Josef Houstek

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6421517/publications.pdf

Version: 2024-02-01

71102 110387 5,050 123 41 64 citations h-index g-index papers 126 126 126 6542 docs citations times ranked citing authors all docs

#	Article	lF	CITATIONS
1	The function and the role of the mitochondrial glycerol-3-phosphate dehydrogenase in mammalian tissues. Biochimica Et Biophysica Acta - Bioenergetics, 2013, 1827, 401-410.	1.0	302
2	TMEM70 mutations cause isolated ATP synthase deficiency and neonatal mitochondrial encephalocardiomyopathy. Nature Genetics, 2008, 40, 1288-1290.	21.4	183
3	Myocardial iron content and mitochondrial function in human heart failure: a direct tissue analysis. European Journal of Heart Failure, 2017, 19, 522-530.	7.1	180
4	Retrospective, Multicentric Study of 180 Children with Cytochrome c Oxidase Deficiency. Pediatric Research, 2006, 59, 21-26.	2.3	142
5	YME1L controls the accumulation of respiratory chain subunits and is required for apoptotic resistance, cristae morphogenesis, and cell proliferation. Molecular Biology of the Cell, 2012, 23, 1010-1023.	2.1	141
6	Mitochondrial ATP synthase deficiency due to a mutation in the ATP5E gene for the F1 Â subunit. Human Molecular Genetics, 2010, 19, 3430-3439.	2.9	133
7	Mitochondrial diseases and genetic defects of ATP synthase. Biochimica Et Biophysica Acta - Bioenergetics, 2006, 1757, 1400-1405.	1.0	116
8	Brown Adipose Tissue: More Than an Effector of Thermogenesis?a. Annals of the New York Academy of Sciences, 1998, 856, 171-187.	3.8	112
9	Glycerophosphate-dependent hydrogen peroxide production by brown adipose tissue mitochondria and its activation by ferricyanide. Journal of Bioenergetics and Biomembranes, 2002, 34, 105-113.	2.3	95
10	\hat{l}^2 -Adrenergic stimulation of interleukin- $1\hat{l}_\pm$ and interleukin-6 expression in mouse brown adipocytes. FEBS Letters, 1997, 411, 83-86.	2.8	91
11	Tetramethyl Rhodamine Methyl Ester (TMRM) is Suitable for Cytofluorometric Measurements of Mitochondrial Membrane Potential in Cells Treated with Digitonin. Bioscience Reports, 1999, 19, 27-34.	2.4	90
12	Tissue-specific cytochrome c oxidase assembly defects due to mutations in SCO2 and SURF1. Biochemical Journal, 2005, 392, 625-632.	3.7	90
13	Altered properties of mitochondrial ATP-synthase in patients with a T â†' G mutation in the ATPase 6 (subunit a) gene at position 8993 of mtDNA. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 1995, 1271, 349-357.	3.8	87
14	HIF and reactive oxygen species regulate oxidative phosphorylation in cancer. Carcinogenesis, 2008, 29, 1528-1537.	2.8	84
15	Direct linkage of mitochondrial genome variation to risk factors for type 2 diabetes in conplastic strains. Genome Research, 2007, 17, 1319-1326.	5 . 5	78
16	Assembly of mitochondrial ATP synthase in cultured human cells: implications for mitochondrial diseases. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 1995, 1272, 190-198.	3.8	76
17	A new role for the von Hippel-Lindau tumor suppressor protein: stimulation of mitochondrial oxidative phosphorylation complex biogenesis. Carcinogenesis, 2004, 26, 531-539.	2.8	73
18	Mitochondrial encephalocardio-myopathy with early neonatal onset due to TMEM70 mutation. Archives of Disease in Childhood, 2010, 95, 296-301.	1.9	72

#	Article	IF	Citations
19	High efficiency of ROS production by glycerophosphate dehydrogenase in mammalian mitochondria. Archives of Biochemistry and Biophysics, 2009, 481, 30-36.	3.0	71
20	The Expression of Subunit c Correlates with and Thus May Limit the Biosynthesis of the Mitochondrial F0F1-ATPase in Brown Adipose Tissue. Journal of Biological Chemistry, 1995, 270, 7689-7694.	3.4	69
21	Glycerol-3-Phosphate Shuttle and Its Function in Intermediary Metabolism of Hamster Brown-Adipose Tissue. FEBS Journal, 1975, 54, 11-18.	0.2	68
22	Sustained deficiency of mitochondrial complex I activity during long periods of survival after seizures induced in immature rats by homocysteic acid. Neurochemistry International, 2010, 56, 394-403.	3.8	68
23	Mitochondrial ATP synthase levels in brown adipose tissue are governed by the câ€Fo subunit P1 isoform. FASEB Journal, 2008, 22, 55-63.	0.5	64
24	Induction of muscle thermogenesis by high-fat diet in mice: association with obesity-resistance. American Journal of Physiology - Endocrinology and Metabolism, 2008, 295, E356-E367.	3.5	64
25	Uncoupling protein in embryonic brown adipose tissue — existence of nonthermogenic and thermogenic mitochondria. Biochimica Et Biophysica Acta - Bioenergetics, 1988, 935, 19-25.	1.0	62
26	Evaluation of basic mitochondrial functions using rat tissue homogenates. Mitochondrion, 2011, 11, 722-728.	3.4	61
27	Diminished synthesis of subunit a (ATP6) and altered function of ATP synthase and cytochrome c oxidase due to the mtDNA 2 bp microdeletion of TA at positions 9205 and 9206. Biochemical Journal, 2004, 383, 561-571.	3.7	59
28	High Number of High-Affinity Binding Sites for (-)-[3H]Dihydroalprenolol on Isolated Hamster Brown-Fat Cells. A Study of the beta-Adrenergic Receptors. FEBS Journal, 1979, 102, 203-210.	0.2	56
29	ROS generation and multiple forms of mammalian mitochondrial glycerol-3-phosphate dehydrogenase. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 98-111.	1.0	55
30	Acadian variant of Fanconi syndrome is caused by mitochondrial respiratory chain complex I deficiency due to a non-coding mutation in complex I assembly factor NDUFAF6. Human Molecular Genetics, 2016, 25, 4062-4079.	2.9	55
31	ROS production in brown adipose tissue mitochondria: The question of UCP1-dependence. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 2017-2030.	1.0	51
32	Effect of metformin therapy on cardiac function and survival in a volume-overload model of heart failure in rats. Clinical Science, 2011, 121, 29-41.	4.3	50
33	Mitochondrial complex I inhibition in cerebral cortex of immature rats following homocysteic acid-induced seizures. Experimental Neurology, 2007, 204, 597-609.	4.1	48
34	Mitochondrially Targeted α-Tocopheryl Succinate Is Antiangiogenic: Potential Benefit Against Tumor Angiogenesis but Caution Against Wound Healing. Antioxidants and Redox Signaling, 2011, 15, 2923-2935.	5.4	48
35	Cytochrome c Oxidase Subunit 4 Isoform Exchange Results in Modulation of Oxygen Affinity. Cells, 2020, 9, 443.	4.1	48
36	ATP synthase subunit c expression: physiological regulation of the P1 and P2 genes. Biochemical Journal, 1997, 323, 379-385.	3.7	46

#	Article	IF	CITATIONS
37	Tissue Metabolism and Plasma Levels of Thyroid Hormones in Critically III Very Premature Infants. Pediatric Research, 1997, 42, 812-818.	2.3	46
38	Functional alteration of cytochrome c oxidase by SURF1 mutations in Leigh syndrome. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2003, 1639, 53-63.	3.8	45
39	Wars2 is a determinant of angiogenesis. Nature Communications, 2016, 7, 12061.	12.8	45
40	Evaluation of mitochondrial membrane potential using a computerized device with a tetraphenylphosphonium-selective electrode. Analytical Biochemistry, 2006, 353, 37-42.	2.4	44
41	Defective kinetics of cytochrome c oxidase and alteration of mitochondrial membrane potential in fibroblasts and cytoplasmic hybrid cells with the mutation for myoclonus epilepsy with ragged-red fibres (â€~MERRF') at position 8344Ânt. Biochemical Journal, 1999, 342, 537-544.	3.7	43
42	Identification of nucleus-encoded FOI protein of bovine heart mitochondrial H+-ATPase as a functional part of the FOmoiety. FEBS Letters, 1988, 237, 9-14.	2.8	42
43	Knockdown of F1 epsilon subunit decreases mitochondrial content of ATP synthase and leads to accumulation of subunit c. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 1124-1129.	1.0	42
44	Topological and functional characterization of the FOI subunit of the membrane moiety of the mitochondrial H+-ATP synthase. FEBS Journal, 1988, 173, 1-8.	0.2	41
45	Bi-allelic Mutations in NDUFA6 Establish Its Role in Early-Onset Isolated Mitochondrial Complex I Deficiency. American Journal of Human Genetics, 2018, 103, 592-601.	6.2	41
46	Decreased affinity for oxygen of cytochrome-coxidase in Leigh syndrome caused by SURF1 mutations. American Journal of Physiology - Cell Physiology, 2004, 287, C1384-C1388.	4.6	39
47	Sex difference in the sensitivity of cardiac mitochondrial permeability transition pore to calcium load. Molecular and Cellular Biochemistry, 2016, 412, 147-154.	3.1	39
48	TMEM70 protein â€" A novel ancillary factor of mammalian ATP synthase. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 529-532.	1.0	37
49	Molecular mechanism of uncoupling in brown adipose tissue mitochondria. FEBS Letters, 1984, 170, 186-190.	2.8	35
50	Mitochondrial diseases and ATPase defects of nuclear origin. Biochimica Et Biophysica Acta - Bioenergetics, 2004, 1658, 115-121.	1.0	35
51	Respiratory chain components involved in the glycerophosphate dehydrogenase-dependent ROS production by brown adipose tissue mitochondria. Biochimica Et Biophysica Acta - Bioenergetics, 2007, 1767, 989-997.	1.0	35
52	The clinical, biochemical and genetic features associated with <i>RMND1</i> related mitochondrial disease. Journal of Medical Genetics, 2016, 53, 768-775.	3.2	35
53	Reduced Respiratory Control with ADP and Changed Pattern of Respiratory Chain Enzymes as a Result of Selective Deficiency of the Mitochondrial ATP Synthase. Pediatric Research, 2004, 55, 988-994.	2.3	34
54	Inhibition of glycerophosphate-dependent H2O2 generation in brown fat mitochondria by idebenone. Biochemical and Biophysical Research Communications, 2006, 339, 362-366.	2.1	34

#	Article	IF	CITATIONS
55	Two components in pathogenic mechanism of mitochondrial ATPase deficiency: Energy deprivation and ROS production. Experimental Gerontology, 2006, 41, 683-687.	2.8	34
56	Inhibition of cytochrome c oxidase subunit 4 precursor processing by the hypoxia mimic cobalt chloride. Biochemical and Biophysical Research Communications, 2006, 344, 1086-1093.	2.1	33
57	Purification and properties of mitochondrial adenosine triphosphatase of hamster brown adipose tissue. Biochimica Et Biophysica Acta - Biomembranes, 1977, 484, 127-139.	2.6	32
58	Compensatory upregulation of respiratory chain complexes III and IV in isolated deficiency of ATP synthase due to TMEM70 mutation. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 1037-1043.	1.0	32
59	IL-1 and LPS but not IL-6 inhibit differentiation and downregulate PPAR gamma in brown adipocytes. Cytokine, 2004, 26, 9-15.	3.2	31
60	Assembly factors of F1Fo-ATP synthase across genomes. Proteins: Structure, Function and Bioinformatics, 2005, 59, 393-402.	2.6	31
61	Adaptation of respiratory chain biogenesis to cytochrome c oxidase deficiency caused by SURF1 gene mutations. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2012, 1822, 1114-1124.	3.8	30
62	Alkaline pH, membrane potential, and magnesium cations are negative modulators of purine nucleotide inhibition of H+ and Clâ'' transport through the uncoupling protein of brown adipose tissue mitochondria. Journal of Bioenergetics and Biomembranes, 1988, 20, 603-622.	2.3	27
63	Mitochondrial ATP synthasome: Expression and structural interaction of its components. Biochemical and Biophysical Research Communications, 2015, 464, 787-793.	2.1	27
64	Differentiation of dicyclohexylcarbodiimide reactive sites of the ATPase complex in bovine heart mitochondria. Biochimica Et Biophysica Acta - Bioenergetics, 1981, 634, 331-339.	1.0	26
65	Postnatal appearance of uncoupling protein and formation of thermogenic mitochondria in hamster brown adipose tissue. Biochimica Et Biophysica Acta - Bioenergetics, 1990, 1015, 441-449.	1.0	26
66	Expression and processing of the TMEM70 protein. Biochimica Et Biophysica Acta - Bioenergetics, 2011, 1807, 144-149.	1.0	26
67	Control of uncoupling protein in brown-fat mitochondria by purine nucleotides. Chemical modification by diazobenzenesulfonate. FEBS Journal, 1987, 164, 687-694.	0.2	25
68	MULTIFACTORIAL INDUCTION OF GENE EXPRESSION AND NUCLEAR LOCALIZATION OF MOUSE INTERLEUKIN 1α. Cytokine, 1996, 8, 460-467.	3.2	25
69	Nonsynonymous variants in mt-Nd2, mt-Nd4, and mt-Nd5 are linked to effects on oxidative phosphorylation and insulin sensitivity in rat conplastic strains. Physiological Genomics, 2012, 44, 487-494.	2.3	25
70	Differentiation of brown adipose tissue and biogenesis of thermogenic mitochondria in situ and in cell culture. Biochimica Et Biophysica Acta - Bioenergetics, 1990, 1018, 243-247.	1.0	24
71	Desminopathy: Novel Desmin Variants, a New Cardiac Phenotype, and Further Evidence for Secondary Mitochondrial Dysfunction. Journal of Clinical Medicine, 2020, 9, 937.	2.4	24
72	Mitochondrial targets of metforminâ€"Are they physiologically relevant?. BioFactors, 2019, 45, 703-711.	5.4	23

#	Article	IF	Citations
73	Defective kinetics of cytochrome c oxidase and alteration of mitochondrial membrane potential in fibroblasts and cytoplasmic hybrid cells with the mutation for myoclonus epilepsy with ragged-red fibres (â€~MERRF') at position 8344Ânt. Biochemical Journal, 1999, 342, 537.	3.7	23
74	Temperature-induced states of isolated F1-ATPase affect catalysis, enzyme conformation and high-affinity nucleotide binding sites. Biochimica Et Biophysica Acta - Bioenergetics, 1989, 976, 77-84.	1.0	22
75	Low content of mitochondrial ATPase in brown adipose tissue is the result of post-transcriptional regulation. FEBS Letters, 1991, 294, 191-194.	2.8	22
76	A Novel Mutation in SURF1 Causes Skipping of Exon 8 in a Patient with Cytochrome c Oxidase-Deficient Leigh Syndrome and Hypertrichosis. Molecular Genetics and Metabolism, 2001, 73, 340-343.	1.1	22
77	Development of a human mitochondrial oligonucleotide microarray (h-MitoArray) and gene expression analysis of fibroblast cell lines from 13 patients with isolated F1Fo ATP synthase deficiency. BMC Genomics, 2008, 9, 38.	2.8	22
78	Evaluation of the specific dicyclohexylcarbodiimide binding sites in brown adipose tissue mitochondria. Biochimica Et Biophysica Acta - Bioenergetics, 1981, 634, 321-330.	1.0	21
79	Mitochondrial F0F1H+-ATP synthase Characterization of F0components involved in H+translocation. FEBS Letters, 1989, 250, 60-66.	2.8	21
80	Low translational efficiency of the F1-ATPase \hat{l}^2 -subunit mRNA largely accounts for the decreased ATPase content in brown adipose tissue mitochondria. FEBS Letters, 1992, 313, 23-26.	2.8	21
81	Mitochondrial Energy Metabolism in Very Premature Neonates. Neonatology, 2002, 81, 229-235.	2.0	21
82	Tissue- and species-specific differences in cytochrome c oxidase assembly induced by SURF1 defects. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2016, 1862, 705-715.	3.8	21
83	Knockout of Tmem70 alters biogenesis of ATP synthase and leads to embryonal lethality in mice. Human Molecular Genetics, 2016, 25, ddw295.	2.9	21
84	Loss of COX4I1 Leads to Combined Respiratory Chain Deficiency and Impaired Mitochondrial Protein Synthesis. Cells, 2021, 10, 369.	4.1	21
85	Cyanide inhibition and pyruvate-induced recovery of cytochrome c oxidase. Journal of Bioenergetics and Biomembranes, 2010, 42, 395-403.	2.3	20
86	CD36 overexpression predisposes to arrhythmias but reduces infarct size in spontaneously hypertensive rats: gene expression profile analysis. Physiological Genomics, 2012, 44, 173-182.	2.3	19
87	Noninvasive diagnostics of mitochondrial disorders in isolated lymphocytes with high resolution respirometry. BBA Clinical, 2014, 2, 62-71.	4.1	19
88	Effects of mtDNA in SHR-mt ^{F344} versus SHR conplastic strains on reduced OXPHOS enzyme levels, insulin resistance, cardiac hypertrophy, and systolic dysfunction. Physiological Genomics, 2014, 46, 671-678.	2.3	18
89	TMEM70 facilitates biogenesis of mammalian ATP synthase by promoting subunit c incorporation into the rotor structure of the enzyme. FASEB Journal, 2019, 33, 14103-14117.	0.5	18
90	Role of Mitochondrial Glycerol-3-Phosphate Dehydrogenase in Metabolic Adaptations of Prostate Cancer. Cells, 2020, 9, 1764.	4.1	18

#	Article	IF	Citations
91	Antioxidant enzymes in cerebral cortex of immature rats following experimentallyâ€induced seizures: upregulation of mitochondrial MnSOD (SOD2). International Journal of Developmental Neuroscience, 2013, 31, 123-130.	1.6	17
92	The mammalian homologue of yeast Afg1 ATPase (lactation elevated 1) mediates degradation of nuclear-encoded complex IV subunits. Biochemical Journal, 2016, 473, 797-804.	3.7	17
93	Pleiotropic Effects of Biguanides on Mitochondrial Reactive Oxygen Species Production. Oxidative Medicine and Cellular Longevity, 2017, 2017, 1-11.	4.0	17
94	Purification and properties of adenosine triphosphatase solubilized from beef heart mitochondria by chloroform. Molecular and Cellular Biochemistry, 1977, 18, 77-80.	3.1	16
95	Role of the carboxyl-terminal region of the PVP protein (F0 I subunit) in the H+ conduction of F0 F1 H+-ATP synthase of bovine heart mitochondria. FEBS Letters, 1989, 249, 62-66.	2.8	16
96	Mitochondrial Membrane Potential and ATP Production in Primary Disorders of ATP Synthase. Toxicology Mechanisms and Methods, 2004, 14, 7-11.	2.7	16
97	Segregation pattern and biochemical effect of the G3460A mtDNA mutation in 27 members of LHON family. Journal of the Neurological Sciences, 2004, 223, 149-155.	0.6	16
98	Alteration of structure and function of ATP synthase and cytochrome c oxidase by lack of Fo-a and Cox3 subunits caused by mitochondrial DNA 9205delTA mutation. Biochemical Journal, 2015, 466, 601-611.	3.7	16
99	Role of the mitochondrial ATP synthase central stalk subunits \hat{I}^3 and \hat{I}' in the activity and assembly of the mammalian enzyme. Biochimica Et Biophysica Acta - Bioenergetics, 2018, 1859, 374-381.	1.0	16
100	Mitochondrial membrane assembly of TMEM70 protein. Mitochondrion, 2014, 15, 1-9.	3.4	15
101	LACE1 interacts with p53 and mediates its mitochondrial translocation and apoptosis. Oncotarget, 2016, 7, 47687-47698.	1.8	13
102	Complex approach to prenatal diagnosis of cytochromec oxidase deficiencies., 1999, 19, 552-558.		12
103	Biochemical thresholds for pathological presentation of ATP synthase deficiencies. Biochemical and Biophysical Research Communications, 2020, 521, 1036-1041.	2.1	12
104	High Molecular Weight Forms of Mammalian Respiratory Chain Complex II. PLoS ONE, 2013, 8, e71869.	2.5	12
105	A novel principle for conferring selectivity to poly(A)-binding proteins: interdependence of two ATP synthase \hat{I}^2 -subunit mRNA-binding proteins. Biochemical Journal, 2000, 346, 33-39.	3.7	9
106	Succinimidyl oleate, established inhibitor of CD36/FAT translocase inhibits complex III of mitochondrial respiratory chain. Biochemical and Biophysical Research Communications, 2010, 391, 1348-1351.	2.1	9
107	Differential expression of ATPAF1 and ATPAF2 genes encoding F1-ATP as e assembly proteins in mouse tissues. FEBS Letters, 2003, 551, 42-46.	2.8	8
108	Specific properties of brown adipose tissue mitochondrial membrane. Comparative Biochemistry and Physiology Part B: Comparative Biochemistry, 1978, 60, 209-214.	0.2	7

#	Article	IF	Citations
109	A novel principle for conferring selectivity to poly(A)-binding proteins: interdependence of two ATP synthase \hat{l}^2 -subunit mRNA-binding proteins. Biochemical Journal, 2000, 346, 33.	3.7	6
110	Characterization of dicyclohexylcarbodiimide binding sites in beef-heart mitochondria. Biochemical and Biophysical Research Communications, 1979, 89, 981-987.	2.1	5
111	A sequence predicted to form a stem–loop is proposed to be required for formation of an RNA–protein complex involving the 3'UTR of β-subunit F0F1-ATPase mRNA. Biochimica Et Biophysica Acta - Bioenergetics, 2008, 1777, 747-757.	1.0	5
112	Electrophoretic behavior of the H+-ATPase proteolipid from bovine heart mitochondria. Journal of Bioenergetics and Biomembranes, 1986, 18, 507-519.	2.3	4
113	Autocrine effects of transgenic resistin reduce palmitate and glucose oxidation in brown adipose tissue. Physiological Genomics, 2016, 48, 420-427.	2.3	4
114	Synthesis of 8-azidoadenosine 5'-phosphate. Collection of Czechoslovak Chemical Communications, 1979, 44, 976-980.	1.0	4
115	Control of Synthesis of Uncoupling Protein and ATPase in Animal and Human Brown Adipose Tissue. , 1992, , 447-458.		2
116	Genetic Complementation of ATP Synthase Deficiency Due to Dysfunction of TMEM70 Assembly Factor in Rat. Biomedicines, 2022, 10, 276.	3.2	2
117	Alprenolol binding to isolated brown adipocytes: An attempt to identify the \hat{l}^2 -adrenergic receptor. Journal of Thermal Biology, 1978, 3, 103.	2.5	1
118	Genetic disorders of mitochondrial ATP synthase. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 47-48.	1.0	1
119	Data on cytochrome c oxidase assembly in mice and human fibroblasts or tissues induced by SURF1 defect. Data in Brief, 2016, 7, 1004-1009.	1.0	1
120	S5/1 Control of the synthesis of uncoupling and coupling proteins in brown adipose tissue. Biochimica Et Biophysica Acta - Bioenergetics, 2008, 1777, S40.	1.0	0
121	Effect of 9205delTA mutation load in the mt-ATP6 gene on mitochondrial ATP synthase structure, function. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 50-51.	1.0	0
122	Cyanide inhibition and pyruvate-induced recovery of cytochrome c oxidase. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 99.	1.0	0
123	Thermoregulation in Athymic and Euthymic Hairless Mice. Contributions To Oncology / Beitrage Zur Onkologie, 1996, , 1-11.	0.1	0