3.7	42
53	IgE antibodies, FcRI and IgE-mediated local anaphylaxis can limit snake venom toxicity. *Journal of Allergy and Clinical Immunology*, **2016**, 137, 246-257.e11	11.5	41
52	Evidence that mast cells are not required for healing of splinted cutaneous excisional wounds in mice. *PLoS ONE*, **2013**, 8, e59167	3.7	36
51	Analyzing the roles of mast cells and basophils in host defense and other biological responses. *International Journal of Hematology*, **2002**, 75, 363-9	2.3	36
50	Imaging protective mast cells in living mice during severe contact hypersensitivity. *JCI Insight*, **2017**, 2,	9.9	35
49	RabGEF1 regulates stem cell factor/c-Kit-mediated signaling events and biological responses in mast cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 2659-64	11.5	32
48	Distinct patterns of early response gene expression and proliferation in mouse mast cells stimulated by stem cell factor, interleukin-3, or IgE and antigen. *European Journal of Immunology*, **1993**, 23, 867-72	6.1	32
47	Roles of RabGEF1/Rabex-5 domains in regulating Fc epsilon RI surface expression and Fc epsilon RI-dependent responses in mast cells. *Blood*, **2007**, 109, 5308-17	2.2	30
46	Basophil-derived tumor necrosis factor can enhance survival in a sepsis model in mice. *Nature Immunology*, **2019**, 20, 129-140	19.1	28
45	Baseline Gastrointestinal Eosinophilia Is Common in Oral Immunotherapy Subjects With IgE-Mediated Peanut Allergy. *Frontiers in Immunology*, **2018**, 9, 2624	8.4	28
44	Assessment of Allergic and Anaphylactic Reactions to mRNA COVID-19 Vaccines With Confirmatory Testing in a US Regional Health System. *JAMA Network Open*, **2021**, 4, e2125524	10.4	27
43	Testing the Rroxin hypothesis of allergyR mast cells, IgE, and innate and acquired immune responses to venoms. *Current Opinion in Immunology*, **2015**, 36, 80-7	7.8	25
42	Pathways of immediate hypothermia and leukocyte infiltration in an adjuvant-free mouse model of anaphylaxis. *Journal of Allergy and Clinical Immunology*, **2017**, 139, 584-596.e10	11.5	25
41	MPLA shows attenuated pro-inflammatory properties and diminished capacity to activate mast cells in comparison with LPS. *Allergy: European Journal of Allergy and Clinical Immunology*, **2015**, 70, 1259-68	9.3	25
40	A role for Bax in the regulation of apoptosis in mouse mast cells. *Journal of Investigative Dermatology*, **2000**, 114, 1205-6	4.3	24
39	Gastrointestinal Eosinophil Responses in a Longitudinal, Randomized Trial of Peanut Oral Immunotherapy. *Clinical Gastroenterology and Hepatology*, **2021**, 19, 1151-1159.e14	6.9	21
38	A TNFRSF14-FceRI-mast cell pathway contributes to development of multiple features of asthma pathology in mice. *Nature Communications*, **2016**, 7, 13696	17.4	21
37	Basophil activation test shows high accuracy in the diagnosis of peanut and tree nut allergy: The Markers of Nut Allergy Study. *Allergy: European Journal of Allergy and Clinical Immunology*, **2021**, 76, 1800-1812	9.3	15

36	A new fluorescent-avidin-based method for quantifying basophil activation in whole blood. *Journal of Allergy and Clinical Immunology*, **2017**, 140, 1202-1206.e3	11.5	14
35	Thirdhand smoke component can exacerbate a mouse asthma model through mast cells. *Journal of Allergy and Clinical Immunology*, **2018**, 142, 1618-1627.e9	11.5	14
34	Analyzing the Functions of Mast Cells In Vivo Using R Mast Cell Knock-in R Mice. *Journal of Visualized Experiments*, **2015**, e52753	1.6	13
33	Mast Cells and IgE can Enhance Survival During Innate and Acquired Host Responses to Venoms. *Transactions of the American Clinical and Climatological Association*, **2017**, 128, 193-221	0.9	12
32	Evidence that the endothelin A receptor can enhance IgE-dependent anaphylaxis in mice. *Journal of Allergy and Clinical Immunology*, **2011**, 128, 424-6.e1	11.5	10
31	The role of recipient mast cells in acute and chronic cardiac allograft rejection in C57BL/6-KitW-sh/W-sh mice. *Journal of Heart and Lung Transplantation*, **2010**, 29, 401-9	5.8	10
30	Alterations in arachidonic acid metabolism in mouse mast cells induced to undergo maturation in vitro in response to stem cell factor. *Journal of Allergy and Clinical Immunology*, **1996**, 97, 1329-41	11.5	10
29	Targeting of Immune Cells by Dual TLR2/7 Ligands Suppresses Features of Allergic Th2 Immune Responses in Mice. *Journal of Immunology Research*, **2017**, 2017, 7983217	4.5	9
28	For better or for worse: does stem cell factor importantly regulate mast cell function in pulmonary physiology and pathology?. *American Journal of Respiratory Cell and Molecular Biology*, **1994**, 11, 644-5	5.7	9
27	Guanine nucleotide exchange factor RABGEF1 regulates keratinocyte-intrinsic signaling to maintain skin homeostasis. *Journal of Clinical Investigation*, **2016**, 126, 4497-4515	15.9	9
26	Mast cells and IgE in defense against lethality of venoms: Possible "benefit" of allergy[]. *Allergo Journal International*, **2020**, 29, 46-62	1.5	8
25	Regulation of Mast Cell Proliferation, Maturation and Function by Stem Cell Factor, a Ligand for the c-kit Receptor. *International Archives of Allergy and Immunology*, **1992**, 99, 234-237	3.7	8
24	The tyrosine kinase inhibitor imatinib mesylate suppresses uric acid crystal-induced acute gouty arthritis in mice. *PLoS ONE*, **2017**, 12, e0185704	3.7	8
23	E-cadherin is regulated by GATA-2 and marks the early commitment of mouse hematopoietic progenitors to the basophil and mast cell fates. *Science Immunology*, **2021**, 6,	28	8
22	Isotype-specific agglutination-PCR (ISAP): A sensitive and multiplex method for measuring allergen-specific IgE. *Journal of Allergy and Clinical Immunology*, **2018**, 141, 1901-1904.e15	11.5	7
21	The Regulation of Mast Cell and Basophil Development by the Kit Ligand, SCF, and IL-3 **1999**, 11-30		7
20	RabGEF1/Rabex-5 Regulates TrkA-Mediated Neurite Outgrowth and NMDA-Induced Signaling Activation in NGF-Differentiated PC12 Cells. *PLoS ONE*, **2015**, 10, e0142935	3.7	6
19	Regulation of Mast Cell and Basophil Development by Stem Cell Factor and Interleukin-3 **2000**, 3-20		6

18	Oral Immunotherapy and Basophil and Mast Cell Reactivity in Food Allergy. *Frontiers in Immunology*, **2020**, 11, 602660	8.4	6
17	Immune Sensitization in the Skin is Enhanced by Antigen-Independent Effects of IgE on Mast Cells. *Novartis Foundation Symposium*,15-38		6
16	Microfluidic methods for precision diagnostics in food allergy. *Biomicrofluidics*, **2020**, 14, 021503	3.2	4
15	Thymic stromal lymphopoietin contributes to myeloid hyperplasia and increased immunoglobulins, but not epidermal hyperplasia, in RabGEF1-deficient mice. *American Journal of Pathology*, **2010**, 177, 2411-20	5.8	4
14	Development of multiple features of antigen-induced asthma pathology in a new strain of mast cell deficient BALB/c-Kit mice. *Laboratory Investigation*, **2020**, 100, 516-526	5.9	4
13	Mass Cytometry Phenotyping of Human Granulocytes Reveals Novel Basophil Functional Heterogeneity. *IScience*, **2020**, 23, 101724	6.1	4
12	IgE antibodies increase honeybee venom responsiveness and detoxification efficiency of mast cells. *Allergy: European Journal of Allergy and Clinical Immunology*, **2021**,	9.3	3
11	The role of Sp140 revealed in IgE and mast cell responses in Collaborative Cross mice. *JCI Insight*, **2021**, 6,	9.9	2
10	Transcriptome programming of IL-3-dependent bone marrow-derived cultured mast cells by stem cell factor (SCF). *Allergy: European Journal of Allergy and Clinical Immunology*, **2021**, 76, 2288-2291	9.3	2
9	Mast Cells: Effector Cells of Anaphylaxis **2011**, 47-68		1
8	Roles of Mast Cells and Basophils in Innate Immunity111-132		1
7	RabGEF1, a Negative Regulator of Ras Signalling, Mast Cell Activation and Skin Inflammation. *Novartis Foundation Symposium*,115-130		1
6	Epithelial RABGEF1 deficiency promotes intestinal inflammation by dysregulating intrinsic MYD88-dependent innate signaling. *Mucosal Immunology*, **2020**, 13, 96-109	9.2	0
5	An optimized protocol for phenotyping human granulocytes by mass cytometry.. *STAR Protocols*, **2022**, 3, 101280	1.4	0
4	Mast cells and IgE in defense against lethality of venoms: Possible "benefit" of allergy*. *Allergo Journal*, **2020**, 29, 34-50	0	
3	FRT FONDATION RENE TOURAINE. *Experimental Dermatology*, **2015**, 24, 803-820	4	
2	RabGEF1 regulates stem cell factor/c-Kit-mediated signaling events and biological responses in mast cells. *FASEB Journal*, **2006**, 20, LB123	0.9	
1	Mast Cells79-105		