

Robert B Gennis

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4218058/publications.pdf>

Version: 2024-02-01

173
papers

7,988
citations

46984

47
h-index

62565

80
g-index

177
all docs

177
docs citations

177
times ranked

4887
citing authors

#	ARTICLE	IF	CITATIONS
1	The cytochrome bd respiratory oxygen reductases. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2011, 1807, 1398-1413.	0.5	445
2	Properties of the two terminal oxidases of <i>Escherichia coli</i> . <i>Biochemistry</i> , 1991, 30, 3936-3942.	1.2	326
3	The aerobic respiratory chain of <i>Escherichia coli</i> . <i>Trends in Biochemical Sciences</i> , 1987, 12, 262-266.	3.7	280
4	Cytochrome c oxidase: exciting progress and remaining mysteries. <i>Journal of Bioenergetics and Biomembranes</i> , 2008, 40, 521-531.	1.0	252
5	Multitarget Drug Discovery for Tuberculosis and Other Infectious Diseases. <i>Journal of Medicinal Chemistry</i> , 2014, 57, 3126-3139.	2.9	205
6	Structure of the alternative complex III in a supercomplex with cytochrome oxidase. <i>Nature</i> , 2018, 557, 123-126.	13.7	198
7	Glutamate 286 in Cytochromeaa ₃ from <i>Rhodobactersphaeroides</i> Is Involved in Proton Uptake during the Reaction of the Fully-Reduced Enzyme with Dioxygen. <i>Biochemistry</i> , 1997, 36, 13824-13829.	1.2	177
8	Mechanism of Ubiquinol Oxidation by thebc ₁ Complex:Â Different Domains of the Quinol Binding Pocket and Their Role in the Mechanism and Binding of Inhibitors. <i>Biochemistry</i> , 1999, 38, 15807-15826.	1.2	155
9	Rapid purification of wildtype and mutant cytochromecoxidase from <i>Rhodobacter sphaeroides</i> by Ni ²⁺ -NTA affinity chromatography. <i>FEBS Letters</i> , 1995, 368, 148-150.	1.3	153
10	Role of the Pathway through K(I-362) in Proton Transfer in CytochromecOxidase from <i>R. sphaeroides</i> . <i>Biochemistry</i> , 1998, 37, 2470-2476.	1.2	139
11	Antiinfectives targeting enzymes and the proton motive force. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E7073-82.	3.3	138
12	Diversity of the Hemeâ€Copper Superfamily in Archaea: Insights from Genomics and Structural Modeling. , 2008, 45, 1-31.		124
13	A Mutation in Subunit I of Cytochrome Oxidase from <i>Rhodobacter sphaeroides</i> Results in an Increase in Steady-State Activity but Completely Eliminates Proton Pumping. <i>Biochemistry</i> , 2002, 41, 13417-13423.	1.2	122
14	Aerobic respiratory chain of <i>Escherichia coli</i> is not allowed to work in fully uncoupled mode. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 17320-17324.	3.3	121
15	Adaptation of aerobic respiration to low O ₂ environments. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 14109-14114.	3.3	119
16	Mutations in the Putative H-Channel in the CytochromecOxidase from <i>Rhodobactersphaeroides</i> Show That This Channel Is Not Important for Proton Conduction but Reveal Modulation of the Properties of Heme. <i>Biochemistry</i> , 2000, 39, 2989-2996.	1.2	112
17	Coulometric and spectroscopic analysis of the purified cytochrome d complex of <i>Escherichia coli</i> : evidence for the identification of "cytochrome a ₁ " as cytochrome b ₅₉₅ . <i>Biochemistry</i> , 1986, 25, 2314-2321.	1.2	110
18	The cytochrome <i>ba</i> ₃ oxygen reductase from <i>Thermus thermophilus</i> uses a single input channel for proton delivery to the active site and for proton pumping. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 16169-16173.	3.3	102

#	ARTICLE	IF	CITATIONS
19	Polar Residues in Helix VIII of Subunit I of CytochromecOxidase Influence the Activity and the Structure of the Active Site. <i>Biochemistry</i> , 1996, 35, 10776-10783.	1.2	99
20	Effects of Mutation of the Conserved Lysine-362 in CytochromecOxidase from <i>Rhodobacter sphaeroides</i> . <i>Biochemistry</i> , 1997, 36, 14456-14464.	1.2	95
21	Purification and Characterization of the Cytochrome c Oxidase from <i>Rhodopseudomonas sphaeroides</i> . <i>FEBS Journal</i> , 1982, 125, 189-195.	0.2	93
22	The low-spin heme site of cytochrome o from <i>Escherichia coli</i> is promiscuous with respect to heme type. <i>Biochemistry</i> , 1992, 31, 10363-10369.	1.2	93
23	Aspartate-132 in Cytochrome c Oxidase from <i>Rhodobacter sphaeroides</i> Is Involved in a Two-Step Proton Transfer during Oxo-Ferryl Formation. <i>Biochemistry</i> , 1999, 38, 6826-6833.	1.2	89
24	Controlled uncoupling and recoupling of proton pumping in cytochrome c oxidase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 317-322.	3.3	89
25	Sequencing and Preliminary Characterization of the Na ⁺ -Translocating NADH:Ubiquinone Oxidoreductase from <i>Vibrio harveyi</i> . <i>Biochemistry</i> , 1999, 38, 16246-16252.	1.2	88
26	Cloning and DNA sequencing of the fbc operon encoding the cytochrome bc ₁ complex from <i>Rhodobacter sphaeroides</i> . Characterization of fbc deletion mutants and complementation by a site-specific mutational variant. <i>FEBS Journal</i> , 1990, 194, 399-411.	0.2	87
27	Ionophoric effects of the antitubercular drug bedaquiline. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 7326-7331.	3.3	85
28	The cbb3-type cytochrome c oxidase from <i>Rhodobacter sphaeroides</i> , a proton-pumping heme-copper oxidase. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1998, 1365, 421-434.	0.5	84
29	The Post-Translational Modification in CytochromecOxidase Is Required To Establish a Functional Environment of the Catalytic Site. <i>Biochemistry</i> , 1998, 37, 14471-14476.	1.2	81
30	Modified, large-scale purification of the cytochrome o complex (bo-type oxidase) of <i>Escherichia coli</i> yields a two heme/one copper terminal oxidase with high specific activity. <i>Biochemistry</i> , 1992, 31, 6917-6924.	1.2	77
31	Time-resolved electrometric and optical studies on cytochrome bd suggest a mechanism of electron-proton coupling in the di-heme active site. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 3657-3662.	3.3	76
32	Transmembrane Charge Separation during the Ferryl-oxo $\hat{\nu}$ Oxidized Transition in a Nonpumping Mutant of Cytochrome c Oxidase. <i>Journal of Biological Chemistry</i> , 2004, 279, 52558-52565.	1.6	75
33	Magic-angle spinning solid-state NMR of a 144 kDa membrane protein complex: <i>E. coli</i> cytochrome bo ₃ oxidase. <i>Journal of Biomolecular NMR</i> , 2006, 36, 55-71.	1.6	75
34	Comparative Genomics and Site-Directed Mutagenesis Support the Existence of Only One Input Channel for Protons in the C-Family (<i>cbb</i> ₃ Oxidase) of Heme ^h -Copper Oxygen Reductases. <i>Biochemistry</i> , 2007, 46, 9963-9972.	1.2	70
35	The Entry Point of the K-Proton-Transfer Pathway in CytochromecOxidase. <i>Biochemistry</i> , 2002, 41, 10794-10798.	1.2	68
36	Subunit CydX of <i>Escherichia coli</i> cytochrome bd ubiquinol oxidase is essential for assembly and stability of the di-heme active site. <i>FEBS Letters</i> , 2014, 588, 1537-1541.	1.3	68

#	ARTICLE	IF	CITATIONS
37	Magnetic Circular Dichroism Used To Examine the Interaction of Escherichia coli Cytochrome bd with Ligands. <i>Biochemistry</i> , 1999, 38, 740-750.	1.2	65
38	The cytochromes of Escherichia coli. <i>FEMS Microbiology Letters</i> , 1987, 46, 387-399.	0.7	61
39	Identification of a ferryl intermediate of Escherichia coli cytochrome d terminal oxidase by resonance Raman spectroscopy. <i>Biochemistry</i> , 1991, 30, 11485-11489.	1.2	61
40	Perfusion-induced redox differences in cytochrome c oxidase: ATR/FT-IR spectroscopy. <i>FEBS Letters</i> , 2001, 505, 63-67.	1.3	59
41	The room temperature reaction of carbon monoxide and oxygen with the cytochrome bd quinol oxidase from Escherichia coli. <i>Biochemistry</i> , 1994, 33, 15110-15115.	1.2	57
42	Proteolysis of the cytochrome d complex with trypsin and chymotrypsin localizes a quinol oxidase domain. <i>Biochemistry</i> , 1991, 30, 3401-3406.	1.2	56
43	Helix Switching of a Key Active-Site Residue in the Cytochrome cbb ₃ Oxidases. <i>Biochemistry</i> , 2005, 44, 10766-10775.	1.2	56
44	A rapid and robust method for selective isotope labeling of proteins. <i>Methods</i> , 2011, 55, 370-378.	1.9	55
45	Cloning and expression of the gene encoding the soluble cytochrome b ₅₆₂ of Escherichia coli. <i>FEBS Journal</i> , 1991, 202, 309-313.	0.2	54
46	Kinetics of Electron and Proton Transfer during the Reaction of Wild Type and Helix VI Mutants of Cytochrome b ₅₆₂ with Oxygen. <i>Biochemistry</i> , 1996, 35, 13673-13680.	1.2	52
47	Proton transfer in b ₅₆₂ cytochrome c oxidase from <i>Thermus thermophilus</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2012, 1817, 650-657.	0.5	52
48	Vibrational Modes of Ubiquinone in Cytochrome b ₅₆₂ from Escherichia coli Identified by Fourier Transform Infrared Difference Spectroscopy and Specific ¹³ C Labeling. <i>Biochemistry</i> , 1999, 38, 14683-14689.	1.2	50
49	Expression and mutagenesis of the NqrC subunit of the NQR respiratory Na ⁺ pump from <i>Vibrio cholerae</i> with covalently attached FMN. <i>FEBS Letters</i> , 2001, 492, 45-49.	1.3	50
50	Resonance Raman Spectroscopic Identification of a Histidine Ligand of b ₅₆₂ and the Nature of the Ligation of Chlorindin the Fully Reduced Escherichia coli Cytochrome bd Oxidase. <i>Biochemistry</i> , 1996, 35, 2403-2412.	1.2	48
51	A pH-Dependent Polarity Change at the Binuclear Center of Reduced Cytochrome c Oxidase Detected by FTIR Difference Spectroscopy of the CO Adduct. <i>Biochemistry</i> , 1996, 35, 9446-9450.	1.2	47
52	Substitution of Lysine-362 in a Putative Proton-Conducting Channel in the Cytochrome c Oxidase from <i>Rhodobacter sphaeroides</i> Blocks Turnover with O ₂ but Not with H ₂ O ₂ . <i>Biochemistry</i> , 1998, 37, 3062-3067.	1.2	46
53	Spectral and Kinetic Equivalence of Oxidized Cytochrome c Oxidase as Isolated and "Activated" by Reoxidation. <i>Journal of Biological Chemistry</i> , 2006, 281, 30319-30325.	1.6	45
54	Site-Directed Mutagenesis of Residues Lining a Putative Proton Transfer Pathway in Cytochrome c Oxidase from <i>Rhodobacter sphaeroides</i> . <i>Biochemistry</i> , 1996, 35, 13089-13093.	1.2	44

#	ARTICLE	IF	CITATIONS
55	Replacing Asn207 by Aspartate at the Neck of the D Channel in the aa3-Type Cytochrome c Oxidase from <i>Rhodobacter sphaeroides</i> Results in Decoupling the Proton Pump. <i>Biochemistry</i> , 2006, 45, 14064-14074.	1.2	44
56	Impaired proton pumping in cytochrome c oxidase upon structural alteration of the D pathway. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2008, 1777, 897-903.	0.5	43
57	Magnetic-circular-dichroism studies of <i>Escherichia coli</i> cytochrome bo. Identification of high-spin ferric, low-spin ferric and ferryl [Fe(IV)] forms of heme o. <i>FEBS Journal</i> , 1994, 219, 595-602.	0.2	42
58	Role of the K-Channel in the pH-Dependence of the Reaction of CytochromecOxidase with Hydrogen Peroxide. <i>Biochemistry</i> , 2001, 40, 9695-9708.	1.2	41
59	Strong Excitonic Interactions in the Oxygen-Reducing Site of <i>bd</i> -Type Oxidase: The Fe-to-Fe Distance between Hemes <i>d</i> and <i>b</i> ₅₉₅ is 10 Å.... <i>Biochemistry</i> , 2008, 47, 1752-1759.	1.2	41
60	The quinone-binding sites of the cytochrome bo ₃ ubiquinol oxidase from <i>Escherichia coli</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2010, 1797, 1924-1932.	0.5	41
61	Characterization of the type 2 NADH:menaquinone oxidoreductases from <i>Staphylococcus aureus</i> and the bactericidal action of phenothiazines. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2014, 1837, 954-963.	0.5	41
62	Distinct forms of the haemo-Cu binuclear site of oxidised cytochromebofrom <i>Escherichia coli</i> . <i>FEBS Letters</i> , 1993, 319, 151-154.	1.3	40
63	Characterization of the Exchangeable Protons in the Immediate Vicinity of the Semiquinone Radical at the QH Site of the Cytochrome bo ₃ from <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 2006, 281, 16879-16887.	1.6	39
64	Single-electron photoreduction of the PM intermediate of cytochrome c oxidase. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2006, 1757, 1122-1132.	0.5	38
65	Subunit II of the Cytochromebo ₃ Ubiquinol Oxidase from <i>Escherichia coli</i> is a Lipoprotein. <i>Biochemistry</i> , 1997, 36, 11298-11303.	1.2	36
66	Site-Directed Mutation of the Highly Conserved Region near the Q-Loop of the Cytochrome bd Quinol Oxidase from <i>Escherichia coli</i> Specifically Perturbs Heme b ₅₉₅ . <i>Biochemistry</i> , 2001, 40, 8548-8556.	1.2	36
67	Heme-heme and heme-ligand interactions in the di-heme oxygen-reducing site of cytochrome bd from <i>Escherichia coli</i> revealed by nanosecond absorption spectroscopy. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2010, 1797, 1657-1664.	0.5	36
68	Kinetic design of the respiratory oxidases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 11057-11062.	3.3	36
69	Division of labor in transhydrogenase by alternating proton translocation and hydride transfer. <i>Science</i> , 2015, 347, 178-181.	6.0	36
70	Identification of the Residues Involved in Stabilization of the Semiquinone Radical in the High-Affinity Ubiquinone Binding Site in Cytochrome bo ₃ from <i>Escherichia coli</i> by Site-Directed Mutagenesis and EPR Spectroscopy. <i>Biochemistry</i> , 2002, 41, 10675-10679.	1.2	35
71	Entrance of the proton pathway in <i>cbb</i> ₃ -type heme-copper oxidases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 17661-17666.	3.3	35
72	The Diheme Cytochrome <i>c</i> ₄ from <i>Vibrio cholerae</i> Is a Natural Electron Donor to the Respiratory <i>cbb</i> ₃ Oxygen Reductase. <i>Biochemistry</i> , 2010, 49, 7494-7503.	1.2	34

#	ARTICLE	IF	CITATIONS
73	Characterization of the Type III sulfide:quinone oxidoreductase from <i>Caldivirga maquilingsis</i> and its membrane binding. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2013, 1827, 266-275.	0.5	34
74	CtaM Is Required for Menaquinol Oxidase aa_3 Function in <i>Staphylococcus aureus</i> . <i>MBio</i> , 2016, 7, .	1.8	34
75	Single-particle cryo-EM studies of transmembrane proteins in SMA copolymer nanodiscs. <i>Chemistry and Physics of Lipids</i> , 2019, 221, 114-119.	1.5	34
76	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. <i>FEBS Letters</i> , 2008, 582, 3705-3709.	1.3	33
77	Properties of Arg481 Mutants of the aa_3 -Type Cytochrome <i>c</i> Oxidase from <i>Rhodobacter sphaeroides</i> Suggest That neither R481 nor the Nearby D-Propionate of Heme <i>a</i> Is Likely To Be the Proton Loading Site of the Proton Pump. <i>Biochemistry</i> , 2009, 48, 7123-7131.	1.2	33
78	Using Matrix-Assisted Laser Desorption Ionization Mass Spectrometry To Map the Quinol Binding Site of Cytochrome <i>bo</i> ₃ from <i>Escherichia coli</i> . <i>Biochemistry</i> , 1998, 37, 9884-9888.	1.2	32
79	Cytochrome O from <i>Escherichia coli</i> Is Structurally Related to Cytochrome <i>aa</i> ₃ . <i>Annals of the New York Academy of Sciences</i> , 1988, 550, 314-324.	1.8	31
80	A Conserved Glutamic Acid in Helix VI of Cytochrome <i>bo</i> ₃ Influences a Key Step in Oxygen Reduction. <i>Biochemistry</i> , 1997, 36, 13736-13742.	1.2	31
81	Q-Band ENDOR (Electron Nuclear Double Resonance) of the High-Affinity Ubisemiquinone Center in Cytochrome <i>bo</i> ₃ from <i>Escherichia coli</i> . <i>Biochemistry</i> , 2000, 39, 3169-3175.	1.2	31
82	Glutamate 107 in Subunit I of the Cytochrome <i>bd</i> Quinol Oxidase from <i>Escherichia coli</i> Is Protonated and near the Heme d/Heme b ₅₉₅ Binuclear Center. <i>Biochemistry</i> , 2007, 46, 3270-3278.	1.2	31
83	Oriented immobilization and electron transfer to the cytochrome <i>c</i> oxidase. <i>Journal of Solid State Electrochemistry</i> , 2011, 15, 105-114.	1.2	31
84	Interactions of Intermediate Semiquinone with Surrounding Protein Residues at the Q _H Site of Wild-Type and D75H Mutant Cytochrome <i>bo</i> ₃ from <i>Escherichia coli</i> . <i>Biochemistry</i> , 2012, 51, 3827-3838.	1.2	31
85	Partial Steps of Charge Translocation in the Nonpumping N139L Mutant of <i>Rhodobacter sphaeroides</i> Cytochrome <i>c</i> Oxidase with a Blocked D-Channel. <i>Biochemistry</i> , 2010, 49, 3060-3073.	1.2	30
86	Resonance Raman studies of <i>Escherichia coli</i> cytochrome <i>bd</i> oxidase. Selective enhancement of the three heme chromophores of the "as-isolated" enzyme and characterization of the cyanide adduct. <i>Biochemistry</i> , 1995, 34, 12144-12151.	1.2	29
87	Tryptophan-136 in Subunit II of Cytochrome <i>bo</i> ₃ from <i>Escherichia coli</i> May Participate in the Binding of Ubiquinol. <i>Biochemistry</i> , 1998, 37, 11806-11811.	1.2	29
88	Characterization of Mutants That Change the Hydrogen Bonding of the Semiquinone Radical at the QH Site of the Cytochrome <i>bo</i> ₃ from <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 2007, 282, 8777-8785.	1.6	29
89	Nitrogen and proton ENDOR of cytochrome <i>d</i> , heme, and metmyoglobin in frozen solutions. <i>Journal of the American Chemical Society</i> , 1993, 115, 10293-10299.	6.6	28
90	Identification of the Nitrogen Donor Hydrogen Bonded with the Semiquinone at the Q _H Site of the Cytochrome <i>bo</i> ₃ from <i>Escherichia coli</i> . <i>Journal of the American Chemical Society</i> , 2008, 130, 15768-15769.	6.6	28

#	ARTICLE	IF	CITATIONS
91	Decoupling Mutations in the D-Channel of the aa3-Type Cytochrome c Oxidase from Rhodobacter sphaeroides Suggest That a Continuous Hydrogen-Bonded Chain of Waters Is Essential for Proton Pumping. <i>Biochemistry</i> , 2010, 49, 4476-4482.	1.2	28
92	Functional interactions between membrane-bound transporters and membranes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 15763-15767.	3.3	27
93	The unusual redox properties of C-type oxidases. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2016, 1857, 1892-1899.	0.5	27
94	Some recent contributions of FTIR difference spectroscopy to the study of cytochrome oxidase1. <i>FEBS Letters</i> , 2003, 555, 2-7.	1.3	26
95	A New Ruthenium Complex To Study Single-Electron Reduction of the Pulsed OH State of Detergent-Solubilized Cytochrome Oxidase. <i>Biochemistry</i> , 2007, 46, 14610-14618.	1.2	26
96	Cryo-EM structures of <i>Escherichia coli</i> cytochrome <i>bo</i> ₃ reveal bound phospholipids and ubiquinone-8 in a dynamic substrate binding site. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	25
97	Characterization of the Semiquinone Radical Stabilized by the Cytochrome aa3-600 Menaquinol Oxidase of <i>Bacillus subtilis</i> . <i>Journal of Biological Chemistry</i> , 2010, 285, 18241-18251.	1.6	24
98	Type 2 NADH Dehydrogenase Is the Only Point of Entry for Electrons into the <i>Streptococcus agalactiae</i> Respiratory Chain and Is a Potential Drug Target. <i>MBio</i> , 2018, 9, .	1.8	24
99	Mutation of a single residue in the <i>ba</i> ₃ oxidase specifically impairs protonation of the pump site. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 3397-3402.	3.3	23
100	Direct Evidence for the Protonation of Aspartate-75, Proposed To Be at a Quinol Binding Site, upon Reduction of Cytochrome <i>bo</i> ₃ from <i>Escherichia coli</i> . <i>Biochemistry</i> , 2001, 40, 1077-1082.	1.2	22
101	Resonance raman study on axial ligands of heme irons in cytochrome <i>bd</i> -type ubiquinol oxidase from <i>Escherichia coli</i> . <i>Biospectroscopy</i> , 1995, 1, 305-311.	0.7	21
102	Matrix-assisted laser desorption ionization mass spectrometry of membrane proteins: Demonstration of a simple method to determine subunit molecular weights of hydrophobic subunits. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1997, 1330, 113-120.	1.4	21
103	Conformational transitions and molecular hysteresis of cytochrome c oxidase: Varying the redox state by electronic wiring. <i>Soft Matter</i> , 2010, 6, 5523.	1.2	21
104	Structure of the cytochrome <i>aa</i> ₃ -600 heme-copper menaquinol oxidase bound to inhibitor HQNO shows TMO is part of the quinol binding site. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 872-876.	3.3	21
105	Solid-State NMR Study of the Charge-Transfer Complex between Ubiquinone-8 and Disulfide Bond Generating Membrane Protein DsbB. <i>Journal of the American Chemical Society</i> , 2011, 133, 4359-4366.	6.6	20
106	Exploring by Pulsed EPR the Electronic Structure of Ubisemiquinone Bound at the QH Site of Cytochrome <i>bo</i> ₃ from <i>Escherichia coli</i> with in Vivo ¹³ C-Labeled Methyl and Methoxy Substituents. <i>Journal of Biological Chemistry</i> , 2011, 286, 10105-10114.	1.6	20
107	Cell-free synthesis of cytochrome <i>bo</i> ₃ ubiquinol oxidase in artificial membranes. <i>Analytical Biochemistry</i> , 2012, 423, 39-45.	1.1	20
108	A Ligand-Exchange Mechanism of Proton Pumping Involving Tyrosine-422 of Subunit I of Cytochrome Oxidase Is Ruled Out. <i>Biochemistry</i> , 1996, 35, 824-828.	1.2	19

#	ARTICLE	IF	CITATIONS
109	Dissection of Hydrogen Bond Interaction Network around an Iron-Sulfur Cluster by Site-Specific Isotope Labeling of Hyperthermophilic Archaeal Rieske-Type Ferredoxin. <i>Journal of the American Chemical Society</i> , 2012, 134, 19731-19738.	6.6	19
110	<i>Escherichia coli</i> Auxotroph Host Strains for Amino Acid-Selective Isotope Labeling of Recombinant Proteins. <i>Methods in Enzymology</i> , 2015, 565, 45-66.	0.4	19
111	X-ray transparent microfluidic platforms for membrane protein crystallization with microseeds. <i>Lab on A Chip</i> , 2018, 18, 944-954.	3.1	19
112	The carboxy-terminal insert in the Q-loop is needed for functionality of <i>Escherichia coli</i> cytochrome <i>bd-l</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2020, 1861, 148175.	0.5	19
113	Evolution of the cytochrome <i>bd</i> oxygen reductase superfamily and the function of <i>CydAA</i> ™ in Archaea. <i>ISME Journal</i> , 2021, 15, 3534-3548.	4.4	18
114	Proton Dynamics at the Membrane Surface. <i>Biophysical Journal</i> , 2016, 110, 1909-1911.	0.2	17
115	All the O ₂ Consumed by <i>Thermus thermophilus</i> Cytochrome <i>ba₃</i> Is Delivered to the Active Site through a Long, Open Hydrophobic Tunnel with Entrances within the Lipid Bilayer. <i>Biochemistry</i> , 2016, 55, 1265-1278.	1.2	17
116	Location of the Substrate Binding Site of the Cytochrome <i>bo₃</i> Ubiquinol Oxidase from <i>Escherichia coli</i> . <i>Journal of the American Chemical Society</i> , 2017, 139, 8346-8354.	6.6	17
117	Detergent-solubilized <i>Escherichia coli</i> cytochrome <i>bo₃</i> ubiquinol oxidase: a monomeric, not a dimeric complex. <i>FEBS Letters</i> , 1999, 457, 153-156.	1.3	16
118	Structure Changes upon Deprotonation of the Proton Release Group in the Bacteriorhodopsin Photocycle. <i>Biophysical Journal</i> , 2012, 103, 444-452.	0.2	16
119	Review and Hypothesis. New insights into the reaction mechanism of transhydrogenase: Swivelling the <i>dlll</i> component may gate the proton channel. <i>FEBS Letters</i> , 2015, 589, 2027-2033.	1.3	16
120	Role of respiratory <i>NADH</i> oxidation in the regulation of <i>Staphylococcus aureus</i> virulence. <i>EMBO Reports</i> , 2020, 21, e45832.	2.0	16
121	Blocking the K-pathway still allows rapid one-electron reduction of the binuclear center during the anaerobic reduction of the <i>aa₃</i> -type cytochrome <i>c</i> oxidase from <i>Rhodobacter sphaeroides</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2010, 1797, 619-624.	0.5	15
122	Timing of Electron and Proton Transfer in the <i>ba₃</i> Cytochrome <i>c</i> Oxidase from <i>Thermus thermophilus</i> . <i>Biochemistry</i> , 2012, 51, 4507-4517.	1.2	15
123	Characterization of the nitric oxide reductase from <i>Thermus thermophilus</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 12613-12618.	3.3	15
124	The electron distribution in the ε-activated state of cytochrome <i>c</i> oxidase. <i>Scientific Reports</i> , 2018, 8, 7502.	1.6	15
125	Critical structural role of R481 in cytochrome <i>c</i> oxidase from <i>Rhodobacter sphaeroides</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2009, 1787, 1272-1275.	0.5	14
126	The Semiquinone at the Q _i Site of the <i>bc₁</i> Complex Explored Using HYSORE Spectroscopy and Specific Isotopic Labeling of Ubiquinone in <i>Rhodobacter sphaeroides</i> via ¹³ C Methionine and Construction of a Methionine Auxotroph. <i>Biochemistry</i> , 2014, 53, 6022-6031.	1.2	14

#	ARTICLE	IF	CITATIONS
127	Microcin J25 inhibits ubiquinol oxidase activity of purified cytochrome bd-I from <i>Escherichia coli</i> . <i>Biochimie</i> , 2019, 160, 141-147.	1.3	14
128	Discovery of Prenyltransferase Inhibitors with <i>In Vitro</i> and <i>In Vivo</i> Antibacterial Activity. <i>ACS Infectious Diseases</i> , 2020, 6, 2979-2993.	1.8	14
129	The three-spin intermediate at the O ₂ cleavage and proton-pumping junction in heme ^b -Cu oxidases. <i>Science</i> , 2021, 373, 1225-1229.	6.0	13
130	Q-Band ENDOR (Electron Nuclear Double Resonance) of the Heme ^b 3 Liganding Environment at the Binuclear Center in Cytochrome _{bo3} from <i>Escherichia coli</i> . <i>Journal of the American Chemical Society</i> , 2000, 122, 8712-8716.	6.6	12
131	Critical Role of Water Molecules in Proton Translocation by the Membrane-Bound Transhydrogenase. <i>Structure</i> , 2017, 25, 1111-1119.e3.	1.6	12
132	Flash-Photolysis of Fully Reduced and Mixed-Valence CO-Bound <i>Rhodobacter sphaeroides</i> Cytochrome <i>c</i> Oxidase: Heme Spectral Shifts. <i>Biochemistry</i> , 2007, 46, 12568-12578.	1.2	11
133	Proton pumping by an inactive structural variant of cytochrome <i>c</i> oxidase. <i>Journal of Inorganic Biochemistry</i> , 2014, 140, 6-11.	1.5	11
134	Functional importance of Glutamate-445 and Glutamate-99 in proton-coupled electron transfer during oxygen reduction by cytochrome bd from <i>Escherichia coli</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2018, 1859, 577-590.	0.5	11
135	Factors Determining Electron-Transfer Rates in Cytochrome _c Oxidase: Studies of the FQ(I-391) Mutant of the <i>Rhodobacter sphaeroides</i> Enzyme. <i>Biochemistry</i> , 1997, 36, 11787-11796.	1.2	10
136	Bacterial denitrifying nitric oxide reductases and aerobic respiratory terminal oxidases use similar delivery pathways for their molecular substrates. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2018, 1859, 712-724.	0.5	10
137	Water as a Cofactor in the Unidirectional Light-Driven Proton Transfer Steps in Bacteriorhodopsin. <i>Photochemistry and Photobiology</i> , 2006, 82, 1398-1405.	1.3	9
138	Plasticity in the High Affinity Menaquinone Binding Site of the Cytochrome <i>aa</i> ₃ -600 Menaquinol Oxidase from <i>Bacillus subtilis</i> . <i>Biochemistry</i> , 2015, 54, 5030-5044.	1.2	9
139	Q-Band Electron-Nuclear Double Resonance Reveals Out-of-Plane Hydrogen Bonds Stabilize an Anionic Ubisemiquinone in Cytochrome _{bo3} from <i>Escherichia coli</i> . <i>Biochemistry</i> , 2016, 55, 5714-5725.	1.2	9
140	Functional Importance of a Pair of Conserved Glutamic Acid Residues and of Ca ²⁺ Binding in the <i>cbb</i> ₃ -Type Oxygen Reductases from <i>Rhodobacter sphaeroides</i> and <i>Vibrio cholerae</i> . <i>Biochemistry</i> , 2012, 51, 7290-7296.	1.2	8
141	Conformational coupling between the active site and residues within the KC-channel of the <i>Vibrio cholerae</i> <i>cbb</i> ₃ -type (C-family) oxygen reductase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E4419-E4428.	3.3	8
142	The two transmembrane helices of CcoP are sufficient for assembly of the <i>cbb</i> ₃ -type heme-copper oxygen reductase from <i>Vibrio cholerae</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2015, 1847, 1231-1239.	0.5	8
143	Searching for the low affinity ubiquinone binding site in cytochrome _{bo3} from <i>Escherichia coli</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2017, 1858, 366-370.	0.5	8
144	Role of the tightly bound quinone for the oxygen reaction of cytochrome <i>bo</i> ₃ oxidase from <i>Escherichia coli</i> . <i>FEBS Letters</i> , 2018, 592, 3380-3387.	1.3	8

#	ARTICLE	IF	CITATIONS
145	Identification of a cytochrome bc ₁ -aa ₃ supercomplex in <i>Rhodobacter sphaeroides</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2021, 1862, 148433.	0.5	8
146	Alternate pathways for NADH oxidation in <i>Thermus thermophilus</i> using type 2 NADH dehydrogenases. <i>Biological Chemistry</i> , 2013, 394, 667-676.	1.2	7
147	X-ray transparent microfluidic chips for high-throughput screening and optimization of in meso membrane protein crystallization. <i>Biomicrofluidics</i> , 2017, 11, 024118.	1.2	7
148	Unpaired Electron Spin Density Distribution across Reduced [2Fe-2S] Cluster Ligands by ¹³ C- ¹⁵ N-Cysteine Labeling. <i>Inorganic Chemistry</i> , 2018, 57, 741-746.	1.9	7
149	Time-Resolved Electrometric Study of the F ₄₇ O Transition in Cytochrome c Oxidase. The Effect of Zn ²⁺ Ions on the Positive Side of the Membrane. <i>Biochemistry (Moscow)</i> , 2021, 86, 105-122.	0.7	7
150	Examination of the Reaction of Fully Reduced Cytochrome Oxidase with Hydrogen Peroxide by Flow-Flash Spectroscopy. <i>Biochemistry</i> , 1999, 38, 16016-16023.	1.2	6
151	Nitroxide spin labels as EPR reporters of the relaxation and magnetic properties of the heme "copper site in cytochrome bo ₃ , <i>E. coli</i> . <i>Journal of Biological Inorganic Chemistry</i> , 2010, 15, 1255-1264.	1.1	6
152	Kinetics and Intermediates of the Reaction of Fully Reduced <i>Escherichia coli</i> bo ₃ Ubiquinol Oxidase with O ₂ . <i>Biochemistry</i> , 2014, 53, 5393-5404.	1.2	6
153	Dynamics of the K ^B Proton Pathway in Cytochrome ba ₃ from <i>Thermus thermophilus</i> . <i>Israel Journal of Chemistry</i> , 2017, 57, 424-436.	1.0	6
154	The Ubiquinol Binding Site of Cytochrome bo ₃ from <i>Escherichia coli</i> Accommodates Menaquinone and Stabilizes a Functional Menasemiquinone. <i>Biochemistry</i> , 2019, 58, 4559-4569.	1.2	6
155	<i>Escherichia coli</i> amino acid auxotrophic expression host strains for investigating protein structure-function relationships. <i>Journal of Biochemistry</i> , 2021, 169, 387-394.	0.9	6
156	Immunochemical analysis of the membrane-bound succinate dehydrogenase of <i>Escherichia coli</i> . <i>FEBS Letters</i> , 1982, 142, 81-87.	1.3	5
157	Cytochrome aa ₃ Oxygen Reductase Utilizes the Tunnel Observed in the Crystal Structures To Deliver O ₂ for Catalysis. <i>Biochemistry</i> , 2018, 57, 2150-2161.	1.2	5
158	Specific inhibition of proton pumping by the T315V mutation in the K channel of cytochrome ba from <i>Thermus thermophilus</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2021, 1862, 148450.	0.5	5
159	Energy transfer between the nicotinamide nucleotide transhydrogenase and ATP synthase of <i>Escherichia coli</i> . <i>Scientific Reports</i> , 2021, 11, 21234.	1.6	4
160	The ¹³ CO Photodissociation and Recombination Dynamics of the W172Y/F282T Ligand Channel Mutant of <i>Rhodobacter sphaeroides</i> aa ₃ Cytochrome c Oxidase. <i>Photochemistry and Photobiology</i> , 2016, 92, 410-419.	1.3	3
161	Mechanism of proton transfer through the KC proton pathway in the <i>Vibrio cholerae</i> cbb3 terminal oxidase. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2018, 1859, 1191-1198.	0.5	3
162	Differential effects of glutamate-286 mutations in the aa ₃ -type cytochrome c oxidase from <i>Rhodobacter sphaeroides</i> and the cytochrome bo ₃ ubiquinol oxidase from <i>Escherichia coli</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2011, 1807, 1342-1348.	0.5	2

#	ARTICLE	IF	CITATIONS
163	The K ^C Channel in the <i>cbb₃</i> -Type Respiratory Oxygen Reductase from <i>Rhodobacter capsulatus</i> Is Required for Both Chemical and Pumped Protons. <i>Journal of Bacteriology</i> , 2014, 196, 1825-1832.	1.0	2
164	The oligomeric state of the <i>Caldivirga maquilingsensis</i> type III sulfide:Quinone Oxidoreductase is required for membrane binding. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2020, 1861, 148132.	0.5	2
165	The Monoheme <i>c</i> Subunit of Respiratory Alternative Complex III Is Not Essential for Electron Transfer to Cytochrome <i>aa₃</i> in <i>Flavobacterium johnsoniae</i> . <i>Microbiology Spectrum</i> , 2021, 9, e0013521.	1.2	2
166	Rapid Formation of a Semiquinone Species on Oxidation of Quinol by the Cytochrome <i>bo₃</i> Oxidase from <i>Escherichia coli</i> . , 1998, , 33-39.		2
167	Ligand binding properties of bacterial oxidases in relation to cytochrome- <i>c</i> oxidase. <i>Biochemical Society Transactions</i> , 1992, 20, 240S-240S.	1.6	1
168	Product-controlled steady-state kinetics between cytochrome <i>aa₃</i> from <i>Rhodobacter sphaeroides</i> and equine ferrocytochrome <i>c</i> analyzed by a novel spectrophotometric approach. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2012, 1817, 1894-1900.	0.5	1
169	Characterization and X-ray structure of the NADH-dependent coenzyme A disulfide reductase from <i>Thermus thermophilus</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2019, 1860, 148080.	0.5	1
170	Immunochemical analysis of membrane-bound antigens from <i>Escherichia coli</i> which have succinate dehydrogenase activity. <i>Biochemical Society Transactions</i> , 1984, 12, 800-801.	1.6	0
171	Respiration in Archaea and Bacteria: Diversity of Prokaryotic Electron Transport Carriers. Davide Zannoni, <i>Advances in Photosynthesis and Respiration</i> (Series Editor, Govindjee), Kluwer Academic Publishers, Dordrecht, The Netherlands, Volume 15, 2004, 350 pp, ISBN 1-4020-2001-5, Price EUR 175.00, USD 193.00, GBP 121.00., <i>Photosynthesis Research</i> , 2005, 83, 363-364.	1.6	0
172	211436 Optimization of expression condition and purification of <i>cbb₃</i> -type cytochrome <i>c</i> oxidase(Heme) Tj ETQq _{0,0} rgBT /Overlock 1		0
173	Replacing Arg70 by Histidine in The Cytochrome <i>Aa₃</i> Menaquinol Oxidase from <i>Bacillus Subtilis</i> Changes The Nitrogen Interacting with The Semiquinone Formed at The Q _h Site But Does Not Eliminate Catalytic Function. <i>FASEB Journal</i> , 2015, 29, LB110.	0.2	0