Katsuhiko Mikoshiba

List of Publications by Year
in descending order

82	6,355	94269 37	66788 78
papers	citations	h-index	g-index

86	86	86	5797
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Scrambler and yotari disrupt the disabled gene and produce a reeler -like phenotype in mice. Nature, 1997, 389, 730-733.	13.7	604
2	Requirement of the Inositol Trisphosphate Receptor for Activation of Store-Operated Ca2+ Channels. Science, 2000, 287, 1647-1651.	6.0	548
3	Alterations of Sarcoplasmic Reticulum Proteins in Failing Human Dilated Cardiomyopathy. Circulation, 1995, 92, 778-784.	1.6	427
4	IP₃ receptor/Ca²⁺ channel: from discovery to new signaling concepts. Journal of Neurochemistry, 2007, 102, 1426-1446.	2.1	354
5	Structure of the inositol 1,4,5-trisphosphate receptor binding core in complex with its ligand. Nature, 2002, 420, 696-700.	13.7	309
6	IP3 Receptor Types 2 and 3 Mediate Exocrine Secretion Underlying Energy Metabolism. Science, 2005, 309, 2232-2234.	6.0	285
7	Activity-Dependent Tuning of Inhibitory Neurotransmission Based on GABAAR Diffusion Dynamics. Neuron, 2009, 62, 670-682.	3.8	252
8	A Novel Zinc Finger Protein, Zic, Is Involved in Neurogenesis, Especially in the Cell Lineage of Cerebellar Granule Cells. Journal of Neurochemistry, 1994, 63, 1880-1890.	2.1	220
9	IRBIT, a Novel Inositol 1,4,5-Trisphosphate (IP3) Receptor-binding Protein, Is Released from the IP3 Receptor upon IP3 Binding to the Receptor. Journal of Biological Chemistry, 2003, 278, 10602-10612.	1.6	176
10	Inositol 1,4,5â€Trisphosphate Receptorâ€Mediated Ca²⁺ Signaling in the Brain. Journal of Neurochemistry, 1995, 64, 953-960.	2.1	171
11	IRBIT Suppresses IP3 Receptor Activity by Competing with IP3 for the Common Binding Site on the IP3 Receptor. Molecular Cell, 2006, 22, 795-806.	4.5	153
12	IRBIT, an inositol 1,4,5-trisphosphate receptor-binding protein, specifically binds to and activates pancreas-type Na+/HCO3- cotransporter 1 (pNBC1). Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 9542-9547.	3.3	150
13	IRBIT coordinates epithelial fluid and HCO3â€“secretion by stimulating the transporters pNBC1 and CFTR in the murine pancreatic duct. Journal of Clinical Investigation, 2009, 119, 193-202.	3.9	113
14	Distinct Role of the N-terminal Tail of the Na,K-ATPase Catalytic Subunit as a Signal Transducer. Journal of Biological Chemistry, 2006, 281, 21954-21962.	1.6	109
15	The function of inositol high polyphosphate binding proteins. BioEssays, 1997, 19, 593-603.	1.2	102
16	Distribution of a reeler gene-related antigen in the developing cerebellum: An immunohistochemical study with an allogeneic antibody CR-50 on normal and reeler mice. , 1996, 372, 215-228.		97
17	Kinesin dependent, rapid, bi-directional transport of ER sub-compartment in dendrites of hippocampal neurons. Journal of Cell Science, 2004, 117, 163-175.	1.2	92
18	Bidirectional Control of Synaptic GABAAR Clustering by Glutamate and Calcium. Cell Reports, 2015, 13, 2768-2780.	2.9	88

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19	Antibody to the inositol trisphosphate receptor blocks thimerosalenhanced Ca2+-induced Ca2+release and Ca2+oscillations in hamster eggs. FEBS Letters, 1992, 309, 180-184.	1.3	87
20	Monoclonal antibodies distinctively recognizing the subtypes of inositol 1,4,5-trisphosphate receptor: Application to the studies on inflammatory cells. FEBS Letters, 1994, 354, 149-154.	1.3	84
21	Adenophostin-medicated quantal Ca2+release in the purified and reconstituted inositol 1,4,5-trisphosphate receptor type 1. FEBS Letters, 1995, 368, 248-252.	1.3	84
22	Irbit Mediates Synergy Between Ca2+ and cAMP Signaling Pathways During Epithelial Transport in Mice. Gastroenterology, 2013, 145, 232-241.	0.6	81
23	80K-H Interacts with Inositol 1,4,5-Trisphosphate (IP3) Receptors and Regulates IP3-induced Calcium Release Activity. Journal of Biological Chemistry, 2009, 284, 372-380.	1.6	68
24	A Potential Approach for Gene Therapy Targeting Hepatoma Using a Liver-Specific Promoter on a Retroviral Vector.. Cell Structure and Function, 1991, 16, 503-510.	0.5	67
25	Synaptotagmin IV Is Present at the Golgi and Distal Parts of Neurites. Journal of Neurochemistry, 2001, 74, 518-526.	2.1	67
26	The IP3 receptor/Ca2+ channel and its cellular function. Biochemical Society Symposia, 2007, 74, 9.	2.7	63
27	Subtypes of inositol 1,4,5-trisphosphate receptor in human hematopoietic cell lines: Dynamic aspects of their cell-type specific expression. FEBS Letters, 1994, 349, 191-196.	1.3	61
28	Adenophostin, a Potent Agonist of the Inositol 1,4,5-Trisphosphate Receptor, Is Useful for Fertilization of Mouse Oocytes Injected with Round Spermatids Leading to Normal Offspring1. Biology of Reproduction, 1998, 58, 867-873.	1.2	56
29	IRBIT controls apoptosis by interacting with the Bcl-2 homolog, Bcl2l10, and by promoting ER-mitochondria contact. ELife, 2016, 5, .	2.8	56
30	Intracellular targeting and homotetramer formation of a truncated inositol 1,4,5-trisphosphate receptorâ€“green fluorescent protein chimera in Xenopus laevis oocytes: evidence for the involvement of the transmembrane spanning domain in endoplasmic reticulum targeting and homotetramer complex formation. Biochemical Journal, 1997, 323, 273-280.	1.7	55
31	Microvesicle-mediated exocytosis of glutamate is a novel paracrine-like chemical transduction mechanism and inhibits melatonin secretion in rat pinealocytes. Journal of Pineal Research, 1996, 21, 175-191.	3.4	49
32	Characterization of KIAA1427 protein as an atypical synaptotagmin (Syt XIII). Biochemical Journal, 2001, 354, 249-257.	1.7	47
33	Gephyrin-Independent GABAAR Mobility and Clustering during Plasticity. PLoS ONE, 2012, 7, e36148.	1.1	47
34	IRBIT: A regulator of ion channels and ion transporters. Biochimica Et Biophysica Acta - Molecular Cell Research, 2014, 1843, 2195-2204.	1.9	45
35	RNG105/caprin1, an RNA granule protein for dendritic mRNA localization, is essential for long-term memory formation. ELife, 2017, 6, .	2.8	45
36	Remodeling of Ca2+ signaling in cancer: Regulation of inositol 1,4,5-trisphosphate receptors through oncogenes and tumor suppressors. Advances in Biological Regulation, 2018, 68, 64-76.	1.4	43

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37	Regulation by bivalent cations of phospholipid binding to the C2A domain of synaptotagmin III. Biochemical Journal, 1997, 323, 421-425.	1.7	41
38	Developmental Neurotoxicity of Phenytoin on Granule Cells and Purkinje Cells in Mouse Cerebellum. Journal of Neurochemistry, 2001, 72, 1497-1506.	2.1	41
39	Calmodulin inhibits inositol 1,4,5-trisphosphate-induced calcium release through the purified and reconstituted inositol 1,4,5-trisphosphate receptor type 1. FEBS Letters, 1999, 456, 322-326.	1.3	39
40	Inositol 1,4,5-trisphosphate (IP3) receptors and their role in neuronal cell function. Journal of Neurochemistry, 2006, 97, 1627-1633.	2.1	39
41	Novel Isoforms of Mouse Myelin Basic Protein Predominantly Expressed in Embryonic Stage. Journal of Neurochemistry, 1993, 60, 1554-1563.	2.1	36
42	IRBIT regulates CaMKIIÎ± activity and contributes to catecholamine homeostasis through tyrosine hydroxylase phosphorylation. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 5515-5520.	3.3	35
43	G-protein-coupled Receptor Kinase-interacting Proteins Inhibit Apoptosis by Inositol 1,4,5-Triphosphate Receptor-mediated Ca2+ Signal Regulation. Journal of Biological Chemistry, 2009, 284, 29158-29169.	1.6	34
44	Unaltered ryanodine receptor protein levels in ischemic cardiomvopathy. Molecular and Cellular Biochemistry, 1996, 160-161, 297-302.	1.4	33
45	Inositol 1,4,5-trisphosphate receptor associated with focal contact cytoskeletal proteins. FEBS Letters, 2000, 466, 29-34.	1.3	32
46	A unique spacer domain of synaptotagmin IV is essential for Golgi localization. Journal of Neurochemistry, 2001, 77, 730-740.	2.1	32
47	Functional Expression of the Type 1 Inositol 1,4,5â€Trisphosphate Receptor Promoterâ€lacZ Fusion Genes in Transgenic Mice. Journal of Neurochemistry, 1996, 66, 1793-1801.	2.1	31
48	Consensus report of the 8 and 9th Weinman Symposia on Gene x Environment Interaction in carcinogenesis: novel opportunities for precision medicine. Cell Death and Differentiation, 2018, 25, 1885-1904.	5.0	31
49	Histamine H1 receptor on astrocytes and neurons controls distinct aspects of mouse behaviour. Scientific Reports, 2019, 9, 16451.	1.6	31
50	Bcl-2 and IP3 compete for the ligand-binding domain of IP3Rs modulating Ca2+ signaling output. Cellular and Molecular Life Sciences, 2019, 76, 3843-3859.	2.4	31
51	IP₃ Receptor Plasticity Underlying Diverse Functions. Annual Review of Physiology, 2020, 82, 151-176.	5.6	31
52	Development of Purkinje cells in humans: an immunohistochemical study using a monoclonal antibody against the inositol 1, 4, 5-triphosphate type 1 receptor (IP 3 R1). Acta Neuropathologica, 1999, 98, 226-232.	3.9	30
53	Molecular cloning and expression of a cDNA encoding an olfactory-specific mouse phenol sulphotransferase. Biochemical Journal, 1998, 331, 953-958.	1.7	29
54	Inositol 1,4,5-Triphosphate Receptor-binding Protein Released with Inositol 1,4,5-Triphosphate (IRBIT) Associates with Components of the mRNA 3â€² Processing Machinery in a Phosphorylation-dependent Manner and Inhibits Polyadenylation. Journal of Biological Chemistry, 2009, 284, 10694-10705.	1.6	29

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55	Movement of endoplasmic reticulum in the living axon is distinct from other membranous vesicles in its rate, form, and sensitivity to microtubule inhibitors. Journal of Neuroscience Research, 2001, 65, 236-246.	1.3	28
56	Isolation of a Drosophila Gene Encoding a Head-Specific Guanylyl Cyclase. Journal of Neurochemistry, 1993, 60, 1570-1573.	2.1	27
57	An improved retroviral vector for assaying promoter activity. FEBS Letters, 1993, 315, 129-133.	1.3	27
58	DrosophilaAD3 mutation of synaptotagmin impairs calcium-dependent self-oligomerization activity. FEBS Letters, 2000, 482, 269-272.	1.3	24
59	Tac2-N, an atypical C-type tandem C2 protein localized in the nucleus 1. FEBS Letters, 2001, 503, 217-218.	1.3	22
60	Ten-eleven translocation 1 mediated-DNA hydroxymethylation is required for myelination and remyelination in the mouse brain. Nature Communications, 2021, 12, 5091.	5.8	22
61	An IRBIT homologue lacks binding activity to inositol 1,4,5â€trisphosphate receptor due to the unique Nâ€terminal appendage. Journal of Neurochemistry, 2009, 109, 539-550.	2.1	20
62	Retrovirus-mediated Gene Transfer Targeted to Malignant Glioma Cells in Murine Brain. Japanese Journal of Cancer Research, 1992, 83, 1244-1247.	1.7	19
63	Transcriptional Regulation of Mouse Type 1 Inositol 1,4,5-Trisphosphate Receptor Gene by NeuroD-Related Factor. Journal of Neurochemistry, 2001, 72, 1717-1724.	2.1	17
64	Expression of Proteolipid Protein Gene Is Directly Associated with Secretion of a Factor Influencing Oligodendrocyte Development. Journal of Neurochemistry, 1995, 64, 2396-2403.	2.1	17
65	Xenopus Polycomblike 2 (XPcl2) controls anterior to posterior patterning of the neural tissue. Development Genes and Evolution, 2001, 211, 309-314.	0.4	16
66	Demonstration of an E-box and Its CNS-Related Binding Factors for Transcriptional Regulation of the Mouse Type 1 Inositol 1,4,5-Trisphosphate Receptor Gene. Journal of Neurochemistry, 2002, 69, 476-484.	2.1	16
67	Fate of Jimpyâ€Type Oligodendrocytes in Jimpy Heterozygote. Journal of Neurochemistry, 1994, 62, 1887-1893.	2.1	16
68	Involvement of protein tyrosine phosphatases in activation of the trimeric G protein Gq/11. Oncogene, 1999, 18, 7399-7402.	2.6	13
69	Dissection of local Ca2+ signals inside cytosol by ER-targeted Ca2+ indicator. Biochemical and Biophysical Research Communications, 2016, 479, 67-73.	1.0	12
70	Splicing variation of Long-IRBIT determines the target selectivity of IRBIT family proteins. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3921-3926.	3.3	12
71	argos is required for projection of photoreceptor axons during optic lobe development in Drosophila. Developmental Dynamics, 1996, 205, 162-171.	0.8	11
72	Desensitization of IP3-induced Ca2+ release by overexpression of a constitutively active Gqalpha protein converts ventral to dorsal fate in Xenopus early embryos. Development Growth and Differentiation, 2000, 42, 327-335.	0.6	11

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73	Inositol 1,4,5-trisphosphate receptors are autoantibody target antigens in patients with SjÃ¶gren's syndrome and other systemic rheumatic diseases. Modern Rheumatology, 2007, 17, 137-143.	0.9	11
74	ERAD components Derlin-1 and Derlin-2 are essential for postnatal brain development and motor function. IScience, 2021, 24, 102758.	1.9	11
75	IRBIT Interacts with the Catalytic Core of Phosphatidylinositol Phosphate Kinase Type IÎ± and IIÎ± through Conserved Catalytic Aspartate Residues. PLoS ONE, 2015, 10, e0141569.	1.1	11
76	The molecular mechanism of synaptic activityâ€induced astrocytic volume transient. Journal of Physiology, 2020, 598, 4555-4572.	1.3	10
77	GIT1 protects against breast cancer growth through negative regulation of Notch. Nature Communications, 2022, 13, 1537.	5.8	5
78	Inhibitory synaptic transmission tuned by Ca 2+ and glutamate through the control of GABA A R lateral diffusion dynamics. Development Growth and Differentiation, 2020, 62, 398-406.	0.6	3
79	The Inositol 1,4,5â€Trisphosphate Receptor. Novartis Foundation Symposium, 1992, 164, 17-35.	1.2	3
80	EXPRESSION OF THE GREEN FLUORESCENT PROTEIN DERIVATIVE S65T IN <i>XENOPUS LAEVIS </i>OOCYTES . Biomedical Research, 1996, 17, 221-225.	0.3	2
81	Metabolic labeling of a subset of glial cells by UDP-galactose: Implication for astrocyte lineage diversity. Journal of Neuroscience Research, 1998, 52, 173-183.	1.3	2
82	Synaptic Function and Neuropathological Disease Revealed by Quantum Dot-Single-Particle Tracking. Neuromethods, 2020, , 131-155.	0.2	2