Vitaliy B Borisov

List of Publications by Year
in descending order

48 papers	2,549 citations	147566 31 h-index	214527 47 g-index
54 all docs	54 docs citations	54 times ranked	1708 citing authors

#	Article	IF	Citations
1	The cytochrome bd respiratory oxygen reductases. Biochimica Et Biophysica Acta - Bioenergetics, 2011, 1807, 1398-1413.	0.5	445
2	Cytochrome bd oxidase and bacterial tolerance to oxidative and nitrosative stress. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 1178-1187.	0.5	180
3	Aerobic respiratory chain of <i>Escherichia coli</i> is not allowed to work in fully uncoupled mode. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 17320-17324.	3.3	121
4	The Terminal Oxidase Cytochrome bd Promotes Sulfide-resistant Bacterial Respiration and Growth. Scientific Reports, 2016, 6, 23788.	1.6	118
5	Cytochrome <i>bd</i> oxidase from <i>Escherichia coli</i> displays high catalase activity: An additional defense against oxidative stress. FEBS Letters, 2013, 587, 2214-2218.	1.3	97
6	Interaction of the bacterial terminal oxidase cytochromebdwith nitric oxide. FEBS Letters, 2004, 576, 201-204.	1.3	79
7	Redox control of fast ligand dissociation from Escherichia coli cytochrome bd. Biochemical and Biophysical Research Communications, 2007, 355, 97-102.	1.0	79
8	Electrogenic Reactions of Cytochromebdâ€. Biochemistry, 2000, 39, 13800-13809.	1.2	78
9	Time-resolved electrometric and optical studies on cytochrome bd suggest a mechanism of electron-proton coupling in the di-heme active site. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 3657-3662.	3.3	76
10	Cytochrome <i>bd</i> oxidase and nitric oxide: From reaction mechanisms to bacterial physiology. FEBS Letters, 2012, 586, 622-629.	1.3	76
11	Interactions between Heme d and Heme b595 in Quinol Oxidase bd from Escherichia coli: A Photoselection Study Using Femtosecond Spectroscopy. Biochemistry, 2002, 41, 1654-1662.	1.2	71
12	Cytochrome<i>bd</i>from<i>Azotobacter vinelandii</i>:â€‰ Evidence for High-Affinity Oxygen Binding. Biochemistry, 2007, 46, 11177-11184.	1.2	61
13	ROS Defense Systems and Terminal Oxidases in Bacteria. Antioxidants, 2021, 10, 839.	2.2	59
14	Oxygenated complex of cytochromebdfromEscherichia coli: Stability and photolability. FEBS Letters, 2005, 579, 4567-4570.	1.3	55
15	Oxygen as Acceptor. EcoSal Plus, 2015, 6, .	2.1	51
16	Glutamate 107 in Subunit I of Cytochrome <i>bd</i> from <i>Escherichia coli</i> Is Part of a Transmembrane Intraprotein Pathway Conducting Protons from the Cytoplasm to the Heme <i>b</i>₅₉₅/Heme <i>d</i> Active Site. Biochemistry, 2008, 47, 7907-7914.	1.2	50
17	Cytochrome bd and Gaseous Ligands in Bacterial Physiology. Advances in Microbial Physiology, 2017, 71, 171-234.	1.0	50
18	Interaction of Cytochrome bd with Carbon Monoxide at Low and Room Temperatures. Journal of Biological Chemistry, 2001, 276, 22095-22099.	1.6	49

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19	Discovery of the True Peroxy Intermediate in the Catalytic Cycle of Terminal Oxidases by Real-time Measurement. Journal of Biological Chemistry, 2007, 282, 28514-28519.	1.6	49
20	Nitric oxide reacts with the ferryl-oxo catalytic intermediate of the CuB-lacking cytochromebdterminal oxidase. FEBS Letters, 2006, 580, 4823-4826.	1.3	46
21	Bacterial Oxidases of the Cytochrome<i>bd</i>Family: Redox Enzymes of Unique Structure, Function, and Utility As Drug Targets. Antioxidants and Redox Signaling, 2021, 34, 1280-1318.	2.5	45
22	Strong Excitonic Interactions in the Oxygen-Reducing Site of <i>bd</i>-Type Oxidase:â€‰ The Fe-to-Fe Distance between Hemes <i>d</i> and <i>b</i>₅₉₅ is 10 Ã…. Biochemistry, 2008, 47, 1752-1759.	1.2	41
23	Reaction of nitric oxide with the oxidized di-heme and hemeâ€"copper oxygen-reducing centers of terminal oxidases: Different reaction pathways and end-products. Journal of Inorganic Biochemistry, 2009, 103, 1185-1187.	1.5	40
24	Cytochrome bd from Escherichia coli catalyzes peroxynitrite decomposition. Biochimica Et Biophysica Acta - Bioenergetics, 2015, 1847, 182-188.	0.5	39
25	Hemeâ€"heme and hemeâ€"ligand interactions in the di-heme oxygen-reducing site of cytochrome bd from Escherichia coli revealed by nanosecond absorption spectroscopy. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 1657-1664.	0.5	36
26	Catalytic intermediates of cytochrome bd terminal oxidase at steady-state: Ferryl and oxy-ferrous species dominate. Biochimica Et Biophysica Acta - Bioenergetics, 2011, 1807, 503-509.	0.5	36
27	Defects in mitochondrial respiratory complexes III and IV, and human pathologies. Molecular Aspects of Medicine, 2002, 23, 385-412.	2.7	35
28	The fully oxidized form of the cytochrome <i>bd</i> quinol oxidase from <i>E. coli</i> does not participate in the catalytic cycle: Direct evidence from rapid kinetics studies. FEBS Letters, 2008, 582, 3705-3709.	1.3	33
29	Optical and magneto-optical activity of cytochrome bd from Geobacillus thermodenitrificans. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 2087-2094.	0.5	33
30	Cytochrome <i>bd</i> Oxidase and Hydrogen Peroxide Resistance in Mycobacterium tuberculosis. MBio, 2013, 4, e01006-13.	1.8	33
31	Heme/heme redox interaction and resolution of individual optical absorption spectra of the hemes in cytochrome bd from Escherichia coli. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 1246-1253.	0.5	32
32	Photosystem II and terminal respiratory oxidases molecular machines operating in opposite directions. Frontiers in Bioscience - Landmark, 2017, 22, 1379-1426.	3.0	25
33	Accommodation of CO in the di-heme active site of cytochrome bd terminal oxidase from Escherichia coli. Journal of Inorganic Biochemistry, 2013, 118, 65-67.	1.5	24
34	Impact of Hydrogen Sulfide on Mitochondrial and Bacterial Bioenergetics. International Journal of Molecular Sciences, 2021, 22, 12688.	1.8	23
35	In the respiratory chain of Escherichia coli cytochromes bd-I and bd-II are more sensitive to carbon monoxide inhibition than cytochrome bo3. Biochimica Et Biophysica Acta - Bioenergetics, 2019, 1860, 148088.	0.5	21
36	Recent Advances in Structural Studies of Cytochrome bd and Its Potential Application as a Drug Target. International Journal of Molecular Sciences, 2022, 23, 3166.	1.8	21

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37	Microsecond Time-Resolved Absorption Spectroscopy Used to Study CO Compounds of Cytochrome bd from Escherichia coli. PLoS ONE, 2014, 9, e95617.	1.1	20
38	Evidence for Fast Electron Transfer between the High-Spin Haems in Cytochrome bd-I from Escherichia coli. PLoS ONE, 2016, 11, e0155186.	1.1	20
39	Assembly of a chimeric respiratory chain from bovine heart submitochondrial particles and cytochrome <i>bd</i> terminal oxidase of <i>Escherichia coli</i>. FEBS Letters, 2009, 583, 1287-1291.	1.3	15
40	Terminal Oxidase Cytochrome bd Protects Bacteria Against Hydrogen Sulfide Toxicity. Biochemistry (Moscow), 2021, 86, 22-32.	0.7	15
41	Proton Pumping and Non-Pumping Terminal Respiratory Oxidases: Active Sites Intermediates of These Molecular Machines and Their Derivatives. International Journal of Molecular Sciences, 2021, 22, 10852.	1.8	15
42	His57 controls the efficiency of ESR, a light-driven proton pump from Exiguobacterium sibiricum at low and high pH. Biochimica Et Biophysica Acta - Bioenergetics, 2021, 1862, 148328.	0.5	11
43	In Escherichia coli Ammonia Inhibits Cytochrome bo3 But Activates Cytochrome bd-I. Antioxidants, 2021, 10, 13.	2.2	11
44	Oxygen as Acceptor. EcoSal Plus, 2009, 3, .	2.1	10
45	Nitric Oxide Does Not Inhibit but Is Metabolized by the Cytochrome bcc-aa3 Supercomplex. International Journal of Molecular Sciences, 2020, 21, 8521.	1.8	9
46	Mutations in respiratory chain complexes and human diseases. Italian Journal of Biochemistry, 2004, 53, 34-40.	0.3	8
47	Bioenergetics and Reactive Nitrogen Species in Bacteria. International Journal of Molecular Sciences, 2022, 23, 7321.	1.8	8
48	Cytochrome bd oxidase sustains sulfide-resistant bacterial respiration and growth. Free Radical Biology and Medicine, 2016, 96, S43-S44.	1.3	0