Toshiro Takai

List of Publications by Year
in descending order

86 papers	3,344 citations	117625 34 h-index	149698 56 g-index
90 all docs	90 docs citations	90 times ranked	3323 citing authors

#	Article	IF	Citations
1	TSLP Expression: Cellular Sources, Triggers, and Regulatory Mechanisms. Allergology International, 2012, 61, 3-17.	3.3	212
2	Engineering of the major house dust mite allergen Der f 2 for allergen-specific immunotherapy. Nature Biotechnology, 1997, 15, 754-758.	17.5	166
3	IL-33â€“Mediated Innate Response and Adaptive Immune Cells Contribute to Maximum Responses of Protease Allergenâ€“Induced Allergic Airway Inflammation. Journal of Immunology, 2013, 190, 4489-4499.	0.8	151
4	Staphylococcus aureus membrane and diacylated lipopeptide induce thymic stromal lymphopoietin inÂkeratinocytes through the Toll-like receptor 2â€“Toll-like receptor 6 pathway. Journal of Allergy and Clinical Immunology, 2010, 126, 985-993.e3.	2.9	147
5	Barrier Dysfunction Caused by Environmental Proteases in the Pathogenesis of Allergic Diseases. Allergology International, 2011, 60, 25-35.	3.3	126
6	Mite serine protease activates proteaseâ€activated receptorâ€2 and induces cytokine release in human keratinocytes. Allergy: European Journal of Allergy and Clinical Immunology, 2009, 64, 1366-1374.	5.7	112
7	Cytokine milieu modulates release of thymic stromal lymphopoietin from human keratinocytes stimulated with double-stranded RNA. Journal of Allergy and Clinical Immunology, 2009, 123, 179-186.	2.9	110
8	Crucial Commitment of Proteolytic Activity of a Purified Recombinant Major House Dust Mite Allergen Der p1 to Sensitization toward IgE and IgG Responses. Journal of Immunology, 2006, 177, 1609-1617.	0.8	109
9	Cystatin A inhibits IL-8 production by keratinocytes stimulated with Der p 1 and Der f 1: Biochemical skin barrier against mite cysteine proteases. Journal of Allergy and Clinical Immunology, 2005, 116, 169-176.	2.9	101
10	Staphylococcus aureus Extracellular Protease Causes Epidermal Barrier Dysfunction. Journal of Investigative Dermatology, 2010, 130, 614-617.	0.7	87
11	Reduction of Skin Barrier Function by Proteolytic Activity of a Recombinant House Dust Mite Major Allergen Der f 1. Journal of Investigative Dermatology, 2006, 126, 2719-2723.	0.7	83
12	Analysis of the structure and allergenicity of recombinant pro- and mature Der p 1 and Der f 1: Major conformational IgE epitopes blocked by prodomains. Journal of Allergy and Clinical Immunology, 2005, 115, 555-563.	2.9	77
13	Prevention of allergic asthma by vaccination with transgenic rice seed expressing mite allergen: induction of allergenâ€specific oral tolerance without bystander suppression. Plant Biotechnology Journal, 2011, 9, 982-990.	8.3	77
14	Human antimicrobial peptide LL-37 modulates proinflammatory responses induced by cytokine milieus and double-stranded RNA in human keratinocytes. Biochemical and Biophysical Research Communications, 2013, 433, 532-537.	2.1	76
15	Long TSLP transcript expression and release of TSLP induced by TLR ligands and cytokines in human keratinocytes. Journal of Dermatological Science, 2012, 66, 233-237.	1.9	75
16	Lipopolysaccharide binding of the mite allergen Der f 2. Genes To Cells, 2009, 14, 1055-1065.	1.2	74
17	Protease Activity of Allergenic Pollen of Cedar, Cypress, Juniper, Birch and Ragweed. Allergology International, 2008, 57, 83-91.	3.3	68
18	Recombinant Der p 1 and Der f 1 exhibit cysteine protease activity but no serine protease activity. Biochemical and Biophysical Research Communications, 2005, 328, 944-952.	2.1	66

#	Article	IF	Citations
19	NMR Study on the Major Mite Allergen Der f 2: Its Refined Tertiary Structure, Epitopes for Monoclonal Antibodies and Characteristics Shared by ML Protein Group Members. Journal of Biochemistry, 2005, 137, 255-263.	1.7	61
20	The Squamous Cell Carcinoma Antigen 2 Inhibits the Cysteine Proteinase Activity of a Major Mite Allergen, Der p 1. Journal of Biological Chemistry, 2004, 279, 5081-5087.	3.4	57
21	Recombinant Der p 1 and Der f 1 with in vitro Enzymatic Activity to Cleave Human CD23, CD25 and Î±₁-Antitrypsin, and in vivo IgE-Eliciting Activity in Mice. International Archives of Allergy and Immunology, 2005, 137, 194-200.	2.1	55
22	Extracellular Double-Stranded RNA Induces TSLP via an Endosomal Acidification- and NF-ÎºB-Dependent Pathway in Human Keratinocytes. Journal of Investigative Dermatology, 2011, 131, 2205-2212.	0.7	54
23	Flagellin Induces the Expression of Thymic Stromal Lymphopoietin in Human Keratinocytes via Toll-Like Receptor 5. International Archives of Allergy and Immunology, 2011, 155, 31-37.	2.1	53
24	Biologically active recombinant forms of a major house dust mite group 1 allergen Der f 1 with full activities of both cysteine protease and IgE binding. Clinical and Experimental Allergy, 2001, 31, 116-124.	2.9	45
25	Determination of the N- and C-terminal sequences required to bind human IgE of the major house dust mite allergen Der f 2 and epitope mapping for monoclonal antibodies. Molecular Immunology, 1997, 34, 255-261.	2.2	44
26	Maturation of the activities of recombinant mite allergens Der p 1 and Der f 1, and its implication in the blockade of proteolytic activity. FEBS Letters, 2002, 531, 265-272.	2.8	44
27	Determination of Three Disulfide Bonds in a Major House Dust Mite Allergen, <i>Der </i><i>f</i> II. International Archives of Allergy and Immunology, 1993, 101, 159-166.	2.1	43
28	Characterization of Proteases, Proteins, and Eicosanoid-Like Substances in Soluble Extracts from Allergenic Pollen Grains. International Archives of Allergy and Immunology, 2008, 147, 276-288.	2.1	43
29	Non-anaphylactic combination of partially deleted fragments of the major house dust mite allergen Der f 2 for allergen-specific immunotherapy. Molecular Immunology, 1999, 36, 1055-1065.	2.2	42
30	NADPH oxidase activity in allergenic pollen grains of different plant species. Biochemical and Biophysical Research Communications, 2009, 387, 430-434.	2.1	42
31	TSLP Expression Induced via Toll-Like Receptor Pathways in Human Keratinocytes. Methods in Enzymology, 2014, 535, 371-387.	1.0	42
32	Pectate Lyase Pollen Allergens: Sensitization Profiles and Cross-Reactivity Pattern. PLoS ONE, 2015, 10, e0120038.	2.5	41
33	Epicutaneous Allergic Sensitization by Cooperation between Allergen Protease Activity and Mechanical Skin Barrier Damage in Mice. Journal of Investigative Dermatology, 2016, 136, 1408-1417.	0.7	41
34	Upregulation of the Release of Granulocyte-Macrophage Colony-Stimulating Factor from Keratinocytes Stimulated with Cysteine Protease Activity of Recombinant Major Mite Allergens, Der f 1 and Der p 1. International Archives of Allergy and Immunology, 2008, 146, 27-35.	2.1	37
35	Cupressaceae Pollen Grains Modulate Dendritic Cell Response and Exhibit IgE-Inducing Adjuvant Activity In Vivo. Journal of Immunology, 2009, 183, 6087-6094.	0.8	34
36	Glucocorticoids Inhibit Double-Stranded RNA-Induced Thymic Stromal Lymphopoietin Release from Keratinocytes in an Atopic Cytokine Milieu More Effectively than Tacrolimus. International Archives of Allergy and Immunology, 2010, 153, 27-34.	2.1	31

#	Article	IF	Citations
37	Epicutaneous Administration of Papain Induces IgE and IgG Responses in a Cysteine Protease Activity-Dependent Manner. Allergology International, 2014, 63, 219-226.	3.3	30
38	Hyposensitization to allergic reaction in rDer f 2-sensitized mice by the intranasal administration of a mutant of rDer f 2, C8/119S. Clinical and Experimental Immunology, 1998, 113, 1-9.	2.6	28
39	Production of Enzymatically and Immunologically Active Der f 1 in <i>Escherichia coli</i>. International Archives of Allergy and Immunology, 2000, 122, 108-114.	2.1	27
40	Glycosylation of Recombinant Proforms of Major House Dust Mite Allergens Der p 1 and Der f 1 Decelerates the Speed of Maturation. International Archives of Allergy and Immunology, 2006, 139, 181-187.	2.1	27
41	Modulation of Allergenicity of Major House Dust Mite Allergens Der f 1 and Der p 1 by Interaction with an Endogenous Ligand. Journal of Immunology, 2009, 183, 7958-7965.	0.8	27
42	Unlocking the allergenic structure of the major house dust mite allergen Der f 2 by elimination of key intramolecular interactions. FEBS Letters, 2000, 484, 102-107.	2.8	24
43	Japanese Society of Allergology task force report on standardization of house dust mite allergen vaccines â€“ Secondary publication. Allergology International, 2015, 64, 181-186.	3.3	24
44	Effects of proline mutations in the major house dust mite allergen Derâ€ƒfâ€ƒ2 on IgEâ€binding and histamineâ€releasing activity. FEBS Journal, 2000, 267, 6650-6656.	0.2	23
45	Production of Humanized Fab Fragment against Human High Affinity IgE Receptor inPichia pastoris. Bioscience, Biotechnology and Biochemistry, 2000, 64, 2138-2144.	1.3	21
46	Inhibition of doubleâ€stranded RNAâ€induced TSLP in human keratinocytes by glucocorticoids. Allergy: European Journal of Allergy and Clinical Immunology, 2009, 64, 1231-1232.	5.7	19
47	Effects of Site-Directed Mutagenesis in the Cysteine Residues and the N-Glycosylation Motif in Recombinant Der f 1 on Secretion and Protease Activity. International Archives of Allergy and Immunology, 2001, 124, 454-460.	2.1	18
48	Multipleâ€mutation at a potential ligandâ€binding region decreased allergenicity of a mite allergen Der f 2 without disrupting global structure. FEBS Letters, 2005, 579, 1988-1994.	2.8	18
49	Cloning and Expression of cDNA Encoding the Complete Prepro-Form of an Isoform of Der f 1, the Major Group 1 Allergen from House Dust Mite Dermatophagoides farinae. Bioscience, Biotechnology and Biochemistry, 2001, 65, 563-569.	1.3	17
50	Application of Immunoreaction Enhancer Solutions to an Enzyme-Linked Immunosorbent Assay for Antigen-Specific IgE in Mice Immunized with Recombinant Major Mite Allergens or Ovalbumin. International Archives of Allergy and Immunology, 2006, 141, 322-330.	2.1	17
51	SLPI prevents cytokine release in mite protease-exposed conjunctival epithelial cells. Biochemical and Biophysical Research Communications, 2009, 379, 681-685.	2.1	17
52	Viral infection induces Thymic stromal lymphopoietin (TSLP) in human keratinocytes. Journal of Dermatological Science, 2011, 62, 131-134.	1.9	16
53	Subcutaneous Allergic Sensitization to Protease Allergen Is Dependent on Mast Cells but Not IL-33: Distinct Mechanisms between Subcutaneous and Intranasal Routes. Journal of Immunology, 2016, 196, 3559-3569.	0.8	16
54	Epitope Analysis and Primary Structures of Variable Regions of Anti-human FcÎµRI Monoclonal Antibodies, and Expression of the Chimeric Antibodies Fused with Human Constant Regions. Bioscience, Biotechnology and Biochemistry, 2000, 64, 1856-1867.	1.3	14

#	Article	IF	Citations
55	Repeated antigen painting and sublingual immunotherapy in mice convert sublingual dendritic cell subsets. Vaccine, 2014, 32, 5669-5676.	3.8	14
56	Presensitization to Ascaris antigens promotes induction of mite-specific IgE upon mite antigen inhalation in mice. Allergology International, 2016, 65, 44-51.	3.3	14
57	Innate IL-17A Enhances IL-33-Independent Skin Eosinophilia and IgE Response on Subcutaneous Papain Sensitization. Journal of Investigative Dermatology, 2021, 141, 105-113.e14.	0.7	14
58	Inhibition of IgE-Dependent Histamine Release from Human Peripheral Blood Basophils by Humanized Fab Fragments That Recognize the Membrane Proximal Domain of the Human FcÎµRI Î±-Chain. International Archives of Allergy and Immunology, 2000, 123, 308-318.	2.1	13
59	Development of Transgenic Rice Expressing Mite Antigen for a New Concept of Immunotherapy. International Archives of Allergy and Immunology, 2009, 149, 21-24.	2.1	13
60	Innate basophil IL-4 responses against allergens, endotoxin, and cytokines require the Fc receptor Î³-chain. Journal of Allergy and Clinical Immunology, 2016, 137, 1613-1615.e2.	2.9	13
61	Immunization of Rabbits with NematodeAscaris lumbricoidesAntigens Induces Antibodies Cross-Reactive to House Dust MiteDermatophagoides farinaeAntigens. Bioscience, Biotechnology and Biochemistry, 2013, 77, 145-150.	1.3	12
62	Cyclooxygenase inhibition in mice heightens adaptiveâ€•and innateâ€type responses against inhaled protease allergen and <scp>IL</scp>â€33. Allergy: European Journal of Allergy and Clinical Immunology, 2019, 74, 2237-2240.	5.7	12
63	Characterization of novel squamous cell carcinoma antigen-related molecules in mice. Biochemical and Biophysical Research Communications, 2004, 324, 1340-1345.	2.1	11
64	Dilution Method to Refold Bacterially Expressed Recombinant Der f 2 and Der p 2 to Exhibit the Secondary Structure and Histamine-Releasing Activity of Natural Allergens. International Archives of Allergy and Immunology, 2005, 137, 1-8.	2.1	11
65	Skin Treatment with Detergent Promotes Protease Allergen-Dependent Epicutaneous Sensitization in a Manner Different from Tape Stripping in Mice. Journal of Investigative Dermatology, 2017, 137, 1578-1582.	0.7	11
66	Airway inflammation after epicutaneous sensitization of mice requires protease activity of low-dose allergen inhalation. Journal of Allergy and Clinical Immunology, 2018, 141, 2271-2273.e7.	2.9	11
67	Effects of Double Mutation at Two Distant IgE-binding Sites in the Three-dimensional Structure of the Major House Dust Mite Allergen Der f 2 on IgE-binding and Histamine-releasing Activity. Bioscience, Biotechnology and Biochemistry, 2001, 65, 1601-1609.	1.3	10
68	The Epithelium Takes Center Stage in Allergic Keratoconjunctivitis. Cornea, 2010, 29, S41-S47.	1.7	8
69	Cysteine protease antigens cleave CD123, the Î± subunit of murine IL-3 receptor, on basophils and suppress IL-3-mediated basophil expansion. Biochemical and Biophysical Research Communications, 2015, 460, 261-266.	2.1	8
70	Enzyme-Linked Immunosorbent Assays with High Sensitivity for Antigen-Specific and Total Murine IgE: A Useful Tool for the Study of Allergies in Mouse Models. Allergology International, 2009, 58, 225-235.	3.3	6
71	Epicutaneous vaccination with protease inhibitor-treated papain prevents papain-induced Th2-mediated airway inflammation without inducing Th17 in mice. Biochemical and Biophysical Research Communications, 2021, 546, 192-199.	2.1	6
72	Epicutaneous challenge with protease allergen requires its protease activity to recall T_H2 and T_H17/T_H22 responses in mice pre-sensitized via distant skin. Journal of Immunotoxicology, 2021, 18, 118-126.	1.7	5

#	Article	IF	Citations
73	Expression of Humanized Fab Fragments That Recognize the IgE-Binding Domain of Human FcÂRIÂ in COS and CHO Cells. Journal of Biochemistry, 2001, 129, 5-12.	1.7	4
74	Reactivities of Mutants of a Major House Dust Mite Allergen Der f 2 to Mouse Anti-Der f 2 Monoclonal Antibodies Analyzed by Immunoblotting. Bioscience, Biotechnology and Biochemistry, 2001, 65, 694-697.	1.3	4
75	Direct Expression of the Extracellular Portion of Human FcÎµRIÎ± Chain as Inclusion Bodies in Escherichia coli. Bioscience, Biotechnology and Biochemistry, 2001, 65, 79-85.	1.3	4
76	Production of Humanized Antibody against Human High-affinity IgE Receptor in a Serum-free Culture of CHO Cells, and Purification of the Fab Fragments. Bioscience, Biotechnology and Biochemistry, 2001, 65, 1082-1089.	1.3	4
77	Crystallization and preliminary X-ray analysis of Der f 2, a potent allergen derived from the house dust mite (Dermatophagoides farinae). Acta Crystallographica Section D: Biological Crystallography, 2003, 59, 1046-1048.	2.5	4
78	Missions of Protease Allergens in the Epithelium. International Archives of Allergy and Immunology, 2011, 154, 3-5.	2.1	4
79	Inhibition of Allergen-Induced Airway Inflammation by Low-Dose Oral Immunotherapy with Transgenic Rice Seeds Independently of Immunoglobulin E Synthesis. International Archives of Allergy and Immunology, 2012, 158, 66-69.	2.1	4
80	Inhibition of Both Cyclooxygenase-1 and -2 Promotes Epicutaneous Th2 and Th17 Sensitization and Allergic Airway Inflammation on Subsequent Airway Exposure to Protease Allergen in Mice. International Archives of Allergy and Immunology, 2021, 182, 788-799.	2.1	3
81	Mite Endopeptidase 1. , 2013, , 1957-1963.		1
82	Allergens in modern society: Updated catalogs and future prospects. Allergology International, 2015, 64, 293-294.	3.3	1
83	Serine Endopeptidase Allergens from Dermatophagoides Species. , 2013, , 3055-3060.		1
84	Cedar Allergen Harvest from Tobacco: Plant Biotechnology for Recombinant Allergens. International Archives of Allergy and Immunology, 2010, 153, 431-433.	2.1	0
85	Allergens in modern society: 2021. Allergology International, 2021, 70, 279-280.	3.3	0
86	Immunotherapy to Treat Allergies: Recent Advances and Future Prospects. Juntendo Medical Journal, 2015, 61, 597-600.	0.1	0