Joan Selverstone Valentine

List of Publications by Year
in descending order

234 papers	26,260 citations	4388 86 h-index	6471 157 g-index
246 all docs	246 docs citations	246 times ranked	17536 citing authors

#	Article	IF	Citations
1	A pH Switch Controls Zinc Binding in Tomato Copperâ€“Zinc Superoxide Dismutase. Biochemistry, 2021, 60, 1597-1608.	2.5	0
2	An ecophysiological explanation for manganese enrichment in rock varnish. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	19
3	A Novel SOD1 Intermediate Oligomer, Role of Free Thiols and Disulfide Exchange. Frontiers in Neuroscience, 2020, 14, 619279.	2.8	4
4	How did life come to tolerate and thrive in an oxygenated world?. Free Radical Biology and Medicine, 2019, 140, 1-3.	2.9	3
5	How manganese empowered life with dioxygen (and vice versa). Free Radical Biology and Medicine, 2019, 140, 113-125.	2.9	33
6	Exposure of Solvent-Inaccessible Regions in the Amyloidogenic Protein Human SOD1 Determined by Hydroxyl Radical Footprinting. Journal of the American Society for Mass Spectrometry, 2019, 30, 218-226.	2.8	8
7	Biological Chemistry of Copper-Zinc Superoxide Dismutase and Its Link to Amyotrophic Lateral Sclerosis. , 2018, , 125-177.		12
8	Distinct Reactivity of a Mononuclear Peroxocobalt(III) Species toward Activation of Nitriles. Journal of the American Chemical Society, 2017, 139, 10960-10963.	13.7	19
9	Relationship between mutant Cu/Zn superoxide dismutase 1 maturation and inclusion formation in cell models. Journal of Neurochemistry, 2017, 140, 140-150.	3.9	15
10	How did life survive Earth's great oxygenation?. Current Opinion in Chemical Biology, 2016, 31, 166-178.	6.1	92
11	Solving 21st Century Problems in Biological Inorganic Chemistry Using Synthetic Models. Accounts of Chemical Research, 2015, 48, 2659-2660.	15.6	6
12	The Disulfide Bond, but Not Zinc or Dimerization, Controls Initiation and Seeded Growth in Amyotrophic Lateral Sclerosis-linked Cu,Zn Superoxide Dismutase (SOD1) Fibrillation. Journal of Biological Chemistry, 2015, 290, 30624-30636.	3.4	50
13	Insights into the Role of the Unusual Disulfide Bond in Copper-Zinc Superoxide Dismutase. Journal of Biological Chemistry, 2015, 290, 2405-2418.	3.4	61
14	Differential localization and potency of manganese porphyrin superoxide dismutase-mimicking compounds in Saccharomyces cerevisiae. Redox Biology, 2014, 3, 1-6.	9.0	14
15	Insights into SOD1-linked amyotrophic lateral sclerosis from NMR studies of Ni2+- and other metal-ion-substituted wild-type copperâ€“zinc superoxide dismutases. Journal of Biological Inorganic Chemistry, 2014, 19, 647-657.	2.6	9
16	Superoxide Dismutases and Superoxide Reductases. Chemical Reviews, 2014, 114, 3854-3918.	47.7	717
17	Yeast copperâ€“zinc superoxide dismutase can be activated in the absence of its copper chaperone. Journal of Biological Inorganic Chemistry, 2013, 18, 985-992.	2.6	7
18	Calcium Ions Promote Superoxide Dismutase 1 (SOD1) Aggregation into Non-fibrillar Amyloid. Journal of Biological Chemistry, 2013, 288, 25219-25228.	3.4	52

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19	Structural similarity of wild-type and ALS-mutant superoxide dismutase-1 fibrils using limited proteolysis and atomic force microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 10934-10939.	7.1	47
20	SOD1 Aggregation and ALS: Role of Metallation States and Disulfide Status. Current Topics in Medicinal Chemistry, 2013, 12, 2560-2572.	2.1	89
21	Tetramerization Reinforces the Dimer Interface of MnSOD. PLoS ONE, 2013, 8, e62446.	2.5	15
22	SOD1 Aggregation and ALS: Role of Metallation States and Disulfide Status. Current Topics in Medicinal Chemistry, 2013, 999, 22-28.	2.1	1
23	Six-coordinate manganese(3+) in catalysis by yeast manganese superoxide dismutase. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 14314-14319.	7.1	30
24	Predictive studies of H-atom abstraction reactions by an iron(iv)â€“oxo corrole cation radical oxidant. Chemical Communications, 2012, 48, 3491.	4.1	20
25	Biologically relevant mechanism for catalytic superoxide removal by simple manganese compounds. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 6892-6897.	7.1	142
26	A novel variant of human superoxide dismutase 1 harboring amyotrophic lateral sclerosisâ€associated and experimental mutations in metalâ€binding residues and free cysteines lacks toxicity <i>in vivo</i>. Journal of Neurochemistry, 2012, 121, 475-485.	3.9	20
27	Comparison of Two Yeast MnSODs: Mitochondrial Saccharomyces cerevisiae versus Cytosolic Candida albicans. Journal of the American Chemical Society, 2011, 133, 20878-20889.	13.7	37
28	Comparative Characterization of Fungal Anthracenone and Naphthacenedione Biosynthetic Pathways Reveals an Î±-Hydroxylation-Dependent Claisen-like Cyclization Catalyzed by a Dimanganese Thioesterase. Journal of the American Chemical Society, 2011, 133, 15773-15785.	13.7	81
29	Structure and reactivity of a mononuclear non-haem iron(III)â€“peroxo complex. Nature, 2011, 478, 502-505.	27.8	292
30	Conference Scene: ALS in California: a report from the First Annual California ALS Research Summit. Neurodegenerative Disease Management, 2011, 1, 281-284.	2.2	1
31	Metabolic alterations in yeast lacking copperâ€“zinc superoxide dismutase. Free Radical Biology and Medicine, 2011, 50, 1591-1598.	2.9	29
32	Copper and Zinc Metallation Status of Copper-Zinc Superoxide Dismutase from Amyotrophic Lateral Sclerosis Transgenic Mice. Journal of Biological Chemistry, 2011, 286, 2795-2806.	3.4	112
33	Accumulation of Porphyrin-based SOD Mimics in Mitochondria is Proportional to Their Lipophilicity: S. cerevisiae Study of ortho Mn(III) N-alkylpyridylporphyrins. Free Radical Biology and Medicine, 2010, 49, S199.	2.9	18
34	A Biomimetic Ferric Hydroperoxo Porphyrin Intermediate. Angewandte Chemie - International Edition, 2010, 49, 2099-2101.	13.8	61
35	Probing in vivo Mn²⁺speciation and oxidative stress resistance in yeast cells with electron-nuclear double resonance spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 15335-15339.	7.1	113
36	Climate Change and the Integrity of Science. Science, 2010, 328, 689-690.	12.6	143

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37	Reversible Oâ˘'O Bond Cleavage and Formation between Mn(IV)-Peroxo and Mn(V)-Oxo Corroles. Journal of the American Chemical Society, 2010, 132, 14030-14032.	13.7	81
38	Investigation of the Highly Active Manganese Superoxide Dismutase fromSaccharomyces cerevisiae. Journal of the American Chemical Society, 2010, 132, 12525-12527.	13.7	24
39	Disrupted Zinc-Binding Sites in Structures of Pathogenic SOD1 Variants D124V and H80R. Biochemistry, 2010, 49, 5714-5725.	2.5	50
40	Metal Deficiency Increases Aberrant Hydrophobicity of Mutant Superoxide Dismutases That Cause Amyotrophic Lateral Sclerosis. Journal of Biological Chemistry, 2009, 284, 27746-27758.	3.4	60
41	Metal-free Superoxide Dismutase-1 and Three Different Amyotrophic Lateral Sclerosis Variants Share a Similar Partially Unfolded Î²-Barrel at Physiological Temperature. Journal of Biological Chemistry, 2009, 284, 34382-34389.	3.4	39
42	Aggregation of Copperâ€"Zinc Superoxide Dismutase in Familial and Sporadic ALS. Antioxidants and Redox Signaling, 2009, 11, 1603-1614.	5.4	140
43	Radioprotective effects of manganese-containing superoxide dismutase mimics on ataxiaâ€"telangiectasia cells. Free Radical Biology and Medicine, 2009, 47, 250-260.	2.9	65
44	Loss of Metal Ions, Disulfide Reduction and Mutations Related to Familial ALS Promote Formation of Amyloid-Like Aggregates from Superoxide Dismutase. PLoS ONE, 2009, 4, e5004.	2.5	113
45	Manganous Phosphate Acts as a Superoxide Dismutase. Journal of the American Chemical Society, 2008, 130, 4604-4606.	13.7	171
46	Initiation and elongation in fibrillation of ALS-linked superoxide dismutase. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18663-18668.	7.1	205
47	Introduction: Reactive Oxygen Species Special Feature. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 8178-8178.	7.1	19
48	Detergent-insoluble Aggregates Associated with Amyotrophic Lateral Sclerosis in Transgenic Mice Contain Primarily Full-length, Unmodified Superoxide Dismutase-1. Journal of Biological Chemistry, 2008, 283, 8340-8350.	3.4	79
49	Structures of the G85R Variant of SOD1 in Familial Amyotrophic Lateral Sclerosis. Journal of Biological Chemistry, 2008, 283, 16169-16177.	3.4	85
50	SOD1 and Amyotrophic Lateral Sclerosis: Mutations and Oligomerization. PLoS ONE, 2008, 3, e1677.	2.5	160
51	Metal-free superoxide dismutase forms soluble oligomers under physiological conditions: A possible general mechanism for familial ALS. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 11263-11267.	7.1	219
52	Metalation of the Amyotrophic Lateral Sclerosis Mutant Glycine 37 to Arginine Superoxide Dismutase (SOD1) Apoprotein Restores Its Structural and Dynamical Properties in Solution to Those of Metalated Wild-Type SOD1. Biochemistry, 2007, 46, 9953-9962.	2.5	25
53	Binding of a Single Zinc Ion to One Subunit of Copperâ˘'Zinc Superoxide Dismutase Apoprotein Substantially Influences the Structure and Stability of the Entire Homodimeric Protein. Journal of the American Chemical Society, 2007, 129, 4575-4583.	13.7	97
54	How do ALS-associated mutations in superoxide dismutase 1 promote aggregation of the protein?. Trends in Biochemical Sciences, 2007, 32, 78-85.	7.5	236

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55	Only one of a wide assortment of manganese-containing SOD mimicking compounds rescues the slow aerobic growth phenotypes of both Escherichia coli and Saccharomyces cerevisiae strains lacking superoxide dismutase enzymes. Journal of Inorganic Biochemistry, 2007, 101, 1875-1882.	3.5	50
56	Variable Metallation of Human Superoxide Dismutase: Atomic Resolution Crystal Structures of Cuâ€“Zn, Znâ€“Zn and As-isolated Wild-type Enzymes. Journal of Molecular Biology, 2006, 356, 1152-1162.	4.2	156
57	Superoxide dismutase 1 modulates expression of transferrin receptor. Journal of Biological Inorganic Chemistry, 2006, 11, 489-498.	2.6	41
58	Local Unfolding in a Destabilized, Pathogenic Variant of Superoxide Dismutase 1 Observed with H/D Exchange and Mass Spectrometry. Journal of Biological Chemistry, 2006, 281, 18167-18176.	3.4	58
59	Familial ALS-superoxide dismutases associate with mitochondria and shift their redox potentials. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 13860-13865.	7.1	231
60	Exogenous manganous ion at millimolar levels rescues all known dioxygen-sensitive phenotypes of yeast lacking CuZnSOD. Journal of Biological Inorganic Chemistry, 2005, 10, 913-923.	2.6	53
61	Metal-Deficient Copper-Zinc Superoxide Dismutase and Familial Amyotrophic Lateral Sclerosis. ACS Symposium Series, 2005, , 348-365.	0.5	1
62	Destabilization of apoprotein is insufficient to explain Cu,Zn-superoxide dismutase-linked ALS pathogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 10516-10521.	7.1	148
63	Fully Metallated S134N Cu,Zn-Superoxide Dismutase Displays Abnormal Mobility and Intermolecular Contacts in Solution. Journal of Biological Chemistry, 2005, 280, 35815-35821.	3.4	56
64	Induction of Phenotypes Resembling CuZn-Superoxide Dismutase Deletion in Wild-Type Yeast Cells:â€‰ An in Vivo Assay for the Role of Superoxide in the Toxicity of Redox-Cycling Compounds. Chemical Research in Toxicology, 2005, 18, 1279-1286.	3.3	34
65	Structural consequences of the familial amyotrophic lateral sclerosis SOD1 mutant His46Arg. Protein Science, 2005, 14, 1201-1213.	7.6	75
66	COPPER-ZINC SUPEROXIDE DISMUTASE AND AMYOTROPHIC LATERAL SCLEROSIS. Annual Review of Biochemistry, 2005, 74, 563-593.	11.1	679
67	Superoxide Inhibits 4Fe-4S Cluster Enzymes Involved in Amino Acid Biosynthesis. Journal of Biological Chemistry, 2004, 279, 32055-32062.	3.4	110
68	Mechanisms for activating Cu- and Zn-containing superoxide dismutase in the absence of the CCS Cu chaperone. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 5964-5969.	7.1	163
69	Mutations in Saccharomyces cerevisiae Iron-Sulfur Cluster Assembly Genes and Oxidative Stress Relevant to Cu,Zn Superoxide Dismutase. Journal of Biological Chemistry, 2004, 279, 29938-29943.	3.4	28
70	Dimer destabilization in superoxide dismutase may result in disease-causing properties: Structures of motor neuron disease mutants. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 5976-5981.	7.1	198
71	Dissociation of Human Copper-Zinc Superoxide Dismutase Dimers Using Chaotrope and Reductant. Journal of Biological Chemistry, 2004, 279, 54558-54566.	3.4	149
72	Local Nanomechanical Motion of the Cell Wall of Saccharomyces cerevisiae. Science, 2004, 305, 1147-1150.	12.6	328

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73	The perplexing role of copper-zinc superoxide dismutase in amyotrophic lateral sclerosis (Lou) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	2.6	54
74	Amyloid-like filaments and water-filled nanotubes formed by SOD1 mutant proteins linked to familial ALS. Nature Structural and Molecular Biology, 2003, 10, 461-467.	8.2	311
75	Dynamic Properties of the G93A Mutant of Copperâ˘'Zinc Superoxide Dismutase As Detected by NMR Spectroscopy:â€‰ Implications for the Pathology of Familial Amyotrophic Lateral Sclerosis. Biochemistry, 2003, 42, 1890-1899.	2.5	60
76	The Structure of Holo and Metal-deficient Wild-type Human Cu, Zn Superoxide Dismutase and its Relevance to Familial Amyotrophic Lateral Sclerosis. Journal of Molecular Biology, 2003, 328, 877-891.	4.2	222
77	Spectroscopic Investigation of Stellacyanin Mutants:Â Axial Ligand Interactions at the Blue Copper Site. Journal of the American Chemical Society, 2003, 125, 11314-11328.	13.7	85
78	Misfolded CuZnSOD and amyotrophic lateral sclerosis. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 3617-3622.	7.1	510
79	An Alternative Mechanism of Bicarbonate-mediated Peroxidation by Copper-Zinc Superoxide Dismutase. Journal of Biological Chemistry, 2003, 278, 21032-21039.	3.4	77
80	<i>SOD2</i> Functions Downstream of Sch9 to Extend Longevity in Yeast. Genetics, 2003, 163, 35-46.	2.9	312
81	Familial Amyotrophic Lateral Sclerosis-associated Mutations Decrease the Thermal Stability of Distinctly Metallated Species of Human Copper/Zinc Superoxide Dismutase. Journal of Biological Chemistry, 2002, 277, 15932-15937.	3.4	206
82	Decreased Metallation and Activity in Subsets of Mutant Superoxide Dismutases Associated with Familial Amyotrophic Lateral Sclerosis. Journal of Biological Chemistry, 2002, 277, 15923-15931.	3.4	324
83	In vivo peroxidative activity of FALS-mutant human CuZnSODs expressed in yeast. Free Radical Biology and Medicine, 2002, 32, 169-174.	2.9	33
84	Do oxidatively modified proteins cause ALS?. Free Radical Biology and Medicine, 2002, 33, 1314-1320.	2.9	63
85	Crowding and hydration effects on protein conformation: a study with sol-gel encapsulated proteins 1 1Edited by P. E. Wright. Journal of Molecular Biology, 2001, 314, 911-922.	4.2	236
86	Molecular confinement influences protein structure and enhances thermal protein stability. Protein Science, 2001, 10, 250-261.	7.6	378
87	Evidence for a Novel Role of Copper-Zinc Superoxide Dismutase in Zinc Metabolism. Journal of Biological Chemistry, 2001, 276, 44798-44803.	3.4	54
88	Yeast Lacking Cu-Zn Superoxide Dismutase Show Altered Iron Homeostasis. Journal of Biological Chemistry, 2000, 275, 11645-11649.	3.4	82
89	Models of Superoxide Dismutases. , 2000, , 461-508.		21
90	Loss of in Vitro Metal Ion Binding Specificity in Mutant Copper-Zinc Superoxide Dismutases Associated with Familial Amyotrophic Lateral Sclerosis. Journal of Biological Chemistry, 2000, 275, 1007-1014.	3.4	149

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91	Yeast Lacking Superoxide Dismutase(s) Show Elevated Levels of â€œFree Ironâ€•as Measured by Whole Cell Electron Paramagnetic Resonance. Journal of Biological Chemistry, 2000, 275, 29187-29192.	3.4	118
92	Effects of Nitric Oxide on the Copper-Responsive Transcription Factor Ace1 in Saccharomyces cerevisiae: Cytotoxic and Cytoprotective Actions of Nitric Oxide. Archives of Biochemistry and Biophysics, 2000, 377, 296-303.	3.0	32
93	Copper(2+) Binding to the Surface Residue Cysteine 111 of His46Arg Human Copperâ^'Zinc Superoxide Dismutase, a Familial Amyotrophic Lateral Sclerosis Mutantâ€. Biochemistry, 2000, 39, 8125-8132.	2.5	89
94	Cobalt(2+) Binding to Human and Tomato Copper Chaperone for Superoxide Dismutase:Â Implications for the Metal Ion Transfer Mechanismâ€,â€¡. Biochemistry, 2000, 39, 5413-5421.	2.5	58
95	X-ray Absorption Edge and EXAFS Studies of the Blue Copper Site in Stellacyanin:Â Effects of Axial Amide Coordinationâ€. Journal of Physical Chemistry B, 2000, 104, 10814-10819.	2.6	50
96	Structural Information through NMR Hyperfine Shifts in Blue Copper Proteins. Journal of the American Chemical Society, 2000, 122, 3701-3707.	13.7	95
97	X-ray Crystallographic and Analytical Ultracentrifugation Analyses of Truncated and Full-Length Yeast Copper Chaperones for SOD (LYS7):â€‰ A Dimerâ^'Dimer Model of LYS7â^'SOD Association and Copper Delivery,. Biochemistry, 2000, 39, 3611-3623.	2.5	50
98	Nucleophilicity of Iron-Peroxo Porphyrin Complexes. Structure and Bonding, 2000, , 37-60.	1.0	88
99	Bio-inorganic chemistry: what is it, and what's so exciting?. Current Opinion in Chemical Biology, 1999, 3, 129-130.	6.1	6
100	A Structure-Based Mechanism for Copperâ^'Zinc Superoxide Dismutaseâ€,â€¡. Biochemistry, 1999, 38, 2167-2178.	2.5	254
101	Synthesis of sol-gel encapsulated heme proteins with chemical sensing properties. Journal of Materials Chemistry, 1999, 9, 45-53.	6.7	134
102	Mitochondrial Superoxide Decreases Yeast Survival in Stationary Phase. Archives of Biochemistry and Biophysics, 1999, 365, 131-142.	3.0	205
103	Reactions of Copper-Zinc Superoxide Dismutases with Hydrogen Peroxide. , 1999, , 221-228.		1
104	Copper-Zinc Superoxide Dismutase and ALS. Advances in Experimental Medicine and Biology, 1999, 448, 193-203.	1.6	11
105	Metal ion reconstitution studies of yeast copper-zinc superoxide dismutase: the "phantom" subunit and the possible role of Lys7p. Journal of Biological Inorganic Chemistry, 1998, 3, 650-662.	2.6	46
106	Strategies for encapsulating biomolecules in solâ€"gel matrices11Paper presented at Sympos. Synergistic Synthesis of Inorganic Materials, March 1996, SchloÃŸ Ringberg, Germany.. Acta Materialia, 1998, 46, 737-741.	7.9	102
107	The dark side of dioxygen biochemistry. Current Opinion in Chemical Biology, 1998, 2, 253-262.	6.1	189
108	Subunit asymmetry in the threeâ€dimensional structure of a human CuZnSOD mutant found in familial amyotrophic lateral sclerosis. Protein Science, 1998, 7, 545-555.	7.6	101

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109	Uclacyanins, stellacyanins, and plantacyanins are distinct subfamilies of phytocyanins: Plantâ€specific mononuclear blue copper proteins. Protein Science, 1998, 7, 1915-1929.	7.6	167
110	Protein Folding Special Issue. Accounts of Chemical Research, 1998, 31, 697-697.	15.6	22
111	Mimicking Cytochrome P-450 2B4 and Aromatase:Â Aromatization of a Substrate Analogue by a Peroxo Fe(III) Porphyrin Complex. Journal of the American Chemical Society, 1998, 120, 5331-5332.	13.7	72
112	Spectroscopic and Geometric Variations in Perturbed Blue Copper Centers:Â Electronic Structures of Stellacyanin and Cucumber Basic Protein. Journal of the American Chemical Society, 1998, 120, 9621-9631.	13.7	140
113	Switching on the Nucleophilic Reactivity of a Ferric Porphyrin Peroxo Complex. Journal of the American Chemical Society, 1998, 120, 2652-2653.	13.7	83
114	Reactions of Hydrogen Peroxide with Familial Amyotrophic Lateral Sclerosis Mutant Human Copper-Zinc Superoxide Dismutases Studied by Pulse Radiolysis. Journal of Biological Chemistry, 1998, 273, 30104-30109.	3.4	59
115	Human Bcl-2 Reverses Survival Defects in Yeast Lacking Superoxide Dismutase and Delays Death of Wild-Type Yeast. Journal of Cell Biology, 1997, 137, 1581-1588.	5.2	203
116	Design for a New Year. Accounts of Chemical Research, 1997, 30, 1-1.	15.6	5
117	Metalloporphyrin Peroxo Complexes of Iron(III), Manganese(III), and Titanium(IV). Comparative Studies Demonstrating That the Iron(III) Complex Is Extremely Nucleophilic. Inorganic Chemistry, 1997, 36, 979-984.	4.0	78
118	BIOCHEMISTRY: Enhanced: Delivering Copper Inside Yeast and Human Cells. Science, 1997, 278, 817-818.	12.6	233
119	Engineering metal-binding sites in proteins. Current Opinion in Structural Biology, 1997, 7, 495-500.	5.7	117
120	Dioxygen activation by iron complexes. The search for reactive intermediates. Journal of Molecular Catalysis A, 1997, 117, 71-82.	4.8	18
121	Do posttranslational modifications of CuZnSOD lead to sporadic amyotrophic lateral sclerosis?. Annals of Neurology, 1997, 42, 135-137.	5.3	32
122	Nickel Complexes as Antioxidants. Inhibition of Aldehyde Autoxidation by Nickel(II) Tetraazamacrocycles. Inorganic Chemistry, 1996, 35, 6632-6633.	4.0	49
123	New Type 2 Copperâ^'Cysteinate Proteins. Copper Site Histidine-to-Cysteine Mutants of Yeast Copperâ^'Zinc Superoxide Dismutase. Inorganic Chemistry, 1996, 35, 1692-1700.	4.0	51
124	The Diverse Reactivity of Peroxy Ferric Porphyrin Complexes of Electron-Rich and Electron-Poor Porphyrins. Journal of the American Chemical Society, 1996, 118, 2008-2012.	13.7	80
125	Nanoconfined Proteins and Enzymes: Solâ€"Gel-Based Biomolecular Materials. ACS Symposium Series, 1996, , 351-365.	0.5	18
126	Unusual Trigonal-Planar Copper Configuration Revealed in the Atomic Structure of Yeast Copperâ^'Zinc Superoxide Dismutaseâ€,â€¡. Biochemistry, 1996, 35, 2316-2321.	2.5	116

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127	Copperâ^'Zinc Superoxide Dismutase:â€‰ Why Not pH-Dependent?. Journal of the American Chemical Society, 1996, 118, 6556-6561.	13.7	178
128	Altered Reactivity of Superoxide Dismutase in Familial Amyotrophic Lateral Sclerosis. Science, 1996, 271, 515-518.	12.6	715
129	Autoxidation of Ubiquinol-6 Is Independent of Superoxide Dismutaseâ€. Biochemistry, 1996, 35, 6595-6603.	2.5	23
130	Mutations in copper-zinc superoxide dismutase that cause amyotrophic lateral sclerosis alter the zinc binding site and the redox behavior of the protein.. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 12240-12244.	7.1	176
131	Metal Complex-Catalyzed Epoxidation of Olefins by Dioxygen with Co-Oxidation of Aldehydes. A Mechanistic Study. Inorganic Chemistry, 1996, 35, 1045-1049.	4.0	197
132	Short and Snappy. Accounts of Chemical Research, 1996, 29, 1-1.	15.6	6
133	Epoxidierung von elektronenarmen Olefinen mit einem nucleophilen Peroxo(porphyrinato)â€Fe^{III}â€Komplex, dem Peroxo(tetramesitylporphyrinato)ferrat(1â^'). Angewandte Chemie, 1996, 108, 195-196.	2.0	7
134	Epoxidation of Electron-Deficient Olefins by a Nucleophilic Iron(III) Peroxo Porphyrinato Complex, Peroxo(tetramesitylporphyrinato)ferrate(1â^'). Angewandte Chemie International Edition in English, 1996, 35, 206-208.	4.4	40
135	Encapsulation of the ferritin protein in sol-gel derived silica glasses. Journal of Sol-Gel Science and Technology, 1996, 7, 109-116.	2.4	20
136	Enzymatic activity of oxalate oxidase and kinetic measurements by optical methods in transparent sol-gel monoliths. Journal of Sol-Gel Science and Technology, 1996, 7, 117-121.	2.4	21
137	A missing link in cupredoxins: Crystal structure of cucumber stellacyanin at 1.6 Ã… resolution. Protein Science, 1996, 5, 2175-2183.	7.6	181
138	Cloning, expression, and spectroscopic characterization of <i>Cucumis sativus</i> stellacyanin in its nonglycosylated form. Protein Science, 1996, 5, 2184-2192.	7.6	44
139	Superoxide Dismutase Activity Is Essential for Stationary Phase Survival in Saccharomyces cerevisiae. Journal of Biological Chemistry, 1996, 271, 12275-12280.	3.4	469
140	Encapsulation of the Ferritin Protein in Sol-Gel Derived Silica Glasses. , 1996, , 109-116.		0
141	Enzymatic Activity of Oxalate Oxidase and Kinetic Measurements by Optical Methods in Transparent Sol-Gel Monoliths. , 1996, , 117-121.		0
142	Mutations associated with amyotrophic lateral sclerosis convert superoxide dismutase from an antiapoptotic gene to a proapoptotic gene: studies in yeast and neural cells.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 3024-3028.	7.1	318
143	Nicotinamide Adenine Dinucleotide Phosphate Fluorescence and Absorption Monitoring of Enzymic Activity in Silicate Sol-Gels for Chemical Sensing Applications. Journal of the American Chemical Society, 1995, 117, 9095-9096.	13.7	65
144	Modeling the Reactivity of .alpha.-Ketoglutarate-Dependent Non-Heme Iron(II)-Containing Enzymes. Inorganic Chemistry, 1995, 34, 2265-2266.	4.0	81

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145	Measurement of Dissolved Oxygen in Water Using Glass-Encapsulated Myoglobin. Analytical Chemistry, 1995, 67, 1505-1509.	6.5	88
146	Synthesis of Protein-Doped Sol-Gel SiO2 Thin Films: Evidence for Rotational Mobility of Encapsulated Cytochrome c. Chemistry of Materials, 1995, 7, 1431-1434.	6.7	82
147	Copper-Zinc Superoxide Dismutase: Mechanistic and Biological Studies. , 1995, , 77-91.		4
148	Biological Reactions of Dioxygen: An Introduction. , 1995, , 1-36.		6
149	Biomolecular materials based on sol-gel encapsulated proteins. Journal of Sol-Gel Science and Technology, 1994, 2, 791-795.	2.4	27
150	Encapsulation and reactivity of the enzyme oxalate oxidase in a sol-gel derived glass. Journal of Sol-Gel Science and Technology, 1994, 2, 827-829.	2.4	5
151	Sol-gel encapsulation methods for biosensors. Analytical Chemistry, 1994, 66, 1120A-1127A.	6.5	664
152	Raman Spectroscopy as an Indicator of Cu-S Bond Length in Type 1 and Type 2 Copper Cysteinate Proteins. Journal of the American Chemical Society, 1994, 116, 11489-11498.	13.7	155
153	Role of the Bridging Histidyl Imidazolate Ligand in Yeast Copper-Zinc Superoxide Dismutase. Characterization of the His63Ala Mutant. Journal of the American Chemical Society, 1994, 116, 9743-9744.	13.7	20
154	Characterization of three yeast copper-zinc superoxide dismutase mutants analogous to those coded for in familial amyotrophic lateral sclerosis.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 9906-9910.	7.1	88
155	Bacteriorhodopsin encapsulated in transparent sol-gel glass: a new biomaterial. Chemistry of Materials, 1993, 5, 115-120.	6.7	147
156	Bcl-2 inhibition of neural death: decreased generation of reactive oxygen species. Science, 1993, 262, 1274-1277.	12.6	1,670
157	Resonance Raman excitation profiles indicate multiple Cys .fwdarw. Cu charge transfer transitions in type 1 copper proteins. Journal of the American Chemical Society, 1993, 115, 4256-4263.	13.7	126
158	ENDOR and ESEEM investigation of AgI2CuII2 bovine superoxide dismutase. Inorganic Chemistry, 1993, 32, 1813-1819.	4.0	15
159	Construction of a blue copper site at the native zinc site of yeast copper-zinc superoxide dismutase. Journal of the American Chemical Society, 1993, 115, 5907-5918.	13.7	107
160	Reevaluation of the significance of oxygen-18 incorporation in metal complex-catalyzed oxygenation reactions carried out in the presence of oxygen-18-labeled water (H218O). Journal of the American Chemical Society, 1993, 115, 1772-1778.	13.7	138
161	Yeast and mammalian metallothioneins functionally substitute for yeast copper-zinc superoxide dismutase.. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 8013-8017.	7.1	239
162	Non-Porphyrin Iron Complex-Catalyzed Epoxidation of Olefins. , 1993, , 183-198.		8

#	Article	IF	Citations
163	Encapsulation and Reactivity of Proteins in Optically Transparent Porous Silicate Glasses Prepared by the Sol-Gel Method. Materials Research Society Symposia Proceedings, 1992, 277, 99.	0.1	0
164	Enzymatic activity of glucose oxidase encapsulated in transparent glass by the sol-gel method. Chemistry of Materials, 1992, 4, 495-497.	6.7	197
165	The redesign of a type 2 into a type 1 copper protein: construction and characterization of yeast copper, zinc superoxide dismutase mutants. Journal of the American Chemical Society, 1992, 114, 3560-3562.	13.7	44
166	Two-dimensional proton NMR studies of the paramagnetic metalloenzyme copper-nickel superoxide dismutase. Inorganic Chemistry, 1992, 31, 4433-4435.	4.0	28
167	Spectroelectrochemistry of copper-zinc superoxide dismutase. Inorganic Chemistry, 1992, 31, 925-927.	4.0	53
168	Encapsulation of proteins in transparent porous silicate glasses prepared by the sol-gel method. Science, 1992, 255, 1113-1115.	12.6	724
169	Lewis acidic catalysts for olefin epoxidation by iodosylbenzene. Journal of the American Chemical Society, 1991, 113, 7195-7205.	13.7	114
170	Iron-cyclam complexes as catalysts for the epoxidation of olefins by 30% aqueous hydrogen peroxide in acetonitrile and methanol. Journal of the American Chemical Society, 1991, 113, 7052-7054.	13.7	208
171	Null mutants of Saccharomyces cerevisiae Cu,Zn superoxide dismutase: characterization and spontaneous mutation rates. Journal of Bacteriology, 1991, 173, 5918-5920.	2.2	194
172	ACE1, a copper-dependent transcription factor, activates expression of the yeast copper, zinc superoxide dismutase gene.. Proceedings of the National Academy of Sciences of the United States of America, 1991, 88, 8558-8562.	7.1	191
173	Complexometric titrations of protein-bound metal ions: A method for determining binding constants. Analytical Biochemistry, 1990, 186, 31-40.	2.4	3
174	NMR studies of cobalt(II)-substituted derivatives of bovine copper-zinc superoxide dismutase. Effects of pH, phosphate, and metal migration. Journal of the American Chemical Society, 1990, 112, 4256-4264.	13.7	12
175	Zinc(II) complexes and aluminum(III) porphyrin complexes catalyze the epoxidation of olefins by iodosylbenzene. Journal of the American Chemical Society, 1990, 112, 4977-4979.	13.7	90
176	Silver-binding properties of bovine cuprozinc superoxide dismutase and the overall stability of selected metal-ion derivatives. Journal of the American Chemical Society, 1990, 112, 1538-1545.	13.7	16
177	NMR studies of nickel(II)-substituted derivatives of bovine copper-zinc superoxide dismutase with nickel(II) bound in the copper site. Journal of the American Chemical Society, 1990, 112, 6374-6383.	13.7	16
178	Reaction of cyclohexene with iodosylbenzene catalyzed by non-porphyrin complexes of iron(III) and aluminum(III). Newly discovered products and a new mechanistic proposal. Journal of the American Chemical Society, 1990, 112, 7826-7828.	13.7	73
179	The Bioinorganic Chemistry of Nickel. Herausgegeben von <i>J. R. Lancaster, Jr</i>. VCH Verlagsgesellschaft, Weinheim/VCH Publishers, New York 1988. XVIII, 337 S., geb., DM 175.00. â€“ ISBN 3â€527â€26692â€5/0â€89573â€338â€2. Angewandte Chemie, 1989, 101, 1571-1572.	2.0	0
180	Characterization of copper-nickel and silver-nickel bovine superoxide dismutases by proton NMR spectroscopy. Inorganic Chemistry, 1988, 27, 4458-4463.	4.0	23

#	Article	IF	Citations
181	Differential scanning calorimetry of copper-zinc-superoxide dismutase, the apoprotein, and its zinc-substituted derivatives. Biochemistry, 1988, 27, 950-958.	2.5	119
182	Magnetic and spectroscopic characterization of an iron porphyrin peroxide complex. Peroxoferrioctaethylporphyrin(1-). Journal of the American Chemical Society, 1988, 110, 1382-1388.	13.7	114
183	Oxygen Atom Transfer Reactions at Binuclear Copper Sites. ACS Symposium Series, 1988, , 105-115.	0.5	2
184	NMR study of cobalt(II)-substituted yeast and human copper-zinc superoxide dismutase. Inorganic Chemistry, 1988, 27, 728-733.	4.0	26
185	The copper, zinc-superoxide dismutase gene of Saccharomyces cerevisiae: cloning, sequencing, and biological activity.. Proceedings of the National Academy of Sciences of the United States of America, 1988, 85, 4789-4793.	7.1	139
186	Mechanisms of Dioxygen Activation in Metal-Containing Monooxygenases: Enzymes and Model Systems. , 1988, , 175-187.		8
187	Electronic structure of low-spin ferric porphyrins: a single-crystal EPR and structural investigation of the influence of axial ligand orientation and the effects of pseudo-Jahn-Teller distortion. Journal of the American Chemical Society, 1987, 109, 3301-3308.	13.7	84
188	Peroxo(tetraphenylporphinato)manganese(III) and chloro(tetraphenylporphinato)manganese(II) anions. Synthesis, crystal structures, and electronic structures.. Journal of the American Chemical Society, 1987, 109, 1425-1434.	13.7	160
189	Preparation and characterization of Cu2Ni2 and Ag2Ni2 superoxide dismutase, two new metal-substituted derivatives. Journal of the American Chemical Society, 1987, 109, 4426-4428.	13.7	16
190	Phosphorus-31 NMR study of the interaction of inorganic phosphate with bovine copper-zinc superoxide dismutase. Inorganic Chemistry, 1987, 26, 2788-2791.	4.0	23
191	Direct formation of complexes between cytochrome P-450 and nitrosoarenes. Biochemistry, 1986, 25, 2714-2719.	2.5	14
192	Epoxidation of olefins by iodosylbenzene catalyzed by binuclear copper(II) complexes. Journal of the American Chemical Society, 1986, 108, 5006-5008.	13.7	59
193	Mechanism of oxidation of N-hydroxyphentermine by superoxide. Biochemistry, 1985, 24, 4161-4167.	2.5	15
194	Copper-zinc superoxide dismutase: A unique biological "ligand" for bioinorganic studies. Journal of Chemical Education, 1985, 62, 990.	2.3	75
195	Influence of adrenalectomy and dexamethasone on rat liver metallothionein and superoxide dismutase activity. Inorganica Chimica Acta, 1984, 91, L21-L22.	2.4	4
196	Phosphate is an inhibitor of copper-zinc superoxide dismutase. Biochemistry, 1984, 23, 2079-2082.	2.5	46
197	Oxygenation of organic substrates by iodosylbenzene catalyzed by soluble manganese, iron, cobalt, or copper salts in acetonitrile. Inorganic Chemistry, 1984, 23, 4121-4123.	4.0	44
198	Copper ion mediated epoxidation of olefins by iodosylbenzene. Journal of the American Chemical Society, 1984, 106, 814-816.	13.7	61

#	Article	IF	Citations
199	Influence of hydrogen bonding on the properties of iron porphyrin imidazole complexes. An internally hydrogen bonded imidazole ligand. Journal of the American Chemical Society, 1984, 106, 4136-4144.	13.7	95
200	[7] Methods for the study of superoxide chemistry in nonaqueous solutions. Methods in Enzymology, 1984, 105, 71-81.	1.0	64
201	Reactivity of the peroxo ligand in metalloporphyrin complexes. Reaction of sulfur dioxide with iron and titanium porphyrin peroxo complexes to give sulfato complexes of sulfate. Inorganic Chemistry, 1984, 23, 3548-3552.	4.0	54
202	Crystal structure and properties of a potassium cryptate salt of bis(4-methylimidazolato)(tetraphenylporphinato)iron(III). Inorganic Chemistry, 1983, 22, 3934-3940.	4.0	38
203	Concerning the Radical Character of Superoxide. The Hâ€"O Bond Energy of HO^{â^'}₂. Israel Journal of Chemistry, 1983, 23, 439-441.	2.3	5
204	How innocuous is superoxide? Reply to comments. Accounts of Chemical Research, 1982, 15, 200-200.	15.6	11
205	New five- and six-coordinate imidazole and imidazolate complexes of ferric tetraphenylporphyrin. Journal of the American Chemical Society, 1982, 104, 2588-2595.	13.7	105
206	Spectroscopic studies of copper(II) bound at the native copper site or substituted at the native zinc site of bovine erythrocuprein (superoxide dismutase). Journal of the American Chemical Society, 1982, 104, 6310-6317.	13.7	67
207	The pH dependence of metal ion binding to the native zinc site of bovine erythrocuprein (superoxide) Tj ETQq1 1 0.784314 rgBT /Overlo	13.7	41
208	Reduced anion-binding affinity of Cu,Zn superoxide dismutases chemically modified at arginine. Biochemical and Biophysical Research Communications, 1982, 108, 1376-1382.	2.1	31
209	Modes of Bonding of Dioxygen, Oxide, and Hydroxide to Iron Porphyrins and Copper. , 1982, , 229-235.		0
210	How super is superoxide?. Accounts of Chemical Research, 1981, 14, 393-400.	15.6	1,276
211	Reactions of superoxide with iron porphyrins in aprotic solvents. A high spin ferric porphyrin peroxo complex. Journal of the American Chemical Society, 1980, 102, 4268-4271.	13.7	174
212	THE CHEMICAL REACTIVITY OF SUPEROXIDE ANION IN APROTIC VERSUS PROTIC MEDIA: A REVIEW. , 1979, , 659-677.		14
213	Reactions of superoxide in aprotic solvents. A superoxo complex of copper(II) rac-5,7,7,12,14,14-hexamethyl-1,4,8,11-tetraazacyclotetradecane. Journal of the American Chemical Society, 1979, 101, 7744-7746.	13.7	40
214	Reversible loss of metal ions from the zinc binding site of copper-zinc superoxide dismutase. The low pH transition. Journal of the American Chemical Society, 1979, 101, 6454-6456.	13.7	58
215	Kinetics of carbon monoxide binding to Fe(TPP)(Im) and Fe(TPP)(Im-): evidence regarding protein control of heme reactivity. Journal of the American Chemical Society, 1979, 101, 3396-3398.	13.7	39
216	pH-dependent migration of copper(II) to the vacant zinc-binding site of zinc-free bovine erythrocyte superoxide dismutase. Proceedings of the National Academy of Sciences of the United States of America, 1979, 76, 4245-4249.	7.1	102

#	Article	IF	Citations
217	Coupling between oxidation state and hydrogen bond conformation in heme proteins. Proceedings of the National Academy of Sciences of the United States of America, 1979, 76, 1009-1013.	7.1	131
218	The influence of axial ligands on metalloporphyrin visible absorption spectra. Complexes of tetraphenylporphinatozinc. Journal of the American Chemical Society, 1978, 100, 5075-5080.	13.7	387
219	REACTIONS OF SUPEROXIDE WITH METALLOPORPHYRINS. , 1978, , 933-940.		5
220	Imidazolate complexes of ferric porphyrins. Journal of the American Chemical Society, 1977, 99, 5799-5800.	13.7	45
221	Nuclear magnetic resonance and chemical modification studies of bovine erythrocyte superoxide dismutase: evidence for zinc-promoted organization of the active site structure. Biochemistry, 1977, 16, 1136-1141.	2.5	75
222	Superoxotetraphenylporphinatozinc(1-). Journal of the American Chemical Society, 1977, 99, 3522-3523.	13.7	36
223	Reaction of superoxide with the manganese(III) tetraphenylporphine cation. Inorganic Chemistry, 1976, 15, 1997-1999.	4.0	56
224	Cleavage of esters by superoxide. Journal of Organic Chemistry, 1976, 41, 586-588.	3.2	97
225	Oxidative cleavage of .alpha.-keto, .alpha.-hydroxy, and .alpha.-halo ketones, esters, and carboxylic acids by superoxide. Journal of Organic Chemistry, 1976, 41, 1077-1078.	3.2	58
226	Convenient preparation of solutions of superoxide anion and the reaction of superoxide anion with a copper(II) complex. Journal of the American Chemical Society, 1975, 97, 224-226.	13.7	217
227	Reaction of superoxide with alkyl halides and tosylates. Journal of Organic Chemistry, 1975, 40, 1678-1680.	3.2	105
228	Interdimer exchange in linear chain copper acetate-pyrazine. Journal of the American Chemical Society, 1974, 96, 97-103.	13.7	94
229	Dioxygen ligand in mononuclear Group VIII transition metal complexes. Chemical Reviews, 1973, 73, 235-245.	47.7	331
230	A new hydrido-iridium(III) isomer of Ir(PPh3)2(CO)Cl. Journal of the Chemical Society Chemical Communications, 1973, , 857.	2.0	16
231	Preparation and photochemical decompositions of acido-substituted .mu.-superoxo-dicobalt-ammine derivatives. Inorganic Chemistry, 1973, 12, 1697-1699.	4.0	5
232	Photochemistry of (en)2Co(NH2)(O2)Co(en)24+. Inorganic Chemistry, 1971, 10, 393-395.	4.0	67
233	Photochemical decomposition of two .mu.-superoxo-dicobalt ammines in acidic aqueous solutions. Journal of the American Chemical Society, 1971, 93, 1111-1117.	13.7	10
234	Photoinduced oxidative addition of 9,10-phenanthrenequinone to Ir(PPh3)2(CO)(Cl). Journal of the American Chemical Society, 1970, 92, 5795-5797.	13.7	28