Joan Selverstone Valentine

List of Publications by Year
in descending order

234 papers	26,260 citations	4370 86 h-index	6454 157 g-index
246 all docs	246 docs citations	246 times ranked	17536 citing authors

#	Article	IF	Citations
1	Bcl-2 inhibition of neural death: decreased generation of reactive oxygen species. Science, 1993, 262, 1274-1277.	6.0	1,670
2	How super is superoxide?. Accounts of Chemical Research, 1981, 14, 393-400.	7.6	1,276
3	Encapsulation of proteins in transparent porous silicate glasses prepared by the sol-gel method. Science, 1992, 255, 1113-1115.	6.0	724
4	Superoxide Dismutases and Superoxide Reductases. Chemical Reviews, 2014, 114, 3854-3918.	23.0	717
5	Altered Reactivity of Superoxide Dismutase in Familial Amyotrophic Lateral Sclerosis. Science, 1996, 271, 515-518.	6.0	715
6	COPPER-ZINC SUPEROXIDE DISMUTASE AND AMYOTROPHIC LATERAL SCLEROSIS. Annual Review of Biochemistry, 2005, 74, 563-593.	5.0	679
7	Sol-gel encapsulation methods for biosensors. Analytical Chemistry, 1994, 66, 1120A-1127A.	3.2	664
8	Misfolded CuZnSOD and amyotrophic lateral sclerosis. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 3617-3622.	3.3	510
9	Superoxide Dismutase Activity Is Essential for Stationary Phase Survival in Saccharomyces cerevisiae. Journal of Biological Chemistry, 1996, 271, 12275-12280.	1.6	469
10	The influence of axial ligands on metalloporphyrin visible absorption spectra. Complexes of tetraphenylporphinatozinc. Journal of the American Chemical Society, 1978, 100, 5075-5080.	6.6	387
11	Molecular confinement influences protein structure and enhances thermal protein stability. Protein Science, 2001, 10, 250-261.	3.1	378
12	Dioxygen ligand in mononuclear Group VIII transition metal complexes. Chemical Reviews, 1973, 73, 235-245.	23.0	331
13	Local Nanomechanical Motion of the Cell Wall of Saccharomyces cerevisiae. Science, 2004, 305, 1147-1150.	6.0	328
14	Decreased Metallation and Activity in Subsets of Mutant Superoxide Dismutases Associated with Familial Amyotrophic Lateral Sclerosis. Journal of Biological Chemistry, 2002, 277, 15923-15931.	1.6	324
15	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.	3.3	318
16	<i>SOD2</i> Functions Downstream of Sch9 to Extend Longevity in Yeast. Genetics, 2003, 163, 35-46.	1.2	312
17	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.	3.6	311
18	Structure and reactivity of a mononuclear non-haem iron(III)â€“peroxo complex. Nature, 2011, 478, 502-505.	13.7	292

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19	A Structure-Based Mechanism for Copperâ˘Zinc Superoxide Dismutaseâ€,â€¡. Biochemistry, 1999, 38, 2167-2178.	1.2	254
20	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.	3.3	239
21	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.	2.0	236
22	How do ALS-associated mutations in superoxide dismutase 1 promote aggregation of the protein?. Trends in Biochemical Sciences, 2007, 32, 78-85.	3.7	236
23	BIOCHEMISTRY: Enhanced: Delivering Copper Inside Yeast and Human Cells. Science, 1997, 278, 817-818.	6.0	233
24	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.	3.3	231
25	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.	2.0	222
26	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.	3.3	219
27	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.	6.6	217
28	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.	6.6	208
29	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.	1.6	206
30	Mitochondrial Superoxide Decreases Yeast Survival in Stationary Phase. Archives of Biochemistry and Biophysics, 1999, 365, 131-142.	1.4	205
31	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.	3.3	205
32	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.	2.3	203
33	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.	3.3	198
34	Enzymatic activity of glucose oxidase encapsulated in transparent glass by the sol-gel method. Chemistry of Materials, 1992, 4, 495-497.	3.2	197
35	Metal Complex-Catalyzed Epoxidation of Olefins by Dioxygen with Co-Oxidation of Aldehydes. A Mechanistic Study. Inorganic Chemistry, 1996, 35, 1045-1049.	1.9	197
36	Null mutants of Saccharomyces cerevisiae Cu,Zn superoxide dismutase: characterization and spontaneous mutation rates. Journal of Bacteriology, 1991, 173, 5918-5920.	1.0	194

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37	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.	3.3	191
38	The dark side of dioxygen biochemistry. Current Opinion in Chemical Biology, 1998, 2, 253-262.	2.8	189
39	A missing link in cupredoxins: Crystal structure of cucumber stellacyanin at 1.6 Ã… resolution. Protein Science, 1996, 5, 2175-2183.	3.1	181
40	Copperâ˘'Zinc Superoxide Dismutase:â€‰ Why Not pH-Dependent?. Journal of the American Chemical Society, 1996, 118, 6556-6561.	6.6	178
41	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.	3.3	176
42	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.	6.6	174
43	Manganous Phosphate Acts as a Superoxide Dismutase. Journal of the American Chemical Society, 2008, 130, 4604-4606.	6.6	171
44	Uclacyanins, stellacyanins, and plantacyanins are distinct subfamilies of phytocyanins: Plantâ€specific mononuclear blue copper proteins. Protein Science, 1998, 7, 1915-1929.	3.1	167
45	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.	3.3	163
46	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.	6.6	160
47	SOD1 and Amyotrophic Lateral Sclerosis: Mutations and Oligomerization. PLoS ONE, 2008, 3, e1677.	1.1	160
48	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.	2.0	156
49	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.	6.6	155
50	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.	1.6	149
51	Dissociation of Human Copper-Zinc Superoxide Dismutase Dimers Using Chaotrope and Reductant. Journal of Biological Chemistry, 2004, 279, 54558-54566.	1.6	149
52	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.	3.3	148
53	Bacteriorhodopsin encapsulated in transparent sol-gel glass: a new biomaterial. Chemistry of Materials, 1993, 5, 115-120.	3.2	147
54	Climate Change and the Integrity of Science. Science, 2010, 328, 689-690.	6.0	143

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55	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.	3.3	142
56	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.	6.6	140
57	Aggregation of Copperâ€"Zinc Superoxide Dismutase in Familial and Sporadic ALS. Antioxidants and Redox Signaling, 2009, 11, 1603-1614.	2.5	140
58	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.	3.3	139
59	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.	6.6	138
60	Synthesis of sol-gel encapsulated heme proteins with chemical sensing properties. Journal of Materials Chemistry, 1999, 9, 45-53.	6.7	134
61	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.	3.3	131
62	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.	6.6	126
63	Differential scanning calorimetry of copper-zinc-superoxide dismutase, the apoprotein, and its zinc-substituted derivatives. Biochemistry, 1988, 27, 950-958.	1.2	119
64	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.	1.6	118
65	Engineering metal-binding sites in proteins. Current Opinion in Structural Biology, 1997, 7, 495-500.	2.6	117
66	Unusual Trigonal-Planar Copper Configuration Revealed in the Atomic Structure of Yeast Copperâˆ'Zinc Superoxide Dismutaseâ€,â€¡. Biochemistry, 1996, 35, 2316-2321.	1.2	116
67	Magnetic and spectroscopic characterization of an iron porphyrin peroxide complex. Peroxoferrioctaethylporphyrin(1-). Journal of the American Chemical Society, 1988, 110, 1382-1388.	6.6	114
68	Lewis acidic catalysts for olefin epoxidation by iodosylbenzene. Journal of the American Chemical Society, 1991, 113, 7195-7205.	6.6	114
69	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.	3.3	113
70	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.	1.1	113
71	Copper and Zinc Metallation Status of Copper-Zinc Superoxide Dismutase from Amyotrophic Lateral Sclerosis Transgenic Mice. Journal of Biological Chemistry, 2011, 286, 2795-2806.	1.6	112
72	Superoxide Inhibits 4Fe-4S Cluster Enzymes Involved in Amino Acid Biosynthesis. Journal of Biological Chemistry, 2004, 279, 32055-32062.	1.6	110

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73	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.	6.6	107
74	Reaction of superoxide with alkyl halides and tosylates. Journal of Organic Chemistry, 1975, 40, 1678-1680.	1.7	105
75	New five- and six-coordinate imidazole and imidazolate complexes of ferric tetraphenylporphyrin. Journal of the American Chemical Society, 1982, 104, 2588-2595.	6.6	105
76	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.	3.3	102
77	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.	3.8	102
78	Subunit asymmetry in the threeâ€dimensional structure of a human CuZnSOD mutant found in familial amyotrophic lateral sclerosis. Protein Science, 1998, 7, 545-555.	3.1	101
79	Cleavage of esters by superoxide. Journal of Organic Chemistry, 1976, 41, 586-588.	1.7	97
80	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.	6.6	97
81	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.	6.6	95
82	Structural Information through NMR Hyperfine Shifts in Blue Copper Proteins. Journal of the American Chemical Society, 2000, 122, 3701-3707.	6.6	95
83	Interdimer exchange in linear chain copper acetate-pyrazine. Journal of the American Chemical Society, 1974, 96, 97-103.	6.6	94
84	How did life survive Earth's great oxygenation?. Current Opinion in Chemical Biology, 2016, 31, 166-178.	2.8	92
85	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.	6.6	90
86	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.	1.2	89
87	SOD1 Aggregation and ALS: Role of Metallation States and Disulfide Status. Current Topics in Medicinal Chemistry, 2013, 12, 2560-2572.	1.0	89
88	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.	3.3	88
89	Measurement of Dissolved Oxygen in Water Using Glass-Encapsulated Myoglobin. Analytical Chemistry, 1995, 67, 1505-1509.	3.2	88
90	Nucleophilicity of Iron-Peroxo Porphyrin Complexes. Structure and Bonding, 2000, , 37-60.	1.0	88

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91	Spectroscopic Investigation of Stellacyanin Mutants:Â Axial Ligand Interactions at the Blue Copper Site. Journal of the American Chemical Society, 2003, 125, 11314-11328.	6.6	85
92	Structures of the G85R Variant of SOD1 in Familial Amyotrophic Lateral Sclerosis. Journal of Biological Chemistry, 2008, 283, 16169-16177.	1.6	85
93	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.	6.6	84
94	Switching on the Nucleophilic Reactivity of a Ferric Porphyrin Peroxo Complex. Journal of the American Chemical Society, 1998, 120, 2652-2653.	6.6	83
95	Synthesis of Protein-Doped Sol-Gel SiO2 Thin Films: Evidence for Rotational Mobility of Encapsulated Cytochrome c. Chemistry of Materials, 1995, 7, 1431-1434.	3.2	82
96	Yeast Lacking Cu-Zn Superoxide Dismutase Show Altered Iron Homeostasis. Journal of Biological Chemistry, 2000, 275, 11645-11649.	1.6	82
97	Modeling the Reactivity of .alpha.-Ketoglutarate-Dependent Non-Heme Iron(II)-Containing Enzymes. Inorganic Chemistry, 1995, 34, 2265-2266.	1.9	81
98	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.	6.6	81
99	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.	6.6	81
100	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.	6.6	80
101	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.	1.6	79
102	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.	1.9	78
103	An Alternative Mechanism of Bicarbonate-mediated Peroxidation by Copper-Zinc Superoxide Dismutase. Journal of Biological Chemistry, 2003, 278, 21032-21039.	1.6	77
104	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.	1.2	75
105	Copper-zinc superoxide dismutase: A unique biological "ligand" for bioinorganic studies. Journal of Chemical Education, 1985, 62, 990.	1.1	75
106	Structural consequences of the familial amyotrophic lateral sclerosis SOD1 mutant His46Arg. Protein Science, 2005, 14, 1201-1213.	3.1	75
107	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.	6.6	73
108	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.	6.6	72

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109	Photochemistry of (en)2Co(NH2)(O2)Co(en)24+. Inorganic Chemistry, 1971, 10, 393-395.	1.9	67
110	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.	6.6	67
111	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.	6.6	65
112	Radioprotective effects of manganese-containing superoxide dismutase mimics on ataxiaâ€“telangiectasia cells. Free Radical Biology and Medicine, 2009, 47, 250-260.	1.3	65
113	[7] Methods for the study of superoxide chemistry in nonaqueous solutions. Methods in Enzymology, 1984, 105, 71-81.	0.4	64
114	Do oxidatively modified proteins cause ALS?. Free Radical Biology and Medicine, 2002, 33, 1314-1320.	1.3	63
115	Copper ion mediated epoxidation of olefins by iodosylbenzene. Journal of the American Chemical Society, 1984, 106, 814-816.	6.6	61
116	A Biomimetic Ferric Hydroperoxo Porphyrin Intermediate. Angewandte Chemie - International Edition, 2010, 49, 2099-2101.	7.2	61
117	Insights into the Role of the Unusual Disulfide Bond in Copper-Zinc Superoxide Dismutase. Journal of Biological Chemistry, 2015, 290, 2405-2418.	1.6	61
118	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 Sclerosisâ€. Biochemistry, 2003, 42, 1890-1899.	1.2	60
119	Metal Deficiency Increases Aberrant Hydrophobicity of Mutant Superoxide Dismutases That Cause Amyotrophic Lateral Sclerosis. Journal of Biological Chemistry, 2009, 284, 27746-27758.	1.6	60
120	Epoxidation of olefins by iodosylbenzene catalyzed by binuclear copper(II) complexes. Journal of the American Chemical Society, 1986, 108, 5006-5008.	6.6	59
121	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.	1.6	59
122	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.	1.7	58
123	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.	6.6	58
124	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.	1.2	58
125	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.	1.6	58
126	Reaction of superoxide with the manganese(III) tetraphenylporphine cation. Inorganic Chemistry, 1976, 15, 1997-1999.	1.9	56

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127	Fully Metallated S134N Cu,Zn-Superoxide Dismutase Displays Abnormal Mobility and Intermolecular Contacts in Solution. Journal of Biological Chemistry, 2005, 280, 35815-35821.	1.6	56
128	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.	1.9	54
129	Evidence for a Novel Role of Copper-Zinc Superoxide Dismutase in Zinc Metabolism. Journal of Biological Chemistry, 2001, 276, 44798-44803.	1.6	54
130	The perplexing role of copper-zinc superoxide dismutase in amyotrophic lateral sclerosis (Lou) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622	1.1	54
131	Spectroelectrochemistry of copper-zinc superoxide dismutase. Inorganic Chemistry, 1992, 31, 925-927.	1.9	53
132	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.	1.1	53
133	Calcium Ions Promote Superoxide Dismutase 1 (SOD1) Aggregation into Non-fibrillar Amyloid. Journal of Biological Chemistry, 2013, 288, 25219-25228.	1.6	52
134	New Type 2 Copperâ˘Cysteinate Proteins. Copper Site Histidine-to-Cysteine Mutants of Yeast Copperâ˘Zinc Superoxide Dismutase. Inorganic Chemistry, 1996, 35, 1692-1700.	1.9	51
135	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.	1.2	50
136	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.	1.2	50
137	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.	1.5	50
138	Disrupted Zinc-Binding Sites in Structures of Pathogenic SOD1 Variants D124V and H80R. Biochemistry, 2010, 49, 5714-5725.	1.2	50
139	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.	1.6	50
140	Nickel Complexes as Antioxidants. Inhibition of Aldehyde Autoxidation by Nickel(II) Tetraazamacrocycles. Inorganic Chemistry, 1996, 35, 6632-6633.	1.9	49
141	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.	3.3	47
142	Phosphate is an inhibitor of copper-zinc superoxide dismutase. Biochemistry, 1984, 23, 2079-2082.	1.2	46
143	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.	1.1	46
144	Imidazolate complexes of ferric porphyrins. Journal of the American Chemical Society, 1977, 99, 5799-5800.	6.6	45

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145	Oxygenation of organic substrates by iodosylbenzene catalyzed by soluble manganese, iron, cobalt, or copper salts in acetonitrile. Inorganic Chemistry, 1984, 23, 4121-4123.	1.9	44
146	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.	6.6	44
147	Cloning, expression, and spectroscopic characterization of <i>Cucumis sativus</i> stellacyanin in its nonglycosylated form. Protein Science, 1996, 5, 2184-2192.	3.1	44
148	The pH dependence of metal ion binding to the native zinc site of bovine erythrocuprein (superoxide) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	6.6	41
149	Superoxide dismutase 1 modulates expression of transferrin receptor. Journal of Biological Inorganic Chemistry, 2006, 11, 489-498.	1.1	41
150	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.	6.6	40
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