## Garry R Buettner

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5073852/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Redox environment of the cell as viewed through the redox state of the glutathione disulfide/glutathione couple. Free Radical Biology and Medicine, 2001, 30, 1191-1212.	2.9	3,895
2	Spin Trapping: ESR parameters of spin adducts 1474 1528V. Free Radical Biology and Medicine, 1987, 3, 259-303.	2.9	1,559
3	Pharmacologic ascorbic acid concentrations selectively kill cancer cells: Action as a pro-drug to deliver hydrogen peroxide to tissues. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 13604-13609.	7.1	895
4	Catalytic Metals, Ascorbate and Free Radicals: Combinations to Avoid. Radiation Research, 1996, 145, 532.	1.5	738
5	Dihydrofluorescein diacetate is superior for detecting intracellular oxidants: comparison with 2′,7′-dichlorodihydrofluorescein diacetate, 5(and 6)-carboxy-2′,7′-dichlorodihydrofluorescein diacetate and dihydrorhodamine 123. Free Radical Biology and Medicine, 1999, 27, 146-159.	,2.9	673
6	Ascorbic acid: Chemistry, biology and the treatment of cancer. Biochimica Et Biophysica Acta: Reviews on Cancer, 2012, 1826, 443-457.	7.4	635
7	Ascorbate in pharmacologic concentrations selectively generates ascorbate radical and hydrogen peroxide in extracellular fluid <i>in vivo</i> . Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 8749-8754.	7.1	588
8	Considerations in the spin trapping of superoxide and hydroxyl radical in aqueous systems using 5,5-dimethyl-1-pyrroline-1-oxide. Biochemical and Biophysical Research Communications, 1978, 83, 69-74.	2.1	583
9	In the absence of catalytic metals ascorbate does not autoxidize at pH 7: ascorbate as a test for catalytic metals. Journal of Proteomics, 1988, 16, 27-40.	2.4	463
10	Mechanisms of circulatory and intestinal barrier dysfunction during whole body hyperthermia. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 280, H509-H521.	3.2	361
11	Ascorbate free radical as a marker of oxidative stress: An EPR study. Free Radical Biology and Medicine, 1993, 14, 49-55.	2.9	338
12	O 2 â‹â^' and H 2 O 2 -Mediated Disruption of Fe Metabolism Causes the Differential Susceptibility of NSCLC and GBM Cancer Cells to Pharmacological Ascorbate. Cancer Cell, 2017, 31, 487-500.e8.	16.8	316
13	Free Radical-Mediated Lipid Peroxidation in Cells: Oxidizability Is a Function of Cell Lipid bis-Allylic Hydrogen Content. Biochemistry, 1994, 33, 4449-4453.	2.5	303
14	Thermodynamic and kinetic considerations for the reaction of semiquinone radicals to form superoxide and hydrogen peroxide. Free Radical Biology and Medicine, 2010, 49, 919-962.	2.9	281
15	The rate of oxygen utilization by cells. Free Radical Biology and Medicine, 2011, 51, 700-712.	2.9	280
16	Mechanisms of Ascorbate-Induced Cytotoxicity in Pancreatic Cancer. Clinical Cancer Research, 2010, 16, 509-520.	7.0	272
17	Superoxide Dismutase in Redox Biology: The Roles of Superoxide and Hydrogen Peroxide. Anti-Cancer Agents in Medicinal Chemistry, 2011, 11, 341-346.	1.7	259
18	Pharmacological ascorbate with gemcitabine for the control of metastatic and node-positive pancreatic cancer (PACMAN): results from a phase I clinical trial. Cancer Chemotherapy and Pharmacology, 2013, 71, 765-775.	2.3	239

#	Article	IF	CITATIONS
19	Tumor cells have decreased ability to metabolize H2O2: Implications for pharmacological ascorbate in cancer therapy. Redox Biology, 2016, 10, 274-284.	9.0	231
20	lron and dioxygen chemistry is an important route to initiation of biological free radical oxidations: an electron paramagnetic resonance spin trapping study. Free Radical Biology and Medicine, 1999, 26, 1447-1456.	2.9	230
21	ULTRAVIOLET LIGHTâ€INDUCED FREE RADICAL FORMATION IN SKIN: AN ELECTRON PARAMAGNETIC RESONANCE STUDY. Photochemistry and Photobiology, 1994, 59, 1-4.	2.5	229
22	Mitochondrial O2â‹Â⁻ and H2O2 Mediate Glucose Deprivation-induced Stress in Human Cancer Cells. Journal of Biological Chemistry, 2005, 280, 4254-4263.	3.4	225
23	THE EFFECT OF IRON ON THE DISTRIBUTION OF SUPEROXIDE AND HYDROXYL RADICALS AS SEEN BY SPIN TRAPPING AND ON THE SUPEROXIDE DISMUTASE ASSAY. Photochemistry and Photobiology, 1978, 28, 693-695.	2.5	214
24	Interaction of vitamin C and vitamin E during free radical stress in plasma: An ESR study. Free Radical Biology and Medicine, 1993, 14, 649-653.	2.9	206
25	An integrated physico-chemical approach for explaining the differential impact of FLASH versus conventional dose rate irradiation on cancer and normal tissue responses. Radiotherapy and Oncology, 2019, 139, 23-27.	0.6	189
26	Increased flux of free radicals in cells subjected to hyperthermia: detection by electron paramagnetic resonance spin trapping. FEBS Letters, 1998, 431, 285-286.	2.8	181
27	A Spectrophotometric Method for the Direct Detection and Quantitation of Nitric Oxide, Nitrite, and Nitrate in Cell Culture Media. Analytical Biochemistry, 2000, 281, 223-229.	2.4	170
28	A New Paradigm: Manganese Superoxide Dismutase Influences the Production of H2O2 in Cells and Thereby Their Biological State. Free Radical Biology and Medicine, 2006, 41, 1338-1350.	2.9	170
29	Activation of Matrix Metalloproteinase-2 by Overexpression of Manganese Superoxide Dismutase in Human Breast Cancer MCF-7 Cells Involves Reactive Oxygen Species. Journal of Biological Chemistry, 2002, 277, 20919-20926.	3.4	169
30	Effect of Topically Applied Tocopherol on Ultraviolet Radiation-Mediated Free Radical Damage in Skin. Journal of Investigative Dermatology, 1995, 104, 484-488.	0.7	168
31	[9] Spin-trapping methods for detecting superoxide and hydroxyl free radicals in vitro and in vivo. Methods in Enzymology, 1990, 186, 127-133.	1.0	167
32	Ascorbate Autoxidation in the Presence of Iron and Copper Chelates. Free Radical Research Communications, 1986, 1, 349-353.	1.8	161
33	The production of hydroxyl radical by bleomycin and iron (II). FEBS Letters, 1979, 97, 47-49.	2.8	160
34	SIRT3 deacetylates and increases pyruvate dehydrogenase activity in cancer cells. Free Radical Biology and Medicine, 2014, 76, 163-172.	2.9	156
35	Milk from Mothers of Both Premature and Full-Term Infants Provides Better Antioxidant Protection than Does Infant Formula. Pediatric Research, 2002, 51, 612-618.	2.3	155
36	Manganese superoxide dismutase overexpression inhibits the growth of androgen-independent prostate cancer cells. Oncogene, 2005, 24, 77-89.	5.9	142

#	Article	IF	CITATIONS
37	Inhibition of MCU forces extramitochondrial adaptations governing physiological and pathological stress responses in heart. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 9129-9134.	7.1	140
38	Ascorbate Reacts with Singlet Oxygen to Produce Hydrogen Peroxide. Photochemistry and Photobiology, 2006, 82, 1634-1637.	2.5	131
39	Chitosan gallate as a novel potential polysaccharide antioxidant: an EPR study. Carbohydrate Research, 2010, 345, 132-140.	2.3	131
40	Manganese superoxide dismutase suppresses hypoxic induction of hypoxia-inducible factor-1α and vascular endothelial growth factor. Oncogene, 2005, 24, 8154-8166.	5.9	130
41	Cell division in normal and transformed cells: The possible role of superoxide and hydrogen peroxide. Medical Hypotheses, 1981, 7, 21-42.	1.5	129
42	Cell differentation, aging and cancer: The possible roles of superoxide and superoxide dismutases. Medical Hypotheses, 1980, 6, 249-268.	1.5	125
43	EPR Detection of Free Radicals in UVâ€Irradiated Skin: Mouse <i>Versus</i> Human. Photochemistry and Photobiology, 1996, 64, 918-922.	2.5	123
44	The kinetics of the reaction of superoxide radical with Fe(III) complexes of EDTA, DETAPAC and HEDTA. FEBS Letters, 1983, 158, 143-146.	2.8	117
45	Free radicals produced by the oxidation of gallic acid: An electron paramagnetic resonance study. Chemistry Central Journal, 2010, 4, 15.	2.6	115
46	Nitric oxide as a cellular antioxidant: A little goes a long way. Free Radical Biology and Medicine, 2006, 40, 501-506.	2.9	114
47	Magnesium reduces free radicals in an in vivo coronary occlusion-reperfusion model. Journal of the American College of Cardiology, 1998, 32, 536-539.	2.8	111
48	The â€~mitoflash' probe cpYFP does not respond to superoxide. Nature, 2014, 514, E12-E14.	27.8	109
49	Acidic pH amplifies iron-mediated lipid peroxidation in cells. Free Radical Biology and Medicine, 2000, 28, 1175-1181.	2.9	108
50	Nonenzymatic displacement of chlorine and formation of free radicals upon the reaction of glutathione with PCB quinones. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 9725-9730.	7.1	108
51	Manganese Superoxide Dismutase Modulates Hypoxia-Inducible Factor-1α Induction via Superoxide. Cancer Research, 2008, 68, 2781-2788.	0.9	106
52	The rate of cellular hydrogen peroxide removal shows dependency on GSH: Mathematical insight into <i>in vivo</i> H <sub>2</sub> O <sub>2</sub> and GPx concentrations. Free Radical Research, 2007, 41, 1201-1211.	3.3	104
53	Endosomal Nox2 Facilitates Redox-Dependent Induction of NF-κB by TNF-α. Antioxidants and Redox Signaling, 2009, 11, 1249-1263.	5.4	102
54	Mitochondrial K <sub>ATP</sub> channel openers activate the ERK kinase by an oxidant-dependent mechanism. American Journal of Physiology - Cell Physiology, 2002, 283, C273-C281.	4.6	99

#	Article	IF	CITATIONS
55	The Spin Trapping of Superoxide and Hydroxyl Free Radicals with DMPO (5,5-Dimethylpyrroline-N-oxide): More About Iron. Free Radical Research Communications, 1993, 19, s79-s87.	1.8	98
56	SPECTROSCOPIC STUDIES OF CUTANEOUS PHOTOSENSITIZING AGENTS–VIII. A SPINâ€TRAPPING STUDY OF LIGHT INDUCED FREE RADICALS FROM CHLORPROMAZINE and PROMAZINE. Photochemistry and Photobiology, 1985, 42, 9-15.	2.5	91
57	Oxidation of 3,4-Dihydroxyphenylacetaldehyde, a Toxic Dopaminergic Metabolite, to a Semiquinone Radical and an ortho-Quinone. Journal of Biological Chemistry, 2011, 286, 26978-26986.	3.4	89
58	Pharmacological Ascorbate Radiosensitizes Pancreatic Cancer. Cancer Research, 2015, 75, 3314-3326.	0.9	89
59	Comparing β-Carotene, Vitamin E and Nitric Oxide as Membrane Antioxidants. Biological Chemistry, 2002, 383, 671-81.	2.5	85
60	The concentration of glutathione in human erythrocytes is a heritable trait. Free Radical Biology and Medicine, 2013, 65, 742-749.	2.9	84
61	Pharmacologic Ascorbate Reduces Radiation-Induced Normal Tissue Toxicity and Enhances Tumor Radiosensitization in Pancreatic Cancer. Cancer Research, 2018, 78, 6838-6851.	0.9	83
62	Myeloperoxidase Is Involved in H2O2-induced Apoptosis of HL-60 Human Leukemia Cells. Journal of Biological Chemistry, 2000, 275, 22461-22469.	3.4	82
63	Lactoferrin in the Preterm Infants' Diet Attenuates Iron-Induced Oxidation Products. Pediatric Research, 2002, 52, 964-972.	2.3	80
64	Superoxide generation in v-Ha-ras-transduced human keratinocyte HaCaT cells. Molecular Carcinogenesis, 1999, 26, 180-188.	2.7	79
65	Doxorubicin increases intracellular hydrogen peroxide in PC3 prostate cancer cells. Archives of Biochemistry and Biophysics, 2005, 440, 181-190.	3.0	79
66	Semiquinone Radicals from Oxygenated Polychlorinated Biphenyls: Electron Paramagnetic Resonance Studies. Chemical Research in Toxicology, 2008, 21, 1359-1367.	3.3	79
67	The apparent production of superoxide and hydroxyl radicals by hematoporphyrin and light as seen by spin-trapping. FEBS Letters, 1980, 121, 161-164.	2.8	78
68	Ascorbate Oxidation: UV Absorbance of Ascorbate and ESR Spectroscopy of the Ascorbyl Radical as Assays for Iron. Free Radical Research Communications, 1990, 10, 5-9.	1.8	78
69	Ascorbate Reacts with Singlet Oxygen to Produce Hydrogen Peroxide. Photochemistry and Photobiology, 2006, 82, 1634.	2.5	77
70	Quantitative Redox Biology: An Approach to Understand the Role of Reactive Species in Defining the Cellular Redox Environment. Cell Biochemistry and Biophysics, 2013, 67, 477-483.	1.8	77
71	The heritability of hemolysis in stored human red blood cells. Transfusion, 2015, 55, 1178-1185.	1.6	77
72	Endogenous Superoxide Dismutase Levels Regulate Iron-Dependent Hydroxyl Radical Formation in <i>Escherichia coli</i> Exposed to Hydrogen Peroxide. Journal of Bacteriology, 1998, 180, 622-625.	2.2	74

#	Article	IF	CITATIONS
73	Electron Paramagnetic Resonance Detection of Free Tyrosyl Radical Generated by Myeloperoxidase, Lactoperoxidase, and Horseradish Peroxidase. Journal of Biological Chemistry, 1998, 273, 32030-32037.	3.4	71
74	A simple and sensitive assay for ascorbate using a plate reader. Analytical Biochemistry, 2007, 365, 31-39.	2.4	70
75	Chlorination Increases the Persistence of Semiquinone Free Radicals Derived from Polychlorinated Biphenyl Hydroquinones and Quinones. Journal of Organic Chemistry, 2008, 73, 8296-8304.	3.2	70
76	Direct current shocks to the heart generate free radicals: An electron paramagnetic resonance study. Journal of the American College of Cardiology, 1996, 28, 1598-1609.	2.8	69
77	Hydrogen peroxide and hydroxyl free radical production by hematoporphyrin derivative, ascorbate and light. Cancer Letters, 1985, 25, 297-304.	7.2	68
78	Manganoporphyrins Increase Ascorbate-Induced Cytotoxicity by Enhancing H2O2 Generation. Cancer Research, 2013, 73, 5232-5241.	0.9	68
79	EPR detection of lipid-derived free radicals from PUFA, LDL, and cell oxidations. Free Radical Biology and Medicine, 2000, 29, 568-579.	2.9	67
80	Vitamin E Slows the Rate of Free Radical-Mediated Lipid Peroxidation in Cells. Archives of Biochemistry and Biophysics, 1996, 334, 261-267.	3.0	65
81	Endogenous production and exogenous exposure to nitric oxide augment doxorubicin cytotoxicity for breast cancer cells but not cardiac myoblasts. Nitric Oxide - Biology and Chemistry, 2004, 10, 119-129.	2.7	65
82	Heritability of glutathione and related metabolites in stored red blood cells. Free Radical Biology and Medicine, 2014, 76, 107-113.	2.9	63
83	[8] Use of ascorbate as test for catalytic metals in simple buffers. Methods in Enzymology, 1990, 186, 125-127.	1.0	61
84	Detailed methods for the quantification of nitric oxide in aqueous solutions using either an oxygen monitor or EPR. Free Radical Biology and Medicine, 2000, 29, 580-585.	2.9	61
85	On the Reaction of Superoxide With DMPO/*OOH. Free Radical Research Communications, 1990, 10, 11-15.	1.8	60
86	High Levels of Catalase and Glutathione Peroxidase Activity Dampen H2O2Signaling in Human Alveolar Macrophages. American Journal of Respiratory Cell and Molecular Biology, 2004, 31, 43-53.	2.9	60
87	Nitric Oxide Inhibits Iron–Induced Lipid Peroxidation in HL-60 Cells. Archives of Biochemistry and Biophysics, 1999, 370, 97-104.	3.0	59
88	The heritability of metabolite concentrations in stored human red blood cells. Transfusion, 2014, 54, 2055-2063.	1.6	59
89	Manganese Superoxide Dismutase Regulates a Metabolic Switch during the Mammalian Cell Cycle. Cancer Research, 2012, 72, 3807-3816.	0.9	58
90	Loss of <i>SOD3</i> (EcSOD) Expression Promotes an Aggressive Phenotype in Human Pancreatic Ductal Adenocarcinoma. Clinical Cancer Research, 2015, 21, 1741-1751.	7.0	58

#	Article	IF	CITATIONS
91	Role of labile iron in the toxicity of pharmacological ascorbate. Free Radical Biology and Medicine, 2015, 84, 289-295.	2.9	57
92	Nitric oxide synthase inhibitors decrease coronary sinus-free radical concentration and ameliorate myocardial stunning in an ischemia-reperfusion model. Journal of the American College of Cardiology, 2001, 38, 546-554.	2.8	55
93	Exposure to Static Magnetic and Electric Fields Treats Type 2 Diabetes. Cell Metabolism, 2020, 32, 561-574.e7.	16.2	55
94	Superoxide, hydrogen peroxide and singlet oxygen in hematoporphyrin derivative-cysteine, -NADH and -light systems. Biochimica Et Biophysica Acta - General Subjects, 1987, 923, 501-507.	2.4	54
95	CaMKII Is Essential for the Proasthmatic Effects of Oxidation. Science Translational Medicine, 2013, 5, 195ra97.	12.4	54
96	Optimal EPR detection of weak nitroxide spin adduct and ascorbyl free radical signals. Journal of Proteomics, 1992, 24, 147-151.	2.4	53
97	Inhibitors of hydroperoxide metabolism enhance ascorbate-induced cytotoxicity. Free Radical Research, 2013, 47, 154-163.	3.3	53
98	An assay for the rate of removal of extracellular hydrogen peroxide by cells. Redox Biology, 2013, 1, 210-217.	9.0	52
99	First-in-Human Phase I Clinical Trial of Pharmacologic Ascorbate Combined with Radiation and Temozolomide for Newly Diagnosed Glioblastoma. Clinical Cancer Research, 2019, 25, 6590-6597.	7.0	52
100	The relationship between vitamin C status, the gut-liver axis, and metabolic syndrome. Redox Biology, 2019, 21, 101091.	9.0	52
101	Mitofusin 1 and optic atrophy 1 shift metabolism to mitochondrial respiration during aging. Aging Cell, 2017, 16, 1136-1145.	6.7	50
102	Moles of a Substance per Cell Is a Highly Informative Dosing Metric in Cell Culture. PLoS ONE, 2015, 10, e0132572.	2.5	49
103	Superoxide formation by protoporphyrin as seen by spin trapping. FEBS Letters, 1979, 98, 18-20.	2.8	48
104	FREE RADICAL PRODUCTION BY CHLORPROMAZINE SULFOXIDE, AN ESR SPIN-TRAPPING AND FLASH PHOTOLYSIS STUDY. Photochemistry and Photobiology, 1986, 44, 5-10.	2.5	48
105	v-Ha-ras mitogenic signaling through superoxide and derived reactive oxygen species. Molecular Carcinogenesis, 2002, 33, 206-218.	2.7	48
106	UVA/B-Induced Formation of Free Radicals from Decabromodiphenyl Ether. Environmental Science & Technology, 2009, 43, 2581-2588.	10.0	48
107	Chitosan conjugated with deoxycholic acid and gallic acid: A novel biopolymerâ€based additive antioxidant for polyethylene. Journal of Applied Polymer Science, 2008, 109, 38-46.	2.6	47
108	Metadherin enhances vulnerability of cancer cells to ferroptosis. Cell Death and Disease, 2019, 10, 682.	6.3	44

#	Article	IF	CITATIONS
109	A spin-trapping database implemented on the IBM PC/AT. Journal of Magnetic Resonance, 1988, 79, 140-142.	0.5	43
110	Linking Cancer Metabolic Dysfunction and Genetic Instability through the Lens of Iron Metabolism. Cancers, 2019, 11, 1077.	3.7	43
111	Redox active metals and H2O2 mediate the increased efficacy of pharmacological ascorbate in combination with gemcitabine or radiation in pre-clinical sarcoma models. Redox Biology, 2018, 14, 417-422.	9.0	42
112	The catalytic activity of iron in synovial fluid as monitored by the ascorbate free radical. Free Radical Biology and Medicine, 1990, 8, 55-56.	2.9	41
113	Overexpression of Manganese Superoxide Dismutase Promotes the Survival of Prostate Cancer Cells Exposed to Hyperthermia. Free Radical Research, 2004, 38, 1119-1132.	3.3	41
114	Increased efficacy of in vitro PhotofrinÂ $^{\odot}$ photosensitization of human oral squamous cell carcinoma by iron and ascorbate. Journal of Photochemistry and Photobiology B: Biology, 1997, 40, 273-277.	3.8	40
115	Regulation of pancreatic cancer growth by superoxide. Molecular Carcinogenesis, 2013, 52, 555-567.	2.7	40
116	Oxygen free radicals mediate the induction of manganese superoxide dismutase gene expression by TNF-1±. Free Radical Biology and Medicine, 2000, 28, 1197-1205.	2.9	39
117	Free radical and drug oxidation products in an intensive care unit sedative: Propofol with sulfite*. Critical Care Medicine, 2003, 31, 787-792.	0.9	39
118	Pharmacological Ascorbate as a Means of Sensitizing Cancer Cells to Radio-Chemotherapy While Protecting Normal Tissue. Seminars in Radiation Oncology, 2019, 29, 25-32.	2.2	39
119	ESR DETECTION OF ENDOGENOUS ASCORBATE FREE RADICAL IN MOUSE SKIN: ENHANCEMENT OF RADICAL PRODUCTION DURING UV IRRADIATION FOLLOWING TOPICAL APPLICATION OF CHLORPROMAZINE. Photochemistry and Photobiology, 1987, 46, 161-164.	2.5	38
120	Singlet Oxygen Toxicity Is Cell Line-dependent: A Study of Lipid Peroxidation in Nine Leukemia Cell Lines. Photochemistry and Photobiology, 1999, 70, 858-867.	2.5	38
121	Pharmacological ascorbate and ionizing radiation (IR) increase labile iron in pancreatic cancer. Redox Biology, 2014, 2, 22-27.	9.0	38
122	Interleukin-6 counteracts therapy-induced cellular oxidative stress in multiple myeloma by up-regulating manganese superoxide dismutase. Biochemical Journal, 2012, 444, 515-527.	3.7	37
123	Detection of Lipid Radicals Using EPR. Antioxidants and Redox Signaling, 2004, 6, 631-638.	5.4	36
124	Peroxiporin Expression Is an Important Factor for Cancer Cell Susceptibility to Therapeutic H2O2: Implications for Pharmacological Ascorbate Therapy. PLoS ONE, 2017, 12, e0170442.	2.5	35
125	Activation of oxygen by metal complexes and its relevance to autoxidative processes in living systems. Bioelectrochemistry, 1987, 18, 29-36.	1.0	34
126	Evidence for oxidative stress in NSAID-induced colitis in IL10â^'/â^' mice. Free Radical Biology and Medicine, 2003, 34, 1153-1166.	2.9	34

#	Article	IF	CITATIONS
127	Aging augments mitochondrial susceptibility to heat stress. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2009, 296, R812-R820.	1.8	34
128	MnSOD activity regulates hydroxytyrosol-induced extension of chronological lifespan. Age, 2012, 34, 95-109.	3.0	34
129	Nox2 NADPH oxidase is dispensable for platelet activation or arterial thrombosis in mice. Blood Advances, 2019, 3, 1272-1284.	5.2	34
130	Simultaneous detection of the enzyme activities of GPx1 and GPx4 guide optimization of selenium in cell biological experiments. Redox Biology, 2020, 32, 101518.	9.0	34
131	Extracellular superoxide dismutase suppresses hypoxia-inducible factor-1α in pancreatic cancer. Free Radical Biology and Medicine, 2014, 69, 357-366.	2.9	33
132	Thiyl free radical production with hematoporphyrin derivative, cysteine and light: a spin-trapping study. FEBS Letters, 1984, 177, 295-299.	2.8	32
133	Catalase ameliorates polychlorinated biphenyl-induced cytotoxicity in nonmalignant human breast epithelial cells. Free Radical Biology and Medicine, 2008, 45, 1094-1102.	2.9	32
134	Extracellular superoxide dismutase (SOD3) regulates oxidative stress at the vitreoretinal interface. Free Radical Biology and Medicine, 2018, 124, 408-419.	2.9	32
135	Superoxide Dismutase Mimetic GC4419 Enhances the Oxidation of Pharmacological Ascorbate and Its Anticancer Effects in an H2O2-Dependent Manner. Antioxidants, 2018, 7, 18.	5.1	32
136	Ascorbate both activates and inactivates bleomycin by free radical generation. Biochemistry, 1992, 31, 9784-9788.	2.5	31
137	Heme Oxygenaseâ€1 Is Protective Against Nonsteroidal Antiâ€inflammatory Drug–induced Gastric Ulcers. Journal of Pediatric Gastroenterology and Nutrition, 2012, 54, 471-476.	1.8	31
138	Manganoporphyrins and ascorbate enhance gemcitabine cytotoxicity in pancreatic cancer. Free Radical Biology and Medicine, 2015, 83, 227-237.	2.9	31
139	EPR Spin Trapping of Free Radicals Produced by Bleomycin and Ascorbate. Free Radical Research Communications, 1993, 19, s89-s93.	1.8	30
140	Phospholipid Hydroperoxide Glutathione Peroxidase Induces a Delay in G1of the Cell Cycle. Free Radical Research, 2003, 37, 621-630.	3.3	30
141	Succinate dehydrogenase activity regulates PCB3-quinone-induced metabolic oxidative stress and toxicity in HaCaT human keratinocytes. Archives of Toxicology, 2016, 90, 319-332.	4.2	30
142	Augmentation of intracellular iron using iron sucrose enhances the toxicity of pharmacological ascorbate in colon cancer cells. Redox Biology, 2018, 14, 82-87.	9.0	30
143	Understanding the Redox Biology of Selenium in the Search of Targeted Cancer Therapies. Antioxidants, 2020, 9, 420.	5.1	29
144	Transition Metal Chelators Reduce Directly Measured Myocardial Free Radical Production During Reperfusion. Journal of Cardiovascular Pharmacology, 1998, 32, 343-348.	1.9	29

#	Article	IF	CITATIONS
145	Magnesium reduces free radical concentration and preserves left ventricular function after direct current shocks. Resuscitation, 2003, 56, 199-206.	3.0	28
146	Ascorbate enhances the toxicity of the photodynamic action of Verteporfin in HL-60 cells. Free Radical Biology and Medicine, 2006, 40, 1615-1627.	2.9	28
147	<b>Production of Lipidâ€Derived Free Radicals in L1210 Murine Leukemia Cells Is an Early Oxidative Event in the Photodynamic Action of Photofrin</b> . Photochemistry and Photobiology, 1997, 65, 576-580.	2.5	27
148	NEAR-INFRARED DETECTION OF SINGLET MOLECULAR OXYGEN PRODUCED BY PHOTOSENSITIZATION WITH PROMAZINE and CHLORPROMAZINE. Photochemistry and Photobiology, 1987, 46, 295-300.	2.5	26
149	Extracellular Iron(II) Can Protect Cells from Hydrogen Peroxide. Archives of Biochemistry and Biophysics, 1996, 330, 401-408.	3.0	26
150	Dual Oxidase-Induced Sustained Generation of Hydrogen Peroxide Contributes to Pharmacologic Ascorbate-Induced Cytotoxicity. Cancer Research, 2020, 80, 1401-1413.	0.9	26
151	Free radicals, oxidants, and antioxidants. Teratology, 2000, 62, 234-234.	1.6	25
152	Dysregulation of hepatic iron with aging: implications for heat stress-induced oxidative liver injury. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2008, 294, R1165-R1174.	1.8	25
153	Pharmacologic ascorbate (P-AscHâ^') suppresses hypoxia-inducible Factor-1α (HIF-1α) in pancreatic adenocarcinoma. Clinical and Experimental Metastasis, 2018, 35, 37-51.	3.3	25
154	The Kinetics of the Reaction of Ferritin with Superoxide. Free Radical Research Communications, 1987, 2, 369-372.	1.8	24
155	Antioxidant-Mediated Modulation of Protein Reactivity for 3,4-Dihydroxyphenylacetaldehyde, a Toxic Dopamine Metabolite. Chemical Research in Toxicology, 2016, 29, 1098-1107.	3.3	24
156	Free radicals from plastic syringes. Free Radical Biology and Medicine, 1991, 11, 69-70.	2.9	23
157	THE STEPWISE BIPHOTONIC PHOTOIONIZATION OF CHLORPROMAZINE AS SEEN BY LASER FLASH PHOTOLYSIS. Photochemistry and Photobiology, 1989, 49, 249-256.	2.5	22
158	Disulfiram causes selective hypoxic cancer cell toxicity and radio-chemo-sensitization via redox cycling of copper. Free Radical Biology and Medicine, 2020, 150, 1-11.	2.9	22
159	Forkhead Box M1 Regulates Quiescence-Associated Radioresistance of Human Head and Neck Squamous Carcinoma Cells. Radiation Research, 2014, 182, 420.	1.5	21
160	Pharmacologic Ascorbate Primes Pancreatic Cancer Cells for Death by Rewiring Cellular Energetics and Inducing DNA Damage. Molecular Cancer Research, 2019, 17, 2102-2114.	3.4	21
161	v-Ha-Ras Overexpression Induces Superoxide Production and Alters Levels of Primary Antioxidant Enzymes. Antioxidants and Redox Signaling, 2001, 3, 697-709.	5.4	20
162	Monohydroxylated Polybrominated Diphenyl Ethers (OH-PBDEs) and Dihydroxylated Polybrominated Biphenyls (Di-OH-PBBs): Novel Photoproducts of 2,6-Dibromophenol. Environmental Science & Technology, 2015, 49, 14120-14128.	10.0	20

#	Article	IF	CITATIONS
163	Moving free radical and redox biology ahead in the next decade(s). Free Radical Biology and Medicine, 2015, 78, 236-238.	2.9	20
164	Direct spectrophotometric measurement of supra-physiological levels of ascorbate in plasma. Redox Biology, 2016, 8, 298-304.	9.0	20
165	Spin traps inhibit formation of hydrogen peroxide via the dismutation of superoxide: implications for spin trapping the hydroxyl free radical. Biochimica Et Biophysica Acta - General Subjects, 1991, 1075, 213-222.	2.4	19
166	THE BIPHOTONIC PHOTOIONIZATION OF CHLORPROMAZINE DURING CONVENTIONAL FLASH PHOTOLYSIS: SPIN TRAPPING RESULTS WITH 5,5-DIMETHYL-1-PYRROLINE-N-OXIDE. Photochemistry and Photobiology, 1991, 54, 167-173.	2.5	19
167	Nitric oxide decreases the stability of DMPO spin adducts. Nitric Oxide - Biology and Chemistry, 2006, 15, 133-141.	2.7	19
168	Applying electron paramagnetic resonance spectroscopy to the study of fouling in protein ultrafiltration. Journal of Membrane Science, 1994, 96, 289-297.	8.2	18
169	Inactivation of Primary Antioxidant Enzymes in Mouse Keratinocytes by Photodynamically Generated Singlet Oxygen. Antioxidants and Redox Signaling, 2006, 8, 1307-1314.	5.4	18
170	The production of hydroxyl radical by tallysomycin and copper(II). FEBS Letters, 1979, 101, 333-335.	2.8	17
171	The nitric oxide donor S-nitroso-N-acetylpenicillamine (SNAP) increases free radical generation and degrades left ventricular function after myocardial ischemia–reperfusion. Resuscitation, 2003, 59, 345-352.	3.0	16
172	In vitro Cytotoxicity and Pharmacokinetic Evaluation of Pharmacological Ascorbate in Dogs. Frontiers in Veterinary Science, 2019, 6, 385.	2.2	16
173	The Spin Trap α -(4-Pyridyl-1-oxide)-N-tert-butylnitrone Stimulates Peroxidase-mediated Oxidation of Deferoxamine. Journal of Biological Chemistry, 1995, 270, 29265-29269.	3.4	15
174	Methylseleninic Acid Induces Lipid Peroxidation and Radiation Sensitivity in Head and Neck Cancer Cells. International Journal of Molecular Sciences, 2019, 20, 225.	4.1	15
175	Red blood cells contain enzymatically active GPx4 whose abundance anticorrelates with hemolysis during blood bank storage. Redox Biology, 2021, 46, 102073.	9.0	15
176	In vivo spin trapping of nitric oxide by heme: Electron paramagnetic resonance detection ex vivo. Methods in Enzymology, 1996, 268, 188-192.	1.0	14
177	Biological effects of menadione photochemistry: effects of menadione on biological systems may not involve classical oxidant production. Biochemical Journal, 2000, 350, 797-804.	3.7	14
178	Magnetic resonance imaging (MRI) of pharmacological ascorbate-induced iron redox state as a biomarker in subjects undergoing radio-chemotherapy. Redox Biology, 2021, 38, 101804.	9.0	14
179	Prolonged Reactive Oxygen Species Production following Septic Insult. ImmunoHorizons, 2021, 5, 477-488.	1.8	14
180	L-PhGPx expression can be suppressed by antisense oligodeoxynucleotides. Archives of Biochemistry and Biophysics, 2003, 417, 212-218.	3.0	13

#	Article	IF	CITATIONS
181	Inactivation of Anthracyclines by Serum Heme Proteins. Chemical Research in Toxicology, 2007, 20, 920-926.	3.3	13
182	Enhanced Pharmacological Ascorbate Oxidation Radiosensitizes Pancreatic Cancer. Radiation Research, 2018, 191, 43.	1.5	13
183	Electron paramagnetic resonance for quantitation of nitric oxide in aqueous solutions. Methods in Enzymology, 2002, 359, 3-18.	1.0	12
184	Calculated cell-specific intracellular hydrogen peroxide concentration: Relevance in cancer cell susceptibility during ascorbate therapy. Free Radical Biology and Medicine, 2018, 120, 356-367.	2.9	12
185	Response to letter regarding "An integrated physico-chemical approach for explaining the differential impact of FLASH versus conventional dose rate irradiation on cancer and normal tissue responsesâ€∙ Radiotherapy and Oncology, 2019, 139, 64-65.	0.6	12
186	Calcium in lipid peroxidation: Does calcium interact with superoxide?. Archives of Biochemistry and Biophysics, 1990, 278, 269-272.	3.0	11
187	Minimization of free radical damage by metal catalysis of multivitamin/multimineral supplements. Nutrition Journal, 2010, 9, 61.	3.4	9
188	Utilization of Pharmacological Ascorbate to Enhance Hydrogen Peroxide-Mediated Radiosensitivity in Cancer Therapy. International Journal of Molecular Sciences, 2021, 22, 10880.	4.1	9
189	Comment on "Pharmacologic ascorbate synergizes with gemcitabine in preclinical models of pancreatic cancer,―i.e., all we are saying is, give C a chance. Free Radical Biology and Medicine, 2011, 50, 1726-1727.	2.9	8
190	Redox State and Redox Environment in Biology. , 2003, , 1-14.		8
191	Pharmacological ascorbate improves the response to platinum-based chemotherapy in advanced stage non-small cell lung cancer. Redox Biology, 2022, 53, 102318.	9.0	8
192	Captopril Lowers Coronary Venous Free Radical Concentration After Direct Current Cardiac Shocks. Chest, 1999, 116, 484-487.	0.8	7
193	Commentary on "Faster plasma vitamin E disappearance in smokers is normalized by vitamin C supplementation― Free Radical Biology and Medicine, 2006, 40, 555-556.	2.9	7
194	The Syringe Nitroxide Free Radical – Part II. Free Radical Research Communications, 1993, 19, s227-s230.	1.8	6
195	Surface charge, fluidity, and calcium uptake by rat intestinal brush-border vesicles. Biochimica Et Biophysica Acta - Biomembranes, 1995, 1234, 81-89.	2.6	6
196	Biological effects of menadione photochemistry: effects of menadione on biological systems may not involve classical oxidant production. Biochemical Journal, 2000, 350, 797.	3.7	6
197	The nitric oxide synthase inhibitor NC-nitro-l-arginine decreases defibrillation-induced free radical generation. Resuscitation, 2004, 60, 351-358.	3.0	6
198	Tin protoporphyrin induces intestinal chloride secretion by inducing light oxidation processes. American Journal of Physiology - Cell Physiology, 2007, 292, C1906-C1914.	4.6	6

#	Article	IF	CITATIONS
199	Electron Spin Resonance Evaluation of Buccal Membrane Fluidity Alterations by Sodium Caprylate and L-Menthol. International Journal of Molecular Sciences, 2021, 22, 10708.	4.1	6
200	Triphenylphosphonium derivatives disrupt metabolism and inhibit melanoma growth in vivo when delivered via a thermosensitive hydrogel. PLoS ONE, 2020, 15, e0244540.	2.5	6
201	Oxidation of ferumoxytol by ionizing radiation releases iron. An electron paramagnetic resonance study. Journal of Radiation Research, 2022, 63, 378-384.	1.6	6
202	Prolonged coronary artery occlusion—reperfusion sequences reduce myocardial free radical production: An electron paramagnetic resonance study. American Heart Journal, 1996, 132, 1147-1155.	2.7	4
203	Observation of an unusual electronically distorted semiquinone radical of PCB metabolites in the active site of prostaglandin H synthase-2. Chemosphere, 2010, 81, 1501-1508.	8.2	4
204	Breaking the dogma: PCB-derived semiquinone free radicals do not form covalent adducts with DNA, GSH, and amino acids. Environmental Science and Pollution Research, 2016, 23, 2138-2147.	5.3	4
205	The latency of peroxisomal catalase in terms of effectiveness factor for pancreatic and glioblastoma cancer cell lines in the presence of high concentrations of H2O2: Implications for the use of pharmacological ascorbate in cancer therapy. Free Radical Biology and Medicine, 2020, 156, 20-25.	2.9	4
206	Catalase Modulates the Radio-Sensitization of Pancreatic Cancer Cells by Pharmacological Ascorbate. Antioxidants, 2021, 10, 614.	5.1	4
207	Counterpoint: An alternative hypothesis for why exposure to static magnetic and electric fields treats type 2 diabetes. American Journal of Physiology - Endocrinology and Metabolism, 2021, 320, E1001-E1002.	3.5	4
208	The nitric oxide synthase inhibitor NG-nitro-l-arginine decreases defibrillation-induced free radical generation. Resuscitation, 2003, 57, 101-108.	3.0	3
209	Hydrogen Peroxide Mediates Artemisinin-Derived C-16 Carba-Dimer-Induced Toxicity of Human Cancer Cells. Antioxidants, 2020, 9, 108.	5.1	3
210	Oxidative Stress and Antioxidant Intervention. , 2002, , 849-869.		3
211	Response to Ling et al. regarding "An integrated physico-chemical approach for explaining the differential impact of FLASH versus conventional dose rate irradiation on cancer and normal tissue responses― Radiotherapy and Oncology, 2020, 147, 241-242.	0.6	2
212	N-alkyl triphenylvinylpyridinium conjugated dihydroartemisinin perturbs mitochondrial functions resulting in enhanced cancer versus normal cell toxicity. Free Radical Biology and Medicine, 2021, 165, 421-434.	2.9	2
213	Cu-Zn Superoxide Dismutase. , 1982, , 199-207.		2
214	Assessment of the Stability of Supraphysiological Ascorbate in Human Blood: Appropriate Handling of Samples from Clinical Trials for Measurements of Pharmacological Ascorbate. Radiation Research, 2019, 191, 491.	1.5	2
215	Role of Nitric Oxide and Membrane Phospholipid Polyunsaturation in Oxidative Cell Death. , 2002, 36, 97-121.		1
216	Iron supplements and oxidative stress in very low birth weight infants. Journal of Pediatrics, 2008, 152, 890-891.	1.8	1

#	Article	IF	CITATIONS
217	In vivo imaging of free radicals produced by multivitamin-mineral supplements. BMC Nutrition, 2015, 1, .	1.6	1
218	TREMâ€l is required for enhanced OpZâ€induced superoxide generation following priming. Journal of Leukocyte Biology, 2022, , .	3.3	1
219	Introduction to the Symposium-in-Print: Photobiology of the Skin and Eye in Memory of Colin F. Chignell. Photochemistry and Photobiology, 2010, 86, 740-741.	2.5	Ο
220	The Selective Toxicity of Pharmacological Ascorbate Is Mediated by Alterations in Iron Metabolism. Free Radical Biology and Medicine, 2015, 87, S72-S73.	2.9	0
221	Pharmacological ascorbate and use in pancreatic cancer. , 2021, , 515-521.		Ο
222	Reply to Petersen et al.: An alternative hypothesis for why exposure to static magnetic and electric fields treats type 2 diabetes. American Journal of Physiology - Endocrinology and Metabolism, 2021, 320, E1004-E1005.	3.5	0
223	Dysregulation of hepatic iron with aging: implications for stressâ€induced oxidative liver injury. FASEB Journal, 2007, 21, A815.	0.5	Ο
224	Deficiency of MnSOD in Hematopoietic Stem Cells Causes a Sideroblastic Anemia-Like Phenotype Blood, 2009, 114, 1991-1991.	1.4	0
225	PRODUCTION OF HYDROXYL RADICAL DURING THE OXIDATION OF XANTHINE BY XANTHINE OXIDASE IS DEPENDENT ON THE PRESENCE OF ADVENTITIOUS IRON. , 1991, , 837-841.		О