Jianhua Zhang

List of Publications by Year
in descending order

112 papers	16,772 citations	50566 48 h-index	34195 103 g-index
113 all docs	113 docs citations	113 times ranked	34849 citing authors

#	Article	IF	Citations
1	Dendritic cell PIK3C3/VPS34 controls the pathogenicity of CNS autoimmunity independently of LC3-associated phagocytosis. Autophagy, 2022, 18, 161-170.	4.3	6
2	Targeting whole body metabolism and mitochondrial bioenergetics in the drug development for Alzheimer's disease. Acta Pharmaceutica Sinica B, 2022, 12, 511-531.	5.7	26
3	Optimization of measurement of mitochondrial electron transport activity in postmortem human brain samples and measurement of susceptibility to rotenone and 4-hydroxynonenal inhibition. Redox Biology, 2022, 50, 102241.	3.9	4
4	Differential Effects of 2-Deoxyglucose and Glucose Deprivation on 4-Hydroxynonenal Dependent Mitochondrial Dysfunction in Primary Neurons. Frontiers in Aging, 2022, 3, .	1.2	2
5	Acute inhibition of OGA sex-dependently alters the networks associated with bioenergetics, autophagy, and neurodegeneration. Molecular Brain, 2022, 15, 22.	1.3	5
6	Pik3c3 deficiency in myeloid cells imparts partial resistance to experimental autoimmune encephalomyelitis associated with reduced IL-1Î² production. Cellular and Molecular Immunology, 2021, 18, 2024-2039.	4.8	12
7	Autophagy-related protein PIK3C3/VPS34 controls T cell metabolism and function. Autophagy, 2021, 17, 1193-1204.	4.3	44
8	Role of <i>O</i>-linked <i>N</i>-acetylglucosamine protein modification in cellular (patho)physiology. Physiological Reviews, 2021, 101, 427-493.	13.1	142
9	Role of O-linked N-acetylglucosamine (O-GlcNAc) modification of proteins in diabetic cardiovascular complications. Current Opinion in Pharmacology, 2021, 57, 1-12.	1.7	30
10	New Insights Into the Biology of Protein O-GlcNAcylation: Approaches and Observations. Frontiers in Aging, 2021, 1, .	1.2	17
11	Novel dopamine receptor 3 antagonists inhibit the growth of primary and temozolomide resistant glioblastoma cells. PLoS ONE, 2021, 16, e0250649.	1.1	4
12	University of Alabama at Birmingham Nathan Shock Center: comparative energetics of aging. GeroScience, 2021, 43, 2149-2160.	2.1	2
13	ZKSCAN3 in severe bacterial lung infection and sepsis-induced immunosuppression. Laboratory Investigation, 2021, 101, 1467-1474.	1.7	8
14	Defining the Dynamic Regulation of O-GlcNAc Proteome in the Mouse Cortex---the O-GlcNAcylation of Synaptic and Trafficking Proteins Related to Neurodegenerative Diseases. Frontiers in Aging, 2021, 2, .	1.2	10
15	Fasting drives the metabolic, molecular and geroprotective effects of a calorie-restricted diet in mice. Nature Metabolism, 2021, 3, 1327-1341.	5.1	84
16	Metabolic derangement in polycystic kidney disease mouse models is ameliorated by mitochondrial-targeted antioxidants. Communications Biology, 2021, 4, 1200.	2.0	16
17	Myeloid Fbxw7 Prevents Pulmonary Fibrosis by Suppressing TGF-Î² Production. Frontiers in Immunology, 2021, 12, 760138.	2.2	11
18	The Identification of a Novel Calcium-Dependent Link Between NAD+ and Glucose Deprivation-Induced Increases in Protein O-GlcNAcylation and ER Stress. Frontiers in Molecular Biosciences, 2021, 8, 780865.	1.6	3

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19	Circadian Regulation of Cardiac Physiology: Rhythms That Keep the Heart Beating. Annual Review of Physiology, 2020, 82, 79-101.	5.6	33
20	Differential effects of REV-ERBÎ±/Î² agonism on cardiac gene expression, metabolism, and contractile function in a mouse model of circadian disruption. American Journal of Physiology - Heart and Circulatory Physiology, 2020, 318, H1487-H1508.	1.5	29
21	Mitochondrial damage and senescence phenotype of cells derived from a novel frataxin G127V point mutation mouse model of Friedreich's ataxia. DMM Disease Models and Mechanisms, 2020, 13, .	1.2	10
22	Nuclear receptor binding factor 2 (NRBF2) is required for learning and memory. Laboratory Investigation, 2020, 100, 1238-1251.	1.7	8
23	Role and Mechanisms of Mitophagy in Liver Diseases. Cells, 2020, 9, 837.	1.8	132
24	Reprint of: Role of O-linked N-acetylglucosamine (O-GlcNAc) modification of proteins in diabetic cardiovascular complications. Current Opinion in Pharmacology, 2020, 54, 209-220.	1.7	6
25	MitoQ regulates redox-related noncoding RNAs to preserve mitochondrial network integrity in pressure-overload heart failure. American Journal of Physiology - Heart and Circulatory Physiology, 2020, 318, H682-H695.	1.5	33
26	Bioenergetics and translational metabolism: implications for genetics, physiology and precision medicine. Biological Chemistry, 2019, 401, 3-29.	1.2	41
27	GNAI1 and GNAI3 Reduce Colitis-Associated Tumorigenesis in Mice by Blocking IL6 Signaling and Down-regulating Expression of GNAI2. Gastroenterology, 2019, 156, 2297-2312.	0.6	59
28	Acute increases in<i>O</i>-GlcNAc indirectly impair mitochondrial bioenergetics through dysregulation of LonP1-mediated mitochondrial protein complex turnover. American Journal of Physiology - Cell Physiology, 2019, 316, C862-C875.	2.1	16
29	Screening and Identification of Linear B Cell Epitopes Within the Nonstructural Proteins of Enterovirus 71. Viral Immunology, 2019, 32, 84-88.	0.6	5
30	Methods for assessing mitochondrial quality control mechanisms and cellular consequences in cell culture. Redox Biology, 2018, 17, 59-69.	3.9	37
31	Temporal partitioning of adaptive responses of the murine heart to fasting. Life Sciences, 2018, 197, 30-39.	2.0	16
32	Mitochondrial function and autophagy: integrating proteotoxic, redox, and metabolic stress in Parkinson's disease. Journal of Neurochemistry, 2018, 144, 691-709.	2.1	58
33	Glutaminolysis is required for transforming growth factor-Î²1â€“induced myofibroblast differentiation and activation. Journal of Biological Chemistry, 2018, 293, 1218-1228.	1.6	126
34	The lysosomal enzyme alpha-Galactosidase A is deficient in Parkinson's disease brain in association with the pathologic accumulation of alpha-synuclein. Neurobiology of Disease, 2018, 110, 68-81.	2.1	38
35	DDIS-04. COMPOUNDS IDENTIFIED BY STRUCTURE BASED VIRTUAL SCREENING DECREASE GBM BTIC GROWTH AND GLUCOSE UPTAKE. Neuro-Oncology, 2018, 20, vi69-vi70.	0.6	0
36	Exosomal transfer of mitochondria from airway myeloid-derived regulatory cells to T cells. Redox Biology, 2018, 18, 54-64.	3.9	130

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37	Identification of Compounds That Decrease Glioblastoma Growth and Glucose Uptake <i>in Vitro</i>. ACS Chemical Biology, 2018, 13, 2048-2057.	1.6	24
38	Autophagy and the redox connection: Virtual collection Vol 2. Redox Biology, 2017, 11, 620-621.	3.9	0
39	Trehalose does not improve neuronal survival on exposure to alpha-synuclein pre-formed fibrils. Redox Biology, 2017, 11, 429-437.	3.9	33
40	Haplodeficiency of <i>Cathepsin D</i> does not affect cerebral amyloidosis and autophagy in <scp>APP</scp>/<scp>PS</scp>1 transgenic mice. Journal of Neurochemistry, 2017, 142, 297-304.	2.1	13
41	Oxidative stress and neurodegeneration. Brain Research Bulletin, 2017, 133, 1-3.	1.4	9
42	Inhibition of autophagy with bafilomycin and chloroquine decreases mitochondrial quality and bioenergetic function in primary neurons. Redox Biology, 2017, 11, 73-81.	3.9	188
43	Regulation of autophagy, mitochondrial dynamics, and cellular bioenergetics by 4-hydroxynonenal in primary neurons. Autophagy, 2017, 13, 1828-1840.	4.3	57
44	Autophagy-related protein Vps34 controls the homeostasis and function of antigen cross-presenting CD8Î± ⁺ dendritic cells. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E6371-E6380.	3.3	55
45	Genetic disruption of the cardiomyocyte circadian clock differentially influences insulin-mediated processes in the heart. Journal of Molecular and Cellular Cardiology, 2017, 110, 80-95.	0.9	52
46	Myocardial Upregulation of Cathepsin D by Ischemic Heart Disease Promotes Autophagic Flux and Protects Against Cardiac Remodeling and Heart Failure. Circulation: Heart Failure, 2017, 10, .	1.6	47
47	Immunoreactivity Analysis of the Nonstructural Proteins of Human Enterovirus 71. Viral Immunology, 2017, 30, 106-110.	0.6	4
48	O-GlcNAcylation and neurodegeneration. Brain Research Bulletin, 2017, 133, 80-87.	1.4	96
49	O-GlcNAc regulation of autophagy and Î±-synuclein homeostasis; implications for Parkinsonâ€™s disease. Molecular Brain, 2017, 10, 32.	1.3	67
50	Generation and Characterization of a Novel Mouse Line, <i>Keratocan-rtTA</i> (<i>Kera^{RT}</i>), for Corneal Stroma and Tendon Research. , 2017, 58, 4800.		17
51	The Role of Autophagy, Mitophagy and Lysosomal Functions in Modulating Bioenergetics and Survival in the Context of Redox and Proteotoxic Damage: Implications for Neurodegenerative Diseases. , 2016, 7, 150.		75
52	Metabolic, autophagic, and mitophagic activities in cancer initiation and progression. Biomedical Journal, 2016, 39, 98-106.	1.4	23
53	Differential regulation of autophagy and mitophagy in pulmonary diseases. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2016, 311, L433-L452.	1.3	97
54	Redox biology and the interface between bioenergetics, autophagy and circadian control of metabolism. Free Radical Biology and Medicine, 2016, 100, 94-107.	1.3	44

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55	Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). Autophagy, 2016, 12, 1-222.	4.3	4,701
56	Role of asparagine at position 562 in dimerization and immunogenicity of the hepatitis E virus capsid protein. Infection, Genetics and Evolution, 2016, 37, 99-107.	1.0	24
57	Novel Mechanisms for the Antifibrotic Action of Nintedanib. American Journal of Respiratory Cell and Molecular Biology, 2016, 54, 51-59.	1.4	163
58	KEAP1â€“NRF2 signalling and autophagy in protection against oxidative and reductive proteotoxicity. Biochemical Journal, 2015, 469, 347-355.	1.7	160
59	Teaching the basics of autophagy and mitophagy to redox biologistsâ€"Mechanisms and experimental approaches. Redox Biology, 2015, 4, 242-259.	3.9	103
60	Upregulation of autophagy decreases chlorine-induced mitochondrial injury and lung inflammation. Free Radical Biology and Medicine, 2015, 85, 83-94.	1.3	51
61	Regulation of autophagy by protein post-translational modification. Laboratory Investigation, 2015, 95, 14-25.	1.7	130
62	The role of GABARAPL1/GEC1 in autophagic flux and mitochondrial quality control in MDA-MB-436 breast cancer cells. Autophagy, 2014, 10, 986-1003.	4.3	86
63	The Bioenergetic Health Index: a new concept in mitochondrial translational research. Clinical Science, 2014, 127, 367-373.	1.8	266
64	Aging and energeticsâ€™ â€˜Top 40â€™ future research opportunities 2010-2013. F1000Research, 2014, 3, 219.	0.8	17
65	Overâ€expression of an inactive mutant cathepsin D increases endogenous alphaâ€synuclein and cathepsin B activity in <scp>SH</scp>â€<scp>SY</scp>5Y cells. Journal of Neurochemistry, 2014, 128, 950-961.	2.1	37
66	Redox regulation of antioxidants, autophagy, and the response to stress: Implications for electrophile therapeutics. Free Radical Biology and Medicine, 2014, 71, 196-207.	1.3	207
67	SCCA1/SERPINB3 Promotes Oncogenesis and Epithelialâ€“Mesenchymal Transition via the Unfolded Protein Response and IL6 Signaling. Cancer Research, 2014, 74, 6318-6329.	0.4	62
68	Identification of specific antigenic epitope at N-terminal segment of enterovirus 71 (EV-71) VP1 protein and characterization of its use in recombinant form for early diagnosis of EV-71 infection. Virus Research, 2014, 189, 248-253.	1.1	8
69	Bioenergetic adaptation in response to autophagy regulators during rotenone exposure. Journal of Neurochemistry, 2014, 131, 625-633.	2.1	38
70	Autophagy as an essential cellular antioxidant pathway in neurodegenerative disease. Redox Biology, 2014, 2, 82-90.	3.9	303
71	Mitophagy mechanisms and role in human diseases. International Journal of Biochemistry and Cell Biology, 2014, 53, 127-133.	1.2	118
72	Autophagy and mitophagy in cellular damage control. Redox Biology, 2013, 1, 19-23.	3.9	173

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73	Inhibition of autophagy and glycolysis by nitric oxide during hypoxiaâ€“reoxygenation impairs cellular bioenergetics and promotes cell death in primary neurons. Free Radical Biology and Medicine, 2013, 65, 1215-1228.	1.3	40
74	Inhibition of glycolysis attenuates 4-hydroxynonenal-dependent autophagy and exacerbates apoptosis in differentiated SH-SY5Y neuroblastoma cells. Autophagy, 2013, 9, 1996-2008.	4.3	45
75	Dopamine and its metabolites in cathepsin D heterozygous mice before and after MPTP administration. Neuroscience Letters, 2013, 538, 3-8.	1.0	10
76	Cellular metabolic and autophagic pathways: Traffic control by redox signaling. Free Radical Biology and Medicine, 2013, 63, 207-221.	1.3	284
77	Dysfunctional mitochondrial bioenergetics and oxidative stress in Akita^{+/Ins2}-derived Î²-cells. American Journal of Physiology - Endocrinology and Metabolism, 2013, 305, E585-E599.	1.8	39
78	Convergent mechanisms for dysregulation of mitochondrial quality control in metabolic disease: implications for mitochondrial therapeutics. Biochemical Society Transactions, 2013, 41, 127-133.	1.6	46
79	Bioenergetic and autophagic control by Sirt3Âin response to nutrient deprivation in mouse embryonic fibroblasts. Biochemical Journal, 2013, 454, 249-257.	1.7	64
80	Impaired Autophagy, Defective T Cell Homeostasis, and a Wasting Syndrome in Mice with a T Cellâ€“Specific Deletion of Vps34. Journal of Immunology, 2013, 190, 5086-5101.	0.4	128
81	Autophagy in neuronal bioenergetics and survival. FASEB Journal, 2013, 27, 1086.3.	0.2	0
82	Hemin causes mitochondrial dysfunction in endothelial cells through promoting lipid peroxidation: the protective role of autophagy. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 302, H1394-H1409.	1.5	130
83	Mammalian PIK3C3/VPS34. Autophagy, 2012, 8, 707-708.	4.3	24
84	Class III PI3K Vps34 plays an essential role in autophagy and in heart and liver function. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 2003-2008.	3.3	327
85	Autophagy, mitochondria and oxidative stress: cross-talk and redox signalling. Biochemical Journal, 2012, 441, 523-540.	1.7	1,243
86	Antigenic characteristics of the complete and truncated capsid protein VP1 of enterovirus 71. Virus Research, 2012, 167, 337-342.	1.1	20
87	Guidelines for the use and interpretation of assays for monitoring autophagy. Autophagy, 2012, 8, 445-544.	4.3	3,122
88	Integration of cellular bioenergetics with mitochondrial quality control and autophagy. Biological Chemistry, 2012, 393, 1485-1512.	1.2	376
89	Distinct Effects of Rotenone, 1-methyl-4-phenylpyridinium and 6-hydroxydopamine on Cellular Bioenergetics and Cell Death. PLoS ONE, 2012, 7, e44610.	1.1	115
90	D295N Mutant Cathepsin D Exerts a Dominant Negative Effect In Vitro by Promoting Î±â€Synuclein Accumulation. FASEB Journal, 2012, 26, 1035.15.	0.2	0

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91	Assessing bioenergetic function in response to oxidative stress by metabolic profiling. Free Radical Biology and Medicine, 2011, 51, 1621-1635.	1.3	372
92	Differentiation of SH-SY5Y cells to a neuronal phenotype changes cellular bioenergetics and the response to oxidative stress. Free Radical Biology and Medicine, 2011, 51, 2007-2017.	1.3	160
93	Systems biology of the autophagy-lysosomal pathway. Autophagy, 2011, 7, 477-489.	4.3	116
94	Lysosomal function in macromolecular homeostasis and bioenergetics in Parkinson's disease. Molecular Neurodegeneration, 2010, 5, 14.	4.4	49
95	Inhibition of lysosomal functions reduces proteasomal activity. Neuroscience Letters, 2009, 456, 15-19.	1.0	51
96	Lysosomal enzyme cathepsin D protects against alpha-synuclein aggregation and toxicity. Molecular Brain, 2008, 1, 17.	1.3	212
97	Lysosomal Dysfunction Promotes Autophagic Stress and NPC Death. FASEB Journal, 2008, 22, 1121.10.	0.2	0
98	Kainic acid induces early and transient autophagic stress in mouse hippocampus. Neuroscience Letters, 2007, 414, 57-60.	1.0	104
99	c-Fos Facilitates the Acquisition and Extinction of Cocaine-Induced Persistent Changes. Journal of Neuroscience, 2006, 26, 13287-13296.	1.7	137
100	Neural system-enriched gene expression: relationship to biological pathways and neurological diseases. Physiological Genomics, 2004, 18, 167-183.	1.0	15
101	Generating Gene Knockout Mice for Studying Mechanisms Underlying Drug Addiction. , 2003, 79, 351-364.		0
102	Endonuclease G is required for early embryogenesis and normal apoptosis in mice. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 15782-15787.	3.3	84
103	Expression profiles of 109 apoptosis pathway-related genes in 82 mouse tissues and experimental conditions. Biochemical and Biophysical Research Communications, 2002, 297, 537-544.	1.0	7
104	Apoptotic DNA fragmentation and tissue homeostasis. Trends in Cell Biology, 2002, 12, 84-89.	3.6	129
105	Hippocampal expression of c-fos is not essential for spatial learning. Synapse, 2002, 46, 91-99.	0.6	23
106	c-fos regulates neuronal excitability and survival. Nature Genetics, 2002, 30, 416-420.	9.4	263
107	Identification of Chronic Cocaineâ€Induced Gene Expression Through Dopamine D1 Receptors by Using cDNA Microarrays. Annals of the New York Academy of Sciences, 2002, 965, 1-9.	1.8	12
108	Toward a Molecular Understanding of Psychostimulant Actions Using Genetically Engineered Dopamine Receptor Knockout Mice as Model Systems. Journal of Addictive Diseases, 2001, 20, 7-18.	0.8	76

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109	Probing the Role of the Dopamine D1 Receptor in Psychostimulant Addiction. Annals of the New York Academy of Sciences, 2000, 914, 13-21.	1.8	13
110	DNA fragmentation factor 45 deficient mice exhibit enhanced spatial learning and memory compared to wild-type control mice. Brain Research, 2000, 867, 70-79.	1.1	30
111	Behavioral responses to cocaine and amphetamine administration in mice lacking the dopamine D1 receptor. Brain Research, 2000, 852, 198-207.	1.1	142
112	Mast cell tryptase does not alter matrix metalloproteinase expression in human dermal fibroblasts: Further evidence that proteolytically-active tryptase is a potent fibrogenic factor. , 1999, 181, 312-318.		13