

Motohiro Nishida

List of Publications by Year in descending order

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116
papers

7,134
citations

66343
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60623
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137
all docs

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docs citations

137
times ranked

7909
citing authors

#	ARTICLE	IF	CITATIONS
1	LTRPC2 Ca ²⁺ -Permeable Channel Activated by Changes in Redox Status Confers Susceptibility to Cell Death. <i>Molecular Cell</i> , 2002, 9, 163-173.	9.7	746
2	TRPC3 and TRPC6 are essential for angiotensin II-induced cardiac hypertrophy. <i>EMBO Journal</i> , 2006, 25, 5305-5316.	7.8	374
3	CysteinyI-tRNA synthetase governs cysteine polysulfidation and mitochondrial bioenergetics. <i>Nature Communications</i> , 2017, 8, 1177.	12.8	373
4	Transient Receptor Potential Channels in Cardiovascular Function and Disease. <i>Circulation Research</i> , 2006, 99, 119-131.	4.5	353
5	Selective and direct inhibition of TRPC3 channels underlies biological activities of a pyrazole compound. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 5400-5405.	7.1	344
6	Mutations in EFHC1 cause juvenile myoclonic epilepsy. <i>Nature Genetics</i> , 2004, 36, 842-849.	21.4	329
7	Hydrogen sulfide anion regulates redox signaling via electrophile sulfhydration. <i>Nature Chemical Biology</i> , 2012, 8, 714-724.	8.0	274
8	GÎ±i and GÎ±o are target proteins of reactive oxygen species. <i>Nature</i> , 2000, 408, 492-495.	27.8	235
9	Transient Receptor Potential 1 Regulates Capacitative Ca ²⁺ Entry and Ca ²⁺ Release from Endoplasmic Reticulum in B Lymphocytes. <i>Journal of Experimental Medicine</i> , 2002, 195, 673-681.	8.5	193
10	P2Y6 receptor-GÎ±12/13 signalling in cardiomyocytes triggers pressure overload-induced cardiac fibrosis. <i>EMBO Journal</i> , 2008, 27, 3104-3115.	7.8	169
11	Inhibition of TRPC6 Channel Activity Contributes to the Antihypertrophic Effects of Natriuretic Peptides-Guanylyl Cyclase-A Signaling in the Heart. <i>Circulation Research</i> , 2010, 106, 1849-1860.	4.5	143
12	GÎ±12/13-mediated Up-regulation of TRPC6 Negatively Regulates Endothelin-1-induced Cardiac Myofibroblast Formation and Collagen Synthesis through Nuclear Factor of Activated T Cells Activation*. <i>Journal of Biological Chemistry</i> , 2007, 282, 23117-23128.	3.4	126
13	GÎ±12/13- and Reactive Oxygen Species-dependent Activation of c-Jun NH2-terminal Kinase and p38 Mitogen-activated Protein Kinase by Angiotensin Receptor Stimulation in Rat Neonatal Cardiomyocytes. <i>Journal of Biological Chemistry</i> , 2005, 280, 18434-18441.	3.4	124
14	Amplification of receptor signalling by Ca ²⁺ entry-mediated translocation and activation of PLCÎ²2 in B lymphocytes. <i>EMBO Journal</i> , 2003, 22, 4677-4688.	7.8	101
15	GÎ±12/13 Mediates Î±1-Adrenergic Receptor-Induced Cardiac Hypertrophy. <i>Circulation Research</i> , 2002, 91, 961-969.	4.5	100
16	Transient receptor potential channels in Alzheimer's disease. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2007, 1772, 958-967.	3.8	99
17	Comprehensive analysis of the ascidian genome reveals novel insights into the molecular evolution of ion channel genes. <i>Physiological Genomics</i> , 2005, 22, 269-282.	2.3	91
18	Phosphorylation of TRPC6 Channels at Thr69 Is Required for Anti-hypertrophic Effects of Phosphodiesterase 5 Inhibition. <i>Journal of Biological Chemistry</i> , 2010, 285, 13244-13253.	3.4	88

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19	GÎ±12/13-mediated Production of Reactive Oxygen Species Is Critical for Angiotensin Receptor-induced NFAT Activation in Cardiac Fibroblasts. <i>Journal of Biological Chemistry</i> , 2005, 280, 23041-23047.	3.4	83
20	Hypoxia-induced interaction of filamin with Drp1 causes mitochondrial hyperfissionâ€“associated myocardial senescence. <i>Science Signaling</i> , 2018, 11, .	3.6	83
21	TRPC3 positively regulates reactive oxygen species driving maladaptive cardiac remodeling. <i>Scientific Reports</i> , 2016, 6, 37001.	3.3	80
22	Differential Requirement of GÎ±12, GÎ±13, GÎ±q, and GÎ²Î³ for Endothelin-1-Induced c-Jun NH2-Terminal Kinase and Extracellular Signal-Regulated Kinase Activation. <i>Molecular Pharmacology</i> , 2003, 63, 478-488.	2.3	72
23	Sulfide catabolism ameliorates hypoxic brain injury. <i>Nature Communications</i> , 2021, 12, 3108.	12.8	71
24	Direct Interaction and Functional Coupling between Metabotropic Glutamate Receptor Subtype 1 and Voltage-sensitive Cav2.1 Ca2+ Channel. <i>Journal of Biological Chemistry</i> , 2003, 278, 25101-25108.	3.4	67
25	Hydrogen peroxide stimulates tetrahydrobiopterin synthesis through the induction of GTP-cyclohydrolase I and increases nitric oxide synthase activity in vascular endothelial cells. <i>Free Radical Biology and Medicine</i> , 2003, 34, 1343-1352.	2.9	66
26	Purinergic P2Y ₆ receptors heterodimerize with angiotensin AT1 receptors to promote angiotensin IIâ€“induced hypertension. <i>Science Signaling</i> , 2016, 9, ra7.	3.6	63
27	Ca2+ influx and protein scaffolding via TRPC3 sustain PKCÎ² and ERK activation in B cells. <i>Journal of Cell Science</i> , 2010, 123, 927-938.	2.0	60
28	TRPC3-mediated Ca2+ influx contributes to Rac1-mediated production of reactive oxygen species in MLP-deficient mouse hearts. <i>Biochemical and Biophysical Research Communications</i> , 2011, 409, 108-113.	2.1	60
29	TRPC3-GEF-H1 axis mediates pressure overload-induced cardiac fibrosis. <i>Scientific Reports</i> , 2016, 6, 39383.	3.3	60
30	Mammalian formin Fhod3 plays an essential role in cardiogenesis by organizing myofibrillogenesis. <i>Biology Open</i> , 2012, 1, 889-896.	1.2	58
31	Roles of TRP channels in the development of cardiac hypertrophy. <i>Naunyn-Schmiedeberg's Archives of Pharmacology</i> , 2008, 378, 395-406.	3.0	56
32	Formation, signaling functions, and metabolisms of nitrated cyclic nucleotide. <i>Nitric Oxide - Biology and Chemistry</i> , 2013, 34, 10-18.	2.7	55
33	Î²-arrestin2 in Infiltrated Macrophages Inhibits Excessive Inflammation after Myocardial Infarction. <i>PLoS ONE</i> , 2013, 8, e68351.	2.5	55
34	MIR30â€“GALNT1/2 Axisâ€“Mediated Glycosylation Contributes to the Increased Secretion of Inactive Human Prohormone for Brain Natriuretic Peptide (proBNP) From Failing Hearts. <i>Journal of the American Heart Association</i> , 2017, 6, .	3.7	53
35	Role of TRPC3 and TRPC6 channels in the myocardial response to stretch: Linking physiology and pathophysiology. <i>Progress in Biophysics and Molecular Biology</i> , 2017, 130, 264-272.	2.9	53
36	Induction of Cardiac Fibrosis by Î²-Blocker in G Protein-independent and G Protein-coupled Receptor Kinase 5/Î²-Arrestin2-dependent Signaling Pathways. <i>Journal of Biological Chemistry</i> , 2012, 287, 35669-35677.	3.4	52

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37	GRK6 deficiency in mice causes autoimmune disease due to impaired apoptotic cell clearance. <i>Nature Communications</i> , 2013, 4, 1532.	12.8	51
38	Stimulation of Adenosine A2B Receptor Inhibits Endothelin-1-Induced Cardiac Fibroblast Proliferation and α -Smooth Muscle Actin Synthesis Through the cAMP/Epac/PI3K/Akt-Signaling Pathway. <i>Frontiers in Pharmacology</i> , 2017, 8, 428.	3.5	50
39	TRPC3-Nox2 complex mediates doxorubicin-induced myocardial atrophy. <i>JCI Insight</i> , 2017, 2, .	5.0	50
40	Purinergic P2Y receptors: Molecular diversity and implications for treatment of cardiovascular diseases. , 2017, 180, 113-128.		48
41	Activation Mechanism of Gi and Go by Reactive Oxygen Species. <i>Journal of Biological Chemistry</i> , 2002, 277, 9036-9042.	3.4	46
42	TRP Channels: Molecular Diversity and Physiological Function. <i>Microcirculation</i> , 2006, 13, 535-550.	1.8	46
43	Methylmercury, an environmental electrophile capable of activation and disruption of the Akt/CREB/Bcl-2 signal transduction pathway in SH-SY5Y cells. <i>Scientific Reports</i> , 2016, 6, 28944.	3.3	46
44	Cilostazol Suppresses Angiotensin II-Induced Vasoconstriction via Protein Kinase A-Mediated Phosphorylation of the Transient Receptor Potential Canonical 6 Channel. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2011, 31, 2278-2286.	2.4	44
45	Amphotericin B-Induced Renal Tubular Cell Injury Is Mediated by Na ⁺ Influx through Ion-Permeable Pores and Subsequent Activation of Mitogen-Activated Protein Kinases and Elevation of Intracellular Ca ²⁺ Concentration. <i>Antimicrobial Agents and Chemotherapy</i> , 2009, 53, 1420-1426.	3.2	42
46	Heterologous down-regulation of angiotensin type 1 receptors by purinergic P2Y ₂ receptor stimulation through S-nitrosylation of NF- κ B. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 6662-6667.	7.1	42
47	Redox signaling regulated by electrophiles and reactive sulfur species. <i>Journal of Clinical Biochemistry and Nutrition</i> , 2016, 58, 91-98.	1.4	41
48	β -Arrestin2 enhances β 2-adrenergic receptor-mediated nuclear translocation of ERK. <i>Cellular Signalling</i> , 2005, 17, 1248-1253.	3.6	39
49	Atrial Natriuretic Peptide-Mediated Inhibition of Microcirculatory Endothelial Ca ²⁺ and Permeability Response to Histamine Involves cGMP-Dependent Protein Kinase I and TRPC6 Channels. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2013, 33, 2121-2129.	2.4	39
50	Exposure to Electrophiles Impairs Reactive Persulfide-Dependent Redox Signaling in Neuronal Cells. <i>Chemical Research in Toxicology</i> , 2017, 30, 1673-1684.	3.3	39
51	2-Oxo-histidine-containing dipeptides are functional oxidation products. <i>Journal of Biological Chemistry</i> , 2019, 294, 1279-1289.	3.4	39
52	Divergent Roles of CAAX Motif-sigaled Posttranslational Modifications in the Regulation and Subcellular Localization of Ral GTPases. <i>Journal of Biological Chemistry</i> , 2015, 290, 22851-22861.	3.4	37
53	Ca ²⁺ Channel β 1B Subunit (CaV 2.2) Knockout Mouse Reveals a Predominant Role of N-Type Channels in the Sympathetic Regulation of the Circulatory System. <i>Trends in Cardiovascular Medicine</i> , 2002, 12, 270-275.	4.9	34
54	Clathrin Required for Phosphorylation and Internalization of β 2-Adrenergic Receptor by G Protein-coupled Receptor Kinase 2 (GRK2). <i>Journal of Biological Chemistry</i> , 2006, 281, 31940-31949.	3.4	33

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55	Sustained \hat{I}^2 AR Stimulation Mediates Cardiac Insulin Resistance in a PKA-Dependent Manner. <i>Molecular Endocrinology</i> , 2016, 30, 118-132.	3.7	33
56	TRPC3 Channels in Cardiac Fibrosis. <i>Frontiers in Cardiovascular Medicine</i> , 2017, 4, 56.	2.4	33
57	Pertussis Toxin Up-regulates Angiotensin Type 1 Receptors through Toll-like Receptor 4-mediated Rac Activation. <i>Journal of Biological Chemistry</i> , 2010, 285, 15268-15277.	3.4	32
58	Mitochondrial dynamics in exercise physiology. <i>Pflügers Archiv European Journal of Physiology</i> , 2020, 472, 137-153.	2.8	32
59	Ibutilast attenuates doxorubicin-induced cytotoxicity by suppressing formation of TRPC3 channel and NADPH oxidase 2 protein complexes. <i>British Journal of Pharmacology</i> , 2019, 176, 3723-3738.	5.4	30
60	Recombinant mitochondrial transcription factor A protein inhibits nuclear factor of activated T cells signaling and attenuates pathological hypertrophy of cardiac myocytes. <i>Mitochondrion</i> , 2012, 12, 449-458.	3.4	29
61	Novel Real-Time Sensors to Quantitatively Assess In Vivo Inositol 1,4,5-Trisphosphate Production in Intact Cells. <i>Chemistry and Biology</i> , 2004, 11, 475-485.	6.0	28
62	Regulation of redox signalling by an electrophilic cyclic nucleotide. <i>Journal of Biochemistry</i> , 2013, 153, 131-138.	1.7	28
63	A food-derived synergist of NGF signaling: identification of protein tyrosine phosphatase 1B as a key regulator of NGF receptor-initiated signal transduction. <i>Journal of Neurochemistry</i> , 2008, 107, 1248-1260.	3.9	27
64	TRPC6 regulates phenotypic switching of vascular smooth muscle cells through plasma membrane potential-dependent coupling with PTEN. <i>FASEB Journal</i> , 2019, 33, 9785-9796.	0.5	27
65	Redox regulation of electrophilic signaling by reactive persulfides in cardiac cells. <i>Free Radical Biology and Medicine</i> , 2017, 109, 132-140.	2.9	26
66	Reactive Cysteine Persulphides: Occurrence, Biosynthesis, Antioxidant Activity, Methodologies, and Bacterial Persulphide Signalling. <i>Advances in Microbial Physiology</i> , 2018, 72, 1-28.	2.4	25
67	Depolysulfidation of Drp1 induced by low-dose methylmercury exposure increases cardiac vulnerability to hemodynamic overload. <i>Science Signaling</i> , 2019, 12, .	3.6	25
68	Regulation of Angiotensin II receptor signaling by cysteine modification of NF- \hat{I} B. <i>Nitric Oxide - Biology and Chemistry</i> , 2011, 25, 112-117.	2.7	24
69	Reactive Sulfur Species-Mediated Activation of the Keap1-Nrf2 Pathway by 1,2-Naphthoquinone through Sulfenic Acids Formation under Oxidative Stress. <i>Chemical Research in Toxicology</i> , 2015, 28, 838-847.	3.3	24
70	TRPC3 participates in angiotensin II type 1 receptor-dependent stress-induced slow increase in intracellular Ca ²⁺ concentration in mouse cardiomyocytes. <i>Journal of Physiological Sciences</i> , 2018, 68, 153-164.	2.1	24
71	Structural library and visualization of endogenously oxidized phosphatidylcholines using mass spectrometry-based techniques. <i>Nature Communications</i> , 2021, 12, 6339.	12.8	24
72	Inhibition of N-type Ca ²⁺ channels ameliorates an imbalance in cardiac autonomic nerve activity and prevents lethal arrhythmias in mice with heart failure. <i>Cardiovascular Research</i> , 2014, 104, 183-193.	3.8	23

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73	A protease-activated receptor-1 antagonist protects against podocyte injury in a mouse model of nephropathy. <i>Journal of Pharmacological Sciences</i> , 2017, 135, 81-88.	2.5	22
74	TRPC6 counteracts TRPC3-Nox2 protein complex leading to attenuation of hyperglycemia-induced heart failure in mice. <i>Scientific Reports</i> , 2017, 7, 7511.	3.3	21
75	TRPC5-eNOS Axis Negatively Regulates ATP-Induced Cardiomyocyte Hypertrophy. <i>Frontiers in Pharmacology</i> , 2018, 9, 523.	3.5	20
76	Keap1 Regulates the Constitutive Expression of GST A1 during Differentiation of Caco-2 Cells. <i>Biochemistry</i> , 2008, 47, 6169-6177.	2.5	18
77	Redox signaling regulated by an electrophilic cyclic nucleotide and reactive cysteine persulfides. <i>Archives of Biochemistry and Biophysics</i> , 2016, 595, 140-146.	3.0	18
78	Screening of Transient Receptor Potential Canonical Channel Activators Identifies Novel Neurotrophic Piperazine Compounds. <i>Molecular Pharmacology</i> , 2016, 89, 348-363.	2.3	18
79	Purinergic P2Y6 receptors: A new therapeutic target of age-dependent hypertension. <i>Pharmacological Research</i> , 2017, 120, 51-59.	7.1	18
80	TRPC3-Nox2 axis mediates nutritional deficiency-induced cardiomyocyte atrophy. <i>Scientific Reports</i> , 2019, 9, 9785.	3.3	18
81	Activation of Rac1 Increases c-Jun NH2-Terminal Kinase Activity and DNA Fragmentation in a Calcium-Dependent Manner in Rat Myoblast Cell Line H9c2. <i>Biochemical and Biophysical Research Communications</i> , 1999, 262, 350-354.	2.1	17
82	Heterotrimeric G Protein G β 13-Induced Induction of Cytokine mRNAs Through Two Distinct Pathways in Cardiac Fibroblasts. <i>Journal of Pharmacological Sciences</i> , 2006, 101, 144-150.	2.5	17
83	Canonical Transient Receptor Potential Channels and Vascular Smooth Muscle Cell Plasticity. <i>Journal of Lipid and Atherosclerosis</i> , 2020, 9, 124.	3.5	16
84	TRPC Channels in Cardiac Plasticity. <i>Cells</i> , 2020, 9, 454.	4.1	15
85	Voltage-dependent N-type Ca ²⁺ channels in endothelial cells contribute to oxidative stress-related endothelial dysfunction induced by angiotensin II in mice. <i>Biochemical and Biophysical Research Communications</i> , 2013, 434, 210-216.	2.1	13
86	Role of 8-nitro-cGMP and its redox regulation in cardiovascular electrophilic signaling. <i>Journal of Molecular and Cellular Cardiology</i> , 2014, 73, 10-17.	1.9	13
87	TRP Channels: Their Function and Potentiality as Drug Targets. , 2015, , 195-218.		13
88	Prolonged stimulation of β ₂ -adrenergic receptor with β ₂ -agonists impairs insulin actions in H9c2 cells. <i>Journal of Pharmacological Sciences</i> , 2018, 138, 184-191.	2.5	13
89	TRPC channels in exercise-mimetic therapy. <i>Pflügers Archiv European Journal of Physiology</i> , 2019, 471, 507-517.	2.8	13
90	Redox-dependent internalization of the purinergic P2Y ₆ receptor limits colitis progression. <i>Science Signaling</i> , 2022, 15, eabj0644.	3.6	12

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91	Drug repurposing for the treatment of COVID-19. Journal of Pharmacological Sciences, 2022, 149, 108-114.	2.5	12
92	Roles of Heterotrimeric GTP-Binding Proteins in the Progression of Heart Failure. Journal of Pharmacological Sciences, 2011, 117, 1-5.	2.5	11
93	Modulation of P2Y6R expression exacerbates pressure overload-induced cardiac remodeling in mice. Scientific Reports, 2020, 10, 13926.	3.3	11
94	Redox Control of Cardiovascular Homeostasis by Angiotensin II. Current Pharmaceutical Design, 2013, 19, 3022-3032.	1.9	11
95	Involvement of nitric oxide/reactive oxygen species signaling via 8-nitro-cGMP formation in 1-methyl-4-phenylpyridinium ion-induced neurotoxicity in PC12 cells and rat cerebellar granule neurons. Biochemical and Biophysical Research Communications, 2018, 495, 2165-2170.	2.1	10
96	Synthesis of radioiodinated probes to evaluate the biodistribution of a potent TRPC3 inhibitor. MedChemComm, 2016, 7, 1003-1006.	3.4	9
97	Clathrin Required for Phosphorylation and Internalization of β_2 -Adrenergic Receptor by G Protein-coupled Receptor Kinase 2 (GRK2). Journal of Biological Chemistry, 2006, 281, 31940-31949.	3.4	9
98	$GI\alpha_3$ Counteracts $GI\alpha_q$ Signaling upon β_1 -Adrenergic Receptor Stimulation. Biochemical and Biophysical Research Communications, 2002, 291, 995-1000.	2.1	8
99	Mechanism of the Cardioprotective Effects of Docetaxel Pre-administration Against Adriamycin-Induced Cardiotoxicity. Journal of Pharmacological Sciences, 2011, 115, 336-345.	2.5	8
100	Blocker-resistant presynaptic voltage-dependent Ca^{2+} channels underlying glutamate release in mice nucleus tractus solitarii. Brain Research, 2006, 1104, 103-113.	2.2	7
101	Deletion of TRPC3 or TRPC6 Fails to Attenuate the Formation of Inflammation and Fibrosis in Non-alcoholic Steatohepatitis. Biological and Pharmaceutical Bulletin, 2021, 44, 431-436.	1.4	7
102	Lysophosphatidic Acid Promotes the Expansion of Cancer Stem Cells via TRPC3 Channels in Triple-Negative Breast Cancer. International Journal of Molecular Sciences, 2022, 23, 1967.	4.1	7
103	Protective roles of MITOL against myocardial senescence and ischemic injury partly via Drp1 regulation. IScience, 2022, 25, 104582.	4.1	7
104	Dual Signaling Pathways of Arterial Constriction by Extracellular Uridine 5'-Triphosphate in the Rat. Journal of Pharmacological Sciences, 2011, 115, 293-308.	2.5	6
105	TRPC3 amplifies B-cell receptor-induced ERK signalling via protein kinase D-dependent Rap1 activation. Biochemical Journal, 2016, 473, 201-210.	3.7	6
106	Long-Acting Thioredoxin Ameliorates Doxorubicin-Induced Cardiomyopathy via Its Anti-Oxidative and Anti-Inflammatory Action. Pharmaceutics, 2022, 14, 562.	4.5	4
107	Cold Atmospheric Plasma Modification of Amyloid β . International Journal of Molecular Sciences, 2021, 22, 3116.	4.1	3
108	Cardiac robustness regulated by reactive sulfur species. Journal of Clinical Biochemistry and Nutrition, 2022, 70, 1-6.	1.4	3

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109	A TRPC3/6 Channel Inhibitor Promotes Arteriogenesis after Hind-Limb Ischemia. Cells, 2022, 11, 2041.	4.1	2
110	Caveolae-Independent Activation of Protein Kinase A in Rat Neonatal Myocytes. Journal of Pharmacological Sciences, 2005, 98, 168-174.	2.5	1
111	Cardiac natriuretic peptides inhibit TRPC6-mediated prohypertrophic signaling through cGMP-PKG pathway. BMC Pharmacology, 2009, 9, .	0.4	0
112	Dual actions of ANP on endothelial permeability. BMC Pharmacology & Toxicology, 2013, 14, .	2.4	0
113	Introduction to serial reviews: Recent developments in research of reactive sulfur species. Journal of Clinical Biochemistry and Nutrition, 2021, 68, 4-4.	1.4	0
114	4. Eco-pharma Research Aimed at Therapeutic Agents for Amyotrophic Diseases. Japanese Journal of Clinical Pharmacology and Therapeutics, 2021, 52, 39-42.	0.1	0
115	Determining the Activation of Rho as an Index of Receptor Coupling to G12/13 Proteins. Methods in Molecular Biology, 2011, 746, 317-327.	0.9	0
116	Eco-pharma research focusing on ACE2-mediated SARS-CoV-2 entry. Proceedings for Annual Meeting of the Japanese Pharmacological Society, 2022, 95, 2-S15-3.	0.0	0