Antonio Zorzano

List of Publications by Year
in descending order

93 papers	11,441 citations	44069 48 h-index	43889 91 g-index
95 all docs	95 docs citations	95 times ranked	15244 citing authors

#	Article	IF	Citations
1	Mitochondrial Dynamics in Mammalian Health and Disease. Physiological Reviews, 2009, 89, 799-845.	28.8	794
2	Mitofusin-2 Determines Mitochondrial Network Architecture and Mitochondrial Metabolism. Journal of Biological Chemistry, 2003, 278, 17190-17197.	3.4	740
3	Mitofusin 2 (Mfn2) links mitochondrial and endoplasmic reticulum function with insulin signaling and is essential for normal glucose homeostasis. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 5523-5528.	7.1	544
4	Increased ERâ€"mitochondrial coupling promotes mitochondrial respiration and bioenergetics during early phases of ER stress. Journal of Cell Science, 2011, 124, 2143-2152.	2.0	483
5	Endoplasmic Reticulum and the Unfolded Protein Response. International Review of Cell and Molecular Biology, 2013, 301, 215-290.	3.2	440
6	Mitofusin 2 in POMC Neurons Connects ER Stress with Leptin Resistance and Energy Imbalance. Cell, 2013, 155, 172-187.	28.9	429
7	The Charcotâ€"Marieâ€"Tooth type 2A gene product, Mfn2, up-regulates fuel oxidation through expression of OXPHOS system. Human Molecular Genetics, 2005, 14, 1405-1415.	2.9	397
8	Critical reappraisal confirms that Mitofusin 2 is an endoplasmic reticulumâ€"mitochondria tether. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11249-11254.	7.1	395
9	Cystinuria caused by mutations in rBAT, a gene involved in the transport of cystine. Nature Genetics, 1994, 6, 420-425.	21.4	366
10	Identification of a Membrane Protein, LAT-2, That Co-expresses with 4F2 Heavy Chain, an L-type Amino Acid Transport Activity with Broad Specificity for Small and Large Zwitterionic Amino Acids. Journal of Biological Chemistry, 1999, 274, 19738-19744.	3.4	356
11	Mfn2 modulates the UPR and mitochondrial function via repression of PERK. EMBO Journal, 2013, 32, 2348-2361.	7.8	340
12	Expression of Mfn2, the Charcot-Marie-Tooth Neuropathy Type 2A Gene, in Human Skeletal Muscle: Effects of Type 2 Diabetes, Obesity, Weight Loss, and the Regulatory Role of Tumor Necrosis Factor Â and Interleukin-6. Diabetes, 2005, 54, 2685-2693.	0.6	334
13	Evidence for a Mitochondrial Regulatory Pathway Defined by Peroxisome Proliferator-Activated Receptor-Â Coactivator-1Â, Estrogen-Related Receptor-Â, and Mitofusin 2. Diabetes, 2006, 55, 1783-1791.	0.6	320
14	Identification and Characterization of a Membrane Protein (y+L Amino Acid Transporter-1) That Associates with 4F2hc to Encode the Amino Acid Transport Activity y+L. Journal of Biological Chemistry, 1998, 273, 32437-32445.	3.4	304
15	Identification of SLC7A7, encoding y+LAT-1, as the lysinuric protein intolerance gene. Nature Genetics, 1999, 21, 293-296.	21.4	286
16	Non-type I cystinuria caused by mutations in SLC7A9, encoding a subunit (bo,+AT) of rBAT. Nature Genetics, 1999, 23, 52-57.	21.4	280
17	Mfn2 deficiency links ageâ€related sarcopenia and impaired autophagy to activation of an adaptive mitophagy pathway. EMBO Journal, 2016, 35, 1677-1693.	7.8	275
18	Mitochondrial Dynamics: Coupling Mitochondrial Fitness with Healthy Aging. Trends in Molecular Medicine, 2017, 23, 201-215.	6.7	223

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19	Identification of LAT4, a Novel Amino Acid Transporter with System L Activity. Journal of Biological Chemistry, 2005, 280, 12002-12011.	3.4	216
20	Deficient Endoplasmic Reticulum-Mitochondrial Phosphatidylserine Transfer Causes Liver Disease. Cell, 2019, 177, 881-895.e17.	28.9	209
21	Mfn2 is critical for brown adipose tissue thermogenic function. EMBO Journal, 2017, 36, 1543-1558.	7.8	193
22	Role of mitochondrial dynamics proteins in the pathophysiology of obesity and type 2 diabetes. International Journal of Biochemistry and Cell Biology, 2009, 41, 1846-1854.	2.8	179
23	Subjects With Early-Onset Type 2 Diabetes Show Defective Activation of the Skeletal Muscle PGC-1Î±/Mitofusin-2 Regulatory Pathway in Response to Physical Activity. Diabetes Care, 2010, 33, 645-651.	8.6	168
24	Mitochondrial fusion proteins: Dual regulators of morphology and metabolism. Seminars in Cell and Developmental Biology, 2010, 21, 566-574.	5.0	165
25	Molecular basis of substrate-induced permeation by an amino acid antiporter. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 3935-3940.	7.1	139
26	Mitochondrial DNA and TLR9 drive muscle inflammation upon Opa1 deficiency. EMBO Journal, 2018, 37, .	7.8	139
27	Mitochondrial Dynamics Mediated by Mitofusin 1 Is Required for POMC Neuron Glucose-Sensing and Insulin Release Control. Cell Metabolism, 2017, 25, 1390-1399.e6.	16.2	106
28	The Structure of Human 4F2hc Ectodomain Provides a Model for Homodimerization and Electrostatic Interaction with Plasma Membrane. Journal of Biological Chemistry, 2007, 282, 31444-31452.	3.4	101
29	Metabolic implications of organelleâ€“mitochondria communication. EMBO Reports, 2019, 20, e47928.	4.5	94
30	The light subunit of system bo,+ is fully functional in the absence of the heavy subunit. EMBO Journal, 2002, 21, 4906-4914.	7.8	93
31	Mitofusin 2 in Macrophages Links Mitochondrial ROS Production, Cytokine Release, Phagocytosis, Autophagy, and Bactericidal Activity. Cell Reports, 2020, 32, 108079.	6.4	93
32	The amino acid transport system y⁺L/4F2hc is a heteromultimeric complex. FASEB Journal, 1998, 12, 1319-1329.	0.5	87
33	Structural bases for the interaction and stabilization of the human amino acid transporter LAT2 with its ancillary protein 4F2hc. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2966-2971.	7.1	84
34	Mfn2 downregulation in excitotoxicity causes mitochondrial dysfunction and delayed neuronal death. EMBO Journal, 2014, 33, 2388-2407.	7.8	84
35	Identification of New Activators of Mitochondrial Fusion Reveals a Link between Mitochondrial Morphology and Pyrimidine Metabolism. Cell Chemical Biology, 2018, 25, 268-278.e4.	5.2	84
36	Membrane Topology of System Xc- Light Subunit Reveals a Re-entrant Loop with Substrate-restricted Accessibility. Journal of Biological Chemistry, 2004, 279, 31228-31236.	3.4	78

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37	dDOR Is an EcR Coactivator that Forms a Feed-Forward Loop Connecting Insulin and Ecdysone Signaling. Current Biology, 2010, 20, 1799-1808.	3.9	75
38	Slc7a9-deficient mice develop cystinuria non-I and cystine urolithiasis. Human Molecular Genetics, 2003, 12, 2097-2108.	2.9	74
39	Autophagy-regulating TP53INP2 mediates muscle wasting and is repressed in diabetes. Journal of Clinical Investigation, 2014, 124, 1914-1927.	8.2	72
40	The sensing of mitochondrial DAMPs by non-immune cells. Cell Stress, 2019, 3, 195-207.	3.2	70
41	Mitofusin 2 as a Driver That Controls Energy Metabolism and Insulin Signaling. Antioxidants and Redox Signaling, 2015, 22, 1020-1031.	5.4	69
42	Autophagy Exacerbates Muscle Wasting in Cancer Cachexia and Impairs Mitochondrial Function. Journal of Molecular Biology, 2019, 431, 2674-2686.	4.2	69
43	The nuclear cofactor DOR regulates autophagy in mammalian and <i>Drosophila</i> cells. EMBO Reports, 2010, 11, 37-44.	4.5	68
44	Mfn1 Deficiency in the Liver Protects Against Diet-Induced Insulin Resistance and Enhances the Hypoglycemic Effect of Metformin. Diabetes, 2016, 65, 3552-3560.	0.6	66
45	Role of Mitochondrial Complex IV in Age-Dependent Obesity. Cell Reports, 2016, 16, 2991-3002.	6.4	65
46	L amino acid transporter structure and molecular bases for the asymmetry of substrate interaction. Nature Communications, 2019, 10, 1807.	12.8	57
47	Autophagy-induced senescence is regulated by p38Î± signaling. Cell Death and Disease, 2019, 10, 376.	6.3	56
48	Expression and Insulin-regulated Distribution of Caveolin in Skeletal Muscle. Journal of Biological Chemistry, 1996, 271, 8133-8139.	3.4	55
49	DOR/Tp53inp2 and Tp53inp1 Constitute a Metazoan Gene Family Encoding Dual Regulators of Autophagy and Transcription. PLoS ONE, 2012, 7, e34034.	2.5	51
50	Amino Acid Transport Associated to Cluster of Differentiation 98 Heavy Chain (CD98hc) Is at the Cross-road of Oxidative Stress and Amino Acid Availability. Journal of Biological Chemistry, 2016, 291, 9700-9711.	3.4	50
51	TP53INP2 regulates adiposity by activating Î²-catenin through autophagy-dependent sequestration of GSK3Î². Nature Cell Biology, 2018, 20, 443-454.	10.3	47
52	Adipose tissue mitochondrial dysfunction in human obesity is linked to a specific DNA methylation signature in adipose-derived stem cells. International Journal of Obesity, 2019, 43, 1256-1268.	3.4	47
53	The dialogue between the ubiquitin-proteasome system and autophagy: Implications in ageing. Ageing Research Reviews, 2020, 64, 101203.	10.9	47
54	Neuregulins Increase Mitochondrial Oxidative Capacity and Insulin Sensitivity in Skeletal Muscle Cells. Diabetes, 2007, 56, 2185-2193.	0.6	45

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55	Mitochondrial dysfunction in insulin resistance: differential contributions of chronic insulin and saturated fatty acid exposure in muscle cells. Bioscience Reports, 2012, 32, 465-478.	2.4	44
56	Disrupted circadian oscillations in type 2 diabetes are linked to altered rhythmic mitochondrial metabolism in skeletal muscle. Science Advances, 2021, 7, eabi9654.	10.3	44
57	The Structural and Functional Units of Heteromeric Amino Acid Transporters. Journal of Biological Chemistry, 2006, 281, 26552-26561.	3.4	43
58	Identification of a Novel Modulator of Thyroid Hormone Receptor-Mediated Action. PLoS ONE, 2007, 2, e1183.	2.5	42
59	Functional and Structural Characterization of the First Prokaryotic Member of the L-Amino Acid Transporter (LAT) Family. Journal of Biological Chemistry, 2007, 282, 13270-13281.	3.4	38
60	Mutations in L-type amino acid transporter-2 support SLC7A8 as a novel gene involved in age-related hearing loss. ELife, 2018, 7, .	6.0	38
61	Macrophage mitochondrial MFN2 (mitofusin 2) links immune stress and immune response through reactive oxygen species (ROS) production. Autophagy, 2020, 16, 2307-2309.	9.1	35
62	CD98hc (SLC3A2) sustains amino acid and nucleotide availability for cell cycle progression. Scientific Reports, 2019, 9, 14065.	3.3	30
63	A new non-canonical pathway of GÎ±q protein regulating mitochondrial dynamics and bioenergetics. Cellular Signalling, 2014, 26, 1135-1146.	3.6	28
64	Mitochondrial dynamics and metabolic homeostasis. Current Opinion in Physiology, 2018, 3, 34-40.	1.8	27
65	A form of mitofusin 2 (Mfn2) lacking the transmembrane domains and the COOH-terminal end stimulates metabolism in muscle and liver cells. American Journal of Physiology - Endocrinology and Metabolism, 2013, 305, E1208-E1221.	3.5	25
66	Cooperation of Antiporter LAT2/CD98hc with Uniporter TAT1 for Renal Reabsorption of Neutral Amino Acids. Journal of the American Society of Nephrology: JASN, 2018, 29, 1624-1635.	6.1	25
67	Regulation of death receptor signaling by the autophagy protein <scp>TP</scp> 53 <scp>INP</scp> 2. EMBO Journal, 2019, 38, .	7.8	24
68	Induction of oxidative metabolism by the p38Î±/MK2 pathway. Scientific Reports, 2017, 7, 11367.	3.3	23
69	DOR undergoes nucleoâ€cytoplasmic shuttling, which involves passage through the nucleolus. FEBS Letters, 2012, 586, 3179-3186.	2.8	22
70	Self-Eating for Muscle Fitness: Autophagy in the Control of Energy Metabolism. Developmental Cell, 2020, 54, 268-281.	7.0	22
71	Inducible Slc7a7 Knockout Mouse Model Recapitulates Lysinuric Protein Intolerance Disease. International Journal of Molecular Sciences, 2019, 20, 5294.	4.1	21
72	Neuregulin improves response to glucose tolerance test in control and diabetic rats. American Journal of Physiology - Endocrinology and Metabolism, 2016, 310, E440-E451.	3.5	19

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73	Role of autophagy in the regulation of adipose tissue biology. Cell Cycle, 2019, 18, 1435-1445.	2.6	19
74	Coordination of mitochondrial and lysosomal homeostasis mitigates inflammation and muscle atrophy during aging. Aging Cell, 2022, 21, e13583.	6.7	19
75	Increased glycolysis is an early consequence of palmitate lipotoxicity mediated by redox signaling. Redox Biology, 2021, 45, 102026.	9.0	15
76	Neuregulin, an Effector on Mitochondria Metabolism That Preserves Insulin Sensitivity. Frontiers in Physiology, 2020, 11, 696.	2.8	14
77	Epigenetic loss of the endoplasmic reticulumâ€“associated degradation inhibitor SVIP induces cancer cell metabolic reprogramming. JCI Insight, 2019, 4, .	5.0	14
78	Aquaglyceroporins Are Differentially Expressed in Beige and White Adipocytes. International Journal of Molecular Sciences, 2020, 21, 610.	4.1	12
79	Role of diabetes- and obesity-related protein in the regulation of osteoblast differentiation. American Journal of Physiology - Endocrinology and Metabolism, 2011, 301, E40-E48.	3.5	11
80	The ubiquitin-proteasome system and autophagy: self-digestion for metabolic health. Trends in Endocrinology and Metabolism, 2021, 32, 594-608.	7.1	11
81	Altered Mitochondrial Opa1-Related Fusion in Mouse Promotes Endothelial Cell Dysfunction and Atherosclerosis. Antioxidants, 2022, 11, 1078.	5.1	10
82	FUNDC1. Circulation, 2017, 136, 2267-2270.	1.6	9
83	Functional characterization of the alanine-serine-cysteine exchanger of <i>Carnobacterium sp AT7</i>. Journal of General Physiology, 2019, 151, 505-517.	1.9	8
84	Involvement of the mitochondrial nuclease EndoG in the regulation of cell proliferation through the control of reactive oxygen species. Redox Biology, 2020, 37, 101736.	9.0	7
85	Neuregulin 4 Downregulation Induces Insulin Resistance in 3T3-L1 Adipocytes through Inflammation and Autophagic Degradation of GLUT4 Vesicles. International Journal of Molecular Sciences, 2021, 22, 12960.	4.1	7
86	13C metabolic flux analysis shows that resistin impairs the metabolic response to insulin in L6E9 myotubes. BMC Systems Biology, 2014, 8, 109.	3.0	6
87	Analysis of Mitochondrial Morphology and Function Under Conditions of Mitofusin 2 Deficiency. Methods in Molecular Biology, 2015, 1265, 307-320.	0.9	6
88	Nek4 regulates mitochondrial respiration and morphology. FEBS Journal, 2022, 289, 3262-3279.	4.7	6
89	TP53INP2 at the crossroad of apoptosis and autophagy in death receptor signaling. Molecular and Cellular Oncology, 2019, 6, e1632687.	0.7	5
90	Stochastic modulation evidences a transitory EGF-Ras-ERK MAPK activity induced by PRMT5. Computers in Biology and Medicine, 2021, 133, 104339.	7.0	5

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91	Mitochondrial Dynamics: A Journey from Mitochondrial Morphology to Mitochondrial Function and Quality. , 2018, , 19-31.		1
92	Fission for reprogramming. Cell Cycle, 2017, 16, 159-160.	2.6	1
93	THE BNIP3 TRIAD: MITOCHONDRIA, LYSOSOMES AND INFLAMMATION IN HEALTHY MUSCLE AGING. , 2022, 1, 252-255.		1