Masahiro Sokabe

List of Publications by Year
in descending order

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239	9,204	30070 54	56724 83
papers	citations	h-index	g-index

243	243	243	10647
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	Actin filaments function as a tension sensor by tension-dependent binding of cofilin to the filament. Journal of Cell Biology, 2011, 195, 721-727.	5.2	275
3	Actin stress fibers transmit and focus force to activate mechanosensitive channels. Journal of Cell Science, 2008, 121, 496-503.	2.0	226
4	Mechanical forces facilitate actin polymerization at focal adhesions in a zyxin-dependent manner. Journal of Cell Science, 2008, 121, 2795-2804.	2.0	210
5	Molecular Identification of a Eukaryotic, Stretch-Activated Nonselective Cation Channel. Science, 1999, 285, 882-886.	12.6	205
6	Differential effects of lipids and lyso-lipids on the mechanosensitivity of the mechanosensitive channels MscL and MscS. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 8770-8775.	7.1	170
7	P2X₄ receptors mediate ATP-induced calcium influx in human vascular endothelial cells. American Journal of Physiology - Heart and Circulatory Physiology, 2000, 279, H285-H292.	3.2	168
8	A Non-Peptidic Ion Channel with K+ Selectivity. Angewandte Chemie International Edition in English, 1995, 34, 693-694.	4.4	166
9	Roles of Disrupted-In-Schizophrenia 1-Interacting Protein Girdin in Postnatal Development of the Dentate Gyrus. Neuron, 2009, 63, 774-787.	8.1	164
10	Involvement of SA channels in orienting response of cultured endothelial cells to cyclic stretch. American Journal of Physiology - Heart and Circulatory Physiology, 1998, 274, H1532-H1538.	3.2	139
11	Sensing substrate rigidity by mechanosensitive ion channels with stress fibers and focal adhesions. Current Opinion in Cell Biology, 2010, 22, 669-676.	5.4	131
12	FUS regulates AMPA receptor function and FTLD/ALS-associated behaviour via GluA1 mRNA stabilization. Nature Communications, 2015, 6, 7098.	12.8	129
13	Two different molecular mechanisms underlying progesterone neuroprotection against ischemic brain damage. Neuropharmacology, 2008, 55, 127-138.	4.1	128
14	Behavioral alterations associated with targeted disruption of exons 2 and 3 of the Disc1 gene in the mouse. Human Molecular Genetics, 2011, 20, 4666-4683.	2.9	128
15	Detection of Cyclic GMP Binding Protein and Ion Channel Activity in Frog Rod Outer Segments1. Journal of Biochemistry, 1987, 102, 281-290.	1.7	118
16	Visualization of flow-induced ATP release and triggering of Ca2+ waves at caveolae in vascular endothelial cells. Journal of Cell Science, 2011, 124, 3477-3483.	2.0	116
17	Mechanoregulation and pathology of YAP/TAZ via Hippo and nonâ€Hippo mechanisms. Clinical and Translational Medicine, 2018, 7, 23.	4.0	113
18	Uniaxial Cyclic Stretch Induces Focal Adhesion Kinase (FAK) Tyrosine Phosphorylation Followed by Mitogen-Activated Protein Kinase (MAPK) Activation. Biochemical and Biophysical Research Communications, 2001, 288, 356-361.	2.1	105

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19	Transient receptor potential vanilloid 4 deficiency suppresses unloadingâ€induced bone loss. Journal of Cellular Physiology, 2008, 216, 47-53.	4.1	103
20	Pp125FAK is required for stretch dependent morphological response of endothelial cells. Oncogene, 1998, 17, 455-463.	5.9	101
21	Î±7 Nicotinic acetylcholine receptor as a target to rescue deficit in hippocampal LTP induction in Î²-amyloid infused rats. Neuropharmacology, 2006, 50, 254-268.	4.1	101
22	Cytoplasmic Calcium Increases in Response to Changes in the Gravity Vector in Hypocotyls and Petioles of Arabidopsis Seedlings. Plant Physiology, 2008, 146, 505-514.	4.8	101
23	Chlamydomonas CAV2 Encodes a Voltage- Dependent Calcium Channel Required for the Flagellar Waveform Conversion. Current Biology, 2009, 19, 133-139.	3.9	96
24	Mechanoreception in motile flagella of Chlamydomonas. Nature Cell Biology, 2011, 13, 630-632.	10.3	91
25	Matrix stiffness regulates migration of human lung fibroblasts. Physiological Reports, 2017, 5, e13281.	1.7	90
26	Molecular and electrophysiological characterization of a mechanosensitive channel expressed in the chloroplasts of Chlamydomonas. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 5883-5888.	7.1	87
27	Mechanotransducing ion channels in astrocytes. Brain Research, 1992, 584, 272-286.	2.2	86
28	Stretch-induced IL-6 secretion from endothelial cells requires NF-ÎºB activation. Biochemical and Biophysical Research Communications, 2003, 308, 306-312.	2.1	86
29	DHEA prevents AÎ²25â€“35-impaired survival of newborn neurons in the dentate gyrus through a modulation of PI3K-Akt-mTOR signaling. Neuropharmacology, 2010, 59, 323-333.	4.1	82
30	Uni-axial cyclic stretch induces c-src activation and translocation in human endothelial cells via SA channel activation. FEBS Letters, 1998, 441, 111-115.	2.8	79
31	Girdin Phosphorylation Is Crucial for Synaptic Plasticity and Memory: A Potential Role in the Interaction of BDNF/TrkB/Akt Signaling with NMDA Receptor. Journal of Neuroscience, 2014, 34, 14995-15008.	3.6	79
32	Uniâ€axial cyclic stretch induces the activation of transcription factor nuclear factor ÎºB in human fibroblast cells. FASEB Journal, 2002, 16, 405-407.	0.5	77
33	Loss-of-Function Mutations at the Rim of the Funnel of Mechanosensitive Channel MscL. Biophysical Journal, 2004, 86, 2113-2120.	0.5	77
34	Force-dependent vinculin binding to talin in live cells: a crucial step in anchoring the actin cytoskeleton to focal adhesions. American Journal of Physiology - Cell Physiology, 2014, 306, C607-C620.	4.6	77
35	Progesterone promotes the survival of newborn neurons in the dentate gyrus of adult male mice. Hippocampus, 2010, 20, 402-412.	1.9	76
36	Abnormal synaptic plasticity in basolateral amygdala may account for hyperactivity and attention-deficit in male rat exposed perinatally to low-dose bisphenol-A. Neuropharmacology, 2011, 60, 789-798.	4.1	72

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37	Characteristics of subepithelial fibroblasts as a mechano-sensor in the intestine: cell-shape-dependent ATP release and P2Y1 signaling. Journal of Cell Science, 2005, 118, 3289-3304.	2.0	71
38	Lipid-Protein Interaction of the MscS Mechanosensitive Channel Examined by Scanning Mutagenesis. Biophysical Journal, 2006, 91, 2874-2881.	0.5	70
39	Mechanical stretch enhances IL-8 production in pulmonary microvascular endothelial cells. Biochemical and Biophysical Research Communications, 2009, 389, 531-536.	2.1	70
40	An anion channel of sarcoplasmic reticulum incorporated into planar lipid bilayers: Single-channel behavior and conductance properties. Journal of Membrane Biology, 1987, 99, 103-111.	2.1	69
41	Stretch-induced cell proliferation is mediated by FAK-MAPK pathway. Life Sciences, 2005, 76, 2817-2825.	4.3	67
42	Suppression of CD44 expression decreases migration and invasion of human glioma cells. International Journal of Cancer, 1996, 66, 255-260.	5.1	66
43	Molecular Design and Synthesis of Artificial Ion Channels Based on Cyclic Peptides Containing Unnatural Amino Acids. Journal of Organic Chemistry, 2001, 66, 2978-2989.	3.2	65
44	Zyxin emerges as a key player in the mechanotransduction at cell adhesive structures. Communicative and Integrative Biology, 2008, 1, 192-195.	1.4	65
45	Mechanical stress-dependent secretion of interleukin 6 by endothelial cells after portal vein embolization: clinical and experimental studies. Journal of Hepatology, 2002, 37, 240-246.	3.7	64
46	Mechanosensitive ATP release from hemichannels and Ca2+ influx through TRPC6 accelerate wound closure in keratinocytes. Journal of Cell Science, 2014, 127, 4159-71.	2.0	63
47	Actin Cytoskeleton Regulates Stretch-Activated Ca²⁺ Influx in Human Pulmonary Microvascular Endothelial Cells. American Journal of Respiratory Cell and Molecular Biology, 2010, 43, 26-34.	2.9	62
48	Microtubule Dynamics Regulate Cyclic Stretch-Induced Cell Alignment in Human Airway Smooth Muscle Cells. PLoS ONE, 2011, 6, e26384.	2.5	62
49	Up-regulation of Integrin Î²3Expression by Cyclic Stretch in Human Umbilical Endothelial Cells. Biochemical and Biophysical Research Communications, 1997, 239, 372-376.	2.1	60
50	Neurosteroid estradiol rescues ischemia-induced deficit in the long-term potentiation of rat hippocampal CA1 neurons. Neuropharmacology, 2007, 52, 1124-1138.	4.1	59
51	Differential effect of double-pulse TMS applied to dorsal premotor cortex and precuneus during internal operation of visuospatial information. NeuroImage, 2010, 49, 1108-1115.	4.2	59
52	DHEA-Neuroprotection and -Neurotoxicity after Transient Cerebral Ischemia in Rats. Journal of Cerebral Blood Flow and Metabolism, 2009, 29, 287-296.	4.3	58
53	Expression of Arabidopsis MCA1 enhanced mechanosensitive channel activity in theXenopus laevisoocyte plasma membrane. Plant Signaling and Behavior, 2012, 7, 1022-1026.	2.4	58
54	Single-molecule imaging and kinetic analysis of cooperative cofilinâ€“actin filament interactions. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 9810-9815.	7.1	58

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55	A Novel Ca²⁺ Influx Pathway Activated by Mechanical Stretch in Human Airway Smooth Muscle Cells. American Journal of Respiratory Cell and Molecular Biology, 2008, 38, 407-413.	2.9	57
56	Actomyosin bundles serve as a tension sensor and a platform for ERK activation. EMBO Reports, 2015, 16, 250-257.	4.5	57
57	Hair cell damage and recovery following chronic application of kanamycin in the chick cochlea. Hearing Research, 1991, 52, 356-368.	2.0	54
58	Gating-associated conformational changes in the mechanosensitive channel MscL. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 4033-4038.	7.1	54
59	Involvement of PI3K/Akt/TOR pathway in stretchâ€induced hypertrophy of myotubes. Muscle and Nerve, 2010, 41, 100-106.	2.2	54
60	Increase of Anteroventral Periventricular Kisspeptin Neurons and Generation of E2-Induced LH-Surge System in Male Rats Exposed Perinatally to Environmental Dose of Bisphenol-A. Endocrinology, 2011, 152, 1562-1571.	2.8	54
61	Hair cell regeneration in the adult budgerigar after kanamycin ototoxicity. Hearing Research, 1992, 59, 46-58.	2.0	53
62	Involvement of reactive oxygen species in cyclic stretchâ€induced NFâ€ÎºB activation in human fibroblast cells. British Journal of Pharmacology, 2005, 145, 364-373.	5.4	53
63	Dynamics of integrin clustering at focal contacts of endothelial cells studied by multimode imaging microscopy. Journal of Cell Science, 2001, 114, 3125-3135.	2.0	52
64	Disrupted-in-schizophrenia 1 regulates transport of ITPR1 mRNA for synaptic plasticity. Nature Neuroscience, 2015, 18, 698-707.	14.8	51
65	Interaction between the Cytoplasmic and Transmembrane Domains of the Mechanosensitive Channel MscS. Biophysical Journal, 2008, 94, 1638-1645.	0.5	49
66	Chronic administration of dehydroepiandrosterone sulfate (DHEAS) primes for facilitated induction of long-term potentiation via sigma 1 (Ïƒ1) receptor: Optical imaging study in rat hippocampal slices. Neuropharmacology, 2006, 50, 380-392.	4.1	46
67	Effect of tensile force on the mechanical behavior of actin filaments. Journal of Biomechanics, 2011, 44, 1776-1781.	2.1	46
68	Reactive oxygen species upregulate expression of muscle atrophy-associated ubiquitin ligase Cbl-b in rat L6 skeletal muscle cells. American Journal of Physiology - Cell Physiology, 2018, 314, C721-C731.	4.6	46
69	A Mechanosensitive Anion Channel in Arabidopsis thaliana Mesophyll Cells. Plant and Cell Physiology, 2004, 45, 1704-1708.	3.1	45
70	Deficits in development of synaptic plasticity in rat dorsal striatum following prenatal and neonatal exposure to low-dose bisphenol A. Neuroscience, 2009, 159, 161-171.	2.3	45
71	Structural Changes in the Cytoplasmic Domain of the Mechanosensitive Channel MscS During Opening. Biophysical Journal, 2009, 97, 1048-1057.	0.5	45
72	Kanamycin induced lowâ€frequency hearing loss in the budgerigar (Melopsittacus undulatus). Journal of the Acoustical Society of America, 1989, 85, 289-294.	1.1	44

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73	Hippocampal Synaptic Modulation by the Phosphotyrosine Adapter Protein ShcC/N-Shc via Interaction with the NMDA Receptor. Journal of Neuroscience, 2005, 25, 1826-1835.	3.6	44
74	Abnormal neurogenesis in the dentate gyrus of adult mice lacking 1,25â€dihydroxy vitamin D₃(1,25â€(OH)₂D₃). Hippocampus, 2012, 22, 421-433.	1.9	44
75	Aminoglycoside blockade of Ca2+-activated K+ channel from rat brain synaptosomal membranes incorporated into planar bilayers. Journal of Membrane Biology, 1990, 115, 241-251.	2.1	43
76	Bi-phasic activation of eNOS in response to uni-axial cyclic stretch is mediated by differential mechanisms in BAECs. Life Sciences, 2006, 79, 233-239.	4.3	43
77	Dynamics of actin filaments during tension-dependent formation of actin bundles. Biochimica Et Biophysica Acta - General Subjects, 2007, 1770, 1115-1127.	2.4	43
78	STIM1 Regulates Platelet-Derived Growth Factor-Induced Migration and Ca2+ Influx in Human Airway Smooth Muscle Cells. PLoS ONE, 2012, 7, e45056.	2.5	43
79	Treatment with progesterone after focal cerebral ischemia suppresses proliferation of progenitor cells but enhances survival of newborn neurons inÂadult male mice. Neuropharmacology, 2010, 58, 930-939.	4.1	42
80	Real-Time Imaging of ATP Release Induced by Mechanical Stretch in Human Airway Smooth Muscle Cells. American Journal of Respiratory Cell and Molecular Biology, 2014, 51, 772-782.	2.9	42
81	Enlargement of glycogen store in rat liver and muscle by fructose-diet intake and exercise training. Journal of Applied Physiology, 1997, 82, 772-775.	2.5	41
82	Activation of a mechanosensitive BK channel by membrane stress created with amphipaths. Molecular Membrane Biology, 2005, 22, 519-527.	2.0	41
83	Continuous de novo synthesis of neurosteroids is required for normal synaptic transmission and plasticity in the dentate gyrus of the rat hippocampus. Neuropharmacology, 2012, 62, 2373-2387.	4.1	41
84	Imaging and characterization of stretchâ€induced ATP release from alveolar A549 cells. Journal of Physiology, 2013, 591, 1195-1215.	2.9	41
85	Molecular Mechanisms Underlying the Force-Dependent Regulation of Actin-to-ECM Linkage at the Focal Adhesions. Progress in Molecular Biology and Translational Science, 2014, 126, 135-154.	1.7	41
86	Presynaptic Modulation of Synaptic Transmission by Pregnenolone Sulfate as Studied by Optical Recordings. Journal of Neurophysiology, 2005, 94, 4131-4144.	1.8	40
87	Mechanosensitivity of ion channels based on proteinâ€“lipid interactions. Journal of the Royal Society Interface, 2010, 7, S307-20.	3.4	40
88	Increased astrocytic ATP release results in enhanced excitability of the hippocampus. Glia, 2013, 61, 210-224.	4.9	40
89	PREGS Induces LTP in the Hippocampal Dentate Gyrus of Adult Rats Via the Tyrosine Phosphorylation International Cooperative Research CREB Signaling. Journal of Neurophysiology, 2007, 98, 1538-1548.	1.8	39
90	Tuning the mechanosensitivity of a BK channel by changing the linker length. Cell Research, 2008, 18, 871-878.	12.0	37

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91	Repetitive stretch suppresses denervationâ€induced atrophy of soleus muscle in rats. Muscle and Nerve, 2009, 39, 456-462.	2.2	37
92	Characterization of a newly found stretch-activated KCa,ATP channel in cultured chick ventricular myocytes. American Journal of Physiology - Heart and Circulatory Physiology, 1999, 276, H1827-H1838.	3.2	36
93	Dehydroepiandrosterone sulfate prevents ischemia-induced impairment of long-term potentiation in rat hippocampal CA1 by up-regulating tyrosine phosphorylation of NMDA receptor. Neuropharmacology, 2006, 51, 958-966.	4.1	36
94	DMXB (GTSâ€21) ameliorates the cognitive deficits in beta amyloid injected mice through preventing the dysfunction of alpha7 nicotinic receptor. Journal of Neuroscience Research, 2010, 88, 1784-1794.	2.9	35
95	Mechano-sensing by actin filaments and focal adhesion proteins. Communicative and Integrative Biology, 2012, 5, 572-577.	1.4	35
96	Structure-Function Study on a de Novo Synthetic Hydrophobic Ion Channel. Biophysical Journal, 1999, 76, 631-641.	0.5	34
97	Protective effects of XBP1 against oxygen and glucose deprivation/reoxygenation injury in rat primary hippocampal neurons. Neuroscience Letters, 2012, 518, 45-48.	2.1	34
98	Analyses of a Gravistimulation-Specific Ca2+ Signature in Arabidopsis using Parabolic Flights Â Â. Plant Physiology, 2013, 163, 543-554.	4.8	34
99	Chronic DHEAS administration facilitates hippocampal long-term potentiation via an amplification of Src-dependent NMDA receptor signaling. Neuropharmacology, 2006, 51, 659-670.	4.1	33
100	Stress-Axis Regulated Exon (STREX) in the C terminus of BKCa channels is responsible for the stretch sensitivity. Biochemical and Biophysical Research Communications, 2009, 385, 634-639.	2.1	33
101	Ca2+ influx and ATP release mediated by mechanical stretch in human lung fibroblasts. Biochemical and Biophysical Research Communications, 2014, 453, 101-105.	2.1	33
102	Unidirectional incorporation of a bacterial mechanosensitive channel into liposomal membranes. FASEB Journal, 2015, 29, 4334-4345.	0.5	33
103	Totally Synthetic Voltage Dependent Ion Channel. Chemistry Letters, 1995, 24, 435-436.	1.3	32
104	The gating mechanism of the bacterial mechanosensitive channel MscL revealed by molecular dynamics simulations. Channels, 2012, 6, 317-331.	2.8	32
105	Actomyosin contractility provokes contact inhibition in E-cadherin-ligated keratinocytes. Scientific Reports, 2017, 7, 46326.	3.3	32
106	Corynebacterium glutamicum mechanosensitive channels: towards unpuzzling â€œglutamate effluxâ€•for amino acid production. Biophysical Reviews, 2018, 10, 1359-1369.	3.2	32
107	Regulation of endothelin-1-induced interleukin-6 production by Ca2+ influx in human airway smooth muscle cells. European Journal of Pharmacology, 2009, 605, 15-22.	3.5	31
108	Force- and Ca2+-dependent internalization of integrins in cultured endothelial cells. Journal of Cell Science, 2011, 124, 3859-3870.	2.0	31

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109	Frequency specific susceptibility to acoustic trauma in the budgerigar (Melopsittacus undulatus). Journal of the Acoustical Society of America, 1988, 83, 2450-2453.	1.1	30
110	Evaluation of extensional and torsional stiffness of single actin filaments by molecular dynamics analysis. Journal of Biomechanics, 2010, 43, 3162-3167.	2.1	30
111	Protective role of Gipie, a Girdin family protein, in endoplasmic reticulum stress responses in endothelial cells. Molecular Biology of the Cell, 2011, 22, 736-747.	2.1	30
112	Sigma-1 (Ïƒ1) receptor deficiency reduces Î²-amyloid25â€“35-induced hippocampal neuronal cell death and cognitive deficits through suppressing phosphorylation of the NMDA receptor NR2B. Neuropharmacology, 2015, 89, 215-224.	4.1	30
113	Real-time luminescence imaging of cellular ATP release. Methods, 2014, 66, 330-344.	3.8	29
114	Bidirectional modulatory effect of 17Î²-estradiol on NMDA receptors via ERÎ± and ERÎ² in the dentate gyrus of juvenile male rats. Neuropharmacology, 2013, 75, 262-273.	4.1	28
115	Hyperforin/HP-Î²-Cyclodextrin Enhances Mechanosensitive Ca²⁺ Signaling in HaCaT Keratinocytes and in Atopic Skin Ex Vivo Which Accelerates Wound Healing. BioMed Research International, 2017, 2017, 1-9.	1.9	28
116	Effects of specific prostanoid EP receptor agonists on cell proliferation and intracellular Ca2+ concentrations in human airway smooth muscle cells. European Journal of Pharmacology, 2011, 659, 72-78.	3.5	27
117	Effects of tensile and compressive strains on response of a chondrocytic cell line embedded in type I collagen gel. Journal of Biotechnology, 2008, 133, 245-252.	3.8	26
118	Critical consideration on the relationship between auxin transport and calcium transients in gravity perception of Arabidopsis seedlings. Plant Signaling and Behavior, 2008, 3, 521-524.	2.4	26
119	Modulatory metaplasticity induced by pregnenolone sulfate in the rat hippocampus: A leftward shift in LTP/LTDâ€frequency curve. Hippocampus, 2010, 20, 499-512.	1.9	25
120	Neurosteroid PREGS Protects Neurite Growth and Survival of Newborn Neurons in the Hippocampal Dentate Gyrus of APPswe/PS1dE9 Mice. Current Alzheimer Research, 2012, 9, 361-372.	1.4	25
121	Gigaseal Mechanics: Creep of the Gigaseal under the Action of Pressure, Adhesion, and Voltage. Journal of Physical Chemistry B, 2014, 118, 12660-12672.	2.6	25
122	Synaptic pruning of murine adult-born neurons by microglia depends on phosphatidylserine. Journal of Experimental Medicine, 2022, 219, .	8.5	25
123	Protamine augments stretch induced calcium increase in vascular endothelium. British Journal of Pharmacology, 2001, 134, 1403-1410.	5.4	23
124	Membrane stretch and cytoplasmic Ca2+ independently modulate stretch-activated BK channel activity. Journal of Biomechanics, 2010, 43, 3015-3019.	2.1	23
125	Neuronal <scp>PAS</scp> domain protein 4 (Npas4) controls neuronal homeostasis in pentylenetetrazoleâ€induced epilepsy through the induction of Homer1a. Journal of Neurochemistry, 2018, 145, 19-33.	3.9	23
126	Characteristics of cultured subepithelial fibroblasts in the rat small intestine. II. Localization and functional analysis of endothelin receptors and cell-shape-independent gap junction permeability. Cell and Tissue Research, 2005, 319, 103-119.	2.9	21

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127	Mechano-sensitive channels regulate the stomatal aperture in Vicia faba. Biochemical and Biophysical Research Communications, 2008, 366, 758-762.	2.1	21
128	Calcium mobilizations in response to changes in the gravity vector inArabidopsisseedlings. Plant Signaling and Behavior, 2014, 9, e29099.	2.4	20
129	Deficits in cognitive function and hippocampal plasticity in GM2/GD2 synthase knockout mice. Hippocampus, 2014, 24, 369-382.	1.9	20
130	Cyclic stretch enhances reorientation and differentiation of 3-D culture model of human airway smooth muscle. Biochemistry and Biophysics Reports, 2018, 16, 32-38.	1.3	20
131	Evaluation of Hepatic Interleukin-6 Secretion following Portal Vein Ligation Using a Minimal Surgical Stress Model. Journal of Surgical Research, 2006, 135, 27-33.	1.6	19
132	Down-regulation of ERK but not MEK phosphorylation in cultured endothelial cells by repeated changes in cyclic stretch. Cardiovascular Research, 2007, 73, 813-822.	3.8	19
133	Stretch speed-dependent myofiber damage and functional deficits in rat skeletal muscle induced by lengthening contraction. Physiological Reports, 2014, 2, e12213.	1.7	19
134	Congenital myasthenic syndrome in Japan: Ethnically unique mutations in muscle nicotinic acetylcholine receptor subunits. Neuromuscular Disorders, 2015, 25, 60-69.	0.6	18
135	SA channel mediates superoxide production in HUVECs. Life Sciences, 2001, 69, 1717-1724.	4.3	17
136	Pregnenolone sulfate enhances survival of adult-generated hippocampal granule cells via sustained presynaptic potentiation. Neuropharmacology, 2011, 60, 529-541.	4.1	17
137	Sex differences in the vocal motor pathway of the zebra finch revealed by real-time optical imaging technique. NeuroReport, 1999, 10, 2487-2491.	1.2	16
138	Stretch-induced morphological changes of human endothelial cells depend on the intracellular level of Ca2+ rather than of cAMP. Life Sciences, 2000, 67, 2605-2613.	4.3	16
139	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
140	Real-time imaging of inflation-induced ATP release in the ex vivo rat lung. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2016, 311, L956-L969.	2.9	16
141	The 5Î±-Reductase Inhibitor Finasteride Exerts Neuroprotection Against Ischemic Brain Injury in Aged Male Rats. Translational Stroke Research, 2019, 10, 67-77.	4.2	16
142	Attachment of growth cones on substrate observed by multi-mode light microscopy. Neuroscience Research, 1999, 35, 197-206.	1.9	15
143	The neuropeptide GsMTx4 inhibits a mechanosensitive BK channel through the voltage-dependent modification specific to mechano-gating. Journal of Biological Chemistry, 2019, 294, 11892-11909.	3.4	15
144	Hypotonically Induced Whole-Cell Currents in A6 Cells: Relationship with Cell Volume and Cytoplasmic Ca2+.. The Japanese Journal of Physiology, 1997, 47, 553-565.	0.9	15

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145	DHEAS induces shortâ€term potentiation via the activation of a metabotropic glutamate receptor in the rat hippocampus. Hippocampus, 2012, 22, 707-722.	1.9	14
146	Non-channel mechanosensors working at focal adhesion-stress fiber complex. Pflugers Archiv European Journal of Physiology, 2015, 467, 141-155.	2.8	14
147	Current-direction/amplitude-dependent single channel gating kinetics of mouse pannexin 1 channel: a new concept for gating kinetics. Scientific Reports, 2017, 7, 10512.	3.3	14
148	Biophysical Mechanisms of Membrane-Thickness-Dependent MscL Gating: An All-Atom Molecular Dynamics Study. Langmuir, 2019, 35, 7432-7442.	3.5	14
149	Anion channels from rat brain synaptosomal membranes incorporated into planar bilayers. Journal of Membrane Biology, 1991, 124, 53-62.	2.1	13
150	L-type calcium channel modulates mechanosensitivity of the cardiomyocyte cell line H9c2. Cell Calcium, 2019, 79, 68-74.	2.4	13
151	Stress-induced breakdown of intestinal barrier function in the rat: Reversal by wood creosote. Life Sciences, 2006, 79, 913-918.	4.3	12
152	Proteoglycan from salmon nasal cartridge promotes in vitro wound healing of fibroblast monolayers via the CD44 receptor. Biochemical and Biophysical Research Communications, 2015, 456, 792-798.	2.1	12
153	MEKK1-dependent phosphorylation of calponin-3 tunes cell contractility. Journal of Cell Science, 2016, 129, 3574-3582.	2.0	12
154	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
155	Synthesis and Ion Channel Formation of Novel Cyclic Peptides Containing a Non-natural Amino Acid. Chemistry Letters, 1997, 26, 953-954.	1.3	11
156	Biphasic activation of liver regeneration-associated signals in an early stage after portal vein branch ligation. Biochemical and Biophysical Research Communications, 2006, 349, 732-739.	2.1	11
157	Nitric oxide (NO) increase at fertilization in sea urchin eggs upregulates fertilization envelope hardening. Developmental Biology, 2008, 322, 251-262.	2.0	10
158	Molecular dynamics study on proteinâ€“water interplay in the mechanogating of the bacterial mechanosensitive channel MscL. European Biophysics Journal, 2015, 44, 531-543.	2.2	10
159	Post-injury stretch promotes recovery in a rat model of muscle damage induced by lengthening contractions. Journal of Physiological Sciences, 2018, 68, 483-492.	2.1	10
160	An influenza-derived membrane tension-modulating peptide regulates cell movement and morphology via actin remodeling. Communications Biology, 2019, 2, 243.	4.4	10
161	A cation channel for K+ and Ca2+ from Tetrahymena cilia in planar lipid bilayers.. Cell Structure and Function, 1988, 13, 51-60.	1.1	10
162	Training at nonâ€damaging intensities facilitates recovery from muscle atrophy. Muscle and Nerve, 2017, 55, 243-253.	2.2	9

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163	Neurosteroid dehydroepiandrosterone enhances activity and trafficking of astrocytic GLTâ€1 via Ïƒ₁ receptorâ€mediated PKC activation in the hippocampal dentate gyrus of rats. Glia, 2017, 65, 1491-1503.	4.9	9
164	Nestorone exerts long-term neuroprotective effects against transient focal cerebral ischemia in adult male rats. Brain Research, 2019, 1719, 288-296.	2.2	9
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