

# Analysis and computer simulation of aerobic oxidation dinucleotide catalyzed by horseradish peroxidase

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Involvement of hydroxyl radical in NAD(P)H oxidation and associated oxygen reduction by the granule fraction of human blood polymorphonuclears. <i>Biochemical and Biophysical Research Communications</i> , 1978, 81, 1067-1072.	2.1	18
2	The oscillating peroxidase-oxidase reaction in an open system Analysis of the reaction mechanism. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1978, 527, 212-220.	2.6	14
3	HYDROGEN PEROXIDE, OXYGEN, SUPEROXIDE ANION, SINGLET OXYGEN AND PEROXIDASE. , 1979, , 167-176.		7
4	PEROXIDASE CATALYZED GENERATION OF TRIPLET ACETONE. <i>Photochemistry and Photobiology</i> , 1979, 30, 101-110.	2.5	86
5	The Interactions of Thiol Compounds with Porcine Erythrocyte Catalase. <i>Journal of Biochemistry</i> , 1980, 87, 429-439.	1.7	28
6	Kinetic studies on the H <sub>2</sub> O <sub>2</sub> (â'' 2 )-forming enzyme in guinea pig leukocytes. <i>FEBS Letters</i> , 1980, 111, 90-94.	2.8	20
7	Electron acceptor function of O <sub>2</sub> in radical N-demethylation reactions catalyzed by heme proteins. <i>Biochemical and Biophysical Research Communications</i> , 1980, 97, 660-666.	2.1	12
8	A sensitive method for the determination of cytolytic activity. <i>Analytical Biochemistry</i> , 1981, 113, 85-92.	2.4	2
9	Photochemical generation of reduced ð²-nicotinamide-adenine dinucleotide (induced by visible light). <i>Journal of Photochemistry and Photobiology</i> , 1981, 16, 193-202.	0.6	13
10	Horseradish Peroxidase Enzyme Electrodes for Nadh and Nadph. <i>Analytical Letters</i> , 1982, 15, 1479-1491.	1.8	9
11	Interaction of the Superoxide Radical With Peroxidase and with Other Iron Complexes. , 1982, , 733-744.		0
12	Effects of 15-hydroperoxy-eicosatetraenoic acid (15-HPETE) on cerebral arterioles of cats. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1984, 247, H631-H637.	3.2	7
13	Listing of Protein Spectra. , 1984, , 1-440.		0
14	Computer simulation of sustained oscillations in peroxidase-oxidase reaction. <i>Biophysical Chemistry</i> , 1984, 19, 259-264.	2.8	33
15	On the mechanism of peroxidase-catalyzed chemiluminescence from isobutyraldehyde. <i>Biochemical and Biophysical Research Communications</i> , 1984, 122, 28-32.	2.1	13
16	The non-photosensitized potentiation by the photosensitizer hematoporphyrin of the horseradish peroxidase-catalyzed H <sub>2</sub> O <sub>2</sub> -mediated oxidation of NADPH to NADP <sup>+</sup> . <i>Biochemical and Biophysical Research Communications</i> , 1984, 118, 191-197.	2.1	12
17	NADPH oxidation catalyzed by the peroxidase/H <sub>2</sub> O <sub>2</sub> system. Guaiacol-mediated and scopoletin-mediated oxidation of NADPH to NADP <sup>+</sup> . <i>FEBS Journal</i> , 1985, 148, 441-445.	0.2	27
18	Reduction in cerebral arteriolar oxygen consumption by arachidonate. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1985, 248, H534-H539.	3.2	3

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19	Appearance of superoxide anion radical in cerebral extracellular space during increased prostaglandin synthesis in cats.. Circulation Research, 1985, 57, 142-151.	4.5	276
20	Superoxide generation and reversal of acetylcholine-induced cerebral arteriolar dilation after acute hypertension.. Circulation Research, 1985, 57, 781-787.	4.5	210
21	George E. Brown memorial lecture. Oxygen radicals in cerebral vascular injury.. Circulation Research, 1985, 57, 508-516.	4.5	395
22	Excited species generation in horseradish peroxidase-mediated oxidation of glutathione. Journal of Free Radicals in Biology & Medicine, 1985, 1, 311-318.	2.1	27
23	Chemiluminescent aerobic oxidation of protein adducts with glycolaldehyde catalyzed by horseradish peroxidase. Archives of Biochemistry and Biophysics, 1986, 248, 435-439.	3.0	18
24	Superoxide production in experimental brain injury. Journal of Neurosurgery, 1986, 64, 803-807.	1.6	391
25	Superoxide anion radical does not mediate vasodilation of cerebral arterioles by vasoactive intestinal polypeptide.. Stroke, 1986, 17, 1287-1290.	2.0	4
26	The role of compound III in reversible and irreversible inactivation of lactoperoxidase. FEBS Journal, 1986, 158, 609-614.	0.2	38
27	Kinetics of the oxidation of reduced nicotinamide adenine dinucleotide by horseradish peroxidase compounds I and II. Biochemistry and Cell Biology, 1986, 64, 323-327.	2.0	17
28	PGH synthase and lipoxygenase generate superoxide in the presence of NADH or NADPH.. Circulation Research, 1986, 59, 612-619.	4.5	469
29	Oxygen Radicals from Arachidonate Metabolism in Abnormal Vascular Responses. The American Review of Respiratory Disease, 1987, 136, 474-477.	2.9	43
30	Bistability in chemical reaction networks: Theory and application to the peroxidase-oxidase reaction. Journal of Chemical Physics, 1987, 87, 3461-3470.	3.0	49
31	Free radicals in iron-containing systems. Free Radical Biology and Medicine, 1987, 3, 405-421.	2.9	204
32	Peroxidase-promoted aerobic oxidation of 2-nitropropane: mechanism of excited state formation. Biochimica Et Biophysica Acta - General Subjects, 1987, 923, 347-354.	2.4	6
33	Generation of excited species catalyzed by horseradish peroxidase or hemin in the presence of reduced glutathione and H <sub>2</sub> O <sub>2</sub> . Free Radical Biology and Medicine, 1987, 3, 107-110.	2.9	18
34	Hemin-mediated oxidation of dithiothreitol reduces oxygen to H <sub>2</sub> O. Molecular and Cellular Biochemistry, 1987, 77, 111-20.	3.1	7
35	CO-reacting haemoproteins of neutrophils: Evidence for cytochrome b-245 and myeloperoxidase as potential oxidases during the respiratory burst. Bioscience Reports, 1987, 7, 193-199.	2.4	6
36	Neuromelanogenic and Cytotoxic Properties of Canine Brainstem Peroxidase. Journal of Neurochemistry, 1987, 48, 876-882.	3.9	18

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37	NAD(P)H oxidase and peroxidase activities in purified plasma membranes from cauliflower inflorescences. <i>Physiologia Plantarum</i> , 1987, 71, 9-19.	5.2	94
38	PHOTOSENSITIZATION BY ANTITUMORAGENTSâ€™6. PRODUCTION OF SUPEROXIDE RADICAL AND HYDROGEN PEROXIDE DURING ILLUMINATION OF DIAMINOANTHRACENEDIONES IN THE PRESENCE OF NADH IN AQUEOUS SOLUTIONS: AN EPR STUDY. <i>Photochemistry and Photobiology</i> , 1988, 47, 625-633.	2.5	19
39	Stimulated regimens in the peroxidase-oxidase reaction. <i>Theoretical and Experimental Chemistry</i> , 1988, 24, 165-172.	0.8	10
40	The influence of porphyrins on iron-catalysed generation of hydroxyl radicals. <i>Biochemical Journal</i> , 1988, 250, 197-201.	3.7	34
41	Abilities of peroxidases to catalyse peroxidase-oxidase oxidation of thiols. <i>Biochemical Journal</i> , 1988, 256, 757-762.	3.7	24
42	Dynamic elements of mixedâ€™mode oscillations and chaos in a peroxidaseâ€™oxidase model network. <i>Journal of Chemical Physics</i> , 1989, 90, 4168-4175.	3.0	27
43	Kinetics of the reaction of superoxide anion with ferric horseradish peroxidase. <i>BBA - Proteins and Proteomics</i> , 1989, 995, 133-137.	2.1	23
44	Chemiluminescent oxidation of ribose catalyzed by horseradish peroxidase in presence of hydrogen peroxide. <i>Free Radical Biology and Medicine</i> , 1989, 6, 565-571.	2.9	4
45	Oxygen radicals in CNS damage. <i>Chemico-Biological Interactions</i> , 1989, 72, 229-255.	4.0	207
46	NADH-dependent Fe <sup>3+</sup> +EDTA and oxygen reduction by plasma membrane vesicles from barley roots. <i>Physiologia Plantarum</i> , 1989, 75, 245-254.	5.2	69
47	Mechanism of horseradish peroxidase-catalyzed oxidation of malonaldehyde. <i>Archives of Biochemistry and Biophysics</i> , 1989, 272, 185-193.	3.0	18
48	Theoretical investigation of the peroxidase-oxidase chemical oscillator for quantitative enzyme analysis. <i>Analytica Chimica Acta</i> , 1990, 237, 381-390.	5.4	8
49	Experiments on the effects of external periodic variation of constraints on the thermodynamics of an oscillatory system. <i>Journal of Chemical Physics</i> , 1990, 92, 3579-3589.	3.0	24
50	Reactions of the NAD radical with higher oxidation states of horseradish peroxidase. <i>Biochemistry</i> , 1990, 29, 2080-2084.	2.5	19
51	Ovothiols as free-radical scavengers and the mechanism of ovothiol-promoted NAD(P)H-O <sub>2</sub> oxidoreductase activity. <i>Biochemistry</i> , 1990, 29, 1953-1961.	2.5	49
52	Steady-state kinetics of autoxidation of NAD(P)H initiated by hydroperoxyl radical, the acid form of superoxide anion radical. <i>Biochemical and Biophysical Research Communications</i> , 1991, 176, 846-851.	2.1	12
53	Mechanism of hydrogen peroxide production in porcine thyroid cells: evidence for intermediary formation of superoxide anion by NADPH-dependent hydrogen peroxide-generating machinery. <i>Biochemistry</i> , 1991, 30, 4880-4886.	2.5	30
54	A new model for oscillations in the peroxidase-oxidase reaction. <i>Biophysical Chemistry</i> , 1991, 40, 189-195.	2.8	13

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55	Mechanism of NADPH oxidation catalyzed by horse-radish peroxidase and 2,4-diacetyl-[2H]heme-substituted horse-radish peroxidase. FEBS Journal, 1991, 201, 507-513.	0.2	18
56	CHEMIEXCITATION IN THE PEROXIDATIVE METABOLISM OF DIETHYLSTILBESTROL. Photochemistry and Photobiology, 1992, 55, 279-285.	2.5	5
57	SPONTANEOUS LOW-LEVEL CHEMILUMINESCENCE FROM CHEMICAL AND ELECTROCHEMICAL OXIDATION OF Î²-DEHYDRO NICOTINEAMIDE ADENINE DINUCLEOTIDE. Photochemistry and Photobiology, 1992, 55, 903-909.	2.5	1
58	The peroxidaseâ€™NADH biochemical oscillator: experimental system, control variables, and oxygen mass transport. Analytica Chimica Acta, 1993, 283, 703-717.	5.4	25
59	OSCILLATORY LOW-LEVEL CHEMILUMINESCENCE FROM A NONEQUILIBRIUM Î²-NICOTINAMIDE ADENINE DINUCLEOTIDEâ€™PEROXIDASE SYSTEM: EXPERIMENTAL OBSERVATIONS and COMPUTER SIMULATIONS. Photochemistry and Photobiology, 1993, 57, 570-576.	2.5	13
60	An extended x-ray absorption fine structure investigation of the structure of the active site of lactoperoxidase. Biochemistry, 1993, 32, 2780-2786.	2.5	17
61	Role of superoxide anions in the mediation of endothelium-dependent contractions.. Hypertension, 1994, 23, 229-235.	2.7	157
62	Characterization of peroxidases in luminol chemiluminescence coupled with copper-catalysed oxidation of cysteamine. Luminescence, 1994, 9, 279-286.	0.0	7
63	Competing peroxidase and oxidase reactions in scopoletin-dependent H2O2-initiated oxidation of NADH by horseradish peroxidase. BBA - Proteins and Proteomics, 1994, 1204, 117-123.	2.1	14
64	A hydrogen peroxide assay based on the peroxidase-oxidase reaction. Numerical simulation of the reaction mechanism. FEBS Journal, 1994, 223, 489-496.	0.2	6
65	Superoxide generation by lipoxygenase in the presence of NADH and NADPH. Lipids and Lipid Metabolism, 1994, 1214, 171-179.	2.6	91
66	NADH oxidation is stimulated by an intermediate formed during vanadyl-H2O2 interaction. Biochimica Et Biophysica Acta - General Subjects, 1994, 1201, 289-297.	2.4	6
67	Oscillatory Chemiluminescence during Peroxidation of Umbelliferone Catalyzed by Horseradish Peroxidase. Bulletin of the Chemical Society of Japan, 1994, 67, 1301-1305.	3.2	5
68	Role of Amino Thiols as Radical Quenchers in Delayed Chemiluminescence of Luminol Catalyzed by Horseradish Peroxidase. Analytical Sciences, 1995, 11, 169-173.	1.6	5
69	Simultaneous manipulation of the nitric oxide and prostanoid pathways reduces myocardial reperfusion injury. Journal of Thoracic and Cardiovascular Surgery, 1995, 110, 1054-1062.	0.8	10
70	Transient and Steady-State Kinetics of the Oxidation of Scopoletin by Horseradish Peroxidase Compounds I, II and III in the Presence of NADH. FEBS Journal, 1995, 233, 364-371.	0.2	23
71	Mixed-mode oscillations and homoclinic chaos in an enzyme reaction. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 2857.	1.7	63
72	Categorization of Some Oscillatory Enzymatic Reactions. The Journal of Physical Chemistry, 1996, 100, 8556-8566.	2.9	38

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73	The Structure-Function Relationship and Reduction Potentials of High Oxidation States of Myoglobin and Peroxidase. <i>Biochemistry</i> , 1996, 35, 2413-2420.	2.5	60
74	Conversion of metmyoglobin to NO myoglobin in the presence of nitrite and reductants. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 1996, 1289, 329-335.	2.4	29
75	Kinetic studies of the oscillatory dynamics in the peroxidase-oxidase reaction catalyzed by four different peroxidases. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 1996, 1289, 377-384.	2.4	13
76	Oscillations in the peroxidase-oxidase reaction: a comparison of different peroxidases. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 1996, 1289, 397-403.	2.4	26
77	High rates of extracellular superoxide generation by cultured human fibroblasts: involvement of a lipid-metabolizing enzyme. <i>Biochemical Journal</i> , 1996, 318, 805-812.	3.7	70
78	Experimental Procedure for a Hydrogen Peroxide Assay Based on the Peroxidase-Oxidase Reaction. <i>FEBS Journal</i> , 1996, 238, 785-789.	0.2	13
79	Horseradish Peroxidase-Catalyzed Generation of Acetophenone and Benzophenone in the Triplet State*. <i>Photochemistry and Photobiology</i> , 1996, 63, 702-708.	2.5	17
80	Horseradish Peroxidase-Catalyzed Conjugation of Eugenol with Basic Amino Acids. <i>Free Radical Research</i> , 1996, 25, 5-12.	3.3	10
81	Quasiperiodicity in a detailed model of the peroxidase-oxidase reaction. <i>Journal of Chemical Physics</i> , 1996, 105, 10849-10859.	3.0	23
82	Detailed Model of the Peroxidase-Catalyzed Oxidation of Indole-3-Acetic Acid at Neutral pH. <i>The Journal of Physical Chemistry</i> , 1996, 100, 913-920.	2.9	25
83	Reduction of Dimension of a Chemically Realistic Model for the Peroxidase-Oxidase Oscillator. <i>The Journal of Physical Chemistry</i> , 1996, 100, 18911-18915.	2.9	4
84	Further Refinements of the Peroxidase-Oxidase Oscillator Mechanism: Mixed-Mode Oscillations and Chaos. <i>The Journal of Physical Chemistry</i> , 1996, 100, 18924-18930.	2.9	20
85	Co-oxidation of NADH and NADPH by a mammalian 15-lipoxygenase: inhibition of lipoxygenase activity at near-physiological NADH concentrations. <i>Biochemical Journal</i> , 1997, 327, 203-208.	3.7	5
86	Routes to Chaos in the Peroxidase-Oxidase Reaction: Period-Doubling and Period-Adding. <i>Journal of Physical Chemistry B</i> , 1997, 101, 5075-5083.	2.6	52
87	Lipid Peroxidation-Dependent Chemiluminescence from the Cyclization of Alkylperoxyl Radicals to Dioxetane Radical Intermediates. <i>Chemical Research in Toxicology</i> , 1997, 10, 1090-1096.	3.3	45
88	The Peroxidase-Oxidase Oscillator and Its Constituent Chemistries. <i>Chemical Reviews</i> , 1997, 97, 739-756.	47.7	102
89	Oscillations and Complex Dynamics in the Peroxidase-Oxidase Reaction Induced by Naturally Occurring Aromatic Substrates. <i>Journal of the American Chemical Society</i> , 1997, 119, 2084-2087.	13.7	24
90	Oscillations in peroxidase-catalyzed reactions and their potential function in vivo. <i>Biophysical Chemistry</i> , 1998, 72, 63-72.	2.8	36

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91	Diperoxovanadate participates in peroxidation reactions of H <sub>2</sub> O <sub>2</sub> in presence of abundant catalase. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 1998, 1381, 249-255.	2.4	12
92	Routes to Chaos in the Peroxidase <sup>+</sup> Oxidase Reaction. 2. The Fat Torus Scenario. <i>Journal of Physical Chemistry B</i> , 1998, 102, 632-640.	2.6	21
93	The Role of Naturally Occurring Phenols in Inducing Oscillations in the Peroxidase <sup>+</sup> Oxidase Reaction. <i>Biochemistry</i> , 1998, 37, 2458-2469.	2.5	45
94	Mechanism of Horseradish Peroxidase Catalyzed Epinephrine Oxidation: Obligatory Role of Endogenous O <sub>2</sub> - and H <sub>2</sub> O <sub>2</sub> . <i>Biochemistry</i> , 1998, 37, 16922-16933.	2.5	32
95	Resolution of Amino Thiols in Time-Resolved Luminol Chemiluminescence Catalyzed by Peroxidases.. <i>Analytical Sciences</i> , 1998, 14, 725-729.	1.6	12
96	Oxidation of biological electron donors and antioxidants by a reactive lactoperoxidase metabolite from nitrite (NO <sub>2</sub> <sup>-</sup> ): an EPR and spin trapping study. <i>Free Radical Biology and Medicine</i> , 1999, 26, 669-678.	2.9	39
97	Hydroxyl-radical production in physiological reactions. A novel function of peroxidase. <i>FEBS Journal</i> , 1999, 260, 726-735.	0.2	383
98	Biotransformations with Peroxidases. <i>Advances in Biochemical Engineering/Biotechnology</i> , 1999, 63, 73-108.	1.1	62
99	Does diphenylene iodonium chloride have any effect on the O <sub>2</sub> <sup>-</sup> -generating step of plant peroxidases?. <i>FEBS Letters</i> , 1999, 462, 254-256.	2.8	13
100	Routes to chaos in the peroxidase-oxidase reaction. , 1999, , 252-272.		3
101	Nicotinamide adenine dinucleotide species in the horseradish peroxidase-oxidase oscillator. <i>FEBS Journal</i> , 2000, 267, 5014-5022.	0.2	19
102	Chorion peroxidase-mediated NADH/O <sub>2</sub> oxidoreduction cooperated by chorion malate dehydrogenase-catalyzed NADH production: a feasible pathway leading to H <sub>2</sub> O <sub>2</sub> formation during chorion hardening in <i>Aedes aegypti</i> mosquitoes. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2000, 1523, 246-253.	2.4	13
103	On the role of methylene blue in the oscillating peroxidase <sup>+</sup> oxidase reaction. <i>Physical Chemistry Chemical Physics</i> , 2000, 2, 1685-1692.	2.8	18
104	Nonlinear Dynamics of the Peroxidase <sup>+</sup> Oxidase Reaction: I. Bistability and Bursting Oscillations at Low Enzyme Concentrations. <i>Journal of Physical Chemistry B</i> , 2001, 105, 310-321.	2.6	15
105	Nonlinear Dynamics of the Peroxidase <sup>+</sup> Oxidase Reaction. II. Compatibility of an Extended Model with Previously Reported Model-Data Correspondences. <i>Journal of Physical Chemistry B</i> , 2001, 105, 5331-5340.	2.6	19
106	NADH Oxidation by Manganese Peroxidase with or without $\hat{\pm}$ -Hydroxy Acid. <i>Bioscience, Biotechnology and Biochemistry</i> , 2002, 66, 717-721.	1.3	3
107	Simulations of temperature sensitivity of the peroxidase <sup>+</sup> oxidase oscillator. <i>Biophysical Chemistry</i> , 2002, 99, 259-270.	2.8	8
108	Response of the Peroxidase-Oxidase Oscillator to Light Is Controlled by MB+ <sup>+</sup> NADH Photochemistry. <i>Journal of Physical Chemistry B</i> , 2003, 107, 8637-8642.	2.6	8

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109	Catalase-peroxidases (KatG) Exhibit NADH Oxidase Activity. <i>Journal of Biological Chemistry</i> , 2004, 279, 43098-43106.	3.4	68
110	Generation of Reactive Oxygen Species in the Reaction Catalyzed by $\alpha$ -Ketoglutarate Dehydrogenase. <i>Journal of Neuroscience</i> , 2004, 24, 7771-7778.	3.6	407
111	Lipoxygenase-dependent superoxide release in skeletal muscle. <i>Journal of Applied Physiology</i> , 2004, 97, 661-668.	2.5	94
112	Enhanced oxidation of NAD(P)H by oxidants in the presence of dehydrogenases but no evidence for a superoxide-propagated chain oxidation of the bound coenzymes. <i>Free Radical Research</i> , 2006, 40, 857-863.	3.3	4
113	Hydrogen Peroxide-Mediated Isoniazid Activation Catalyzed by <i>Mycobacterium tuberculosis</i> Catalase $\gamma$ -Peroxidase (KatG) and Its S315T Mutant $\alpha$ , $\beta$ . <i>Biochemistry</i> , 2006, 45, 4131-4140.	2.5	149
114	Elementary Steps of Enzymatic Oxidation of Nifedipine Catalyzed by Horseradish Peroxidase. <i>Journal of Physical Chemistry B</i> , 2006, 110, 21232-21237.	2.6	8
115	The Role of Hydrogen Peroxide-Producing and Hydrogen Peroxide-Consuming Peroxidases in the Leaf Apoplast of Cowpea in Manganese Tolerance. <i>Plant Physiology</i> , 2006, 140, 1451-1463.	4.8	102
116	Magnetic Spin Effects in Enzymatic Reactions: $\alpha$ Radical Oxidation of NADH by Horseradish Peroxidase. <i>Journal of the American Chemical Society</i> , 2006, 128, 8651-8658.	13.7	58
117	Feedback loops for Shil $\alpha$ ™nikov chaos: The peroxidase-oxidase reaction. <i>Journal of Chemical Physics</i> , 2006, 125, 014901.	3.0	20
118	Reactive oxygen species in programmed death of pea guard cells. <i>Biochemistry (Moscow)</i> , 2008, 73, 1076-1084.	1.5	15
119	Ammonium $\alpha$ -dependent hydrogen peroxide production by mitochondria. <i>FEBS Letters</i> , 2008, 582, 2719-2724.	2.8	21
120	Programmed cell death in plants: Protective effect of phenolic compounds against chitosan and H <sub>2</sub> O <sub>2</sub> . <i>Biochemistry (Moscow)</i> , 2010, 75, 257-263.	1.5	6
121	Effect of Ca <sup>2+</sup> on programmed death of guard and epidermal cells of pea leaves. <i>Biochemistry (Moscow)</i> , 2010, 75, 614-622.	1.5	7
122	Characteristics of the level-of-evidence-1 disease forecast cancer biomarkers uPA and its inhibitor PAI-1. <i>Expert Review of Molecular Diagnostics</i> , 2010, 10, 947-962.	3.1	43
123	Degradation of pentachlorophenol by a novel peroxidase-catalyzed process in the presence of reduced nicotinamide adenine dinucleotide. <i>Chemosphere</i> , 2011, 83, 124-130.	8.2	12
124	A mechanistic study of the formation of hydroxyl radicals induced by horseradish peroxidase with NADH. <i>Journal of Biochemistry</i> , 2012, 152, 199-206.	1.7	11
125	Mixed-Mode Oscillations with Multiple Time Scales. <i>SIAM Review</i> , 2012, 54, 211-288.	9.5	431
126	Programmed cell death in plants: Protective effect of tetraphenylphosphonium and tetramethylrhodamine cations used as transmembrane quinone carriers. <i>Biochemistry (Moscow)</i> , 2012, 77, 354-361.	1.5	3



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127	Effects of Tyramine and 4-Aminophenol on the Oscillating Peroxidaseâ€“Oxidase Reaction. Journal of Physical Chemistry B, 2014, 118, 18-25.	2.6	1
128	Reaction Characteristic and Bleaching Process of Peroxidase. Oleoscience, 2015, 15, 469-475.	0.0	1
129	Rapid Bioorthogonal Chemistry Turn-on through Enzymatic or Long Wavelength Photocatalytic Activation of Tetrazine Ligation. Journal of the American Chemical Society, 2016, 138, 5978-5983.	13.7	121
130	Salicylhydroxamic acid enhances the NADH-oxidase activity of peroxidase in pea mitochondrial and chloroplast suspensions. Moscow University Biological Sciences Bulletin, 2016, 71, 19-23.	0.7	4
131	Enzymatic degradation of polyacrylamide in aqueous solution with peroxidase and $H_2O_2$ . Journal of Applied Polymer Science, 2017, 134, .	2.6	22
132	Complexity of a peroxidaseâ€“oxidase reaction model. Physical Chemistry Chemical Physics, 2021, 23, 1943-1955.	2.8	12
133	Chaos in the peroxidaseâ€“oxidase oscillator. Chaos, 2021, 31, 013119.	2.5	12
134	Oscillations. Applied Mathematical Sciences (Switzerland), 2015, , 397-430.	0.8	2
135	Steady-state and transient-state kinetic studies on the oxidation of 3,4-dimethoxybenzyl alcohol catalyzed by the ligninase of Phanerocheate chrysosporium Burds.. Journal of Biological Chemistry, 1986, 261, 1687-1693.	3.4	228
136	The mechanism of indole-3-acetic acid oxidation by horseradish peroxidases.. Journal of Biological Chemistry, 1979, 254, 872-878.	3.4	99
137	The relationship between a novel NAD(P)H oxidase activity of ovoperoxidase and the CN <sup>-</sup> -resistant respiratory burst that follows fertilization of sea urchin eggs.. Journal of Biological Chemistry, 1985, 260, 13163-13171.	3.4	32
138	Peroxidase-catalyzed formation of triplet acetone and chemiluminescence from isobutyraldehyde and molecular oxygen.. Journal of Biological Chemistry, 1985, 260, 10217-10225.	3.4	73
139	The mechanism of oxidation of nitroalkanes by horseradish peroxidase.. Journal of Biological Chemistry, 1983, 258, 9913-9924.	3.4	132
140	Mechanism of hydrogen peroxide formation catalyzed by NADPH oxidase in thyroid plasma membrane. Journal of Biological Chemistry, 1991, 266, 3739-3743.	3.4	114
141	Oxidation of dihydronicotinamides by flavin in enzyme and model reactions. Old yellow enzyme and lumiflavin.. Journal of Biological Chemistry, 1980, 255, 7362-7370.	3.4	8
142	Decoloration Reaction of Orange II Catalyzed by Horseradish Peroxidase in Organic Solvents/water System. Journal of Oleo Science, 2005, 54, 577-583.	1.4	1
143	STRUCTURE AND REACTIVITY OF PEROXIDASE HIGHER OXIDATION STATES. , 1980, , 273-283.		0
144	Dynamics of Oscillatory Chemical Systems. Springer Series in Synergetics, 1995, , 23-47.	0.4	0

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146	Complexity in subnetworks of a peroxidaseâ€“oxidase reaction model. <i>Chaos</i> , 2022, 32, .	2.5	4
148	Epigallocatechin Gallate: pH-Dependent Redox Properties and Effect on Respiration, Photosynthesis, and Cell Death in Pea Plants. <i>Biochemistry (Moscow)</i> , 2023, 88, 211-220.	1.5	1
149	Horseradish peroxidase (HRP) and glucose oxidase (GOX) based dual-enzyme system: Sustainable release of H <sub>2</sub> O <sub>2</sub> and its effect on the desirable ping pong biodegradation mechanism. <i>Environmental Research</i> , 2023, 229, 115979.	7.5	6
150	The Nature of the Chemical Bonds of High-Valent Transitionâ€“Metal Oxo (M=O) and Peroxo (MOO) Compounds: A Historical Perspective of the Metal Oxyâ€“Radical Character by the Classical to Quantum Computations. <i>Molecules</i> , 2023, 28, 7119.	3.8	2