

Hydroxyl Radical Formation during Peroxynitrous Acid

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Citation Report

#	ARTICLE	IF	CITATIONS
3	Oxidation of Acetaldehyde by Peroxynitrite and Hydrogen Peroxide/Iron(II). Production of Acetate, Formate, and Methyl Radicals. <i>Chemical Research in Toxicology</i> , 1999, 12, 1010-1018.	3.3	50
4	The Yield of Hydroxyl Radical from the Decomposition of Peroxynitrous Acid. <i>Inorganic Chemistry</i> , 1999, 38, 4317-4321.	4.0	103
5	Cage-Escape of Geminate Radical Pairs Can Produce Peroxynitrate from Peroxynitrite under a Wide Variety of Experimental Conditions. <i>Journal of the American Chemical Society</i> , 1999, 121, 10695-10701.	13.7	126
6	Peroxynitrous Acid Decomposes via Homolysis: Evidence from High-Pressure Pulse Radiolysis. <i>Journal of Physical Chemistry A</i> , 1999, 103, 6587-6590.	2.5	31
8	Uric Acid Oxidation by Peroxynitrite: Multiple Reactions, Free Radical Formation, and Amplification of Lipid Oxidation. <i>Archives of Biochemistry and Biophysics</i> , 1999, 372, 285-294.	3.0	229
9	Barium oxides immobilized SO ₄ ⁻ and NO ₂ as chemiluminescence reaction media. <i>Bunseki Kagaku</i> , 2000, 49, 547-550.	0.2	1
10	Modeling the Interaction of Peroxynitrite with Low-density Lipoproteins. I. Plasma Levels of Peroxynitrite. <i>Journal of Theoretical Biology</i> , 2000, 205, 457-464.	1.7	7
11	Modeling the Interaction of Peroxynitrite with Low-density Lipoproteins. II: Reaction/Diffusion Model of Peroxynitrite in Low-density Lipoprotein Particles. <i>Journal of Theoretical Biology</i> , 2000, 205, 465-471.	1.7	18
12	Autocatalytic nitration of P450CAM by peroxynitrite. <i>Journal of Inorganic Biochemistry</i> , 2000, 81, 213-220.	3.5	33
13	Peroxynitrite reductase activity of bacterial peroxiredoxins. <i>Nature</i> , 2000, 407, 211-215.	27.8	629
14	A Novel Nitration Product Formed during the Reaction of Peroxynitrite with 2,3,5-Tri-O-acetyl-7,8-dihydro-8-oxoguanosine: N-Nitro-N-[1-(2,3,5-Tri-O-acetyl- β -D-erythro-pentofuranosyl)-2,4-dioximidazolidin-5-ylidene]guanidine. <i>Chemical Research in Toxicology</i> , 2000, 13, 390-396.	3.5	39
15	The Biological Chemistry of Peroxynitrite. , 2000, , 57-82.		64
16	The decomposition of peroxynitrite does not yield nitroxyl anion and singlet oxygen. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000, 97, 8216-8218.	7.1	30
17	Peroxynitrite does not decompose to singlet oxygen ($^1\Delta_g O_2$) and nitroxyl (NO ⁻). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000, 97, 10307-10312.	7.1	87
18	Dityrosine Formation Outcompetes Tyrosine Nitration at Low Steady-state Concentrations of Peroxynitrite. <i>Journal of Biological Chemistry</i> , 2000, 275, 6346-6352.	3.4	143
19	Rapid Reactions of Peroxynitrite with Heme ^c -Thiolate Proteins as the Basis for Protection of Prostacyclin Synthase from Inactivation by Nitration. <i>Archives of Biochemistry and Biophysics</i> , 2000, 376, 149-155.	3.0	61
20	Reaction of Uric Acid with Peroxynitrite and Implications for the Mechanism of Neuroprotection by Uric Acid. <i>Archives of Biochemistry and Biophysics</i> , 2000, 376, 333-337.	3.0	300
21	Role of the Carbonate Radical Anion in Tyrosine Nitration and Hydroxylation by Peroxynitrite. <i>Archives of Biochemistry and Biophysics</i> , 2000, 377, 146-152.	3.0	100

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22	The Quantitative Oxidation of Methionine to Methionine Sulfoxide by Peroxynitrite. Archives of Biochemistry and Biophysics, 2000, 377, 266-272.	3.0	62
23	A Reevaluation of the Peroxynitrite Scavenging Activity of Some Dietary Phenolics. Biochemical and Biophysical Research Communications, 2000, 279, 692-699.	2.1	71
24	Application of Chemically Induced Dynamic Nuclear Polarization to the Nitration of N-Acetyltyrosine and to Some Reactions of Peroxynitrite. Nitric Oxide - Biology and Chemistry, 2000, 4, 472-482.	2.7	9
25	Formation of N-Nitrosamines and N-Nitramines by the Reaction of Secondary Amines with Peroxynitrite and Other Reactive Nitrogen Species: Comparison with Nitrotyrosine Formation. Chemical Research in Toxicology, 2000, 13, 301-308.	3.3	84
26	26 Mechanisms of reactions in solution. Annual Reports on the Progress of Chemistry Section A, 2000, 96, 557-623.	0.8	5
27	Investigations into the spin trapping of nitric oxide and superoxide: models to explore free radical generation by nitric oxide synthase. Perkin Transactions II RSC, 2000, , 983-988.	1.1	12
28	Radical Dinitroalkane Dianions from the Nitration of Nitroalkanes by Peroxynitrite. Chemical Research in Toxicology, 2000, 13, 963-966.	3.3	6
29	Permeation of Phospholipid Membranes by Peroxynitrite. Biochemistry, 2000, 39, 14238-14249.	2.5	67
30	A Novel Procedure for Generating both Nitric Oxide and Superoxide in Situ from Chemical Sources at Any Chosen Mole Ratio. First Application: Tyrosine Oxidation and a Comparison with Preformed Peroxynitrite. Chemical Research in Toxicology, 2000, 13, 1287-1293.	3.3	45
31	Mechanism of Peroxynitrite Oxidation of Aliphatic CH Bonds in Saturated and Unsaturated Hydrocarbons. A Theoretical Model for the CH Oxidation of Lipids. Journal of the American Chemical Society, 2000, 122, 1191-1199.	13.7	26
32	Tyrosine Nitration by Peroxynitrite Formed from Nitric Oxide and Superoxide Generated by Xanthine Oxidase. Journal of Biological Chemistry, 2000, 275, 32467-32474.	3.4	172
33	N ⁺ NO Bond Dissociation Energies of N-Nitroso Diphenylamine Derivatives (Or Analogues) and Their Radical Anions: Implications for the Effect of Reductive Electron Transfer on N ⁺ NO Bond Activation and for the Mechanisms of NO Transfer to Nitranions. Journal of Organic Chemistry, 2000, 65, 6729-6735.	3.2	56
34	UV Photolysis of Nitrate: Effects of Natural Organic Matter and Dissolved Inorganic Carbon and Implications for UV Water Disinfection. Environmental Science & Technology, 2001, 35, 2949-2955.	10.0	121
35	Mechanisms of Peroxynitrite Decomposition Catalyzed by FeTMPs, a Bioactive Sulfonated Iron Porphyrin. Archives of Biochemistry and Biophysics, 2001, 387, 307-317.	3.0	92
36	Peroxynitrite decay in the presence of hydrogen peroxide, mannitol and ethanol: A reappraisal. Free Radical Research, 2001, 34, 467-475.	3.3	15
37	Does Peroxynitrite Partition between Aqueous and Gas Phases? Implication for Lipid Peroxidation. Chemical Research in Toxicology, 2001, 14, 1232-1238.	3.3	12
38	Mechanism of Peroxynitrite Interaction with Ferric Hemoglobin and Identification of Nitrated Tyrosine Residues. CO2 Inhibits Heme-Catalyzed Scavenging and Isomerization. Biochemistry, 2001, 40, 15300-15309.	2.5	31
39	Pressure Dependence of Peroxynitrite Reactions. Support for a Radical Mechanism. Inorganic Chemistry, 2001, 40, 528-532.	4.0	20

#	ARTICLE	IF	CITATIONS
40	Kinetic and Mechanistic Studies of the NO \cdot -Mediated Oxidation of Oxymyoglobin and Oxyhemoglobin \cdot . <i>Biochemistry</i> , 2001, 40, 3385-3395.	2.5	324
41	The Reaction of Peroxynitrite with Organic Molecules Bearing a Biologically Important Functionality. The Multiplicity of Reaction Modes as Exemplified by Hydroxylation, Nitration, Nitrosation, Dealkylation, Oxygenation, and Oxidative Dimerization and Cleavage. <i>Bulletin of the Chemical Society of Japan</i> . 2001, 74, 2385-2395.	3.2	27
42	Effect of chemical modifications upon exchange capacity of aminated macroporous styrene-divinyl benzene (PS-DVB) copolymer anion exchange resin. <i>Journal of Applied Polymer Science</i> , 2001, 79, 1735-1748.	2.6	13
43	S-Nitrosothiol and Disulfide Formation through Peroxynitrite-Promoted Oxidation of Thiols. <i>European Journal of Organic Chemistry</i> , 2001, 2001, 131-135.	2.4	16
44	The Chemistry of Peroxynitrite: Involvement of an ET Process in the Radical Nitration of Unsaturated and Aromatic Systems. <i>European Journal of Organic Chemistry</i> , 2001, 2001, 741-748.	2.4	23
45	Separation characteristics of modified polysulfone ultrafiltration membranes using NO $_x$. <i>Separation and Purification Technology</i> , 2001, 24, 271-282.	7.9	25
46	EPR Detection of Glutathionyl and Protein-tyrosyl Radicals during the Interaction of Peroxynitrite with Macrophages (J774). <i>Journal of Biological Chemistry</i> , 2001, 276, 39879-39884.	3.4	44
47	Activation of Matrix Metalloproteinases by Peroxynitrite-induced Protein S-Glutathiolation via Disulfide S-Oxide Formation. <i>Journal of Biological Chemistry</i> , 2001, 276, 29596-29602.	3.4	394
48	Carbon Dioxide Stimulates the Production of Thiyl, Sulfinyl, and Disulfide Radical Anion from Thiol Oxidation by Peroxynitrite. <i>Journal of Biological Chemistry</i> , 2001, 276, 9749-9754.	3.4	172
49	Reaction of Superoxide and Nitric Oxide with Peroxynitrite. <i>Journal of Biological Chemistry</i> , 2001, 276, 28799-28805.	3.4	214
50	First Spectroscopic Observation of Gas-Phase HOONO. <i>Journal of Physical Chemistry A</i> , 2002, 106, 855-859.	2.5	82
51	Preparation of high capacity chloroethylated strong base anion exchange resin using NO $_x$. <i>Separation Science and Technology</i> , 2002, 37, 895-919.	2.5	11
52	Reaction of a Superoxochromium(III) Ion with Nitrogen Monoxide: Kinetics and Mechanism. <i>Journal of the American Chemical Society</i> , 2002, 124, 421-427.	13.7	44
53	Reaction of Nitrogen Monoxide with a Macrocyclic Superoxorhodium(III) Complex Produces an Observable Nitratohodium Intermediate. <i>Journal of the American Chemical Society</i> , 2002, 124, 1698-1703.	13.7	34
54	Nitration of prostacyclin synthase: mechanism and physiological implications. <i>International Congress Series</i> , 2002, 1233, 405-414.	0.2	2
55	Product Distribution of Peroxynitrite Decay as a Function of pH, Temperature, and Concentration. <i>Journal of the American Chemical Society</i> , 2002, 124, 234-239.	13.7	110
56	Peroxynitrite Decomposition Activity of Iron Porphyrin Complexes. <i>Inorganic Chemistry</i> , 2002, 41, 4788-4797.	4.0	73
57	The Mechanism by which 4-Hydroxy-2,2,6,6-tetramethylpiperidine-1-oxyl (Tempol) Diverts Peroxynitrite Decomposition from Nitrating to Nitrosating Species. <i>Chemical Research in Toxicology</i> , 2002, 15, 506-511.	3.3	60

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58	Development of a novel rhodamine-type fluorescent probe to determine peroxyxynitrite. <i>Talanta</i> , 2002, 57, 883-890.	5.5	222
59	Anaerobic metabolism and quorum sensing by <i>Pseudomonas aeruginosa</i> biofilms in chronically infected cystic fibrosis airways: rethinking antibiotic treatment strategies and drug targets. <i>Advanced Drug Delivery Reviews</i> , 2002, 54, 1425-1443.	13.7	269
60	Nitrogen dioxide and carbonate radical anion: two emerging radicals in biology. <i>Free Radical Biology and Medicine</i> , 2002, 32, 841-859.	2.9	477
61	Peroxyxynitrite activates kinases of the src family and upregulates tyrosine phosphorylation signaling 1,2 1This article is part of a series of reviews on "Reactive Nitrogen Species, Tyrosine Nitration and Cell Signaling."The full list of papers may be found on the homepage of the journal. 2Guest Editor: Harry Ischiropoulos. <i>Free Radical Biology and Medicine</i> , 2002, 33, 744-754.	2.9	107
62	Stickstoffmonoxid, Superoxid und Peroxyxynitrit: Radikalchemie im Organismus. <i>Chemie in Unserer Zeit</i> , 2002, 36, 366-375.	0.1	11
63	Prevention of peroxyxynitrite-dependent damage by carnosine and related sulphonomido pseudodipeptides. <i>Cellular and Molecular Life Sciences</i> , 2002, 59, 546-551.	5.4	67
64	Radiolytic degradation and toxicity changes in 13 -irradiated solutions of 2,4-dichlorophenol. <i>Radiation Physics and Chemistry</i> , 2002, 65, 357-366.	2.8	30
65	Oxidations of iron(II)/(III) by hydrogen peroxide: from aquo to enzyme. <i>Coordination Chemistry Reviews</i> , 2002, 233-234, 311-318.	18.8	188
66	A Reassessment of the Peroxyxynitrite Scavenging Activity of Uric Acid. <i>Annals of the New York Academy of Sciences</i> , 2002, 962, 242-259.	3.8	161
67	Peroxyxynitrite Reacts with 8-Nitropurines to Yield 8-Oxopurines. <i>Chemical Research in Toxicology</i> , 2002, 15, 7-14.	3.3	38
69	Electron transfer, 151. Decomposition of peroxyxynitrite as catalyzed by copper(II). <i>Research on Chemical Intermediates</i> , 2002, 28, 575-583.	2.7	14
70	Mechanism of the Oxidation of Cyclohexane by Peroxyxynitrous Acid in Media with and without Oxygen. <i>Theoretical and Experimental Chemistry</i> , 2003, 39, 36-40.	0.8	1
71	Electron transfer. 153. Internal electron transfer to bound cobalt(III) induced by hydroxyl radical. <i>Research on Chemical Intermediates</i> , 2003, 29, 343-348.	2.7	1
72	Nitrate photosensitized degradation of atrazine during UV water treatment. <i>Aquatic Sciences</i> , 2003, 65, 359-366.	1.5	42
73	Peroxyxynitrite reactivity with amino acids and proteins. <i>Amino Acids</i> , 2003, 25, 295-311.	2.7	495
74	Rapid scavenging of peroxyxynitrous acid by monohydroascorbate. <i>Free Radical Biology and Medicine</i> , 2003, 35, 1529-1537.	2.9	28
75	Pyrolysis"gas chromatography/mass spectrometry of peroxyxynitrite-treated melanins. <i>Journal of Analytical and Applied Pyrolysis</i> , 2003, 70, 457-467.	5.5	14
76	Gibbs energies of reactive species involved in peroxyxynitrite chemistry calculated by density functional theory. <i>Computational and Theoretical Chemistry</i> , 2003, 623, 95-103.	1.5	8

#	ARTICLE	IF	CITATIONS
77	Early events of target deprivation/axotomy-induced neuronal apoptosis <i>in vivo</i> : oxidative stress, DNA damage, p53 phosphorylation and subcellular redistribution of death proteins. <i>Journal of Neurochemistry</i> , 2003, 85, 234-247.	3.9	71
78	Hydroxyl Radical Formation by O-O Bond Homolysis in Peroxynitrous Acid. <i>Inorganic Chemistry</i> , 2003, 42, 5259-5266.	4.0	77
79	Theoretical Studies of the Reaction Mechanisms of Dimethylsulfide and Dimethylselenide with Peroxynitrite. <i>Journal of Physical Chemistry A</i> , 2003, 107, 5862-5873.	2.5	21
80	Evidence of an Electron-Transfer Mechanism in the Peroxynitrite-Mediated Oxidation of 4-Alkylphenols and Tyrosine. <i>Journal of Organic Chemistry</i> , 2003, 68, 6349-6353.	3.2	8
81	Evaluation of Activation Volumes for the Conversion of Peroxynitrous to Nitric Acid. <i>Journal of Physical Chemistry A</i> , 2003, 107, 11261-11263.	2.5	9
82	Reactivity of Ebtellur Derivatives with the Peroxynitrite Anion: A Comparison with Their Ebselen Analogues. <i>Journal of Physical Chemistry A</i> , 2003, 107, 5631-5639.	2.5	9
83	Rate of ON-OO-Bond Homolysis and the Gibbs Energy of Formation of Peroxynitrite. <i>Journal of Physical Chemistry A</i> , 2003, 107, 7991-7996.	2.5	22
84	Product formation and kinetic simulations in the pH range 1-14 account for a free-radical mechanism of peroxynitrite decomposition. <i>Archives of Biochemistry and Biophysics</i> , 2003, 418, 133-150.	3.0	62
85	Impact of hydrogen peroxide on nitrite formation during UV disinfection. <i>Water Research</i> , 2003, 37, 4730-4736.	11.3	50
86	Direct Evidence of Singlet Molecular Oxygen [$O_2(1^1g)$] Production in the Reaction of Linoleic Acid Hydroperoxide with Peroxynitrite. <i>Journal of the American Chemical Society</i> , 2003, 125, 4510-4517.	13.7	138
87	Transmembrane Nitration of Hydrophobic Tyrosyl Peptides. <i>Journal of Biological Chemistry</i> , 2003, 278, 8969-8978.	3.4	52
88	The Autoxidation of Tetrahydrobiopterin Revisited. <i>Journal of Biological Chemistry</i> , 2003, 278, 24481-24490.	3.4	76
89	Peroxynitrous Acid - Where is the Hydroxyl Radical?. <i>IUBMB Life</i> , 2004, 55, 567-572.	3.4	38
90	DIOXYGEN ACTIVATION BY TRANSITION METAL COMPLEXES. ATOM TRANSFER AND FREE RADICAL CHEMISTRY IN AQUEOUS MEDIA. <i>Advances in Inorganic Chemistry</i> , 2004, 55, 1-59.	1.0	28
91	Kinetics of Conversions of Peroxynitrous Acid in Reactions of Isomerization, Decomposition, and Reduction by Cyclohexane. <i>Theoretical and Experimental Chemistry</i> , 2004, 40, 309-313.	0.8	1
92	Determination of pipemidic acid based on flow-injection chemiluminescence due to energy transfer from peroxynitrous acid synthesized on-line. <i>Analytical and Bioanalytical Chemistry</i> , 2004, 380, 918-923.	3.7	11
93	Flow-injection chemiluminescence determination of fluoroquinolones by enhancement of weak chemiluminescence from peroxynitrous acid. <i>Analytica Chimica Acta</i> , 2004, 510, 21-28.	5.4	73
94	Reaction of Peroxynitrite with Hyaluronan and Related Saccharides. <i>Free Radical Research</i> , 2004, 38, 343-353.	3.3	29

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95	Homolytic Pathways Drive Peroxynitrite-Dependent Trolox C Oxidation. <i>Chemical Research in Toxicology</i> , 2004, 17, 1377-1384.	3.3	22
96	Mass Spectrometric Identification of 4-Hydroxy-2,5-dioxo-imidazolidine-4-carboxylic Acid during Oxidation of 8-Oxoguanosine by Peroxynitrite and KHSO ₅ /CoCl ₂ . <i>Chemical Research in Toxicology</i> , 2004, 17, 1501-1509.	3.3	13
97	Spiroiminodihydantoin and Guanidinohydantoin Are the Dominant Products of 8-Oxoguanosine Oxidation at Low Fluxes of Peroxynitrite: A Mechanistic Studies with ¹⁸ O. <i>Chemical Research in Toxicology</i> , 2004, 17, 1510-1519.	3.3	77
98	Preventing Nitrite Contamination in Tetramethylammonium Peroxynitrite Solutions. <i>Inorganic Chemistry</i> , 2004, 43, 6519-6521.	4.0	15
99	Peroxynitrite Reactions with Dimethylsulfide and Dimethylselenide: An Experimental Study. <i>Journal of Physical Chemistry A</i> , 2004, 108, 289-294.	2.5	12
100	Nitration and hydroxylation of benzene in the presence of nitrite/nitrous acid in aqueous solution. <i>Chemosphere</i> , 2004, 56, 1049-1059.	8.2	63
101	Flow-injection chemiluminescence determination of chloroquine using peroxynitrous acid as oxidant. <i>Talanta</i> , 2004, 62, 757-763.	5.5	29
102	Kinetics and Mechanism of Octacyanomolybdate(IV) Oxidation by Peroxynitrite. <i>Journal of Chemical Research</i> , 2004, 2004, 94-98.	1.3	2
103	Effects of Oxygen on the Reactivity of Nitrogen Oxide Species Including Peroxynitrite. <i>Biological and Pharmaceutical Bulletin</i> , 2004, 27, 17-23.	1.4	20
104	Oxidation of hypotaurine and cysteine sulphinic acid by peroxynitrite. <i>Biochemical Journal</i> , 2005, 389, 233-240.	3.7	22
105	Flow-injection chemiluminescence determination of tryptophan through its peroxidation and epoxidation by peroxynitrous acid. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2005, 38, 100-106.	2.8	39
106	Peroxynitritometal complexes. <i>Coordination Chemistry Reviews</i> , 2005, 249, 499-506.	18.8	45
107	Nitrated phenols in the atmosphere: a review. <i>Atmospheric Environment</i> , 2005, 39, 231-248.	4.1	348
108	Adult Motor Neuron Apoptosis Is Mediated by Nitric Oxide and Fas Death Receptor Linked by DNA Damage and p53 Activation. <i>Journal of Neuroscience</i> , 2005, 25, 6449-6459.	3.6	140
109	Reactions Induced in Natural Waters by Irradiation of Nitrate and Nitrite Ions. , 0, , 221-253.		22
110	A comparative study on the degradation of cotton linters induced by carbonate and hydroxyl radicals generated from peroxynitrite. <i>Holzforschung</i> , 2005, 59, 132-142.	1.9	3
111	Interaction of peroxynitrite with myoglobin and hemoglobin. <i>Canadian Journal of Chemistry</i> , 2006, 84, 788-793.	1.1	3
112	Theoretical Study on the Mechanisms of the Reaction of Peroxynitrous Acid and Phenol. <i>Acta Physico-chimica Sinica</i> , 2006, 22, 1266-1272.	0.6	3

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113	Nitroxidative, Nitrosative, and Nitrative Stress: Kinetic Predictions of Reactive Nitrogen Species Chemistry Under Biological Conditions. <i>Chemical Research in Toxicology</i> , 2006, 19, 1160-1174.	3.3	208
114	A Highly Selective Fluorescent Probe for the Detection and Imaging of Peroxynitrite in Living Cells. <i>Journal of the American Chemical Society</i> , 2006, 128, 6004-6005.	13.7	259
115	Formation of Reactive Free Radicals in an Aqueous Environment. , 2006, , 7-46.		4
116	Peroxynitrite-induced oxidation and nitration products of guanine and 8-oxoguanine: Structures and mechanisms of product formation. <i>Nitric Oxide - Biology and Chemistry</i> , 2006, 14, 109-121.	2.7	173
118	Use of Fluorescence Probes for Detection of Reactive Nitrogen Species: A Review. <i>Journal of Fluorescence</i> , 2006, 16, 119-139.	2.5	151
119	The oxidation of 2,7-dichlorofluorescein to reactive oxygen species: A self-fulfilling prophesy?. <i>Free Radical Biology and Medicine</i> , 2006, 40, 968-975.	2.9	201
120	Iron and Manganese Corroles Are Potent Catalysts for the Decomposition of Peroxynitrite. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 6544-6547.	13.8	91
121	15N Chemically Induced Dynamic Nuclear Polarization (15N-CIDNP) Investigations of the Peroxynitrite Decay and Nitration of N-Acetyl-L-tyrosine. <i>Helvetica Chimica Acta</i> , 2006, 89, 2144-2166.	1.6	2
123	Nitric Oxide and Peroxynitrite in Health and Disease. <i>Physiological Reviews</i> , 2007, 87, 315-424.	28.8	5,209
124	Nitric oxide increases toxicity of hydrogen peroxide against rat liver endothelial cells and hepatocytes by inhibition of hydrogen peroxide degradation. <i>American Journal of Physiology - Cell Physiology</i> , 2007, 292, C1440-C1449.	4.6	24
125	CARDIOVASCULAR EFFECTS OF PEROXYNITRITE. <i>Clinical and Experimental Pharmacology and Physiology</i> , 2007, 34, 933-937.	1.9	39
126	Inactivation and nitration of human superoxide dismutase (SOD) by fluxes of nitric oxide and superoxide. <i>Free Radical Biology and Medicine</i> , 2007, 42, 1359-1368.	2.9	89
127	Peroxynitrite: In vivo and In vitro synthesis and oxidant degradative action on biological systems regarding biomolecular injury and inflammatory processes. <i>Chemical Papers</i> , 2007, 61, .	2.2	12
128	Kinetic studies of the reaction of heme-thiolate enzyme chloroperoxidase with peroxynitrite. <i>Journal of Inorganic Biochemistry</i> , 2007, 101, 159-164.	3.5	17
129	Selective iNOS inhibition reduces renal damage induced by cisplatin. <i>Toxicology Letters</i> , 2008, 176, 48-57.	0.8	98
130	Fluorogenic and Chromogenic Rhodamine Spirolactam Based Probe for Nitric Oxide by Spiro Ring Opening Reaction. <i>Organic Letters</i> , 2008, 10, 2357-2360.	4.6	138
131	EFFECTS OF NITRATE ON THE UV PHOTOLYSIS OF H ₂ O ₂ FOR VOCs DEGRADATION IN AN AQUEOUS SOLUTION. <i>Environmental Technology (United Kingdom)</i> , 2008, 29, 91-99.	2.2	8
132	Reaction of a Copper ^{II} -Dioxygen Complex with Nitrogen Monoxide (NO) Leads to a Copper(II)-Peroxynitrite Species. <i>Journal of the American Chemical Society</i> , 2008, 130, 6700-6701.	13.7	78

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133	Advanced H ₂ O ₂ oxidation for diethyl phthalate degradation in treated effluents: effect of nitrate on oxidation and a pilot-scale AOP operation. <i>Water Science and Technology</i> , 2008, 58, 1031-1037.	2.5	8
134	Nitrite formation during low pressure ultraviolet lamp irradiation of nitrate. <i>Water Science and Technology</i> , 2009, 60, 1393-1400.	2.5	21
135	Effects of nitrate on the UV photolysis of H ₂ O ₂ for 2,4-dichlorophenol degradation in treated effluents. <i>Desalination and Water Treatment</i> , 2009, 2, 6-11.	1.0	10
136	Kinetic study of Orange II oxidation using peroxyntrous acid. <i>Journal of Physical Organic Chemistry</i> , 2009, 22, 546-549.	1.9	3
137	Peroxyntate is formed rapidly during decomposition of peroxyntrite at neutral pH. <i>Dalton Transactions</i> , 2009, , 5730.	3.3	42
138	Understanding peroxyntrite biochemistry and its potential for treating human diseases. <i>Archives of Biochemistry and Biophysics</i> , 2009, 484, 114-116.	3.0	51
140	Bicarbonate-enhanced transformation of phenol upon irradiation of hematite, nitrate, and nitrite. <i>Photochemical and Photobiological Sciences</i> , 2009, 8, 91-100.	2.9	33
141	Direct evidence of singlet molecular oxygen generation from peroxyntate, a decomposition product of peroxyntrite. <i>Dalton Transactions</i> , 2009, , 5720.	3.3	50
142	Redox Chemistry of Biological Thiols. <i>Advances in Molecular Toxicology</i> , 2010, , 183-222.	0.4	94
143	Kinetic and theoretical study on peroxyntrite decomposition catalyzed by iron porphyrins. <i>Reaction Kinetics, Mechanisms and Catalysis</i> , 2010, 101, 291-300.	1.7	5
144	Degradation of diethyl phthalate in treated effluents from an MBR via advanced oxidation processes: Effects of nitrate on oxidation and a pilot-scale AOP operation. <i>Environmental Technology (United Kingdom)</i> , 2010, 31, 1027-1037.	2.0	10
145	Nitrosation-modulating effect of ascorbate in a model dynamic system of coexisting nitric oxide and superoxide. <i>Free Radical Research</i> , 2010, 44, 552-562.	3.3	15
146	The Mitochondrial Permeability Transition Pore Regulates Nitric Oxide-Mediated Apoptosis of Neurons Induced by Target Deprivation. <i>Journal of Neuroscience</i> , 2011, 31, 359-370.	3.6	85
148	Analytical and Toxicological Studies of Decomposition of Insecticide Parathion after Gamma-Irradiation and Ozonation. <i>Journal of AOAC INTERNATIONAL</i> , 2012, 95, 1378-1385.	1.5	4
149	Effects of nitrate on the advanced UV photolysis of di(2-ethylhexyl) phthalate degradation in aqueous solution. <i>Desalination and Water Treatment</i> , 2012, 47, 163-170.	1.0	9
150	The formation of reactive species having hydroxyl radical-like reactivity from UV photolysis of N-nitrosodimethylamine (NDMA): Kinetics and mechanism. <i>Science of the Total Environment</i> , 2012, 437, 237-244.	8.0	19
151	Review of photochemical reaction constants of organic micropollutants required for UV advanced oxidation processes in water. <i>Water Research</i> , 2012, 46, 2815-2827.	11.3	473
152	Biochemical insight into physiological effects of H ₂ S: reaction with peroxyntrite and formation of a new nitric oxide donor, sulfinyl nitrite. <i>Biochemical Journal</i> , 2012, 441, 609-621.	3.7	99

#	ARTICLE	IF	CITATIONS
153	Fine Tuning the Reactivity of Corrole-Based Catalytic Antioxidants. <i>Inorganic Chemistry</i> , 2012, 51, 8083-8090.	4.0	35
154	What really happens in the neutrophil phagosome?. <i>Free Radical Biology and Medicine</i> , 2012, 53, 508-520.	2.9	106
155	Peroxynitrous acid: controversy and consensus surrounding an enigmatic oxidant. <i>Dalton Transactions</i> , 2012, 41, 13779.	3.3	61
156	Determination of berberine in pharmaceutical preparations using acidic hydrogen peroxideâ€“nitrite chemiluminescence system. <i>Drug Testing and Analysis</i> , 2013, 5, 150-155.	2.6	9
157	Mechanisms of bacterial inactivation in the liquid phase induced by a remote RF cold atmospheric pressure plasma jet. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 175203.	2.8	253
158	Separation and characterization of nitrated variants of the major birch pollen allergen by <sc>CZE</sc>â€“<sc>ESI</sc>â€“1/4<sc>TOF MS</sc>. <i>Electrophoresis</i> , 2013, 34, 2695-2704.	2.4	14
159	Effect of nitrate on the degradation of bisphenol A by UV/H₂O₂ and ozone/H₂O₂ oxidation in aqueous solution. <i>Desalination and Water Treatment</i> , 2014, 52, 797-804.	1.0	12
160	Reactive Oxygen and Nitrogen Species in Steatotic Hepatocytes: A Molecular Perspective on the Pathophysiology of Ischemia-Reperfusion Injury in the Fatty Liver. <i>Antioxidants and Redox Signaling</i> , 2014, 21, 1119-1142.	5.4	98
161	Indirect Photochemistry in Sunlit Surface Waters: Photoinduced Production of Reactive Transient Species. <i>Chemistry - A European Journal</i> , 2014, 20, 10590-10606.	3.3	325
162	About the mechanism for paramagnetic centers formation under the radiolysis of RbNO ₃ and CsNO ₃ crystals. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2014, 326, 65-67.	1.4	1
163	2,4,6-Trichlorophenol-promoted catalytic wet oxidation of humic substances and stabilized landfill leachate. <i>Chemical Engineering Journal</i> , 2014, 247, 216-222.	12.7	27
164	Predicting pharmaceutical degradation by UV (LP)/H ₂ O ₂ processes: A kinetic model. <i>Chemical Engineering Journal</i> , 2014, 255, 334-343.	12.7	69
165	Prediction of the removal efficiency of pharmaceuticals by a rapid spectrophotometric method using Rhodamine B in the UV/H ₂ O ₂ process. <i>Chemical Engineering Journal</i> , 2014, 236, 438-447.	12.7	19
166	Tyrosine nitration in peptides by peroxynitrite generated in situ in a light-controlled platform: Effects of pH and thiols. <i>Journal of Inorganic Biochemistry</i> , 2014, 138, 24-30.	3.5	3
167	Peroxynitrite chemistry derived from nitric oxide reaction with a Cu(II)â€“OOH species and a copper mediated NO reductive coupling reaction. <i>Chemical Communications</i> , 2014, 50, 2844-2846.	4.1	15
168	Momentum, heat, and neutral mass transport in convective atmospheric pressure plasma-liquid systems and implications for aqueous targets. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 424007.	2.8	81
169	Physicochemical processes in the indirect interaction between surface air plasma and deionized water. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 495201.	2.8	160
170	Influence of process conditions and water quality on the formation of mutagenic byproducts in UV/H ₂ O ₂ processes. <i>Water Research</i> , 2015, 74, 191-202.	11.3	23

#	ARTICLE	IF	CITATIONS
171	Reactions of Co(III)-Nitrosyl Complexes with Superoxide and Their Mechanistic Insights. Journal of the American Chemical Society, 2015, 137, 4284-4287.	13.7	38
172	Degradation of bisphenol A by UV/H ₂ O ₂ oxidation in aqueous solution containing nitrate and alkalinity. Desalination and Water Treatment, 2015, 54, 1022-1028.	1.0	4
173	Nitration of indoxyl sulfate facilitates its cytotoxicity in human renal proximal tubular cells via expression of heme oxygenase-1. Biochemical and Biophysical Research Communications, 2015, 465, 481-487.	2.1	3
174	Predicting pharmaceutical degradation by UV (MP)/H ₂ O ₂ processes: A kinetic model. Chemical Engineering Journal, 2015, 263, 336-345.	12.7	30
175	Mechanism of the Reaction of Human Manganese Superoxide Dismutase with Peroxynitrite: Nitration of Critical Tyrosine 34. Biochemistry, 2016, 55, 3403-3417.	2.5	37
176	Removal of taste and odor causing compounds by UV/H ₂ O ₂ treatment: effect of the organic and inorganic water matrix. Desalination and Water Treatment, 0, , 1-10.	1.0	5
177	Factors That Control the Reactivity of Cobalt(III)-Nitrosyl Complexes in Nitric Oxide Transfer and Dioxygenation Reactions: A Combined Experimental and Theoretical Investigation. Journal of the American Chemical Society, 2016, 138, 7753-7762.	13.7	36
178	Emerging investigators series: prediction of trace organic contaminant abatement with UV/H ₂ O ₂ : development and validation of semi-empirical models for municipal wastewater effluents. Environmental Science: Water Research and Technology, 2016, 2, 460-473.	2.4	29
179	Reactive oxygen species and antioxidant defense in human gastrointestinal diseases. Integrative Medicine Research, 2016, 5, 250-258.	1.8	175
180	A Free Radical Primer. , 2016, , 1-33.		11
181	Photochemical reaction of peroxynitrite and carbon dioxide could account for up to 15% of carbonate radicals generation in surface waters. Environmental Chemistry Letters, 2016, 14, 183-187.	16.2	11
182	Mineralization of sucralose by UV-based advanced oxidation processes: UV/PDS versus UV/H ₂ O ₂ . Chemical Engineering Journal, 2016, 285, 392-401.	12.7	104
183	The UV/peroxymonosulfate process for the mineralization of artificial sweetener sucralose. Chemical Engineering Journal, 2017, 317, 561-569.	12.7	66
184	Alpha radiolysis of nitric acid aqueous solution irradiated by ²³⁸ Pu source. Nuclear Science and Techniques/Hewuli, 2017, 28, 1.	3.4	6
185	Tyrosine oxidation and nitration in transmembrane peptides is connected to lipid peroxidation. Archives of Biochemistry and Biophysics, 2017, 622, 9-25.	3.0	14
186	Reaction of a Co(III)-Peroxo Complex and NO: Formation of a Putative Peroxynitrite Intermediate. Inorganic Chemistry, 2017, 56, 10932-10938.	4.0	15
187	Dioxygenation Reaction of a Cobalt-Nitrosyl: Putative Formation of a Cobalt-Peroxynitrite via a {Co ^{III} (NO)(O ₂) ⁺ } Intermediate. Inorganic Chemistry, 2017, 56, 14438-14445.	4.0	21
188	Reaction of a Nitrosyl Complex of Cobalt Porphyrin with Hydrogen Peroxide: Putative Formation of Peroxynitrite Intermediate. Inorganic Chemistry, 2017, 56, 7781-7787.	4.0	8

#	ARTICLE	IF	CITATIONS
189	UV/H ₂ O ₂ process stability and pilot-scale validation for trace organic chemical removal from wastewater treatment plant effluents. <i>Water Research</i> , 2018, 136, 169-179.	11.3	99
190	Bed flow photoreactor experiments to assess the photocatalytic nitrogen oxides abatement under simulated atmospheric conditions. <i>Applied Catalysis B: Environmental</i> , 2018, 231, 161-172.	20.2	29
191	Reaction Rate Constants of Hydroxyl Radicals with Micropollutants and Their Significance in Advanced Oxidation Processes. <i>Journal of Advanced Oxidation Technologies</i> , 2018, 21, 178-195.	0.5	28
192	Orally administered gold nanoparticles protect against colitis by attenuating Toll-like receptor 4- and reactive oxygen/nitrogen species-mediated inflammatory responses but could induce gut dysbiosis in mice. <i>Journal of Nanobiotechnology</i> , 2018, 16, 86.	9.1	48
193	The labile iron pool attenuates peroxyxynitrite-dependent damage and can no longer be considered solely a pro-oxidative cellular iron source. <i>Journal of Biological Chemistry</i> , 2018, 293, 8530-8542.	3.4	18
194	Oxidative Release of Copper from Pharmacologic Copper Bis(thiosemicarbazone) Compounds. <i>Inorganic Chemistry</i> , 2018, 57, 8923-8932.	4.0	13
195	Removal of trace organic chemicals in wastewater effluent by UV/H ₂ O ₂ and UV/PDS. <i>Water Research</i> , 2018, 145, 487-497.	11.3	124
196	The effect of pH on the aqueous reactive species in sodium phosphate buffers induced by surface air discharge. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 415201.	2.8	10
197	Ultrasound-assisted Plasma-activated Water for Bacterial Inactivation in Poultry Industry. , 2019, , .		5
198	Nitric oxide and its derivatives in the cancer battlefield. <i>Nitric Oxide - Biology and Chemistry</i> , 2019, 93, 102-114.	2.7	79
199	Full-scale comparison of UV/H ₂ O ₂ and UV/Cl ₂ advanced oxidation: The degradation of micropollutant surrogates and the formation of disinfection byproducts. <i>Water Research</i> , 2019, 161, 448-458.	11.3	85
200	Effects of Sunlight on the Trichloronitromethane Formation Potential of Wastewater Effluents: Dependence on Nitrite Concentration. <i>Environmental Science & Technology</i> , 2019, 53, 4285-4294.	10.0	24
201	Microbubble-enhanced DBD plasma reactor: Design, characterisation and modelling. <i>Chemical Engineering Research and Design</i> , 2019, 144, 159-173.	5.6	29
202	Nitric oxide dioxygenation (NOD) reactions of CollI-peroxy and NiIII-peroxy complexes: NOD versus NO activation. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 4872-4882.	6.0	10
203	On the Anti-Cancer Effect of Cold Atmospheric Plasma and the Possible Role of Catalase-Dependent Apoptotic Pathways. <i>Cells</i> , 2020, 9, 2330.	4.1	16
204	Nitrate with benefits: optimizing radical production during UV water treatment. <i>Environmental Science: Water Research and Technology</i> , 2020, 6, 1163-1175.	2.4	19
205	Modification of DNA structure by reactive nitrogen species as a result of 2-methoxyestradiol-induced neuronal nitric oxide synthase uncoupling in metastatic osteosarcoma cells. <i>Redox Biology</i> , 2020, 32, 101522.	9.0	10
206	Nitric oxide monooxygenation (NOM) reaction of cobalt-nitrosyl {Co(NO)} ₈ to Coll-nitrito {Coll(NO ²⁻)}: base induced hydrogen gas (H ₂) evolution. <i>Chemical Science</i> , 2020, 11, 5037-5042.	7.4	11

#	ARTICLE	IF	CITATIONS
207	Mass Spectrometry-Based Protein Footprinting for Higher-Order Structure Analysis: Fundamentals and Applications. <i>Chemical Reviews</i> , 2020, 120, 4355-4454.	47.7	149
208	Features and application of coupled cold plasma and photocatalysis processes for decontamination of water. <i>Chemosphere</i> , 2021, 262, 128336.	8.2	15
209	Photochemical origin of reactive radicals and halogenated organic substances in natural waters: A review. <i>Journal of Hazardous Materials</i> , 2021, 401, 123884.	12.4	37
210	Fluid model of plasma-liquid interaction: The effect of interfacial boundary conditions and Henry's law constants. <i>AIP Advances</i> , 2021, 11, .	1.3	7
211	Reactivity and Diffusivity of Nitrogen Oxides in Mammalian Biology. , 2003, , 53-79.		5
212	Reactive Nitrogen Species and Nitric Oxide. , 2015, , 3-19.		8
214	Long-lived species in plasma-activated water generated by an AC multi-needle-to-water discharge: effects of gas flow on chemical reactions. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 065201.	2.8	53
215	[~] OONO. <i>Circulation Research</i> , 2001, 89, 295-297.	4.5	28
216	Peroxynitrite mediated linoleic acid oxidation and tyrosine nitration in the presence of synthetic neuromelanins.. <i>Acta Biochimica Polonica</i> , 2000, 47, 931-940.	0.5	10
217	Mechanism of peroxynitrite interaction with cytochrome c.. <i>Acta Biochimica Polonica</i> , 2003, 50, 815-823.	0.5	12
218	Comparative Assessment of Melatonin-Afforded Protection in Liver, Kidney and Heart of Male Mice against Doxorubicin Induced Toxicity. <i>Pharmacology & Pharmacy</i> , 2013, 04, 590-598.	0.7	5
219	Formation of Reactive Species Enhanced by H ₂ O ₂ Addition in the Photodecomposition of N-Nitrosodimethylamine (NDMA). <i>Environmental Engineering Research</i> , 2013, 18, 29-35.	2.5	6
220	Determination of Efficient Operating Condition of UV/H ₂ O ₂ Process Using the OH Radical Scavenging Factor. <i>Daehan Hwan'gyeong Gonghag Hoeji</i> , 2014, 36, 534-541.	1.1	1
221	Modeling study of the indirect treatment of phosphate buffered saline in surface air plasma. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 065203.	2.8	10
222	Resorufin-based fluorescent probe with elevated water solubility for visualizing fluctuant peroxynitrite in progression of inflammation. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022, 267, 120620.	3.9	25
223	Unravelling the performance of UV/H ₂ O ₂ on the removal of pharmaceuticals in real industrial, hospital, grey and urban wastewaters. <i>Chemosphere</i> , 2022, 290, 133315.	8.2	17
224	Advances in mass spectrometry-based epitope mapping of protein therapeutics. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2022, 215, 114754.	2.8	8
225	Degradation of 2,6-dichloro-1,4-benzoquinone by UV/H ₂ O ₂ /O ₃ treatment: Effectiveness, water matrix effects, and degradation mechanism. <i>Chemosphere</i> , 2022, 296, 134014.	8.2	10

#	ARTICLE	IF	CITATIONS
226	Frozen Hydrogen Peroxide and Nitrite Solution: The Acceleration of Benzoic Acid Oxidation via the Decreased pH in Ice. <i>Environmental Science & Technology</i> , 2022, 56, 2323-2333.	10.0	10
228	Kinetics of processes initiated in a water cathode by the action of a direct current discharge at atmospheric pressure in air: simulation and experiment. <i>Journal Physics D: Applied Physics</i> , 0, , .	2.8	5
229	Regulation of pulse DC power on the Long lived reactive species concentration of AC excited plasma in liquid phase. , 2022, , .		0
230	Experimental review of different plasma technologies for the degradation of cylindrospermopsin as model water pollutant. <i>Chemical Engineering Journal</i> , 2023, 451, 138984.	12.7	4
231	Hydroxylation and dimerization of <i>para</i> -dihydroxylated aromatic compounds mediated by cold atmospheric-pressure plasma in comparison with chemically catalyzed reactions. <i>Green Chemistry</i> , 2022, 24, 7951-7967.	9.0	1
232	Dominant Dissolved Oxygen-Independent Pathway to Form Hydroxyl Radicals and the Generation of Reactive Chlorine and Nitrogen Species in Breakpoint Chlorination. <i>Environmental Science & Technology</i> , 2023, 57, 150-159.	10.0	7
233	Combined effect of atmospheric gas plasma and UVA light: A sustainable and green alternative for chemical decontamination and microbial inactivation of fish processing water. <i>Chemosphere</i> , 2023, 317, 137792.	8.2	1
234	Fluorescence-based chemical tools for monitoring ultrasound-induced hydroxyl radical production in aqueous solution and in cells. <i>Chemical Communications</i> , 2023, 59, 4328-4331.	4.1	4
235	Exploring the nitric oxide dioxygenation (NOD) reactions of manganese peroxo complexes. <i>Dalton Transactions</i> , 2023, 52, 5095-5100.	3.3	3
236	The Chemical Composition of Species Formed in a Water Anode Under the Action of a Direct Current Electric Discharge: Comparison with Liquid Cathode Experiment and Simulation. <i>Plasma Chemistry and Plasma Processing</i> , 2023, 43, 577-597.	2.4	5
237	Nitric Oxide Oxygenation Reactions of Cobalt-Peroxo and Cobalt-Nitrosyl Complexes. <i>Inorganic Chemistry</i> , 2023, 62, 7385-7392.	4.0	4
238	Reaction of a Co(III)-peroxo complex with nitric oxide: putative formation of a peroxy nitrite intermediate. <i>Dalton Transactions</i> , 0, , .	3.3	0
239	Mechanistic insights into nitric oxide oxygenation (NOO) reactions of {CrNO} ⁵ and {CoNO} ⁸ . <i>Dalton Transactions</i> , 0, , .	3.3	1
240	Degradation of carbamazepine in surface water: performance of Pd-modified TiO ₂ and Ce-modified ZnO as photocatalysts. <i>Environmental Science and Pollution Research</i> , 2023, 30, 116078-116090.	5.3	0
241	Structural dependent degradation of histamine H ₂ -receptor antagonists by UV/NH ₂ Cl: Reactive species contribution and the role of carbonate ions on •NO generation. <i>Chemical Engineering Journal</i> , 2024, 479, 147278.	12.7	0