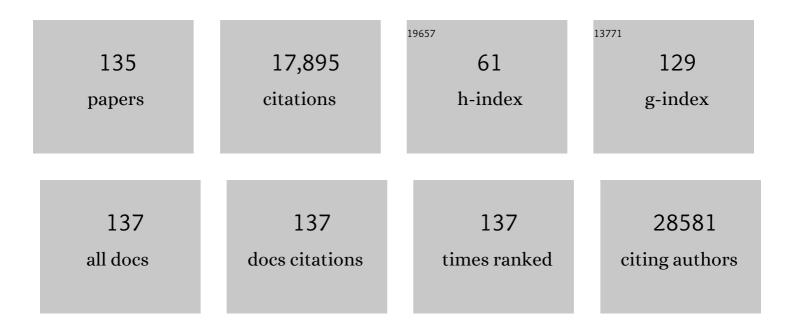
## Hiromi Sesaki

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5687110/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). Autophagy, 2016, 12, 1-222.	9.1	4,701
2	Mitochondrial Dynamics Controls T Cell Fate through Metabolic Programming. Cell, 2016, 166, 63-76.	28.9	1,025
3	The dynamin-related GTPase Drp1 is required for embryonic and brain development in mice. Journal of Cell Biology, 2009, 186, 805-816.	5.2	556
4	Direct Membrane Association Drives Mitochondrial Fission by the Parkinson Disease-associated Protein α-Synuclein. Journal of Biological Chemistry, 2011, 286, 20710-20726.	3.4	499
5	Division versus Fusion: Dnm1p and Fzo1p Antagonistically Regulate Mitochondrial Shape. Journal of Cell Biology, 1999, 147, 699-706.	5.2	498
6	Mitochondrial Dynamics Impacts Stem Cell Identity and Fate Decisions by Regulating a Nuclear Transcriptional Program. Cell Stem Cell, 2016, 19, 232-247.	11.1	469
7	Mitochondrial dynamics in neurodegeneration. Trends in Cell Biology, 2013, 23, 64-71.	7.9	409
8	The Putative Drp1 Inhibitor mdivi-1 Is a Reversible Mitochondrial Complex I Inhibitor that Modulates Reactive Oxygen Species. Developmental Cell, 2017, 40, 583-594.e6.	7.0	406
9	A mitochondrial origin for frontotemporal dementia and amyotrophic lateral sclerosis through CHCHD10 involvement. Brain, 2014, 137, 2329-2345.	7.6	377
10	Parkinâ€independent mitophagy requires <scp>D</scp> rp1 and maintains the integrity of mammalian heart and brain. EMBO Journal, 2014, 33, 2798-2813.	7.8	361
11	Mitochondrial inner membrane permeabilisation enables mt <scp>DNA</scp> release during apoptosis. EMBO Journal, 2018, 37, .	7.8	313
12	Mitochondrial Division Is Requisite to RAS-Induced Transformation and Targeted by Oncogenic MAPK Pathway Inhibitors. Molecular Cell, 2015, 57, 521-536.	9.7	310
13	Metformin Improves Mitochondrial Respiratory Activity through Activation of AMPK. Cell Reports, 2019, 29, 1511-1523.e5.	6.4	244
14	Mgm1p, a Dynamin-related GTPase, Is Essential for Fusion of the Mitochondrial Outer Membrane. Molecular Biology of the Cell, 2003, 14, 2342-2356.	2.1	239
15	Mitochondrial division ensures the survival of postmitotic neurons by suppressing oxidative damage. Journal of Cell Biology, 2012, 197, 535-551.	5.2	225
16	Defects in Mitochondrial Dynamics and Metabolomic Signatures of Evolving Energetic Stress in Mouse Models of Familial Alzheimer's Disease. PLoS ONE, 2012, 7, e32737.	2.5	225
17	UGO1 Encodes an Outer Membrane Protein Required for Mitochondrial Fusion. Journal of Cell Biology, 2001, 152, 1123-1134.	5.2	215
18	Regulation of mitochondrial fusion and division. Trends in Cell Biology, 2007, 17, 563-569.	7.9	209

#	Article	IF	CITATIONS
19	Phosphatidic Acid and Cardiolipin Coordinate Mitochondrial Dynamics. Trends in Cell Biology, 2018, 28, 67-76.	7.9	186
20	Transient assembly of F-actin on the outer mitochondrial membrane contributes to mitochondrial fission. Journal of Cell Biology, 2015, 208, 109-123.	5.2	180
21	Mitochondrial Stasis Reveals p62-Mediated Ubiquitination in Parkin-Independent Mitophagy and Mitigates Nonalcoholic Fatty Liver Disease. Cell Metabolism, 2018, 28, 588-604.e5.	16.2	180
22	Mitochondrial division and fusion in metabolism. Current Opinion in Cell Biology, 2015, 33, 111-118.	5.4	174
23	Loss of Mitochondrial Fission Depletes Axonal Mitochondria in Midbrain Dopamine Neurons. Journal of Neuroscience, 2014, 34, 14304-14317.	3.6	165
24	Ugo1p Links the Fzo1p and Mgm1p GTPases for Mitochondrial Fusion. Journal of Biological Chemistry, 2004, 279, 28298-28303.	3.4	161
25	<scp>OPA</scp> 1 deficiency promotes secretion of <scp>FGF</scp> 21 from muscle that prevents obesity and insulin resistance. EMBO Journal, 2017, 36, 2126-2145.	7.8	157
26	Constriction of the mitochondrial inner compartment is a priming event for mitochondrial division. Nature Communications, 2017, 8, 15754.	12.8	155
27	Coincident Phosphatidic Acid Interaction Restrains Drp1 in Mitochondrial Division. Molecular Cell, 2016, 63, 1034-1043.	9.7	150
28	Ups1p and Ups2p antagonistically regulate cardiolipin metabolism in mitochondria. Journal of Cell Biology, 2009, 185, 1029-1045.	5.2	149
29	A dimeric equilibrium intermediate nucleates Drp1 reassembly on mitochondrial membranes for fission. Molecular Biology of the Cell, 2014, 25, 1905-1915.	2.1	149
30	Altered brain energetics induces mitochondrial fission arrest in Alzheimer's Disease. Scientific Reports, 2016, 6, 18725.	3.3	146
31	<i> <scp>CHCHD</scp> 10 </i> mutations promote loss of mitochondrial cristae junctions with impaired mitochondrial genome maintenance and inhibition of apoptosis. EMBO Molecular Medicine, 2016, 8, 58-72.	6.9	143
32	Reduced dynamin-related protein 1 protects against phosphorylated Tau-induced mitochondrial dysfunction and synaptic damage in Alzheimer's disease. Human Molecular Genetics, 2016, 25, 4881-4897.	2.9	142
33	Tam41 Is a CDP-Diacylglycerol Synthase Required for Cardiolipin Biosynthesis in Mitochondria. Cell Metabolism, 2013, 17, 709-718.	16.2	135
34	Yeast mitochondrial dynamics: Fusion, division, segregation, and shape. Microscopy Research and Technique, 2000, 51, 573-583.	2.2	125
35	Tim23–Tim50 pair coordinates functions of translocators and motor proteins in mitochondrial protein import. Journal of Cell Biology, 2009, 184, 129-141.	5.2	125
36	Protective effects of reduced dynamin-related protein 1 against amyloid beta-induced mitochondrial dysfunction and synaptic damage in Alzheimer's disease. Human Molecular Genetics, 2016, 25, ddw330.	2.9	125

#	Article	IF	CITATIONS
37	Cells lacking Pcp1p/Ugo2p, a rhomboid-like protease required for Mgm1p processing, lose mtDNA and mitochondrial structure in a Dnm1p-dependent manner, but remain competent for mitochondrial fusion. Biochemical and Biophysical Research Communications, 2003, 308, 276-283.	2.1	122
38	Doxorubicinâ€induced cardiomyocyte death is mediated by unchecked mitochondrial fission and mitophagy. FASEB Journal, 2019, 33, 11096-11108.	0.5	118
39	Dynamin-Related Protein 1 Deficiency Promotes Recovery from AKI. Journal of the American Society of Nephrology: JASN, 2018, 29, 194-206.	6.1	110
40	Asymmetrically Segregated Mitochondria Provide Cellular Memory of Hematopoietic Stem Cell Replicative History and Drive HSC Attrition. Cell Stem Cell, 2020, 26, 420-430.e6.	11.1	108
41	Endoplasmic reticulum–associated degradation regulates mitochondrial dynamics in brown adipocytes. Science, 2020, 368, 54-60.	12.6	107
42	Role for Two Conserved Intermembrane Space Proteins, Ups1p and Up2p, in Intra-mitochondrial Phospholipid Trafficking. Journal of Biological Chemistry, 2012, 287, 15205-15218.	3.4	101
43	Mutations in DNM1L, as in OPA1, result in dominant optic atrophy despite opposite effects on mitochondrial fusion and fission. Brain, 2017, 140, 2586-2596.	7.6	100
44	Yeast Mitochondrial Division and Distribution Require the Cortical Num1 Protein. Developmental Cell, 2007, 12, 363-375.	7.0	95
45	Parasitic Nematode-Induced Modulation of Body Weight and Associated Metabolic Dysfunction in Mouse Models of Obesity. Infection and Immunity, 2013, 81, 1905-1914.	2.2	95
46	Drp1 Promotes KRas-Driven Metabolic Changes to Drive Pancreatic Tumor Growth. Cell Reports, 2019, 28, 1845-1859.e5.	6.4	93
47	SQSTM1/p62 promotes mitochondrial ubiquitination independently of PINK1 and PRKN/parkin in mitophagy. Autophagy, 2019, 15, 2012-2018.	9.1	93
48	Ups1p, a conserved intermembrane space protein, regulates mitochondrial shape and alternative topogenesis of Mgm1p. Journal of Cell Biology, 2006, 173, 651-658.	5.2	92
49	Structural and functional analysis of MiD51, a dynamin receptor required for mitochondrial fission. Journal of Cell Biology, 2014, 204, 477-486.	5.2	91
50	Mitochondrial division: molecular machinery and physiological functions. Current Opinion in Cell Biology, 2011, 23, 427-434.	5.4	89
51	Drp1 stabilizes p53 on the mitochondria to trigger necrosis under oxidative stress conditions <i>inÂvitro</i> and <i>inÂvivo</i> . Biochemical Journal, 2014, 461, 137-146.	3.7	89
52	Dynamin-Related Protein 1 Inhibition Attenuates Cardiovascular Calcification in the Presence of Oxidative Stress. Circulation Research, 2017, 121, 220-233.	4.5	88
53	Decreasing mitochondrial fission diminishes vascular smooth muscle cell migration and ameliorates intimal hyperplasia. Cardiovascular Research, 2015, 106, 272-283.	3.8	86
54	Methylene blue alleviates nuclear and mitochondrial abnormalities in progeria. Aging Cell, 2016, 15, 279-290.	6.7	85

#	Article	IF	CITATIONS
55	DRP1 Suppresses Leptin and Glucose Sensing of POMC Neurons. Cell Metabolism, 2017, 25, 647-660.	16.2	84
56	MIRO-1 Determines Mitochondrial Shape Transition upon GPCR Activation and Ca2+ Stress. Cell Reports, 2018, 23, 1005-1019.	6.4	80
57	Molecular Cloning and Characterization of DdCAD-1, a Ca2+-dependent Cell-Cell Adhesion Molecule, in. Journal of Biological Chemistry, 1996, 271, 16399-16408.	3.4	72
58	C9orf72 regulates energy homeostasis by stabilizing mitochondrial complex I assembly. Cell Metabolism, 2021, 33, 531-546.e9.	16.2	70
59	Mdm35p imports Ups proteins into the mitochondrial intermembrane space by functional complex formation. EMBO Journal, 2010, 29, 2875-2887.	7.8	68
60	Myosin I Links PIP <sub>3</sub> Signaling to Remodeling of the Actin Cytoskeleton in Chemotaxis. Science Signaling, 2012, 5, ra10.	3.6	65
61	Inhibition of Drp1 protects against senecionine-induced mitochondria-mediated apoptosis in primary hepatocytes and in mice. Redox Biology, 2017, 12, 264-273.	9.0	64
62	The Cell Adhesion Molecule DdCAD-1 in Dictyostelium Is Targeted to the Cell Surface by a Nonclassical Transport Pathway Involving Contractile Vacuoles. Journal of Cell Biology, 1997, 138, 939-951.	5.2	62
63	Phospholipid Transport via Mitochondria. Traffic, 2014, 15, 933-945.	2.7	62
64	Engineering ePTEN, an enhanced PTEN with increased tumor suppressor activities. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E2684-93.	7.1	60
65	Mitochondrial Fission Mediates Endothelial Inflammation. Hypertension, 2020, 76, 267-276.	2.7	59
66	Phosphorylated Rho–GDP directly activates mTORC2 kinase towards AKT through dimerization with Ras–GTP to regulate cell migration. Nature Cell Biology, 2019, 21, 867-878.	10.3	58
67	Label-Free Quantification of Intracellular Mitochondrial Dynamics Using Dielectrophoresis. Analytical Chemistry, 2017, 89, 5757-5764.	6.5	52
68	SnapShot: Mitochondrial Dynamics. Cell, 2011, 145, 1158-1158.e1.	28.9	49
69	Loss of MICOS complex integrity and mitochondrial damage, but not TDP-43 mitochondrial localisation, are likely associated with severity of CHCHD10-related diseases. Neurobiology of Disease, 2018, 119, 159-171.	4.4	48
70	Maintenance of Cardiolipin and Crista Structure Requires Cooperative Functions of Mitochondrial Dynamics and Phospholipid Transport. Cell Reports, 2019, 26, 518-528.e6.	6.4	48
71	In vivo functions of Drp1: Lessons learned from yeast genetics and mouse knockouts. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2014, 1842, 1179-1185.	3.8	46
72	A brain-enriched Drp1 isoform associates with lysosomes, late endosomes, and the plasma membrane. Journal of Biological Chemistry, 2018, 293, 11809-11822.	3.4	46

#	Article	IF	CITATIONS
73	Phosphatidylethanolamine Biosynthesis in Mitochondria. Journal of Biological Chemistry, 2012, 287, 43961-43971.	3.4	42
74	Biosynthesis and roles of phospholipids in mitochondrial fusion, division and mitophagy. Cellular and Molecular Life Sciences, 2014, 71, 3767-3778.	5.4	42
75	Villin-1 and Gelsolin Regulate Changes in Actin Dynamics That Affect Cell Survival Signaling Pathways and Intestinal Inflammation. Gastroenterology, 2018, 154, 1405-1420.e2.	1.3	42
76	Rho GTPases orient directional sensing in chemotaxis. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E4723-32.	7.1	41
77	Parkin suppresses Drp1-independent mitochondrial division. Biochemical and Biophysical Research Communications, 2016, 475, 283-288.	2.1	41
78	Mitochondrial division, fusion and degradation. Journal of Biochemistry, 2020, 167, 233-241.	1.7	40
79	Drp1 Tubulates the ER in a GTPase-Independent Manner. Molecular Cell, 2020, 80, 621-632.e6.	9.7	35
80	Charcot-Marie-Tooth-related Gene GDAP1 Complements Cell Cycle Delay at G2/M Phase in Saccharomyces cerevisiae fis1 Gene-defective Cells. Journal of Biological Chemistry, 2011, 286, 36777-36786.	3.4	34
81	DISC1 regulates lactate metabolism in astrocytes: implications for psychiatric disorders. Translational Psychiatry, 2018, 8, 76.	4.8	34
82	Proteomic identification of phosphatidylinositol (3,4,5) triphosphate-binding proteins in <i>Dictyostelium discoideum</i> . Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11829-11834.	7.1	33
83	In Vivo Deletion of $\hat{l}^2$ -Cell Drp1 Impairs Insulin Secretion Without Affecting Islet Oxygen Consumption. Endocrinology, 2018, 159, 3245-3256.	2.8	32
84	Dynamin-1–Like Protein Inhibition Drives Megamitochondria Formation as an Adaptive Response in Alcohol-Induced Hepatotoxicity. American Journal of Pathology, 2019, 189, 580-589.	3.8	32
85	Novel Redistribution of the Ca 2+ -Dependent Cell Adhesion Molecule DdCAD-1 during Development of Dictyostelium discoideum. Developmental Biology, 1996, 177, 504-516.	2.0	31
86	Carbonyl cyanide 3-chlorophenylhydrazone (CCCP) suppresses STING-mediated DNA sensing pathway through inducing mitochondrial fission. Biochemical and Biophysical Research Communications, 2017, 493, 737-743.	2.1	27
87	Elevated mitochondrial activity distinguishes fibrogenic hepatic stellate cells and sensitizes for selective inhibition by mitotropic doxorubicin. Journal of Cellular and Molecular Medicine, 2018, 22, 2210-2219.	3.6	27
88	Brain-specific Drp1 regulates postsynaptic endocytosis and dendrite formation independently of mitochondrial division. ELife, 2019, 8, .	6.0	26
89	An unstructured loop that is critical for interactions of the stalk domain of Drp1 with saturated phosphatidic acid. Small GTPases, 2018, 9, 472-479.	1.6	23
90	Mitochondrial Safeguard: a stress response that offsets extreme fusion and protects respiratory function via flickeringâ€induced Oma1 activation. EMBO Journal, 2020, 39, e105074.	7.8	22

#	Article	IF	CITATIONS
91	Dynamin-Related Protein 1 Deficiency Leads to Receptor-Interacting Protein Kinase 3–Mediated Necroptotic Neurodegeneration. American Journal of Pathology, 2016, 186, 2798-2802.	3.8	21
92	Intracellular calcium is a rheostat for the STING signaling pathway. Biochemical and Biophysical Research Communications, 2018, 500, 497-503.	2.1	21
93	Nuclear PTEN deficiency causes microcephaly with decreased neuronal soma size and increased seizure susceptibility. Journal of Biological Chemistry, 2018, 293, 9292-9300.	3.4	21
94	Novel role of dynaminâ€relatedâ€protein 1 in dynamics of ERâ€lipid droplets in adipose tissue. FASEB Journal, 2020, 34, 8265-8282.	0.5	20
95	KARATE: PKA-induced KRAS4B-RHOA-mTORC2 supercomplex phosphorylates AKT in insulin signaling and glucose homeostasis. Molecular Cell, 2021, 81, 4622-4634.e8.	9.7	19
96	Prevention and regression of megamitochondria and steatosis by blocking mitochondrial fusion in the liver. IScience, 2022, 25, 103996.	4.1	19
97	Mitochondrial division prevents neurodegeneration. Autophagy, 2012, 8, 1531-1533.	9.1	18
98	Opening the conformation is a master switch for the dual localization and phosphatase activity of PTEN. Scientific Reports, 2015, 5, 12600.	3.3	18
99	Mitochondrial building blocks. Trends in Cell Biology, 2004, 14, 215-218.	7.9	17
100	p62/sequestosome-1 knockout delays neurodegeneration induced by Drp1 loss. Neurochemistry International, 2018, 117, 77-81.	3.8	15
101	The Loss of Nuclear PTEN Increases Tumorigenesis in a Preclinical Mouse Model for Hepatocellular Carcinoma. IScience, 2020, 23, 101548.	4.1	15
102	Hippo/Mst signaling coordinates cellular quiescence with terminal maturation in iNKT cell development and fate decisions. Journal of Experimental Medicine, 2020, 217, .	8.5	15
103	Regulation of Ammonia Homeostasis by the Ammonium Transporter AmtA in <i>Dictyostelium discoideum</i> . Eukaryotic Cell, 2007, 6, 2419-2428.	3.4	13
104	The novel RacE-binding protein GflB sharpens Ras activity at the leading edge of migrating cells. Molecular Biology of the Cell, 2016, 27, 1596-1605.	2.1	13
105	Longitudinal tracking of neuronal mitochondria delineates PINK1/Parkin-dependent mechanisms of mitochondrial recycling and degradation. Science Advances, 2021, 7, .	10.3	13
106	Identification of multiâ€copy suppressors for endoplasmic reticulumâ€mitochondria tethering proteins in <i>Saccharomyces cerevisiae</i> . FEBS Letters, 2016, 590, 3061-3070.	2.8	11
107	Hetero-oligomerization of Rho and Ras GTPases Connects GPCR Activation to mTORC2-AKT Signaling. Cell Reports, 2020, 33, 108427.	6.4	11
108	DRP1 haploinsufficiency attenuates cardiac ischemia/reperfusion injuries. PLoS ONE, 2021, 16, e0248554.	2.5	11

#	Article	IF	CITATIONS
109	Nuclear PTEN and p53 suppress stress-induced liver cancer through distinct mechanisms. Biochemical and Biophysical Research Communications, 2021, 549, 83-90.	2.1	10
110	Reduced Levels of Drp1 Protect against Development of Retinal Vascular Lesions in Diabetic Retinopathy. Cells, 2021, 10, 1379.	4.1	10
111	Reply: Are CHCHD10 mutations indeed associated with familial amyotrophic lateral sclerosis?. Brain, 2014, 137, e314-e314.	7.6	9
112	Engineering PTEN function: Membrane association and activity. Methods, 2015, 77-78, 119-124.	3.8	9
113	PARK2/Parkin becomes critical when DNM1L/Drp1 is absent. Autophagy, 2015, 11, 573-574.	9.1	9
114	Depletion of oocyte dynamin-related protein 1 shows maternal-effect abnormalities in embryonic development. Science Advances, 2022, 8, .	10.3	9
115	Secretion of Slime, the Extracellular Matrix of the Plasmodium, as Visualized with a Fluorescent Probe and Its Correlation with Locomotion on the Substratum Cell Structure and Function, 1997, 22, 279-289.	1.1	8
116	Ahead of the curve: mitochondrial fusion and phospholipase D. Nature Cell Biology, 2006, 8, 1215-1217.	10.3	6
117	A GPCR Handles Bacterial Sensing in Chemotaxis and Phagocytosis. Developmental Cell, 2016, 36, 354-356.	7.0	5
118	Making a Division Apparatus on Mitochondria. Trends in Biochemical Sciences, 2016, 41, 209-210.	7.5	5
119	Reply: The expanding neurological phenotype of DNM1L-related disorders. Brain, 2018, 141, e29-e29.	7.6	5
120	Loss of dynamin-related protein 1 (Drp1) does not affect epidermal development or UVB-induced apoptosis but does accelerate UVB-induced carcinogenesis. Journal of Dermatological Science, 2020, 99, 109-118.	1.9	5
121	Reply: Two novel mutations in conserved codons indicate that CHCHD10 is a gene associated with motor neuron disease. Brain, 2014, 137, e310-e310.	7.6	4
122	Assay to Measure Interactions between Purified Drp1 and Synthetic Liposomes. Bio-protocol, 2017, 7, .	0.4	4
123	Reply: Mutations in the CHCHD10 gene are a common cause of familial amyotrophic lateral sclerosis. Brain, 2014, 137, e312-e312.	7.6	3
124	Reply: IsCHCHD10Pro34Ser pathogenic for frontotemporal dementia and amyotrophic lateral sclerosis?. Brain, 2015, 138, e386-e386.	7.6	3
125	Twenty-Eight-Kilodalton Phosphorylatable Calcium- and Lipid-Binding Proteins Purified from Physarum Plasmodium. Journal of Biochemistry, 1992, 112, 269-276.	1.7	2
126	Cyclin C: An Inducer of Mitochondrial Division Hidden in the Nucleus. Developmental Cell, 2014, 28, 112-114.	7.0	2

#	Article	IF	CITATIONS
127	Reply: A distinct clinical phenotype in a German kindred with motor neuron disease carrying aCHCHD10mutation: Table 1. Brain, 2015, 138, e377-e377.	7.6	2
128	Nuclear PTEN deficiency and heterozygous PTEN loss have distinct impacts on brain and lymph node size. Biochemical and Biophysical Research Communications, 2021, 555, 81-88.	2.1	2
129	Generating a new mouse model for nuclear PTEN deficiency by a single K13R mutation. Genes To Cells, 2021, , .	1.2	2
130	Reply: <i>CHCHD10</i> mutations in Italian patients with sporadic amyotrophic lateral sclerosis. Brain, 2015, 138, e373-e373.	7.6	1
131	Mitochondrial Morphology Controls Hematopoietic Stem Cell Self-Renewal and Confers Them Divisional Memory. Blood, 2017, 130, 633-633.	1.4	1
132	Drp1 regulates transcription of ribosomal protein genes in embryonic hearts. Journal of Cell Science, 2022, 135, .	2.0	1
133	Role for two conserved intermembrane space proteins, Ups1p and Ups2p, in intra-mitochondrial phospholipid trafficking Journal of Biological Chemistry, 2012, 287, 27450.	3.4	0
134	Reply: High prevalence ofCHCHD10mutations in patients with frontotemporal dementia from China: Table 1. Brain, 2016, 139, e22-e22.	7.6	0
135	Mitochondrial Fusion and Division. FASEB Journal, 2012, 26, 103.3.	0.5	0