Hiroshi Kiyono

List of Publications by Year in Descending Order

129 papers	5,120 citations	33 h-index	69 g-index
135 ext. papers	6,295 ext. citations	8.9 avg, IF	5.67 L-index

#	Paper	IF	Citations
129	Super high-resolution single-molecule sequence-based typing of HLA class I alleles in HIV-1 infected individuals in Ghana. *PLoS ONE*, **2022**, 17, e0269390	3.7	0
128	Chemically Synthesized Lipid A as an Adjuvant to Augment Immune Responses to Type B Conjugate Vaccine. *Frontiers in Pharmacology*, **2021**, 12, 763657	5.6	1
127	Prolonged Gut Dysbiosis and Fecal Excretion of Hepatitis A Virus in Patients Infected with Human Immunodeficiency Virus. *Viruses*, **2021**, 13,	6.2	1
126	Role of interleukin-6 in antigen-specific mucosal immunoglobulin A induction by cationic liposomes. *International Immunopharmacology*, **2021**, 101, 108280	5.8	0
125	Lipopolysaccharide from Gut-Associated Lymphoid-Tissue-Resident Alcaligenes faecalis: Complete Structure Determination and Chemical Synthesis of Its Lipid A. *Angewandte Chemie - International Edition*, **2021**, 60, 10023-10031	16.4	13
124	Distinct Age-Specific miRegulome Profiling of Isolated Small and Large Intestinal Epithelial Cells in Mice. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	3
123	Lipopolysaccharide from Gut-Associated Lymphoid-Tissue-Resident Alcaligenes faecalis: Complete Structure Determination and Chemical Synthesis of Its Lipid A. *Angewandte Chemie*, **2021**, 133, 10111-10119	3.6	
122	Functional Restoration of Bacteriomes and Viromes by Fecal Microbiota Transplantation. *Gastroenterology*, **2021**, 160, 2089-2102.e12	13.3	17
121	Dysbiotic Fecal Microbiome in HIV-1 Infected Individuals in Ghana. *Frontiers in Cellular and Infection Microbiology*, **2021**, 11, 646467	5.9	5
120	A nanogel-based trivalent PspA nasal vaccine protects macaques from intratracheal challenge with pneumococci. *Vaccine*, **2021**, 39, 3353-3364	4.1	6
119	Gut microbiota signature of pathogen-dependent dysbiosis in viral gastroenteritis. *Scientific Reports*, **2021**, 11, 13945	4.9	8
118	Effector memory CD4T cells in mesenteric lymph nodes mediate bone loss in food-allergic enteropathy model mice, creating IL-4 dominance. *Mucosal Immunology*, **2021**, 14, 1335-1346	9.2	3
117	Orally desensitized mast cells form a regulatory network with Treg cells for the control of food allergy. *Mucosal Immunology*, **2021**, 14, 640-651	9.2	9
116	Fecal Microbiome Composition in Healthy Adults in Ghana. *Japanese Journal of Infectious Diseases*, **2021**, 74, 42-47	2.7	4
115	Enzymatically polymerised polyphenols prepared from various precursors potentiate antigen-specific immune responses in both mucosal and systemic compartments in mice. *PLoS ONE*, **2021**, 16, e0246422	3.7	2
114	Characterization and Specification of a Trivalent Protein-Based Pneumococcal Vaccine Formulation Using an Adjuvant-Free Nanogel Nasal Delivery System. *Molecular Pharmaceutics*, **2021**, 18, 1582-1592	5.6	5
113	Development of Antibody-Fragment-Producing Rice for Neutralization of Human Norovirus. *Frontiers in Plant Science*, **2021**, 12, 639953	6.2	1

112	Pancreatic glycoprotein 2 is a first line of defense for mucosal protection in intestinal inflammation. *Nature Communications*, **2021**, 12, 1067	17.4	6
111	Comparison of gene expression and activation of transcription factors in organoid-derived monolayer intestinal epithelial cells and organoids. *Bioscience, Biotechnology and Biochemistry*, **2021**, 85, 2137-2144	2.1	1
110	Lipopolysaccharide Derived From the Lymphoid-Resident Commensal Bacteria Functions as an Effective Nasal Adjuvant to Augment IgA Antibody and Th17 Cell Responses. *Frontiers in Immunology*, **2021**, 12, 699349	8.4	2
109	Mucosal vaccines: wisdom from now and then. *International Immunology*, **2021**, 33, 767-774	4.9	2
108	Oral MucoRice-CTB vaccine for safety and microbiota-dependent immunogenicity in humans: a phase 1 randomised trial.. *Lancet Microbe, The*, **2021**, 2, e429-e440	22.2	6
107	The gut microbiota induces Peyer's-patch-dependent secretion of maternal IgA into milk. *Cell Reports*, **2021**, 36, 109655	10.6	7
106	Comparative whole-genome and proteomics analyses of the next seed bank and the original master seed bank of MucoRice-CTB 51A line, a rice-based oral cholera vaccine. *BMC Genomics*, **2021**, 22, 59	4.5	0
105	A Heterodimeric Antibody Fragment for Passive Immunotherapy Against Norovirus Infection. *Journal of Infectious Diseases*, **2020**, 222, 470-478	7	2
104	Metagenome Data on Intestinal Phage-Bacteria Associations Aids the Development of Phage Therapy against Pathobionts. *Cell Host and Microbe*, **2020**, 28, 380-389.e9	23.4	19
103	Maternal docosapentaenoic acid inhibits infant allergic dermatitis through TRAIL-expressing plasmacytoid dendritic cells in mice. *Allergy: European Journal of Allergy and Clinical Immunology*, **2020**, 75, 1939-1955	9.3	5
102	Microfold cell-dependent antigen transport alleviates infectious colitis by inducing antigen-specific cellular immunity. *Mucosal Immunology*, **2020**, 13, 679-690	9.2	11
101	Persistent colonization of non-lymphoid tissue-resident macrophages by Stenotrophomonas maltophilia. *International Immunology*, **2020**, 32, 133-141	4.9	2
100	Lymphoid Tissue-Resident Establish an Intracellular Symbiotic Environment by Creating a Unique Energy Shift in Dendritic Cells. *Frontiers in Microbiology*, **2020**, 11, 561005	5.7	8
99	Commensal-bacteria-derived butyrate promotes the T-cell-independent IgA response in the colon. *International Immunology*, **2020**, 32, 243-258	4.9	24
98	Chemically Synthesized Lipid A Shows a Potent and Safe Nasal Vaccine Adjuvant Activity for the Induction of -Specific IgA and Th17 Mediated Protective Immunity. *Microorganisms*, **2020**, 8,	4.9	10
97	Stratified layer analysis reveals intrinsic leptin stimulates cryptal mesenchymal cells for controlling mucosal inflammation. *Scientific Reports*, **2020**, 10, 18351	4.9	2
96	Adjuvant Activity of Synthetic Lipid A of , a Gut-Associated Lymphoid Tissue-Resident Commensal Bacterium, to Augment Antigen-Specific IgG and Th17 Responses in Systemic Vaccine. *Vaccines*, **2020**, 8,	5.3	9
95	The global response to the COVID-19 pandemic: how have immunology societies contributed?. *Nature Reviews Immunology*, **2020**, 20, 594-602	36.5	10

94	Fatty acid metabolism in the host and commensal bacteria for the control of intestinal immune responses and diseases. *Gut Microbes*, **2020**, 11, 276-284	8.8	14
93	Intestinal Permeability and IgA Provoke Immune Vasculitis Linked to Cardiovascular Inflammation. *Immunity*, **2019**, 51, 508-521.e6	32.3	49
92	A role for the CCR5-CCL5 interaction in the preferential migration of HSV-2-specific effector cells to the vaginal mucosa upon nasal immunization. *Mucosal Immunology*, **2019**, 12, 1391-1403	9.2	4
91	Fucosyltransferase 2 induces lung epithelial fucosylation and exacerbates house dust mite-induced airway inflammation. *Journal of Allergy and Clinical Immunology*, **2019**, 144, 698-709.e9	11.5	12
90	Dietary coconut oil ameliorates skin contact hypersensitivity through mead acid production in mice. *Allergy: European Journal of Allergy and Clinical Immunology*, **2019**, 74, 1522-1532	9.3	7
89	Distinct roles for Peyer's patch B cells for induction of antigen-specific IgA antibody responses in mice administered oral recombinant Salmonella. *International Immunology*, **2019**, 31, 531-541	4.9	3
88	Mast cells play role in wound healing through the ZnT2/GPR39/IL-6 axis. *Scientific Reports*, **2019**, 9, 10842	4.9	17
87	Antigen-Specific Mucosal Immunity Regulates Development of Intestinal Bacteria-Mediated Diseases. *Gastroenterology*, **2019**, 157, 1530-1543.e4	13.3	11
86	Essential Role of Host Double-Stranded DNA Released from Dying Cells by Cationic Liposomes for Mucosal Adjuvanticity. *Vaccines*, **2019**, 8,	5.3	5
85	The Mucosal Immune System for Vaccine Development. *Nihon Bika Gakkai Kaishi (Japanese Journal of Rhinology)*, **2019**, 58, 635-642	0.1	
84	Human Norovirus Propagation in Human Induced Pluripotent Stem Cell-Derived Intestinal Epithelial Cells. *Cellular and Molecular Gastroenterology and Hepatology*, **2019**, 7, 686-688.e5	7.9	29
83	A comprehensive understanding of the gut mucosal immune system in allergic inflammation. *Allergology International*, **2019**, 68, 17-25	4.4	37
82	Eosinophil depletion suppresses radiation-induced small intestinal fibrosis. *Science Translational Medicine*, **2018**, 10,	17.5	32
81	Generation of tumor antigen-specific murine CD8+ T cells with enhanced anti-tumor activity via highly efficient CRISPR/Cas9 genome editing. *International Immunology*, **2018**, 30, 141-154	4.9	7
80	Impaired airway mucociliary function reduces antigen-specific IgA immune response to immunization with a claudin-4-targeting nasal vaccine in mice. *Scientific Reports*, **2018**, 8, 2904	4.9	6
79	Characterization of morphological conversion of Helicobacter pylori under anaerobic conditions. *Microbiology and Immunology*, **2018**, 62, 221-228	2.7	11
78	Lymphoid tissue-resident Alcaligenes LPS induces IgA production without excessive inflammatory responses via weak TLR4 agonist activity. *Mucosal Immunology*, **2018**, 11, 693-702	9.2	36
77	The 17,18-epoxyeicosatetraenoic acid-G protein-coupled receptor 40 axis ameliorates contact hypersensitivity by inhibiting neutrophil mobility in mice and cynomolgus macaques. *Journal of Allergy and Clinical Immunology*, **2018**, 142, 470-484.e12	11.5	26

76	Cationic pullulan nanogel as a safe and effective nasal vaccine delivery system for respiratory infectious diseases. *Human Vaccines and Immunotherapeutics*, **2018**, 14, 2189-2193	4.4	17
75	Intranasal administration of cationic liposomes enhanced granulocyte-macrophage colony-stimulating factor expression and this expression is dispensable for mucosal adjuvant activity. *BMC Research Notes*, **2018**, 11, 472	2.3	8
74	ATP as a Pathophysiologic Mediator of Bacteria-Host Crosstalk in the Gastrointestinal Tract. *International Journal of Molecular Sciences*, **2018**, 19,	6.3	12
73	Polymeric Caffeic Acid Is a Safer Mucosal Adjuvant That Augments Antigen-Specific Mucosal and Systemic Immune Responses in Mice. *Molecular Pharmaceutics*, **2018**, 15, 4226-4234	5.6	5
72	A Refined Culture System for Human Induced Pluripotent Stem Cell-Derived Intestinal Epithelial Organoids. *Stem Cell Reports*, **2018**, 10, 314-328	8	56
71	Nanogel-based nasal vaccines for infectious and lifestyle-related diseases. *Molecular Immunology*, **2018**, 98, 19-24	4.3	12
70	Nasal vaccination with pneumococcal surface protein A in combination with cationic liposomes consisting of DOTAP and DC-chol confers antigen-mediated protective immunity against Streptococcus pneumoniae infections in mice. *International Immunopharmacology*, **2018**, 61, 385-393	5.8	25
69	Mucosal Ecological Network of Epithelium and Immune Cells for Gut Homeostasis and Tissue Healing. *Annual Review of Immunology*, **2017**, 35, 119-147	34.7	131
68	Allograft inflammatory factor 1 is a regulator of transcytosis in M cells. *Nature Communications*, **2017**, 8, 14509	17.4	26
67	Mast Cells Are Crucial for Induction of Group 2 Innate Lymphoid Cells and Clearance of Helminth Infections. *Immunity*, **2017**, 46, 863-874.e4	32.3	110
66	IL-22BP dictates characteristics of Peyer's patch follicle-associated epithelium for antigen uptake. *Journal of Experimental Medicine*, **2017**, 214, 1607-1618	16.6	37
65	Attachment of class B CpG ODN onto DOTAP/DC-chol liposome in nasal vaccine formulations augments antigen-specific immune responses in mice. *BMC Research Notes*, **2017**, 10, 68	2.3	23
64	MicroRNA-mediated dynamic control of mucosal immunity. *International Immunology*, **2017**, 29, 157-163	4.9	14
63	Development of a nanogel-based nasal vaccine as a novel antigen delivery system. *Expert Review of Vaccines*, **2017**, 16, 1231-1240	5.2	11
62	Reciprocal Inflammatory Signaling Between Intestinal Epithelial Cells and Adipocytes in the Absence of Immune Cells. *EBioMedicine*, **2017**, 23, 34-45	8.8	26
61	Seed Metabolome Analysis of a Transgenic Rice Line Expressing Cholera Toxin B-subunit. *Scientific Reports*, **2017**, 7, 5196	4.9	9
60	Microbiota-derived butyrate suppresses group 3 innate lymphoid cells in terminal ileal Peyer's patches. *Scientific Reports*, **2017**, 7, 3980	4.9	49
59	Mucosal Mesenchymal Cells: Secondary Barrier and Peripheral Educator for the Gut Immune System. *Frontiers in Immunology*, **2017**, 8, 1787	8.4	7

58	Dietary and Microbial Metabolites in the Regulation of Host Immunity. *Frontiers in Microbiology*, **2017**, 8, 2171	5.7	67
57	Herpes simplex virus-1 evasion of CD8+ T cell accumulation contributes to viral encephalitis. *Journal of Clinical Investigation*, **2017**, 127, 3784-3795	15.9	22
56	Critical role of intestinal interleukin-4 modulating regulatory T cells for desensitization, tolerance, and inflammation of food allergy. *PLoS ONE*, **2017**, 12, e0172795	3.7	12
55	Epithelial glycosylation in gut homeostasis and inflammation. *Nature Immunology*, **2016**, 17, 1244-1251	19.1	98
54	The effect of mucoadhesive excipient on the nasal retention time of and the antibody responses induced by an intranasal influenza vaccine. *Vaccine*, **2016**, 34, 1201-7	4.1	18
53	Good manufacturing practices production of a purification-free oral cholera vaccine expressed in transgenic rice plants. *Plant Cell Reports*, **2016**, 35, 667-79	5.1	26
52	Lymphoid-Tissue-Resident Commensal Bacteria Promote Members of the IL-10 Cytokine Family to Establish Mutualism. *Immunity*, **2016**, 44, 634-646	32.3	98
51	Differential analyses of major allergen proteins in wild-type rice and rice producing a fragment of anti-rotavirus antibody. *Regulatory Toxicology and Pharmacology*, **2016**, 76, 128-36	3.4	3
50	MicroRNA-orchestrated pathophysiologic control in gut homeostasis and inflammation. *BMB Reports*, **2016**, 49, 263-9	5.5	10
49	Sphingolipids and Epoxidized Lipid Metabolites in the Control of Gut Immunosurveillance and Allergy. *Frontiers in Nutrition*, **2016**, 3, 3	6.2	11
48	Comparative whole-genome analyses of selection marker-free rice-based cholera toxin B-subunit vaccine lines and wild-type lines. *BMC Genomics*, **2015**, 16, 48	4.5	15
47	Negative regulation of DSS-induced experimental colitis by PILR *International Immunology*, **2015**, 27, 307-14	4.9	10
46	Oral rice-based vaccine induces passive and active immunity against enterotoxigenic E. coli-mediated diarrhea in pigs. *Vaccine*, **2015**, 33, 5204-11	4.1	21
45	Plant-based vaccines for animals and humans: recent advances in technology and clinical trials. *Therapeutic Advances in Vaccines*, **2015**, 3, 139-54		91
44	Loss of lymph node fibroblastic reticular cells and high endothelial cells is associated with humoral immunodeficiency in mouse graft-versus-host disease. *Journal of Immunology*, **2015**, 194, 398-406	5.3	20
43	Profiles of microRNA networks in intestinal epithelial cells in a mouse model of colitis. *Scientific Reports*, **2015**, 5, 18174	4.9	36
42	The mucosal immune system: From dentistry to vaccine development. *Proceedings of the Japan Academy Series B: Physical and Biological Sciences*, **2015**, 91, 423-39	4	22
41	Dietary fatty acid exerts anti-allergic effect through the conversion to 17,18-epoxyeicosatetraenoic acid in the gut. *Scientific Reports*, **2015**, 5, 9750	4.9	84

40	IL-10-producing CD4(+) T cells negatively regulate fucosylation of epithelial cells in the gut. *Scientific Reports*, **2015**, 5, 15918	4.9	22
39	Structural basis of blocking integrin activation and deactivation for anti-inflammation. *Journal of Biomedical Science*, **2015**, 22, 51	13.3	32
38	C-Terminal Clostridium perfringens Enterotoxin-Mediated Antigen Delivery for Nasal Pneumococcal Vaccine. *PLoS ONE*, **2015**, 10, e0126352	3.7	33
37	Central Role of Core Binding Factor β in Mucosa-Associated Lymphoid Tissue Organogenesis in Mouse. *PLoS ONE*, **2015**, 10, e0127460	3.7	9
36	Nasal Administration of Cholera Toxin as a Mucosal Adjuvant Damages the Olfactory System in Mice. *PLoS ONE*, **2015**, 10, e0139368	3.7	15
35	Intranasal Immunization with DOTAP Cationic Liposomes Combined with DC-Cholesterol Induces Potent Antigen-Specific Mucosal and Systemic Immune Responses in Mice. *PLoS ONE*, **2015**, 10, e0139785	3.7	35
34	Identification and Analysis of Natural Killer Cells in Murine Nasal Passages. *PLoS ONE*, **2015**, 10, e0142920	3.7	7
33	Pathophysiological role of extracellular purinergic mediators in the control of intestinal inflammation. *Mediators of Inflammation*, **2015**, 2015, 427125	4.3	13
32	Mode of Bioenergetic Metabolism during B Cell Differentiation in the Intestine Determines the Distinct Requirement for Vitamin B1. *Cell Reports*, **2015**, 13, 122-131	10.6	71
31	The ectoenzyme E-NPP3 negatively regulates ATP-dependent chronic allergic responses by basophils and mast cells. *Immunity*, **2015**, 42, 279-293	32.3	58
30	Determination of genomic location and structure of the transgenes in marker-free rice-based cholera vaccine by using whole genome resequencing approach. *Plant Cell, Tissue and Organ Culture* , **2015**, 120, 35-48	2.7	9
29	New era for mucosal mast cells: their roles in inflammation, allergic immune responses and adjuvant development. *Experimental and Molecular Medicine*, **2014**, 46, e83	12.8	32
28	The enzyme Cyp26b1 mediates inhibition of mast cell activation by fibroblasts to maintain skin-barrier homeostasis. *Immunity*, **2014**, 40, 530-41	32.3	54
27	The mucosal immune system for vaccine development. *Vaccine*, **2014**, 32, 6711-23	4.1	92
26	Regulation of intestinal IgA responses by dietary palmitic acid and its metabolism. *Journal of Immunology*, **2014**, 193, 1666-71	5.3	37
25	Innate lymphoid cells regulate intestinal epithelial cell glycosylation. *Science*, **2014**, 345, 1254009	33.3	351
24	Interleukin 15 and CD4+ T cells cooperate to promote small intestinal enteropathy in response to dietary antigen. *Gastroenterology*, **2014**, 146, 1017-27	13.3	35
23	A rice-based soluble form of a murine TNF-specific llama variable domain of heavy-chain antibody suppresses collagen-induced arthritis in mice. *Journal of Biotechnology*, **2014**, 175, 45-52	3.7	11

22	Generation of colonic IgA-secreting cells in the caecal patch. *Nature Communications*, **2014**, 5, 3704	17.4	88
21	Challenges in mucosal vaccines for the control of infectious diseases. *International Immunology*, **2014**, 26, 517-28	4.9	74
20	Runx2-I isoform contributes to fetal bone formation even in the absence of specific N-terminal amino acids. *PLoS ONE*, **2014**, 9, e108294	3.7	14
19	Peyer's patches and mesenteric lymph nodes cooperatively promote enteropathy in a mouse model of food allergy. *PLoS ONE*, **2014**, 9, e107492	3.7	17
18	Vaginal memory T cells induced by intranasal vaccination are critical for protective T cell recruitment and prevention of genital HSV-2 disease. *Journal of Virology*, **2014**, 88, 13699-708	6.6	29
17	Blockade of TLR3 protects mice from lethal radiation-induced gastrointestinal syndrome. *Nature Communications*, **2014**, 5, 3492	17.4	96
16	Role of Lactobacillus pentosus Strain b240 and the Toll-like receptor 2 axis in Peyer's patch dendritic cell-mediated immunoglobulin A enhancement. *PLoS ONE*, **2014**, 9, e91857	3.7	29
15	Microbe-dependent CD11b+ IgA+ plasma cells mediate robust early-phase intestinal IgA responses in mice. *Nature Communications*, **2013**, 4, 1772	17.4	49
14	Innate lymphoid cells promote anatomical containment of lymphoid-resident commensal bacteria. *Science*, **2012**, 336, 1321-5	33.3	542
13	Extracellular ATP mediates mast cell-dependent intestinal inflammation through P2X7 purinoceptors. *Nature Communications*, **2012**, 3, 1034	17.4	190
12	Distinct fucosylation of M cells and epithelial cells by Fut1 and Fut2, respectively, in response to intestinal environmental stress. *Biochemical and Biophysical Research Communications*, **2011**, 404, 822-8	3.4	40
11	Indigenous opportunistic bacteria inhabit mammalian gut-associated lymphoid tissues and share a mucosal antibody-mediated symbiosis. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 7419-24	11.5	169
10	The mucosal immune system for secretory IgA responses and mucosal vaccine development. *Inflammation and Regeneration*, **2010**, 30, 40-47	10.9	1
9	Uptake through glycoprotein 2 of FimH(+) bacteria by M cells initiates mucosal immune response. *Nature*, **2009**, 462, 226-30	50.4	443
8	Comprehensive gene expression profiling of Peyer's patch M cells, villous M-like cells, and intestinal epithelial cells. *Journal of Immunology*, **2008**, 180, 7840-6	5.3	139
7	Influence of commensal bacteria on the induction of UEA-1+ NKM-16-2-4+ cells in small intestine. *FASEB Journal*, **2008**, 22, 851.4	0.9	
6	Sphingosine 1-phosphate regulates innate and acquired intestinal IgA production. *FASEB Journal*, **2008**, 22, 853.17	0.9	
5	A subunit type of botulinum mucosal vaccine effectively induces protective immunity in non-human primates. *FASEB Journal*, **2008**, 22, 853.4	0.9	

4	Genesis of tear duct-associated lymphoid tissue is independent of Id2, RORα but requires Cbfβ2 transcriptional regulator. *FASEB Journal*, **2008**, 22, 845.1	0.9	
3	Application of dynamic light sources produced by unique optics to stimulate the human cerebrum. *Journal of Life Support Engineering*, **2006**, 18, 113-120	0	
2	NALT- versus Peyer's-patch-mediated mucosal immunity. *Nature Reviews Immunology*, **2004**, 4, 699-710	36.5	528
1	Introduction to Mucosally-Induced Tolerance: from Bench to Bedside. *Japanese Journal of Clinical Immunology*, **2003**, 26, 198-198		