Hidetoshi Iida

List of Publications by Year
in descending order

65 papers	2,908 citations	201674 27 h-index	175258 52 g-index
68 all docs	68 docs citations	68 times ranked	2375 citing authors

#	Article	IF	Citations
1	Entanglement of Arabidopsis Seedlings to a Mesh Substrate under Microgravity Conditions in KIBO on the ISS. Plants, 2022, 11, 956.	3.5	0
2	The root growth reduction in response to mechanical stress involves ethylene-mediated microtubule reorganization and transmembrane receptor-mediated signal transduction in Arabidopsis. Plant Cell Reports, 2021, 40, 575-582.	5.6	17
3	The gravistimulation-induced very slow Ca2+ increase in Arabidopsis seedlings requires MCA1, a Ca2+-permeable mechanosensitive channel. Scientific Reports, 2021, 11, 227.	3.3	12
4	A Method Enabling Comprehensive Isolation of Arabidopsis Mutants Exhibiting Unusual Root Mechanical Behavior. Frontiers in Plant Science, 2021, 12, 646404.	3.6	6
5	Mix and match: Patchwork domain evolution of the land plant-specific Ca2+-permeable mechanosensitive channel MCA. PLoS ONE, 2021, 16, e0249735.	2.5	10
6	MCAs in Arabidopsis are Ca2+-permeable mechanosensitive channels inherently sensitive to membrane tension. Nature Communications, 2021, 12, 6074.	12.8	37
7	Highly conserved extracellular residues mediate interactions between pore-forming and regulatory subunits of the yeast Ca2+ channel related to the animal VGCC/NALCN family. Journal of Biological Chemistry, 2020, 295, 13008-13022.	3.4	3
8	The ER-associated protease Ste24 prevents N-terminal signal peptide-independent translocation into the endoplasmic reticulum in Saccharomyces cerevisiae. Journal of Biological Chemistry, 2020, 295, 10406-10419.	3.4	14
9	MCA1 and MCA2 Are Involved in the Response to Hypergravity in Arabidopsis Hypocotyls. Plants, 2020, 9, 590.	3.5	23
10	Ca2+-permeable mechanosensitive channels MCA1 and MCA2 mediate cold-induced cytosolic Ca2+ increase and cold tolerance in Arabidopsis. Scientific Reports, 2018, 8, 550.	3.3	97
11	Molecular Mechanisms of Mechanosensing and Mechanotransduction. , 2018, , 375-397.		2
12	Coupling of a voltageâ€gated Ca²⁺ channel homologue with a plasma membrane H⁺â€ATPase in yeast. Genes To Cells, 2017, 22, 94-104.	1.2	5
13	Post-translational processing and membrane translocation of the yeast regulatory Mid1 subunit of the Cch1/VGCC/NALCN cation channel family. Journal of Biological Chemistry, 2017, 292, 20570-20582.	3.4	9
14	Sensors Make Sense of Signaling. Plant and Cell Physiology, 2017, 58, 1121-1125.	3.1	6
15	Genetic analysis of the regulation of the voltage-gated calcium channel homolog Cch1 by the Î³ subunit homolog Ecm7 and cortical ER protein Scs2 in yeast. PLoS ONE, 2017, 12, e0181436.	2.5	9
16	Transmembrane Topologies of Ca2+-permeable Mechanosensitive Channels MCA1 and MCA2 in Arabidopsis thaliana. Journal of Biological Chemistry, 2015, 290, 30901-30909.	3.4	31
17	Involvement of Ca²⁺in Vacuole Degradation Caused by a Rapid Temperature Decrease in<i>Saintpaulia</i>Palisade Cells: A Case of Gene Expression Analysis in a Specialized Small Tissue. Plant and Cell Physiology, 2015, 56, 1297-1305.	3.1	8
18	Mechanosensitive channel candidate MCA2 is involved in touch-induced root responses in Arabidopsis. Frontiers in Plant Science, 2014, 5, 421.	3.6	5

#	Article	IF	Citations
19	Mugifumi, a beneficial farm work of adding mechanical stress by treading to wheat and barley seedlings. Frontiers in Plant Science, 2014, 5, 453.	3.6	25
20	Mechanosensitive channels Msy1 and Msy2 are required for maintaining organelle integrity upon hypoosmotic shock inSchizosaccharomyces pombe. FEMS Yeast Research, 2014, 14, 992-994.	2.3	13
21	Organellar mechanosensitive channels involved in hypo-osmoregulation in fission yeast. Cell Calcium, 2014, 56, 467-471.	2.4	10
22	Structural Characterization of the Mechanosensitive Channel Candidate MCA2 from Arabidopsis thaliana. PLoS ONE, 2014, 9, e87724.	2.5	30
23	Electrophysiological Characterization of the Mechanosensitive Channel MscCG in Corynebacterium glutamicum. Biophysical Journal, 2013, 105, 1366-1375.	0.5	35
24	Plant mechanosensing and Ca2+ transport. Trends in Plant Science, 2013, 18, 227-233.	8.8	143
25	Hyperactive and hypoactive mutations in Cch1, a yeast homologue of the voltage-gated calcium-channel pore-forming subunit. Microbiology (United Kingdom), 2013, 159, 970-979.	1.8	17
26	A Gain-of-Function Mutation in Gating of Corynebacterium glutamicum NCgl1221 Causes Constitutive Glutamate Secretion. Applied and Environmental Microbiology, 2012, 78, 5432-5434.	3.1	26
27	Roles of a putative mechanosensitive plasma membrane Ca²⁺-permeable channel OsMCA1 in generation of reactive oxygen species and hypo-osmotic signaling in rice. Plant Signaling and Behavior, 2012, 7, 796-798.	2.4	13
28	KlMID1, a relevant key player between endoplasmic reticulum homeostasis and mitochondrial dysfunction in Kluyveromyces lactis. Microbiology (United Kingdom), 2012, 158, 1694-1701.	1.8	2
29	Expression of Arabidopsis MCA1 enhanced mechanosensitive channel activity in the<i>Xenopus laevis</i>oocyte plasma membrane. Plant Signaling and Behavior, 2012, 7, 1022-1026.	2.4	58
30	Organellar mechanosensitive channels in fission yeast regulate the hypo-osmotic shock response. Nature Communications, 2012, 3, 1020.	12.8	79
31	Involvement of the putative Ca2+-permeable mechanosensitive channels, NtMCA1 and NtMCA2, in Ca2+ uptake, Ca2+-dependent cell proliferation and mechanical stress-induced gene expression in tobacco (Nicotiana tabacum) BY-2 cells. Journal of Plant Research, 2012, 125, 555-568.	2.4	54
32	Plasma membrane protein OsMCA1 is involved in regulation of hypo-osmotic shock-induced Ca2+influx and modulates generation of reactive oxygen species in cultured rice cells. BMC Plant Biology, 2012, 12, 11.	3.6	107
33	Mechanoreception in motile flagella of Chlamydomonas. Nature Cell Biology, 2011, 13, 630-632.	10.3	91
34	Determination of Structural Regions Important for Ca2+ Uptake Activity in Arabidopsis MCA1 and MCA2 Expressed in Yeast. Plant and Cell Physiology, 2011, 52, 1915-1930.	3.1	37
35	MCA1 and MCA2 That Mediate Ca2+ Uptake Have Distinct and Overlapping Roles in Arabidopsis. Plant Physiology, 2010, 152, 1284-1296.	4.8	169
36	Role of glycine residues highly conserved in the S2â€“S3 linkers of domains I and II of voltage-gated calcium channel Î±1 subunits. Biochimica Et Biophysica Acta - Biomembranes, 2010, 1798, 966-974.	2.6	0

#	Article	IF	Citations
37	Ion-channel blocker sensitivity of voltage-gated calcium-channel homologue Cch1 in Saccharomyces cerevisiae. Microbiology (United Kingdom), 2008, 154, 3775-3781.	1.8	45
38	Essential, Completely Conserved Glycine Residue in the Domain III S2â€“S3 Linker of Voltage-gated Calcium Channel Î±1 Subunits in Yeast and Mammals. Journal of Biological Chemistry, 2007, 282, 25659-25667.	3.4	18
39	Arabidopsis plasma membrane protein crucial for Ca2+ influx and touch sensing in roots. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 3639-3644.	7.1	352
40	Polarized Morphogenesis Regulator Spa2 Is Required for the Function of Putative Stretch-Activated Ca 2+ -Permeable Channel Component Mid1 in Saccharomyces cerevisiae. Eukaryotic Cell, 2005, 4, 1353-1363.	3.4	5
41	Identification of functional domains of Mid1, a stretch-activated channel component, necessary for localization to the plasma membrane and Ca2+ permeation. Experimental Cell Research, 2005, 311, 84-95.	2.6	16
42	Evidence for the plasma membrane localization of a putative voltage-dependent Ca2+ channel, OsTPC1, in rice. Plant Biotechnology, 2005, 22, 235-239.	1.0	18
43	A Mechanosensitive Anion Channel in Arabidopsis thaliana Mesophyll Cells. Plant and Cell Physiology, 2004, 45, 1704-1708.	3.1	45
44	Functional Analysis of a Rice Putative Voltage-Dependent Ca2+ Channel, OsTPC1, Expressed in Yeast Cells Lacking its Homologous Gene CCH1. Plant and Cell Physiology, 2004, 45, 496-500.	3.1	45
45	Molecular cloning in yeast by in vivo homologous recombination of the yeast putative Î±1 subunit of the voltage-gated calcium channel. FEBS Letters, 2004, 576, 291-296.	2.8	32
46	Subcellular localization and oligomeric structure of the yeast putative stretch-activated Ca2+ channel component Mid1. Experimental Cell Research, 2004, 293, 185-195.	2.6	44
47	Molecular Dissection of the Hydrophobic Segments H3 and H4 of the Yeast Ca2+ Channel Component Mid1. Journal of Biological Chemistry, 2003, 278, 9647-9654.	3.4	24
48	Pressure-Induced Differential Regulation of the Two Tryptophan Permeases Tat1 and Tat2 by Ubiquitin Ligase Rsp5 and Its Binding Proteins, Bul1 and Bul2. Molecular and Cellular Biology, 2003, 23, 7566-7584.	2.3	107
49	Essential Hydrophilic Carboxyl-terminal Regions Including Cysteine Residues of the Yeast Stretch-activated Calcium-permeable Channel Mid1. Journal of Biological Chemistry, 2002, 277, 11645-11652.	3.4	19
50	Phenylethylamine Induces an Increase in Cytosolic Ca2+in Yeast. Bioscience, Biotechnology and Biochemistry, 2002, 66, 1069-1074.	1.3	14
51	Ca+2 Signal is Generated Only Once in the Mating Pheromone Response Pathway in Saccharomyces cerevisiae.. Cell Structure and Function, 2000, 25, 125-131.	1.1	13
52	yam8+, a Schizosaccharomyces pombe Gene, Is a Potential Homologue of the Saccharomyces cerevisiae MID1 Gene Encoding a Stretch- Activated Ca2+-Permeable Channel. Biochemical and Biophysical Research Communications, 2000, 269, 265-269.	2.1	14
53	Molecular Identification of a Eukaryotic, Stretch-Activated Nonselective Cation Channel. Science, 1999, 285, 882-886.	12.6	205
54	Salicylic Acid Induces a Cytosolic Ca2+Elevation in Yeast. Bioscience, Biotechnology and Biochemistry, 1998, 62, 986-989.	1.3	16

#	Article	IF	Citations
55	Calmodulin-dependent protein kinase II and calmodulin are required for induced thermotolerance in Saccharomyces cerevisiae. Current Genetics, 1995, 27, 190-193.	1.7	20
56	Cooperation of Calcineurin and Vacuolar H+-ATPase in Intracellular Ca2+Homeostasis of Yeast Cells. Journal of Biological Chemistry, 1995, 270, 10113-10119.	3.4	82
57	Intracellular free calcium level and its response to cAMP stimulation in developingDictyosteliumcells transformed with jellyfish apoaequorin cDNA. FEBS Letters, 1994, 337, 43-47.	2.8	63
58	The MID2 gene encodes a putative integral membrane protein with a Ca2+-binding domain and shows mating pheromone-stimulated expression in Saccharomyces cerevisiae. Gene, 1994, 151, 203-208.	2.2	52
59	Galactose-dependent expression of the recombinant Ca2+-binding photoprotein aequorin in yeast. Biochemical and Biophysical Research Communications, 1991, 174, 115-122.	2.1	15
60	A DBL-homologous region of the yeast CLS4CDC24 gene product is important for Ca2+-modulated bud assembly. Biochemical and Biophysical Research Communications, 1991, 181, 604-610.	2.1	37
61	Heat shock induction of intranuclear actin rods in cultured mammalian cells. Experimental Cell Research, 1986, 165, 207-215.	2.6	92
62	A heat shock-resistant variant of Chinese hamster cell line constitutively expressing heat shock protein of Mr 90,000 at high level.. Cell Structure and Function, 1986, 11, 65-73.	1.1	48
63	Yeast heat-shock protein of Mr 48,000 is an isoprotein of enolase. Nature, 1985, 315, 688-690.	27.8	209
64	Differential transcription of fd RFI DNA byCaulobacter crescentusandEscherichia coliRNA polymerases. FEBS Letters, 1979, 99, 346-350.	2.8	3
65	Regulation of polar surface structures in Caulobacter crescentus: Pleiotropic mutations affect the coordinate morphogenesis of flagella, pili and phage receptors. Molecular Genetics and Genomics, 1976, 149, 167-173.	2.4	34