Martin Jastroch

List of Publications by Year
in descending order

82 papers	5,345 citations	109321 35 h-index	88630 70 g-index
86 all docs	86 docs citations	86 times ranked	9664 citing authors

#	Article	IF	Citations
1	Evolution of pinniped UCP1 is not linked to aquatic life but to neonatal thermogenesis and body size. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2118431119.	7.1	0
2	Obligatory homeothermy of mesic habitat-adapted African striped mice, Rhabdomys pumilio, is governed by seasonal basal metabolism and year-round â€˜thermogenic readinessâ€™ of brown adipose tissue. Journal of Experimental Biology, 2022, 225, .	1.7	2
3	Activating ligands of Uncoupling protein 1 identified by rapid membrane protein thermostability shift analysis. Molecular Metabolism, 2022, 62, 101526.	6.5	6
4	Loss of the psychiatric risk factor SLC6A15 is associated with increased metabolic functions in primary hippocampal neurons. European Journal of Neuroscience, 2021, 53, 390-401.	2.6	8
5	Pros and cons for the evidence of adaptive non-shivering thermogenesis in marsupials. Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 2021, 191, 1085-1095.	1.5	7
6	T cells armed with C-X-C chemokine receptor type 6 enhance adoptive cell therapy for pancreatic tumours. Nature Biomedical Engineering, 2021, 5, 1246-1260.	22.5	80
7	Respiratory Parameters for the Classification of Dysfunctional Insulin Secretion by Pancreatic Islets. Metabolites, 2021, 11, 405.	2.9	4
8	The good and the BAT of metabolic sex differences in thermogenic human adipose tissue. Molecular and Cellular Endocrinology, 2021, 533, 111337.	3.2	19
9	Comparative functional analyses of UCP1 to unravel evolution, ecophysiology and mechanisms of mammalian thermogenesis. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2021, 255, 110613.	1.6	2
10	Disruption of thermogenic UCP1 predated the divergence of pigs and peccaries. Journal of Experimental Biology, 2020, 223, .	1.7	10
11	Gut Microbes Controlling Blood Sugar: No Fire Required!. Cell Metabolism, 2020, 31, 443-444.	16.2	9
12	Importance of adipocyte browning in the evolution of endothermy. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190134.	4.0	14
13	Endogenous FGF21-signaling controls paradoxical obesity resistance of UCP1-deficient mice. Nature Communications, 2020, 11, 624.	12.8	60
14	Molecular evolution of thermogenic uncoupling protein 1 and implications for medical intervention of human disease. Molecular Aspects of Medicine, 2019, 68, 6-17.	6.4	4
15	Bispecific Antibodies Enable Synthetic Agonistic Receptor-Transduced T Cells for Tumor Immunotherapy. Clinical Cancer Research, 2019, 25, 5890-5900.	7.0	31
16	4-Methylumbelliferone improves the thermogenic capacity of brown adipose tissue. Nature Metabolism, 2019, 1, 546-559.	11.9	26
17	Molecular evolution of uncoupling proteins and implications for brain function. Neuroscience Letters, 2019, 696, 140-145.	2.1	17
18	Preadipocytes of obese humans display gender-specific bioenergetic responses to glucose and insulin. Molecular Metabolism, 2019, 20, 28-37.	6.5	14

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19	Insights into brown adipose tissue evolution and function from non-model organisms. Journal of Experimental Biology, 2018, 221, .	1.7	41
20	Respiromics â€“ An integrative analysis linking mitochondrial bioenergetics to molecular signatures. Molecular Metabolism, 2018, 9, 4-14.	6.5	12
21	Mitochondrial adaptation in steatotic mice. Mitochondrion, 2018, 40, 1-12.	3.4	54
22	Glycemic Variability Promotes Both Local Invasion and Metastatic Colonization by Pancreatic Ductal Adenocarcinoma. Cellular and Molecular Gastroenterology and Hepatology, 2018, 6, 429-449.	4.5	22
23	Uncoupling proteins as a therapeutic target to protect the diabetic heart. Pharmacological Research, 2018, 137, 11-24.	7.1	24
24	Atlas of Circadian Metabolism Reveals System-wide Coordination and Communication between Clocks. Cell, 2018, 174, 1571-1585.e11.	28.9	258
25	Editorial: The Evolution of Endothermyâ€“From Patterns to Mechanisms. Frontiers in Physiology, 2018, 9, 891.	2.8	9
26	CD4+ T cell activation, function, and metabolism are inhibited by low concentrations of DMSO. Journal of Immunological Methods, 2018, 463, 54-60.	1.4	7
27	Celastrol-Induced Weight Loss Is Driven by Hypophagia and Independent From UCP1. Diabetes, 2018, 67, 2456-2465.	0.6	39
28	Comparing Electron Leak in Vertebrate Muscle Mitochondria. Integrative and Comparative Biology, 2018, 58, 495-505.	2.0	11
29	Evolution of UCP1. Handbook of Experimental Pharmacology, 2018, 251, 127-141.	1.8	14
30	Prediction of Adipose Browning Capacity by Systematic Integration of Transcriptional Profiles. Cell Reports, 2018, 23, 3112-3125.	6.4	57
31	Mitochondria are physiologically maintained at close to 50 Â°C. PLoS Biology, 2018, 16, e2003992.	5.6	295
32	Dissociation Between Brown Adipose Tissue ¹⁸F-FDG Uptake and Thermogenesis in Uncoupling Protein 1â€“Deficient Mice. Journal of Nuclear Medicine, 2017, 58, 1100-1103.	5.0	73
33	Direct Substrate Delivery Into Mitochondrial Fissionâ€“Deficient Pancreatic Islets Rescues Insulin Secretion. Diabetes, 2017, 66, 1247-1257.	0.6	28
34	Alternatively activated macrophages do not synthesize catecholamines or contribute to adipose tissue adaptive thermogenesis. Nature Medicine, 2017, 23, 623-630.	30.7	282
35	Fat controls U. Science, 2017, 355, 1124-1125.	12.6	6
36	Data on chow, liver tissue and mitochondrial fatty acid compositions as well as mitochondrial proteome changes after feeding mice a western diet for 6â€“24 weeks. Data in Brief, 2017, 15, 163-169.	1.0	9

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37	Inactivation of thermogenic UCP1 as a historical contingency in multiple placental mammal clades. Science Advances, 2017, 3, e1602878.	10.3	78
38	Extracellular calcium modulates brown adipocyte differentiation and identity. Scientific Reports, 2017, 7, 8888.	3.3	27
39	A Stat6/Pten Axis Links Regulatory T Cells with Adipose Tissue Function. Cell Metabolism, 2017, 26, 475-492.e7.	16.2	71
40	Long-Term Cold Adaptation Does Not Require FGF21 or UCP1. Cell Metabolism, 2017, 26, 437-446.e5.	16.2	100
41	Activated macrophages control human adipocyte mitochondrial bioenergetics via secreted factors. Molecular Metabolism, 2017, 6, 1226-1239.	6.5	25
42	Uncoupling protein 1 controls reactive oxygen species in brown adipose tissue. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7744-7746.	7.1	41
43	Comparison of Mitochondrial Reactive Oxygen Species Production of Ectothermic and Endothermic Fish Muscle. Frontiers in Physiology, 2017, 8, 704.	2.8	21
44	Identification of proliferative and mature Î²-cells in the islets of Langerhans. Nature, 2016, 535, 430-434.	27.8	279
45	Î±-Melanocyte stimulating hormone promotes muscle glucose uptake via melanocortin 5 receptors. Molecular Metabolism, 2016, 5, 807-822.	6.5	39
46	Astrocytic Insulin Signaling Couples Brain Glucose Uptake with Nutrient Availability. Cell, 2016, 166, 867-880.	28.9	382
47	Activation of Peroxisome Proliferatorâ€“Activated Receptor-Î´ as Novel Therapeutic Strategy to Prevent In-Stent Restenosis and Stent Thrombosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2016, 36, 1534-1548.	2.4	22
48	Diversification and coevolution of the ghrelin/growth hormone secretagogue receptor system in vertebrates. Ecology and Evolution, 2016, 6, 2516-2535.	1.9	9
49	Muscle mitochondrial stress adaptation operates independently of endogenous FGF21 action. Molecular Metabolism, 2016, 5, 79-90.	6.5	58
50	Measurement of the Absolute Magnitude and Time Courses of Mitochondrial Membrane Potential in Primary and Clonal Pancreatic Beta-Cells. PLoS ONE, 2016, 11, e0159199.	2.5	24
51	miR-184 Regulates Pancreatic Î²-Cell Function According to Glucose Metabolism. Journal of Biological Chemistry, 2015, 290, 20284-20294.	3.4	53
52	When pigs fly, UCP1 makes heat. Molecular Metabolism, 2015, 4, 359-362.	6.5	25
53	Calcineurin Links Mitochondrial Elongation with Energy Metabolism. Cell Metabolism, 2015, 22, 838-850.	16.2	71
54	Genetic disruption of uncoupling protein 1 in mice renders brown adipose tissue a significant source of FGF21 secretion. Molecular Metabolism, 2015, 4, 537-542.	6.5	78

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55	Torpor at high ambient temperature in a neotropical didelphid, the grey short-tailed opossum (Monodelphis domestica). Die Naturwissenschaften, 2014, 101, 1003-1006.	1.6	8
56	Analysis and Interpretation of Microplate-Based Oxygen Consumption and pH Data. Methods in Enzymology, 2014, 547, 309-354.	1.0	351
57	Metabolic depression during warm torpor in the Golden spiny mouse (Acomys russatus) does not affect mitochondrial respiration and hydrogen peroxide release. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2014, 167, 7-14.	1.8	12
58	Brite/beige fat and UCP1 â€" is it thermogenesis?. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 1075-1082.	1.0	99
59	Spare mitochondrial respiratory capacity permits human adipocytes to maintain ATP homeostasis under hypoglycemic conditions. FASEB Journal, 2014, 28, 761-770.	0.5	67
60	Antioxidant properties of UCP1 are evolutionarily conserved in mammals and buffer mitochondrial reactive oxygen species. Free Radical Biology and Medicine, 2014, 77, 210-216.	2.9	31
61	Depression of mitochondrial respiration during daily torpor of the Djungarian hamster, Phodopus sungorus, is specific for liver and correlates with body temperature. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2013, 164, 584-589.	1.8	19
62	Leptin action in the brain: How (and when) it makes fat burn. Molecular Metabolism, 2013, 2, 63-64.	6.5	7
63	Minor Role of Mitochondrial Respiration for Fatty-Acid Induced Insulin Secretion. International Journal of Molecular Sciences, 2013, 14, 18989-18998.	4.1	13
64	Brown fat in a protoendothermic mammal fuels eutherian evolution. Nature Communications, 2013, 4, 2140.	12.8	70
65	p62 Links Î²-adrenergic input to mitochondrial function and thermogenesis. Journal of Clinical Investigation, 2013, 123, 469-478.	8.2	107
66	Functional characterization of UCP1 in mammalian HEK293 cells excludes mitochondrial uncoupling artefacts and reveals no contribution to basal proton leak. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 1660-1670.	1.0	46
67	Quantitative measurement of mitochondrial membrane potential in cultured cells: calciumâ€induced deâ€• and hyperpolarization of neuronal mitochondria. Journal of Physiology, 2012, 590, 2845-2871.	2.9	172
68	Expression of Uncoupling Proteins in a Mammalian Cell Culture System (HEK293) and Assessment of Their Protein Function. Methods in Molecular Biology, 2012, 810, 153-164.	0.9	6
69	Uncoupling protein-2 attenuates glucose-stimulated insulin secretion in INS-1E insulinoma cells by lowering mitochondrial reactive oxygen species. Free Radical Biology and Medicine, 2011, 50, 609-616.	2.9	76
70	Mitochondrial uncoupling and lifespan. Mechanisms of Ageing and Development, 2010, 131, 463-472.	4.6	136
71	UCP1 ectopically expressed in murine muscle displays native function and mitigates mitochondrial superoxide production. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 324-330.	1.0	35
72	Uncoupling Protein 1 Decreases Superoxide Production in Brown Adipose Tissue Mitochondria. Journal of Biological Chemistry, 2010, 285, 21961-21968.	3.4	79

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73	Adaptive thermogenesis and thermal conductance in wild-type and UCP1-KO mice. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2010, 299, R1396-R1406.	1.8	129
74	Mitochondrial proton and electron leaks. Essays in Biochemistry, 2010, 47, 53-67.	4.7	601
75	Physiological Significance of Mitochondrial Uncoupling Protein 1 in the Prevention of Reactive Oxygen Species and Control of Substrate Oxidation. FASEB Journal, 2010, 24, lb585.	0.5	1
76	Mitochondrial Proton Conductance in Skeletal Muscle of a Coldâ€Exposed Marsupial, Antechinus flavipes, Is Unlikely to Be Involved in Adaptive Nonshivering Thermogenesis but Displays Increased Sensitivity toward Carbonâ€Centered Radicals. Physiological and Biochemical Zoology, 2009, 82, 447-454.	1.5	9
77	Molecular evolution of UCP1 and the evolutionary history of mammalian non-shivering thermogenesis. BMC Evolutionary Biology, 2009, 9, 4.	3.2	67
78	The evolution of uncoupling protein 1â€mediated nonshivering thermogenesis in vertebrates. FASEB Journal, 2008, 22, 102-102.	0.5	0
79	The molecular and biochemical basis of nonshivering thermogenesis in an African endemic mammal, Elephantulus myurus. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2007, 293, R2120-R2127.	1.8	28
80	Functional characterisation of UCP1 in the common carp: uncoupling activity in liver mitochondria and cold-induced expression in the brain. Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 2007, 177, 743-752.	1.5	73
81	Uncoupling protein 1 in fish uncovers an ancient evolutionary history of mammalian nonshivering thermogenesis. Physiological Genomics, 2005, 22, 150-156.	2.3	111
82	Uncoupling protein 2 and 3 in marsupials: identification, phylogeny, and gene expression in response to cold and fasting in Antechinus flavipes. Physiological Genomics, 2004, 17, 130-139.	2.3	29