Kensuke Miyake

List of Publications by Year
in descending order

127 papers	18,394 citations	20817 60 h-index	15266 126 g-index
135 all docs	135 docs citations	135 times ranked	18782 citing authors

#	Article	IF	Citations
1	MD-2, a Molecule that Confers Lipopolysaccharide Responsiveness on Toll-like Receptor 4. Journal of Experimental Medicine, 1999, 189, 1777-1782.	8.5	1,902
2	Oligosaccharides of Hyaluronan Activate Dendritic Cells via Toll-like Receptor 4. Journal of Experimental Medicine, 2002, 195, 99-111.	8.5	1,236
3	Noncanonical Inflammasome Activation by Intracellular LPS Independent of TLR4. Science, 2013, 341, 1246-1249.	12.6	1,223
4	Essential role of MD-2 in LPS responsiveness and TLR4 distribution. Nature Immunology, 2002, 3, 667-672.	14.5	940
5	Role of the Toll-like Receptor 4/NF-Î°B Pathway in Saturated Fatty Acidâ€"Induced Inflammatory Changes in the Interaction Between Adipocytes and Macrophages. Arteriosclerosis, Thrombosis, and Vascular Biology, 2007, 27, 84-91.	2.4	722
6	Mediators of innate immune recognition of bacteria concentrate in lipid rafts and facilitate lipopolysaccharide-induced cell activation. Journal of Cell Science, 2002, 115, 2603-2611.	2.0	527
7	Mediators of innate immune recognition of bacteria concentrate in lipid rafts and facilitate lipopolysaccharide-induced cell activation. Journal of Cell Science, 2002, 115, 2603-11.	2.0	462
8	Innate immune sensing of pathogens and danger signals by cell surface Toll-like receptors. Seminars in Immunology, 2007, 19, 3-10.	5.6	454
9	Crystal Structures of Human MD-2 and Its Complex with Antiendotoxic Lipid IVa. Science, 2007, 316, 1632-1634.	12.6	436
10	Establishment of a monoclonal antibody against human Toll-like receptor 3 that blocks double-stranded RNA-mediated signaling. Biochemical and Biophysical Research Communications, 2002, 293, 1364-1369.	2.1	411
11	Peroxiredoxin family proteins are key initiators of post-ischemic inflammation in the brain. Nature Medicine, 2012, 18, 911-917.	30.7	375
12	Virulence factors of Yersinia pestis are overcome by a strong lipopolysaccharide response. Nature Immunology, 2006, 7, 1066-1073.	14.5	364
13	Lipopolysaccharide Interaction with Cell Surface Toll-like Receptor 4-MD-2. Journal of Experimental Medicine, 2003, 198, 1035-1042.	8.5	353
14	Mouse Toll-like Receptor 4Â·MD-2 Complex Mediates Lipopolysaccharide-mimetic Signal Transduction by Taxol. Journal of Biological Chemistry, 2000, 275, 2251-2254.	3.4	333
15	Structural Analysis Reveals that Toll-like Receptor 7 Is a Dual Receptor for Guanosine and Single-Stranded RNA. Immunity, 2016, 45, 737-748.	14.3	321
16	Toll-like receptor 8 senses degradation products of single-stranded RNA. Nature Structural and Molecular Biology, 2015, 22, 109-115.	8.2	312
17	The Toll-like Receptor Protein Rp105 Regulates Lipopolysaccharide Signaling in B Cells. Journal of Experimental Medicine, 2000, 192, 23-30.	8.5	290
18	Structural basis of CpG and inhibitory DNA recognition by Toll-like receptor 9. Nature, 2015, 520, 702-705.	27.8	290

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19	Innate recognition of lipopolysaccharide by Toll-like receptor 4â€"MD-2. Trends in Microbiology, 2004, 12, 186-192.	7.7	288
20	Structural Reorganization of the Toll-Like Receptor 8 Dimer Induced by Agonistic Ligands. Science, 2013, 339, 1426-1429.	12.6	288
21	Unc93B1 biases Toll-like receptor responses to nucleic acid in dendritic cells toward DNA- but against RNA-sensing. Journal of Experimental Medicine, 2009, 206, 1339-1350.	8.5	285
22	Molecular Genetic Analysis of an Endotoxin Nonresponder Mutant Cell Line. Journal of Experimental Medicine, 2001, 194, 79-88.	8.5	269
23	B Lymphocytes Differentially Use the Rel and Nuclear Factor Î°B1 (NF-Î°B1) Transcription Factors to Regulate Cell Cycle Progression and Apoptosis in Quiescent and Mitogen-activated Cells. Journal of Experimental Medicine, 1998, 187, 663-674.	8.5	236
24	Human MD-2 confers on mouse Toll-like receptor 4 species-specific lipopolysaccharide recognition. International Immunology, 2001, 13, 1595-1599.	4.0	233
25	Lipid A antagonist, lipid IVa, is distinct from lipid A in interaction with Toll-like receptor 4 (TLR4)-MD-2 and ligand-induced TLR4 oligomerization. International Immunology, 2004, 16, 961-969.	4.0	210
26	Inhibition of homodimerization of Toll-like receptor 4 by curcumin. Biochemical Pharmacology, 2006, 72, 62-69.	4.4	206
27	Roles for LPS-dependent interaction and relocation of TLR4 and TRAM in TRIF-signaling. Biochemical and Biophysical Research Communications, 2008, 368, 94-99.	2.1	204
28	Unc93B1 Restricts Systemic Lethal Inflammation by Orchestrating Toll-like Receptor 7 and 9 Trafficking. Immunity, 2011, 35, 69-81.	14.3	180
29	Double-Stranded RNA of Intestinal Commensal but Not Pathogenic Bacteria Triggers Production of Protective Interferon-Î². Immunity, 2013, 38, 1187-1197.	14.3	176
30	TLR accessory molecules. Current Opinion in Immunology, 2008, 20, 420-425.	5.5	169
31	Regulatory Roles for MD-2 and TLR4 in Ligand-Induced Receptor Clustering. Journal of Immunology, 2006, 176, 6211-6218.	0.8	166
32	Requirement for MD-1 in cell surface expression of RP105/CD180 and B-cell responsiveness to lipopolysaccharide. Blood, 2002, 99, 1699-1705.	1.4	165
33	A protein associated with Toll-like receptor (TLR) 4 (PRAT4A) is required for TLR-dependent immune responses. Journal of Experimental Medicine, 2007, 204, 2963-2976.	8.5	162
34	Cathepsins are required for Toll-like receptor 9 responses. Biochemical and Biophysical Research Communications, 2008, 367, 693-699.	2.1	136
35	Crystal structure of NOD2 and its implications in human disease. Nature Communications, 2016, 7, 11813.	12.8	135
36	Roles for accessory molecules in microbial recognition by Toll-like receptors. Journal of Endotoxin Research, 2006, 12, 195-204.	2.5	125

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37	CD19 regulates innate immunity by the toll-like receptor RP105 signaling in B lymphocytes. Blood, 2003, 102, 1374-1380.	1.4	117
38	High-Density Lipoprotein Suppresses the Type I Interferon Response, a Family of Potent Antiviral Immunoregulators, in Macrophages Challenged With Lipopolysaccharide. Circulation, 2010, 122, 1919-1927.	1.6	116
39	Herpes Simplex Virus 1 VP22 Inhibits AIM2-Dependent Inflammasome Activation to Enable Efficient Viral Replication. Cell Host and Microbe, 2018, 23, 254-265.e7.	11.0	109
40	Nucleic acidâ€sensing <scp>TLR</scp>s and autoimmunity: novel insights from structural and cell biology. Immunological Reviews, 2016, 269, 60-75.	6.0	108
41	DNase II-dependent DNA digestion is required for DNA sensing by TLR9. Nature Communications, 2015, 6, 5853.	12.8	107
42	Interaction of Soluble Form of Recombinant Extracellular TLR4 Domain with MD-2 Enables Lipopolysaccharide Binding and Attenuates TLR4-Mediated Signaling. Journal of Immunology, 2004, 173, 6949-6954.	0.8	104
43	Innate recognition of lipopolysaccharide by CD14 and toll-like receptor 4-MD-2: unique roles for MD-2. International Immunopharmacology, 2003, 3, 119-128.	3.8	103
44	A Protein Associated with Toll-Like Receptor 4 (PRAT4A) Regulates Cell Surface Expression of TLR4. Journal of Immunology, 2006, 177, 1772-1779.	0.8	101
45	Structural Analyses of Toll-like Receptor 7 Reveal Detailed RNA Sequence Specificity and Recognition Mechanism of Agonistic Ligands. Cell Reports, 2018, 25, 3371-3381.e5.	6.4	98
46	The Radioprotective 105/MD-1 Complex Links TLR2 and TLR4/MD-2 in Antibody Response to Microbial Membranes. Journal of Immunology, 2005, 174, 7043-7049.	0.8	97
47	Guanosine and its modified derivatives are endogenous ligands for TLR7. International Immunology, 2016, 28, 211-222.	4.0	97
48	The Molecular Mechanism of B Cell Activation by toll-like Receptor Protein RP-105. Journal of Experimental Medicine, 1998, 188, 93-101.	8.5	95
49	Toll-like Receptor 9 Contains Two DNA Binding Sites that Function Cooperatively to Promote Receptor Dimerization and Activation. Immunity, 2018, 48, 649-658.e4.	14.3	94
50	The Chaperone UNC93B1 Regulates Toll-like Receptor Stability Independently of Endosomal TLR Transport. Immunity, 2018, 48, 911-922.e7.	14.3	92
51	Interleukin-33 produced by M2 macrophages and other immune cells contributes to Th2 immune reaction of IgG4-related disease. Scientific Reports, 2017, 7, 42413.	3.3	89
52	Endotoxin recognition molecules, Toll-like receptor 4-MD-2. Seminars in Immunology, 2004, 16, 11-16.	5.6	87
53	Mechanisms controlling nucleic acid-sensing Toll-like receptors. International Immunology, 2018, 30, 43-51.	4.0	85
54	Regulatory molecules required for nucleotideâ€sensing Tollâ€like receptors. Immunological Reviews, 2009, 227, 32-43.	6.0	84

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55	The Enzyme Cyp26b1 Mediates Inhibition of Mast Cell Activation by Fibroblasts to Maintain Skin-Barrier Homeostasis. Immunity, 2014, 40, 530-541.	14.3	81
56	Association of SIGNR1 with TLR4â€“MD-2 enhances signal transduction by recognition of LPS in gram-negative bacteria. International Immunology, 2005, 17, 827-836.	4.0	77
57	Isoliquiritigenin Attenuates Adipose Tissue Inflammation in vitro and Adipose Tissue Fibrosis through Inhibition of Innate Immune Responses in Mice. Scientific Reports, 2016, 6, 23097.	3.3	75
58	An essential role for the N-terminal fragment of Toll-like receptor 9 in DNA sensing. Nature Communications, 2013, 4, 1949.	12.8	74
59	Targeting cell surface TLR7 for therapeutic intervention in autoimmune diseases. Nature Communications, 2015, 6, 6119.	12.8	71
60	TLR7 mediated viral recognition results in focal type I interferon secretion by dendritic cells. Nature Communications, 2017, 8, 1592.	12.8	70
61	TLR4â€“MD-2 complex is negatively regulated by an endogenous ligand, globotetraosylceramide. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4714-4719.	7.1	66
62	UNC93B1 is essential for the plasma membrane localization and signaling of Toll-like receptor 5. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 7072-7077.	7.1	62
63	Cell-Intrinsic Expression of TLR9 in Autoreactive B Cells Constrains BCR/TLR7-Dependent Responses. Journal of Immunology, 2015, 194, 2504-2512.	0.8	54
64	Combating herpesvirus encephalitis by potentiating a TLR3â€“mTORC2 axis. Nature Immunology, 2018, 19, 1071-1082.	14.5	52
65	B cells lacking RP105, a novel B cell antigen, in systemic lupus erythematosus. Arthritis and Rheumatism, 1999, 42, 2593-2600.	6.7	50
66	Mast cellâ€mediated immune responses through IgE antibody and Tollâ€like receptorâ€„4 by malarial peroxiredoxin. European Journal of Immunology, 2008, 38, 1341-1350.	2.9	49
67	Marginal zone B cells exacerbate endotoxic shock via interleukin-6 secretion induced by FcÎ±/Î¼R-coupled TLR4 signalling. Nature Communications, 2016, 7, 11498.	12.8	49
68	Autoinhibition and relief mechanism by the proteolytic processing of Toll-like receptor 8. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3012-3017.	7.1	47
69	Roles of the Cleaved N-Terminal TLR3 Fragment and Cell Surface TLR3 in Double-Stranded RNA Sensing. Journal of Immunology, 2014, 193, 5208-5217.	0.8	46
70	The attenuated inflammation of MPL is due to the lack of CD14-dependent tight dimerization of the TLR4/MD2 complex at the plasma membrane. International Immunology, 2014, 26, 307-314.	4.0	45
71	Species-Specific Minimal Sequence Motif for Oligodeoxyribonucleotides Activating Mouse TLR9. Journal of Immunology, 2015, 195, 4396-4405.	0.8	43
72	Intracellular TLR4/MD-2 in macrophages senses Gram-negative bacteria and induces a unique set of LPS-dependent genes. International Immunology, 2011, 23, 503-510.	4.0	41

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73	Reciprocal regulation of STING and TCR signaling by mTORC1 for T-cell activation and function. Life Science Alliance, 2019, 2, e201800282.	2.8	40
74	Essential role for Toll-like receptor 7 (TLR7)-unique cysteines in an intramolecular disulfide bond, proteolytic cleavage and RNA sensing. International Immunology, 2013, 25, 413-422.	4.0	39
75	Selectivity of Human TLR9 for Double CpG Motifs and Implications for the Recognition of Genomic DNA. Journal of Immunology, 2017, 198, 2093-2104.	0.8	39
76	PRAT4A-dependent expression of cell surface TLR5 on neutrophils, classical monocytes and dendritic cells. International Immunology, 2012, 24, 613-623.	4.0	36
77	Core fucose is critical for CD14-dependent Toll-like receptor 4 signaling. Glycobiology, 2017, 27, 1006-1015.	2.5	32
78	A molecule that is associated with Toll-like receptor 4 and regulates its cell surface expression. Biochemical and Biophysical Research Communications, 2006, 339, 1076-1082.	2.1	31
79	Endotoxin Recognition Molecules MD-2 and Toll-like Receptor 4 as Potential Targets for Therapeutic Intervention of Endotoxin Shock. Inflammation and Allergy: Drug Targets, 2004, 3, 291-297.	3.1	30
80	Toll-like receptor 7 cooperates with IL-4 in activated B cells through antigen receptor or CD38 and induces class switch recombination and IgG1 production. Molecular Immunology, 2009, 46, 1278-1288.	2.2	30
81	Homeostatic inflammation in innate immunity. Current Opinion in Immunology, 2014, 30, 85-90.	5.5	30
82	Human TLR4 polymorphism D299G/T399I alters TLR4/MD-2 conformation and response to a weak ligand monophosphoryl lipid A. International Immunology, 2013, 25, 45-52.	4.0	29
83	Lipopeptides are signaled by Toll-like receptor 1, 2 and 6 in endolysosomes. International Immunology, 2014, 26, 563-573.	4.0	29
84	Emerging roles of the processing of nucleic acids and Toll-like receptors in innate immune responses to nucleic acids. Journal of Leukocyte Biology, 2017, 101, 135-142.	3.3	29
85	Agonistic Antibody to TLR4/MD-2 Protects Mice from Acute Lethal Hepatitis Induced by TNF-Î±. Journal of Immunology, 2006, 176, 4244-4251.	0.8	28
86	A single base mutation in the PRAT4A gene reveals differential interaction of PRAT4A with Toll-like receptors. International Immunology, 2008, 20, 1407-1415.	4.0	28
87	Involvement of CD14 in the inhibitory effects of dimethyl-Î±-cyclodextrin on lipopolysaccharide signaling in macrophages. FEBS Letters, 2005, 579, 1707-1714.	2.8	25
88	Arl8b is required for lysosomal degradation of maternal proteins in the visceral yolk sac endoderm of mouse embryos. Journal of Cell Science, 2017, 130, 3568-3577.	2.0	23
89	Potentiation of TLR9 responses for human naÃ¯ve B-cell growth through RP105 signaling. Clinical Immunology, 2010, 135, 125-136.	3.2	22
90	The protective effect of the anti-Toll-like receptor 9 antibody against acute cytokine storm caused by immunostimulatory DNA. Scientific Reports, 2017, 7, 44042.	3.3	21

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91	Cleavage of DNA and RNA by PLD3 and PLD4 limits autoinflammatory triggering by multiple sensors. Nature Communications, 2021, 12, 5874.	12.8	21
92	Anti-TLR7 Antibody Protects Against Lupus Nephritis in NZBWF1 Mice by Targeting B Cells and Patrolling Monocytes. Frontiers in Immunology, 2021, 12, 777197.	4.8	21
93	Mucolipin 1 positively regulates TLR7 responses in dendritic cells by facilitating RNA transportation to lysosomes. International Immunology, 2015, 27, 83-94.	4.0	19
94	Endocytosisâ€free <scp>DNA</scp> sensing by cell surface <scp>TLR</scp>9 in neutrophils: Rapid defense with autoimmune risks. European Journal of Immunology, 2013, 43, 2006-2009.	2.9	18
95	Biallelic Variants in CNPY3, Encoding an Endoplasmic Reticulum Chaperone, Cause Early-Onset Epileptic Encephalopathy. American Journal of Human Genetics, 2018, 102, 321-329.	6.2	17
96	Differentiation Stages of Eosinophils Characterized by Hyaluronic Acid Binding via CD44 and Responsiveness to Stimuli. DNA and Cell Biology, 2001, 20, 189-202.	1.9	15
97	Endoplasmic Protein Nogo-B (RTN4-B) Interacts with GRAMD4 and Regulates TLR9-Mediated Innate Immune Responses. Journal of Immunology, 2015, 194, 5426-5436.	0.8	15
98	Toll-like receptors in COPD. European Respiratory Journal, 2017, 49, 1700739.	6.7	15
99	Tonic B cell activation by Radioprotective105/MD-1 promotes disease progression in MRL/lpr mice. International Immunology, 2008, 20, 881-891.	4.0	14
100	The impact of cell maturation and tissue microenvironments on the expression of endosomal Toll-like receptors in monocytes and macrophages. International Immunology, 2020, 32, 785-798.	4.0	14
101	MD-2 is required for the full responsiveness of mast cells to LPS but not to PGN. Biochemical and Biophysical Research Communications, 2004, 323, 491-498.	2.1	13
102	Cholera toxin B induces interleukin-1Î² production from resident peritoneal macrophages through the pyrin inflammasome as well as the NLRP3 inflammasome. International Immunology, 2019, 31, 657-668.	4.0	13
103	Structural basis for speciesâ€specific activation of mouse Tollâ€like receptor 9. FEBS Letters, 2018, 592, 2636-2646.	2.8	12
104	Cleavage of Toll-Like Receptor 9 Ectodomain Is Required for In Vivo Responses to Single Strand DNA. Frontiers in Immunology, 2018, 9, 1491.	4.8	12
105	Controlling systems of nucleic acid sensing-TLRs restrict homeostatic inflammation. Experimental Cell Research, 2012, 318, 1461-1466.	2.6	11
106	Phospholipase A2 from bee venom increases poly(I:C)-induced activation in human keratinocytes. International Immunology, 2020, 32, 371-383.	4.0	11
107	TRPM5 Negatively Regulates Calcium-Dependent Responses in Lipopolysaccharide-Stimulated B Lymphocytes. Cell Reports, 2020, 31, 107755.	6.4	10
108	Nucleic Acid Sensing by Toll-Like Receptors in the Endosomal Compartment. Frontiers in Immunology, 0, 13, .	4.8	10

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109	Nucleic acid-sensing Toll-like receptors: Beyond ligand searchâ˜†. Advanced Drug Delivery Reviews, 2008, 60, 782-785.	13.7	9
110	Inflammatory responses increase secretion of MD-1 protein. International Immunology, 2016, 28, 503-512.	4.0	9
111	Requirement of glycosylation machinery in TLR responses revealed by CRISPR/Cas9 screening. International Immunology, 2017, 29, 347-355.	4.0	9
112	Endolysosomal compartments as platforms for orchestrating innate immune and metabolic sensors. Journal of Leukocyte Biology, 2019, 106, 853-862.	3.3	9
113	Cytidine deaminase enables Toll-like receptor 8 activation by cytidine or its analogs. International Immunology, 2019, 31, 167-173.	4.0	9
114	Skewed endosomal RNA responses from TLR7 to TLR3 in RNase T2-deficient macrophages. International Immunology, 2021, 33, 479-490.	4.0	9
115	Epithelial membrane protein 3 (Emp3) downregulates induction and function of cytotoxic T lymphocytes by macrophages via TNF-Î± production. Cellular Immunology, 2018, 324, 33-41.	3.0	8
116	Essential role of MD-2 in B-cell responses to lipopolysaccharide and Toll-like receptor 4 distribution. Journal of Endotoxin Research, 2002, 8, 449-452.	2.5	8
117	New application of anti-TLR monoclonal antibodies: detection, inhibition and protection. Inflammation and Regeneration, 2018, 38, 11.	3.7	7
118	Visualization of the Molecular Dynamics of Lipopolysaccharide on the Plasma Membrane of Murine Macrophages by Total Internal Reflection Fluorescence Microscopy. Journal of Biological Chemistry, 2008, 283, 22962-22971.	3.4	5
119	Type I IFN Contributes to the Phenotype of Unc93b1D34A/D34A Mice by Regulating TLR7 Expression in B Cells and Dendritic Cells. Journal of Immunology, 2016, 196, 416-427.	0.8	5
120	C4bâ€binding protein negatively regulates <scp>TLR</scp>4/<scp>MD</scp>â€2 response but not <scp>TLR</scp>3 response. FEBS Letters, 2017, 591, 1732-1741.	2.8	5
121	C4b binding protein negatively regulates TLR1/2 response. Innate Immunity, 2017, 23, 11-19.	2.4	4
122	N6-methylated adenine on the target sites of mamA from Mycobacterium bovis BCG enhances macrophage activation by CpG DNA in mice. Tuberculosis, 2020, 121, 101890.	1.9	4
123	Editorial overview: Special section: Effects of endogenous immune stimulants: From a defence system against infection to a homeostatic mechanism linking metabolism with inflammation. Current Opinion in Immunology, 2014, 30, viii-ix.	5.5	3
124	Dynamic control of nucleic-acid-sensing Toll-like receptors by the endosomal compartment. International Immunology, 2021, 33, 835-840.	4.0	3
125	Myeloid differentiation proteinâ€2 has a protective role in house dust miteâ€mediated asthmatic characteristics with the proinflammatory regulation of airway epithelial cells and dendritic cells. Clinical and Experimental Allergy, 2022, 52, 149-161.	2.9	2
126	Homeostatic Inflammation as Environmental-Adaptation Strategy. , 2016, , 25-52.		0

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127	ADP-ribosylation factor-like 8b is required for the development of mouse models of systemic lupus erythematosus. International Immunology, 2019, 31, 225-237.	4.0	0