Carles Canto

List of Publications by Year
in descending order

61 papers	15,757 citations	66343 42 h-index	138484 58 g-index
62 all docs	62 docs citations	62 times ranked	19943 citing authors

#	Article	IF	Citations
1	Nicotinamide Riboside and Dihydronicotinic Acid Riboside Synergistically Increase Intracellular NAD+ by Generating Dihydronicotinamide Riboside. Nutrients, 2022, 14, 2752.	4.1	7
2	NAD+ Precursors: A Questionable Redundancy. Metabolites, 2022, 12, 630.	2.9	8
3	Reduced nicotinamide mononucleotide is a new and potent NAD⁺precursor in mammalian cells and mice. FASEB Journal, 2021, 35, e21456.	0.5	42
4	Crosstalk between Drp1 phosphorylation sites during mitochondrial remodeling and their impact on metabolic adaptation. Cell Reports, 2021, 36, 109565.	6.4	32
5	A Method to Monitor the NAD+ Metabolomeâ€"From Mechanistic to Clinical Applications. International Journal of Molecular Sciences, 2021, 22, 10598.	4.1	13
6	Distinct patterns of skeletal muscle mitochondria fusion, fission and mitophagy upon duration of exercise training. Acta Physiologica, 2019, 225, e13179.	3.8	79
7	Endogenous nicotinamide riboside metabolism protects against diet-induced liver damage. Nature Communications, 2019, 10, 4291.	12.8	30
8	A reduced form of nicotinamide riboside defines a new path for NAD+ biosynthesis and acts as an orally bioavailable NAD+ precursor. Molecular Metabolism, 2019, 30, 192-202.	6.5	89
9	State of Knowledge and Recent Advances in Prevention and Treatment of Mitochondrial Dysfunction in Obesity and Type 2 Diabetes. , 2019, , 399-418.		1
10	The NAD-Booster Nicotinamide Riboside Potently Stimulates Hematopoiesis through Increased Mitochondrial Clearance. Cell Stem Cell, 2019, 24, 405-418.e7.	11.1	143
11	Mitochondrial stress management: a dynamic journey. Cell Stress, 2018, 2, 253-274.	3.2	55
12	Circadian Rhythms and Mitochondria: Connecting the Dots. Frontiers in Genetics, 2018, 9, 452.	2.3	62
13	Mitochondrial Dynamics: Shaping Metabolic Adaptation. International Review of Cell and Molecular Biology, 2018, 340, 129-167.	3.2	12
14	The heat shock factor HSF1 juggles protein quality control and metabolic regulation. Journal of Cell Biology, 2017, 216, 551-553.	5.2	7
15	Enhanced Respiratory Chain Supercomplex Formation in Response to Exercise in Human Skeletal Muscle. Cell Metabolism, 2017, 25, 301-311.	16.2	213
16	Mfn2 is critical for brown adipose tissue thermogenic function. EMBO Journal, 2017, 36, 1543-1558.	7.8	193
17	Circadian and Feeding Rhythms Orchestrate the Diurnal Liver Acetylome. Cell Reports, 2017, 20, 1729-1743.	6.4	72
18	Nicotinamide riboside kinases display redundancy in mediating nicotinamide mononucleotide and nicotinamide riboside metabolism in skeletal muscle cells. Molecular Metabolism, 2017, 6, 819-832.	6.5	96

#	Article	IF	Citations
19	SIRT1: A novel guardian of brown fat against metabolic damage. Obesity, 2016, 24, 554-554.	3.0	8
20	Sirtuins and Aging. , 2016, , 213-227.		2
21	Dietary restriction and Sirtuin 1 in metabolic health: connections and divergences. Proceedings of the Nutrition Society, 2016, 75, 30-37.	1.0	3
22	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
23	SIRT1 in Metabolic Health and Disease. , 2016, , 71-104.		1
24	NAD ⁺ repletion improves muscle function in muscular dystrophy and counters global PARylation. Science Translational Medicine, 2016, 8, 361ra139.	12.4	208
25	NRK1 controls nicotinamide mononucleotide and nicotinamide riboside metabolism in mammalian cells. Nature Communications, 2016, 7, 13103.	12.8	261
26	SIRT1 Gain of Function Does Not Mimic or Enhance the Adaptations to Intermittent Fasting. Cell Reports, 2016, 14, 2068-2075.	6.4	31
27	Highâ€Resolution Respirometry for Mitochondrial Characterization of Ex Vivo Mouse Tissues. Current Protocols in Mouse Biology, 2015, 5, 135-153.	1.2	32
28	SIRT1 enhances glucose tolerance by potentiating brown adipose tissue function. Molecular Metabolism, 2015, 4, 118-131.	6.5	75
29	NAD+ Metabolism and the Control of Energy Homeostasis: A Balancing Act between Mitochondria and the Nucleus. Cell Metabolism, 2015, 22, 31-53.	16.2	1,153
30	The molecular targets of resveratrol. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2015, 1852, 1114-1123.	3.8	362
31	Pharmacological Inhibition of Poly(ADP-Ribose) Polymerases Improves Fitness and Mitochondrial Function in Skeletal Muscle. Cell Metabolism, 2014, 19, 1034-1041.	16.2	211
32	Mitochondrial response to nutrient availability and its role in metabolic disease. EMBO Molecular Medicine, 2014, 6, 580-589.	6.9	120
33	Skeletal Muscle Mitochondria in the Elderly: Effects of Physical Fitness and Exercise Training. Journal of Clinical Endocrinology and Metabolism, 2014, 99, 1852-1861.	3.6	114
34	SIRT1 metabolic actions: Integrating recent advances from mouse models. Molecular Metabolism, 2014, 3, 5-18.	6.5	102
35	The NAD+/Sirtuin Pathway Modulates Longevity through Activation of Mitochondrial UPR and FOXO Signaling. Cell, 2013, 154, 430-441.	28.9	951
36	Crosstalk between poly(ADP-ribose) polymerase and sirtuin enzymes. Molecular Aspects of Medicine, 2013, 34, 1168-1201.	6.4	202

#	Article	IF	Citations
37	In Vivo Measurement of the Acetylation State of Sirtuin Substrates as a Proxy for Sirtuin Activity. Methods in Molecular Biology, 2013, 1077, 217-237.	0.9	2
38	FGF21 Takes a Fat Bite. Science, 2012, 336, 675-676.	12.6	46
39	Muscle or liver-specific Sirt3 deficiency induces hyperacetylation of mitochondrial proteins without affecting global metabolic homeostasis. Scientific Reports, 2012, 2, 425.	3.3	126
40	The NAD+ Precursor Nicotinamide Riboside Enhances Oxidative Metabolism and Protects against High-Fat Diet-Induced Obesity. Cell Metabolism, 2012, 15, 838-847.	16.2	957
41	The Role of PARP-1 and PARP-2 Enzymes in Metabolic Regulation and Disease. Cell Metabolism, 2012, 16, 290-295.	16.2	240
42	Targeting Sirtuin 1 to Improve Metabolism: All You Need Is NAD⁺?. Pharmacological Reviews, 2012, 64, 166-187.	16.0	326
43	NCoR1 Is a Conserved Physiological Modulator of Muscle Mass and Oxidative Function. Cell, 2011, 147, 827-839.	28.9	228
44	PARP-1 Inhibition Increases Mitochondrial Metabolism through SIRT1 Activation. Cell Metabolism, 2011, 13, 461-468.	16.2	673
45	PARP-2 Regulates SIRT1 Expression and Whole-Body Energy Expenditure. Cell Metabolism, 2011, 13, 450-460.	16.2	231
46	CREB and ChREBP oppositely regulate SIRT1 expression in response to energy availability. EMBO Reports, 2011, 12, 1069-1076.	4.5	140
47	SRT1720 improves survival and healthspan of obese mice. Scientific Reports, 2011, 1, 70.	3.3	249
48	Longevity hits a roadblock. Nature, 2011, 477, 410-411.	27.8	44
49	Calorie Restriction: Is AMPK a Key Sensor and Effector?. Physiology, 2011, 26, 214-224.	3.1	209
50	The metabolic footprint of aging in mice. Scientific Reports, 2011, 1, 134.	3.3	440
51	Interference between PARPs and SIRT1: a novel approach to healthy ageing?. Aging, 2011, 3, 543-547.	3.1	46
52	AMP-activated protein kinase and its downstream transcriptional pathways. Cellular and Molecular Life Sciences, 2010, 67, 3407-3423.	5.4	336
53	The Secret Life of NAD+: An Old Metabolite Controlling New Metabolic Signaling Pathways. Endocrine Reviews, 2010, 31, 194-223.	20.1	731
54	Clking on PGC-1Î± to Inhibit Gluconeogenesis. Cell Metabolism, 2010, 11, 6-7.	16.2	11

#	Article	IF	Citations
55	Interdependence of AMPK and SIRT1 for Metabolic Adaptation to Fasting and Exercise in Skeletal Muscle. Cell Metabolism, 2010, 11, 213-219.	16.2	752
56	AMPK regulates energy expenditure by modulating NAD+ metabolism and SIRT1 activity. Nature, 2009, 458, 1056-1060.	27.8	2,654
57	Specific SIRT1 Activation Mimics Low Energy Levels and Protects against Diet-Induced Metabolic Disorders by Enhancing Fat Oxidation. Cell Metabolism, 2009, 9, 210.	16.2	2
58	Caloric restriction, SIRT1 and longevity. Trends in Endocrinology and Metabolism, 2009, 20, 325-331.	7.1	352
59	PGC-1Î±, SIRT1 and AMPK, an energy sensing network that controls energy expenditure. Current Opinion in Lipidology, 2009, 20, 98-105.	2.7	1,238
60	Specific SIRT1 Activation Mimics Low Energy Levels and Protects against Diet-Induced Metabolic Disorders by Enhancing Fat Oxidation. Cell Metabolism, 2008, 8, 347-358.	16.2	665
61	Glucose Restriction: Longevity SIRTainly, but without Building Muscle?. Developmental Cell, 2008, 14, 642-644.	7.0	3