Rafael Radi

List of Publications by Citations

264 papers	34,250 citations	92 h-index	181 g-index
276 ext. papers	36,697 ext. citations	6.7 avg, IF	7.56 L-index

#	Paper	IF	Citations
264	Peroxynitrite-induced membrane lipid peroxidation: the cytotoxic potential of superoxide and nitric oxide. *Archives of Biochemistry and Biophysics*, **1991**, 288, 481-7	4.1	1946
263	Peroxynitrite oxidation of sulfhydryls.. *Journal of Biological Chemistry*, **1991**, 266, 4244-4250	5.4	1885
262	Peroxynitrite oxidation of sulfhydryls. The cytotoxic potential of superoxide and nitric oxide. *Journal of Biological Chemistry*, **1991**, 266, 4244-50	5.4	1776
261	Peroxynitrite: biochemistry, pathophysiology and development of therapeutics. *Nature Reviews Drug Discovery*, **2007**, 6, 662-80	64.1	1453
260	Nitric oxide, oxidants, and protein tyrosine nitration. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 4003-8	11.5	1175
259	Nitric oxide regulation of superoxide and peroxynitrite-dependent lipid peroxidation. Formation of novel nitrogen-containing oxidized lipid derivatives. *Journal of Biological Chemistry*, **1994**, 269, 26066-26075	5.4	998
258	Nitric oxide regulation of superoxide and peroxynitrite-dependent lipid peroxidation. Formation of novel nitrogen-containing oxidized lipid derivatives. *Journal of Biological Chemistry*, **1994**, 269, 26066-75	5.4	876
257	Inhibition of mitochondrial electron transport by peroxynitrite. *Archives of Biochemistry and Biophysics*, **1994**, 308, 89-95	4.1	633
256	Differential inhibitory action of nitric oxide and peroxynitrite on mitochondrial electron transport. *Archives of Biochemistry and Biophysics*, **1996**, 328, 309-16	4.1	606
255	Unraveling peroxynitrite formation in biological systems. *Free Radical Biology and Medicine*, **2001**, 30, 463-88	7.8	598
254	Chemical biology of peroxynitrite: kinetics, diffusion, and radicals. *ACS Chemical Biology*, **2009**, 4, 161-77	4.9	544
253	Peroxynitrite, a stealthy biological oxidant. *Journal of Biological Chemistry*, **2013**, 288, 26464-72	5.4	514
252	Peroxynitrite reaction with carbon dioxide/bicarbonate: kinetics and influence on peroxynitrite-mediated oxidations. *Archives of Biochemistry and Biophysics*, **1996**, 333, 49-58	4.1	507
251	Peroxynitrite reactions and formation in mitochondria. *Free Radical Biology and Medicine*, **2002**, 33, 1451-64	7.8	492
250	Peroxynitrite reactivity with amino acids and proteins. *Amino Acids*, **2003**, 25, 295-311	3.5	438
249	Aconitase is readily inactivated by peroxynitrite, but not by its precursor, nitric oxide.. *Journal of Biological Chemistry*, **1994**, 269, 29409-29415	5.4	437
248	The thiol pool in human plasma: the central contribution of albumin to redox processes. *Free Radical Biology and Medicine*, **2013**, 65, 244-253	7.8	408

247	Oxygen radicals, nitric oxide, and peroxynitrite: Redox pathways in molecular medicine. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 5839-5848	11.5	381
246	Aconitase is readily inactivated by peroxynitrite, but not by its precursor, nitric oxide. *Journal of Biological Chemistry*, **1994**, 269, 29409-15	5.4	379
245	Diffusion of peroxynitrite across erythrocyte membranes. *Proceedings of the National Academy of Sciences of the United States of America*, **1998**, 95, 3566-71	11.5	365
244	Protein tyrosine nitration: biochemical mechanisms and structural basis of functional effects. *Accounts of Chemical Research*, **2013**, 46, 550-9	24.3	343
243	Peroxynitrite-induced luminol chemiluminescence. *Biochemical Journal*, **1993**, 290 (Pt 1), 51-7	3.8	328
242	Protein tyrosine nitration--functional alteration or just a biomarker?. *Free Radical Biology and Medicine*, **2008**, 45, 357-66	7.8	323
241	Detection of catalase in rat heart mitochondria. *Journal of Biological Chemistry*, **1991**, 266, 22028-34	5.4	314
240	Nitric oxide and superoxide contribute to motor neuron apoptosis induced by trophic factor deprivation. *Journal of Neuroscience*, **1998**, 18, 923-31	6.6	313
239	Cytochrome c nitration by peroxynitrite. *Journal of Biological Chemistry*, **2000**, 275, 21409-15	5.4	281
238	Sulfenic acid formation in human serum albumin by hydrogen peroxide and peroxynitrite. *Biochemistry*, **2003**, 42, 9906-14	3.2	271
237	Peroxynitrite-induced cytotoxicity in PC12 cells: evidence for an apoptotic mechanism differentially modulated by neurotrophic factors. *Journal of Neurochemistry*, **1995**, 65, 1543-50	6	244
236	Biochemistry of Peroxynitrite and Protein Tyrosine Nitration. *Chemical Reviews*, **2018**, 118, 1338-1408	68.1	241
235	Peroxynitrite-dependent tryptophan nitration. *Chemical Research in Toxicology*, **1996**, 9, 390-6	4	229
234	Pathways of peroxynitrite oxidation of thiol groups. *Biochemical Journal*, **1997**, 322 (Pt 1), 167-73	3.8	227
233	Mitochondrial dysfunction in SOD1G93A-bearing astrocytes promotes motor neuron degeneration: prevention by mitochondrial-targeted antioxidants. *Journal of Neuroscience*, **2008**, 28, 4115-22	6.6	223
232	Fundamentals on the biochemistry of peroxynitrite and protein tyrosine nitration. *Redox Biology*, **2018**, 14, 618-625	11.3	221
231	Peroxynitrite inhibits T lymphocyte activation and proliferation by promoting impairment of tyrosine phosphorylation and peroxynitrite-driven apoptotic death. *Journal of Immunology*, **1999**, 162, 3356-66	5.3	221
230	Biochemistry of protein tyrosine nitration in cardiovascular pathology. *Cardiovascular Research*, **2007**, 75, 291-302	9.9	219

229	Factors affecting protein thiol reactivity and specificity in peroxide reduction. *Chemical Research in Toxicology*, **2011**, 24, 434-50	4	215
228	Direct EPR detection of the carbonate radical anion produced from peroxynitrite and carbon dioxide. *Journal of Biological Chemistry*, **1999**, 274, 10802-6	5.4	215
227	Nitric oxide and peroxynitrite interactions with mitochondria. *Biological Chemistry*, **2002**, 383, 401-9	4.5	214
226	Kinetics of peroxynitrite reaction with amino acids and human serum albumin. *Journal of Biological Chemistry*, **1999**, 274, 842-8	5.4	211
225	Even free radicals should follow some rules: a guide to free radical research terminology and methodology. *Free Radical Biology and Medicine*, **2015**, 78, 233-5	7.8	191
224	Peroxynitrite-mediated cytotoxicity to Trypanosoma cruzi. *Archives of Biochemistry and Biophysics*, **1993**, 304, 279-86	4.1	170
223	On the pH-dependent yield of hydroxyl radical products from peroxynitrite. *Free Radical Biology and Medicine*, **1994**, 16, 331-8	7.8	168
222	Kinetics of cytochrome c2+ oxidation by peroxynitrite: implications for superoxide measurements in nitric oxide-producing biological systems. *Archives of Biochemistry and Biophysics*, **1995**, 319, 491-7	4.1	166
221	Intraphagosomal peroxynitrite as a macrophage-derived cytotoxin against internalized Trypanosoma cruzi: consequences for oxidative killing and role of microbial peroxiredoxins in infectivity. *Journal of Biological Chemistry*, **2011**, 286, 6627-40	5.4	162
220	Reactivity of hydrogen sulfide with peroxynitrite and other oxidants of biological interest. *Free Radical Biology and Medicine*, **2011**, 50, 196-205	7.8	160
219	Glyceraldehyde-3-phosphate dehydrogenase inactivation by peroxynitrite. *Archives of Biochemistry and Biophysics*, **1998**, 360, 187-94	4.1	156
218	Spin-trapping studies of peroxynitrite decomposition and of 3-morpholinosydnonimine N-ethylcarbamide autooxidation: direct evidence for metal-independent formation of free radical intermediates. *Archives of Biochemistry and Biophysics*, **1994**, 310, 118-25	4.1	155
217	Reaction of peroxynitrite with Mn-superoxide dismutase. Role of the metal center in decomposition kinetics and nitration. *Journal of Biological Chemistry*, **2001**, 276, 11631-8	5.4	153
216	Nitro-fatty acid reaction with glutathione and cysteine. Kinetic analysis of thiol alkylation by a Michael addition reaction. *Journal of Biological Chemistry*, **2007**, 282, 31085-93	5.4	152
215	Catalytic scavenging of peroxynitrite by isomeric Mn(III) N-methylpyridylporphyrins in the presence of reductants. *Chemical Research in Toxicology*, **1999**, 12, 442-9	4	152
214	Nitric oxide diffusion in membranes determined by fluorescence quenching. *Archives of Biochemistry and Biophysics*, **1996**, 328, 208-12	4.1	152
213	Peroxynitrite reactions and diffusion in biology. *Chemical Research in Toxicology*, **1998**, 11, 720-1	4	146
212	Chemiluminescent detection of oxidants in vascular tissue. Lucigenin but not coelenterazine enhances superoxide formation. *Circulation Research*, **1999**, 84, 1203-11	15.7	146

211	Xanthine oxidase-mediated decomposition of S-nitrosothiols. *Journal of Biological Chemistry*, **1998**, 273, 7828-34	5.4	145
210	Peroxynitrite reaction with the reduced and the oxidized forms of lipoic acid: new insights into the reaction of peroxynitrite with thiols. *Archives of Biochemistry and Biophysics*, **2002**, 397, 91-8	4.1	145
209	Reactions of manganese porphyrins with peroxynitrite and carbonate radical anion. *Journal of Biological Chemistry*, **2003**, 278, 27432-8	5.4	143
208	Mercaptoethylguanidine and guanidine inhibitors of nitric-oxide synthase react with peroxynitrite and protect against peroxynitrite-induced oxidative damage. *Journal of Biological Chemistry*, **1997**, 272, 9030-6	5.4	138
207	Nitric oxide reaction with lipid peroxyl radicals spares alpha-tocopherol during lipid peroxidation. Greater oxidant protection from the pair nitric oxide/alpha-tocopherol than alpha-tocopherol/ascorbate. *Journal of Biological Chemistry*, **2000**, 275, 10812-8	5.4	137
206	Pre-steady state kinetic characterization of human peroxiredoxin 5: taking advantage of Trp84 fluorescence increase upon oxidation. *Archives of Biochemistry and Biophysics*, **2007**, 467, 95-106	4.1	136
205	Nitration and inactivation of tyrosine hydroxylase by peroxynitrite. *Journal of Biological Chemistry*, **2001**, 276, 46017-23	5.4	129
204	Reactions of nitric oxide with metalloproteins. *Chemical Research in Toxicology*, **1996**, 9, 828-35	4	128
203	Cytochrome c-catalyzed oxidation of organic molecules by hydrogen peroxide. *Archives of Biochemistry and Biophysics*, **1991**, 288, 112-7	4.1	128
202	Reactivity of sulfenic acid in human serum albumin. *Biochemistry*, **2008**, 47, 358-67	3.2	126
201	Multiple thioredoxin-mediated routes to detoxify hydroperoxides in Mycobacterium tuberculosis. *Archives of Biochemistry and Biophysics*, **2004**, 423, 182-91	4.1	125
200	Cytochrome c-catalyzed membrane lipid peroxidation by hydrogen peroxide. *Archives of Biochemistry and Biophysics*, **1991**, 288, 118-25	4.1	120
199	Peroxynitrite-mediated oxidation of albumin to the protein-thiyl free radical. *FEBS Letters*, **1994**, 348, 287-90	3.8	119
198	Peroxynitrite inactivates thiol-containing enzymes of Trypanosoma cruzi energetic metabolism and inhibits cell respiration. *Archives of Biochemistry and Biophysics*, **1994**, 308, 96-102	4.1	117
197	Multifunctional Cytochrome c: Learning New Tricks from an Old Dog. *Chemical Reviews*, **2017**, 117, 13382-13460	28.1	116
196	Insights into the redox biology of Trypanosoma cruzi: Trypanothione metabolism and oxidant detoxification. *Free Radical Biology and Medicine*, **2008**, 45, 733-42	7.8	116
195	Direct measurement of nitric oxide and oxygen partitioning into liposomes and low density lipoprotein. *Journal of Biological Chemistry*, **2005**, 280, 8850-4	5.4	116
194	Mitochondrial superoxide radicals mediate programmed cell death in Trypanosoma cruzi: cytoprotective action of mitochondrial iron superoxide dismutase overexpression. *Biochemical Journal*, **2007**, 403, 323-34	3.8	115

193	Protein tyrosine nitration in hydrophilic and hydrophobic environments. *Amino Acids*, **2007**, 32, 501-15	3.5	113
192	Nitric oxide-derived oxidants with a focus on peroxynitrite: molecular targets, cellular responses and therapeutic implications. *Current Pharmaceutical Design*, **2011**, 17, 3905-32	3.3	109
191	Inactivation of human Cu,Zn superoxide dismutase by peroxynitrite and formation of histidinyl radical. *Free Radical Biology and Medicine*, **2004**, 37, 813-22	7.8	109
190	Macrophage-derived peroxynitrite diffusion and toxicity to Trypanosoma cruzi. *Archives of Biochemistry and Biophysics*, **2004**, 432, 222-32	4.1	108
189	Ca2+-independent permeabilization of the inner mitochondrial membrane by peroxynitrite is mediated by membrane protein thiol cross-linking and lipid peroxidation. *Archives of Biochemistry and Biophysics*, **1997**, 345, 243-50	4.1	107
188	Pure MnTBAP selectively scavenges peroxynitrite over superoxide: comparison of pure and commercial MnTBAP samples to MnTE-2-PyP in two models of oxidative stress injury, an SOD-specific Escherichia coli model and carrageenan-induced pleurisy. *Free Radical Biology and Medicine*, **2009**, 46, 192-201	7.8	105
187	Kinetics of peroxiredoxins and their role in the decomposition of peroxynitrite. *Sub-Cellular Biochemistry*, **2007**, 44, 83-113	5.5	105
186	L-arginine-dependent suppression of apoptosis in Trypanosoma cruzi: contribution of the nitric oxide and polyamine pathways. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 7301-6	11.5	105
185	Trypanosoma brucei and Trypanosoma cruzi tryparedoxin peroxidases catalytically detoxify peroxynitrite via oxidation of fast reacting thiols. *Journal of Biological Chemistry*, **2004**, 279, 34175-82	5.4	104
184	Peroxynitrite and drug-dependent toxicity. *Toxicology*, **2005**, 208, 273-88	4.4	104
183	Peroxiredoxins play a major role in protecting Trypanosoma cruzi against macrophage- and endogenously-derived peroxynitrite. *Biochemical Journal*, **2008**, 410, 359-68	3.8	101
182	Reaction of human hemoglobin with peroxynitrite. Isomerization to nitrate and secondary formation of protein radicals. *Journal of Biological Chemistry*, **2003**, 278, 44049-57	5.4	101
181	Kinetic and mechanistic considerations to assess the biological fate of peroxynitrite. *Biochimica Et Biophysica Acta - General Subjects*, **2014**, 1840, 768-80	4	100
180	Enzymes of the antioxidant network as novel determiners of Trypanosoma cruzi virulence. *International Journal for Parasitology*, **2009**, 39, 1455-64	4.3	100
179	Desferrioxamine inhibition of the hydroxyl radical-like reactivity of peroxynitrite: role of the hydroxamic groups. *Free Radical Biology and Medicine*, **1995**, 19, 11-9	7.8	100
178	Neuroprotective effects of the mitochondria-targeted antioxidant MitoQ in a model of inherited amyotrophic lateral sclerosis. *Free Radical Biology and Medicine*, **2014**, 70, 204-13	7.8	97
177	Protein and lipid nitration: role in redox signaling and injury. *Biochimica Et Biophysica Acta - General Subjects*, **2008**, 1780, 1318-24	4	97
176	Time course and site(s) of cytochrome c tyrosine nitration by peroxynitrite. *Biochemistry*, **2005**, 44, 8038-46	3.6	97

175	Diffusion of peroxynitrite in the presence of carbon dioxide. *Archives of Biochemistry and Biophysics*, **1999**, 368, 23-30	4.1	95
174	Fighting the oxidative assault: the Trypanosoma cruzi journey to infection. *Current Opinion in Microbiology*, **2009**, 12, 415-21	7.9	93
173	Mitochondrial superoxide production and nuclear factor erythroid 2-related factor 2 activation in p75 neurotrophin receptor-induced motor neuron apoptosis. *Journal of Neuroscience*, **2007**, 27, 7777-85	6.6	92
172	Thiol and sulfenic acid oxidation of AhpE, the one-cysteine peroxiredoxin from Mycobacterium tuberculosis: kinetics, acidity constants, and conformational dynamics. *Biochemistry*, **2009**, 48, 9416-26	3.2	91
171	Enhanced mitochondrial superoxide in hyperglycemic endothelial cells: direct measurements and formation of hydrogen peroxide and peroxynitrite. *American Journal of Physiology - Heart and Circulatory Physiology*, **2007**, 293, H3404-14	5.2	91
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168	Xanthine oxidase binding to glycosaminoglycans: kinetics and superoxide dismutase interactions of immobilized xanthine oxidase-heparin complexes. *Archives of Biochemistry and Biophysics*, **1997**, 339, 125-35	4.1	87
167	Peroxynitrite detoxification and its biologic implications. *Antioxidants and Redox Signaling*, **2008**, 10, 1607-20	8.4	86
166	One- and two-electron oxidation of thiols: mechanisms, kinetics and biological fates. *Free Radical Research*, **2016**, 50, 150-71	4	85
165	Nitration of solvent-exposed tyrosine 74 on cytochrome c triggers heme iron-methionine 80 bond disruption. Nuclear magnetic resonance and optical spectroscopy studies. *Journal of Biological Chemistry*, **2009**, 284, 17-26	5.4	85
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163	Trypanothione: a unique bis-glutathionyl derivative in trypanosomatids. *Biochimica Et Biophysica Acta - General Subjects*, **2013**, 1830, 3199-216	4	81
162	Disruption of the M80-Fe ligation stimulates the translocation of cytochrome c to the cytoplasm and nucleus in nonapoptotic cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 2653-8	11.5	81
161	Peroxynitrite reactions with carbon dioxide-bicarbonate. *Methods in Enzymology*, **1999**, 301, 353-67	1.7	81
160	Alternative Conformations of Cytochrome c: Structure, Function, and Detection. *Biochemistry*, **2016**, 55, 407-28	3.2	80
159	Inactivation and nitration of human superoxide dismutase (SOD) by fluxes of nitric oxide and superoxide. *Free Radical Biology and Medicine*, **2007**, 42, 1359-68	7.8	78
158	Cytochrome c: a catalyst and target of nitrite-hydrogen peroxide-dependent protein nitration. *Archives of Biochemistry and Biophysics*, **2004**, 421, 99-107	4.1	76

157	Mitochondrial protein tyrosine nitration. *Free Radical Research*, **2011**, 45, 37-52	4	74
156	Modulation of astrocytic mitochondrial function by dichloroacetate improves survival and motor performance in inherited amyotrophic lateral sclerosis. *PLoS ONE*, **2012**, 7, e34776	3.7	70
155	Formation of protein tyrosine ortho-semiquinone radical and nitrotyrosine from cytochrome c-derived tyrosyl radical. *Journal of Biological Chemistry*, **2004**, 279, 18054-62	5.4	70
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153	Oxidation of ubiquinol by peroxynitrite: implications for protection of mitochondria against nitrosative damage. *Biochemical Journal*, **2000**, 349, 35-42	3.8	69
152	Physiologic levels of uric acid inhibit xanthine oxidase in human plasma. *Pediatric Research*, **1993**, 34, 303-7	3.2	69
151	Mechanistic studies of peroxynitrite-mediated tyrosine nitration in membranes using the hydrophobic probe N-t-BOC-L-tyrosine tert-butyl ester. *Biochemistry*, **2006**, 45, 6813-25	3.2	68
150	Superoxide-mediated inactivation of nitric oxide and peroxynitrite formation by tobacco smoke in vascular endothelium: studies in cultured cells and smokers. *American Journal of Physiology - Heart and Circulatory Physiology*, **2009**, 296, H1781-92	5.2	67
149	Reactions of manganese porphyrins and manganese-superoxide dismutase with peroxynitrite. *Methods in Enzymology*, **2002**, 349, 23-37	1.7	66
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144	Trypanosoma cruzi antioxidant enzymes as virulence factors in Chagas disease. *Antioxidants and Redox Signaling*, **2013**, 19, 723-34	8.4	64
143	Peroxynitrite-mediated decarboxylation of pyruvate to both carbon dioxide and carbon dioxide radical anion. *Chemical Research in Toxicology*, **1997**, 10, 786-94	4	63
142	Diffusion of nitric oxide into low density lipoprotein. *Journal of Biological Chemistry*, **2002**, 277, 932-6	5.4	63
141	Neurovascular coupling in hippocampus is mediated via diffusion by neuronal-derived nitric oxide. *Free Radical Biology and Medicine*, **2014**, 73, 421-9	7.8	62
140	Peroxynitrite, a potent macrophage-derived oxidizing cytotoxin to combat invading pathogens. *BioFactors*, **2014**, 40, 215-25	6.1	61

139	Formation of spin trap adducts during the decomposition of peroxynitrite. *Archives of Biochemistry and Biophysics*, **1998**, 349, 36-46	4.1	61
138	The role of cytochrome c and mitochondrial catalase in hydroperoxide-induced heart mitochondrial lipid peroxidation. *Archives of Biochemistry and Biophysics*, **1993**, 300, 409-15	4.1	60
137	A comprehensive evaluation of catalase-like activity of different classes of redox-active therapeutics. *Free Radical Biology and Medicine*, **2015**, 86, 308-21	7.8	59
136	Topography of tyrosine residues and their involvement in peroxidation of polyunsaturated cardiolipin in cytochrome c/cardiolipin peroxidase complexes. *Biochimica Et Biophysica Acta - Biomembranes*, **2011**, 1808, 2147-55	3.8	58
135	Mitochondrial calcium overload triggers complement-dependent superoxide-mediated programmed cell death in Trypanosoma cruzi. *Biochemical Journal*, **2009**, 418, 595-604	3.8	58
134	Molecular basis of the mechanism of thiol oxidation by hydrogen peroxide in aqueous solution: challenging the SN2 paradigm. *Chemical Research in Toxicology*, **2012**, 25, 741-6	4	56
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132	Peroxynitrite formation from biochemical and cellular fluxes of nitric oxide and superoxide. *Methods in Enzymology*, **2002**, 359, 353-66	1.7	55
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128	Binding of xanthine oxidase to glycosaminoglycans limits inhibition by oxypurinol. *Journal of Biological Chemistry*, **2004**, 279, 37231-4	5.4	53
127	Tyrosine-Nitrated Proteins: Proteomic and Bioanalytical Aspects. *Antioxidants and Redox Signaling*, **2017**, 26, 313-328	8.4	52
126	3-Hydroxyglutaric acid moderately impairs energy metabolism in brain of young rats. *Neuroscience*, **2005**, 135, 111-20	3.9	52
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117	Detection and quantification of nitric oxide-derived oxidants in biological systems. *Journal of Biological Chemistry*, **2019**, 294, 14776-14802	5.4	48
116	The Biological Chemistry of Peroxynitrite **2000**, 57-82		48
115	Tryparedoxin peroxidases from Trypanosoma cruzi: high efficiency in the catalytic elimination of hydrogen peroxide and peroxynitrite. *Archives of Biochemistry and Biophysics*, **2011**, 507, 287-95	4.1	47
114	Dietary nitrite in nitric oxide biology: a redox interplay with implications for pathophysiology and therapeutics. *Current Drug Targets*, **2011**, 12, 1351-63	3	47
113	Fluorescence and chemiluminescence approaches for peroxynitrite detection. *Free Radical Biology and Medicine*, **2018**, 128, 59-68	7.8	45
112	Active Site Structure and Peroxidase Activity of Oxidatively Modified Cytochrome c Species in Complexes with Cardiolipin. *Biochemistry*, **2015**, 54, 7491-504	3.2	45
111	Exploring the molecular basis of human manganese superoxide dismutase inactivation mediated by tyrosine 34 nitration. *Archives of Biochemistry and Biophysics*, **2011**, 507, 304-9	4.1	45
110	Interactions between nitric oxide and peroxynitrite during prostaglandin endoperoxide H synthase-1 catalysis: a free radical mechanism of inactivation. *Free Radical Biology and Medicine*, **2007**, 42, 1029-38	7.8	45
109	Specific methionine oxidation of cytochrome c in complexes with zwitterionic lipids by hydrogen peroxide: potential implications for apoptosis. *Chemical Science*, **2015**, 6, 705-713	9.4	44
108	Ternary copper complexes and manganese (III) tetrakis(4-benzoic acid) porphyrin catalyze peroxynitrite-dependent nitration of aromatics. *Chemical Research in Toxicology*, **1997**, 10, 1338-44	4	44
107	L-arginine metabolism during interaction of Trypanosoma cruzi with host cells. *Trends in Parasitology*, **2004**, 20, 363-9	6.4	44
106	Formation of lipid-protein adducts in low-density lipoprotein by fluxes of peroxynitrite and its inhibition by nitric oxide. *Archives of Biochemistry and Biophysics*, **2001**, 395, 225-32	4.1	44
105	Structural and molecular basis of the peroxynitrite-mediated nitration and inactivation of Trypanosoma cruzi iron-superoxide dismutases (Fe-SODs) A and B: disparate susceptibilities due to the repair of Tyr35 radical by Cys83 in Fe-SODB through intramolecular electron transfer. *Journal of Biological Chemistry*, **2014**, 289, 12760-78	5.4	43
104	Leghemoglobin is nitrated in functional legume nodules in a tyrosine residue within the heme cavity by a nitrite/peroxide-dependent mechanism. *Plant Journal*, **2015**, 81, 723-35	6.9	43

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