

Rakesh P Patel

List of Publications by Year in descending order

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240
papers

17,934
citations

15503

65
h-index

14758

127
g-index

258
all docs

258
docs citations

258
times ranked

15799
citing authors

#	ARTICLE	IF	CITATIONS
1	Nitrite reduction to nitric oxide by deoxyhemoglobin vasodilates the human circulation. <i>Nature Medicine</i> , 2003, 9, 1498-1505.	30.7	1,606
2	Hydrogen sulfide mediates the vasoactivity of garlic. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 17977-17982.	7.1	724
3	Cytoprotective effects of nitrite during in vivo ischemia-reperfusion of the heart and liver. <i>Journal of Clinical Investigation</i> , 2005, 115, 1232-1240.	8.2	585
4	Enzymatic function of hemoglobin as a nitrite reductase that produces NO under allosteric control. <i>Journal of Clinical Investigation</i> , 2005, 115, 2099-2107.	8.2	450
5	Hypoxia, red blood cells, and nitrite regulate NO-dependent hypoxic vasodilation. <i>Blood</i> , 2006, 107, 566-574.	1.4	444
6	Biological aspects of reactive nitrogen species. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1999, 1411, 385-400.	1.0	408
7	Oxygen radical inhibition of nitric oxide-dependent vascular function in sickle cell disease. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001, 98, 15215-15220.	7.1	356
8	Polarographic measurement of hydrogen sulfide production and consumption by mammalian tissues. <i>Analytical Biochemistry</i> , 2005, 341, 40-51.	2.4	338
9	The biochemistry of nitric oxide, nitrite, and hemoglobin: role in blood flow regulation. <i>Free Radical Biology and Medicine</i> , 2004, 36, 707-717.	2.9	332
10	Nitrated Fatty Acids: Endogenous Anti-inflammatory Signaling Mediators*. <i>Journal of Biological Chemistry</i> , 2006, 281, 35686-35698.	3.4	318
11	<i>Mycobacterium tuberculosis</i> DosS is a redox sensor and DosT is a hypoxia sensor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 11568-11573.	7.1	306
12	Nitrite as a vascular endocrine nitric oxide reservoir that contributes to hypoxic signaling, cytoprotection, and vasodilation. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2006, 291, H2026-H2035.	3.2	276
13	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.	3.4	234
14	The Reaction between Nitrite and Deoxyhemoglobin. <i>Journal of Biological Chemistry</i> , 2005, 280, 31126-31131.	3.4	229
15	Redox Reactions of Hemoglobin and Myoglobin: Biological and Toxicological Implications. <i>Antioxidants and Redox Signaling</i> , 2001, 3, 313-327.	5.4	223
16	Catalytic generation of N ₂ O ₃ by the concerted nitrite reductase and anhydrase activity of hemoglobin. <i>Nature Chemical Biology</i> , 2007, 3, 785-794.	8.0	206
17	A mitochondria-targeted S-nitrosothiol modulates respiration, nitrosates thiols, and protects against ischemia-reperfusion injury. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 10764-10769.	7.1	205
18	Nitric oxide partitioning into mitochondrial membranes and the control of respiration at cytochrome c oxidase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001, 98, 7212-7217.	7.1	203

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19	Inhaled NO accelerates restoration of liver function in adults following orthotopic liver transplantation. Journal of Clinical Investigation, 2007, 117, 2583-2591.	8.2	202
20	Cell signaling by reactive nitrogen and oxygen species in atherosclerosis. Free Radical Biology and Medicine, 2000, 28, 1780-1794.	2.9	196
21	Pathophysiology of nitric oxide and related species: free radical reactions and modification of biomolecules. Molecular Aspects of Medicine, 1998, 19, 221-357.	6.4	179
22	Nanotransducers in cellular redox signaling: modification of thiols by reactive oxygen and nitrogen species. Trends in Biochemical Sciences, 2002, 27, 489-492.	7.5	178
23	Chronic sodium nitrite therapy augments ischemia-induced angiogenesis and arteriogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 7540-7545.	7.1	178
24	Fatty Acid Transduction of Nitric Oxide Signaling. Journal of Biological Chemistry, 2005, 280, 19289-19297.	3.4	167
25	Antioxidant mechanisms of isoflavones in lipid systems: paradoxical effects of peroxy radical scavenging. Free Radical Biology and Medicine, 2001, 31, 1570-1581.	2.9	164
26	Inhalation of Nitric Oxide Prevents Ischemic Brain Damage in Experimental Stroke by Selective Dilatation of Collateral Arterioles. Circulation Research, 2012, 110, 727-738.	4.5	163
27	The reaction between nitrite and hemoglobin: the role of nitrite in hemoglobin-mediated hypoxic vasodilation. Journal of Inorganic Biochemistry, 2005, 99, 237-246.	3.5	157
28	Hydrogen sulfide mediates vasoactivity in an O ₂ -dependent manner. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 292, H1953-H1960.	3.2	153
29	SNO-hemoglobin is not essential for red blood cell-dependent hypoxic vasodilation. Nature Medicine, 2008, 14, 773-777.	30.7	145
30	Overexpression of Endothelial Nitric Oxide Synthase Prevents Diet-Induced Obesity and Regulates Adipocyte Phenotype. Circulation Research, 2012, 111, 1176-1189.	4.5	134
31	Biochemical Characterization of Human S-Nitrosohemoglobin. Journal of Biological Chemistry, 1999, 274, 15487-15492.	3.4	123
32	Nitric Oxide-Dependent Induction of Glutathione Synthesis through Increased Expression of γ -Glutamylcysteine Synthetase. Archives of Biochemistry and Biophysics, 1998, 358, 74-82.	3.0	118
33	The induction of GSH synthesis by nanomolar concentrations of NO in endothelial cells: a role for γ -glutamylcysteine synthetase and γ -glutamyl transpeptidase. FEBS Letters, 1999, 448, 292-296.	2.8	115
34	Cytoprotection against Oxidative Stress and the Regulation of Glutathione Synthesis. Biological Chemistry, 2003, 384, 527-37.	2.5	114
35	Mechanisms of Cell Signaling by Nitric Oxide and Peroxynitrite: From Mitochondria to MAP Kinases. Antioxidants and Redox Signaling, 2001, 3, 215-229.	5.4	112
36	Nitrosation of Uric Acid by Peroxynitrite. Journal of Biological Chemistry, 1998, 273, 24491-24497.	3.4	109

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37	The Globin-based Free Radical of Ferryl Hemoglobin Is Detected in Normal Human Blood. Journal of Biological Chemistry, 1997, 272, 7114-7121.	3.4	107
38	Control of Mitochondrial Respiration by NO., Effects of Low Oxygen and Respiratory State. Journal of Biological Chemistry, 2003, 278, 31603-31609.	3.4	107
39	Hydrolysis of Acyloxy Nitroso Compounds Yields Nitroxyl (HNO). Journal of the American Chemical Society, 2006, 128, 9687-9692.	13.7	105
40	Transduction of NO-bioactivity by the red blood cell in sepsis: novel mechanisms of vasodilation during acute inflammatory disease. Blood, 2004, 104, 1375-1382.	1.4	102
41	Dietary flavonoid quercetin stimulates vasorelaxation in aortic vessels. Free Radical Biology and Medicine, 2010, 49, 339-347.	2.9	97
42	Redox Cycling of Human Methaemoglobin by H ₂ O ₂ Yields Persistent Ferryl Iron and Protein Based Radicals. Free Radical Research, 1996, 25, 117-123.	3.3	96
43	Nitrite and nitrate chemical biology and signalling. British Journal of Pharmacology, 2019, 176, 228-245.	5.4	94
44	Mechanisms of the pro- and anti-oxidant actions of nitric oxide in atherosclerosis. Cardiovascular Research, 2000, 47, 465-474.	3.8	92
45	Protein kinase B/Akt activates c-Jun NH ₂ -terminal kinase by increasing NO production in response to shear stress. Journal of Applied Physiology, 2001, 91, 1574-1581.	2.5	91
46	Formation of nanomolar concentrations of S-nitroso-albumin in human plasma by nitric oxide. Free Radical Biology and Medicine, 2001, 31, 688-696.	2.9	91
47	Chlorination and Nitration of Soy Isoflavones. Archives of Biochemistry and Biophysics, 1999, 368, 265-275.	3.0	90
48	Reduction of Cu(II) by lipid hydroperoxides: implications for the copper-dependent oxidation of low-density lipoprotein. Biochemical Journal, 1997, 322, 425-433.	3.7	89
49	Intercellular Adhesion Molecule-1 (ICAM-1) Regulates Endothelial Cell Motility through a Nitric Oxide-dependent Pathway. Journal of Biological Chemistry, 2004, 279, 19230-19238.	3.4	89
50	Endothelial heterogeneity and adhesion molecules N-glycosylation: Implications in leukocyte trafficking in inflammation. Glycobiology, 2013, 23, 622-633.	2.5	87
51	Mechanisms of signal transduction mediated by oxidized lipids: the role of the electrophile-responsive proteome. Biochemical Society Transactions, 2004, 32, 151-155.	3.4	83
52	Essential role of ICAM-1 in mediating monocyte adhesion to aortic endothelial cells. American Journal of Physiology - Cell Physiology, 2001, 281, C1442-C1447.	4.6	82
53	Evidence for peroxynitrite as a signaling molecule in flow-dependent activation of c-Jun NH ₂ -terminal kinase. American Journal of Physiology - Heart and Circulatory Physiology, 1999, 277, H1647-H1653.	3.2	81
54	Revealing anti-inflammatory mechanisms of soy isoflavones by flow: modulation of leukocyte-endothelial cell interactions. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 289, H908-H915.	3.2	81

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55	Sildenafil Promotes Ischemia-Induced Angiogenesis Through a PKG-Dependent Pathway. Arteriosclerosis, Thrombosis, and Vascular Biology, 2007, 27, 1947-1954.	2.4	79
56	Haemoglobin: NO transporter, NO inactivator or NOne of the above?. Trends in Pharmacological Sciences, 2002, 23, 406-411.	8.7	78
57	A Novel Model of Chronic Wounds: Importance of Redox Imbalance and Biofilm-Forming Bacteria for Establishment of Chronicity. PLoS ONE, 2014, 9, e109848.	2.5	76
58	Endothelial Surface N-Glycans Mediate Monocyte Adhesion and Are Targets for Anti-inflammatory Effects of Peroxisome Proliferator-activated Receptor β Ligands. Journal of Biological Chemistry, 2011, 286, 38738-38747.	3.4	75
59	A murine neonatal model of necrotizing enterocolitis caused by anemia and red blood cell transfusions. Nature Communications, 2019, 10, 3494.	12.8	74
60	Enhanced Antioxidant Activity After Chlorination of Quercetin by Hypochlorous Acid. Alcoholism: Clinical and Experimental Research, 2001, 25, 434-443.	2.4	71
61	Hemoglobin oxygen fractional saturation regulates nitrite-dependent vasodilation of aortic ring bioassays. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H2565-H2572.	3.2	71
62	Local Peroxynitrite Impairs Endothelial Transient Receptor Potential Vanilloid 4 Channels and Elevates Blood Pressure in Obesity. Circulation, 2020, 141, 1318-1333.	1.6	71
63	Mechanisms of the interaction of nitroxyl with mitochondria. Biochemical Journal, 2004, 379, 359-366.	3.7	70
64	Working with nitric oxide and hydrogen sulfide in biological systems. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2015, 308, L403-L415.	2.9	69
65	Over-the-counter mouthwash use and risk of pre-diabetes/diabetes. Nitric Oxide - Biology and Chemistry, 2017, 71, 14-20.	2.7	66
66	Biochemical aspects of the reaction of hemoglobin and NO: implications for Hb-based blood substitutes. Free Radical Biology and Medicine, 2000, 28, 1518-1525.	2.9	65
67	Obesity, Aerobic Exercise, and Vascular Disease: The Role of Oxidant Stress. Obesity, 2002, 10, 964-968.	4.0	65
68	Pentoxifylline attenuation of experimental hepatopulmonary syndrome. Journal of Applied Physiology, 2007, 102, 949-955.	2.5	65
69	Polyphenols, Inflammatory Response, and Cancer Prevention: Chlorination of Isoflavones by Human Neutrophils. Journal of Nutrition, 2003, 133, 3773S-3777S.	2.9	63
70	Effects of sodium nitrite on ischemia-reperfusion injury in the rat kidney. American Journal of Physiology - Renal Physiology, 2006, 290, F779-F786.	2.7	63
71	Beyond ER α and ER β : Estrogen Receptor Binding Is Only Part of the Isoflavone Story. Journal of Nutrition, 2000, 130, 656S-657S.	2.9	62
72	Induction of glutathione synthesis by oxidized low-density lipoprotein and 1-palmitoyl-2-arachidonyl phosphatidylcholine: protection against quinone-mediated oxidative stress. Biochemical Journal, 2002, 362, 51-59.	3.7	62

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73	Hemoglobin mediated nitrite activation of soluble guanylyl cyclase. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2005, 142, 130-135.	1.8	62
74	Mechanisms of Cystic Fibrosis Transmembrane Conductance Regulator Activation by S-Nitrosoglutathione. Journal of Biological Chemistry, 2006, 281, 9190-9199.	3.4	61
75	Anti-Inflammatory Effects of Isoflavones are Dependent on Flow and Human Endothelial Cell PPAR γ . Journal of Nutrition, 2007, 137, 351-356.	2.9	61
76	Endothelial dysfunction is induced by proinflammatory oxidant hypochlorous acid. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 281, H1469-H1475.	3.2	60
77	The potential role of the red blood cell in nitrite-dependent regulation of blood flow. Cardiovascular Research, 2011, 89, 507-515.	3.8	60
78	Erythrocyte storage increases rates of NO and nitrite scavenging: implications for transfusion-related toxicity. Biochemical Journal, 2012, 446, 499-508.	3.7	59
79	Role of Endothelial N-Glycan Mannose Residues in Monocyte Recruitment During Atherogenesis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2012, 32, e51-9.	2.4	58
80	Heterogenic Endothelial Responses to Inflammation: Role for Differential N-Glycosylation and Vascular Bed of Origin. Journal of the American Heart Association, 2013, 2, e000263.	3.7	58
81	Regulation of endothelial glutathione by ICAM-1: implications for inflammation. FASEB Journal, 2004, 18, 1321-1323.	0.5	57
82	Reaction of S-Nitrosoglutathione with the Heme Group of Deoxyhemoglobin. Journal of Biological Chemistry, 2000, 275, 36562-36567.	3.4	55
83	Vasoactivity of S-nitrosohemoglobin: role of oxygen, heme, and NO oxidation states. Blood, 2003, 101, 4408-4415.	1.4	55
84	Absorbance and redox based approaches for measuring free heme and free hemoglobin in biological matrices. Redox Biology, 2016, 9, 167-177.	9.0	55
85	Regulation of nitrite transport in red blood cells by hemoglobin oxygen fractional saturation. American Journal of Physiology - Heart and Circulatory Physiology, 2009, 296, H1398-H1407.	3.2	54
86	Peroxiredoxin-2 Recycling Is Inhibited During Erythrocyte Storage. Antioxidants and Redox Signaling, 2015, 22, 294-307.	5.4	52
87	Modulation of pulmonary endothelial endothelin B receptor expression and signaling: implications for experimental hepatopulmonary syndrome. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2007, 292, L1467-L1472.	2.9	51
88	Role of heme in lung bacterial infection after trauma hemorrhage and stored red blood cell transfusion: A preclinical experimental study. PLoS Medicine, 2018, 15, e1002522.	8.4	51
89	Regulation of endothelial glutathione by ICAM-1 governs VEGF-A-mediated eNOS activity and angiogenesis. Free Radical Biology and Medicine, 2007, 42, 720-729.	2.9	50
90	The apolipoprotein A-I mimetic peptide 4F prevents defects in vascular function in endotoxemic rats. Journal of Lipid Research, 2010, 51, 2695-2705.	4.2	50

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91	Current perspectives and challenges in understanding the role of nitrite as an integral player in nitric oxide biology and therapy. <i>Free Radical Biology and Medicine</i> , 2011, 51, 805-812.	2.9	50
92	Dipyridamole enhances ischaemia-induced arteriogenesis through an endocrine nitrite/nitric oxide-dependent pathway. <i>Cardiovascular Research</i> , 2010, 85, 661-670.	3.8	49
93	Formation of chlorinated lipids post-chlorine gas exposure. <i>Journal of Lipid Research</i> , 2016, 57, 1529-1540.	4.2	49
94	The interplay of nitric oxide and peroxynitrite with signal transduction pathways: Implications for disease. <i>Seminars in Perinatology</i> , 1997, 21, 351-366.	2.5	48
95	Neutrophil myeloperoxidase chlorinates and nitrates soy isoflavones and enhances their antioxidant properties. <i>Free Radical Biology and Medicine</i> , 2003, 35, 1417-1430.	2.9	48
96	Identification of a high-mannose ICAM-1 glycoform: effects of ICAM-1 hypoglycosylation on monocyte adhesion and outside in signaling. <i>American Journal of Physiology - Cell Physiology</i> , 2013, 305, C228-C237.	4.6	48
97	Low Intensity Shear Stress Increases Endothelial ELR+ CXC Chemokine Production via a Focal Adhesion Kinase-p38 [̳] MAPK-NF- [̳] B Pathway. <i>Journal of Biological Chemistry</i> , 2009, 284, 5945-5955.	3.4	47
98	Mitigation of chlorine gas lung injury in rats by postexposure administration of sodium nitrite. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2011, 300, L362-L369.	2.9	46
99	Chlorine Gas Exposure Causes Systemic Endothelial Dysfunction by Inhibiting Endothelial Nitric Oxide Synthase-Dependent Signaling. <i>American Journal of Respiratory Cell and Molecular Biology</i> , 2011, 45, 419-425.	2.9	46
100	Antioxidant functions for the hemoglobin [̳] 293 cysteine residue in erythrocytes and in the vascular compartment in vivo. <i>Free Radical Biology and Medicine</i> , 2013, 55, 119-129.	2.9	46
101	Acyloxy Nitroso Compounds as Nitroxyl (HNO) Donors: Kinetics, Reactions with Thiols, and Vasodilation Properties. <i>Journal of Medicinal Chemistry</i> , 2011, 54, 1059-1070.	6.4	44
102	Red blood cell age and potentiation of transfusion-related pathology in trauma patients. <i>Transfusion</i> , 2011, 51, 867-873.	1.6	44
103	Nitric oxide formation versus scavenging: the red blood cell balancing act. <i>Journal of Physiology</i> , 2012, 590, 4993-5000.	2.9	44
104	Mechanism of faster NO scavenging by older stored red blood cells. <i>Redox Biology</i> , 2014, 2, 211-219.	9.0	44
105	Red blood cell washing, nitrite therapy, and antiheme therapies prevent stored red blood cell toxicity after trauma-hemorrhage. <i>Free Radical Biology and Medicine</i> , 2015, 85, 207-218.	2.9	42
106	Hemoglobin [̳] 293 Cysteine Is Not Required for Export of Nitric Oxide Bioactivity From the Red Blood Cell. <i>Circulation</i> , 2019, 139, 2654-2663.	1.6	42
107	Molecular mechanisms of the copper dependent oxidation of low-density lipoprotein. <i>Free Radical Research</i> , 1999, 30, 1-9.	3.3	41
108	Single-Dose Pharmacokinetics of Different Oral Sodium Nitrite Formulations in Diabetes Patients. <i>Diabetes Technology and Therapeutics</i> , 2012, 14, 552-560.	4.4	41

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109	Endothelial NOS-dependent activation of c-Jun NH2-terminal kinase by oxidized low-density lipoprotein. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 281, H2705-H2713.	3.2	39
110	Erythrocyte-dependent regulation of human skeletal muscle blood flow: role of varied oxyhemoglobin and exercise on nitrite, S-nitrosohemoglobin, and ATP. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 299, H1936-H1946.	3.2	39
111	The matrikine N-1±-PGP couples extracellular matrix fragmentation to endothelial permeability. Science Advances, 2015, 1, .	10.3	39
112	Microvascular Response to Red Blood Cell Transfusion in Trauma Patients. Shock, 2012, 37, 276-281.	2.1	38
113	Older Blood Is Associated With Increased Mortality and Adverse Events in Massively Transfused Trauma Patients: Secondary Analysis of the PROPPR Trial. Annals of Emergency Medicine, 2019, 73, 650-661.	0.6	38
114	Spatial mapping of SARS-CoV-2 and H1N1 lung injury identifies differential transcriptional signatures. Cell Reports Medicine, 2021, 2, 100242.	6.5	38
115	Effects of S-Nitrosation and Cross-Linking of Hemoglobin on Hypoxic Pulmonary Vasoconstriction in Isolated Rat Lungs. Circulation Research, 2002, 91, 626-632.	4.5	37
116	The Red Blood Cell and Vascular Function in Health and Disease. Antioxidants and Redox Signaling, 2004, 6, 992-999.	5.4	37
117	The detection of the nitrite reductase and NO-generating properties of haemoglobin by mitochondrial inhibition. Cardiovascular Research, 2011, 89, 566-573.	3.8	37
118	Effects of venous needle turbulence during ex vivo hemodialysis on endothelial morphology and nitric oxide formation. Journal of Biomechanics, 2007, 40, 2158-2166.	2.1	36
119	A Randomized Clinical Trial Testing the Anti-Inflammatory Effects of Preemptive Inhaled Nitric Oxide in Human Liver Transplantation. PLoS ONE, 2014, 9, e86053.	2.5	36
120	The deleterious effect of red blood cell storage on microvascular response to transfusion. Journal of Trauma and Acute Care Surgery, 2013, 75, 807-812.	2.1	34
121	Characterization of Storage-Induced Red Blood Cell Hemolysis Using Raman Spectroscopy. Laboratory Medicine, 2018, 49, 298-310.	1.2	34
122	Assessment of endothelial glycocalyx disruption in term parturients receiving a fluid bolus before spinal anesthesia: a prospective observational study. International Journal of Obstetric Anesthesia, 2014, 23, 330-334.	0.4	33
123	Activation of c-Jun N-Terminal Kinase and Apoptosis in Endothelial Cells Mediated by Endogenous Generation of Hydrogen Peroxide. Biological Chemistry, 2002, 383, 693-701.	2.5	32
124	Isoflavones and PPAR Signaling: A Critical Target in Cardiovascular, Metastatic, and Metabolic Disease. PPAR Research, 2010, 2010, 1-10.	2.4	32
125	Is methemoglobin an inert bystander, biomarker or a mediator of oxidative stress? The example of anemia?. Redox Biology, 2013, 1, 65-69.	9.0	32
126	An EPR Investigation of Human Methaemoglobin Oxidation by Hydrogen Peroxide: Methods to Quantify all Paramagnetic Species Observed in the Reaction. Free Radical Research, 1996, 24, 269-280.	3.3	31

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127	Measurement of mitochondrial respiratory thresholds and the control of respiration by nitric oxide. <i>Methods in Enzymology</i> , 2002, 359, 305-319.	1.0	31
128	Potential biomarkers of tissue hypoxia during acute hemodilutional anemia in cardiac surgery: A prospective study to assess tissue hypoxia as a mechanism of organ injury. <i>Canadian Journal of Anaesthesia</i> , 2018, 65, 901-913.	1.6	31
129	Administration of nitrite after chlorine gas exposure prevents lung injury: Effect of administration modality. <i>Free Radical Biology and Medicine</i> , 2012, 53, 1431-1439.	2.9	30
130	Induction of glutathione synthesis by oxidized low-density lipoprotein and 1-palmitoyl-2-arachidonyl phosphatidylcholine: protection against quinone-mediated oxidative stress. <i>Biochemical Journal</i> , 2002, 362, 51.	3.7	29
131	Effects of T- and R-state stabilization on deoxyhemoglobin-nitrite reactions and stimulation of nitric oxide signaling. <i>Nitric Oxide - Biology and Chemistry</i> , 2011, 25, 59-69.	2.7	29
132	Sodium nitrite therapy attenuates the hypertensive effects of HBOC-201 via nitrite reduction ¹ . <i>Biochemical Journal</i> , 2009, 422, 423-432.	3.7	28
133	[35] Using peroxynitrite as oxidant with low-density lipoprotein. <i>Methods in Enzymology</i> , 1996, 269, 375-384.	1.0	27
134	Mass spectrometric methods for the analysis of chlorinated and nitrated isoflavonoids: a novel class of biological metabolites. <i>Journal of Mass Spectrometry</i> , 2003, 38, 764-771.	1.6	27
135	Dipyridamole reverses peripheral ischemia and induces angiogenesis in the Db/Db diabetic mouse hind-limb model by decreasing oxidative stress. <i>Free Radical Biology and Medicine</i> , 2011, 50, 262-269.	2.9	27
136	Bromofatty aldehyde derived from bromine exposure and myeloperoxidase and eosinophil peroxidase modify GSH and protein. <i>Journal of Lipid Research</i> , 2018, 59, 696-705.	4.2	27
137	Phosgene inhalation causes hemolysis and acute lung injury. <i>Toxicology Letters</i> , 2019, 312, 204-213.	0.8	27
138	Novel Method for Measuring S-Nitrosothiols Using Hydrogen Sulfide. <i>Methods in Enzymology</i> , 2008, 441, 161-172.	1.0	26
139	Sodium nitrite protects against kidney injury induced by brain death and improves post-transplant function. <i>Kidney International</i> , 2012, 82, 304-313.	5.2	26
140	The Hepatoprotective Effect of Sodium Nitrite on Cold Ischemia-Reperfusion Injury. <i>Journal of Transplantation</i> , 2012, 2012, 1-10.	0.5	26
141	Nitrite therapy prevents chlorine gas toxicity in rabbits. <i>Toxicology Letters</i> , 2017, 271, 20-25.	0.8	26
142	Potential for Chlorine Gas-induced Injury in the Extrapulmonary Vasculature. <i>Proceedings of the American Thoracic Society</i> , 2010, 7, 290-293.	3.5	25
143	Weight Loss and Race Modulate Nitric Oxide Metabolism in Overweight Women. <i>Free Radical Biology and Medicine</i> , 2004, 37, 695-702.	2.9	24
144	Developmental changes in circulating IL-8/CXCL8 isoforms in neonates. <i>Cytokine</i> , 2009, 46, 12-16.	3.2	24

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145	There is blood in the water: hemolysis, hemoglobin, and heme in acute lung injury. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2016, 311, L714-L718.	2.9	24
146	Over-the-counter mouthwash use, nitric oxide and hypertension risk. Blood Pressure, 2020, 29, 103-112.	1.5	24
147	Resveratrol and exercise combined to treat functional limitations in late life: A pilot randomized controlled trial. Experimental Gerontology, 2021, 143, 111111.	2.8	24
148	Modulatory effects of hypercapnia on in vitro and in vivo pulmonary endothelial neutrophil adhesive responses during inflammation. Cytokine, 2008, 44, 108-117.	3.2	23
149	Effects of Erythrocyte Aging on Nitric Oxide and Nitrite Metabolism. Antioxidants and Redox Signaling, 2013, 19, 1198-1208.	5.4	23
150	The role of red blood cell S-nitrosation in nitrite bioactivation and its modulation by leucine and glucose. Redox Biology, 2016, 8, 415-421.	9.0	23
151	Mechanisms and Treatment of Halogen Inhalation-Induced Pulmonary and Systemic Injuries in Pregnant Mice. Hypertension, 2017, 70, 390-400.	2.7	23
152	Encapsulation of hemoglobin inside liposomes surface conjugated with poly(ethylene glycol) attenuates their reactions with gaseous ligands and regulates nitric oxide dependent vasodilation. Biotechnology Progress, 2012, 28, 636-645.	2.6	21
153	Elevated levels of NO are localized to distal airways in asthma. Free Radical Biology and Medicine, 2011, 50, 1679-1688.	2.9	20
154	ICAM-1 cytoplasmic tail regulates endothelial glutathione synthesis through a NOX4/PI3-kinase-dependent pathway. Free Radical Biology and Medicine, 2010, 49, 1119-1128.	2.9	19
155	Redox therapeutics in hepatic ischemia reperfusion injury. World Journal of Hepatology, 2014, 6, 1.	2.0	19
156	Nitrite therapy improves survival postexposure to chlorine gas. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2014, 307, L888-L894.	2.9	19
157	Measuring nitrate reductase activity from human and rodent tongues. Nitric Oxide - Biology and Chemistry, 2017, 66, 62-70.	2.7	19
158	Physiologic, pathologic and therapeutic implications for hemoglobin interactions with nitric oxide. Free Radical Biology and Medicine, 2004, 36, 399-401.	2.9	18
159	Chlorine gas exposure disrupts nitric oxide homeostasis in the pulmonary vasculature. Toxicology, 2014, 321, 96-102.	4.2	18
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