Yan Burelle

List of Publications by Year
in descending order

82 papers	10,263 citations	109321 35 h-index	74163 75 g-index
83 all docs	83 docs citations	83 times ranked	20304 citing authors

#	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	An Official American Thoracic Society/European Respiratory Society Statement: Update on Limb Muscle Dysfunction in Chronic Obstructive Pulmonary Disease. American Journal of Respiratory and Critical Care Medicine, 2014, 189, e15-e62.	5.6	793
3	Mitochondrial Dysfunction and Lipid Accumulation in the Human Diaphragm during Mechanical Ventilation. American Journal of Respiratory and Critical Care Medicine, 2012, 186, 1140-1149.	5.6	648
4	Parkinsonâ€™s Disease-Related Proteins PINK1 and Parkin Repress Mitochondrial Antigen Presentation. Cell, 2016, 166, 314-327.	28.9	429
5	The rise of mitochondria in medicine. Mitochondrion, 2016, 30, 105-116.	3.4	349
6	Mitochondrial morphology transitions and functions: implications for retrograde signaling?. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2013, 304, R393-R406.	1.8	242
7	AMPK Activation Stimulates Autophagy and Ameliorates Muscular Dystrophy in the mdx Mouse Diaphragm. American Journal of Pathology, 2012, 181, 583-592.	3.8	194
8	Interdependence of Parkin-Mediated Mitophagy and Mitochondrial Fission in Adult Mouse Hearts. Circulation Research, 2015, 117, 346-351.	4.5	172
9	Mitochondrial functional specialization in glycolytic and oxidative muscle fibers: tailoring the organelle for optimal function. American Journal of Physiology - Cell Physiology, 2012, 302, C629-C641.	4.6	170
10	Protective role of PARK2/Parkin in sepsis-induced cardiac contractile and mitochondrial dysfunction. Autophagy, 2013, 9, 1837-1851.	9.1	133
11	Mitochondrial Contagion Induced by Parkin Deficiency in Drosophila Hearts and Its Containment by Suppressing Mitofusin. Circulation Research, 2014, 114, 257-265.	4.5	129
12	A Metabolic Signature of Mitochondrial Dysfunction Revealed through a Monogenic Form of Leigh Syndrome. Cell Reports, 2015, 13, 981-989.	6.4	113
13	Formation of mitochondrialâ€derived vesicles is an active and physiologically relevant mitochondrial quality control process in the cardiac system. Journal of Physiology, 2016, 594, 5343-5362.	2.9	113
14	The Relationship between Muscle Fiber Type-Specific PGC-1Î± Content and Mitochondrial Content Varies between Rodent Models and Humans. PLoS ONE, 2014, 9, e103044.	2.5	104
15	Regular exercise is associated with a protective metabolic phenotype in the rat heart. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 287, H1055-H1063.	3.2	103
16	Autophagy and Skeletal Muscles in Sepsis. PLoS ONE, 2012, 7, e47265.	2.5	96
17	The Mitochondrial Phenotype of Peripheral Muscle in Chronic Obstructive Pulmonary Disease. American Journal of Respiratory and Critical Care Medicine, 2008, 178, 1040-1047.	5.6	87
18	A Mitochondrial Health Index Sensitive to Mood and Caregiving Stress. Biological Psychiatry, 2018, 84, 9-17.	1.3	82

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19	Resistance to Ca²⁺-induced opening of the permeability transition pore differs in mitochondria from glycolytic and oxidative muscles. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2008, 295, R659-R668.	1.8	79
20	Stress-induced opening of the permeability transition pore in the dystrophin-deficient heart is attenuated by acute treatment with sildenafil. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 300, H144-H153.	3.2	77
21	Protective role of Parkin in skeletal muscle contractile and mitochondrial function. Journal of Physiology, 2018, 596, 2565-2579.	2.9	72
22	MCL-1Matrix maintains neuronal survival by enhancing mitochondrial integrity and bioenergetic capacity under stress conditions. Cell Death and Disease, 2020, 11, 321.	6.3	68
23	Peroxisome proliferatorâ€activated receptor Î³ coactivator 1â€Î± gene transfer restores mitochondrial biomass and improves mitochondrial calcium handling in postâ€necrotic mdx mouse skeletal muscle. Journal of Physiology, 2012, 590, 5487-5502.	2.9	66
24	Mechanical ventilation triggers abnormal mitochondrial dynamics and morphology in the diaphragm. Journal of Applied Physiology, 2015, 118, 1161-1171.	2.5	66
25	Muscle denervation promotes opening of the permeability transition pore and increases the expression of cyclophilin D. Journal of Physiology, 2006, 574, 319-327.	2.9	62
26	Endurance training induces muscle-specific changes in mitochondrial function in skinned muscle fibers. Journal of Applied Physiology, 2002, 92, 2429-2438.	2.5	61
27	Exercise training induces respiratory substrate-specific decrease in Ca2+-induced permeability transition pore opening in heart mitochondria. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 290, H1549-H1557.	3.2	60
28	Lower oxidative DNA damage despite greater ROS production in muscles from rats selectively bred for high running capacity. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2011, 300, R544-R553.	1.8	60
29	Autophagic flux and oxidative capacity of skeletal muscles during acute starvation. Autophagy, 2013, 9, 1604-1620.	9.1	59
30	Increased expression and intramitochondrial translocation of cyclophilin-D associates with increased vulnerability of the permeability transition pore to stress-induced opening during compensated ventricular hypertrophy. Journal of Molecular and Cellular Cardiology, 2009, 46, 420-430.	1.9	56
31	Mitochondrial Oxidative Stress Reduces the Immunopotency of Mesenchymal Stromal Cells in Adults With Coronary Artery Disease. Circulation Research, 2018, 122, 255-266.	4.5	46
32	Compensated volume overload increases the vulnerability of heart mitochondria without affecting their functions in the absence of stress. Journal of Molecular and Cellular Cardiology, 2006, 41, 998-1009.	1.9	45
33	Alterations in mitochondrial function as a harbinger of cardiomyopathy: Lessons from the dystrophic heart. Journal of Molecular and Cellular Cardiology, 2010, 48, 310-321.	1.9	43
34	Comparison of exogenous glucose, fructose and galactose oxidation during exercise using C-labelling. British Journal of Nutrition, 2006, 96, 56.	2.3	42
35	Tissue-specific responses to the LRPPRC founder mutation in French Canadian Leigh Syndrome. Human Molecular Genetics, 2015, 24, 480-491.	2.9	41
36	Different Timing of Changes in Mitochondrial Functions following Endurance Training. Medicine and Science in Sports and Exercise, 2012, 44, 217-224.	0.4	39

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37	Loss of hepatic LRPPRC alters mitochondrial bioenergetics, regulation of permeability transition and trans-membrane ROS diffusion. Human Molecular Genetics, 2017, 26, 3186-3201.	2.9	36
38	Proteomics characterization of mitochondrialâ€derived vesicles under oxidative stress. FASEB Journal, 2021, 35, e21278.	0.5	36
39	Mitochondrial Vulnerability and Increased Susceptibility to Nutrient-Induced Cytotoxicity in Fibroblasts from Leigh Syndrome French Canadian Patients. PLoS ONE, 2015, 10, e0120767.	2.5	29
40	Mitochondrial psychobiology: foundations and applications. Current Opinion in Behavioral Sciences, 2019, 28, 142-151.	3.9	28
41	Effect of eccentric versus concentric exercise training on mitochondrial function. Muscle and Nerve, 2014, 50, 803-811.	2.2	26
42	Lipidomics unveils lipid dyshomeostasis and low circulating plasmalogens as biomarkers in a monogenic mitochondrial disorder. JCI Insight, 2019, 4, .	5.0	26
43	Early predictors of cardiac decompensation in experimental volume overload. Molecular and Cellular Biochemistry, 2010, 338, 271-282.	3.1	25
44	Effects of (â^')-epicatechin on mitochondria. Nutrition Reviews, 2021, 79, 25-41.	5.8	25
45	Role of peroxisome proliferator-activated receptor gamma coactivator 1-alpha (PGC-1Î±) in denervation-induced atrophy in aged muscle: facts and hypotheses. Longevity & Healthspan, 2013, 2, 13.	6.7	24
46	Regulation of ULK1 Expression and Autophagy by STAT1. Journal of Biological Chemistry, 2017, 292, 1899-1909.	3.4	24
47	Oxidative stress-induced senescence mediates inflammatory and fibrotic phenotypes in fibroblasts from systemic sclerosis patients. Rheumatology, 2022, 61, 1265-1275.	1.9	19
48	Short Term Training Attenuates Opening of the Mitochondrial Permeability Transition Pore Without Affecting Myocardial Function Following Ischemia-Reperfusion. Molecular and Cellular Biochemistry, 2006, 291, 39-47.	3.1	18
49	Mitochondrial quality control in the cardiac system: An integrative view. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2019, 1865, 782-796.	3.8	18
50	Mitochondria: Starving to reach quorum?. BioEssays, 2012, 34, 272-274.	2.5	17
51	The intra-mitochondrial O-GlcNAcylation system rapidly modulates OXPHOS function and ROS release in the heart. Communications Biology, 2022, 5, 349.	4.4	17
52	Adiponectin has a pivotal role in the cardioprotective effect of CPâ€3(iv), a selective CD36 azapeptide ligand, after transient coronary artery occlusion in mice. FASEB Journal, 2018, 32, 807-818.	0.5	16
53	Use of an Î±-glucosidase inhibitor to maintain glucose homoeostasis during postprandial exercise in intensively treated Type 1 diabetic subjects. Diabetic Medicine, 2001, 18, 739-744.	2.3	15
54	Mitophagy: A New Player in Stem Cell Biology. Biology, 2020, 9, 481.	2.8	15

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55	Oxidation of [¹³C]glycerol ingested along with glucose during prolonged exercise. Journal of Applied Physiology, 2001, 90, 1685-1690.	2.5	13
56	Differential metabolic fate of the carbon skeleton and amino-N of [13C]alanine and [15N]alanine ingested during prolonged exercise. Journal of Applied Physiology, 2002, 93, 499-504.	2.5	13
57	Control of maximum metabolic rate in humans: Dependence on performance phenotypes. Molecular and Cellular Biochemistry, 2004, 256, 95-103.	3.1	13
58	Disparate Regulation of Signaling Proteins after Exercise and Myocardial Infarction. Medicine and Science in Sports and Exercise, 2006, 38, 455-462.	0.4	13
59	Protein Oâ€GlcNAcylation levels are regulated independently of dietary intake in a tissue and timeâ€specific manner during rat postnatal development. Acta Physiologica, 2021, 231, e13566.	3.8	11
60	Circulating lipids are lowered but pancreatic islet lipid metabolism and insulin secretion are unaltered in exercise-trained female rats. Applied Physiology, Nutrition and Metabolism, 2007, 32, 241-248.	1.9	10
61	Cyclosporine A Treatment Inhibits Abcc6-Dependent Cardiac Necrosis and Calcification following Coxsackievirus B3 Infection in Mice. PLoS ONE, 2015, 10, e0138222.	2.5	10
62	A Linear Fragment of Unacylated Ghrelin (UAG6â˜13) Protects Against Myocardial Ischemia/Reperfusion Injury in Mice in a Growth Hormone Secretagogue Receptor-Independent Manner. Frontiers in Endocrinology, 2018, 9, 798.	3.5	9
63	Oxidation of 13C-Glucose and 13C-Fructose Ingested as a Preexercise Meal: Effect of Carbohydrate Ingestion during Exercise. International Journal of Sport Nutrition, 1997, 7, 117-127.	1.7	8
64	Grx2 Regulates Skeletal Muscle Mitochondrial Structure and Autophagy. Frontiers in Physiology, 2021, 12, 604210.	2.8	7
65	Effects of acute exercise on the gluconeogenic capacity of periportal and perivenous hepatocytes. Journal of Applied Physiology, 2001, 91, 1099-1104.	2.5	6
66	CyclophilinâĐ is dispensable for atrophy and mitochondrial apoptotic signalling in denervated muscle. Journal of Physiology, 2011, 589, 855-861.	2.9	5
67	Nutritional Regulation of Mitochondrial Function. , 2019, , 93-126.		5
68	Dietary Cocoa Flavanols Enhance Mitochondrial Function in Skeletal Muscle and Modify Whole-Body Metabolism in Healthy Mice. Nutrients, 2021, 13, 3466.	4.1	5
69	Fiber-specific and whole-muscle LRP130 expression in rested, exercised, and fasted human skeletal muscle. Pflugers Archiv European Journal of Physiology, 2020, 472, 375-384.	2.8	4
70	Adaptive optimization of the OXPHOS assembly line partially compensates lrpprc-dependent mitochondrial translation defects in mice. Communications Biology, 2021, 4, 989.	4.4	4
71	Cardiac Left Ventricle Mitochondrial Dysfunction After Neonatal Exposure to Hyperoxia: Relevance for Cardiomyopathy After Preterm Birth. Hypertension, 2022, 79, 575-587.	2.7	4
72	Hybrid Clear/Blue Native Electrophoresis for the Separation and Analysis of Mitochondrial Respiratory Chain Supercomplexes. Journal of Visualized Experiments, 2019, , .	0.3	3

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73	A recurrent de novo ATP5F1A substitution associated with neonatal complex V deficiency. European Journal of Human Genetics, 2021, 29, 1719-1724.	2.8	2
74	Histopathology and Mitochondrial Function in Liverâ€Specific LRPPRC Knockout Mice. FASEB Journal, 2015, 29, 1036.2.	0.5	2
75	61. Developing Sensitive Measurements of Mitochondrial Responses to Acute and Chronic Stress. Biological Psychiatry, 2018, 83, S25.	1.3	1
76	Implication of Cyclophilin D and Permeability Transition Pore in Mitochondrial Vulnerability of Compensated Heart Hypertrophy. FASEB Journal, 2008, 22, 1238.17.	0.5	1
77	A52. Chronic volume overload increases the vulnerability of cardiac mitochondria without affecting their basal functions. Journal of Molecular and Cellular Cardiology, 2006, 40, 865-866.	1.9	0
78	Mitochondrial Metabolic Uncoupling in Maladaptive Right Ventricular Remodeling in Response to Pressure Overload in Fischer Rats. , 2020, , .		0
79	Strainâ€Dependence in Susceptibility to Heart Failure: Role of Mitochondria. FASEB Journal, 2008, 22, .	0.5	0
80	Mitochondrial Functional Specialization in Glycolytic and Oxidative Muscle Fibers: Tailoring the Organelle for Optimal Function. FASEB Journal, 2012, 26, 887.19.	0.5	0
81	Abstract 13917: O -GlcNAc Levels Are Regulated in a Time and Tissue Specific Manner Independently of Dietary Intake. Circulation, 2020, 142, .	1.6	0
82	Metabolic and Cardiac Manifestations in a Mouse Model of Genetic Mitochondrial Hepatopathy Without Obesity: Evidence for a Sexual Dimorphism. FASEB Journal, 2022, 36, .	0.5	0