

# Charles Affourtit

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8031895/publications.pdf>

Version: 2024-02-01

57  
papers

2,724  
citations

218592

26  
h-index

189801

50  
g-index

64  
all docs

64  
docs citations

64  
times ranked

3500  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mitochondrial superoxide: production, biological effects, and activation of uncoupling proteins. <i>Free Radical Biology and Medicine</i> , 2004, 37, 755-767.	1.3	900
2	Function of the alternative oxidase: is it still a scavenger?. <i>Trends in Plant Science</i> , 2002, 7, 478-481.	4.3	176
3	Exploring the molecular nature of alternative oxidase regulation and catalysis. <i>FEBS Letters</i> , 2002, 510, 121-126.	1.3	116
4	Control of plant mitochondrial respiration. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2001, 1504, 58-69.	0.5	114
5	Uncoupling protein-2 contributes significantly to high mitochondrial proton leak in INS-1E insulinoma cells and attenuates glucose-stimulated insulin secretion. <i>Biochemical Journal</i> , 2008, 409, 199-204.	1.7	80
6	Uncoupling protein-2 attenuates glucose-stimulated insulin secretion in INS-1E insulinoma cells by lowering mitochondrial reactive oxygen species. <i>Free Radical Biology and Medicine</i> , 2011, 50, 609-616.	1.3	76
7	Measurement of Proton Leak and Electron Leak in Isolated Mitochondria. <i>Methods in Molecular Biology</i> , 2012, 810, 165-182.	0.4	72
8	Structure of the Plant Alternative Oxidase. <i>Journal of Biological Chemistry</i> , 2002, 277, 1190-1194.	1.6	67
9	Energization-dependent endogenous activation of proton conductance in skeletal muscle mitochondria. <i>Biochemical Journal</i> , 2008, 412, 131-139.	1.7	64
10	On the role of uncoupling protein-2 in pancreatic beta cells. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2008, 1777, 973-979.	0.5	62
11	Stronger control of ATP/ADP by proton leak in pancreatic $\beta$ -cells than skeletal muscle mitochondria. <i>Biochemical Journal</i> , 2006, 393, 151-159.	1.7	55
12	Compelling EPR evidence that the alternative oxidase is a diiron carboxylate protein. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2008, 1777, 327-330.	0.5	50
13	Novel insights into pancreatic $\beta$ -cell glucolipotoxicity from real-time functional analysis of mitochondrial energy metabolism in INS-1E insulinoma cells. <i>Biochemical Journal</i> , 2013, 456, 417-426.	1.7	50
14	New Insights into the Regulation of Plant Succinate Dehydrogenase. <i>Journal of Biological Chemistry</i> , 2001, 276, 32567-32574.	1.6	48
15	Mitochondrial involvement in skeletal muscle insulin resistance: A case of imbalanced bioenergetics. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2016, 1857, 1678-1693.	0.5	48
16	On the mechanism by which dietary nitrate improves human skeletal muscle function. <i>Frontiers in Physiology</i> , 2015, 6, 211.	1.3	45
17	Chapter 23 Measuring Mitochondrial Bioenergetics in INS-1E Insulinoma Cells. <i>Methods in Enzymology</i> , 2009, 457, 405-424.	0.4	44
18	Insulin acutely improves mitochondrial function of rat and human skeletal muscle by increasing coupling efficiency of oxidative phosphorylation. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2014, 1837, 270-276.	0.5	44

#	ARTICLE	IF	CITATIONS
19	Novel Uncoupling Proteins. Novartis Foundation Symposium, 0, , 70-91.	1.2	42
20	Constitutive activity of <i>Sauromatum guttatum</i> alternative oxidase in <i>Schizosaccharomyces pombe</i> implicates residues in addition to conserved cysteines in $\beta$ -keto acid activation. FEBS Letters, 2005, 579, 331-336.	1.3	40
21	Dynamic regulation of uncoupling protein 2 content in INS-1E insulinoma cells. Biochimica Et Biophysica Acta - Bioenergetics, 2008, 1777, 1378-1383.	0.5	40
22	A Highly Conserved Glutamate Residue (Glu-270) Is Essential for Plant Alternative Oxidase Activity. Journal of Biological Chemistry, 1998, 273, 30301-30305.	1.6	39
23	Palmitate-induced impairment of glucose-stimulated insulin secretion precedes mitochondrial dysfunction in mouse pancreatic islets. Biochemical Journal, 2016, 473, 487-496.	1.7	39
24	Mutagenesis of the <i>Sauromatum guttatum</i> alternative oxidase reveals features important for oxygen binding and catalysis. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 732-737.	0.5	33
25	Functional Expression of the Plant Alternative Oxidase Affects Growth of the Yeast <i>Schizosaccharomyces pombe</i> . Journal of Biological Chemistry, 1999, 274, 6212-6218.	1.6	32
26	Mitochondrial Activity and Skeletal Muscle Insulin Resistance in Kidney Disease. International Journal of Molecular Sciences, 2019, 20, 2751.	1.8	30
27	Mitochondrial electron transfer in the wheat pathogenic fungus <i>Septoria tritici</i> : on the role of alternative respiratory enzymes in fungicide resistance. Biochimica Et Biophysica Acta - Bioenergetics, 2000, 1459, 291-298.	0.5	28
28	Direct Substrate Delivery Into Mitochondrial Fission "Deficient Pancreatic Islets Rescues Insulin Secretion. Diabetes, 2017, 66, 1247-1257.	0.3	28
29	Interaction of purified alternative oxidase from thermogenic <i>Arum maculatum</i> with pyruvate. FEBS Letters, 2011, 585, 397-401.	1.3	26
30	Pro-inflammatory cytokines attenuate glucose-stimulated insulin secretion from INS-1E insulinoma cells by restricting mitochondrial pyruvate oxidation capacity " Novel mechanistic insight from real-time analysis of oxidative phosphorylation. PLoS ONE, 2018, 13, e0199505.	1.1	26
31	Temperature-dependent changes in respiration rates and redox poise of the ubiquinone pool in protoplasts and isolated mitochondria of potato leaves. Physiologia Plantarum, 2007, 129, 175-184.	2.6	24
32	Mitochondrial uncoupling protein 2 in pancreatic $\beta$ cells. Diabetes, Obesity and Metabolism, 2010, 12, 134-140.	2.2	22
33	Purification of the plant alternative oxidase from <i>Arum maculatum</i> : measurement, stability and metal requirement. Biochimica Et Biophysica Acta - Bioenergetics, 2004, 1608, 181-189.	0.5	20
34	Palmitate-induced changes in energy demand cause reallocation of ATP supply in rat and human skeletal muscle cells. Biochimica Et Biophysica Acta - Bioenergetics, 2016, 1857, 1403-1411.	0.5	20
35	Uncoupling protein-2 attenuates palmitoleate protection against the cytotoxic production of mitochondrial reactive oxygen species in INS-1E insulinoma cells. Redox Biology, 2015, 4, 14-22.	3.9	19
36	Novel uncoupling proteins. Novartis Foundation Symposium, 2007, 287, 70-80; discussion 80-91.	1.2	19

#	ARTICLE	IF	CITATIONS
37	Control of pancreatic $\beta$ -cell bioenergetics. <i>Biochemical Society Transactions</i> , 2018, 46, 555-564.	1.6	18
38	Identification of a mitochondrial alcohol dehydrogenase in <i>Schizosaccharomyces pombe</i> : new insights into energy metabolism. <i>Biochemical Journal</i> , 2007, 401, 459-464.	1.7	15
39	Measurement of Proton Leak in Isolated Mitochondria. <i>Methods in Molecular Biology</i> , 2018, 1782, 157-170.	0.4	8
40	The active site of the plant alternative oxidase: structural and mechanistic considerations. <i>Pest Management Science</i> , 2000, 56, 31-38.	1.7	7
41	Mitochondrial uncoupling protein-2 is not involved in palmitate-induced impairment of glucose-stimulated insulin secretion in INS-1E insulinoma cells and is not needed for the amplification of insulin release. <i>Biochemistry and Biophysics Reports</i> , 2015, 1, 8-15.	0.7	7
42	Developmental regulation of respiratory activity and protein import in plant mitochondria. <i>Biochemical Society Transactions</i> , 1996, 24, 746-749.	1.6	5
43	The relationship between the in situ reduction level of the cytochrome pool of <i>Azorhizobium caulinodans</i> growing in a chemostat with $\text{NH}_4^+$ or $\text{N}_2$ as the N source and the total activity of cytochrome oxidases. <i>FEMS Microbiology Letters</i> , 1995, 129, 149-155.	0.7	4
44	Oxygen protection of nitrogen fixation in free-living <i>Azorhizobium caulinodans</i> : the role of cytochrome aa3. <i>Microbiology (United Kingdom)</i> , 1998, 144, 1773-1782.	0.7	4
45	Respiratory Parameters for the Classification of Dysfunctional Insulin Secretion by Pancreatic Islets. <i>Metabolites</i> , 2021, 11, 405.	1.3	4
46	Measuring Mitochondrial Uncoupling Protein-2 Level and Activity in Insulinoma Cells. <i>Methods in Enzymology</i> , 2013, 528, 257-267.	0.4	3
47	The relationship between the in situ reduction level of the cytochrome pool of growing in a chemostat with $\text{NH}_4^+$ or $\text{N}_2$ as the N source and the total activity of cytochrome oxidases. <i>FEMS Microbiology Letters</i> , 1995, 129, 149-155.	0.7	2
48	Maesaquinone: A Novel Inhibitor of Plant Mitochondrial Respiratory Enzymes That React with Ubiquinone. <i>IUBMB Life</i> , 2000, 49, 533-537.	1.5	2
49	Acute bioenergetic insulin sensitivity of skeletal muscle cells: ATP-demand-provoked glycolysis contributes to stimulation of ATP supply. <i>Biochemistry and Biophysics Reports</i> , 2022, 30, 101274.	0.7	2
50	Mitochondrial coupling efficiency predicts insulin secretion and classifies dysfunctional properties in pancreatic beta cells. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2016, 1857, e95.	0.5	1
51	Kinetic interaction between oxidases and dehydrogenases in plant mitochondria. <i>Biochemical Society Transactions</i> , 1997, 25, 60S-60S.	1.6	0
52	The effect of Y253F on the activity of the plant alternative oxidase in <i>Schizosaccharomyces pombe</i> mitochondria. <i>Biochemical Society Transactions</i> , 2001, 29, A123-A123.	1.6	0
53	S12.9 Dynamic regulation of UCP2 concentration in INS-1E pancreatic beta-cells. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2008, 1777, S77.	0.5	0
54	Uncoupling protein-2 does not mediate palmitate-induced glucolipotoxic defects in oxidative phosphorylation in INS-1E insulinoma cells. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2014, 1837, e35-e36.	0.5	0

#	ARTICLE	IF	CITATIONS
55	Nitrite acutely improves mitochondrial coupling efficiency of spontaneously contracting rat myotubes. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2016, 1857, e32-e33.	0.5	0
56	Measuring real-time bioenergetic behaviour of electrically stimulated muscle cells. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2018, 1859, e118.	0.5	0
57	Insights into the active site of the plant alternative oxidase and its relationship to function. , 1999, , 17-36.		0