

Anatoly A Starkov

List of Publications by Year in descending order

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119
papers

11,684
citations

38660

50
h-index

27345

106
g-index

123
all docs

123
docs citations

123
times ranked

14600
citing authors

#	ARTICLE	IF	CITATIONS
1	Mitochondrial Dysfunction and Permeability Transition in Neonatal Brain and Lung Injuries. <i>Cells</i> , 2021, 10, 569.	1.8	12
2	Mildronate protects heart mtDNA from oxidative stress toxicity induced by exhaustive physical exercise. <i>Archives of Biochemistry and Biophysics</i> , 2021, 705, 108892.	1.4	3
3	HIF1 α stabilization in hypoxia is not oxidant-initiated. <i>ELife</i> , 2021, 10, .	2.8	13
4	Lung cancer increases H ₂ O ₂ concentration in the exhaled breath condensate, extent of mtDNA damage, and mtDNA copy number in buccal mucosa. <i>Heliyon</i> , 2020, 6, e04303.	1.4	7
5	p62-Nrf2-p62 Mitophagy Regulatory Loop as a Target for Preventive Therapy of Neurodegenerative Diseases. <i>Brain Sciences</i> , 2020, 10, 847.	1.1	27
6	Method for detection of mtDNA damages for evaluating of pesticides toxicity for bumblebees (<i>Bombus</i>) Tj ETQq0 0,0 rgBT /Overlock 10	1.6	12
7	Crosstalk between the mTOR and Nrf2/ARE signaling pathways as a target in the improvement of long-term potentiation. <i>Experimental Neurology</i> , 2020, 328, 113285.	2.0	45
8	Metabolic ROS Signaling: To Immunity and Beyond. <i>Biochemistry (Moscow)</i> , 2020, 85, 1650-1667.	0.7	13
9	INTEGRAL ANALYSIS OF GENOMIC AND TRANSCRIPTOMIC CHANGES IN CLEAR CELL RENAL CELL CARCINOMA IN THE RUSSIAN POPULATION. <i>Siberian Journal of Oncology</i> , 2020, 18, 39-49.	0.1	0
10	Unique features of flight muscles mitochondria of honey bees (<i>Apis mellifera</i> L.). <i>Archives of Insect Biochemistry and Physiology</i> , 2019, 102, e21595.	0.6	10
11	Autophagy Induction by Bexarotene Promotes Mitophagy in Presenilin 1 Familial Alzheimer's Disease iPSC-Derived Neural Stem Cells. <i>Molecular Neurobiology</i> , 2019, 56, 8220-8236.	1.9	52
12	Redox-Dependent Loss of Flavin by Mitochondrial Complex I in Brain Ischemia/Reperfusion Injury. <i>Antioxidants and Redox Signaling</i> , 2019, 31, 608-622.	2.5	48
13	Methylene blue does not bypass Complex III antimycin block in mouse brain mitochondria. <i>FEBS Letters</i> , 2019, 593, 499-503.	1.3	22
14	β -Guanidinopropionic Acid Stimulates Brain Mitochondria Biogenesis and Alters Cognitive Behavior in Nondiseased Mid-Age Mice. <i>Journal of Experimental Neuroscience</i> , 2018, 12, 117906951876652.	2.3	10
15	Estrogen receptor beta modulates permeability transition in brain mitochondria. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2018, 1859, 423-433.	0.5	37
16	Krebs cycle metabolites and preferential succinate oxidation following neonatal hypoxic-ischemic brain injury in mice. <i>Pediatric Research</i> , 2018, 83, 491-497.	1.1	31
17	Prohibitin is a positive modulator of mitochondrial function in PC12 cells under oxidative stress. <i>Journal of Neurochemistry</i> , 2018, 146, 235-250.	2.1	31
18	Benfotiamine treatment activates the Nrf2/ARE pathway and is neuroprotective in a transgenic mouse model of tauopathy. <i>Human Molecular Genetics</i> , 2018, 27, 2874-2892.	1.4	58

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19	STUDY OF THE MICROBIOLOGICAL COMPOSITION OF DAIRY PRODUCTS AND MAYONNAISE USING DNA BARCODING AND METABARCODING. <i>Foods and Raw Materials</i> , 2018, 6, 144-153.	0.8	3
20	Divalent cation chelators citrate and EDTA unmask an intrinsic uncoupling pathway in isolated mitochondria. <i>Journal of Bioenergetics and Biomembranes</i> , 2017, 49, 3-11.	1.0	6
21	Evaluation of the toxicity of fungicides to flight muscle mitochondria of bumblebee (<i>Bombus</i>) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.6	30
22	Perfluoroalkyl acids-induced liver steatosis: Effects on genes controlling lipid homeostasis. <i>Toxicology</i> , 2017, 378, 37-52.	2.0	163
23	Simplified qPCR method for detecting excessive mtDNA damage induced by exogenous factors. <i>Toxicology</i> , 2017, 382, 67-74.	2.0	35
24	Mutant TDP-43 does not impair mitochondrial bioenergetics in vitro and in vivo. <i>Molecular Neurodegeneration</i> , 2017, 12, 37.	4.4	37
25	Mild metabolic perturbations alter succinylation of mitochondrial proteins. <i>Journal of Neuroscience Research</i> , 2017, 95, 2244-2252.	1.3	32
26	Reverse electron transfer results in a loss of flavin from mitochondrial complex I: Potential mechanism for brain ischemia reperfusion injury. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2017, 37, 3649-3658.	2.4	48
27	Distinct intracellular sAC-cAMP domains regulate ER calcium signaling and OXPHOS function. <i>Journal of Cell Science</i> , 2017, 130, 3713-3727.	1.2	28
28	Methylene blue improves sensorimotor phenotype and decreases anxiety in parallel with activating brain mitochondria biogenesis in mid-age mice. <i>Neuroscience Research</i> , 2016, 113, 19-27.	1.0	21
29	Discovery of LRE1 as a specific and allosteric inhibitor of soluble adenylyl cyclase. <i>Nature Chemical Biology</i> , 2016, 12, 838-844.	3.9	74
30	Alterations in voltage-sensing of the mitochondrial permeability transition pore in ANT1-deficient cells. <i>Scientific Reports</i> , 2016, 6, 26700.	1.6	33
31	Distinct Nrf2 Signaling Mechanisms of Fumaric Acid Esters and Their Role in Neuroprotection against 1-Methyl-4-Phenyl-1,2,3,6-Tetrahydropyridine-Induced Experimental Parkinson's-Like Disease. <i>Journal of Neuroscience</i> , 2016, 36, 6332-6351.	1.7	169
32	The effect of fenofibrate on expression of genes involved in fatty acids beta-oxidation and associated free-radical processes. <i>Biochemistry (Moscow) Supplement Series B: Biomedical Chemistry</i> , 2016, 10, 70-74.	0.2	1
33	Production of reactive oxygen species by flight muscle mitochondria of the bumblebee (<i>Bombus</i>) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.3	3
34	Antihelminthic Benzimidazoles Are Novel HIF Activators That Prevent Oxidative Neuronal Death via Binding to Tubulin. <i>Antioxidants and Redox Signaling</i> , 2015, 22, 121-134.	2.5	17
35	Mitochondrial ROS metabolism: 10 Years later. <i>Biochemistry (Moscow)</i> , 2015, 80, 517-531.	0.7	149
36	Mitochondrial diaphorases as NAD ⁺ donors to segments of the citric acid cycle that support substrate-level phosphorylation yielding ATP during respiratory inhibition. <i>FASEB Journal</i> , 2014, 28, 1682-1697.	0.2	33

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37	PGC α 1 \pm : overexpression exacerbates β 2 μ amyloid and tau deposition in a transgenic mouse model of Alzheimer's disease. <i>FASEB Journal</i> , 2014, 28, 1745-1755.	0.2	47
38	Scavenging of H ₂ O ₂ by mouse brain mitochondria. <i>Journal of Bioenergetics and Biomembranes</i> , 2014, 46, 471-477.	1.0	60
39	Methylene blue upregulates Nrf2/ARE genes and prevents tau-related neurotoxicity. <i>Human Molecular Genetics</i> , 2014, 23, 3716-3732.	1.4	115
40	Measurement of ADP \leftrightarrow ATP Exchange in Relation to Mitochondrial Transmembrane Potential and Oxygen Consumption. <i>Methods in Enzymology</i> , 2014, 542, 333-348.	0.4	26
41	Measuring Mitochondrial Reactive Oxygen Species (ROS) Production. , 2014, , 265-278.		3
42	Isolation and properties of flight muscle mitochondria of the bumblebee <i>Bombus terrestris</i> (L). <i>Biochemistry (Moscow)</i> , 2013, 78, 909-914.	0.7	13
43	An update on the role of mitochondrial α -ketoglutarate dehydrogenase in oxidative stress. <i>Molecular and Cellular Neurosciences</i> , 2013, 55, 13-16.	1.0	49
44	UCP2 overexpression worsens mitochondrial dysfunction and accelerates disease progression in a mouse model of amyotrophic lateral sclerosis. <i>Molecular and Cellular Neurosciences</i> , 2013, 57, 104-110.	1.0	34
45	The negative impact of α -ketoglutarate dehydrogenase complex deficiency on matrix substrate \rightarrow level phosphorylation. <i>FASEB Journal</i> , 2013, 27, 2392-2406.	0.2	57
46	Pioglitazone halts axonal degeneration in a mouse model of X-linked adrenoleukodystrophy. <i>Brain</i> , 2013, 136, 2432-2443.	3.7	69
47	Bezafibrate administration improves behavioral deficits and tau pathology in P301S mice. <i>Human Molecular Genetics</i> , 2012, 21, 5091-5105.	1.4	77
48	Hypoxic-Ischemic Injury in the Developing Brain: The Role of Reactive Oxygen Species Originating in Mitochondria. <i>Neurology Research International</i> , 2012, 2012, 1-10.	0.5	85
49	Behavioral Improvement after Chronic Administration of Coenzyme Q10 in P301S Transgenic Mice. <i>Journal of Alzheimer's Disease</i> , 2012, 28, 173-182.	1.2	47
50	The mitochondrial calcium regulator cyclophilin D is an essential component of oestrogen-mediated neuroprotection in amyotrophic lateral sclerosis. <i>Brain</i> , 2012, 135, 2865-2874.	3.7	62
51	Mitochondrial Permeability Transition Pore Component Cyclophilin D Distinguishes Nigrostriatal Dopaminergic Death Paradigms in the MPTP Mouse Model of Parkinson's Disease. <i>Antioxidants and Redox Signaling</i> , 2012, 16, 855-868.	2.5	49
52	The Oxygen Free Radicals Originating from Mitochondrial Complex I Contribute to Oxidative Brain Injury Following Hypoxia \rightarrow Ischemia in Neonatal Mice. <i>Journal of Neuroscience</i> , 2012, 32, 3235-3244.	1.7	145
53	Mild Hypoxemia during Initial Reperfusion Alleviates the Severity of Secondary Energy Failure and Protects Brain in Neonatal Mice with Hypoxic-Ischemic Injury. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2012, 32, 232-241.	2.4	17
54	α -Ketoglutarate Dehydrogenase Complex in Neurodegeneration. <i>Oxidative Stress and Disease</i> , 2012, , 433-454.	0.3	0

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55	Truncated Peroxisome Proliferator-Activated Receptor- β Coactivator 1 α Splice Variant Is Severely Altered in Huntington's Disease. <i>Neurodegenerative Diseases</i> , 2011, 8, 496-503.	0.8	32
56	Modulation of F ₀ F ₁ -ATP synthase activity by cyclophilin D regulates matrix adenine nucleotide levels. <i>FEBS Journal</i> , 2011, 278, 1112-1125.	2.2	45
57	Isolation and Functional Assessment of Mitochondria from Small Amounts of Mouse Brain Tissue. <i>Methods in Molecular Biology</i> , 2011, 793, 311-324.	0.4	42
58	Behavioral deficit, oxidative stress, and mitochondrial dysfunction precede tau pathology in P301S transgenic mice. <i>FASEB Journal</i> , 2011, 25, 4063-4072.	0.2	106
59	Oxidative Damage Compromises Energy Metabolism in the Axonal Degeneration Mouse Model of X-Adrenoleukodystrophy. <i>Antioxidants and Redox Signaling</i> , 2011, 15, 2095-2107.	2.5	78
60	<i>In Vivo</i> Pathogenic Role of Mutant SOD1 Localized in the Mitochondrial Intermembrane Space. <i>Journal of Neuroscience</i> , 2011, 31, 15826-15837.	1.7	60
61	Impaired Brain Creatine Kinase Activity in Huntington's Disease. <i>Neurodegenerative Diseases</i> , 2011, 8, 194-201.	0.8	43
62	Cyclophilin D decreases ATP hydrolysis and synthesis rates of the FOF1-ATP synthase, unaffected ADP-ATP flux rates in intact mitochondria. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2010, 1797, 138.	0.5	0
63	Inhibition of transglutaminase 2 mitigates transcriptional dysregulation in models of Huntington disease. <i>EMBO Molecular Medicine</i> , 2010, 2, 349-370.	3.3	124
64	A kinetic assay of mitochondrial ADP-ATP exchange rate in permeabilized cells. <i>Analytical Biochemistry</i> , 2010, 407, 52-57.	1.1	28
65	Methylenedioxymethamphetamine inhibits mitochondrial complex I activity in mice: a possible mechanism underlying neurotoxicity. <i>British Journal of Pharmacology</i> , 2010, 160, 233-245.	2.7	35
66	The molecular identity of the mitochondrial Ca ²⁺ sequestration system. <i>FEBS Journal</i> , 2010, 277, 3652-3663.	2.2	63
67	Complement Component C1q Mediates Mitochondria-Driven Oxidative Stress in Neonatal Hypoxic-Ischemic Brain Injury. <i>Journal of Neuroscience</i> , 2010, 30, 2077-2087.	1.7	84
68	Regulation of intermediary metabolism by the PKC δ signalosome in mitochondria. <i>FASEB Journal</i> , 2010, 24, 5033-5042.	0.2	44
69	Measurement of Mitochondrial ROS Production. <i>Methods in Molecular Biology</i> , 2010, 648, 245-255.	0.4	96
70	Promethazine protects against 3-nitropropionic acid-induced neurotoxicity. <i>Neurochemistry International</i> , 2010, 56, 208-212.	1.9	6
71	Cause and consequence: Mitochondrial dysfunction initiates and propagates neuronal dysfunction, neuronal death and behavioral abnormalities in age-associated neurodegenerative diseases. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2010, 1802, 122-134.	1.8	203
72	Calcium and Mitochondrial Reactive Oxygen Species Generation: How to Read the Facts. <i>Journal of Alzheimer's Disease</i> , 2010, 20, S413-S426.	1.2	209

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73	Nonalcoholic Fatty Liver Disease in Children (NAFLD): Does the Severity of Disease Correlate with Mitochondrial Respiratory Chain Enzyme Activity?.. , 2010, , P2-724-P2-724.		0
74	Impaired PGC-1 β function in muscle in Huntington's disease. Human Molecular Genetics, 2009, 18, 3048-3065.	1.4	215
75	Hypoxic Stress Exacerbates Hyperoxia-Induced Lung Injury in a Neonatal Mouse Model of Bronchopulmonary Dysplasia. Neonatology, 2009, 95, 299-305.	0.9	56
76	Mitochondrial Dysfunction Contributes to Alveolar Developmental Arrest in Hyperoxia-Exposed Mice. American Journal of Respiratory Cell and Molecular Biology, 2009, 40, 511-518.	1.4	94
77	Mice deficient in dihydrolipoyl succinyl transferase show increased vulnerability to mitochondrial toxins. Neurobiology of Disease, 2009, 36, 320-330.	2.1	24
78	Mitochondrial dysfunction in the limelight of Parkinson's disease pathogenesis. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2009, 1792, 651-663.	1.8	219
79	The Role of Mitochondria in Reactive Oxygen Species Metabolism and Signaling. Annals of the New York Academy of Sciences, 2008, 1147, 37-52.	1.8	653
80	Portal to Alzheimer's disease. Nature Medicine, 2008, 14, 1020-1021.	15.2	43
81	An Isolation Method for Assessment of Brain Mitochondria Function in Neonatal Mice with Hypoxic-Ischemic Brain Injury. Developmental Neuroscience, 2008, 30, 319-324.	1.0	24
82	The mitochondrial respiratory chain is a modulator of apoptosis. Journal of Cell Biology, 2007, 179, 1163-1177.	2.3	136
83	Measurements of the Antioxidant Enzyme Activities of Superoxide Dismutase, Catalase, and Glutathione Peroxidase. Methods in Cell Biology, 2007, 80, 379-393.	0.5	62
84	Neural mitochondrial Ca ²⁺ capacity impairment precedes the onset of motor symptoms in G93A Cu/Zn-superoxide dismutase mutant mice. Journal of Neurochemistry, 2006, 96, 1349-1361.	2.1	203
85	Protein-mediated energy-dissipating pathways in mitochondria. Chemico-Biological Interactions, 2006, 161, 57-68.	1.7	11
86	Protein-mediated energy-dissipating pathways in mitochondria. Chemico-Biological Interactions, 2006, 163, 133-144.	1.7	27
87	Mice lacking alpha-synuclein are resistant to mitochondrial toxins. Neurobiology of Disease, 2006, 21, 541-548.	2.1	185
88	Yin and Yang of Mitochondrial ROS. , 2006, , 1-60.		3
89	L-Arginine regulates neuronal nitric oxide synthase production of superoxide and hydrogen peroxide. Biochemical Pharmacology, 2005, 69, 971-979.	2.0	23
90	Diacylglycerols Activate Mitochondrial Cationic Channel(s) and Release Sequestered Ca ²⁺ . Journal of Bioenergetics and Biomembranes, 2005, 37, 237-247.	1.0	13

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91	Mitochondrial metabolism of reactive oxygen species. <i>Biochemistry (Moscow)</i> , 2005, 70, 200-214.	0.7	1,008
92	Promethazine protects against 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine neurotoxicity. <i>Neurobiology of Disease</i> , 2005, 20, 701-708.	2.1	21
93	Mitochondrial calcium and oxidative stress as mediators of ischemic brain injury. <i>Cell Calcium</i> , 2004, 36, 257-264.	1.1	298
94	Mice deficient in dihydrolipoamide dehydrogenase show increased vulnerability to MPTP, malonate and 3-nitropropionic acid neurotoxicity. <i>Journal of Neurochemistry</i> , 2004, 88, 1352-1360.	2.1	92
95	Neuroprotective mechanisms of creatine occur in the absence of mitochondrial creatine kinase. <i>Neurobiology of Disease</i> , 2004, 15, 610-617.	2.1	54
96	Mitochondrial α -Ketoglutarate Dehydrogenase Complex Generates Reactive Oxygen Species. <i>Journal of Neuroscience</i> , 2004, 24, 7779-7788.	1.7	626
97	Cyclosporin A-sensitive decrease in the transmembrane potential across the inner membrane of liver mitochondria induced by low concentrations of fatty acids and Ca ²⁺ . <i>Biochemistry (Moscow)</i> , 2003, 68, 391-398.	0.7	18
98	Effect of electron-transport inhibitors on the generation of reactive oxygen species by pea mitochondria during succinate oxidation. <i>Biochemistry (Moscow)</i> , 2003, 68, 747-751.	0.7	13
99	Regulation of brain mitochondrial H ₂ O ₂ production by membrane potential and NAD(P)H redox state. <i>Journal of Neurochemistry</i> , 2003, 86, 1101-1107.	2.1	447
100	Cyclosporin A-insensitive Permeability Transition in Brain Mitochondria. <i>Journal of Biological Chemistry</i> , 2003, 278, 27382-27389.	1.6	123
101	Mitochondrial Mechanisms of Neural Cell Death and Neuroprotective Interventions in Parkinson's Disease. <i>Annals of the New York Academy of Sciences</i> , 2003, 991, 111-119.	1.8	216
102	The Role of Tetrahydrobiopterin in the Regulation of Neuronal Nitric-oxide Synthase-generated Superoxide. <i>Journal of Biological Chemistry</i> , 2002, 277, 40275-40280.	1.6	85
103	Structural Determinants of Fluorochemical-Induced Mitochondrial Dysfunction. <i>Toxicological Sciences</i> , 2002, 66, 244-252.	1.4	167
104	Regulation of hydrogen peroxide production by brain mitochondria by calcium and Bax. <i>Journal of Neurochemistry</i> , 2002, 83, 220-228.	2.1	215
105	Thyroxine reversibly inhibits the uncoupling action of protonophores on energy production in rat thymus lymphocytes. <i>Biochemistry (Moscow)</i> , 2002, 67, 468-472.	0.7	0
106	Myxothiazol Induces H ₂ O ₂ Production from Mitochondrial Respiratory Chain. <i>Biochemical and Biophysical Research Communications</i> , 2001, 281, 645-650.	1.0	130
107	Ascorbate and low concentrations of FeSO ₄ induce Ca ²⁺ -dependent pore in rat liver mitochondria. <i>Biochemistry (Moscow)</i> , 2001, 66, 909-912.	0.7	4
108	Apoptosis-Related Activities Measured with Isolated Mitochondria and Digitonin-Permeabilized Cells. <i>Methods in Enzymology</i> , 2000, 322, 222-234.	0.4	51

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109	Mitochondrial Targets of Drug Toxicity. Annual Review of Pharmacology and Toxicology, 2000, 40, 353-388.	4.2	405
110	Fatty acids as natural uncouplers preventing generation of O ₂ ^{•-} and H ₂ O ₂ by mitochondria in the resting state. FEBS Letters, 1998, 435, 215-218.	1.3	170
111	Thyroxine induces cyclosporin A-insensitive, Ca ²⁺ -dependent reversible permeability transition pore in rat liver mitochondria. FEBS Letters, 1997, 412, 173-178.	1.3	35
112	Inhibition of the alternative oxidase stimulates H ₂ O ₂ production in plant mitochondria. FEBS Letters, 1997, 415, 87-90.	1.3	156
113	High protonic potential actuates a mechanism of production of reactive oxygen species in mitochondria. FEBS Letters, 1997, 416, 15-18.	1.3	1,490
114	6-Ketocholestanol is a recoupler for mitochondria, chromatophores and cytochrome oxidase proteoliposomes. Biochimica Et Biophysica Acta - Bioenergetics, 1997, 1318, 159-172.	0.5	52
115	Regulation of the energy coupling in mitochondria by some steroid and thyroid hormones. Biochimica Et Biophysica Acta - Bioenergetics, 1997, 1318, 173-183.	0.5	34
116	•Uncoupling of Mitochondria. Bioscience Reports, 1997, 17, 273-279.	1.1	108
117	6-Ketocholestanol abolishes the effect of the most potent uncouplers of oxidative phosphorylation in mitochondria. FEBS Letters, 1994, 355, 305-308.	1.3	61
118	The protecting effect of L-carnitine on Ca ²⁺ -loaded rat liver mitochondria. FEBS Letters, 1991, 289, 187-189.	1.3	5
119	Uncoupling effect of fatty acids on heart muscle mitochondria and submitochondrial particles. FEBS Letters, 1991, 295, 51-54.	1.3	42