Edward T Chouchani

List of Publications by Year
in descending order

51 papers	9,220 citations	117453 34 h-index	174990 52 g-index
54 all docs	54 docs citations	54 times ranked	12806 citing authors

#	Article	IF	Citations
1	Cysteine 253 of UCP1 regulates energy expenditure and sex-dependent adipose tissue inflammation. Cell Metabolism, 2022, 34, 140-157.e8.	7.2	27
2	Suppressive effects of the obese tumor microenvironment on CD8 T cell infiltration and effector function. Journal of Experimental Medicine, 2022, 219, .	4.2	33
3	Measurement of Futile Creatine Cycling Using Respirometry. Methods in Molecular Biology, 2022, 2448, 141-153.	0.4	3
4	Logic and mechanisms of metabolite signalling. Nature Reviews Endocrinology, 2022, 18, 71-72.	4.3	3
5	Why succinate? Physiological regulation by a mitochondrial coenzyme Q sentinel. Nature Chemical Biology, 2022, 18, 461-469.	3.9	38
6	Mitochondrial uncouplers induce proton leak by activating AAC and UCP1. Nature, 2022, 606, 180-187.	13.7	48
7	Lactate fluxes mediated by the monocarboxylate transporter-1 are key determinants of the metabolic activityÂof beige adipocytes. Journal of Biological Chemistry, 2021, 296, 100137.	1.6	22
8	Fragment-based covalent ligand discovery. RSC Chemical Biology, 2021, 2, 354-367.	2.0	65
9	AIDA and UCP1 snuggle up to prevent hypothermia. Nature Cell Biology, 2021, 23, 216-218.	4.6	0
10	IRF3 reduces adipose thermogenesis via ISG15-mediated reprogramming of glycolysis. Journal of Clinical Investigation, 2021, 131, .	3.9	43
11	UCP1 governs liver extracellular succinate and inflammatory pathogenesis. Nature Metabolism, 2021, 3, 604-617.	5.1	82
12	Mitochondrial TNAP controls thermogenesis by hydrolysis of phosphocreatine. Nature, 2021, 593, 580-585.	13.7	64
13	Microglial metabolism is a pivotal factor in sexual dimorphism in Alzheimerâ€™s disease. Communications Biology, 2021, 4, 711.	2.0	61
14	Glycogen metabolism links glucose homeostasis to thermogenesis in adipocytes. Nature, 2021, 599, 296-301.	13.7	36
15	Glucose metabolism and pyruvate carboxylase enhance glutathione synthesis and restrict oxidative stress in pancreatic islets. Cell Reports, 2021, 37, 110037.	2.9	21
16	pH-Gated Succinate Secretion Regulates Muscle Remodeling in Response to Exercise. Cell, 2020, 183, 62-75.e17.	13.5	129
17	Facultative protein selenation regulates redox sensitivity, adipose tissue thermogenesis, and obesity. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 10789-10796.	3.3	30
18	Nitrogen Trapping as a Therapeutic Strategy in Tumors with Mitochondrial Dysfunction. Cancer Research, 2020, 80, 3492-3506.	0.4	8

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19	A Quantitative Tissue-Specific Landscape of Protein Redox Regulation during Aging. Cell, 2020, 180, 968-983.e24.	13.5	220
20	Sample multiplexing for targeted pathway proteomics in aging mice. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9723-9732.	3.3	73
21	Glycerol phosphate shuttle enzyme GPD2 regulates macrophage inflammatory responses. Nature Immunology, 2019, 20, 1186-1195.	7.0	126
22	H+ transport is an integral function of the mitochondrial ADP/ATP carrier. Nature, 2019, 571, 515-520.	13.7	183
23	Metabolic adaptation and maladaptation in adipose tissue. Nature Metabolism, 2019, 1, 189-200.	5.1	224
24	Ablation of adipocyte creatine transport impairs thermogenesis and causes diet-induced obesity. Nature Metabolism, 2019, 1, 360-370.	5.1	103
25	New Advances in Adaptive Thermogenesis: UCP1 and Beyond. Cell Metabolism, 2019, 29, 27-37.	7.2	451
26	Coupling Krebs cycle metabolites to signalling in immunity and cancer. Nature Metabolism, 2019, 1, 16-33.	5.1	260
27	Multiplexed Isobaric Tagâ€Based Profiling of Seven Murine Tissues Following In Vivo Nicotine Treatment Using a Minimalistic Proteomics Strategy. Proteomics, 2018, 18, e1700326.	1.3	22
28	Itaconate is an anti-inflammatory metabolite that activates Nrf2 via alkylation of KEAP1. Nature, 2018, 556, 113-117.	13.7	1,115
29	Mechanisms of Mitochondria Assembly, Dynamics and Turnover in Health and Disease. Journal of Molecular Biology, 2018, 430, 4821-4822.	2.0	0
30	Accumulation of succinate controls activation of adipose tissue thermogenesis. Nature, 2018, 560, 102-106.	13.7	380
31	UCP1 deficiency causes brown fat respiratory chain depletion and sensitizes mitochondria to calcium overload-induced dysfunction. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7981-7986.	3.3	136
32	Mitochondrial Patch Clamp of Beige Adipocytes Reveals UCP1-Positive and UCP1-Negative Cells Both Exhibiting Futile Creatine Cycling. Cell Metabolism, 2017, 25, 811-822.e4.	7.2	174
33	Stress turns on the heat: Regulation of mitochondrial biogenesis and UCP1 by ROS in adipocytes. Adipocyte, 2017, 6, 56-61.	1.3	30
34	Genetic Depletion of Adipocyte Creatine Metabolism Inhibits Diet-Induced Thermogenesis and Drives Obesity. Cell Metabolism, 2017, 26, 660-671.e3.	7.2	187
35	Mitochondrial reactive oxygen species and adipose tissue thermogenesis: Bridging physiology and mechanisms. Journal of Biological Chemistry, 2017, 292, 16810-16816.	1.6	77
36	Identification and quantification of protein S-nitrosation by nitrite in the mouse heart during ischemia. Journal of Biological Chemistry, 2017, 292, 14486-14495.	1.6	34

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37	Mitochondrial ROS regulate thermogenic energy expenditure and sulfenylation of UCP1. Nature, 2016, 532, 112-116.	13.7	341
38	Succinate metabolism: a new therapeutic target for myocardial reperfusion injury. Cardiovascular Research, 2016, 111, 134-141.	1.8	107
39	Moving Forwards by Blocking Back-Flow. Circulation Research, 2016, 118, 898-906.	2.0	83
40	A Unifying Mechanism for Mitochondrial Superoxide Production during Ischemia-Reperfusion Injury. Cell Metabolism, 2016, 23, 254-263.	7.2	527
41	Assessing the Mitochondrial Membrane Potential in Cells and InÂVivo using Targeted Click Chemistry and Mass Spectrometry. Cell Metabolism, 2016, 23, 379-385.	7.2	78
42	Disabling Mitochondrial Peroxide Metabolism via Combinatorial Targeting of Peroxiredoxin 3 as an Effective Therapeutic Approach for Malignant Mesothelioma. PLoS ONE, 2015, 10, e0127310.	1.1	26
43	Fasting, but Not Aging, Dramatically Alters the Redox Status of Cysteine Residues on Proteins in Drosophila melanogaster. Cell Reports, 2015, 11, 1856-1865.	2.9	54
44	A Creatine-Driven Substrate Cycle Enhances Energy Expenditure and Thermogenesis in Beige Fat. Cell, 2015, 163, 643-655.	13.5	575
45	Complex I Deficiency Due to Selective Loss of Ndufs4 in the Mouse Heart Results in Severe Hypertrophic Cardiomyopathy. PLoS ONE, 2014, 9, e94157.	1.1	41
46	Ischaemic accumulation of succinate controls reperfusion injury through mitochondrial ROS. Nature, 2014, 515, 431-435.	13.7	1,989
47	Mitochondria selective S â€nitrosation by mitochondriaâ€targeted S â€nitrosothiol protects against postâ€infarct heart failure in mouse hearts. European Journal of Heart Failure, 2014, 16, 712-717.	2.9	39
48	Cardioprotection by S-nitrosation of a cysteine switch on mitochondrial complex I. Nature Medicine, 2013, 19, 753-759.	15.2	521
49	Inactivation of Pyruvate Dehydrogenase Kinase 2 by Mitochondrial Reactive Oxygen Species. Journal of Biological Chemistry, 2012, 287, 35153-35160.	1.6	45
50	Proteomic approaches to the characterization of protein thiol modification. Current Opinion in Chemical Biology, 2011, 15, 120-128.	2.8	90
51	Identification of S-nitrosated mitochondrial proteins by S-nitrosothiol difference in gel electrophoresis (SNO-DIGE): implications for the regulation of mitochondrial function by reversible S-nitrosation. Biochemical Journal, 2010, 430, 49-59.	1.7	130