Hidemi Misawa

List of Publications by Year
in descending order

94 papers	5,917 citations	76326 40 h-index	76900 74 g-index
95 all docs	95 docs citations	95 times ranked	7143 citing authors

#	Article	IF	Citations
1	Astrocytes as determinants of disease progression in inherited amyotrophic lateral sclerosis. Nature Neuroscience, 2008, 11, 251-253.	14.8	1,015
2	miRNA malfunction causes spinal motor neuron disease. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 13111-13116.	7.1	299
3	Expression and Function of the Cholinergic System in Immune Cells. Frontiers in Immunology, 2017, 8, 1085.	4.8	250
4	Localization of two cholinergic markers, choline acetyltransferase and vesicular acetylcholine transporter in the central nervous system of the rat: in situ hybridization histochemistry and immunohistochemistry. Journal of Chemical Neuroanatomy, 1997, 13, 23-39.	2.1	203
5	A null mutation in the human CNTF gene is not causally related to neurological diseases. Nature Genetics, 1994, 7, 79-84.	21.4	202
6	Expression and function of genes encoding cholinergic components in murine immune cells. Life Sciences, 2007, 80, 2314-2319.	4.3	199
7	Loss of TDP-43 causes age-dependent progressive motor neuron degeneration. Brain, 2013, 136, 1371-1382.	7.6	168
8	Motor Neuron-specific Disruption of Proteasomes, but Not Autophagy, Replicates Amyotrophic Lateral Sclerosis. Journal of Biological Chemistry, 2012, 287, 42984-42994.	3.4	162
9	Physiological functions of the cholinergic system in immune cells. Journal of Pharmacological Sciences, 2017, 134, 1-21.	2.5	151
10	Critical roles of acetylcholine and the muscarinic and nicotinic acetylcholine receptors in the regulation of immune function. Life Sciences, 2012, 91, 1027-1032.	4.3	142
11	Calcium-permeable AMPA receptors promote misfolding of mutant SOD1 protein and development of amyotrophic lateral sclerosis in a transgenic mouse model. Human Molecular Genetics, 2004, 13, 2183-2196.	2.9	138
12	Induced Loss of ADAR2 Engenders Slow Death of Motor Neurons from Q/R Site-Unedited GluR2. Journal of Neuroscience, 2010, 30, 11917-11925.	3.6	137
13	Neurotransmitter release regulated by a MALSâ€"liprin-Î± presynaptic complex. Journal of Cell Biology, 2005, 170, 1127-1134.	5.2	116
14	Evidence for active acetylcholine metabolism in human amniotic epithelial cells: applicable to intracerebral allografting for neurologic disease. Neuroscience Letters, 1997, 232, 53-56.	2.1	96
15	The crucial role of caspase-9 in the disease progression of a transgenic ALS mouse model. EMBO Journal, 2003, 22, 6665-6674.	7.8	96
16	Induction of choline acetyltransferase mRNA in human mononuclear leukocytes stimulated by phytohemagglutinin, a T-cell activator. Journal of Neuroimmunology, 1998, 82, 101-107.	2.3	95
17	Ubiquitous expression of acetylcholine and its biological functions in life forms without nervous systems. Life Sciences, 2007, 80, 2206-2209.	4.3	89
18	Enhanced serum antigen-specific IgG1 and proinflammatory cytokine production in nicotinic acetylcholine receptor Î±7 subunit gene knockout mice. Journal of Neuroimmunology, 2007, 189, 69-74.	2.3	87

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19	Multiple mRNA species of choline acetyltransferase from rat spinal cord. Molecular Brain Research, 1993, 18, 71-76.	2.3	86
20	Immune system expression of SLURP-1 and SLURP-2, two endogenous nicotinic acetylcholine receptor ligands. Life Sciences, 2007, 80, 2365-2368.	4.3	79
21	Coordinate expression of vesicular acetylcholine transporter and choline acetyltransferase in sympathetic superior cervical neurones. NeuroReport, 1995, 6, 965-968.	1.2	77
22	Non-neuronal cholinergic system in regulation of immune function with a focus on Î±7 nAChRs. International Immunopharmacology, 2015, 29, 127-134.	3.8	77
23	Loss of Cholinergic Synapses on the Spinal Motor Neurons of Amyotrophic Lateral Sclerosis. Journal of Neuropathology and Experimental Neurology, 1998, 57, 329-333.	1.7	73
24	Transfection Analysis of Functional Roles of Complexin I and II in the Exocytosis of Two Different Types of Secretory Vesicles. Biochemical and Biophysical Research Communications, 1999, 265, 691-696.	2.1	71
25	Functional Reconstitution of Purified Giand Gowith ?-Opioid Receptors in Guinea Pig Striatal Membranes Pretreated with Micromolar Concentrations of N-Ethylmaleimide. Journal of Neurochemistry, 1990, 54, 841-848.	3.9	64
26	Reconciling neuronally and nonneuronally derived acetylcholine in the regulation of immune function. Annals of the New York Academy of Sciences, 2012, 1261, 7-17.	3.8	64
27	Human choline acetyltransferase mRNAs with different 5â€²-region produce a 69-kDa major translation product. Molecular Brain Research, 1997, 44, 323-333.	2.3	61
28	Primary sensory neuronal expression of SLURP-1, an endogenous nicotinic acetylcholine receptor ligand. Neuroscience Research, 2009, 64, 403-412.	1.9	60
29	Constitutive expression of mRNA for the same choline acetyltransferase as that in the nervous system, an acetylcholine-synthesizing enzyme, in human leukemic T-cell lines. Neuroscience Letters, 1999, 259, 71-74.	2.1	58
30	Ultrastructural localization of high-affinity choline transporter in the rat neuromuscular junction: Enrichment on synaptic vesicles. Synapse, 2004, 53, 53-56.	1.2	58
31	Selective Expression of Osteopontin in ALS-resistant Motor Neurons is a Critical Determinant of Late Phase Neurodegeneration Mediated by Matrix Metalloproteinase-9. Scientific Reports, 2016, 6, 27354.	3.3	54
32	HEG1 is a novel mucin-like membrane protein that serves as a diagnostic and therapeutic target for malignant mesothelioma. Scientific Reports, 2017, 7, 45768.	3.3	50
33	Conditional knockout of Mn superoxide dismutase in postnatal motor neurons reveals resistance to mitochondrial generated superoxide radicals. Neurobiology of Disease, 2006, 23, 169-177.	4.4	49
34	Neuregulin 1 confers neuroprotection in SOD1-linked amyotrophic lateral sclerosis mice via restoration of C-boutons of spinal motor neurons. Acta Neuropathologica Communications, 2016, 4, 15.	5.2	49
35	Transcriptional Regulation of Choline Acetyltransferase Gene by Cyclic AMP. Journal of Neurochemistry, 1993, 60, 1383-1387.	3.9	48
36	Diminished antigen-specific IgG1 and interleukin-6 production and acetylcholinesterase expression in combined M1 and M5 muscarinic acetylcholine receptor knockout mice. Journal of Neuroimmunology, 2007, 188, 80-85.	2.3	47

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37	Molecular characterization of the mouse vesicular acetylcholine transporter gene. NeuroReport, 1997, 8, 3467-3473.	1.2	46
38	Contrasting Localizations of MALS/LIN-7 PDZ Proteins in Brain and Molecular Compensation in Knockout Mice. Journal of Biological Chemistry, 2001, 276, 9264-9272.	3.4	46
39	Identification and Transgenic Analysis of a Murine Promoter that Targets Cholinergic Neuron Expression. Journal of Neurochemistry, 1999, 72, 17-28.	3.9	42
40	Renal defects associated with improper polarization of the CRB and DLG polarity complexes in MALS-3 knockout mice. Journal of Cell Biology, 2007, 179, 151-164.	5.2	42
41	Expression of Choline Acetyltransferase mRNA and Protein in T-Lymphocytes.. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 1995, 71, 231-235.	3.8	41
42	Expression of SLURPâ€1, an endogenous Î±7 nicotinic acetylcholine receptor allosteric ligand, in murine bronchial epithelial cells. Journal of Neuroscience Research, 2009, 87, 2740-2747.	2.9	41
43	Klf4 Regulates the Expression of Slurp1, Which Functions as an Immunomodulatory Peptide in the Mouse Cornea. , 2012, 53, 8433.		38
44	Innate immune adaptor TRIF deficiency accelerates disease progression of ALS mice with accumulation of aberrantly activated astrocytes. Cell Death and Differentiation, 2018, 25, 2130-2146.	11.2	36
45	Formation and spreading of TDP-43 aggregates in cultured neuronal and glial cells demonstrated by time-lapse imaging. PLoS ONE, 2017, 12, e0179375.	2.5	36
46	SLURP-1, an endogenous Î±7 nicotinic acetylcholine receptor allosteric ligand, is expressed in CD205+ dendritic cells in human tonsils and potentiates lymphocytic cholinergic activity. Journal of Neuroimmunology, 2014, 267, 43-49.	2.3	34
47	Distinct Roles of Î±7 nAChRs in Antigen-Presenting Cells and CD4+ T Cells in the Regulation of T Cell Differentiation. Frontiers in Immunology, 2019, 10, 1102.	4.8	34
48	VAChT-Cre.Fast and VAChT-Cre.Slow: Postnatal expression of Cre recombinase in somatomotor neurons with different onset. Genesis, 2003, 37, 44-50.	1.6	31
49	Îº-Opioid agonist inhibits phospholipase C, possibly via an inhibition of G-protein activity. Neuroscience Letters, 1990, 112, 324-327.	2.1	30
50	Identification of a Monogenic Locus (<i>jams1</i>) Causing Juvenile Audiogenic Seizures in Mice. Journal of Neuroscience, 2002, 22, 10088-10093.	3.6	28
51	A misfolded dimer of Cu/Znâ€superoxide dismutase leading to pathological oligomerization in amyotrophic lateral sclerosis. Protein Science, 2017, 26, 484-496.	7.6	28
52	Changes of expression levels of choline acetyltransferase and vesicular acetylcholine transporter mRNAs after transection of the hypoglossal nerve in adult rats. Neuroscience Letters, 1997, 236, 95-98.	2.1	27
53	Behavioral and electrophysiological evidence for a neuroprotective role of aquaporin-4 in the 5xFAD transgenic mice model. Acta Neuropathologica Communications, 2020, 8, 67.	5.2	27
54	Role of GluR1 in Activity-Dependent Motor System Development. Journal of Neuroscience, 2008, 28, 9953-9968.	3.6	26

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55	The in vivo contribution of motor neuron TrkB receptors to mutant SOD1 motor neuron disease. Human Molecular Genetics, 2011, 20, 4116-4131.	2.9	26
56	Osteopontin is an alpha motor neuron marker in the mouse spinal cord. Journal of Neuroscience Research, 2012, 90, 732-742.	2.9	26
57	The specific opioid Îº-agonist U-50,488H inhibits low Km GTPase. European Journal of Pharmacology, 1987, 138, 129-132.	3.5	25
58	Localization of Acetylcholine-Related Molecules in the Retina: Implication of the Communication from Photoreceptor to Retinal Pigment Epithelium. PLoS ONE, 2012, 7, e42841.	2.5	24
59	A copper-deficient form of mutant Cu/Zn-superoxide dismutase as an early pathological species in amyotrophic lateral sclerosis. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2018, 1864, 2119-2130.	3.8	22
60	Dissociation of blood-brain barrier disruption and disease manifestation in an aquaporin-4-deficient mouse model of amyotrophic lateral sclerosis. Neuroscience Research, 2018, 133, 48-57.	1.9	22
61	Substrate-Induced Internalization of the High-Affinity Choline Transporter. Journal of Neuroscience, 2011, 31, 14989-14997.	3.6	21
62	Regulation of Immune Functions by Non-Neuronal Acetylcholine (ACh) via Muscarinic and Nicotinic ACh Receptors. International Journal of Molecular Sciences, 2021, 22, 6818.	4.1	21
63	IL-22/STAT3-Induced Increases in SLURP1 Expression within Psoriatic Lesions Exerts Antimicrobial Effects against Staphylococcus aureus. PLoS ONE, 2015, 10, e0140750.	2.5	20
64	Down-regulation of secreted lymphocyte antigen-6/urokinase-type plasminogen activator receptor-related peptide-1 (SLURP-1), an endogenous allosteric Î±7 nicotinic acetylcholine receptor modulator, in murine and human asthmatic conditions. Biochemical and Biophysical Research Communications, 2010, 398, 713-718.	2.1	19
65	A subtype of opioid Îº-receptor is coupled to inhibition of Gil-mediated phospholipase C activity in the guinea pig cerebellum. FEBS Letters, 1995, 361, 106-110.	2.8	18
66	Calcium-Independent Release of Acetylcholine from Stable Cell Lines Expressing Mouse Choline Acetyltransferase cDNA. Journal of Neurochemistry, 2002, 62, 465-470.	3.9	18
67	Effect of secreted lymphocyte antigen-6/urokinase-type plasminogen activator receptor-related peptide-1 (SLURP-1) on airway epithelial cells. Biochemical and Biophysical Research Communications, 2013, 438, 175-179.	2.1	18
68	A novel function of synapsin II in neurotransmitter release. Molecular Brain Research, 2000, 85, 133-143.	2.3	17
69	Immunochemical characterization on pathological oligomers of mutant Cu/Zn-superoxide dismutase in amyotrophic lateral sclerosis. Molecular Neurodegeneration, 2017, 12, 2.	10.8	16
70	Minireview: Divergent roles of Î±7 nicotinic acetylcholine receptors expressed on antigen-presenting cells and CD4+ T cells in the regulation of T cell differentiation. International Immunopharmacology, 2020, 82, 106306.	3.8	16
71	Acetylcholine synthesis and release in NIH3T3 cells coexpressing the highâ€affinity choline transporter and choline acetyltransferase. Journal of Neuroscience Research, 2009, 87, 3024-3032.	2.9	15
72	Transcriptional regulation of SLURP2, a psoriasis-associated gene, is under control of IL-22 in the skin: A special reference to the nested gene LYNX1. International Immunopharmacology, 2015, 29, 71-75.	3.8	15

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73	Identification of mesothelioma-specific sialylated epitope recognized with monoclonal antibody SKM9-2 in a mucin-like membrane protein HEG1. Scientific Reports, 2018, 8, 14251.	3.3	15
74	Stagnation of glymphatic interstitial fluid flow and delay in waste clearance in the SOD1-G93A mouse model of ALS. Neuroscience Research, 2021, 171, 74-82.	1.9	15
75	Discrete acetylcholine release from neuroblastoma or hybrid cells overexpressing choline acetyltransferase into the neuromuscular synaptic cleft. Neuroscience Research, 1995, 22, 81-88.	1.9	14
76	Oxidative misfolding of Cu/Zn-superoxide dismutase triggered by non-canonical intramolecular disulfide formation. Free Radical Biology and Medicine, 2020, 147, 187-199.	2.9	13
77	Endogenous neurotoxin-like protein Ly6H inhibits alpha7 nicotinic acetylcholine receptor currents at the plasma membrane. Scientific Reports, 2020, 10, 11996.	3.3	12
78	Sustained subcutaneous infusion of nicotine enhances cholinergic vasodilation in the cerebral cortex induced by stimulation of the nucleus basalis of Meynert in rats. European Journal of Pharmacology, 2011, 654, 235-240.	3.5	11
79	Aberrant trafficking of the highâ€affinity choline transporter in APâ€3â€deficient mice. European Journal of Neuroscience, 2008, 27, 3109-3117.	2.6	10
80	Differential roles of NF-Y transcription factor in ER chaperone expression and neuronal maintenance in the CNS. Scientific Reports, 2016, 6, 34575.	3.3	10
81	A Subtype of Îº-Opioid Receptor Mediates Inhibition of High-Affinity GTPase Inherent in Gi1 in Guinea Pig Cerebellar Membranes. Journal of Neurochemistry, 2002, 66, 845-851.	3.9	9
82	Selective disruption of acetylcholine synthesis in subsets of motor neurons: A new model of late-onset motor neuron disease. Neurobiology of Disease, 2014, 65, 102-111.	4.4	8
83	Novel analogs of choline as potential neuroprotective agents. Journal of Alzheimer's Disease, 2005, 6, S85-S92.	2.6	7
84	SIMPLE binds specifically to PI4P through SIMPLE-like domain and participates in protein trafficking in the trans-Golgi network and/or recycling endosomes. PLoS ONE, 2018, 13, e0199829.	2.5	7
85	Hyperproliferation of synapses on spinal motor neurons of Duchenne muscular dystrophy and myotonic dystrophy patients. Acta Neuropathologica, 2003, 106, 557-560.	7.7	6
86	The missing link between long-term stimulation of nicotinic receptors and the increases of acetylcholine release and vasodilation in the cerebral cortex of aged rats. Journal of Physiological Sciences, 2013, 63, 95-101.	2.1	5
87	Involvement of neuronal and muscular Trk-fused gene (TFG) defects in the development of neurodegenerative diseases. Scientific Reports, 2022, 12, 1966.	3.3	5
88	Competitive inhibition of the high-affinity choline transporter by tetrahydropyrimidine anthelmintics. European Journal of Pharmacology, 2021, 898, 173986.	3.5	4
89	Reappraisal of VAChTâ€Cre: Preference in slow motor neurons innervating type I or IIa muscle fibers. Genesis, 2016, 54, 568-572.	1.6	3
90	Reply to â€œCNTF in the embryoâ€. Nature Genetics, 1994, 7, 460-460.	21.4	0

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91	cDNA cloning and chromosomal localization of the human ciliary neurotrophic factor gene. Neuroscience Letters, 1995, 185, 175-178.	2.1	0
92	Roles for Î±7 nicotinic acetylcholine receptors on naÃ¯ve CD4⁺ T cells and antigen-presenting cells in regulation of differentiation. Proceedings for Annual Meeting of the Japanese Pharmacological Society, 2018, WCP2018, PO4-3-25.	0.0	0
93	Selective elimination of slow motor neurons in mice progressively induces a kinetic tremor that resembles patients with essential tremor. Proceedings for Annual Meeting of the Japanese Pharmacological Society, 2018, WCP2018, PO4-1-82.	0.0	0
94	Î±7 Nicotinic acetylcholine (ACh) receptors (Î±7 nAChRs) expressed on antigen-presenting cells (APCs) suppress the differentiation of CD4⁺ T cells.. Proceedings for Annual Meeting of the Japanese Pharmacological Society, 2019, 92, 2-P-088.	0.0	0