Boris V Chernyak

List of Publications by Year
in descending order

117	4,902	116194 36	116156 66
papers	citations	h-index	g-index

119	119	119	8495
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Extrusion of mitochondria: Garbage clearance or cellâ€“cell communication signals?. Journal of Cellular Physiology, 2022, 237, 2345-2356.	2.0	11
2	Analysis of genes regulated by DUX4 via oxidative stress reveals potential therapeutic targets for treatment of facioscapulohumeral dystrophy. Redox Biology, 2021, 43, 102008.	3.9	12
3	Editorial: Pharmacological Approaches Targeting Neutrophilic Inflammation. Frontiers in Pharmacology, 2021, 12, 763140.	1.6	1
4	Mitochondria Are Potential Targets for the Development of New Drugs Against Neutrophilic Inflammation in Severe Pneumonia Including COVID-19. Frontiers in Pharmacology, 2021, 12, 609508.	1.6	3
5	Gram-Negative Bacteria Salmonella typhimurium Boost Leukotriene Synthesis Induced by Chemoattractant fMLP to Stimulate Neutrophil Swarming. Frontiers in Pharmacology, 2021, 12, 814113.	1.6	8
6	Innate Immunity as an Executor of the Programmed Death of Individual Organisms for the Benefit of the Entire Population. International Journal of Molecular Sciences, 2021, 22, 13480.	1.8	7
7	Mitochondrial permeability transition pore is involved in oxidative burst and NETosis of human neutrophils. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2020, 1866, 165664.	1.8	70
8	Mitochondria as Targets for Endothelial Protection in COVID-19. Frontiers in Physiology, 2020, 11, 606170.	1.3	5
9	The Role Played by Mitochondria in FcÎµRI-Dependent Mast Cell Activation. Frontiers in Immunology, 2020, 11, 584210.	2.2	16
10	Novel Fluorescent Mitochondria-Targeted Probe MitoCLox Reports Lipid Peroxidation in Response to Oxidative Stress In Vivo. Oxidative Medicine and Cellular Longevity, 2020, 2020, 1-11.	1.9	14
11	Usnic acid as calcium ionophore and mast cells stimulator. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183303.	1.4	8
12	Mitochondria-targeted 1,4-naphthoquinone (SkQN) is a powerful prooxidant and cytotoxic agent. Biochimica Et Biophysica Acta - Bioenergetics, 2020, 1861, 148210.	0.5	14
13	Therapeutic Effect of the Mitochondria-Targeted Antioxidant SkQ1 on the Culture Model of Multiple Sclerosis. Oxidative Medicine and Cellular Longevity, 2019, 2019, 1-10.	1.9	14
14	DUX4 Pathological Expression: Causes and Consequences in Cancer. Trends in Cancer, 2019, 5, 268-271.	3.8	15
15	MitoCLox: A Novel Mitochondria-Targeted Fluorescent Probe for Tracing Lipid Peroxidation. Oxidative Medicine and Cellular Longevity, 2019, 2019, 1-11.	1.9	15
16	The Role of SKQ1 (Visomitin) in Inflammation and Wound Healing of the Ocular Surface. Ophthalmology and Therapy, 2019, 8, 63-73.	1.0	16
17	Induction of autophagy by depolarization of mitochondria. Autophagy, 2018, 14, 921-924.	4.3	78
18	HIV-1 Tat protein induces DNA damage in human peripheral blood B-lymphocytes via mitochondrial ROS production. Redox Biology, 2018, 15, 97-108.	3.9	62

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19	The role of mitochondrial ROS in antibacterial immunity. Journal of Cellular Physiology, 2018, 233, 3745-3754.	2.0	74
20	Mitochondria-targeted antioxidant SkQ1 suppresses fibrosarcoma and rhabdomyosarcoma tumour cell growth. Cell Cycle, 2018, 17, 1797-1811.	1.3	24
21	Efficiency of tiotropium bromide in patients with severe persistent bronchial asthma in clinical practice. Acta Biomedica Scientifica, 2018, 3, 25-29.	0.1	0
22	Low concentration of uncouplers of oxidative phosphorylation decreases the TNF-induced endothelial permeability and lethality in mice. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2017, 1863, 968-977.	1.8	36
23	Mitochondrial reactive oxygen species are involved in chemoattractant-induced oxidative burst and degranulation of human neutrophils in vitro. European Journal of Cell Biology, 2017, 96, 254-265.	1.6	80
24	Control of DNA integrity in skeletal muscle under physiological and pathological conditions. Cellular and Molecular Life Sciences, 2017, 74, 3439-3449.	2.4	13
25	Mitochondriaâ€Targeted Antioxidants and Uncouplers of Oxidative Phosphorylation in Treatment of the Systemic Inflammatory Response Syndrome (SIRS). Journal of Cellular Physiology, 2017, 232, 904-912.	2.0	13
26	Mitochondria-Targeted Antioxidant SkQ1 Improves Dermal Wound Healing in Genetically Diabetic Mice. Oxidative Medicine and Cellular Longevity, 2017, 2017, 1-10.	1.9	41
27	Depletion of mitochondrial reactive oxygen species downregulates epithelial-to-mesenchymal transition in cervical cancer cells. Oncotarget, 2017, 8, 4901-4913.	0.8	22
28	Mitochondria-targeted Antioxidants as a Prospective Therapeutic Strategy for Multiple Sclerosis. Current Medicinal Chemistry, 2017, 24, 2086-2114.	1.2	37
29	Low concentrations of uncouplers of oxidative phosphorylation prevent inflammatory activation of endothelial cells by tumor necrosis factor. Biochemistry (Moscow), 2015, 80, 610-619.	0.7	17
30	Mutations enhancing selectivity of antitumor cytokine TRAIL to DR5 receptor increase its cytotoxicity against tumor cells. Biochemistry (Moscow), 2015, 80, 1080-1091.	0.7	8
31	Radioprotective Effects of Mitochondria-Targeted Antioxidant SkQR1. Radiation Research, 2015, 183, 64-71.	0.7	21
32	New Strategy for High-Level Expression and Purification of Biologically Active Monomeric TGF-Î²1/C77S in Escherichia coli. Molecular Biotechnology, 2015, 57, 160-171.	1.3	9
33	Mitochondria-targeted antioxidant SkQ1 improves impaired dermal wound healing in old mice. Aging, 2015, 7, 475-485.	1.4	38
34	Combination of TRAIL with Bortezomib Shifted Apoptotic Signaling from DR4 to DR5 Death Receptor by Selective Internalization and Degradation of DR4. PLoS ONE, 2014, 9, e109756.	1.1	15
35	Mitochondria-targeted antioxidants prevent TNFÎ±-induced endothelial cell damage. Biochemistry (Moscow), 2014, 79, 124-130.	0.7	26
36	A short-chain alkyl derivative of Rhodamine 19 acts as a mild uncoupler of mitochondria and a neuroprotector. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 1739-1747.	0.5	34

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37	Prooxidant Properties of p66shc Are Mediated by Mitochondria in Human Cells. PLoS ONE, 2014, 9, e86521.	1.1	28
38	Role of mitochondrial reactive oxygen species in age-related inflammatory activation of endothelium. Aging, 2014, 6, 661-674.	1.4	65
39	SkBQ â€" Prooxidant addressed to mitochondria. Biochemistry (Moscow), 2013, 78, 1366-1370.	0.7	5
40	Heterogeneous catalysis on the phage surface: Display of active human enteropeptidase. Biochimie, 2013, 95, 2076-2081.	1.3	5
41	Derivatives of the cationic plant alkaloids berberine and palmatine amplify protonophorous activity of fatty acids in model membranes and mitochondria. Mitochondrion, 2013, 13, 520-525.	1.6	19
42	In search of novel highly active mitochondriaâ€targeted antioxidants: Thymoquinone and its cationic derivatives. FEBS Letters, 2013, 587, 2018-2024.	1.3	57
43	Novel Penetrating Cations for Targeting Mitochondria. Current Pharmaceutical Design, 2013, 19, 2795-2806.	0.9	18
44	Dissecting structural basis of the unique substrate selectivity of human enteropeptidase catalytic subunit. Journal of Biomolecular Structure and Dynamics, 2012, 30, 62-73.	2.0	3
45	Novel mitochondria-targeted compounds composed of natural constituents: Conjugates of plant alkaloids berberine and palmatine with plastoquinone. Biochemistry (Moscow), 2012, 77, 983-995.	0.7	14
46	The effect of p66shc protein on the resistance of the RKO colon cancer cell line to oxidative stress. Molecular Biology, 2012, 46, 126-133.	0.4	10
47	Strategy for improvement of enteropeptidase efficiency in tag removal processes. Protein Expression and Purification, 2011, 79, 191-196.	0.6	24
48	Novel Mitochondria-Targeted Antioxidants: Plastoquinone Conjugated with Cationic Plant Alkaloids Berberine and Palmatine. Pharmaceutical Research, 2011, 28, 2883-2895.	1.7	49
49	Pyrimidine biosynthesis links mitochondrial respiration to the p53 pathway. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 12828-12833.	3.3	148
50	Scavenging of Reactive Oxygen Species in Mitochondria Induces Myofibroblast Differentiation. Antioxidants and Redox Signaling, 2010, 13, 1297-1307.	2.5	30
51	Reactive oxygen species produced in mitochondria are involved in age-dependent changes of hematopoietic and mesenchymal progenitor cells in mice. A study with the novel mitochondria-targeted antioxidant SkQ1. Mechanisms of Ageing and Development, 2010, 131, 415-421.	2.2	25
52	Prevention of cardiolipin oxidation and fatty acid cycling as two antioxidant mechanisms of cationic derivatives of plastoquinone (SkQs). Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 878-889.	0.5	104
53	Mitochondriaâ€targeted antioxidant SkQR1 selectively protects MDR (Pgp 170)â€negative cells against oxidative stress. FEBS Letters, 2010, 584, 562-566.	1.3	40
54	An efficient method for expression in Escherichia coli and purification of the extracellular ligand binding domain of the human TGFÎ² type II receptor. Journal of Biotechnology, 2010, 148, 113-118.	1.9	5

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55	Mitochondria as source of reactive oxygen species under oxidative stress. Study with novel mitochondria-targeted antioxidants â€" the â€œSkulachev-ionâ€•derivatives. Biochemistry (Moscow), 2010, 75, 123-129.	0.7	41
56	Novel mitochondria-targeted antioxidants, â€œSkulachev-Ionâ€•derivatives, accelerate dermal wound healing in animals. Biochemistry (Moscow), 2010, 75, 274-280.	0.7	29
57	A-to-I RNA Editing: A Contribution to Diversity of the Transcriptome and an Organismâ€™s Development. Biochemistry (Moscow), 2010, 75, 1316-1323.	0.7	6
58	An attempt to prevent senescence: A mitochondrial approach. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 437-461.	0.5	359
59	Generation of new TRAIL mutants DR5-A and DR5-B with improved selectivity to death receptor 5. Apoptosis: an International Journal on Programmed Cell Death, 2009, 14, 778-787.	2.2	41
60	Overexpression in Escherichia coli and purification of human fibroblast growth factor (FGF-2). Biochemistry (Moscow), 2009, 74, 221-225.	0.7	32
61	Preparation and characterization of mouse embryonic fibroblasts with K72W mutation in somatic cytochrome C gene. Molecular Biology, 2009, 43, 596-603.	0.4	7
62	Proapoptotic activity of cytochrome c in living cells: effect of K72 substitutions and species differences. Molecular and Cellular Biochemistry, 2008, 314, 85-93.	1.4	22
63	Protective Effects of Mitochondria-Targeted Antioxidant SkQ in Aqueous and Lipid Membrane Environments. Journal of Membrane Biology, 2008, 222, 141-149.	1.0	76
64	Infection of stromal and hemopoietic precursor cells with lentivirus vector in vivo and in vitro. Bulletin of Experimental Biology and Medicine, 2008, 145, 133-136.	0.3	2
65	Cytoskeleton inhibitors combined with TRAIL induce apoptosis in HeLa carcinoma cells overexpressing antiapoptotic protein Bcl-2. Biochemistry (Moscow), 2008, 73, 358-362.	0.7	3
66	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.	0.7	267
67	Mitochondria-targeted plastoquinone derivatives as tools to interrupt execution of the aging program. 3. Inhibitory effect of SkQ1 on tumor development from p53-deficient cells. Biochemistry (Moscow), 2008, 73, 1300-1316.	0.7	82
68	Novel mechanism of elimination of malfunctioning mitochondria (mitoptosis): Formation of mitoptotic bodies and extrusion of mitochondrial material from the cell. Biochimica Et Biophysica Acta - Bioenergetics, 2008, 1777, 817-825.	0.5	97
69	Overexpression and refolding of thioredoxin/TRAIL fusion from inclusion bodies and further purification of TRAIL after cleavage by enteropeptidase. Biotechnology Letters, 2007, 29, 1567-1573.	1.1	20
70	Production of reactive oxygen species in mitochondria of HeLa cells under oxidative stress. Biochimica Et Biophysica Acta - Bioenergetics, 2006, 1757, 525-534.	0.5	112
71	Effect of oxidative stress on dynamics of mitochondrial reticulum. Biochimica Et Biophysica Acta - Bioenergetics, 2006, 1757, 518-524.	0.5	111
72	Hydrogen peroxide produced inside mitochondria takes part in cell-to-cell transmission of apoptotic signal. Biochemistry (Moscow), 2006, 71, 60-67.	0.7	28

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73	Biochemical characterization of human enteropeptidase light chain. Biochemistry (Moscow), 2006, 71, 113-119.	0.7	30
74	Long-distance apoptotic killing of cells is mediated by hydrogen peroxide in a mitochondrial ROS-dependent fashion. Cell Death and Differentiation, 2005, 12, 1442-1444.	5.0	47
75	Comparative analysis of proapoptotic activity of cytochrome c mutants in living cells. Apoptosis: an International Journal on Programmed Cell Death, 2005, 10, 797-808.	2.2	34
76	Bioenergetics and death. Biochemistry (Moscow), 2005, 70, 240-245.	0.7	14
77	Prolonged lipid oxidation after photodynamic treatment. Study with oxidation-sensitive probe C11-BODIPY581/591. FEBS Letters, 2005, 579, 1255-1260.	1.3	43
78	Thread-grain transition of mitochondrial reticulum as a step of mitoptosis and apoptosis. Molecular and Cellular Biochemistry, 2004, 256, 341-358.	1.4	128
79	Marginal blebbing during the early stages of TNF-induced apoptosis indicates alteration in actomyosin contractility. Cell Biology International, 2004, 28, 471-475.	1.4	16
80	â€œWages of Fearâ€ transient threefold decrease in intracellular ATP level imposes apoptosis. Biochimica Et Biophysica Acta - Bioenergetics, 2004, 1658, 141-147.	0.5	149
81	Expression, purification, and characterization of human enteropeptidase catalytic subunit in Escherichia coli. Protein Expression and Purification, 2003, 31, 133-139.	0.6	71
82	A cytochrome c mutant with high electron transfer and antioxidant activities but devoid of apoptogenic effect. Biochemical Journal, 2002, 362, 749-754.	1.7	47
83	A cytochrome c mutant with high electron transfer and antioxidant activities but devoid of apoptogenic effect. Biochemical Journal, 2002, 362, 749.	1.7	39
84	Oligomycin, inhibitor of the F0 part of H+-ATP-synthase, suppresses the TNF-induced apoptosis. Oncogene, 2002, 21, 8149-8157.	2.6	146
85	Respiration and mitochondrial membrane potential are not required for apoptosis and anti-apoptotic action of Bcl-2 in HeLa cells. Biochemistry (Moscow), 2002, 67, 222-226.	0.7	14
86	Preservation of native properties of mitochondria in rat liver homogenate. Mitochondrion, 2001, 1, 249-267.	1.6	22
87	Identification and Characterization of an 18-Kilodalton, VAMP-Like Protein in Suspension-Cultured Carrot Cells. Plant Physiology, 2000, 122, 25-34.	2.3	2
88	Cyclosporin A-sensitive release of Ca2+from mitochondria in intact thymocytes. FEBS Letters, 1997, 418, 131-134.	1.3	9
89	6-Ketocholestanol is a recoupler for mitochondria, chromatophores and cytochrome oxidase proteoliposomes. Biochimica Et Biophysica Acta - Bioenergetics, 1997, 1318, 159-172.	0.5	52
90	Redox Regulation of the Mitochondrial Permeability Transition Pore. Bioscience Reports, 1997, 17, 293-302.	1.1	66

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91	The secretory nature of the lesion of carrot cell variant ts11, rescuable by endochitinase. Planta, 1997, 203, 381-389.	1.6	21
92	The Mitochondrial Permeability Transition Pore is Modulated by Oxidative Agents Through Both Pyridine Nucleotides and Glutathione at Two Separate Sites. FEBS Journal, 1996, 238, 623-630.	0.2	213
93	Modulation of the Mitochondrial Permeability Transition Pore by Pyridine Nucleotides and Dithiol Oxidation at Two Separate Sites. Journal of Biological Chemistry, 1996, 271, 6746-6751.	1.6	474
94	Enzyme turnover is essential for deactivation of F0F1-ATPase in plant mitochondria. Biochimica Et Biophysica Acta - Bioenergetics, 1995, 1229, 121-128.	0.5	3
95	Selective inhibition of the mitochondrial permeability transition pore at the oxidation-reduction sensitive dithiol by monobromobimane. FEBS Letters, 1995, 362, 239-242.	1.3	85
96	Ca2+-triggered membrane permeability transition in deenergized mitochondria from rat liver. FEBS Letters, 1995, 365, 75-78.	1.3	22
97	Mitochondrial ATP hydrolysis and ATP depletion in thymocytes and Ehrlich ascites carcinoma cells. FEBS Letters, 1994, 337, 56-59.	1.3	6
98	Effects of Zn2+ on the activity and binding of the mitochondrial ATPase inhibitor protein, IF1. Journal of Bioenergetics and Biomembranes, 1993, 25, 297-306.	1.0	6
99	Structure-Function Relationships in the Interaction of Amphipathic Helical Polypeptides with the Gastric H/K ATPase. Annals of the New York Academy of Sciences, 1992, 671, 443-445.	1.8	8
100	Zn2+Allows Differentiation between Two Kinds of IF1-ATPase Interaction in Intact Mitochondria. Annals of the New York Academy of Sciences, 1992, 671, 507-508.	1.8	0
101	Adenine nucleotide-binding sites on mitochondrial F1-ATPase: Studies of the inactive complex formed upon binding ADP at a catalytic site. Archives of Biochemistry and Biophysics, 1992, 295, 247-252.	1.4	22
102	Regulation of ATP hydrolysis in hepatoma 22a mitochondria. Archives of Biochemistry and Biophysics, 1991, 286, 604-609.	1.4	14
103	Activation of a complex of ATPase with the natural protein inhibitor in submitochondrial particles. FEBS Letters, 1990, 272, 145-148.	1.3	10
104	Transfer of tightly-bound tritium from the chloroplast membranes to CF1is activated by the photophosphorylation process. FEBS Letters, 1990, 272, 184-186.	1.3	9
105	Regulation of ATP hydrolysis in liver mitochondria from ground squirrel. FEBS Letters, 1990, 266, 83-86.	1.3	8
106	Energization of the membrane prevents the formation of tight inactive complexes of ATPase with MgADP in submitochondrial particles. FEBS Letters, 1989, 254, 79-82.	1.3	3
107	The properties and structure of the membrane ATPase from Vibrio alginolyticus. FEMS Microbiology Letters, 1988, 56, 79-82.	0.7	4
108	The interaction of MgADP with H+-ATPase in rat liver mitochondria. FEBS Letters, 1988, 230, 159-162.	1.3	10

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109	The effect of the natural protein inhibitor on H+-ATPase in hepatoma 22amitochondria. FEBS Letters, 1987, 215, 300-304.	1.3	14
110	Regulation of H+-ATPases in oxidative- and photophosphorylation. Trends in Biochemical Sciences, 1986, 11, 32-35.	3.7	27
111	The oxidation of sulfhydryl groups in mitochondrial F1 -ATPase decreases the rate of its inactivation by the natural protein inhibitor. FEBS Letters, 1985, 187, 253-256.	1.3	17
112	High-pressure enzyme kinetics. FEBS Letters, 1984, 169, 97-100.	1.3	1
113	A novel type of energetics in a marine alkali-tolerant bacterium. FEBS Letters, 1983, 164, 38-42.	1.3	85
114	A new method for studying bacterial chemotaxis. FEMS Microbiology Letters, 1982, 13, 113-116.	0.7	0
115	Structural rearrangements in soluble mitochondrial ATPase. Biochimica Et Biophysica Acta - Bioenergetics, 1981, 635, 552-570.	0.5	23
116	Investigation of Soluble Mitochondrial ATPase by the Reacting Enzyme Sedimentation Method. FEBS Journal, 1979, 98, 585-589.	0.2	7
117	Adenylylimidodiphosphate release from the active site of submitochondrial particles ATPase. FEBS Letters, 1979, 104, 215-219.	1.3	19