Josef Houstek

List of Publications by Year
in descending order

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

#	Article	IF	Citations
1	Genetic Complementation of ATP Synthase Deficiency Due to Dysfunction of TMEM70 Assembly Factor in Rat. Biomedicines, 2022, 10, 276.	3.2	2
2	Loss of COX4I1 Leads to Combined Respiratory Chain Deficiency and Impaired Mitochondrial Protein Synthesis. Cells, 2021, 10, 369.	4.1	21
3	Biochemical thresholds for pathological presentation of ATP synthase deficiencies. Biochemical and Biophysical Research Communications, 2020, 521, 1036-1041.	2.1	12
4	Role of Mitochondrial Glycerol-3-Phosphate Dehydrogenase in Metabolic Adaptations of Prostate Cancer. Cells, 2020, 9, 1764.	4.1	18
5	Cytochrome c Oxidase Subunit 4 Isoform Exchange Results in Modulation of Oxygen Affinity. Cells, 2020, 9, 443.	4.1	48
6	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
7	Mitochondrial targets of metforminâ€"Are they physiologically relevant?. BioFactors, 2019, 45, 703-711.	5.4	23
8	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
9	Role of the mitochondrial ATP synthase central stalk subunits Î³ and Î´ in the activity and assembly of the mammalian enzyme. Biochimica Et Biophysica Acta - Bioenergetics, 2018, 1859, 374-381.	1.0	16
10	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
11	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
12	Pleiotropic Effects of Biguanides on Mitochondrial Reactive Oxygen Species Production. Oxidative Medicine and Cellular Longevity, 2017, 2017, 1-11.	4.0	17
13	The clinical, biochemical and genetic features associated withRMND1-related mitochondrial disease. Journal of Medical Genetics, 2016, 53, 768-775.	3.2	35
14	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
15	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
16	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
17	Knockout of Tmem70 alters biogenesis of ATP synthase and leads to embryonal lethality in mice. Human Molecular Genetics, 2016, 25, ddw295.	2.9	21
18	Wars2 is a determinant of angiogenesis. Nature Communications, 2016, 7, 12061.	12.8	45

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19	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
20	Autocrine effects of transgenic resistin reduce palmitate and glucose oxidation in brown adipose tissue. Physiological Genomics, 2016, 48, 420-427.	2.3	4
21	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
22	LACE1 interacts with p53 and mediates its mitochondrial translocation and apoptosis. Oncotarget, 2016, 7, 47687-47698.	1.8	13
23	Mitochondrial ATP synthasome: Expression and structural interaction of its components. Biochemical and Biophysical Research Communications, 2015, 464, 787-793.	2.1	27
24	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
25	Noninvasive diagnostics of mitochondrial disorders in isolated lymphocytes with high resolution respirometry. BBA Clinical, 2014, 2, 62-71.	4.1	19
26	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
27	ROS generation and multiple forms of mammalian mitochondrial glycerol-3-phosphate dehydrogenase. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 98-111.	1.0	55
28	ROS production in brown adipose tissue mitochondria: The question of UCP1-dependence. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 2017-2030.	1.0	51
29	Mitochondrial membrane assembly of TMEM70 protein. Mitochondrion, 2014, 15, 1-9.	3.4	15
30	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
31	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
32	High Molecular Weight Forms of Mammalian Respiratory Chain Complex II. PLoS ONE, 2013, 8, e71869.	2.5	12
33	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
34	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
35	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
36	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

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37	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
38	Evaluation of basic mitochondrial functions using rat tissue homogenates. Mitochondrion, 2011, 11, 722-728.	3.4	61
39	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
40	Expression and processing of the TMEM70 protein. Biochimica Et Biophysica Acta - Bioenergetics, 2011, 1807, 144-149.	1.0	26
41	Mitochondrially Targeted Î±-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
42	Cyanide inhibition and pyruvate-induced recovery of cytochrome c oxidase. Journal of Bioenergetics and Biomembranes, 2010, 42, 395-403.	2.3	20
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	Genetic disorders of mitochondrial ATP synthase. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 47-48.	1.0	1
45	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
46	Cyanide inhibition and pyruvate-induced recovery of cytochrome c oxidase. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 99.	1.0	0
47	Mitochondrial encephalocardio-myopathy with early neonatal onset due to TMEM70 mutation. Archives of Disease in Childhood, 2010, 95, 296-301.	1.9	72
48	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
49	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
50	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
51	TMEM70 protein â€" A novel ancillary factor of mammalian ATP synthase. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 529-532.	1.0	37
52	High efficiency of ROS production by glycerophosphate dehydrogenase in mammalian mitochondria. Archives of Biochemistry and Biophysics, 2009, 481, 30-36.	3.0	71
53	TMEM70 mutations cause isolated ATP synthase deficiency and neonatal mitochondrial encephalocardiomyopathy. Nature Genetics, 2008, 40, 1288-1290.	21.4	183
54	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

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55	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
56	A sequence predicted to form a stemâ€“loop is proposed to be required for formation of an RNAâ€“protein complex involving the 3'UTR of Î²-subunit F0F1-ATPase mRNA. Biochimica Et Biophysica Acta - Bioenergetics, 2008, 1777, 747-757.	1.0	5
57	HIF and reactive oxygen species regulate oxidative phosphorylation in cancer. Carcinogenesis, 2008, 29, 1528-1537.	2.8	84
58	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
59	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
60	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
61	Mitochondrial complex I inhibition in cerebral cortex of immature rats following homocysteic acid-induced seizures. Experimental Neurology, 2007, 204, 597-609.	4.1	48
62	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
63	Mitochondrial diseases and genetic defects of ATP synthase. Biochimica Et Biophysica Acta - Bioenergetics, 2006, 1757, 1400-1405.	1.0	116
64	Inhibition of glycerophosphate-dependent H2O2 generation in brown fat mitochondria by idebenone. Biochemical and Biophysical Research Communications, 2006, 339, 362-366.	2.1	34
65	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
66	Evaluation of mitochondrial membrane potential using a computerized device with a tetraphenylphosphonium-selective electrode. Analytical Biochemistry, 2006, 353, 37-42.	2.4	44
67	Two components in pathogenic mechanism of mitochondrial ATPase deficiency: Energy deprivation and ROS production. Experimental Gerontology, 2006, 41, 683-687.	2.8	34
68	Retrospective, Multicentric Study of 180 Children with Cytochrome c Oxidase Deficiency. Pediatric Research, 2006, 59, 21-26.	2.3	142
69	Tissue-specific cytochrome c oxidase assembly defects due to mutations in SCO2 and SURF1. Biochemical Journal, 2005, 392, 625-632.	3.7	90
70	Assembly factors of F1Fo-ATP synthase across genomes. Proteins: Structure, Function and Bioinformatics, 2005, 59, 393-402.	2.6	31
71	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
72	Decreased affinity for oxygen of cytochrome-coxidase in Leigh syndrome caused bySURF1mutations. American Journal of Physiology - Cell Physiology, 2004, 287, C1384-C1388.	4.6	39

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73	Mitochondrial Membrane Potential and ATP Production in Primary Disorders of ATP Synthase. Toxicology Mechanisms and Methods, 2004, 14, 7-11.	2.7	16
74	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
75	Mitochondrial diseases and ATPase defects of nuclear origin. Biochimica Et Biophysica Acta - Bioenergetics, 2004, 1658, 115-121.	1.0	35
76	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
77	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
78	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
79	Differential expression ofATPAF1andATPAF2genes encoding F1-ATPase assembly proteins in mouse tissues. FEBS Letters, 2003, 551, 42-46.	2.8	8
80	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
81	Mitochondrial Energy Metabolism in Very Premature Neonates. Neonatology, 2002, 81, 229-235.	2.0	21
82	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
83	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
84	A novel principle for conferring selectivity to poly(A)-binding proteins: interdependence of two ATP synthase Î²-subunit mRNA-binding proteins. Biochemical Journal, 2000, 346, 33-39.	3.7	9
85	A novel principle for conferring selectivity to poly(A)-binding proteins: interdependence of two ATP synthase Î²-subunit mRNA-binding proteins. Biochemical Journal, 2000, 346, 33.	3.7	6
86	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
87	Complex approach to prenatal diagnosis of cytochromec oxidase deficiencies. , 1999, 19, 552-558.		12
88	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€˜MERRFâ€™) at position 8344Ânt. Biochemical Journal, 1999, 342, 537-544.	3.7	43
89	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€˜MERRFâ€™) at position 8344Ânt. Biochemical Journal, 1999, 342, 537.	3.7	23
90	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

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91	ATP synthase subunit c expression: physiological regulation of the P1 and P2 genes. Biochemical Journal, 1997, 323, 379-385.	3.7	46
92	Î²-Adrenergic stimulation of interleukin-1Î± and interleukin-6 expression in mouse brown adipocytes. FEBS Letters, 1997, 411, 83-86.	2.8	91
93	Tissue Metabolism and Plasma Levels of Thyroid Hormones in Critically Ill Very Premature Infants. Pediatric Research, 1997, 42, 812-818.	2.3	46
94	MULTIFACTORIAL INDUCTION OF GENE EXPRESSION AND NUCLEAR LOCALIZATION OF MOUSE INTERLEUKIN 1Î±. Cytokine, 1996, 8, 460-467.	3.2	25
95	Thermoregulation in Athymic and Euthymic Hairless Mice. Contributions To Oncology / Beitrage Zur Onkologie, 1996, , 1-11.	0.1	0
96	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
97	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
98	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
99	Low translational efficiency of the F1-ATPase Î²-subunit mRNA largely accounts for the decreased ATPase content in brown adipose tissue mitochondria. FEBS Letters, 1992, 313, 23-26.	2.8	21
100	Control of Synthesis of Uncoupling Protein and ATPase in Animal and Human Brown Adipose Tissue. , 1992, , 447-458.		2
101	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
102	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
103	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
104	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
105	Mitochondrial F0F1H+-ATP synthase Characterization of F0components involved in H+translocation. FEBS Letters, 1989, 250, 60-66.	2.8	21
106	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
107	Topological and functional characterization of the F0I subunit of the membrane moiety of the mitochondrial H+-ATP synthase. FEBS Journal, 1988, 173, 1-8.	0.2	41
108	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

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109	Uncoupling protein in embryonic brown adipose tissue â€" existence of nonthermogenic and thermogenic mitochondria. Biochimica Et Biophysica Acta - Bioenergetics, 1988, 935, 19-25.	1.0	62
110	Identification of nucleus-encoded F0I protein of bovine heart mitochondrial H+-ATPase as a functional part of the F0moiety. FEBS Letters, 1988, 237, 9-14.	2.8	42
111	Control of uncoupling protein in brown-fat mitochondria by purine nucleotides. Chemical modification by diazobenzenesulfonate. FEBS Journal, 1987, 164, 687-694.	0.2	25
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	Molecular mechanism of uncoupling in brown adipose tissue mitochondria. FEBS Letters, 1984, 170, 186-190.	2.8	35
114	Evaluation of the specific dicyclohexylcarbodiimide binding sites in brown adipose tissue mitochondria. Biochimica Et Biophysica Acta - Bioenergetics, 1981, 634, 321-330.	1.0	21
115	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
116	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
117	Characterization of dicyclohexylcarbodiimide binding sites in beef-heart mitochondria. Biochemical and Biophysical Research Communications, 1979, 89, 981-987.	2.1	5
118	Synthesis of 8-azidoadenosine 5'-phosphate. Collection of Czechoslovak Chemical Communications, 1979, 44, 976-980.	1.0	4
119	Alprenolol binding to isolated brown adipocytes: An attempt to identify the Î²-adrenergic receptor. Journal of Thermal Biology, 1978, 3, 103.	2.5	1
120	Specific properties of brown adipose tissue mitochondrial membrane. Comparative Biochemistry and Physiology Part B: Comparative Biochemistry, 1978, 60, 209-214.	0.2	7
121	Purification and properties of mitochondrial adenosine triphosphatase of hamster brown adipose tissue. Biochimica Et Biophysica Acta - Biomembranes, 1977, 484, 127-139.	2.6	32
122	Purification and properties of adenosine triphosphatase solubilized from beef heart mitochondria by chloroform. Molecular and Cellular Biochemistry, 1977, 18, 77-80.	3.1	16
123	Glycerol-3-Phosphate Shuttle and Its Function in Intermediary Metabolism of Hamster Brown-Adipose Tissue. FEBS Journal, 1975, 54, 11-18.	0.2	68