Lev S Yaguzhinsky

List of Publications by Year
in descending order

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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	An attempt to prevent senescence: A mitochondrial approach. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 437-461.	1.0	359
2	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
3	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
4	Thread-grain transition of mitochondrial reticulum as a step of mitoptosis and apoptosis. Molecular and Cellular Biochemistry, 2004, 256, 341-358.	3.1	128
5	Synthesis of ATP coupled with action of membrane protonic pumps at the octaneâ€“water interface. Nature, 1976, 259, 494-496.	27.8	71
6	The role of lipid peroxidation in the induction of cation transport in rat liver mitochondria. FEBS Letters, 1983, 158, 27-30.	2.8	53
7	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
8	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
9	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
10	Non-bilayer structures in mitochondrial membranes regulate ATP synthase activity. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 586-599.	2.6	47
11	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
12	Subcellular reorganization of mitochondria producing heavy DNA in aging wheat coleoptiles. FEBS Letters, 1999, 457, 122-125.	2.8	39
13	Relationships of respiratory chain and ATP-synthetase in energized mitochondria. FEBS Letters, 1984, 167, 176-180.	2.8	36
14	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
15	Hydrophobic sites of the mitochondrial electron transfer system. Journal of Bioenergetics and Biomembranes, 1973, 5, 163-174.	2.3	30
16	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
17	Necessity of superoxide production for development of etiolated wheat seedlings. Biochemistry (Moscow), 2000, 65, 1357-1361.	1.5	27
18	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

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19	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
20	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
21	Ordered Clusters of the Complete Oxidative Phosphorylation System in Cardiac Mitochondria. International Journal of Molecular Sciences, 2021, 22, 1462.	4.1	23
22	Cardiolipin, Non-Bilayer Structures and Mitochondrial Bioenergetics: Relevance to Cardiovascular Disease. Cells, 2021, 10, 1721.	4.1	23
23	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
24	NMDA and GABA receptor presence in rat heart mitochondria. Chemico-Biological Interactions, 2018, 291, 40-46.	4.0	21
25	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
26	On the localized coupling of respiration and phosphorylation in mitochondria. Biochimica Et Biophysica Acta - Bioenergetics, 2006, 1757, 408-414.	1.0	20
27	Diversity of neurodegenerative processes in the model of brain cortex tissue ischemia. Neurochemistry International, 2009, 54, 322-329.	3.8	20
28	Proton transfer through the membraneâ€"water interfaces in uncoupled mitochondria. Biochemistry (Moscow), 2005, 70, 195-199.	1.5	19
29	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
30	Detection of the local H+ gradients on the internal mitochondrial membrane. FEBS Letters, 1998, 440, 223-225.	2.8	18
31	Functional activity and ultrastructure of mitochondria isolated from myocardial apoptotic tissue. Biochemistry (Moscow), 2003, 68, 875-881.	1.5	18
32	The formation of metastable bond between protons and mitoplast surface. Doklady Biochemistry and Biophysics, 2011, 438, 127-130.	0.9	16
33	The effect of gramicidin on ATP synthesis in pea chloroplasts: two modes of phosphorylation. FEBS Letters, 1985, 187, 257-260.	2.8	15
34	Ionol (BHT) produces superoxide anion. Biochemistry (Moscow), 2002, 67, 1271-1275.	1.5	15
35	Study of three-dimensionally ordered structures of intact mitochondria by small-angle neutron scattering. Crystallography Reports, 2007, 52, 521-524.	0.6	15
36	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

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37	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
38	On local coupling of electron transport and ATP-synthesis system in mitochondria. Theory and experiment. Biochemistry (Moscow), 2015, 80, 576-581.	1.5	14
39	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
40	Potentials of Small-angle Neutron Scattering for Studies of the Structure of â€œLiveâ€•Mitochondria. Neutron News, 2011, 22, 11-14.	0.2	13
41	Glutamate induces H2O2 synthesis in nonsynaptic brain mitochondria. Free Radical Biology and Medicine, 2013, 65, 428-435.	2.9	13
42	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
43	SANS investigations of the lipidic cubic phase behaviour in course of bacteriorhodopsin crystallization. Journal of Crystal Growth, 2005, 275, e1453-e1459.	1.5	12
44	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
45	Ion transport in rat liver mitochondria: the effect of the incubation medium osmolarity. FEBS Letters, 1985, 183, 47-51.	2.8	10
46	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
47	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
48	Amino Acids as Regulators of Cell Metabolism. Biochemistry (Moscow), 2020, 85, 393-408.	1.5	10
49	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
50	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
51	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
52	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
53	Self-oscillating water luminescence induced by laser irradiation. Doklady Biochemistry and Biophysics, 2009, 425, 114-116.	0.9	9
54	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

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55	Induction of apoptosis in rat myocardium under anoxic conditions. Biochemistry (Moscow), 2002, 67, 246-253.	1.5	8
56	On the regulative role of the glutamate receptor in mitochondria. Biological Chemistry, 2016, 397, 445-458.	2.5	8
57	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
58	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
59	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
60	Regulation of lipid peroxidation by ATP synthetase substrates in rat liver mitochondria. Lipids and Lipid Metabolism, 1986, 876, 567-571.	2.6	6
61	Mechanism of Superoxide Anion Generation in Intact Mitochondria in the Presence of Lucigenin and Cyanide. Biochemistry (Moscow), 2003, 68, 1349-1359.	1.5	6
62	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
63	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
64	Reactions of Mitochondrial NADH-dehydrogenase coenzymes on bilayer lipid membranes. Bioelectrochemistry, 1977, 4, 155-165.	1.0	4
65	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
66	On the mechanism of oligomycin inhibition of Ca2+-induced mitochondrial respiration. FEBS Letters, 1991, 290, 52-54.	2.8	4
67	Specific properties of the mitochondrial oxidative phosphorylation system operating as a supercomplex. Biophysics (Russian Federation), 2014, 59, 904-909.	0.7	4
68	Model reactions of nucleotide sorption. Bioelectrochemistry, 1982, 9, 23-30.	1.0	3
69	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
70	Apoptosis in Wheat Seedlings Grown under Normal Daylight. Biochemistry (Moscow), 2004, 69, 285-294.	1.5	3
71	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
72	Functionally significant low-temperature structural alterations in mitochondrial membranes of homoiothermic animals. Biophysics (Russian Federation), 2017, 62, 415-420.	0.7	3

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73	Mechanism of Energy Storage and Transformation in the Mitochondria at the Waterâ€“Membrane Interface. Biochemistry (Moscow), 2022, 87, 179-190.	1.5	3
74	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
75	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
76	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
77	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
78	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
79	Crystallization of F1F0-ATP synthase from Chloroflexus aurantiacus. Journal of Crystal Growth, 2005, 275, e1447-e1452.	1.5	1
80	Changes in antioxidant status of myocardium during oxidative stress under the influence of coenzyme Q10. Biochemistry (Moscow), 2005, 70, 79-84.	1.5	1
81	Effect of â€œExternalâ€•Superoxide Anion on Apoptosis in Coleoptiles of Wheat Seedlings. Biochemistry (Moscow), 2005, 70, 1095-1103.	1.5	1
82	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
83	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
84	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
85	Interaction of a surface-active base with the fraction of membrane-bound Williamsâ€™ protons. Biophysics (Russian Federation), 2013, 58, 95-102.	0.7	1
86	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
87	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
88	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
89	Model reactions of nucleotide sorption. Bioelectrochemistry, 1982, 9, 31-37.	1.0	0
90	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

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91	The barrier function of membrane-bound proteins during the H+-transport process in mitochondria. Biochemical Society Transactions, 2000, 28, A462-A462.	3.4	0
92	S12.8 Glycine prevents mitochondrial impairment caused by left carotid occlusion. Biochimica Et Biophysica Acta - Bioenergetics, 2008, 1777, S77.	1.0	0
93	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
94	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
95	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