Lev S Yaguzhinsky

List of Publications by Year
in descending order

95 papers	2,166 citations	331670 21 h-index	243625 44 g-index
103 all docs	103 docs citations	103 times ranked	1800 citing authors

#	Article	IF	Citations
1	Mechanism of Energy Storage and Transformation in the Mitochondria at the Waterâ€“Membrane Interface. Biochemistry (Moscow), 2022, 87, 179-190.	1.5	3
2	Structural and functional roles of non-bilayer lipid phases of chloroplast thylakoid membranes and mitochondrial inner membranes. Progress in Lipid Research, 2022, 86, 101163.	11.6	21
3	Ordered Clusters of the Complete Oxidative Phosphorylation System in Cardiac Mitochondria. International Journal of Molecular Sciences, 2021, 22, 1462.	4.1	23
4	Cardiolipin, Non-Bilayer Structures and Mitochondrial Bioenergetics: Relevance to Cardiovascular Disease. Cells, 2021, 10, 1721.	4.1	23
5	Amino Acids as Regulators of Cell Metabolism. Biochemistry (Moscow), 2020, 85, 393-408.	1.5	10
6	Determining the Structure and Location of the ATP Synthase in the Membranes of Ratâ€™s Heart Mitochondria Using Cryoelectron Tomography. Nanotechnologies in Russia, 2020, 15, 83-89.	0.7	8
7	Non-bilayer structures in mitochondrial membranes regulate ATP synthase activity. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 586-599.	2.6	47
8	NMDA and GABA receptor presence in rat heart mitochondria. Chemico-Biological Interactions, 2018, 291, 40-46.	4.0	21
9	Autocatalytic cycle in the pathogenesis of diabetes mellitus: biochemical and pathophysiological aspects of metabolic therapy with natural amino acids on the example of glycine. Diabetes Mellitus, 2018, 21, 283-292.	1.9	6
10	Functionally significant low-temperature structural alterations in mitochondrial membranes of homoiothermic animals. Biophysics (Russian Federation), 2017, 62, 415-420.	0.7	3
11	On the mechanism and functional significance of the ADP/ATP carrier (AAC) dimerization. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2017, 11, 321-329.	0.6	1
12	On the regulative role of the glutamate receptor in mitochondria. Biological Chemistry, 2016, 397, 445-458.	2.5	8
13	Specificity of interactions of the surface-active protonophore 2,4,6-trichloro-3-pentadecylphenol with artificial and mitochondrial membranes. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2015, 9, 100-106.	0.6	0
14	On local coupling of electron transport and ATP-synthesis system in mitochondria. Theory and experiment. Biochemistry (Moscow), 2015, 80, 576-581.	1.5	14
15	The continuous generation of hydrogen peroxide in water containing very low concentrations of unsymmetrical dimethylhydrazine. Biophysics (Russian Federation), 2015, 60, 553-558.	0.7	2
16	Specific properties of the mitochondrial oxidative phosphorylation system operating as a supercomplex. Biophysics (Russian Federation), 2014, 59, 904-909.	0.7	4
17	Glutamate induces H2O2 synthesis in nonsynaptic brain mitochondria. Free Radical Biology and Medicine, 2013, 65, 428-435.	2.9	13
18	Interaction of a surface-active base with the fraction of membrane-bound Williamsâ€™ protons. Biophysics (Russian Federation), 2013, 58, 95-102.	0.7	1

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19	The new class of surface-active phenols selectively interact with membrane-bound protons fraction with an excess of free energy. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, S132.	1.0	0
20	Generation of reactive oxygen species in water under exposure to visible or infrared irradiation at absorption bands of molecular oxygen. Biophysics (Russian Federation), 2012, 57, 1-8.	0.7	34
21	Mechanism Underlying the Protective Effect of Glycine in Energetic Disturbances in Brain Tissues under Hypoxic Conditions. Bulletin of Experimental Biology and Medicine, 2012, 153, 44-47.	0.8	9
22	BrÃ¸nsted acids bounded to the mitochondrial membranes as a substrate for ATP synthase. Doklady Biochemistry and Biophysics, 2012, 444, 158-161.	0.9	14
23	Oxygen-Dependent Auto-Oscillations of Water Luminescence Triggered by the 1264 nm Radiation. Journal of Physical Chemistry B, 2011, 115, 7693-7698.	2.6	53
24	Potentials of Small-angle Neutron Scattering for Studies of the Structure of â€œLiveâ€•Mitochondria. Neutron News, 2011, 22, 11-14.	0.2	13
25	The formation of metastable bond between protons and mitoplast surface. Doklady Biochemistry and Biophysics, 2011, 438, 127-130.	0.9	16
26	SkQ3: The new member of the class of membranotropic uncouplers. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2011, 5, 310-315.	0.6	1
27	The new type of uncouplers which selectively interact with non-equilibrium membrane bounded protons. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 43-44.	1.0	0
28	Penetrating cation/fatty acid anion pair as a mitochondria-targeted protonophore. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 663-668.	7.1	173
29	An attempt to prevent senescence: A mitochondrial approach. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 437-461.	1.0	359
30	Molecular mechanisms of transformation of SkQ mitotropic quinones and the search for new approaches to creation of selective free radical traps. Biochemistry (Moscow), 2009, 74, 1114-1124.	1.5	1
31	Self-oscillating water luminescence induced by laser irradiation. Doklady Biochemistry and Biophysics, 2009, 425, 114-116.	0.9	9
32	Properties and new methods of non-equilibrium membrane bound proton fraction research under conditions of proton pump activation. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2009, 3, 478-487.	0.6	2
33	Diversity of neurodegenerative processes in the model of brain cortex tissue ischemia. Neurochemistry International, 2009, 54, 322-329.	3.8	20
34	Identification of two discrete states of energized mitochondria: Experiments on single mitochondria. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2008, 2, 144-149.	0.6	3
35	Mitochondria-targeted plastoquinone derivatives as tools to interrupt execution of the aging program. 1. Cationic plastoquinone derivatives: Synthesis and in vitro studies. Biochemistry (Moscow), 2008, 73, 1273-1287.	1.5	267
36	S12.8 Glycine prevents mitochondrial impairment caused by left carotid occlusion. Biochimica Et Biophysica Acta - Bioenergetics, 2008, 1777, S77.	1.0	0

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37	S13.43 Inhibitors of succinate dehydrogenase (SDH) and complex III promote respiration of liver mitochondria under conditions of functioning dt-diaphorase (DTD). Biochimica Et Biophysica Acta - Bioenergetics, 2008, 1777, S98-S99.	1.0	1
38	Interaction of positively charged ubiquinone analog (MitoQ10) with DT-diaphorase from liver mitochondria. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2008, 2, 33-39.	0.6	1
39	Effect of the inhibitory neurotransmitter glycine on slow destructive processes in brain cortex slices under anoxic conditions. Biochemistry (Moscow), 2007, 72, 509-517.	1.5	9
40	Study of three-dimensionally ordered structures of intact mitochondria by small-angle neutron scattering. Crystallography Reports, 2007, 52, 521-524.	0.6	15
41	On the localized coupling of respiration and phosphorylation in mitochondria. Biochimica Et Biophysica Acta - Bioenergetics, 2006, 1757, 408-414.	1.0	20
42	Low cetyltrimethylammonium bromide concentrations induce reversible amorphous aggregation of tobacco mosaic virus and its coat protein at room temperature. International Journal of Biochemistry and Cell Biology, 2006, 38, 533-543.	2.8	9
43	Crystallization of F1F0-ATP synthase from Chloroflexus aurantiacus. Journal of Crystal Growth, 2005, 275, e1447-e1452.	1.5	1
44	SANS investigations of the lipidic cubic phase behaviour in course of bacteriorhodopsin crystallization. Journal of Crystal Growth, 2005, 275, e1453-e1459.	1.5	12
45	Mechanism of Action of Gametocides As Agents Disturbing the Normal Development of the Male Gametophyte. Doklady Biochemistry and Biophysics, 2005, 405, 417-419.	0.9	2
46	Changes in antioxidant status of myocardium during oxidative stress under the influence of coenzyme Q10. Biochemistry (Moscow), 2005, 70, 79-84.	1.5	1
47	Proton transfer through the membraneâ€"water interfaces in uncoupled mitochondria. Biochemistry (Moscow), 2005, 70, 195-199.	1.5	19
48	Effect of â€œExternalâ€•Superoxide Anion on Apoptosis in Coleoptiles of Wheat Seedlings. Biochemistry (Moscow), 2005, 70, 1095-1103.	1.5	1
49	Apoptosis in Wheat Seedlings Grown under Normal Daylight. Biochemistry (Moscow), 2004, 69, 285-294.	1.5	3
50	Thread-grain transition of mitochondrial reticulum as a step of mitoptosis and apoptosis. Molecular and Cellular Biochemistry, 2004, 256, 341-358.	3.1	128
51	Low sodium dodecyl sulfate concentrations inhibit tobacco mosaic virus coat protein amorphous aggregation and change the protein stability. Biochemistry (Moscow), 2004, 69, 1372-1378.	1.5	10
52	Functional activity and ultrastructure of mitochondria isolated from myocardial apoptotic tissue. Biochemistry (Moscow), 2003, 68, 875-881.	1.5	18
53	Mechanism of Superoxide Anion Generation in Intact Mitochondria in the Presence of Lucigenin and Cyanide. Biochemistry (Moscow), 2003, 68, 1349-1359.	1.5	6
54	Specific effect induced by subminute amounts of ascorbic acid on the fluctuations of transmission factor of water in the infrared spectral range. Doklady Biochemistry and Biophysics, 2003, 388, 43-45.	0.9	1

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55	Induction of apoptosis in rat myocardium under anoxic conditions. Biochemistry (Moscow), 2002, 67, 246-253.	1.5	8
56	Ionol (BHT) produces superoxide anion. Biochemistry (Moscow), 2002, 67, 1271-1275.	1.5	15
57	The barrier function of membrane-bound proteins during the H+-transport process in mitochondria. Biochemical Society Transactions, 2000, 28, A462-A462.	3.4	0
58	Necessity of superoxide production for development of etiolated wheat seedlings. Biochemistry (Moscow), 2000, 65, 1357-1361.	1.5	27
59	Subcellular reorganization of mitochondria producing heavy DNA in aging wheat coleoptiles. FEBS Letters, 1999, 457, 122-125.	2.8	39
60	Increase of local hydrogen ion gradient near bilayer lipid membrane under the conditions of catalysis of proton transfer across the interface. FEBS Letters, 1998, 425, 222-224.	2.8	10
61	Detection of the local H+ gradients on the internal mitochondrial membrane. FEBS Letters, 1998, 440, 223-225.	2.8	18
62	The immobilized matrix buffer controls the rate of mitochondrial respiration in state 3P according to chance. Biochemistry (Moscow), 1997, 62, 364-70.	1.5	2
63	Effect of the alkyl chain length of monocarboxylic acid on the permeation through bilayer lipid membranes. Biochimica Et Biophysica Acta - Biomembranes, 1996, 1281, 245-251.	2.6	26
64	Combination of the electrogenic ionophores, valinomycin and CCCP, can lead to non-electrogenic K+ /H+ exchange on bilayer lipid membranes. FEBS Letters, 1994, 345, 104-106.	2.8	9
65	Evidence in favor of the existence of a kinetic barrier for proton transfer from a surface of bilayer phospholipid membrane to bulk water. Biochimica Et Biophysica Acta - Biomembranes, 1993, 1150, 45-50.	2.6	52
66	Induction of an electrogenic transfer of monovalent cations (K+, NH+4) in thylakoid membranes byN,Nâ€²-dicyclohexylcarbodiimide. FEBS Letters, 1992, 307, 280-282.	2.8	7
67	Effects of amyl ester of unsubstituted rhodamine on respiration and Ca2+ transport in rat liver mitochondria. Biochemical and Biophysical Research Communications, 1991, 175, 1010-1016.	2.1	3
68	Proton dissociation from nigericin at the membrane-water interface, the rate-limiting step of K+ /H+ exchange on the bilayer lipid membrane. FEBS Letters, 1991, 289, 176-178.	2.8	13
69	On the mechanism of oligomycin inhibition of Ca2+-induced mitochondrial respiration. FEBS Letters, 1991, 290, 52-54.	2.8	4
70	Transfer of tightly-bound tritium from the chloroplast membranes to CF1is activated by the photophosphorylation process. FEBS Letters, 1990, 272, 184-186.	2.8	9
71	Effect of changes in cation concentration near bilayer lipid membrane on the rate of carrier-mediated cation fluxes and on the carrier apparent selectivity. Biochimica Et Biophysica Acta - Biomembranes, 1990, 1026, 236-240.	2.6	12
72	Kinetic properties of cation/H+-exchange: calcimycin (A23187)-mediated Ca2+/2H+-exchange on the bilayer lipid membrane. Biochimica Et Biophysica Acta - Biomembranes, 1990, 1027, 295-300.	2.6	21

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73	ATP-synthase complex: The mechanism of control of ion fluxes induced by cumene hydroperoxide in mitochondria. FEBS Letters, 1989, 247, 255-258.	2.8	24
74	The mechanism of the formation of the electrical potential on the bilayer lipid membrane induced by propranolol and verapamil. Bioelectrochemistry, 1988, 19, 499-503.	1.0	4
75	The mechanism of the formation of the electrical potential on the bilayer lipid membrane induced by propranolol and verapamil. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1988, 253, 499-503.	0.1	0
76	The ion selectivity of nonelectrogenic ionophores measured on a bilayer lipid membrane: nigericin, monensin, A23187 and lasalocid A. Biochimica Et Biophysica Acta - Biomembranes, 1988, 938, 125-130.	2.6	40
77	Ion permeability induction by the SH cross-linking reagents in rat liver mitochondria is inhibited by the free radical scavenger, butylhydroxytoluene. Journal of Bioenergetics and Biomembranes, 1987, 19, 191-202.	2.3	48
78	The peculiarities of reactions catalyzed by alcohol dehydrogenase in unstirred layers adjacent to the bilayer lipid membrane. Biochimica Et Biophysica Acta - Biomembranes, 1986, 861, 337-344.	2.6	7
79	Regulation of lipid peroxidation by ATP synthetase substrates in rat liver mitochondria. Lipids and Lipid Metabolism, 1986, 876, 567-571.	2.6	6
80	Ion transport in rat liver mitochondria: the effect of the incubation medium osmolarity. FEBS Letters, 1985, 183, 47-51.	2.8	10
81	The effect of gramicidin on ATP synthesis in pea chloroplasts: two modes of phosphorylation. FEBS Letters, 1985, 187, 257-260.	2.8	15
82	The role of pH gradient in the unstirred layers in the transport of weak acids and bases through bilayer lipid membranes. Bioelectrochemistry, 1984, 13, 85-91.	1.0	14
83	The use of phospholipid-impregnated millipore filters for recording nonelectrogenic cation flows in the presence of Men+nH+ exchangers. Analytical Biochemistry, 1984, 140, 468-471.	2.4	5
84	Relationships of respiratory chain and ATP-synthetase in energized mitochondria. FEBS Letters, 1984, 167, 176-180.	2.8	36
85	Coupling of two redox reactions at the octane|water interface with the participation of NADH and a ferri-complex of ethioporphyrin and oxygen. Bioelectrochemistry, 1983, 10, 493-498.	1.0	10
86	The role of lipid peroxidation in the induction of cation transport in rat liver mitochondria. FEBS Letters, 1983, 158, 27-30.	2.8	53
87	A new method of the measurement of the electrically neutral fluxes of cations through lipid bilayer membranes induced by Me n + /n H+ -exchangers. FEBS Letters, 1983, 163, 42-45.	2.8	25
88	Model reactions of nucleotide sorption. Bioelectrochemistry, 1982, 9, 23-30.	1.0	3
89	Model reactions of nucleotide sorption. Bioelectrochemistry, 1982, 9, 31-37.	1.0	0
90	Generation of potential in lipid bilayer membranes as a result of proton-transfer reactions in the unstirred layers. Journal of Bioenergetics and Biomembranes, 1982, 14, 457-465.	2.3	29

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91	Comparative study of the action of substances of the 5-oxo-4-hexanolide series on the phosphorylating functions of the mitochondria. Pharmaceutical Chemistry Journal, 1979, 13, 465-469.	0.8	0
92	Reactions of Mitochondrial NADH-dehydrogenase coenzymes on bilayer lipid membranes. Bioelectrochemistry, 1977, 4, 155-165.	1.0	4
93	Synthesis of ATP coupled with action of membrane protonic pumps at the octaneâ€“water interface. Nature, 1976, 259, 494-496.	27.8	71
94	Potential generation in bilayer lipid membranes in the NADH-flavin mononucleotide-ubiquinone-6-O2 system. Biochimica Et Biophysica Acta - Bioenergetics, 1974, 368, 22-28.	1.0	18
95	Hydrophobic sites of the mitochondrial electron transfer system. Journal of Bioenergetics and Biomembranes, 1973, 5, 163-174.	2.3	30