

Reactions of hydroxylamine with the electron-donor side

Biochemistry

26, 8285-8295

DOI: [10.1021/bi00399a040](https://doi.org/10.1021/bi00399a040)

Citation Report

#	ARTICLE	IF	CITATIONS
1	The molecular "double-pivot"™ mechanism for water oxidation. <i>Biochimica Et Biophysica Acta - Reviews on Bioenergetics</i> , 1987, 895, 259-274.	0.2	36
2	Inhibition of electron transport in photosystem II by hydroxylamine: further evidence for two binding sites. <i>Biochemistry</i> , 1988, 27, 6297-6306.	2.5	18
3	Hydrogen peroxide oxidation catalyzed by chloride-depleted thylakoid membranes. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1988, 936, 149-156.	1.0	18
4	The reaction of H ₂ S with the photosynthetic water-oxidizing complex and its lack of reaction with the primary electron acceptor in spinach. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1988, 936, 228-235.	1.0	11
5	Electron Transport in Photosystems I and II. <i>Annual Review of Plant Biology</i> , 1988, 39, 379-411.	14.3	95
6	INVESTIGATION OF DAMAGE TO FOREST BY EPR SPECTROSCOPY in vivo. <i>Photochemistry and Photobiology</i> , 1989, 50, 209-211.	2.5	10
7	DIFFERENCE SPECTRA OF THE OXIDIZED INTERMEDIATES IN THE PHOTOSYNTHETIC OXYGEN-EVOLVING SYSTEM: EVIDENCE FOR A SMALL S ₀ →S ₁ ABSORPTION CHANGE. <i>Photochemistry and Photobiology</i> , 1989, 50, 235-241.	2.5	17
8	Oxidation of exogenous substrates by the O ₂ -evolving center of photosystem II and related catalytic air oxidation of secondary alcohols via a tetranuclear manganese(IV) complex. <i>Tetrahedron</i> , 1989, 45, 4903-4911.	1.9	14
9	Photosystem II, the water-splitting enzyme. <i>Trends in Biochemical Sciences</i> , 1989, 14, 227-232.	7.5	279
10	Manganese and calcium requirements for reconstitution of oxygen-evolution activity in manganese-depleted photosystem II membranes. <i>Biochemistry</i> , 1989, 28, 8181-8190.	2.5	108
11	Evidence that protein B of the thiosulphate-oxidizing system of <i>Thiobacillus versutus</i> contains a binuclear manganese cluster. <i>FEBS Letters</i> , 1989, 253, 239-243.	2.8	45
12	Alkylbenzyltrimethylammonium chloride, a stabilizer of the S-state system in the filamentous cyanobacterium <i>Oscillatoria chalybea</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1989, 975, 399-402.	1.0	7
13	The S ₀ state of photosystem II induced by hydroxylamine: differences between the structure of the manganese complex in the S ₀ and S ₁ states determined by x-ray absorption spectroscopy. <i>Biochemistry</i> , 1990, 29, 486-496.	2.5	107
14	A new mechanism-based inhibitor of photosynthetic water oxidation: acetone hydrazone. 1. Equilibrium reactions. <i>Biochemistry</i> , 1990, 29, 7759-7767.	2.5	3
15	Electron-transfer events leading to reconstitution of oxygen-evolution activity in manganese-depleted photosystem II membranes. <i>Biochemistry</i> , 1990, 29, 1385-1392.	2.5	85
16	A new mechanism-based inhibitor of photosynthetic water oxidation: acetone hydrazone. 2. Kinetic probes. <i>Biochemistry</i> , 1990, 29, 7767-7773.	2.5	6
17	Mass spectroscopic analysis of N ₂ formation by flash-induced oxidation of hydrazine and hydroxylamine in normal and tris-treated tobacco chloroplasts. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1990, 1015, 288-294.	1.0	10
18	A guide to electron paramagnetic resonance spectroscopy of Photosystem II membranes. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1991, 1056, 1-18.	1.0	187

#	ARTICLE	IF	CITATIONS
19	Calcium activation of photosynthetic water oxidation. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1991, 1059, 1-15.	1.0	132
20	Inactivation and reactivation of manganese catalase: oxidation-state assignments using x-ray absorption spectroscopy. <i>Biochemistry</i> , 1991, 30, 10486-10490.	2.5	55
21	Mechanism of irreversible inhibition of oxygen evolution in photosystem II by tris(hydroxymethyl)aminomethane. <i>Biochemistry</i> , 1991, 30, 7888-7894.	2.5	21
22	Unusual low reactivity of the water oxidase in redox state S3 toward exogenous reductants. Analysis of the NH ₂ OH- and NH ₂ NH ₂ -induced modifications of flash-induced oxygen evolution in isolated spinach thylakoids. <i>Biochemistry</i> , 1991, 30, 7852-7862.	2.5	101
23	Compound I radical in site-directed mutants of cytochrome c peroxidase as probed by electron paramagnetic resonance and electron-nuclear double resonance. <i>Biochemistry</i> , 1991, 30, 1986-1996.	2.5	103
24	Calcium retards hydroxylamine inhibition of oxygen evolution activity by stabilization of manganese(2+) binding to photosystem II. <i>Biochemistry</i> , 1991, 30, 7836-7842.	2.5	39
25	Photosystem II: Molecular Organization, Function, and Acclimation. , 1991, , 1-81.		112
26	Nanosecond fluorescence of chloroplasts as a probe for electron transfer disruption in photosystem II. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 1991, 8, 175-181.	3.8	4
27	Investigation of the origin of the "S3" EPR signal from the oxygen-evolving complex of photosystem 2: the role of tyrosine Z. <i>Biochemistry</i> , 1992, 31, 4562-4573.	2.5	126
28	The manganese and calcium ions of photosynthetic oxygen evolution. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1992, 1102, 269-352.	1.0	1,080
29	Chemical oxidation and reduction of the O ₂ -evolution center in Photosystem II. <i>Photosynthesis Research</i> , 1993, 38, 441-448.	2.9	4
30	Stabilization of the Mn-cluster of the oxygen-evolving complex by glycinebetaine. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1993, 1144, 92-96.	1.0	33
31	Stimulatory Effects of an Ammonium Salt Biocide on Photosynthetic Electron Transport Reactions. <i>Zeitschrift Fur Naturforschung - Section C Journal of Biosciences</i> , 1994, 49, 87-94.	1.4	2
32	Photoinactivation of Photosystem II by in situ-Photoproduced Hydroxyurea Radicals. <i>Biochemistry</i> , 1994, 33, 10487-10493.	2.5	9
33	An ENDOR study of structural changes in the environment of the dark stable tyrosine radical, YD, of Photosystem 2 induced by inhibition of the oxygen evolving complex. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1994, 1188, 318-324.	1.0	2
34	Investigation of the ammonium chloride and ammonium acetate inhibition of oxygen evolution by Photosystem II. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1994, 1188, 325-334.	1.0	27
35	Fourier transform infrared spectrum of the radical cation of β^2 -carotene photoinduced in photosystem II. <i>FEBS Letters</i> , 1994, 356, 179-182.	2.8	67
36	Reduced Derivatives of the Mn Cluster in the Oxygen-Evolving Complex of Photosystem II: An EXAFS Study. <i>Journal of the American Chemical Society</i> , 1996, 118, 2387-2399.	13.7	99

#	ARTICLE	IF	CITATIONS
37	Primary reactions of oxygenic photosynthesis. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1996, 100, 1923-1942.	0.9	52
38	Detection of an EPR Multiline Signal for the S ₀ * State in Photosystem II. Biochemistry, 1997, 36, 11055-11060.	2.5	183
39	Introduction of Novel Substrate Oxidation into Cytochrome c Peroxidase by Cavity Complementation: Δ Oxidation of 2-Aminothiazole and Covalent Modification of the Enzyme. Biochemistry, 1997, 36, 11665-11674.	2.5	56
40	S ₃ State of the Water Oxidase in Photosystem II. Biochemistry, 1997, 36, 6862-6873.	2.5	90
41	Catalase-Free Photosystem II: Δ The O ₂ -Evolving Complex Does Not Dismutate Hydrogen Peroxide. Biochemistry, 1998, 37, 5052-5059.	2.5	21
42	NO Reversibly Reduces the Water-Oxidizing Complex of Photosystem II through S ₀ and S ₋₁ to the State Characterized by the Mn(II)-Mn(III) Multiline EPR Signal. Biochemistry, 1998, 37, 16445-16451.	2.5	25
43	Mechanism of photosynthetic water oxidation: combining biophysical studies of photosystem II with inorganic model chemistry. Biochimica Et Biophysica Acta - Bioenergetics, 2001, 1503, 229-245.	1.0	226
44	Reduction of the Mn Cluster of the Water-Oxidizing Enzyme by Nitric Oxide: Δ Formation of an S ₋₂ State. Biochemistry, 2002, 41, 3057-3064.	2.5	46
45	Electron Transfer from the Water Oxidizing Complex at Cryogenic Temperatures: Δ The S ₁ to S ₂ Step. Biochemistry, 2002, 41, 4117-4126.	2.5	73
46	Effect of Hydroxylamine on Photosystem II: Δ Reinvestigation of Electron Paramagnetic Resonance Characteristics Reveals Possible S State Intermediates. Biochemistry, 2003, 42, 5500-5507.	2.5	24
47	Acceptor and donor-side interactions of phenolic inhibitors in Photosystem II. Biochimica Et Biophysica Acta - Bioenergetics, 2003, 1604, 23-32.	1.0	22
48	Over-reduced states of the Mn-cluster in cucumber leaves induced by dark-chilling treatment. Biochimica Et Biophysica Acta - Bioenergetics, 2003, 1604, 151-158.	1.0	27
49	EPR of Free Radicals in Solids. Progress in Theoretical Chemistry and Physics, 2003, , .	0.2	18
50	Low-Temperature Electron Transfer in Photosystem II: Δ A Tyrosyl Radical and Semiquinone Charge Pair. Biochemistry, 2004, 43, 13787-13795.	2.5	60
51	Probing reactive sites within the Photosystem II manganese cluster: Evidence for separate populations of manganese that differ in redox potential. Physical Chemistry Chemical Physics, 2004, 6, 4897.	2.8	20
52	Manganese Clusters with Relevance to Photosystem II. Chemical Reviews, 2004, 104, 3981-4026.	47.7	549
53	Reduction-Induced Inhibition and Mn(II) Release from the Photosystem II Oxygen-Evolving Complex by Hydroquinone or NH ₂ OH Are Consistent with a Mn(III)/Mn(III)/Mn(IV)/Mn(IV) Oxidation State for the Dark-Adapted Enzyme. Biochemistry, 2005, 44, 2129-2142.	2.5	36
54	EPR kinetic studies of the S ₁ state in spinach thylakoids. Biochimica Et Biophysica Acta - Bioenergetics, 2005, 1708, 35-41.	1.0	5

#	ARTICLE	IF	CITATIONS
55	Effect of bicarbonate on the water-oxidizing complex of photosystem II in the super-reduced S-states. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2006, 1757, 253-261.	1.0	17
56	Interaction of N,N,N',N'-tetramethyl-p-phenylenediamine with photosystem II as revealed by thermoluminescence: Reduction of the higher oxidation states of the Mn cluster and displacement of plastoquinone from the QB niche. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2006, 1757, 1547-1556.	1.0	14
57	Rapid chlorophyll a fluorescence transient of <i>Lemna gibba</i> leaf as an indication of light and hydroxylamine effect on photosystem II activity. <i>Photochemical and Photobiological Sciences</i> , 2007, 6, 532.	2.9	12
58	Oxidation of N^{III} and N^{I} by an $\{\text{Mn}_4\text{O}_6\}^{\text{4+}}$ Core in Aqueous Media: Proton-Coupled Electron Transfer. <i>European Journal of Inorganic Chemistry</i> , 2007, 2007, 4500-4507.	2.0	7
59	Evidence against Bicarbonate Bound in the O_2 -Evolving Complex of Photosystem II. <i>Biochemistry</i> , 2008, 47, 3073-3075.	2.5	43
60	Production of reactive oxygen species by photosystem II. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2009, 1787, 1151-1160.	1.0	288
61	The reduced S ₁ and S ₂ oxidation states of the O ₂ -evolving complex of photosystem II: An EPR microwave power saturation study. <i>Photosynthetica</i> , 2009, 47, 567-574.	1.7	1
62	Light-induced water oxidation in photosystem II. <i>Frontiers in Bioscience - Landmark</i> , 2011, 16, 3072.	3.0	36
63	Molecule-Based Exchange-Coupled High-Spin Clusters: Conventional, High-Field/High-Frequency and Pulse-Based Electron Spin Resonance of Molecule-Based Magnetically Coupled Systems. <i>Progress in Theoretical Chemistry and Physics</i> , 2012, , 71-162.	0.2	1
64	EPR of Free Radicals in Solids II. <i>Progress in Theoretical Chemistry and Physics</i> , 2012, , .	0.2	4
65	Role of oxido incorporation and ligand lability in expanding redox accessibility of structurally related Mn ₄ clusters. <i>Chemical Science</i> , 2013, 4, 3986.	7.4	40
66	Photoinhibition of Photosystem II. <i>International Review of Cell and Molecular Biology</i> , 2013, 300, 243-303.	3.2	235
67	Oxygen Atom Transfer and Oxidative Water Incorporation in Cuboidal Mn ₃ MO _n Complexes Based on Synthetic, Isotopic Labeling, and Computational Studies. <i>Journal of the American Chemical Society</i> , 2013, 135, 1073-1082.	13.7	95
68	Non-photochemical reduction of thylakoid photosynthetic redox carriers in vitro: Relevance to cyclic electron flow around photosystem I?. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2014, 1837, 1944-1954.	1.0	31
69	Emissive $\{\text{Mn}_4\text{Ca}\}^{\text{III}}$ Clusters with Square Pyramidal Topologies: Syntheses and Structural, Spectroscopic, and Physicochemical Characterization. <i>Inorganic Chemistry</i> , 2015, 54, 2137-2151.	4.0	23
70	Structural Diversities in Heterometallic Mn^{I} -Ca Cluster Chemistry from the Use of Salicylhydroxamic Acid: $\{\text{Mn}^{\text{III}}_3\text{Ca}_2\}$, $\{\text{Mn}^{\text{II/III}}_6\text{Ca}_2\}$, $\{\text{Mn}^{\text{III/IV}}_8\text{Ca}\}$, and $\{\text{Mn}^{\text{III}}_8\text{Ca}_2\}$ Complexes with Relevance to Both High- and Low-Valent States of the Oxygen-Evolving Complex. <i>Inorganic Chemistry</i> , 2017, 56, 10760-10774.	4.0	15
71	Frequently asked questions about chlorophyll fluorescence, the sequel. <i>Photosynthesis Research</i> , 2017, 132, 13-66.	2.9	419
72	New insights in Mn-Ca chemistry from the use of oximate-based ligands: $\{\text{Mn}^{\text{II/III}}_2\text{Ca}_2\}$ and $\{\text{Mn}^{\text{IV}}_2\text{Ca}_2\}$ complexes with relevance to both low- and high-valent states of the oxygen-evolving complex. <i>Polyhedron</i> , 2018, 149, 39-44.	2.2	7

#	ARTICLE	IF	CITATIONS
73	Analysis of the transformation effect in cytochrome b559 of photosystem II in terms of the model of the heme-quinone redox interaction. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2018, 1859, 1161-1172.	1.0	2
74	Model Lipid Membranes Assembled from Natural Plant Thylakoids into 2D Microarray Patterns as a Platform to Assess the Organization and Photophysics of Light-Harvesting Proteins. <i>Small</i> , 2021, 17, e2006608.	10.0	7
75	Bioinorganic Chemistry of Manganese Related to Photosynthetic Oxygen Evolution. <i>Progress in Inorganic Chemistry</i> , 0, , 99-142.	3.0	94
76	Molecule-Based Exchange-Coupled High-Spin Clusters. <i>Progress in Theoretical Chemistry and Physics</i> , 2003, , 407-490.	0.2	3
77	Oxygen evolution. , 1992, , 179-229.		77
78	Functional Mechanism in Reaction Center II Based on Analysis of 7 Time-Resolved Optical Difference Spectra and Hydroxylamine "Titration", 1990, , 837-840.		2
79	Probing the Lower States of the Water-Oxidising Complex of Photosystem II by the Use of No as a Redox Agent. , 1998, , 1241-1246.		0
81	Binding of the substrate analog methanol in the oxygen-evolving complex of photosystem II in the D1-N87A genetic variant of cyanobacteria. <i>Faraday Discussions</i> , 2022, 234, 195-213.	3.2	4