Lai Guan Ng

List of Publications by Year
in descending order

127 papers	24,126 citations	18482 62 h-index	16650 123 g-index
131 all docs	131 docs citations	131 times ranked	36677 citing authors

#	Article	IF	Citations
1	Fate Mapping Analysis Reveals That Adult Microglia Derive from Primitive Macrophages. Science, 2010, 330, 841-845.	12.6	3,920
2	Dimensionality reduction for visualizing single-cell data using UMAP. Nature Biotechnology, 2019, 37, 38-44.	17.5	3,254
3	The gut microbiota influences blood-brain barrier permeability in mice. Science Translational Medicine, 2014, 6, 263ra158.	12.4	1,589
4	C-Myb+ Erythro-Myeloid Progenitor-Derived Fetal Monocytes Give Rise to Adult Tissue-Resident Macrophages. Immunity, 2015, 42, 665-678.	14.3	847
5	Guidelines for the use of flow cytometry and cell sorting in immunological studies (second edition). European Journal of Immunology, 2019, 49, 1457-1973.	2.9	766
6	IRF4 Transcription Factor-Dependent CD11b+ Dendritic Cells in Human and Mouse Control Mucosal IL-17 Cytokine Responses. Immunity, 2013, 38, 970-983.	14.3	703
7	Two distinct interstitial macrophage populations coexist across tissues in specific subtissular niches. Science, 2019, 363, .	12.6	676
8	Elevated Calprotectin and Abnormal Myeloid Cell Subsets Discriminate Severe from Mild COVID-19. Cell, 2020, 182, 1401-1418.e18.	28.9	663
9	Adult Langerhans cells derive predominantly from embryonic fetal liver monocytes with a minor contribution of yolk sacâ€“derived macrophages. Journal of Experimental Medicine, 2012, 209, 1167-1181.	8.5	639
10	Developmental Analysis of Bone Marrow Neutrophils Reveals Populations Specialized in Expansion, Trafficking, and Effector Functions. Immunity, 2018, 48, 364-379.e8.	14.3	450
11	B Cell-Activating Factor Belonging to the TNF Family (BAFF)-R Is the Principal BAFF Receptor Facilitating BAFF Costimulation of Circulating T and B Cells. Journal of Immunology, 2004, 173, 807-817.	0.8	436
12	Heterogeneity of neutrophils. Nature Reviews Immunology, 2019, 19, 255-265.	22.7	416
13	Fate Mapping via Ms4a3-Expression History Traces Monocyte-Derived Cells. Cell, 2019, 178, 1509-1525.e19.	28.9	361
14	A Network of Macrophages Supports Mitochondrial Homeostasis in the Heart. Cell, 2020, 183, 94-109.e23.	28.9	360
15	Deciphering human macrophage development at single-cell resolution. Nature, 2020, 582, 571-576.	27.8	279
16	A Neutrophil Timer Coordinates Immune Defense and Vascular Protection. Immunity, 2019, 50, 390-402.e10.	14.3	258
17	Ultrabright Organic Dots with Aggregationâ€Induced Emission Characteristics for Realâ€Time Twoâ€Photon Intravital Vasculature Imaging. Advanced Materials, 2013, 25, 6083-6088.	21.0	255
18	Cutaneous immunosurveillance by self-renewing dermal Î³Î´ T cells. Journal of Experimental Medicine, 2011, 208, 505-518.	8.5	248

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19	Co-option of Neutrophil Fates by Tissue Environments. Cell, 2020, 183, 1282-1297.e18.	28.9	246
20	Induced-Pluripotent-Stem-Cell-Derived Primitive Macrophages Provide a Platform for Modeling Tissue-Resident Macrophage Differentiation and Function. Immunity, 2017, 47, 183-198.e6.	14.3	245
21	Perivascular macrophages mediate neutrophil recruitment during bacterial skin infection. Nature Immunology, 2014, 15, 45-53.	14.5	242
22	DC mobilization from the skin requires docking to immobilized CCL21 on lymphatic endothelium and intralymphatic crawling. Journal of Experimental Medicine, 2011, 208, 2141-2153.	8.5	235
23	Hyaluronan Receptor LYVE-1-Expressing Macrophages Maintain Arterial Tone through Hyaluronan-Mediated Regulation of Smooth Muscle Cell Collagen. Immunity, 2018, 49, 326-341.e7.	14.3	235
24	B Cell-Activating Factor Belonging to the TNF Family Acts through Separate Receptors to Support B Cell Survival and T Cell-Independent Antibody Formation. Journal of Immunology, 2004, 173, 2331-2341.	0.8	230
25	Migratory Dermal Dendritic Cells Act as Rapid Sensors of Protozoan Parasites. PLoS Pathogens, 2008, 4, e1000222.	4.7	213
26	Biocompatible Nanoparticles Based on Diketoâ€Pyrroloâ€Pyrrole (DPP) with Aggregationâ€Induced Red/NIR Emission for In Vivo Twoâ€Photon Fluorescence Imaging. Advanced Functional Materials, 2015, 25, 2857-2866.	14.9	213
27	Perivascular leukocyte clusters are essential for efficient activation of effector T cells in the skin. Nature Immunology, 2014, 15, 1064-1069.	14.5	211
28	Random migration precedes stable target cell interactions of tumor-infiltrating T cells. Journal of Experimental Medicine, 2006, 203, 2749-2761.	8.5	201
29	Neutrophils instruct homeostatic and pathological states in naive tissues. Journal of Experimental Medicine, 2018, 215, 2778-2795.	8.5	200
30	Guidelines for the use of flow cytometry and cell sorting in immunological studies (third edition). European Journal of Immunology, 2021, 51, 2708-3145.	2.9	198
31	Neutrophil mobilization via plerixafor-mediated CXCR4 inhibition arises from lung demargination and blockade of neutrophil homing to the bone marrow. Journal of Experimental Medicine, 2013, 210, 2321-2336.	8.5	190
32	Patients with COVID-19: in the dark-NETs of neutrophils. Cell Death and Differentiation, 2021, 28, 3125-3139.	11.2	189
33	Visualizing the Neutrophil Response to Sterile Tissue Injury in Mouse Dermis Reveals a Three-Phase Cascade of Events. Journal of Investigative Dermatology, 2011, 131, 2058-2068.	0.7	187
34	Polymerization-Enhanced Two-Photon Photosensitization for Precise Photodynamic Therapy. ACS Nano, 2019, 13, 3095-3105.	14.6	182
35	A Liver Capsular Network of Monocyte-Derived Macrophages Restricts Hepatic Dissemination of Intraperitoneal Bacteria by Neutrophil Recruitment. Immunity, 2017, 47, 374-388.e6.	14.3	171
36	Intravital multiphoton imaging of immune responses in the mouse ear skin. Nature Protocols, 2012, 7, 221-234.	12.0	162

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37	Plasmodium vivax: restricted tropism and rapid remodeling of CD71-positive reticulocytes. Blood, 2015, 125, 1314-1324.	1.4	157
38	TNF Deficiency Fails to Protect BAFF Transgenic Mice against Autoimmunity and Reveals a Predisposition to B Cell Lymphoma. Journal of Immunology, 2004, 172, 812-822.	0.8	154
39	Combinatorial Single-Cell Analyses of Granulocyte-Monocyte Progenitor Heterogeneity Reveals an Early Uni-potent Neutrophil Progenitor. Immunity, 2020, 53, 303-318.e5.	14.3	153
40	Langerhans cells are precommitted to immune tolerance induction. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 18049-18054.	7.1	150
41	The methyltransferase Ezh2 controls cell adhesion and migration through direct methylation of the extranuclear regulatory protein talin. Nature Immunology, 2015, 16, 505-516.	14.5	144
42	The BAFF/APRIL system: life beyond B lymphocytes. Molecular Immunology, 2005, 42, 763-772.	2.2	141
43	Whole blood immunophenotyping uncovers immature neutrophil-to-VD2 T-cell ratio as an early marker for severe COVID-19. Nature Communications, 2020, 11, 5243.	12.8	138
44	Nanocrystallization: A Unique Approach to Yield Bright Organic Nanocrystals for Biological Applications. Advanced Materials, 2017, 29, 1604100.	21.0	126
45	BAFF Augments Certain Th1-Associated Inflammatory Responses. Journal of Immunology, 2005, 174, 5537-5544.	0.8	124
46	Neutrophils contribute to inflammatory lymphangiogenesis by increasing VEGF-A bioavailability and secreting VEGF-D. Blood, 2013, 122, 3666-3677.	1.4	118
47	A Three-Dimensional Atlas of Human Dermal Leukocytes, Lymphatics, and Blood Vessels. Journal of Investigative Dermatology, 2014, 134, 965-974.	0.7	111
48	CXCR4 identifies transitional bone marrow premonocytes that replenish the mature monocyte pool for peripheral responses. Journal of Experimental Medicine, 2016, 213, 2293-2314.	8.5	108
49	Dynamic Imaging of CD8+ T Cells and Dendritic Cells during Infection with Toxoplasma gondii. PLoS Pathogens, 2009, 5, e1000505.	4.7	107
50	A subset of Kupffer cells regulates metabolism through the expression of CD36. Immunity, 2021, 54, 2101-2116.e6.	14.3	99
51	Efficient Red/Nearâ€Infrared Fluorophores Based on Benzo[1,2â€b:4,5â€bâ€²]dithiophene 1,1,5,5â€Tetraoxide for Targeted Photodynamic Therapy and In Vivo Twoâ€Photon Fluorescence Bioimaging. Advanced Functional Materials, 2018, 28, 1706945.	14.9	96
52	NIRâ€IIâ€Excited Intravital Twoâ€Photon Microscopy Distinguishes Deep Cerebral and Tumor Vasculatures with an Ultrabright NIRâ€I AIE Luminogen. Advanced Materials, 2019, 31, e1904447.	21.0	93
53	Biocompatible Green and Red Fluorescent Organic Dots with Remarkably Large Two-Photon Action Cross Sections for Targeted Cellular Imaging and Real-Time Intravital Blood Vascular Visualization. ACS Applied Materials & Interfaces, 2015, 7, 14965-14974.	8.0	86
54	CD44 Mediates Successful Interstitial Navigation by Killer T Cells and Enables Efficient Antitumor Immunity. Immunity, 2008, 29, 971-985.	14.3	85

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55	NIRâ€Ⅱ Excitable Conjugated Polymer Dots with Bright NIRâ€Ⅰ Emission for Deep In Vivo Twoâ€Photon Brain Imaging Through Intact Skull. Advanced Functional Materials, 2019, 29, 1808365.	14.9	80
56	Capturing the Fantastic Voyage of Monocytes Through Time and Space. Frontiers in Immunology, 2019, 10, 834.	4.8	80
57	Red Emissive Biocompatible Nanoparticles from Tetraphenyletheneâ€Decorated BODIPY Luminogens for Twoâ€Photon Excited Fluorescence Cellular Imaging and Mouse Brain Blood Vascular Visualization. Particle and Particle Systems Characterization, 2014, 31, 481-491.	2.3	78
58	Siloleâ€Based Red Fluorescent Organic Dots for Bright Twoâ€Photon Fluorescence In vitro Cell and In vivo Blood Vessel Imaging. Small, 2016, 12, 782-792.	10.0	74
59	BAFF costimulation of Toll-like receptor-activatedB-1 cells. European Journal of Immunology, 2006, 36, 1837-1846.	2.9	73
60	Development of nephritis but not sialadenitis in autoimmune-prone BAFF transgenic mice lacking marginal zone B cells. European Journal of Immunology, 2006, 36, 2504-2514.	2.9	69
61	Granulopoiesis and Neutrophil Homeostasis: A Metabolic, Daily Balancing Act. Trends in Immunology, 2019, 40, 598-612.	6.8	67
62	Micelle/Silica Co-protected Conjugated Polymer Nanoparticles for Two-Photon Excited Brain Vascular Imaging. Chemistry of Materials, 2014, 26, 1874-1880.	6.7	65
63	A Smallâ€Molecule FRET Reporter for the Realâ€Time Visualization of Cellâ€Surface Proteolytic Enzyme Functions. Angewandte Chemie - International Edition, 2014, 53, 14357-14362.	13.8	63
64	Neutrophils Self-Regulate Immune Complex-Mediated Cutaneous Inflammation through CXCL2. Journal of Investigative Dermatology, 2016, 136, 416-424.	0.7	62
65	PD-L1 expression on nonclassical monocytes reveals their origin and immunoregulatory function. Science Immunology, 2019, 4, .	11.9	60
66	Dengue virusâ€“elicited tryptase induces endothelial permeability and shock. Journal of Clinical Investigation, 2019, 129, 4180-4193.	8.2	60
67	In Vivo Threeâ€Photon Imaging of Lipids using Ultrabright Fluorogens with Aggregationâ€Induced Emission. Advanced Materials, 2021, 33, e2007490.	21.0	58
68	Bright AIEgenâ€“Protein Hybrid Nanocomposite for Deep and Highâ€Resolution In Vivo Twoâ€Photon Brain Imaging. Advanced Functional Materials, 2019, 29, 1902717.	14.9	56
69	MAP3K2-regulated intestinal stromal cells define a distinct stem cell niche. Nature, 2021, 592, 606-610.	27.8	53
70	Behavioural immune landscapes of inflammation. Nature, 2022, 601, 415-421.	27.8	53
71	Visualizing dendritic cell migration within the skin. Histochemistry and Cell Biology, 2008, 130, 1131-1146.	1.7	52
72	A Subset of Type I Conventional Dendritic Cells Controls Cutaneous Bacterial Infections through VEGFÎ±-Mediated Recruitment of Neutrophils. Immunity, 2019, 50, 1069-1083.e8.	14.3	50

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73	Silica shelled and block copolymer encapsulated red-emissive AIE nanoparticles with 50% quantum yield for two-photon excited vascular imaging. Chemical Communications, 2015, 51, 13416-13419.	4.1	45
74	3-Dimensional Optical Clearing and Imaging of Pruritic Atopic Dermatitis and Psoriasis Skin RevealsÂDownregulation of Epidermal Innervation. Journal of Investigative Dermatology, 2019, 139, 1201-1204.	0.7	39
75	Lung endothelial cell antigen cross-presentation to CD8+T cells drives malaria-associated lung injury. Nature Communications, 2019, 10, 4241.	12.8	36
76	Dual modal ultra-bright nanodots with aggregation-induced emission and gadolinium-chelation for vascular integrity and leakage detection. Biomaterials, 2018, 152, 77-85.	11.4	34
77	Twoâ€photon imaging of effector Tâ€cell behavior: lessons from a tumor model. Immunological Reviews, 2008, 221, 147-162.	6.0	33
78	Tumor stroma and chemokines control T-cell migration into melanoma following Temozolomide treatment. OncoImmunology, 2015, 4, e978709.	4.6	33
79	Polymeric nanorods with aggregation-induced emission characteristics for enhanced cancer targeting and imaging. Nanoscale, 2018, 10, 5869-5874.	5.6	32
80	In vivo labelâ€free functional photoacoustic monitoring of ischemic reperfusion. Journal of Biophotonics, 2019, 12, e201800454.	2.3	31
81	A quantitative approach to histopathological dissection of elastin-related disorders using multiphoton microscopy. British Journal of Dermatology, 2013, 169, 869-879.	1.5	29
82	Anti-Allergic Inflammatory Activity of Interleukin-37 Is Mediated by Novel Signaling Cascades in Human Eosinophils. Frontiers in Immunology, 2018, 9, 1445.	4.8	29
83	Resident macrophages restrain pathological adipose tissue remodeling and protect vascular integrity in obese mice. EMBO Reports, 2021, 22, e52835.	4.5	28
84	In vivo Imaging of Cutaneous T-Cell Lymphoma Migration to the Skin. Cancer Research, 2009, 69, 2704-2708.	0.9	25
85	Efficient aortic lymphatic drainage is necessary for atherosclerosis regression induced by ezetimibe. Science Advances, 2020, 6, .	10.3	24
86	Peeking into the secret life of neutrophils. Immunologic Research, 2012, 53, 168-181.	2.9	22
87	CD8 T Cells Regulate Allergic Contact Dermatitis by Modulating CCR2â€“Dependent TNF/iNOSâ€“Expressing Ly6C + CD11b + Monocytic Cells. Journal of Investigative Dermatology, 2014, 134, 666-676.	0.7	22
88	Reverse-engineering flow-cytometry gating strategies for phenotypic labelling and high-performance cell sorting. Bioinformatics, 2019, 35, 301-308.	4.1	22
89	Organic nanoparticles with ultrahigh quantum yield and aggregation-induced emission characteristics for cellular imaging and real-time two-photon lung vasculature imaging. Journal of Materials Chemistry B, 2018, 6, 2630-2636.	5.8	19
90	Understanding the Murine Cutaneous Dendritic Cell Network to Improve Intradermal Vaccination Strategies. Current Topics in Microbiology and Immunology, 2010, 351, 1-24.	1.1	17

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91	<scp>CD</scp>41 is a reliable identification and activation marker for murine basophils in the steady state and during helminth and malarial infections. European Journal of Immunology, 2014, 44, 1823-1834.	2.9	16
92	CXCR4 signaling controls dendritic cell location and activation at steady state and in inflammation. Blood, 2021, 137, 2770-2784.	1.4	16
93	Visualization of bone marrow monocyte mobilization using Cx3cr1gfp/+Flt3Lâ^'/â^' reporter mouse by multiphoton intravital microscopy. Journal of Leukocyte Biology, 2015, 97, 611-619.	3.3	15
94	Glycopeptide antibiotic analogs for selective inactivation and two-photon imaging of vancomycin-resistant strains. Chemical Communications, 2016, 52, 4667-4670.	4.1	15
95	Targeted induction of antigen expression within dendritic cells modulates antigen-specific immunity afforded by recombinant BCG. Vaccine, 2011, 29, 1374-1381.	3.8	14
96	Lights, Camera, and Action: Vertebrate Skin Sets the Stage for Immune Cell Interaction with Arthropod-Vectored Pathogens. Frontiers in Immunology, 2013, 4, 286.	4.8	14
97	Real-Time Imaging of Dendritic Cell Responses to Sterile Tissue Injury. Journal of Investigative Dermatology, 2015, 135, 1181-1184.	0.7	14
98	Identification of a novel lymphoid population in the murine epidermis. Scientific Reports, 2015, 5, 12554.	3.3	13
99	Ezh2 Controls Skin Tolerance through Distinct Mechanisms in Different Subsets of Skin Dendritic Cells. IScience, 2018, 10, 23-39.	4.1	12
100	Neutrophil subsets and their differential roles in viral respiratory diseases. Journal of Leukocyte Biology, 2022, 111, 1159-1173.	3.3	11
101	Inducing Ischemia-reperfusion Injury in the Mouse Ear Skin for Intravital Multiphoton Imaging of Immune Responses. Journal of Visualized Experiments, 2016, , .	0.3	9
102	Intravital multiphoton imaging of mouse tibialis anterior muscle. Intravital, 2016, 5, e1156272.	2.0	9
103	The impact of ischemiaâ€reperfusion injuries on skin resident murine dendritic cells. European Journal of Immunology, 2018, 48, 1014-1019.	2.9	9
104	Illuminating the covert mission of mononuclear phagocytes in their regional niches. Current Opinion in Immunology, 2018, 50, 94-101.	5.5	9
105	Transitional premonocytes emerge in the periphery for host defense against bacterial infections. Science Advances, 2022, 8, eabj4641.	10.3	9
106	Rodent Plasmodium-infected red blood cells: Imaging their fates and interactions within their hosts. Parasitology International, 2014, 63, 187-194.	1.3	8
107	Streamlining volumetric multi-channel image cytometry using hue-saturation-brightness-based surface creation. Communications Biology, 2018, 1, 136.	4.4	8
108	Neutrophils in cancerâ€"unresolved questions. Science China Life Sciences, 2021, 64, 1829-1841.	4.9	8

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109	Neutrophils guide pre-existing matrix into injured organs to initiate tissue repair. Nature Immunology, 2022, 23, 472-473.	14.5	6
110	Neutrophil: A mobile fertilizer. Journal of Experimental Medicine, 2019, 216, 4-6.	8.5	4
111	Imaging of Inflammatory Responses in the Mouse Ear Skin. Methods in Molecular Biology, 2018, 1763, 87-107.	0.9	4
112	WDR82-binding long noncoding RNA lncEry controls mouse erythroid differentiation and maturation. Journal of Experimental Medicine, 2022, 219, .	8.5	4
113	Multi-modal image cytometry approach â€“ From dynamic to whole organ imaging. Cellular Immunology, 2019, 344, 103946.	3.0	3
114	Skinâ€ny deeping: Uncovering immune cell behavior and function through imaging techniques*. Immunological Reviews, 2022, 306, 271-292.	6.0	3
115	â€œCloakingâ€•on Time: A Cover-Up Act by Resident Tissue Macrophages. Cell, 2019, 177, 514-516.	28.9	2
116	In silico modeling of cancer cell dissemination and metastasis. Annals of the New York Academy of Sciences, 2013, 1284, 71-74.	3.8	1
117	Nanostring Analysis of Skin Biopsies from Patients with Henoch-SchÃ¶nlein Purpura Reveals Genes Associated with Pathology and Heterogeneity in the Disease Process. Acta Dermato-Venereologica, 2018, 98, 896-897.	1.3	1
118	Research Techniques Made Simple: Optical Clearing and Three-Dimensional Volumetric Imaging of Skin Biopsies. Journal of Investigative Dermatology, 2020, 140, 1305-1314.e1.	0.7	1
119	Reprint of â€œMulti-modal image cytometry approach â€“ From dynamic to whole organ imagingâ€• Cellular Immunology, 2020, 350, 104086.	3.0	1
120	Intravital Imaging of Bone Marrow Microenvironment in the Mouse Calvaria and Tibia. Methods in Molecular Biology, 2021, 2308, 177-202.	0.9	1
121	Intravital Multiphoton Imaging of Immune Cells. Advances in Intelligent and Soft Computing, 2012, , 3-16.	0.2	1
122	A chemotaxis model to explain WHIM neutrophil accumulation in the bone marrow of WHIM mouse model. Blood Science, 2019, 1, 102-112.	0.9	0
123	Immune imaging: Seeing the immune system in a new light. Cellular Immunology, 2020, 350, 104067.	3.0	0
124	Threeâ€dimensional neuroanatomy of the intraepidermal nervous system. British Journal of Dermatology, 2020, 183, 174-176.	1.5	0
125	Intrafemoral Delivery of Hematopoietic Progenitors. Methods in Molecular Biology, 2021, 2308, 151-161.	0.9	0
126	Functional vascular imaging by Photoacoustic Microscopy (PAM) and its biomedical application. , 2019, , .		0

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127	The convergence of hematology and immunology (November 13â€“15; Tianjin, China). Blood Science, 2020, 2, 41-43.	0.9	0