Gary Cecchini

List of Publications by Year
in descending order

48 papers	3,700 citations	201674 27 h-index	206112 48 g-index
49 all docs	49 docs citations	49 times ranked	3260 citing authors

#	Article	IF	Citations
1	Architecture of Succinate Dehydrogenase and Reactive Oxygen Species Generation. Science, 2003, 299, 700-704.	12.6	806
2	Function and Structure of Complex II of the Respiratory Chain. Annual Review of Biochemistry, 2003, 72, 77-109.	11.1	430
3	Structure of the Escherichia coli Fumarate Reductase Respiratory Complex. Science, 1999, 284, 1961-1966.	12.6	400
4	Structural and Computational Analysis of the Quinone-binding Site of Complex II (Succinate-Ubiquinone Oxidoreductase). Journal of Biological Chemistry, 2006, 281, 7309-7316.	3.4	244
5	Succinate dehydrogenase and fumarate reductase from Escherichia coli. Biochimica Et Biophysica Acta - Bioenergetics, 2002, 1553, 140-157.	1.0	228
6	Anaerobic Expression of <i>Escherichia coli</i> Succinate Dehydrogenase: Functional Replacement of Fumarate Reductase in the Respiratory Chain during Anaerobic Growth. Journal of Bacteriology, 1998, 180, 5989-5996.	2.2	125
7	Crystallographic Studies of the Escherichia coli Quinol-Fumarate Reductase with Inhibitors Bound to the Quinol-binding Site. Journal of Biological Chemistry, 2002, 277, 16124-16130.	3.4	98
8	Enzyme Electrokinetics:â€‰ Energetics of Succinate Oxidation by Fumarate Reductase and Succinate Dehydrogenase. Biochemistry, 2001, 40, 11234-11245.	2.5	88
9	[3Fe-4S] to [4Fe-4S] cluster conversion in Escherichia coli fumarate reductase by site-directed mutagenesis. Biochemistry, 1992, 31, 2703-2712.	2.5	84
10	Structure of Escherichia coli Succinate:Quinone Oxidoreductase with an Occupied and Empty Quinone-binding Site. Journal of Biological Chemistry, 2009, 284, 29836-29846.	3.4	76
11	Effect of cysteine to serine mutations on the properties of the [4Fe-4S] center in Escherichia coli fumarate reductase. Biochemistry, 1995, 34, 12284-12293.	2.5	73
12	The quinone-binding and catalytic site of complex II. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 1877-1882.	1.0	70
13	Comparison of Catalytic Activity and Inhibitors of Quinone Reactions of Succinate Dehydrogenase (Succinateâ€"Ubiquinone Oxidoreductase) and Fumarate Reductase (Menaquinolâ€"Fumarate) Tj ETQq1 1 0.78431 rgBT /Overlock 10	3.4	69
14	The Quinone Binding Site in Escherichia coli Succinate Dehydrogenase Is Required for Electron Transfer to the Heme b. Journal of Biological Chemistry, 2006, 281, 32310-32317.	3.4	51
15	Fumarate Reductase and Succinate Oxidase Activity of Escherichia coli Complex II Homologs Are Perturbed Differently by Mutation of the Flavin Binding Domain. Journal of Biological Chemistry, 2006, 281, 11357-11365.	3.4	49
16	<i>Escherichia coli</i> succinate dehydrogenase variant lacking the heme <i>b</i>. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18007-18012.	7.1	47
17	The bacterial flagellar switch complex is getting more complex. EMBO Journal, 2008, 27, 1134-1144.	7.8	45
18	Interactions of oxaloacetate with Escherichia coli fumarate reductase. Archives of Biochemistry and Biophysics, 1989, 268, 26-34.	3.0	44

#	Article	IF	Citations
19	Differences in Protonation of Ubiquinone and Menaquinone in Fumarate Reductase from Escherichia coli. Journal of Biological Chemistry, 2006, 281, 26655-26664.	3.4	44
20	Retention of Heme in Axial Ligand Mutants of Succinate-Ubiquinone Oxidoreductase (Complex II) from Escherichia coli. Journal of Biological Chemistry, 2001, 276, 18968-18976.	3.4	41
21	Structural Basis for Malfunction in Complex II. Journal of Biological Chemistry, 2012, 287, 35430-35438.	3.4	41
22	Molecular identification of the enzyme responsible for the mitochondrial NADH-supported ammonium-dependent hydrogen peroxide production. FEBS Letters, 2011, 585, 385-389.	2.8	40
23	Variation in proton donor/acceptor pathways in succinate:quinone oxidoreductases. FEBS Letters, 2003, 545, 31-38.	2.8	39
24	Analyzing your complexes: structure of the quinol-fumarate reductase respiratory complex. Current Opinion in Structural Biology, 2000, 10, 448-455.	5.7	32
25	Evidence for non-cysteinyl coordination of the [2Fe-2S] cluster inEscherichia colisuccinate dehydrogenase. FEBS Letters, 1992, 299, 1-4.	2.8	31
26	A novel strong competitive inhibitor of complex I. FEBS Letters, 2005, 579, 4861-4866.	2.8	30
27	Defining a direction: Electron transfer and catalysis in Escherichia coli complex II enzymes. Biochimica Et Biophysica Acta - Bioenergetics, 2013, 1827, 668-678.	1.0	29
28	Defining the QP-site of Escherichia coli fumarate reductase by site-directed mutagenesis, fluorescence quench titrations and EPR spectroscopy. FEBS Journal, 2005, 272, 313-326.	4.7	28
29	Electron Transfer within Complex II. Journal of Biological Chemistry, 2005, 280, 33331-33337.	3.4	28
30	Redox State of Flavin Adenine Dinucleotide Drives Substrate Binding and Product Release in <i>Escherichia coli</i> Succinate Dehydrogenase. Biochemistry, 2015, 54, 1043-1052.	2.5	26
31	A Threonine on the Active Site Loop Controls Transition State Formation in Escherichia coli Respiratory Complex II. Journal of Biological Chemistry, 2008, 283, 15460-15468.	3.4	25
32	The roles of SDHAF2 and dicarboxylate in covalent flavinylation of SDHA, the human complex II flavoprotein. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 23548-23556.	7.1	25
33	Overexpression, Purification, and Crystallization of the Membrane-Bound Fumarate Reductase from Escherichia coli. Protein Expression and Purification, 2000, 19, 188-196.	1.3	23
34	The unassembled flavoprotein subunits of human and bacterial complex II have impaired catalytic activity and generate only minor amounts of ROS. Journal of Biological Chemistry, 2018, 293, 7754-7765.	3.4	23
35	Maturation of the respiratory complex II flavoprotein. Current Opinion in Structural Biology, 2019, 59, 38-46.	5.7	22
36	Crystal structure of an assembly intermediate of respiratory Complex II. Nature Communications, 2018, 9, 274.	12.8	21

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37	Geometric Restraint Drives On- and Off-pathway Catalysis by the Escherichia coli Menaquinol:Fumarate Reductase. Journal of Biological Chemistry, 2011, 286, 3047-3056.	3.4	20
38	Binding of the Covalent Flavin Assembly Factor to the Flavoprotein Subunit of Complex II. Journal of Biological Chemistry, 2016, 291, 2904-2916.	3.4	18
39	Electron-Transfer Pathways in the Heme and Quinone-Binding Domain of Complex II (Succinate) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.5	16
40	Structural and biochemical analyses reveal insights into covalent flavinylation of the Escherichia coli Complex II homolog quinol:fumarate reductase. Journal of Biological Chemistry, 2017, 292, 12921-12933.	3.4	15
41	Mutation of the heme axial ligand of Escherichia coli succinateâ€“quinone reductase: Implications for heme ligation in mitochondrial complex II from yeast. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 747-754.	1.0	12
42	Cardioprotective activity of a novel and potent competitive inhibitor of lactate dehydrogenase. FEBS Letters, 2010, 584, 159-165.	2.8	10
43	New crystal forms of the integral membrane Escherichia coli quinol:fumarate reductase suggest that ligands control domain movement. Journal of Structural Biology, 2018, 202, 100-104.	2.8	8
44	Uptake and binding of riboflavin by membrane vesicles of bacillus subtilis. Journal of Supramolecular Structure, 1980, 13, 93-100.	2.3	5
45	A Mechanism of Modulating the Direction of Flagellar Rotation in Bacteria by Fumarate and Fumarate Reductase. Journal of Molecular Biology, 2019, 431, 3662-3676.	4.2	5
46	Determination of Flavin Potential in Proteins by Xanthine/Xanthine Oxidase Method. Bio-protocol, 2020, 10, e3571.	0.4	5
47	Complexities of complex II: Sulfide metabolism inÂvivo. Journal of Biological Chemistry, 2022, 298, 101661.	3.4	4
48	Investigating the Thermostability of Succinate: Quinone Oxidoreductase Enzymes by Direct Electrochemistry at SWNTsâ€Modified Electrodes and FTIR Spectroscopy. ChemPhysChem, 2014, 15, 3572-3579.	2.1	3