Sayuri Miyamoto

List of Publications by Year
in descending order

105 papers	4,793 citations	147566 31 h-index	102304 66 g-index
133 all docs	133 docs citations	133 times ranked	6649 citing authors

#	Article	IF	Citations
1	Selenium Utilization by GPX4 Is Required to Prevent Hydroperoxide-Induced Ferroptosis. Cell, 2018, 172, 409-422.e21.	13.5	920
2	Singlet Molecular Oxygen Reactions with Nucleic Acids, Lipids, and Proteins. Chemical Reviews, 2019, 119, 2043-2086.	23.0	404
3	Oxidative stress in Perna perna and other bivalves as indicators of environmental stress in the Brazilian marine environment: Antioxidants, lipid peroxidation and DNA damage. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2007, 146, 588-600.	0.8	214
4	Oxidative and alkylating damage in DNA. Mutation Research - Reviews in Mutation Research, 2003, 544, 115-127.	2.4	190
5	Singlet Molecular Oxygen Generated from Lipid Hydroperoxides by the Russell Mechanism:â€‰ Studies Using 18O-Labeled Linoleic Acid Hydroperoxide and Monomol Light Emission Measurements. Journal of the American Chemical Society, 2003, 125, 6172-6179.	6.6	189
6	Unique Uptake and Transport of Isoflavone Aglycones by Human Intestinal Caco-2 Cells: Comparison of Isoflavonoids and Flavonoids. Journal of Nutrition, 2002, 132, 1956-1961.	1.3	161
7	Protective effect of phospholipid hydroperoxide glutathione peroxidase (PHGPx) against lipid peroxidation in mussels Perna perna exposed to different metals. Marine Pollution Bulletin, 2004, 49, 386-392.	2.3	148
8	Direct Evidence of Singlet Molecular Oxygen [O2 (1Î”g)] Production in the Reaction of Linoleic Acid Hydroperoxide with Peroxynitrite. Journal of the American Chemical Society, 2003, 125, 4510-4517.	6.6	138
9	Photosensitized Membrane Permeabilization Requires Contact-Dependent Reactions between Photosensitizer and Lipids. Journal of the American Chemical Society, 2018, 140, 9606-9615.	6.6	133
10	Linoleic acid hydroperoxide reacts with hypochlorous acid, generating peroxyl radical intermediates and singlet molecular oxygen. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 293-298.	3.3	120
11	Singlet molecular oxygen generated by biological hydroperoxides. Journal of Photochemistry and Photobiology B: Biology, 2014, 139, 24-33.	1.7	120
12	Tryptophan Oxidation by Singlet Molecular Oxygen [O₂ (¹Î”_g)]: Mechanistic Studies Using ¹⁸O-Labeled Hydroperoxides, Mass Spectrometry, and Light Emission Measurements. Chemical Research in Toxicology, 2008, 21, 1271-1283.	1.7	119
13	Biological hydroperoxides and singlet molecular oxygen generation. IUBMB Life, 2007, 59, 322-331.	1.5	106
14	Alterations in lipid metabolism of spinal cord linked to amyotrophic lateral sclerosis. Scientific Reports, 2019, 9, 11642.	1.6	98
15	Hydroperoxy Fatty Acid Cycling Mediated by Mitochondrial Uncoupling Protein UCP2. Journal of Biological Chemistry, 2004, 279, 53097-53102.	1.6	84
16	Production of the Carbonate Radical Anion during Xanthine Oxidase Turnover in the Presence of Bicarbonate. Journal of Biological Chemistry, 2004, 279, 51836-51843.	1.6	76
17	Palmitoleic acid (n-7) increases white adipocyte lipolysis and lipase content in a PPARÎ±-dependent manner. American Journal of Physiology - Endocrinology and Metabolism, 2013, 305, E1093-E1102.	1.8	63
18	Generation of Cholesterol Carboxyaldehyde by the Reaction of Singlet Molecular Oxygen [O₂ (¹Î”_g)] as Well as Ozone with Cholesterol. Chemical Research in Toxicology, 2009, 22, 875-884.	1.7	60

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19	Lipid hydroperoxide-induced and hemoglobin-enhanced oxidative damage to colon cancer cells. Free Radical Biology and Medicine, 2011, 51, 503-515.	1.3	56
20	Excited singlet molecular O2 (1Î”g) is generated enzymatically from excited carbonyls in the dark. Scientific Reports, 2014, 4, 5938.	1.6	52
21	Direct evidence of singlet molecular oxygen generation from peroxynitrate, a decomposition product of peroxynitrite. Dalton Transactions, 2009, , 5720.	1.6	50
22	Quercetin-4â€˜-glucoside Is More Potent than Quercetin-3-glucoside in Protection of Rat Intestinal Mucosa Homogenates against Iron Ion-Induced Lipid Peroxidation. Journal of Agricultural and Food Chemistry, 2004, 52, 1907-1912.	2.4	49
23	Omegaâ€3 fatty acids protect from dietâ€induced obesity, glucose intolerance, and adipose tissue inflammation through PPARÎ³â€dependent and PPARÎ³â€independent actions. Molecular Nutrition and Food Research, 2015, 59, 957-967.	1.5	46
24	Ohr plays a central role in bacterial responses against fatty acid hydroperoxides and peroxynitrite. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E132-E141.	3.3	43
25	Lipidomic Analysis Reveals Serum Alteration of Plasmalogens in Patients Infected With ZIKA Virus. Frontiers in Microbiology, 2019, 10, 753.	1.5	39
26	PHOSPHOLIPASE A2 ACTIVITY IN POULTRY PSE, PALE, SOFT, EXUDATIVE, MEAT. Journal of Food Biochemistry, 2003, 27, 309-320.	1.2	38
27	Ferroptosis: The Greasy Side of Cell Death. Chemical Research in Toxicology, 2019, 32, 362-369.	1.7	38
28	The Development of a Specific and Sensitive LC-MS-Based Method for the Detection and Quantification of Hydroperoxy- and Hydroxydocosahexaenoic Acids as a Tool for Lipidomic Analysis. PLoS ONE, 2013, 8, e77561.	1.1	38
29	Adipocyte mTORC1 deficiency promotes adipose tissue inflammation and NLRP3 inflammasome activation via oxidative stress and de novo ceramide synthesis. Journal of Lipid Research, 2017, 58, 1797-1807.	2.0	37
30	Caloric restriction protects livers from ischemia/reperfusion damage by preventing Ca2+-induced mitochondrial permeability transition. Free Radical Biology and Medicine, 2017, 110, 219-227.	1.3	35
31	Synthesis of a hydrophilic and non-ionic anthracene derivative, the N,Nâ€²-di-(2,3-dihydroxypropyl)-9,10-anthracenedipropanamide as a chemical trap for singlet molecular oxygen detection in biological systems. Tetrahedron, 2006, 62, 10762-10770.	1.0	34
32	Distinct photo-oxidation-induced cell death pathways lead to selective killing of human breast cancer cells. Cell Death and Disease, 2020, 11, 1070.	2.7	34
33	Thymine hydroperoxide as a potential source of singlet molecular oxygen in DNA. Free Radical Biology and Medicine, 2009, 47, 401-409.	1.3	33
34	Phospholipid hydroperoxides are detoxified by phospholipase A2 and GSH peroxidase in rat gastric mucosa. Lipids, 2003, 38, 641-649.	0.7	32
35	Cytochrome c-promoted cardiolipin oxidation generates singlet molecular oxygen. Photochemical and Photobiological Sciences, 2012, 11, 1536-1546.	1.6	32
36	Probing lipid-protein adduction with alkynyl surrogates: application to Smith-Lemli-Opitz syndrome. Journal of Lipid Research, 2013, 54, 2842-2850.	2.0	31

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37	Energy Transfer between Singlet (1Î”g) and Triplet (3Î£g-) Molecular Oxygen in Aqueous Solution. Journal of the American Chemical Society, 2004, 126, 3056-3057.	6.6	30
38	Distinct metabolic patterns during microglial remodeling by oleate and palmitate. Bioscience Reports, 2019, 39, .	1.1	30
39	Protective effect of phytic acid hydrolysis products on iron-induced lipid peroxidation of liposomal membranes. Lipids, 2000, 35, 1411-1414.	0.7	29
40	Fish Oil Protects Wild Type and Uncoupling Protein 1â€Deficient Mice from Obesity and Glucose Intolerance by Increasing Energy Expenditure. Molecular Nutrition and Food Research, 2019, 63, 1800813.	1.5	29
41	OxidaÃ§Ã£o de proteÃnas por oxigÃªnio singlete: mecanismos de dano, estratÃ©gias para detecÃ§Ã£o e implicaÃ§Ãµes biolÃ³gicas. Quimica Nova, 2006, 29, 563-568.	0.3	27
42	Cholesterol Hydroperoxides Generate Singlet Molecular Oxygen [O₂ (¹Î”_g)]: Near-IR Emission, ¹⁸O-Labeled Hydroperoxides, and Mass Spectrometry. Chemical Research in Toxicology, 2011, 24, 887-895.	1.7	23
43	Palmitoleic acid reduces high fat diet-induced liver inflammation by promoting PPAR-Î³-independent M2a polarization of myeloid cells. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2020, 1865, 158776.	1.2	23
44	Direct evidence of singlet molecular oxygen [O2(1Î”g)] production in the reaction of acetonitrile with hydrogen peroxide in alkaline solutions. Analytica Chimica Acta, 2003, 482, 99-104.	2.6	20
45	Cholesterol secosterol aldehyde adduction and aggregation of Cu,Zn-superoxide dismutase: Potential implications in ALS. Redox Biology, 2018, 19, 105-115.	3.9	20
46	Highly Sensitive Fluorescent Method for the Detection of Cholesterol Aldehydes Formed by Ozone and Singlet Molecular Oxygen. Analytical Chemistry, 2010, 82, 6775-6781.	3.2	19
47	Lipid Hydroperoxides as a Source of Singlet Molecular Oxygen. Sub-Cellular Biochemistry, 2014, 77, 3-20.	1.0	19
48	Thin-layer chromatography blotting for the fluorescence detection of phospholipid hydroperoxides and cholesteryl ester hydroperoxides. Biomedical Applications, 2001, 765, 199-203.	1.7	18
49	Simultaneous silencing of lysophosphatidylcholine acyltransferases 1-4 by nucleic acid nanoparticles (NANPs) improves radiation response of melanoma cells. Nanomedicine: Nanotechnology, Biology, and Medicine, 2021, 36, 102418.	1.7	18
50	Singlet molecular oxygen: DÃ¼sseldorf â€“ SÃ£o Paulo, the Brazilian connection. Archives of Biochemistry and Biophysics, 2016, 595, 161-175.	1.4	17
51	Detection and Characterization of Cholesterol-Oxidized Products Using HPLC Coupled to Dopant Assisted Atmospheric Pressure Photoionization Tandem Mass Spectrometry. Analytical Chemistry, 2010, 82, 7293-7301.	3.2	16
52	Assay of Protein and Peptide Adducts of Cholesterol Ozonolysis Products by Hydrophobic and Click Enrichment Methods. Chemical Research in Toxicology, 2014, 27, 1757-1768.	1.7	15
53	Organic Tellurium-Centered Radicals Evidenced by EPR Spin Trapping and Mass Spectrometry Experiments:â€‰ Insights into the Mechanism of the Hydrotelluration Reaction. Organometallics, 2006, 25, 5059-5066.	1.1	14
54	Effect of Dietary Green Tea Catechin Preparation on Oxidative Stress Parameters in Large Intestinal Mucosa of Rats. Bioscience, Biotechnology and Biochemistry, 2006, 70, 286-289.	0.6	14

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55	Ischemic preconditioning enhances fatty acid-dependent mitochondrial uncoupling. Journal of Bioenergetics and Biomembranes, 2007, 39, 313-320.	1.0	14
56	Lipid aldehyde hydrophobicity affects apo-SOD1 modification and aggregation. Free Radical Biology and Medicine, 2020, 156, 157-167.	1.3	14
57	Cytochrome c Reacts with Cholesterol Hydroperoxides To Produce Lipid- and Protein-Derived Radicals. Biochemistry, 2015, 54, 2841-2850.	1.2	13
58	Effect of Ouratea sp. butter in the crystallinity of solid lipids used in nanostructured lipid carriers (NLCs). Journal of Thermal Analysis and Calorimetry, 2016, 123, 941-948.	2.0	13
59	Oxidative Modification of Proteins: From Damage to Catalysis, Signaling, and Beyond. Antioxidants and Redox Signaling, 2021, 35, 1016-1080.	2.5	13
60	Oligomerization of Cu,Zn-Superoxide Dismutase (SOD1) by Docosahexaenoic Acid and Its Hydroperoxides In Vitro: Aggregation Dependence on Fatty Acid Unsaturation and Thiols. PLoS ONE, 2015, 10, e0125146.	1.1	13
61	Production of three symbiosis-related fatty acids by Symbiodinium types in clades Aâ€“F associated with marine invertebrate larvae. Coral Reefs, 2017, 36, 1319-1328.	0.9	12
62	Liver lipidome signature and metabolic pathways in nonalcoholic fatty liver disease induced by a high-sugar diet. Journal of Nutritional Biochemistry, 2021, 87, 108519.	1.9	12
63	Behavior of the thermal diffusivity of native and oxidized human low-density lipoprotein solutions studied by the Z-scan technique. Journal of Biomedical Optics, 2012, 17, 1050031.	1.4	11
64	Covalent Binding and Anchoring of Cytochrome c to Mitochondrial Mimetic Membranes Promoted by Cholesterol Carboxyaldehyde. Chemical Research in Toxicology, 2013, 26, 1536-1544.	1.7	11
65	Forever panting and forever growing: physiology of Saccharomyces cerevisiae at extremely low oxygen availability in the absence of ergosterol and unsaturated fatty acids. FEMS Yeast Research, 2019, 19, .	1.1	11
66	Impaired antioxidant capacity causes a disruption of metabolic homeostasis in sickle erythrocytes. Free Radical Biology and Medicine, 2019, 141, 34-46.	1.3	11
67	Omega-3 Fatty Acids Improve Functionality of High-Density Lipoprotein in Individuals With High Cardiovascular Risk: A Randomized, Parallel, Controlled and Double-Blind Clinical Trial. Frontiers in Nutrition, 2021, 8, 767535.	1.6	11
68	PPARÎ³-induced upregulation of subcutaneous fat adiponectin secretion, glyceroneogenesis and BCAA oxidation requires mTORC1 activity. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2021, 1866, 158967.	1.2	10
69	Identification of urate hydroperoxide in neutrophils: A novel pro-oxidant generated in inflammatory conditions. Free Radical Biology and Medicine, 2018, 126, 177-186.	1.3	9
70	Lipase-like 5 enzyme controls mitochondrial activity in response to starvation in Caenorhabditis elegans. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2020, 1865, 158539.	1.2	9
71	Biological effects of an oxyphytosterol generated by Î²-Sitosterol ozonization. Archives of Biochemistry and Biophysics, 2020, 696, 108654.	1.4	9
72	Lipoatrophyâ€Associated Insulin Resistance and Hepatic Steatosis are Attenuated by Intake of Diet Rich in Omega 3 Fatty Acids. Molecular Nutrition and Food Research, 2020, 64, 1900833.	1.5	9

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73	DNA strand breaks and base modifications induced by cholesterol hydroperoxides. Free Radical Research, 2011, 45, 266-275.	1.5	8
74	Structure and Thermotropic Behavior of Bovine- and Porcine-Derived Exogenous Lung Surfactants. Langmuir, 2020, 36, 14514-14529.	1.6	8
75	¹⁸Oâ€Labeled lipid hydroperoxides and HPLC coupled to mass spectrometry as valuable tools for studying the generation of singlet oxygen in biological system. BioFactors, 2004, 22, 333-339.	2.6	7
76	Deletion of the transcriptional regulator opi1p decreases cardiolipin content and disrupts mitochondrial metabolism in Saccharomyces cerevisiae. Fungal Genetics and Biology, 2013, 60, 150-158.	0.9	7
77	Synthesis of a Novel Phosphate Ester of a Vitamin E Derivative and Its Antioxidative Activity. Bioscience, Biotechnology and Biochemistry, 1998, 62, 2463-2466.	0.6	6
78	Characterization of Hydroxy and Hydroperoxy Polyunsaturated Fatty Acids by Mass Spectrometry. Advances in Experimental Medicine and Biology, 2019, 1127, 21-35.	0.8	6
79	Prolonged erythrocyte auto-incubation as an alternative model for oxidant generation system. Toxicology in Vitro, 2019, 56, 62-74.	1.1	6
80	Cytochrome c modification and oligomerization induced by cardiolipin hydroperoxides in a membrane mimetic model. Archives of Biochemistry and Biophysics, 2020, 693, 108568.	1.4	6
81	Characterization of oxyphytosterols generated by Î²-sitosterol ozonization. Archives of Biochemistry and Biophysics, 2020, 689, 108472.	1.4	6
82	Electrophilic oxysterols: generation, measurement and protein modification. Free Radical Research, 2021, 55, 416-440.	1.5	6
83	Plasma lipidome profiling of newborns with antenatal exposure to Zika virus. PLoS Neglected Tropical Diseases, 2021, 15, e0009388.	1.3	6
84	Thermal plasticity of coral reef symbionts is linked to major alterations in their lipidome composition. Limnology and Oceanography, 2022, 67, 1456-1469.	1.6	6
85	In yeast, cardiolipin unsaturation level plays a key role in mitochondrial function and inner membrane integrity. Biochimica Et Biophysica Acta - Bioenergetics, 2022, 1863, 148587.	0.5	6
86	Generation of Singlet Molecular Oxygen by Lipid Hydroperoxides and Nitronium Ionâ€. Photochemistry and Photobiology, 2020, 96, 560-569.	1.3	5
87	Bioactive compounds and hepatoprotective effect of Hancornia speciosa gomes fruit juice on acetaminophen-induced hepatotoxicity in vivo. Natural Product Research, 2022, 36, 2565-2569.	1.0	5
88	Metabolismo, oxidaÃ§Ã£o e implicaÃ§Ãµes biolÃ³gicas do Ã¡cido docosahexaenoico em doenÃ§as neurodegenerativas. Quimica Nova, 2011, 34, 1409-1416.	0.3	4
89	Identification of caffeic acid and rutin by UHPLC MS/MS and antioxidant activity of Commelina erecta Lineu. in cell culture. Anais Da Academia Brasileira De Ciencias, 2020, 92, e20190491.	0.3	4
90	Antioxidant Activity of Phytic Acid Hydrolysis Products on Iron Ion-Induced Oxidative Damage in Biological System. ACS Symposium Series, 2002, , 241-250.	0.5	3

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91	Dietary sodium restriction alters muscle lipidomics that relates to insulin resistance in mice. Journal of Biological Chemistry, 2021, 296, 100344.	1.6	3
92	Postprandial plasma lipidome responses to a high-fat meal among healthy women. Journal of Nutritional Biochemistry, 2021, 97, 108809.	1.9	3
93	The promoter of filamentation (POF1) protein from Saccharomyces cerevisiae is an ATPase involved in the protein quality control process. BMC Microbiology, 2011, 11, 268.	1.3	2
94	Oxidation of apoptosis-inducing factor (AIF) to disulfide-linked conjugates. Archives of Biochemistry and Biophysics, 2020, 692, 108515.	1.4	2
95	Calorie restriction changes lipidomic profiles and maintains mitochondrial function and redox balance during isoproterenol-induced cardiac hypertrophy. Journal of Physiology and Biochemistry, 2022, 78, 283-294.	1.3	2
96	Mass Spectrometry Characterization of Thiol Conjugates Linked to Polyoxygenated Polyunsaturated Fatty Acid Species. Chemical Research in Toxicology, 2019, 32, 2028-2041.	1.7	1
97	Mass spectrometry dataset on apo-SOD1 modifications induced by lipid aldehydes. Data in Brief, 2020, 31, 105850.	0.5	1
98	Chapter 32. [¹⁸O]-Labeled Singlet Molecular Oxygen: Chemical Generation and Trapping as a Tool for Mechanistic Studies. Comprehensive Series in Photochemical and Photobiological Sciences, 2016, , 135-150.	0.3	1
99	Where do we aspire to publish? A position paper on scientific communication in biochemistry and molecular biology. Brazilian Journal of Medical and Biological Research, 2019, 52, e8935.	0.7	1
100	Presence of new disulphide-bonded collagens in shark Prionace glauca muscle. Comparative Biochemistry and Physiology Part B: Comparative Biochemistry, 1993, 106, 337-339.	0.2	0
101	Generation of Singlet Molecular Oxygen From Nitroperoxy Lipids. Free Radical Biology and Medicine, 2011, 51, S149.	1.3	0
102	Cytochrome c modifications promoted by cholesterol hydroperoxides and aldehydes. Chemistry and Physics of Lipids, 2011, 164, S44.	1.5	0
103	Characterization of Changes in the Apo Form of Enzyme Cu, Zn Superoxide Dismutase Promoted by Docosahexaenoic Acid and their Hydroperoxides. Free Radical Biology and Medicine, 2012, 53, S133.	1.3	0
104	Cholesterol Secosterol Aldehydes Are Increased in Amyotrophic Lateral Sclerosis Rat Model and Induce Covalent Modification and Aggregation of Cu,Zn-Superoxide Dismutase. Free Radical Biology and Medicine, 2015, 87, S145.	1.3	0
105	Disruption of polycystin-1 cleavage leads to cardiac metabolic rewiring in mice. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2022, 1868, 166371.	1.8	0