Willem H Koppenol

List of Publications by Year in Descending Order

209 papers	19,868 citations	63 h-index	139 g-index
235 ext. papers	21,198 ext. citations	6.2 avg, IF	6.95 L-index

#	Paper	IF	Citations
209	A resurrection of the Haber-Weiss reaction.. *Nature Communications*, **2022**, 13, 396	17.4	0
208	Comment on "Theoretical investigations on hydrogen peroxide decomposition in aquo" by T. Tsuneda and T. Taketsugu, , 2018, , 24992. *Physical Chemistry Chemical Physics*, **2021**, 23, 26004-26005	3.6	1
207	Thinking Outside the Cage: A New Hypothesis That Accounts for Variable Yields of Radicals from the Reaction of CO with ONOO. *Chemical Research in Toxicology*, **2020**, 33, 1516-1527	4	7
206	The Haber-Weiss reaction - The latest revival. *Free Radical Biology and Medicine*, **2019**, 145, 221-222	7.8	11
205	Iron and redox cycling. DoMs and donMts. *Free Radical Biology and Medicine*, **2019**, 133, 3-10	7.8	81
204	Reaction of CO with ONOO: One Molecule of CO Is Not Enough. *Chemical Research in Toxicology*, **2018**, 31, 721-730	4	9
203	Rust never sleeps: The continuing story of the Iron Bolt. *Free Radical Biology and Medicine*, **2018**, 124, 353-357	7.8	1
202	Chemistry of Peroxynitrite and Its Relevance to Biological Systems **2018**, 597-619		2
201	Low-Temperature Trapping of Intermediates in the Reaction of NO with O. *Inorganic Chemistry*, **2017**, 56, 4846-4851	5.1	3
200	Signaling by sulfur-containing molecules. Quantitative aspects. *Archives of Biochemistry and Biophysics*, **2017**, 617, 3-8	4.1	44
199	Hydrocarbon Proton Exchange Membranes **2017**, 107-138		1
198	Jumpstarting the cytochrome P450 catalytic cycle with a hydrated electron. *Journal of Biological Chemistry*, **2017**, 292, 21481-21489	5.4	9
197	Hydrogen peroxide, from Wieland to Sies. *Archives of Biochemistry and Biophysics*, **2016**, 595, 9-12	4.1	1
196	How to name new chemical elements (IUPAC Recommendations 2016). *Pure and Applied Chemistry*, **2016**, 88, 401-405	2.1	29
195	Electrode Potentials of l-Tryptophan, l-Tyrosine, 3-Nitro-l-tyrosine, 2,3-Difluoro-l-tyrosine, and 2,3,5-Trifluoro-l-tyrosine. *Biochemistry*, **2016**, 55, 2849-56	3.2	14
194	Superoxide-mediated post-translational modification of tyrosine residues. *Free Radical Biology and Medicine*, **2015**, 86, S17-S18	7.8	0
193	Protein thiyl radical reactions and product formation: a kinetic simulation. *Free Radical Biology and Medicine*, **2015**, 80, 158-63	7.8	31

192	Iron(II) binding by cereal beta-glucan. *Carbohydrate Polymers*, **2015**, 115, 739-43	10.3	9
191	Standard electrode potentials involving radicals in aqueous solution: inorganic radicals (IUPAC Technical Report). *Pure and Applied Chemistry*, **2015**, 87, 1139-1150	2.1	211
190	Primary photochemistry of peroxynitrite in aqueous solution. *Chemical Physics Letters*, **2015**, 641, 187-192	2.5	5
189	Concurrent cooperativity and substrate inhibition in the epoxidation of carbamazepine by cytochrome P450 3A4 active site mutants inspired by molecular dynamics simulations. *Biochemistry*, **2015**, 54, 711-21	3.2	31
188	Redox properties and activity of iron-citrate complexes: evidence for redox cycling. *Chemical Research in Toxicology*, **2015**, 28, 604-14	4	38
187	Rapid reaction of superoxide with insulin-tyrosyl radicals to generate a hydroperoxide with subsequent glutathione addition. *Free Radical Biology and Medicine*, **2014**, 70, 86-95	7.8	24
186	ONOOH does not react with H2: Potential beneficial effects of H2 as an antioxidant by selective reaction with hydroxyl radicals and peroxynitrite. *Free Radical Biology and Medicine*, **2014**, 75, 191-4	7.8	17
185	Why selenocysteine replaces cysteine in thioredoxin reductase: a radical hypothesis. *Biochemistry*, **2014**, 53, 5017-22	3.2	25
184	The kinetics of the reaction of nitrogen dioxide with iron(II)- and iron(III) cytochrome c. *Free Radical Biology and Medicine*, **2014**, 69, 172-80	7.8	12
183	Intramolecular 1,2- and 1,3-Hydrogen Transfer Reactions of Thiyl Radicals. *Israel Journal of Chemistry*, **2014**, 54, 265-271	3.4	8
182	Repair of Protein Radicals by Antioxidants. *Israel Journal of Chemistry*, **2014**, 54, 254-264	3.4	11
181	The complex interplay of iron metabolism, reactive oxygen species, and reactive nitrogen species: insights into the potential of various iron therapies to induce oxidative and nitrosative stress. *Free Radical Biology and Medicine*, **2013**, 65, 1174-1194	7.8	262
180	Decomposition kinetics of peroxynitrite: influence of pH and buffer. *Dalton Transactions*, **2013**, 42, 9898-905	4.3	35
179	Reactions of the tetraoxidosulfate(□) and hydroxyl radicals with poly(sodium □methylstyrene sulfonate). *Physical Chemistry Chemical Physics*, **2013**, 15, 4975-83	3.6	8
178	Cytochrome c and superoxide. *Journal of Biological Inorganic Chemistry*, **2013**, 18, 865-6	3.7	
177	Standard electrode potentials involving radicals in aqueous solution: inorganic radicals. *Bioinorganic Reaction Mechanisms*, **2013**, 9,		40
176	Why do proteins use selenocysteine instead of cysteine?. *Amino Acids*, **2012**, 42, 39-44	3.5	53
175	Efficient depletion of ascorbate by amino acid and protein radicals under oxidative stress. *Free Radical Biology and Medicine*, **2012**, 53, 1565-73	7.8	10

174	Nitrosation, thiols, and hemoglobin: energetics and kinetics. *Inorganic Chemistry*, **2012**, 51, 5637-41	5.1	49
173	Peroxynitrous acid: controversy and consensus surrounding an enigmatic oxidant. *Dalton Transactions*, **2012**, 41, 13779-87	4.3	53
172	Hydrogen exchange equilibria in thiols. *Chemical Research in Toxicology*, **2012**, 25, 1862-7	4	17
171	Reversible hydrogen transfer reactions in thiyl radicals from cysteine and related molecules: absolute kinetics and equilibrium constants determined by pulse radiolysis. *Journal of Physical Chemistry B*, **2012**, 116, 5329-41	3.4	40
170	Chemical characterization of the smallest S-nitrosothiol, HSNO; cellular cross-talk of H2S and S-nitrosothiols. *Journal of the American Chemical Society*, **2012**, 134, 12016-27	16.4	267
169	Fast repair of protein radicals by urate. *Free Radical Biology and Medicine*, **2012**, 52, 1929-36	7.8	26
168	Water increases rates of epoxidation by Mn(III)porphyrins/imidazole/IO4(-) in CH2Cl2. Analogy with peroxidase and chlorite dismutase. *Dalton Transactions*, **2011**, 40, 8695-700	4.3	18
167	Otto Warburg's contributions to current concepts of cancer metabolism. *Nature Reviews Cancer*, **2011**, 11, 325-37	31.3	1912
166	Reaction of SO4•− with an oligomer of poly(sodium styrene sulfonate). Probing the mechanism of damage to fuel cell membranes. *Physical Chemistry Chemical Physics*, **2011**, 13, 12429-34	3.6	8
165	Kinetic Simulation of the Chemical Stabilization Mechanism in Fuel Cell Membranes Using Cerium and Manganese Redox Couples. *Journal of the Electrochemical Society*, **2011**, 159, B211-B218	3.9	74
164	Radicals in Fuel Cell Membranes: Mechanisms of Formation and Ionomer Attack. *ECS Transactions*, **2011**, 41, 1431-1439	1	2
163	Radical (HO?, H? and HOO?) Formation and Ionomer Degradation in Polymer Electrolyte Fuel Cells. *Journal of the Electrochemical Society*, **2011**, 158, B755	3.9	178
162	Selenium and sulfur in exchange reactions: a comparative study. *Journal of Organic Chemistry*, **2010**, 75, 6696-9	4.2	119
161	Hydrogen exchange equilibria in glutathione radicals: rate constants. *Chemical Research in Toxicology*, **2010**, 23, 1596-600	4	36
160	Distance-dependent diffusion-controlled reaction of •NO and O2•− at chemical equilibrium with ONOO-. *Journal of Physical Chemistry B*, **2010**, 114, 16584-93	3.4	26
159	Damage to fuel cell membranes. Reaction of HO* with an oligomer of poly(sodium styrene sulfonate) and subsequent reaction with O(2). *Physical Chemistry Chemical Physics*, **2010**, 12, 11609-16	3.6	27
158	Reduction of protein radicals by GSH and ascorbate: potential biological significance. *Amino Acids*, **2010**, 39, 1131-7	3.5	76
157	Electrode potentials of partially reduced oxygen species, from dioxygen to water. *Free Radical Biology and Medicine*, **2010**, 49, 317-22	7.8	222

156	Efficient repair of protein radicals by ascorbate. *Free Radical Biology and Medicine*, **2009**, 46, 1049-57	7.8	56
155	Intermediates in the autoxidation of nitrogen monoxide. *Chemistry - A European Journal*, **2009**, 15, 6161-8	4.8	48
154	Peroxynitrate is formed rapidly during decomposition of peroxynitrite at neutral pH. *Dalton Transactions*, **2009**, 5730-6	4.3	37
153	Photon-initiated homolysis of peroxynitrous acid. *Inorganic Chemistry*, **2009**, 48, 7307-12	5.1	7
152	Preparation and properties of lithium and sodium peroxynitrite. *Chemical Research in Toxicology*, **2008**, 21, 2257-9	4	4
151	Kinetics of tyrosyl radical reduction by selenocysteine. *Biochemistry*, **2008**, 47, 9602-7	3.2	26
150	Antioxidant nanoreactor based on superoxide dismutase encapsulated in superoxide-permeable vesicles. *Journal of Physical Chemistry B*, **2008**, 112, 8211-7	3.4	96
149	P51. Intermediates in the autoxidation of nitrogen monoxide. *Nitric Oxide - Biology and Chemistry*, **2008**, 19, 54-55	5	
148	Reversible intramolecular hydrogen transfer between cysteine thiyl radicals and glycine and alanine in model peptides: absolute rate constants derived from pulse radiolysis and laser flash photolysis. *Journal of Physical Chemistry B*, **2008**, 112, 15034-44	3.4	64
147	Oxygen activation by cytochrome p450: a thermodynamic analysis. *Journal of the American Chemical Society*, **2007**, 129, 9686-90	16.4	38
146	Homolysis of the peroxynitrite anion detected with permanganate. *Inorganic Chemistry*, **2007**, 46, 10655-8	5.1	13
145	The glutathione thiyl radical does not react with nitrogen monoxide. *Biochemical and Biophysical Research Communications*, **2007**, 360, 146-8	3.4	14
144	Oxidation-state-dependent reactions of cytochrome c with the trioxidocarbonate(*1-) radical: a pulse radiolysis study. *Journal of Biological Inorganic Chemistry*, **2007**, 12, 118-25	3.7	9
143	Dissociation of CP20 from Iron(II)(cp20)3: A Pulse Radiolysis Study. *European Journal of Inorganic Chemistry*, **2006**, 2006, 671-675	2.3	11
142	Fenton chemistry and iron chelation under physiologically relevant conditions: Electrochemistry and kinetics. *Chemical Research in Toxicology*, **2006**, 19, 1263-9	4	73
141	Two pathways of carbon dioxide catalyzed oxidative coupling of phenol by peroxynitrite. *Chemical Research in Toxicology*, **2006**, 19, 382-91	4	10
140	Catalysis of electron transfer by selenocysteine. *Biochemistry*, **2006**, 45, 6038-43	3.2	84
139	Intramolecular addition of cysteine thiyl radicals to phenylalanine in peptides: formation of cyclohexadienyl type radicals. *Chemical Communications*, **2005**, 3400-2	5.8	12

138	Calmodulin methionine residues are targets for one-electron oxidation by hydroxyl radicals: formation of S[therefore]N three-electron bonded radical complexes. *Chemical Communications*, **2005**, 587-9	5.8	20
137	On the chemical and electrochemical one-electron reduction of peroxynitrous acid. *Journal of Physical Chemistry A*, **2005**, 109, 965-9	2.8	14
136	Qualitative and quantitative determination of nitrite and nitrate with ion chromatography. *Methods in Enzymology*, **2005**, 396, 61-8	1.7	17
135	Peroxynitrite efficiently mediates the interconversion of redox intermediates of myeloperoxidase. *Biochemical and Biophysical Research Communications*, **2005**, 337, 944-54	3.4	33
134	Kinetics properties of Cu,Zn-superoxide dismutase as a function of metal content. *Archives of Biochemistry and Biophysics*, **2005**, 439, 234-40	4.1	25
133	Peroxynitritometal complexes. *Coordination Chemistry Reviews*, **2005**, 249, 499-506	23.2	44
132	Chemiluminescence of Pholasin caused by peroxynitrite. *Free Radical Biology and Medicine*, **2005**, 38, 1014-22	7.8	17
131	Redox cycling of iron complexes of N-(dithiocarboxy)sarcosine and N-methyl-D-glucamine dithiocarbamate. *Free Radical Biology and Medicine*, **2005**, 39, 1581-90	7.8	7
130	Paneth, IUPAC, and the Naming of Elements. *Helvetica Chimica Acta*, **2005**, 88, 95-99	2	12
129	Inhibition of the Fenton reaction by nitrogen monoxide. *Journal of Biological Inorganic Chemistry*, **2005**, 10, 732-8	3.7	35
128	The kinetics of oxidation of GSH by protein radicals. *Biochemical Journal*, **2005**, 392, 693-701	3.8	66
127	Mechanistic insight into the peroxidase catalyzed nitration of tyrosine derivatives by nitrite and hydrogen peroxide. *FEBS Journal*, **2004**, 271, 895-906		53
126	Redox Properties of the Iron Complexes of Orally Active Iron Chelators CP20, CP502, CP509, and ICL670. *Helvetica Chimica Acta*, **2004**, 87, 3021-3034	2	36
125	UV photolysis of 3-nitrotyrosine generates highly oxidizing species: a potential source of photooxidative stress. *Chemical Research in Toxicology*, **2004**, 17, 1227-35	4	9
124	Kinetics evidence for a complex between peroxynitrous acid and titanium(IV). *Inorganic Chemistry*, **2004**, 43, 4805-7	5.1	4
123	Preventing nitrite contamination in tetramethylammonium peroxynitrite solutions. *Inorganic Chemistry*, **2004**, 43, 6519-21	5.1	15
122	Human peroxiredoxin 5 is a peroxynitrite reductase. *FEBS Letters*, **2004**, 571, 161-5	3.8	153
121	The mechanisms of S-nitrosothiol decomposition catalyzed by iron. *Nitric Oxide - Biology and Chemistry*, **2004**, 10, 60-73	5	69

120	Peroxynitrous acid--where is the hydroxyl radical?. *IUBMB Life*, **2003**, 55, 567-72	4.7	31
119	Peroxynitrite-mediated oxidation of dichlorodihydrofluorescein and dihydrorhodamine. *Free Radical Biology and Medicine*, **2003**, 35, 676-82	7.8	51
118	Rapid scavenging of peroxynitrous acid by monohydroascorbate. *Free Radical Biology and Medicine*, **2003**, 35, 1529-37	7.8	23
117	Oxidation of Nitrite by Peroxynitrous Acid. *Journal of Physical Chemistry A*, **2003**, 107, 1763-1769	2.8	29
116	Evaluation of Activation Volumes for the Conversion of Peroxynitrous to Nitric Acid. *Journal of Physical Chemistry A*, **2003**, 107, 11261-11263	2.8	9
115	Reaction of peroxynitrite with carbon dioxide: intermediates and determination of the yield of CO3*- and NO2*. *Journal of Biological Inorganic Chemistry*, **2002**, 7, 31-6	3.7	78
114	The Haber-Weiss cycle□1 years later. *Redox Report*, **2002**, 7, 59-60	5.9	37
113	Studies of metal-binding properties of Cu,Zn superoxide dismutase by isothermal titration calorimetry. *Methods in Enzymology*, **2002**, 349, 115-23	1.7	4
112	The Rate Constant of the Reaction of Superoxide with Nitrogen Monoxide: Approaching the Diffusion Limit. *Journal of Physical Chemistry A*, **2002**, 106, 4084-4086	2.8	159
111	Naming of new elements(IUPAC Recommendations 2002). *Pure and Applied Chemistry*, **2002**, 74, 787-791	2.1	30
110	NO nomenclature?. *Nitric Oxide - Biology and Chemistry*, **2002**, 6, 96-8	5	11
109	Product distribution of peroxynitrite decay as a function of pH, temperature, and concentration. *Journal of the American Chemical Society*, **2002**, 124, 234-9	16.4	106
108	Names for muonium and hydrogen atoms and their ions(IUPAC Recommendations 2001). *Pure and Applied Chemistry*, **2001**, 73, 377-379	2.1	7
107	100 years of peroxynitrite chemistry and 11 years of peroxynitrite biochemistry. *Redox Report*, **2001**, 6, 339-41	5.9	34
106	The Haber-Weiss cycle--70 years later. *Redox Report*, **2001**, 6, 229-34	5.9	322
105	On the oxidation of cytochrome c by hypohalous acids. *Archives of Biochemistry and Biophysics*, **2001**, 389, 110-22	4.1	48
104	Oxidation of NADH by chloramines and chloramides and its activation by iodide and by tertiary amines. *Archives of Biochemistry and Biophysics*, **2001**, 393, 297-307	4.1	18
103	Gibbs energy of formation of peroxynitrite. *Chemical Research in Toxicology*, **2001**, 14, 348-50	4	11

102	Synthesis and Characterization of Tris(tetraethylammonium) Pentacyanoperoxynitritocobaltate(III). *Helvetica Chimica Acta*, **2000**, 83, 748-754	2	32
101	Reactions of Peroxynitrite with Phenolic and Carbonyl Compounds: Flavonoids are not Scavengers of Peroxynitrite. *Helvetica Chimica Acta*, **2000**, 83, 2412-2424	2	22
100	Peroxynitrite does not decompose to singlet oxygen ((1)Delta (g)O(2)) andnitroxyl (NO(-)). *Proceedings of the National Academy of Sciences of the United States of America*, **2000**, 97, 10307-12	11.5	80
99	Names for inorganic radicals (IUPAC Recommendations 2000). *Pure and Applied Chemistry*, **2000**, 72, 437-446	2.1	27
98	Mechanism of reaction of myeloperoxidase with nitrite. *Journal of Biological Chemistry*, **2000**, 275, 20597-601	5.4	183
97	The quantitative oxidation of methionine to methionine sulfoxide by peroxynitrite. *Archives of Biochemistry and Biophysics*, **2000**, 377, 266-72	4.1	54
96	On the irreversible destruction of reduced nicotinamide nucleotides by hypohalous acids. *Archives of Biochemistry and Biophysics*, **2000**, 380, 181-91	4.1	56
95	The preparation of apo-Cu,Zn superoxide dismutase by ion-exchange chromatography on iminodiacetic acid-sepharose. *Protein Expression and Purification*, **2000**, 19, 53-6	2	11
94	Peroxynitrite studied by stopped-flow spectroscopy. *Methods in Enzymology*, **1999**, 301, 342-52	1.7	15
93	Conformation of peroxynitrite: determination by crystallographic analysis. *Chemical Research in Toxicology*, **1999**, 12, 305-7	4	23
92	Chemistry of peroxynitrite and its relevance to biological systems. *Metal Ions in Biological Systems*, **1999**, 36, 597-619		12
91	The basic chemistry of nitrogen monoxide and peroxynitrite. *Free Radical Biology and Medicine*, **1998**, 25, 385-91	7.8	264
90	Hydrogen Isotope Effect on the Isomerization of Peroxynitrous Acid. *Helvetica Chimica Acta*, **1998**, 81, 1201-1206	2	17
89	A Pulse Radiolysis Study of an Imidazolato-Bridged Asymmetric Dicopper(II) Complex: A Structural and Functional Mimic of Superoxide Dismutase. *European Journal of Inorganic Chemistry*, **1998**, 1998, 1939-1943	2.3	7
88	Formation and properties of peroxynitrite as studied by laser flash photolysis, high-pressure stopped-flow technique, and pulse radiolysis volume 10, number 11, november 1997, pp 1285-1292. *Chemical Research in Toxicology*, **1998**, 11, 557	4	12
87	Can O=NOOH undergo homolysis?. *Chemical Research in Toxicology*, **1998**, 11, 87-90	4	98
86	Kinetic study of the reaction of glutathione peroxidase with peroxynitrite. *Chemical Research in Toxicology*, **1998**, 11, 1398-401	4	100
85	Peroxynitrite uncloaked?. *Chemical Research in Toxicology*, **1998**, 11, 716-7	4	21

84	The reaction of peroxynitrite with zeaxanthin. *Nitric Oxide - Biology and Chemistry*, **1998**, 2, 8-16	5	26
83	The chemistry of peroxynitrite, a biological toxin. *Quimica Nova*, **1998**, 21, 326-331	1.6	11
82	Formation and properties of peroxynitrite as studied by laser flash photolysis, high-pressure stopped-flow technique, and pulse radiolysis. *Chemical Research in Toxicology*, **1997**, 10, 1285-92	4	543
81	Thermodynamics of reactions involving nitrogen-oxygen compounds. *Methods in Enzymology*, **1996**, 268, 7-12	1.7	44
80	Syntheses of peroxynitrite: to go with the flow or on solid grounds?. *Methods in Enzymology*, **1996**, 269, 296-302	1.7	170
79	Kinetic study of the reaction of ebselen with peroxynitrite. *FEBS Letters*, **1996**, 398, 179-82	3.8	139
78	Nitration and hydroxylation of phenolic compounds by peroxynitrite. *Chemical Research in Toxicology*, **1996**, 9, 232-40	4	144
77	Nitric oxide, superoxide, and peroxynitrite: the good, the bad, and ugly. *American Journal of Physiology - Cell Physiology*, **1996**, 271, C1424-37	5.4	4107
76	Is your manuscript ready for Free Radical Redox Report of Research in Biology and Medicine? A guide for authors. *Redox Report*, **1996**, 2, 83-4	5.9	
75	Reaction of peroxynitrite with L-tryptophan. *Redox Report*, **1996**, 2, 349	5.9	3
74	Nitration and hydroxylation of phenolic compounds by peroxynitrite. *Methods in Enzymology*, **1996**, 269, 195-201	1.7	7
73	Reaction of peroxynitrite with L-tryptophan. *Redox Report*, **1996**, 2, 173-7	5.9	51
72	Ab Initio and NMR Study of Peroxynitrite and Peroxynitrous Acid: Important Biological Oxidants. *The Journal of Physical Chemistry*, **1996**, 100, 15087-15095		78
71	The enthalpy of isomerization of peroxynitrite to nitrate. *Thermochimica Acta*, **1996**, 273, 11-15	2.9	16
70	Say NO to nitric oxide: nomenclature for nitrogen- and oxygen-containing compounds. *Methods in Enzymology*, **1996**, 268, 3-7	1.7	28
69	A practical method for preparing peroxynitrite solutions of low ionic strength and free of hydrogen peroxide. *Free Radical Biology and Medicine*, **1995**, 18, 75-83	7.8	151
68	The kinetics of the oxidation of L-ascorbic acid by peroxynitrite. *Free Radical Biology and Medicine*, **1995**, 18, 85-92	7.8	152
67	A Novel Hexanuclear FeIII-cis-Inositolato Complex as a Model for FeIIIPolyol Interactions in Aqueous Solution. *Angewandte Chemie International Edition in English*, **1995**, 34, 2242-2243		20

66	On the pH-dependent yield of hydroxyl radical products from peroxynitrite. *Free Radical Biology and Medicine*, **1994**, 16, 331-8	7.8	168
65	The hazard of hydroxyl radicals, a reply. *Free Radical Biology and Medicine*, **1994**, 16, 289-290	7.8	1
64	NO comments. *Nature*, **1994**, 367, 28	50.4	7
63	Thermodynamic considerations on the formation of reactive species from hypochlorite, superoxide and nitrogen monoxide. Could nitrosyl chloride be produced by neutrophils and macrophages?. *FEBS Letters*, **1994**, 347, 5-8	3.8	42
62	Ab initio calculations on ONOOH and ONOO *International Journal of Quantum Chemistry*, **1993**, 48, 1-6	2.1	15
61	Binding of ferredoxin to ferredoxin:NADP+ oxidoreductase: the role of carboxyl groups, electrostatic surface potential, and molecular dipole moment. *Protein Science*, **1993**, 2, 1126-35	6.3	97
60	ALS, SOD and peroxynitrite. *Nature*, **1993**, 364, 584	50.4	675
59	Ferredoxin binding site on ferredoxin: NADP+ reductase. Differential chemical modification of free and ferredoxin-bound enzyme. *FEBS Journal*, **1993**, 216, 57-66		31
58	The centennial of the Fenton reaction. *Free Radical Biology and Medicine*, **1993**, 15, 645-51	7.8	187
57	A thermodynamic appraisal of the radical sink hypothesis. *Free Radical Biology and Medicine*, **1993**, 14, 91-4	7.8	52
56	Peroxynitrite, a cloaked oxidant formed by nitric oxide and superoxide. *Chemical Research in Toxicology*, **1992**, 5, 834-42	4	1245
55	The hydroxylation of tryptophan. *Archives of Biochemistry and Biophysics*, **1992**, 296, 514-20	4.1	106
54	The hydroxylation of phenylalanine and tyrosine: a comparison with salicylate and tryptophan. *Archives of Biochemistry and Biophysics*, **1992**, 296, 521-9	4.1	104
53	The quality of nutrition letters in free radical biology & medicine: A reply. *Free Radical Biology and Medicine*, **1992**, 13, 460	7.8	
52	The dipole moment of cytochrome c. *Molecular Biology and Evolution*, **1991**, 8, 545-58	8.3	32
51	Thermodynamic considerations on the generation of hydroxyl radicals from nitrous oxide--no laughing matter. *Free Radical Biology and Medicine*, **1991**, 10, 85-7	7.8	14
50	Oxyradicals and multivitamin tablets. *Free Radical Biology and Medicine*, **1991**, 11, 609-10	7.8	14
49	The superoxide dismutase activities of two higher valent manganese complexes, MnIV desferrioxamine and MnIII-cyclam. *Archives of Biochemistry and Biophysics*, **1991**, 289, 97-102	4.1	15

48	Spirohydantoin inhibitors of aldose reductase inhibit iron- and copper-catalysed ascorbate oxidation in vitro. *Biochemical Pharmacology*, **1991**, 42, 1273-8	6	24
47	What is in a name? Rules for radicals. *Free Radical Biology and Medicine*, **1990**, 9, 225-7	7.8	11
46	The hydroxylation of the salicylate anion by a Fenton reaction and T-radiolysis: a consideration of the respective mechanisms. *Free Radical Biology and Medicine*, **1990**, 8, 153-62	7.8	93
45	Distinction between hydroxyl radical and ferryl species. *Methods in Enzymology*, **1990**, 186, 148-56	1.7	52
44	Oxyradical reactions: from bond-dissociation energies to reduction potentials. *FEBS Letters*, **1990**, 264, 165-7	3.8	119
43	Reactions of iron(II) nucleotide complexes with hydrogen peroxide. *FEBS Letters*, **1990**, 261, 121-123	3.8	72
42	Reactions of Fe(II)-ATP and Fe(II)-citrate complexes with t-butyl hydroperoxide and cumyl hydroperoxide. *FEBS Letters*, **1990**, 275, 114-6	3.8	28
41	Electron affinity of chlorine dioxide. *The Journal of Physical Chemistry*, **1989**, 93, 8126-8127		17
40	Hormesis. *Science*, **1989**, 246, 311-311	33.3	3
39	Hormesis. *Science*, **1989**, 246, 311	33.3	1
38	The electron-transfer site of spinach plastocyanin. *Biochemistry*, **1988**, 27, 5876-84	3.2	32
37	Electrostatic interactions of 4-carboxy-2,6-dinitrophenyllysine-modified cytochromes c with physiological and non-physiological redox partners. *Biochimica Et Biophysica Acta - Bioenergetics*, **1988**, 936, 187-98	4.6	9
36	Reactions of iron(II) nitrilotriacetate and iron(II) ethylenediamine-N,N′-diacetate complexes with hydrogen peroxide. *Journal of the American Chemical Society*, **1988**, 110, 4957-4963	16.4	106
35	Conformational stability of ferrocytochrome c. Electrostatic aspects of the oxidation by tris(1,10-phenanthroline)cobalt(III) at low ionic strength. *Journal of Biological Chemistry*, **1988**, 263, 7514-20	5.4	13
34	The paradox of oxygen: thermodynamics versus toxicity. *Progress in Clinical and Biological Research*, **1988**, 274, 93-109		1
33	Conformational stability of ferrocytochrome c. Electrostatic aspects of the oxidation by tris(1,10-phenanthroline)cobalt(III) at low ionic strength.. *Journal of Biological Chemistry*, **1988**, 263, 7514-7520	5.4	18
32	Reduction potential of the carbon dioxide/carbon dioxide radical anion: a comparison with other C1 radicals. *The Journal of Physical Chemistry*, **1987**, 91, 4429-4430		199
31	Effects of gamma-irradiation on isolated rat liver mitochondria. *International Journal of Radiation Biology and Related Studies in Physics, Chemistry, and Medicine*, **1987**, 51, 147-55		6

30	Effect of a dipole moment on the ionic strength dependence of electron-transfer reactions of cytochrome c. *Journal of the American Chemical Society*, **1987**, 109, 2679-2682	16.4	57
29	The reaction between ferrous polyaminocarboxylate complexes and hydrogen peroxide: an investigation of the reaction intermediates by stopped flow spectrophotometry. *Journal of Inorganic Biochemistry*, **1987**, 29, 199-215	4.2	102
28	Thermodynamics of reactions involving oxyradicals and hydrogen peroxide. *Bioelectrochemistry*, **1987**, 18, 3-11		63
27	Catalysis of superoxide dismutation by manganese aminopolycarboxylate complexes. *Archives of Biochemistry and Biophysics*, **1986**, 251, 594-9	4.1	50
26	In vitro damage to rat lens by xanthine-xanthine oxidase: protection by ascorbate. *Experimental Eye Research*, **1986**, 43, 1067-76	3.7	27
25	Oxidizing intermediates in the reaction of ferrous EDTA with hydrogen peroxide. Reactions with organic molecules and ferrocytochrome c. *Journal of Biological Chemistry*, **1986**, 261, 6730-3	5.4	135
24	Oxidizing intermediates in the reaction of ferrous EDTA with hydrogen peroxide. Reactions with organic molecules and ferrocytochrome c.. *Journal of Biological Chemistry*, **1986**, 261, 6730-6733	5.4	154
23	Energetics of interconversion reactions of oxyradicals. *Advances in Free Radical Biology & Medicine*, **1985**, 1, 91-131		236
22	The reaction of ferrous EDTA with hydrogen peroxide: evidence against hydroxyl radical formation. *Journal of Free Radicals in Biology & Medicine*, **1985**, 1, 281-5		76
21	The oxidizing nature of the hydroxyl radical. A comparison with the ferryl ion (FeO2+). *The Journal of Physical Chemistry*, **1984**, 88, 99-101		309
20	The Radiation Chemistry of Cytochrome c. *Israel Journal of Chemistry*, **1984**, 24, 11-16	3.4	51
19	Is cytochrome c reactivity determined by dipole moment or by local charges?. *Biophysical Chemistry*, **1983**, 18, 203-5	3.5	2
18	The reduction potential of the couple O3/O3. Consequences for mechanisms of ozone toxicity. *FEBS Letters*, **1982**, 140, 169-72	3.8	36
17	Chemiosmotic ATPase mechanisms. *Annals of the New York Academy of Sciences*, **1982**, 402, 584-601	6.5	37
16	The asymmetric distribution of charges on the surface of horse cytochrome c. Functional implications. *Journal of Biological Chemistry*, **1982**, 257, 4426-37	5.4	222
15	Kinetics and mechanism of the reduction of ferricytochrome c by the superoxide anion. *Journal of Biological Chemistry*, **1982**, 257, 10747-50	5.4	165
14	Kinetics and mechanism of the reduction of ferricytochrome c by the superoxide anion.. *Journal of Biological Chemistry*, **1982**, 257, 10747-10750	5.4	218
13	The asymmetric distribution of charges on the surface of horse cytochrome c. Functional implications.. *Journal of Biological Chemistry*, **1982**, 257, 4426-4437	5.4	291

12	Use of singly modified cytochrome c derivatives to determine the site for electron transfer in reactions with inorganic complexes. *Journal of the American Chemical Society*, **1981**, 103, 469-471	16.4	52
11	Basic issues in binding. *Trends in Biochemical Sciences*, **1981**, 6, v-vii	10.3	2
10	Definition of cytochrome c binding domains by chemical modification. Interaction of horse cytochrome c with beef sulfite oxidase and analysis of steady state kinetics. *Journal of Biological Chemistry*, **1981**, 256, 7394-400	5.4	39
9	Effect of a molecular dipole on the ionic strength dependence of a biomolecular rate constant. Identification of the site of reaction. *Biophysical Journal*, **1980**, 29, 493-507	2.9	66
8	Electrostatic interactions in cytochrome c. The role of interactions between residues 13 and 90 and residues 79 and 47 in stabilizing the heme crevice structure. *Journal of Biological Chemistry*, **1980**, 255, 1689-97	5.4	74
7	THE HABER-WEISS CYCLE. *Photochemistry and Photobiology*, **1978**, 28, 655-658	3.6	163
6	The electric potential field around cytochrome c and the effect of ionic strength on reaction rates of horse cytochrome c. *Biochimica Et Biophysica Acta - Bioenergetics*, **1978**, 503, 499-508	4.6	82
5	A tunnelling model to explain the reduction of ferricytochrome c by H and OH radicals. *Biochimica Et Biophysica Acta - Bioenergetics*, **1978**, 503, 1-9	4.6	30
4	Mechanism of the reaction of hydrated electrons with ferrocytochrome c. *Biochimica Et Biophysica Acta - Bioenergetics*, **1977**, 459, 207-15	4.6	15
3	Mechanism of reactions involving singlet oxygen and the superoxide anion. *FEBS Letters*, **1977**, 83, 1-6	3.8	68
2	The kinetics of the reduction of cytochrome c by the superoxide anion radical. *Biochimica Et Biophysica Acta - Bioenergetics*, **1976**, 449, 157-68	4.6	105
1	Reactions involving singlet oxygen and the superoxide anion. *Nature*, **1976**, 262, 420-1	50.4	150