

Chris E Cooper

List of Publications by Year in descending order

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187
papers

18,252
citations

22132

59
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12258

133
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189
all docs

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docs citations

189
times ranked

15962
citing authors

#	ARTICLE	IF	CITATIONS
1	Nitric oxide synthases: structure, function and inhibition. <i>Biochemical Journal</i> , 2001, 357, 593-615.	1.7	3,123
2	Nitric oxide synthases: structure, function and inhibition. <i>Biochemical Journal</i> , 2001, 357, 593.	1.7	2,118
3	Association between mitochondrial dysfunction and severity and outcome of septic shock. <i>Lancet</i> , The, 2002, 360, 219-223.	6.3	1,360
4	Nanomolar concentrations of nitric oxide reversibly inhibit synaptosomal respiration by competing with oxygen at cytochrome oxidase. <i>FEBS Letters</i> , 1994, 356, 295-298.	1.3	921
5	The inhibition of mitochondrial cytochrome oxidase by the gases carbon monoxide, nitric oxide, hydrogen cyanide and hydrogen sulfide: chemical mechanism and physiological significance. <i>Journal of Bioenergetics and Biomembranes</i> , 2008, 40, 533-9.	1.0	608
6	Performance Comparison of Several Published Tissue Near-Infrared Spectroscopy Algorithms. <i>Analytical Biochemistry</i> , 1995, 227, 54-68.	1.1	568
7	Nitric oxide and iron proteins. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1999, 1411, 290-309.	0.5	451
8	Global Iron-dependent Gene Regulation in <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 2003, 278, 29478-29486.	1.6	414
9	Mild Hypothermia after Severe Transient Hypoxia-Ischemia Ameliorates Delayed Cerebral Energy Failure in the Newborn Piglet. <i>Pediatric Research</i> , 1995, 37, 667-670.	1.1	368
10	Superoxide Activates Uncoupling Proteins by Generating Carbon-centered Radicals and Initiating Lipid Peroxidation. <i>Journal of Biological Chemistry</i> , 2003, 278, 48534-48545.	1.6	283
11	Specific Inhibition of Apoptosis after Cerebral Hypoxia-Ischemia by Moderate Post-Insult Hypothermia. <i>Biochemical and Biophysical Research Communications</i> , 1995, 217, 1193-1199.	1.0	272
12	Exercise-Induced Oxidative Stress. <i>Sports Medicine</i> , 2005, 35, 1045-1062.	3.1	255
13	Exercise, free radicals and oxidative stress. <i>Biochemical Society Transactions</i> , 2002, 30, 280-285.	1.6	245
14	A Causative Role for Redox Cycling of Myoglobin and Its Inhibition by Alkalinization in the Pathogenesis and Treatment of Rhabdomyolysis-induced Renal Failure. <i>Journal of Biological Chemistry</i> , 1998, 273, 31731-31737.	1.6	234
15	Nitric oxide inhibition of respiration involves both competitive (heme) and noncompetitive (copper) binding to cytochrome c oxidase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 708-713.	3.3	211
16	Reactions of nitric oxide with mitochondrial cytochrome c: a novel mechanism for the formation of nitroxyl anion and peroxynitrite. <i>Biochemical Journal</i> , 1998, 332, 9-19.	1.7	196
17	Nitric oxide and cytochrome oxidase: substrate, inhibitor or effector?. <i>Trends in Biochemical Sciences</i> , 2002, 27, 33-39.	3.7	193
18	Nanotransducers in cellular redox signaling: modification of thiols by reactive oxygen and nitrogen species. <i>Trends in Biochemical Sciences</i> , 2002, 27, 489-492.	3.7	178

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19	Noninvasive method for measuring local hemoglobin oxygen saturation in tissue using wide gap second derivative near-infrared spectroscopy. <i>Journal of Biomedical Optics</i> , 2005, 10, 034017.	1.4	158
20	Cytochrome bd confers nitric oxide resistance to <i>Escherichia coli</i> . <i>Nature Chemical Biology</i> , 2009, 5, 94-96.	3.9	158
21	The Relationship of Intracellular Iron Chelation to the Inhibition and Regeneration of Human Ribonucleotide Reductase. <i>Journal of Biological Chemistry</i> , 1996, 271, 20291-20299.	1.6	153
22	Nitric oxide regulation of mitochondrial oxygen consumption II: molecular mechanism and tissue physiology. <i>American Journal of Physiology - Cell Physiology</i> , 2007, 292, C1993-C2003.	2.1	145
23	Sulfide inhibition of and metabolism by cytochrome <i>c</i> oxidase. <i>Biochemical Society Transactions</i> , 2013, 41, 1312-1316.	1.6	138
24	Measurement of cytochrome oxidase and mitochondrial energetics by near-infrared spectroscopy. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 1997, 352, 669-676.	1.8	136
25	Absolute quantification of deoxyhaemoglobin concentration in tissue near infrared spectroscopy. <i>Physics in Medicine and Biology</i> , 1994, 39, 1295-1312.	1.6	133
26	Interaction of Peroxynitrite with Mitochondrial Cytochrome Oxidase. <i>Journal of Biological Chemistry</i> , 1998, 273, 30961-30972.	1.6	121
27	Increased apoptosis in the cingulate sulcus of newborn piglets following transient hypoxia-ischaemia is related to the degree of high energy phosphate depletion during the insult. <i>Neuroscience Letters</i> , 1994, 181, 121-125.	1.0	120
28	Characterisation of "fast" and "slow" forms of bovine heart cytochrome-c oxidase. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1991, 1059, 189-207.	0.5	113
29	Tyrosine Residues as Redox Cofactors in Human Hemoglobin. <i>Journal of Biological Chemistry</i> , 2008, 283, 30780-30787.	1.6	109
30	Noninvasive Assessment of Changes in Cytochrome-c Oxidase Oxidation in Human Subjects during Visual Stimulation. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1999, 19, 592-603.	2.4	103
31	Cytochrome c oxidase rapidly metabolises nitric oxide to nitrite. <i>FEBS Letters</i> , 2000, 475, 263-266.	1.3	102
32	Nitric oxide regulation of mitochondrial oxygen consumption I: cellular physiology. <i>American Journal of Physiology - Cell Physiology</i> , 2006, 291, C1225-C1231.	2.1	101
33	Nitric oxide ejects electrons from the binuclear centre of cytochromecoxidase by reacting with oxidised copper: a general mechanism for the interaction of copper proteins with nitric oxide?. <i>FEBS Letters</i> , 1997, 414, 281-284.	1.3	100
34	A Common Mechanism for the Interaction of Nitric Oxide with the Oxidized Binuclear Centre and Oxygen Intermediates of Cytochromec Oxidase. <i>Journal of Biological Chemistry</i> , 1998, 273, 8756-8766.	1.6	98
35	Near-infrared spectroscopy of the brain: relevance to cytochrome oxidase bioenergetics. <i>Biochemical Society Transactions</i> , 1994, 22, 974-980.	1.6	95
36	Ascorbate removes key precursors to oxidative damage by cell-free haemoglobin in vitro and in vivo. <i>Biochemical Journal</i> , 2006, 399, 513-524.	1.7	92

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37	The steady-state kinetics of cytochrome c oxidation by cytochrome oxidase. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1990, 1017, 187-203.	0.5	91
38	Use of Mitochondrial Inhibitors to Demonstrate That Cytochrome Oxidase Near-Infrared Spectroscopy Can Measure Mitochondrial Dysfunction Noninvasively in the Brain. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1999, 19, 27-38.	2.4	91
39	Performance comparison of the MOXY and PortaMon near-infrared spectroscopy muscle oximeters at rest and during exercise. <i>Journal of Biomedical Optics</i> , 2018, 23, 1.	1.4	90
40	A New Method of Identifying the Site of Tyrosyl Radicals in Proteins. <i>Biophysical Journal</i> , 2004, 87, 582-595.	0.2	87
41	Cytochrome <i>c</i> oxidase: structure, function, and membrane topology of the polypeptide subunits. <i>Biochemistry and Cell Biology</i> , 1991, 69, 586-607.	0.9	86
42	Endogenous Superoxide Production and the Nitrite/Nitrate Ratio Control the Concentration of Bioavailable Free Nitric Oxide in Leaves. <i>Journal of Biological Chemistry</i> , 2004, 279, 24100-24107.	1.6	86
43	Mitochondrial dysfunction in patients with severe sepsis: An EPR interrogation of individual respiratory chain components. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2006, 1757, 262-272.	0.5	82
44	Comparative Study of Tyrosine Radicals in Hemoglobin and Myoglobins Treated with Hydrogen Peroxide. <i>Biophysical Journal</i> , 2002, 83, 2845-2855.	0.2	80
45	A Model of Brain Circulation and Metabolism: NIRS Signal Changes during Physiological Challenges. <i>PLoS Computational Biology</i> , 2008, 4, e1000212.	1.5	77
46	Treatment of Phenytoin Toxicity by the Molecular Adsorbents Recirculating System (MARS). <i>Epilepsia</i> , 2003, 44, 265-267.	2.6	74
47	Re-evaluation of the near infrared spectra of mitochondrial cytochrome c oxidase: Implications for non invasive in vivo monitoring of tissues. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2014, 1837, 1882-1891.	0.5	73
48	The mechanism of formation, structure and physiological relevance of covalent hemoglobin attachment to the erythrocyte membrane. <i>Free Radical Biology and Medicine</i> , 2017, 103, 95-106.	1.3	73
49	Ferryl haem protonation gates peroxidatic reactivity in globins. <i>Biochemical Journal</i> , 2007, 403, 391-395.	1.7	71
50	Cytochrome c oxidase response to changes in cerebral oxygen delivery in the adult brain shows higher brain-specificity than haemoglobin. <i>NeuroImage</i> , 2014, 85, 234-244.	2.1	71
51	Haptoglobin Binding Stabilizes Hemoglobin Ferryl Iron and the Globin Radical on Tyrosine ¹⁴⁵ . <i>Antioxidants and Redox Signaling</i> , 2013, 18, 2264-2273.	2.5	71
52	Estimation of cerebral blood flow with near infrared spectroscopy and indocyanine green. <i>Lancet, The</i> , 1993, 342, 1425.	6.3	70
53	EPR and Optical Spectroscopic Studies of Met80X Mutants of Yeast Ferricytochrome c. Models for Intermediates in the Alkaline Transition. <i>Journal of the American Chemical Society</i> , 2005, 127, 92-99.	6.6	66
54	A new sensitive assay reveals that hemoglobin is oxidatively modified in vivo. <i>Free Radical Biology and Medicine</i> , 2005, 39, 1216-1228.	1.3	64

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55	Nitric oxide and peroxynitrite cause irreversible increases in the Km for oxygen of mitochondrial cytochrome oxidase: in vitro and in vivo studies. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2003, 1607, 27-34.	0.5	63
56	The Environment of the Lipoxygenase Iron Binding Site Explored with Novel Hydroxypyridinone Iron Chelators. <i>Journal of Biological Chemistry</i> , 1996, 271, 7965-7972.	1.6	62
57	Peroxidase activity of hemoglobin towards ascorbate and urate: A synergistic protective strategy against toxicity of Hemoglobin-Based Oxygen Carriers (HBOC). <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2008, 1784, 1415-1420.	1.1	62
58	Haptoglobin Binding Stabilizes Hemoglobin Ferryl Iron and the Globin Radical on Tyrosine \hat{I}^{2145} . <i>Antioxidants and Redox Signaling</i> , 2013, 18, 2264-2273.	2.5	62
59	Detection of Nitrosyl Complexes in Human Substantia Nigra, in Relation to Parkinson's Disease. <i>Biochemical and Biophysical Research Communications</i> , 1996, 228, 298-305.	1.0	58
60	The relationship of oxygen delivery to absolute haemoglobin oxygenation and mitochondrial cytochrome oxidase redox state in the adult brain: a near-infrared spectroscopy study. <i>Biochemical Journal</i> , 1998, 332, 627-632.	1.7	57
61	Systematic investigation of changes in oxidized cerebral cytochrome c oxidase concentration during frontal lobe activation in healthy adults. <i>Biomedical Optics Express</i> , 2012, 3, 2550.	1.5	55
62	[12] Electron paramagnetic resonance spectroscopy of iron complexes and iron-containing proteins. <i>Methods in Enzymology</i> , 1993, 227, 353-384.	0.4	49
63	Tryptophan or tyrosine? On the nature of the amino acid radical formed following hydrogen peroxide treatment of cytochrome c oxidase. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2004, 1655, 372-380.	0.5	48
64	Asymmetry of Quadriceps Muscle Oxygenation during Elite Short-Track Speed Skating. <i>Medicine and Science in Sports and Exercise</i> , 2012, 44, 501-508.	0.2	48
65	Fast Reduction of a Copper Center in Laccase by Nitric Oxide and Formation of a Peroxide Intermediate. <i>Journal of the American Chemical Society</i> , 2002, 124, 963-967.	6.6	47
66	Biomarkers of oxidative stress study V: Ozone exposure of rats and its effect on lipids, proteins, and DNA in plasma and urine. <i>Free Radical Biology and Medicine</i> , 2013, 61, 408-415.	1.3	47
67	The pH dependence of naturally occurring low-spin forms of methaemoglobin and metmyoglobin: an EPR study. <i>Biochemical Journal</i> , 2000, 351, 595-605.	1.7	46
68	Measurement of cerebral blood flow during cardiopulmonary bypass with near-infrared spectroscopy. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 1998, 115, 94-102.	0.4	45
69	A New Method for Quantitation of Spin Concentration by EPR Spectroscopy: Application to Methemoglobin and Metmyoglobin. <i>Journal of Magnetic Resonance</i> , 2000, 142, 266-275.	1.2	42
70	Oxidation and reduction of cytochrome oxidase in the neonatal brain observed by in vivo near-infrared spectroscopy. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1998, 1366, 291-300.	0.5	41
71	Muscle Oxygen Changes following Sprint Interval Cycling Training in Elite Field Hockey Players. <i>PLoS ONE</i> , 2015, 10, e0120338.	1.1	41
72	Iron speciation at physiological pH in media containing ascorbate and oxygen. <i>British Journal of Nutrition</i> , 1993, 70, 157-169.	1.2	39

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73	Effects of nitric oxide and peroxynitrite on the cytochrome oxidase Km for oxygen: implications for mitochondrial pathology. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2000, 1459, 390-396.	0.5	39
74	A Hydrogen-Donating Monohydroxamate Scavenges Ferryl Myoglobin Radicals. <i>Free Radical Research</i> , 1994, 20, 219-227.	1.5	38
75	Time course of the haemodynamic response to visual stimulation in migraine, measured using near-infrared spectroscopy. <i>Cephalalgia</i> , 2012, 32, 621-629.	1.8	37
76	The Radical and Redox Chemistry of Myoglobin and Hemoglobin: From In Vitro Studies to Human Pathology. <i>Antioxidants and Redox Signaling</i> , 2004, 6, 954-966.	2.5	37
77	Competitive, Reversible, Physiological? Inhibition of Mitochondrial Cytochrome Oxidase by Nitric Oxide. <i>IUBMB Life</i> , 2004, 55, 591-597.	1.5	36
78	On the formation, nature, stability and biological relevance of the primary reaction intermediates of myoglobins with hydrogen peroxide. <i>Dalton Transactions</i> , 2005, , 3483.	1.6	36
79	A new method to measure local oxygen consumption in human skeletal muscle during dynamic exercise using near-infrared spectroscopy. <i>Physiological Measurement</i> , 2010, 31, 1257-1269.	1.2	36
80	Non-transferrin-bound iron species in the serum of hypotransferrinaemic mice. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 1992, 1156, 19-26.	1.1	35
81	Brain-metabolite transverse relaxation times in magnetic resonance spectroscopy increase as adenosine triphosphate depletes during secondary energy failure following acute hypoxia-ischaemia in the newborn piglet. <i>Neuroscience Letters</i> , 1994, 182, 201-204.	1.0	35
82	The steady-state mechanism of cytochrome c oxidase: redox interactions between metal centres. <i>Biochemical Journal</i> , 2009, 422, 237-246.	1.7	35
83	Experimental and theoretical comparison of NIR spectroscopy measurements of cerebral hemoglobin changes. <i>Journal of Applied Physiology</i> , 1998, 85, 1915-1921.	1.2	34
84	A dynamic model of nitric oxide inhibition of mitochondrial cytochrome c oxidase. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2008, 1777, 867-876.	0.5	34
85	Differences in Muscle Oxygenation, Perceived Fatigue and Recovery between Long-Track and Short-Track Speed Skating. <i>Frontiers in Physiology</i> , 2016, 7, 619.	1.3	34
86	Structure-Function Investigation of the Interaction of 1- and 2-Substituted 3-Hydroxypyridin-4-ones with 5-Lipoxygenase and Ribonucleotide Reductase. <i>Journal of Biological Chemistry</i> , 2001, 276, 48814-48822.	1.6	33
87	Warm-up effects on muscle oxygenation, metabolism and sprint cycling performance. <i>European Journal of Applied Physiology</i> , 2012, 112, 3129-3139.	1.2	31
88	Reaction of <i>Aplysia limacina</i> metmyoglobin with hydrogen peroxide. <i>Dalton Transactions</i> , 2007, , 840.	1.6	30
89	Underwater near-infrared spectroscopy measurements of muscle oxygenation: laboratory validation and preliminary observations in swimmers and triathletes. <i>Journal of Biomedical Optics</i> , 2014, 19, 127002.	1.4	30
90	A novel copper site in a cyanobacterial metallochaperone. <i>Biochemical Journal</i> , 2004, 378, 293-297.	1.7	29

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91	Transient species involved in catalytic dioxygen/peroxide activation by hemoproteins: possible involvement of protonated Compound I species. Dalton Transactions, 2005, , 3477.	1.6	29
92	The Interactions between Nitric Oxide and Brain Nerve Terminals as Studied by Electron Paramagnetic Resonance. Biochemical and Biophysical Research Communications, 1995, 212, 404-412.	1.0	28
93	Investigation of in vivo measurement of cerebral cytochrome-c-oxidase redox changes using near-infrared spectroscopy in patients with orthostatic hypotension. Physiological Measurement, 2007, 28, 199-211.	1.2	28
94	Engineering Tyrosine-Based Electron Flow Pathways in Proteins: The Case of Aplysia Myoglobin. Journal of the American Chemical Society, 2012, 134, 7741-7749.	6.6	27
95	Oxidised low density lipoproteins induce iron release from activated myoglobin. FEBS Letters, 1993, 326, 177-182.	1.3	26
96	Transport of K ⁺ and other cations across phospholipid membranes by nonesterified fatty acids. Journal of Membrane Biology, 1994, 141, 21-8.	1.0	25
97	Interconversion of Fast and Slow Forms of Cytochrome bo from Escherichia coli. Biochemistry, 1995, 34, 6838-6846.	1.2	25
98	Use of Oxonol V as a probe of membrane potential in proteoliposomes containing cytochrome oxidase in the submitochondrial orientation. Biochemistry, 1990, 29, 3859-3865.	1.2	23
99	Interaction of human myeloperoxidase with nitrite. FEBS Letters, 1992, 314, 58-60.	1.3	23
100	Haem, flavin and oxygen interactions in Hmp, a flavohaemoglobin from <i>Escherichia coli</i> . Biochemical Society Transactions, 1994, 22, 709-713.	1.6	23
101	Exogenous ferrous iron is required for the nitric oxide-catalysed destruction of the iron-sulphur centre in adrenodoxin. Biochemical Journal, 2002, 368, 633-639.	1.7	23
102	Protein-Template-Driven Formation of Polynuclear Iron Species. Journal of the American Chemical Society, 2004, 126, 496-504.	6.6	23
103	Nitrite binding to globins: linkage isomerism, EPR silence and reductive chemistry. Nitric Oxide - Biology and Chemistry, 2014, 42, 32-39.	1.2	23
104	Engineering tyrosine electron transfer pathways decreases oxidative toxicity in hemoglobin: implications for blood substitute design. Biochemical Journal, 2016, 473, 3371-3383.	1.7	23
105	Comparison of the oxidative reactivity of recombinant fetal and adult human hemoglobin: implications for the design of hemoglobin-based oxygen carriers. Bioscience Reports, 2018, 38, .	1.1	22
106	Free radical in blood: a measure of haemoglobin autoxidation in vivo. Journal of the Chemical Society Perkin Transactions II, 1997, , 2539-2544.	0.9	21
107	The Reactivity of Heme in Biological Systems: Autocatalytic Formation of Both Tyrosine-Heme and Tryptophan-Heme Covalent Links in a Single Protein Architecture. Biochemistry, 2007, 46, 13269-13278.	1.2	21
108	Computational modelling of the piglet brain to simulate near-infrared spectroscopy and magnetic resonance spectroscopy data collected during oxygen deprivation. Journal of the Royal Society Interface, 2012, 9, 1499-1509.	1.5	20

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109	A Hybrid Multi-Distance Phase and Broadband Spatially Resolved Spectrometer and Algorithm for Resolving Absolute Concentrations of Chromophores in the Near-Infrared Light Spectrum. <i>Advances in Experimental Medicine and Biology</i> , 2010, 662, 169-175.	0.8	20
110	Nitrosyl heme production compared in endotoxemic and hemorrhagic shock. <i>Free Radical Biology and Medicine</i> , 2005, 38, 41-49.	1.3	19
111	Exercise-Induced Oxidative Stress in Overload Training and Tapering. <i>Medicine and Science in Sports and Exercise</i> , 2006, 38, 1335-1341.	0.2	19
112	Engineering tyrosine residues into hemoglobin enhances heme reduction, decreases oxidative stress and increases vascular retention of a hemoglobin based blood substitute. <i>Free Radical Biology and Medicine</i> , 2019, 134, 106-118.	1.3	19
113	Slow (â€œrestingâ€™) forms of mitochondrial cytochrome c oxidase consist of two kinetically distinct conformations of the binuclear CuBa3 centre â€” relevance to the mechanism of proton translocation. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1993, 1144, 149-160.	0.5	18
114	Assessment of the response of carrot somaclones to <i>Pythium violae</i> , causal agent of cavity spot. <i>Plant Pathology</i> , 2006, 55, 427-432.	1.2	18
115	The pH dependence of naturally occurring low-spin forms of methaemoglobin and metmyoglobin: an EPR study. <i>Biochemical Journal</i> , 2000, 351, 595.	1.7	17
116	The importance of the effect of shear stress on endothelial cells in determining the performance of hemoglobin based oxygen carriers. <i>Biomaterials</i> , 2009, 30, 445-451.	5.7	17
117	Drug cheating at the Olympics: who, what, and why?. <i>Lancet, The</i> , 2012, 380, 21-22.	6.3	17
118	Effect of Race Distance on Muscle Oxygenation in Short-Track Speed Skating. <i>Medicine and Science in Sports and Exercise</i> , 2013, 45, 83-92.	0.2	16
119	Engineering hemoglobin to enable homogenous PEGylation without modifying protein functionality. <i>Biomaterials Science</i> , 2020, 8, 3896-3906.	2.6	16
120	Comparison of Local Adipose Tissue Content and SRS-Derived NIRS Muscle Oxygenation Measurements in 90 Individuals. <i>Advances in Experimental Medicine and Biology</i> , 2010, 662, 177-181.	0.8	16
121	Reactivity of nitric oxide with cytochrome c oxidase: interactions with the binuclear centre and mechanism of inhibition. <i>Journal of Bioenergetics and Biomembranes</i> , 1998, 30, 63-69.	1.0	15
122	Ascorbate peroxidase activity of cytochrome c. <i>Free Radical Research</i> , 2011, 45, 439-444.	1.5	15
123	Radical Producing and Consuming Reactions of Hemoglobin: How Can We Limit Toxicity?. <i>Artificial Organs</i> , 2009, 33, 110-114.	1.0	14
124	A model for the nitric oxide producing nitrite reductase activity of hemoglobin as a function of oxygen saturation. <i>Nitric Oxide - Biology and Chemistry</i> , 2013, 33, 74-80.	1.2	14
125	The Use of Portable NIRS to Measure Muscle Oxygenation and Haemodynamics During a Repeated Sprint Running Test. <i>Advances in Experimental Medicine and Biology</i> , 2013, 789, 185-191.	0.8	14
126	The mechanism of potassium movement across the liposomal membrane. <i>Biochemical and Biophysical Research Communications</i> , 1990, 173, 1008-1012.	1.0	13

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127	Morphological and biochemical response of carrots to <i>Pythium violae</i> , causative agent of Cavity Spot. <i>Physiological and Molecular Plant Pathology</i> , 2004, 64, 27-35.	1.3	13
128	Modelling Blood Flow and Metabolism in the Preclinical Neonatal Brain during and Following Hypoxic-Ischaemia. <i>PLoS ONE</i> , 2015, 10, e0140171.	1.1	13
129	High- and low-affinity PEGylated hemoglobin-based oxygen carriers: Differential oxidative stress in a Guinea pig transfusion model. <i>Free Radical Biology and Medicine</i> , 2018, 124, 299-310.	1.3	13
130	The effect of ferredoxin(BED) overexpression on benzene dioxygenase activity in <i>Pseudomonas putida</i> ML2. <i>Journal of Bacteriology</i> , 1994, 176, 2507-2512.	1.0	12
131	The Cytochrome Oxidase Redox State in Vivo. <i>Advances in Experimental Medicine and Biology</i> , 1997, 428, 449-456.	0.8	12
132	Control of proteoliposomal cytochrome <i>c</i> oxidase: the overall reaction. <i>Biochemistry and Cell Biology</i> , 1990, 68, 1128-1134.	0.9	11
133	Interactions of cytochrome <i>c</i> oxidase with nitric oxide: reactions of the $\tilde{\text{turnover}}^{\text{TM}}$ intermediates. <i>Biochemical Society Transactions</i> , 1997, 25, 905-909.	1.6	11
134	NMR spectroscopy and imaging of the neonatal brain. <i>Biochemical Society Transactions</i> , 2000, 28, 121-126.	1.6	11
135	NIRS Measurements with Elite Speed Skaters: Comparison Between the Ice Rink and the Laboratory. <i>Advances in Experimental Medicine and Biology</i> , 2013, 765, 81-86.	0.8	11
136	Development of a Model to Aid NIRS Data Interpretation: Results from a Hypercapnia Study in Healthy Adults. <i>Advances in Experimental Medicine and Biology</i> , 2012, 737, 293-300.	0.8	11
137	Structure and vectorial properties of proteoliposomes containing cytochrome oxidase in the submitochondrial orientation. <i>Biochemistry</i> , 1990, 29, 3865-3871.	1.2	10
138	The biochemistry of drugs and doping methods used to enhance aerobic sport performance. <i>Essays in Biochemistry</i> , 2008, 44, 63-84.	2.1	10
139	A Wide Gap Second Derivative NIR Spectroscopic Method for Measuring Tissue Hemoglobin Oxygen Saturation. <i>Advances in Experimental Medicine and Biology</i> , 2006, 578, 217-222.	0.8	9
140	Muscle Oxygen Saturation Measured Using $\tilde{\text{Cyclic NIR Signals}}$ During Exercise. <i>Advances in Experimental Medicine and Biology</i> , 2010, 662, 183-189.	0.8	9
141	Using Portable NIRS to Compare Arm and Leg Muscle Oxygenation During Roller Skiing in Biathletes: A Case Study. <i>Advances in Experimental Medicine and Biology</i> , 2013, 789, 179-184.	0.8	9
142	Radical Formation and Migration in Myoglobins. <i>Progress in Reaction Kinetics and Mechanism</i> , 2003, 28, 105-118.	1.1	8
143	Nitrite and nitrate reduction by molybdenum centers of the nitrate reductase type: Computational predictions on the catalytic mechanism. <i>Nitric Oxide - Biology and Chemistry</i> , 2012, 26, 27-31.	1.2	8
144	Nitrogen dioxide oxidizes mitochondrial cytochrome <i>c</i> . <i>Free Radical Biology and Medicine</i> , 2012, 52, 80-87.	1.3	8

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145	Effects of Assuming Constant Optical Scattering on Haemoglobin Concentration Measurements Using NIRS during a Valsalva Manoeuvre. <i>Advances in Experimental Medicine and Biology</i> , 2011, 701, 15-20.	0.8	8
146	Reactions of Cross-Linked Methaemoglobins with Hydrogen Peroxide. <i>Advances in Experimental Medicine and Biology</i> , 1999, 471, 9-15.	0.8	8
147	Antioxidant drugs and the inhibition of low-density lipoprotein oxidation. <i>Biochemical Society Transactions</i> , 1993, 21, 362-366.	1.6	7
148	The electron paramagnetic resonance characterisation of a copper-containing extracellular peroxidase from <i>Thermomonospora fusca</i> BD25. <i>BBA - Proteins and Proteomics</i> , 1999, 1434, 74-85.	2.1	7
149	Modelling of Mitochondrial Oxygen Consumption and NIRS Detection of Cytochrome Oxidase Redox State. <i>Advances in Experimental Medicine and Biology</i> , 2010, 662, 285-291.	0.8	7
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