Paolo Sarti

List of Publications by Year
in descending order

89 papers	3,857 citations	101543 36 h-index	128289 60 g-index
91 all docs	91 docs citations	91 times ranked	3511 citing authors

#	Article	IF	Citations
1	Mitochondria: regulators of signal transduction by reactive oxygen and nitrogen species 1,2 1Guest Editor: Harry Ischiropoulos 2This article is part of a series of reviews on â€œReactive Nitrogen Species, Tyrosine Nitration and Cell Signaling.â€•The full list of papers may be found on the homepage of the journal.. Free Radical Biology and Medicine, 2002, 33, 755-764.	2.9	272
2	Cytochrome bd oxidase and bacterial tolerance to oxidative and nitrosative stress. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 1178-1187.	1.0	180
3	Nitric Oxide and Cytochrome c Oxidase: Mechanisms of Inhibition and NO Degradation. Biochemical and Biophysical Research Communications, 2000, 274, 183-187.	2.1	155
4	Mechanism of S-Nitrosothiol Formation and Degradation Mediated by Copper Ions. Journal of Biological Chemistry, 1999, 274, 28128-28133.	3.4	132
5	On the Mechanism of Inhibition of Cytochrome c Oxidase by Nitric Oxide. Journal of Biological Chemistry, 1996, 271, 33404-33408.	3.4	129
6	Cytochrome oxidase, ligands and electrons. Journal of Inorganic Biochemistry, 2005, 99, 324-336.	3.5	119
7	The Terminal Oxidase Cytochrome bd Promotes Sulfide-resistant Bacterial Respiration and Growth. Scientific Reports, 2016, 6, 23788.	3.3	118
8	Cytochrome c oxidase and nitric oxide in action: Molecular mechanisms and pathophysiological implications. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 610-619.	1.0	113
9	The cytochrome cbb₃ from Pseudomonas stutzeri displays nitric oxide reductase activity. FEBS Journal, 2001, 268, 6486-6491.	0.2	110
10	The O2-scavenging Flavodiiron Protein in the Human Parasite Giardia intestinalis. Journal of Biological Chemistry, 2008, 283, 4061-4068.	3.4	107
11	Cytochrome-c oxidase. Subunit structure and proton pumping. FEBS Journal, 1987, 169, 1-8.	0.2	101
12	Structure and function of a molecular machine: cytochrome c oxidase. Biophysical Chemistry, 1995, 54, 1-33.	2.8	101
13	Cytochrome bd oxidase from Escherichia coli displays high catalase activity: An additional defense against oxidative stress. FEBS Letters, 2013, 587, 2214-2218.	2.8	97
14	Control of cytochrome c oxidase activity by nitric oxide. Biochimica Et Biophysica Acta - Bioenergetics, 2004, 1655, 365-371.	1.0	91
15	Nitric oxide and cytochrome oxidase: reaction mechanisms from the enzyme to the cell. Free Radical Biology and Medicine, 2003, 34, 509-520.	2.9	87
16	Interaction of the bacterial terminal oxidase cytochromebdwith nitric oxide. FEBS Letters, 2004, 576, 201-204.	2.8	79
17	Redox control of fast ligand dissociation from Escherichia coli cytochrome bd. Biochemical and Biophysical Research Communications, 2007, 355, 97-102.	2.1	79
18	Cytochrome bd oxidase and nitric oxide: From reaction mechanisms to bacterial physiology. FEBS Letters, 2012, 586, 622-629.	2.8	76

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19	Reaction of Nitric Oxide with the Turnover Intermediates of CytochromecOxidase:Â Reaction Pathway and Functional Effectsâ€. Biochemistry, 2000, 39, 15446-15453.	2.5	74
20	Modulation of mitochondrial respiration by nitric oxide: investigation by single cell fluorescence microscopy. FASEB Journal, 1999, 13, 191-197.	0.5	71
21	Control of Respiration by Cytochrome c Oxidase in Intact Cells. Journal of Biological Chemistry, 2009, 284, 32331-32335.	3.4	68
22	Nitric oxide and the respiratory enzyme. Biochimica Et Biophysica Acta - Bioenergetics, 2006, 1757, 1144-1154.	1.0	66
23	Cytochrome c Oxidase Does Not Catalyze the Anaerobic Reduction of NO. Biochemical and Biophysical Research Communications, 1998, 245, 459-465.	2.1	65
24	NOâ€¢ Binds Human Cystathionine Î²-Synthase Quickly and Tightly. Journal of Biological Chemistry, 2014, 289, 8579-8587.	3.4	58
25	Cytochrome bo3 from Escherichia coli: the binding and turnover of nitric oxide. Biochemical and Biophysical Research Communications, 2002, 296, 1272-1278.	2.1	50
26	The Chemical Interplay between Nitric Oxide and Mitochondrial CytochromecOxidase: Reactions, Effectors and Pathophysiology. International Journal of Cell Biology, 2012, 2012, 1-11.	2.5	48
27	Nitric oxide reacts with the ferryl-oxo catalytic intermediate of the CuB-lacking cytochromebdterminal oxidase. FEBS Letters, 2006, 580, 4823-4826.	2.8	46
28	Chloride Bound to Oxidized Cytochrome c Oxidase Controls the Reaction with Nitric Oxide. Journal of Biological Chemistry, 1998, 273, 32475-32478.	3.4	43
29	Nitric Oxide and Mitochondrial Complex IV. IUBMB Life, 2004, 55, 605-611.	3.4	43
30	Flavohemoglobin and nitric oxide detoxification in the human protozoan parasite Giardia intestinalis. Biochemical and Biophysical Research Communications, 2010, 399, 654-658.	2.1	43
31	Bioenergetic relevance of hydrogen sulfide and the interplay between gasotransmitters at human cystathionine Î²-synthase. Biochimica Et Biophysica Acta - Bioenergetics, 2016, 1857, 1127-1138.	1.0	42
32	Intermediates in the catalytic cycle of lentil (Lens esculenta) seedling copper-containing amine oxidase1. Biochemical Journal, 1998, 332, 431-437.	3.7	41
33	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.	3.5	40
34	Redox properties of the oxygen-detoxifying flavodiiron protein from the human parasite Giardia intestinalis. Archives of Biochemistry and Biophysics, 2009, 488, 9-13.	3.0	40
35	Mitochondria and Nitric Oxide: Chemistry and Pathophysiology. Advances in Experimental Medicine and Biology, 2012, 942, 75-92.	1.6	40
36	Cytochrome bd from Escherichia coli catalyzes peroxynitrite decomposition. Biochimica Et Biophysica Acta - Bioenergetics, 2015, 1847, 182-188.	1.0	39

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37	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.	1.0	36
38	S-Adenosyl-l-methionine Modulates CO and NOâ€¢ Binding to the Human H2S-generating Enzyme Cystathionine Î²-Synthase. Journal of Biological Chemistry, 2016, 291, 572-581.	3.4	36
39	Antioxidant defence systems in the protozoan pathogen Giardia intestinalis. Molecular and Biochemical Parasitology, 2016, 206, 56-66.	1.1	35
40	Nitric oxide, cytochromecoxidase and myoglobin: Competition and reaction pathways. FEBS Letters, 2005, 579, 2528-2532.	2.8	34
41	Cytochrome bd Oxidase and Hydrogen Peroxide Resistance in Mycobacterium tuberculosis. MBio, 2013, 4, e01006-13.	4.1	33
42	Functional Characterization of Peroxiredoxins from the Human Protozoan Parasite Giardia intestinalis. PLoS Neglected Tropical Diseases, 2014, 8, e2631.	3.0	33
43	New Evidence for Cross Talk between Melatonin and Mitochondria Mediated by a Circadian-Compatible Interaction with Nitric Oxide. International Journal of Molecular Sciences, 2013, 14, 11259-11276.	4.1	32
44	Nitric Oxide Reacts with the Single-electron Reduced Active Site of Cytochrome c Oxidase. Journal of Biological Chemistry, 2002, 277, 22402-22406.	3.4	31
45	Characterization of Mitochondrial Dysfunction in the 7PA2 Cell Model of Alzheimer's Disease. Journal of Alzheimer's Disease, 2013, 37, 747-758.	2.6	30
46	Nanomolar melatonin enhances nNOS expression and controls HaCaTâ€¢ells bioenergetics. IUBMB Life, 2012, 64, 251-258.	3.4	28
47	Internal Electron Transfer in Cu-Heme Oxidases. Journal of Biological Chemistry, 1997, 272, 19870-19874.	3.4	26
48	Redox-Linked Protonation of Cytochrome c Oxidase:â€‰ The Effect of Chloride Bound to CuB. Biochemistry, 2002, 41, 13046-13052.	2.5	26
49	The superoxide reductase from the early diverging eukaryote Giardia intestinalis. Free Radical Biology and Medicine, 2011, 51, 1567-1574.	2.9	26
50	Giardia intestinalis escapes oxidative stress by colonizing the small intestine: A molecular hypothesis. IUBMB Life, 2011, 63, 21-25.	3.4	25
51	Probing the access of protons to the K pathway in the Paracoccus denitrificans cytochrome c oxidase. FEBS Journal, 2005, 272, 404-412.	4.7	23
52	The interplay between heme iron and protein sulfhydryls in the reaction of dimeric Scapharca inaequivalvis hemoglobin with nitric oxide. Biophysical Chemistry, 2002, 98, 209-216.	2.8	22
53	Flavodiiron Oxygen Reductase from Entamoeba histolytica. Journal of Biological Chemistry, 2014, 289, 28260-28270.	3.4	22
54	Proton Uptake upon Anaerobic Reduction of theParacoccus denitrificansCytochromecOxidase:Â A Kinetic Investigation of the K354M and D124N Mutantsâ€. Biochemistry, 2004, 43, 2957-2963.	2.5	20

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55	Cardiovascular Mitochondrial Dysfunction Induced by Cocaine: Biomarkers and Possible Beneficial Effects of Modulators of Oxidative Stress. Oxidative Medicine and Cellular Longevity, 2017, 2017, 1-15.	4.0	20
56	A Sulfite Respiration Pathway from Thermus thermophilus and the Key Role of Newly Identified Cytochrome c ₅₅₀. Journal of Bacteriology, 2011, 193, 3988-3997.	2.2	18
57	The oxidation of cytochrome-c oxidase vesicles by hemoglobin. BBA - Proteins and Proteomics, 1994, 1208, 38-44.	2.1	17
58	The oxygen reactive species of cytochrome-c-oxidase: An alternate view. FEBS Letters, 1992, 314, 191-194.	2.8	16
59	Kinetics of electron transfer from NADH to the Escherichia coli nitric oxide reductase flavorubredoxin. FEBS Journal, 2007, 274, 677-686.	4.7	15
60	Is the Internal Electron Transfer the Rate-Limiting Step in the Catalytic Cycle of Cytochrome c Oxidase?. Annals of the New York Academy of Sciences, 1988, 550, 161-166.	3.8	14
61	Interconversion between states in cytochrome oxidase: Interpretation of kinetic data on mixed-valence oxidase. FEBS Letters, 1983, 152, 75-78.	2.8	12
62	Benthic mucilagenous aggregates: Biochemical characterization and ligand binding properties. Marine Environmental Research, 1996, 41, 1-14.	2.5	12
63	Spectral analysis of cytochromes in rat heart myocytes: Transient and steady-state photodiode array spectrophotometry measurements. Archives of Biochemistry and Biophysics, 1992, 299, 8-14.	3.0	11
64	Antigiardial activity of novel triazolyl-quinolone-based chalcone derivatives: when oxygen makes the difference. Frontiers in Microbiology, 2015, 6, 256.	3.5	11
65	Probing the high-affinity site of beef heart cytochrome c oxidase by cross-linking. Biochemical Journal, 1996, 315, 909-916.	3.7	10
66	Control of cell respiration by nitric oxide in Ataxia Telangiectasia lymphoblastoid cells. Biochimica Et Biophysica Acta - Bioenergetics, 2008, 1777, 66-73.	1.0	10
67	Kinetic Characterization of the Escherichia coli Nitric Oxide Reductase Flavorubredoxin. Methods in Enzymology, 2008, 437, 47-62.	1.0	10
68	Functional Dissection of the Multi-Domain Di-Heme Cytochrome c550 from Thermus thermophilus. PLoS ONE, 2013, 8, e55129.	2.5	10
69	Nonylphenol and Octylphenol Differently Affect Cell Redox Balance by Modulating the Nitric Oxide Signaling. Oxidative Medicine and Cellular Longevity, 2018, 2018, 1-13.	4.0	10
70	O ₂ -Dependent Efficacy of Novel Piperidine- and Piperazine-Based Chalcones against the Human Parasite Giardia intestinalis. Antimicrobial Agents and Chemotherapy, 2014, 58, 543-549.	3.2	9
71	Modulation of Cytochrome c Oxidase Activity by an Electrical Transmembrane Gradient. Annals of the New York Academy of Sciences, 1988, 550, 269-276.	3.8	8
72	VLDL Induced Modulation of Nitric Oxide Signalling and Cell Redox Homeostasis in HUVEC. Oxidative Medicine and Cellular Longevity, 2017, 2017, 1-15.	4.0	8

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73	Evidence for Detrimental Cross Interactions between Reactive Oxygen and Nitrogen Species in Leberâ€™s Hereditary Optic Neuropathy Cells. Oxidative Medicine and Cellular Longevity, 2016, 2016, 1-9.	4.0	7
74	Selective oxidation of Met-192 in bovine Î±-chymotrypsin. Effect on catalytic and inhibitor binding properties. BBA - Proteins and Proteomics, 1993, 1161, 201-208.	2.1	6
75	Chemical modification of ligands for cell receptors to introduce foreign compounds into the cells. Diseases of the Colon and Rectum, 1994, 37, S127-S132.	1.3	6
76	Twentyâ€five years of cytochrome oxidase research in Rome with Maurizio Brunori. IUBMB Life, 2007, 59, 570-577.	3.4	6
77	Superoxide reductase fromGiardia intestinalis: structural characterization of the first SOR from a eukaryotic organism shows an iron centre that is highly sensitive to photoreduction. Acta Crystallographica Section D: Biological Crystallography, 2015, 71, 2236-2247.	2.5	6
78	A new method for the determination of the buffer power of artificial phospholipid vesicles by stopped-flow spectroscopy. Biochimica Et Biophysica Acta - Bioenergetics, 1985, 809, 39-43.	1.0	5
79	Lonidamine-mediated respiratory changes in rat heart myocytes: A re-examination of the functional response of mitochondrial cytochrome c oxidase. Biochemical Pharmacology, 1994, 47, 2221-2225.	4.4	5
80	Molecular control of cytochrome oxidase activity. Bioelectrochemistry, 1986, 16, 159-165.	1.0	4
81	Selective oxidation of methionyl residues in the human recombinant secretory leukocyte proteinase inhibitor. Effect on the inhibitor binding properties. Journal of Molecular Recognition, 1994, 7, 31-37.	2.1	4
82	The kinetics of electron entry in cytochromec oxidase. Biology of Metals, 1990, 3, 118-121.	1.1	2
83	Kinetic control of internal electron transfer in cytochrome c oxidase. BioFactors, 1998, 8, 191-193.	5.4	2
84	EFfect of bepridil on the activity of cytochrome c oxidase in solution and in proteoliposomes. Biochemical Pharmacology, 1984, 33, 109-113.	4.4	1
85	Reconstitution of cytochrome c oxidase into phospholipid vesicles: Effect of detergents. Bioelectrochemistry, 1990, 23, 265-270.	1.0	1
86	Reconstitution of cytochrome c oxidase into phospholipid vesicles: effect of detergents. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1990, 298, 265-270.	0.1	0
87	Liposomal and Mitochondrial Cytochrome Oxidase Display Similar Bioenergetic Properties. Journal of Liposome Research, 1993, 3, 589-598.	3.3	0
88	Transient Spectroscopy of the Reaction between Cytochrome c Oxidase and Nitric Oxide. , 1999, , 219-232.		0
89	The intricate interplay among the gasotransmitters NO, CO, H2S and mitochondrial complex IV. Pharmacy & Pharmacology International Journal, 2018, 6, .	0.2	0