Makoto Ihara

List of Publications by Year
in descending order

57 papers	2,386 citations	257450 24 h-index	206112 48 g-index
57 all docs	57 docs citations	57 times ranked	1942 citing authors

#	Article	IF	Citations
1	SIMULTANEOUS ESTABLISHMENT OF MONOCLONAL ANTIBODIES SPECIFIC FOR EITHER CYCLOBUTANE PYRIMIDINE DIMER OR (6â€4)PHOTOPRODUCT FROM THE SAME MOUSE IMMUNIZED WITH ULTRAVIOLETâ€IRRADIATED DNA. Photochemistry and Photobiology, 1991, 54, 225-232.	2.5	413
2	Neonicotinoids Show Selective and Diverse Actions on Their Nicotinic Receptor Targets: Electrophysiology, Molecular Biology, and Receptor Modeling Studies. Bioscience, Biotechnology and Biochemistry, 2005, 69, 1442-1452.	1.3	175
3	Neonicotinoid Insecticides: Molecular Targets, Resistance, and Toxicity. Annual Review of Pharmacology and Toxicology, 2020, 60, 241-255.	9.4	168
4	Crystal structures of Lymnaea stagnalis AChBP in complex with neonicotinoid insecticides imidacloprid and clothianidin. Invertebrate Neuroscience, 2008, 8, 71-81.	1.8	135
5	Neonicotinoid insecticides display partial and super agonist actions on native insect nicotinic acetylcholine receptors. Journal of Neurochemistry, 2006, 99, 608-615.	3.9	127
6	Role in the Selectivity of Neonicotinoids of Insect-Specific Basic Residues in Loop D of the Nicotinic Acetylcholine Receptor Agonist Binding Site. Molecular Pharmacology, 2006, 70, 1255-1263.	2.3	114
7	Diverse actions of neonicotinoids on chicken Î±7, Î±4Î²2 and Drosophilaâ€"chicken SADÎ²2 and ALSÎ²2 hybrid nicotinic acetylcholine receptors expressed in Xenopus laevis oocytes. Neuropharmacology, 2003, 45, 133-144.	4.1	102
8	Neonicotinoids: molecular mechanisms of action, insights into resistance and impact on pollinators. Current Opinion in Insect Science, 2018, 30, 86-92.	4.4	85
9	Modes of Action, Resistance and Toxicity of Insecticides Targeting Nicotinic Acetylcholine Receptors. Current Medicinal Chemistry, 2017, 24, 2925-2934.	2.4	74
10	Role of loop D of the Î±7 nicotinic acetylcholine receptor in its interaction with the insecticide imidacloprid and related neonicotinoids. British Journal of Pharmacology, 2000, 130, 981-986.	5.4	66
11	Cofactor-enabled functional expression of fruit fly, honeybee, and bumblebee nicotinic receptors reveals picomolar neonicotinoid actions. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16283-16291.	7.1	61
12	Mechanisms of Action, Resistance and Toxicity of Insecticides Targeting GABA Receptors. Current Medicinal Chemistry, 2017, 24, 2935-2945.	2.4	58
13	Super Agonist Actions of Clothianidin and Related Compounds on the SADÎ²2 Nicotinic Acetylcholine Receptor Expressed inXenopus laevisOocytes. Bioscience, Biotechnology and Biochemistry, 2004, 68, 761-763.	1.3	57
14	Actions of imidacloprid, clothianidin and related neonicotinoids on nicotinic acetylcholine receptors of American cockroach neurons and their relationships with insecticidal potency. Journal of Pesticide Sciences, 2006, 31, 35-40.	1.4	45
15	Comparative ecotoxicity of imidacloprid and dinotefuran to aquatic insects in rice mesocosms. Ecotoxicology and Environmental Safety, 2017, 138, 122-129.	6.0	42
16	GluCl a target of indole alkaloid okaramines: a 25 year enigma solved. Scientific Reports, 2014, 4, 6190.	3.3	41
17	Flupyrimin: A Novel Insecticide Acting at the Nicotinic Acetylcholine Receptors. Journal of Agricultural and Food Chemistry, 2017, 65, 7865-7873.	5.2	40
18	Insect-vertebrate chimeric nicotinic acetylcholine receptors identify a region, loop B to the N-terminus of the Drosophila DÎ±2 subunit, which contributes to neonicotinoid sensitivity. Neuroscience Letters, 2005, 385, 168-172.	2.1	37

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19	Studies on an Acetylcholine Binding Protein Identify a Basic Residue in Loop G on the<i>Î²</i>1 Strand as a New Structural Determinant of Neonicotinoid Actions. Molecular Pharmacology, 2014, 86, 736-746.	2.3	35
20	A dual-target molecular mechanism of pyrethrum repellency against mosquitoes. Nature Communications, 2021, 12, 2553.	12.8	31
21	Biosynthesis and Structureâ€“Activity Relationship Studies of Okaramines That Target Insect Glutamate-Gated Chloride Channels. ACS Chemical Biology, 2018, 13, 561-566.	3.4	29
22	Differential blocking actions of 4â€²-ethynyl-4-n-propylbicycloorthobenzoate (EBOB) and Î³-hexachlorocyclohexane (Î³-HCH) on Î³-aminobutyric acid- and glutamate-induced responses of American cockroach neurons. Invertebrate Neuroscience, 2005, 5, 157-164.	1.8	28
23	Action of six pyrethrins purified from the botanical insecticide pyrethrum on cockroach sodium channels expressed in Xenopus oocytes. Pesticide Biochemistry and Physiology, 2018, 151, 82-89.	3.6	25
24	Exon 3 Splicing and Mutagenesis Identify Residues Influencing Cell Surface Density of Heterologously Expressed Silkworm (<i>Bombyx mori</i>) Glutamate-Gated Chloride Channels. Molecular Pharmacology, 2014, 86, 686-695.	2.3	24
25	Action of nereistoxin on recombinant neuronal nicotinic acetylcholine receptors expressed in Xenopus laevis oocytes. Invertebrate Neuroscience, 2003, 5, 29-35.	1.8	23
26	A hypothesis to account for the selective and diverse actions of neonicotinoid insecticides at their molecular targets, nicotinic acetylcholine receptors: catch and release in hydrogen bond networks. Invertebrate Neuroscience, 2007, 7, 47-51.	1.8	22
27	Loops D, E and G in the <i>Drosophila</i> DÎ±1 subunit contribute to high neonicotinoid sensitivity of DÎ±1â€chicken Î²2 nicotinic acetylcholine receptor. British Journal of Pharmacology, 2018, 175, 1999-2012.	5.4	22
28	Meroterpenoid Chrodrimanins Are Selective and Potent Blockers of Insect GABA-Gated Chloride Channels. PLoS ONE, 2015, 10, e0122629.	2.5	22
29	GFPâ€based evaluation system of recombinant expression through the secretory pathway in insect cells and its application to the extracellular domains of class C GPCRs. Protein Science, 2011, 20, 1720-1734.	7.6	20
30	Probing new components (loop G and the Î±â€“Î± interface) of neonicotinoid binding sites on nicotinic acetylcholine receptors. Pesticide Biochemistry and Physiology, 2015, 121, 47-52.	3.6	20
31	Molecular Bases of Multimodal Regulation of a Fungal Transient Receptor Potential (TRP) Channel. Journal of Biological Chemistry, 2013, 288, 15303-15317.	3.4	19
32	Potentiating and blocking actions of neonicotinoids on the response to acetylcholine of the neuronal .ALPHA.4.BETA.2 nicotinic acetylcholine receptor. Journal of Pesticide Sciences, 2008, 33, 146-151.	1.4	18
33	Okaramine insecticidal alkaloids show similar activity on both exon 3c and exon 3b variants of glutamate-gated chloride channels of the larval silkworm, Bombyx mori. NeuroToxicology, 2017, 60, 240-244.	3.0	17
34	Blocking actions of alkylene-tethered bis-neonicotinoids on nicotinic acetylcholine receptors expressed by terminal abdominal ganglion neurons of Periplaneta americana. Neuroscience Letters, 2007, 425, 137-140.	2.1	16
35	STAT3 inhibitory activity of naphthoquinones isolated from Tabebuia avellanedae. Bioorganic and Medicinal Chemistry, 2020, 28, 115347.	3.0	14
36	Proinsecticide candidates N-(5-methyl-2-oxo-1,3-dioxol-4-yl)methyl derivatives of imidacloprid and 1-chlorothiazolylmethyl-2-nitroimino-imidazolidine. Bioorganic and Medicinal Chemistry Letters, 2007, 17, 4500-4503.	2.2	13

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37	Metabolome Analysis Identified Okaramines in the Soybean Rhizosphere as a Legacy of Hairy Vetch. Frontiers in Genetics, 2020, 11, 114.	2.3	13
38	PREFERENTIAL INHIBITION OF NUCLEOSOME ASSEMBLY BY ULTRAVIOLETâ€INDUCED (6â€4)PHOTOPRODUCTS. Photochemistry and Photobiology, 1995, 61, 459-462.	2.5	11
39	Insecticidal and Neural Activities of Candidate Photoaffinity Probes for Neonicotinoid Binding Sites. Bioscience, Biotechnology and Biochemistry, 2001, 65, 1534-1541.	1.3	11
40	High-resolution Native-PAGE for membrane proteins capable of fluorescence detection and hydrodynamic state evaluation. Analytical Biochemistry, 2011, 412, 217-223.	2.4	11
41	Ivermectin modulation of pH-sensitive chloride channels in the silkworm larvae of Bombyx mori. Pesticide Biochemistry and Physiology, 2016, 126, 1-5.	3.6	11
42	Combined effects of mutations in loop C and the loop D-E-G triangle on neonicotinoid interactions with Drosophila DÎ±1/chicken Î²2 hybrid nAChRs. Pesticide Biochemistry and Physiology, 2018, 151, 47-52.	3.6	11
43	An L319F mutation in transmembrane region 3 (TM3) selectively reduces sensitivity to okaramine B of the <i>Bombyx mori</i> Â<scp>l</scp>-glutamate-gated chloride channel. Bioscience, Biotechnology and Biochemistry, 2017, 81, 1861-1867.	1.3	10
44	Identification of multiple odorant receptors essential for pyrethrum repellency in Drosophila melanogaster. PLoS Genetics, 2021, 17, e1009677.	3.5	10
45	The mechanism of loop C-neonicotinoid interactions at insect nicotinic acetylcholine receptor Î±1 subunit predicts resistance emergence in pests. Scientific Reports, 2020, 10, 7529.	3.3	9
46	The fungal alkaloid Okaramine-B activates an L-glutamate-gated chloride channel from Ixodes scapularis, a tick vector of Lyme disease. International Journal for Parasitology: Drugs and Drug Resistance, 2018, 8, 350-360.	3.4	8
47	Isolation and identification of histamine-release inhibitors from Pistacia weinmannifolia J. Pisson ex. Franch. Journal of Natural Medicines, 2006, 60, 138-140.	2.3	7
48	Selective regulation of pyrethrin biosynthesis by the specific blend of wound induced volatiles in<i>Tanacetum cinerariifolium</i>. Plant Signaling and Behavior, 2016, 11, e1149675.	2.4	7
49	Availability of NHS-biotin labeling to identify free protein lysine revealed by experiment and MD simulation. Analytical Biochemistry, 2018, 557, 46-58.	2.4	6
50	Cy3-3-acylcholine: A fluorescent analogue of acetylcholine for single molecule detection. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 1106-1109.	2.2	5
51	A single amino acid polymorphism in the Drosophila melanogaster DÎ±1 (ALS) subunit enhances neonicotinoid efficacy at DÎ±1-chicken Î²2 hybrid nicotinic acetylcholine receptor expressed in Xenopus laevis oocytes. Bioscience, Biotechnology and Biochemistry, 2014, 78, 543-549.	1.3	4
52	Splice Variants of pH-Sensitive Chloride Channel Identify a Key Determinant of Ivermectin Sensitivity in the Larvae of the Silkworm<i>Bombyx mori</i>. Molecular Pharmacology, 2017, 92, 491-499.	2.3	4
53	Ligand-gated ion channels as targets of neuroactive insecticides. Bioscience, Biotechnology and Biochemistry, 2022, 86, 157-164.	1.3	4
54	Effects of cofactors RIC-3, TMX3 and UNC-50, together with distinct subunit ratios on the agonist actions of imidacloprid on Drosophila melanogaster DÎ±1/DÎ²1 nicotinic acetylcholine receptors expressed in Xenopus laevis oocytes. Pesticide Biochemistry and Physiology, 2022, 187, 105177.	3.6	3

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55	Mechanisms of action of insecticides on ligand-gated ion channels. Journal of Pesticide Sciences, 2007, 32, 278-280.	1.4	2
56	General flexible nature of the cytosolic regions of fungal transient receptor potential (TRP) channels, revealed by expression screening using GFPâ€fusion techniques. Protein Science, 2014, 23, 923-931.	7.6	1
57	Competitive chrodrimanin B interactions with rat brain GABAA receptors revealed by radioligand binding assays. Pesticide Biochemistry and Physiology, 2022, 183, 105074.	3.6	0