

Mario Piccioli

List of Publications by Year in descending order

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102
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citations

109321

35
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138484

58
g-index

107
all docs

107
docs citations

107
times ranked

2164
citing authors

#	ARTICLE	IF	CITATIONS
1	¹³ C-detected protonless NMR spectroscopy of proteins in solution. Progress in Nuclear Magnetic Resonance Spectroscopy, 2006, 48, 25-45.	7.5	210
2	The iron-sulfur cluster (Fe ₄ S ₄) centers in ferredoxins studied through proton and carbon hyperfine coupling. Sequence-specific assignments of cysteines in ferredoxins from <i>Clostridium acidii urici</i> and <i>Clostridium pasteurianum</i> . Journal of the American Chemical Society, 1994, 116, 651-660.	13.7	147
3	Proton NOE studies on dicopper(II) dicobalt(II) superoxide dismutase. Inorganic Chemistry, 1989, 28, 4650-4656.	4.0	140
4	Solution Structure of Reduced Monomeric Q133M2 Copper, Zinc Superoxide Dismutase (SOD). Why Is SOD a Dimeric Enzyme? Biochemistry, 1998, 37, 11780-11791.	2.5	135
5	Spectroscopic studies on Cu ₂ Zn ₂ SOD: a continuous advancement of investigation tools. Coordination Chemistry Reviews, 1990, 100, 67-103.	18.8	120
6	[2Fe-2S] cluster transfer in iron-sulfur protein biogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 6203-6208.	7.1	116
7	Formation of [4Fe-4S] Clusters in the Mitochondrial Iron-Sulfur Cluster Assembly Machinery. Journal of the American Chemical Society, 2014, 136, 16240-16250.	13.7	114
8	[4Fe-4S] Cluster Assembly in Mitochondria and Its Impairment by Copper. Journal of the American Chemical Society, 2017, 139, 719-730.	13.7	103
9	Paramagnetism-based versus classical constraints: an analysis of the solution structure of Ca Ln calbindin D9k. Journal of Biomolecular NMR, 2001, 21, 85-98.	2.8	101
10	The three-dimensional structure in solution of the paramagnetic high-potential iron-sulfur protein I from <i>Ectothiorhodospira halophila</i> through nuclear magnetic resonance. FEBS Journal, 1994, 225, 715-725.	0.2	99
11	Identification of the iron ions of high potential iron protein from <i>Chromatium vinosum</i> within the protein frame through two-dimensional NMR experiments. Journal of the American Chemical Society, 1992, 114, 3332-3340.	13.7	97
12	The electronic structure of iron-sulfur [Fe ₄ S ₄] ³⁺ clusters in proteins. An investigation of the oxidized high-potential iron-sulfur protein II from <i>Ectothiorhodospira vacuolata</i> . Biochemistry, 1993, 32, 9387-9397.	2.5	86
13	Solution Structure of the Oxidized 2[4Fe-4S] Ferredoxin from <i>Clostridium Pasteurianum</i> . FEBS Journal, 1995, 232, 192-205.	0.2	86
14	NMR structures of paramagnetic metalloproteins. Quarterly Reviews of Biophysics, 2005, 38, 167-219.	5.7	84
15	A spectroscopic characterization of a monomeric analog of copper, zinc superoxide dismutase. European Biophysics Journal, 1994, 23, 167-176.	2.2	70
16	The iron-sulfur cluster in the oxidized high-potential iron protein from <i>Ectothiorhodospira halophila</i> . Journal of the American Chemical Society, 1993, 115, 3431-3440.	13.7	69
17	The Solution Structure Refinement of the Paramagnetic Reduced High-Potential Iron-Sulfur Protein I from <i>Ectothiorhodospira Halophila</i> by Using Stable Isotope Labeling and Nuclear Relaxation. FEBS Journal, 1996, 241, 440-452.	0.2	69
18	Paramagnetic Probes in Metalloproteins. Methods in Enzymology, 2001, 339, 314-340.	1.0	68

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19	Paramagnetic NMR spectroscopy and coordination structure of cobalt(II) Cys112Asp azurin. <i>Inorganic Chemistry</i> , 1995, 34, 737-742.	4.0	67
20	Direct-Detected ¹³ C NMR to Investigate the Iron(III) Hemophore HasA. <i>Journal of the American Chemical Society</i> , 2006, 128, 150-158.	13.7	67
21	Characterization of a Partially Unfolded High Potential Iron Protein. <i>Biochemistry</i> , 1997, 36, 9332-9339.	2.5	66
22	Locating the Metal Ion in Calcium-Binding Proteins by Using Cerium(III) as a Probe. <i>ChemBioChem</i> , 2001, 2, 550-558.	2.6	66
23	Molecular view of an electron transfer process essential for iron-sulfur protein biogenesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 7136-7141.	7.1	63
24	¹³ C Direct Detected NMR Increases the Detectability of Residual Dipolar Couplings. <i>Journal of the American Chemical Society</i> , 2006, 128, 15042-15043.	13.7	61
25	Electron self-exchange in high-potential iron-sulfur proteins. Characterization of protein I from <i>Ectothiorhodospira vacuolata</i> . <i>Biochemistry</i> , 1993, 32, 12887-12893.	2.5	47
26	Deciphering the Structural Role of Histidine 83 for Heme Binding in Hemophore HasA. <i>Journal of Biological Chemistry</i> , 2008, 283, 5960-5970.	3.4	45
27	X-Ray, NMR and Molecular Dynamics Studies on Reduced Bovine Superoxide Dismutase: Implications for the Mechanism. <i>Biochemical and Biophysical Research Communications</i> , 1994, 202, 1088-1095.	2.1	44
28	Sequence-Specific Assignment of Ligand Cysteine Protons of Oxidized, Recombinant HiPIP I from <i>Ectothiorhodospira halophila</i> . <i>Inorganic Chemistry</i> , 1995, 34, 2516-2523.	4.0	40
29	Cross correlation rates between Curie spin and dipole-dipole relaxation in paramagnetic proteins: the case of cerium substituted calbindin D9k. <i>Journal of Biomolecular NMR</i> , 2002, 23, 115-125.	2.8	40
30	COSY spectra of paramagnetic macromolecules: Observability, scalar effects, cross-correlation effects, relaxation-allowed coherence transfer. <i>Concepts in Magnetic Resonance</i> , 1994, 6, 307-335.	1.3	39
31	The role of a conserved tyrosine residue in high-potential iron sulfur proteins. <i>Protein Science</i> , 1995, 4, 2562-2572.	7.6	39
32	Mapping the Interaction between the Hemophore HasA and Its Outer Membrane Receptor HasR Using CRINEPT-TROSY NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2009, 131, 1736-1744.	13.7	39
33	Structural and Dynamical Properties of a Partially Unfolded Fe ₄ S ₄ Protein: A Role of the Cofactor in Protein Folding. <i>Biochemistry</i> , 1999, 38, 4669-4680.	2.5	38
34	¹³ C Direct detected experiments: Optimization for paramagnetic signals. <i>Journal of Magnetic Resonance</i> , 2005, 174, 125-132.	2.1	38
35	Copper-zinc superoxide dismutase: A paramagnetic protein that provides a unique frame for the NMR investigation. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 1994, 26, 91-139.	7.5	36
36	Hydrogen-1 NOE and ligand field studies of copper-cobalt superoxide dismutase with anions. <i>Inorganic Chemistry</i> , 1990, 29, 4867-4873.	4.0	34

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37	The IR-15N-HSQC-AP experiment: a new tool for NMR spectroscopy of paramagnetic molecules. <i>Journal of Biomolecular NMR</i> , 2014, 58, 123-128.	2.8	34
38	¹ H-NMR investigation of oxidized and reduced high-potential iron-sulfur protein from <i>Rhodospseudomonas globiformis</i> . <i>FEBS Journal</i> , 1993, 212, 69-78.	0.2	33
39	Role of the Iron Axial Ligands of Heme Carrier HasA in Heme Uptake and Release. <i>Journal of Biological Chemistry</i> , 2012, 287, 26932-26943.	3.4	32
40	The Solution Structure of Oxidized HiPIP I from <i>Ectothiorhodospira halophila</i> ; Can NMR Spectroscopy Be Used to Probe Rearrangements Associated with Electron Transfer Processes?. <i>Chemistry - A European Journal</i> , 1995, 1, 598-607.	3.3	30
41	ePHOGSY experiments on a paramagnetic protein: location of the catalytic water molecule in the heme crevice of the oxidized form of horse heart cytochrome c. <i>FEBS Letters</i> , 1997, 415, 45-48.	2.8	30
42	NMR is a unique and necessary step in the investigation of iron sulfur proteins: the HiPIP from <i>R. gelatinosus</i> as an example. <i>Inorganica Chimica Acta</i> , 1992, 198-200, 483-491.	2.4	29
43	Assignment Strategy for Fast Relaxing Signals: Complete Aminoacid Identification in Thulium Substituted Calbindin D9K. <i>Journal of Biomolecular NMR</i> , 2006, 34, 63-73.	2.8	29
44	Two-dimensional proton NMR studies of the paramagnetic metalloenzyme copper-nickel superoxide dismutase. <i>Inorganic Chemistry</i> , 1992, 31, 4433-4435.	4.0	28
45	Protein Hydration and Location of Water Molecules in Oxidized Horse Heart Cytochrome c by ¹ H NMR. <i>Journal of Magnetic Resonance</i> , 2000, 147, 1-8.	2.1	28
46	Transient iron coordination sites in proteins: Exploiting the dual nature of paramagnetic NMR. <i>Coordination Chemistry Reviews</i> , 2015, 284, 313-328.	18.8	27
47	Kinetic studies on metal removal from transferrins by pyrophosphate. Investigation on iron(III) and manganese(III) derivatives. <i>Inorganic Chemistry</i> , 1988, 27, 2405-2409.	4.0	26
48	Backbone Dynamics of Rusticyanin: The High Hydrophobicity and Rigidity of This Blue Copper Protein Is Responsible for Its Thermodynamic Properties. <i>Biochemistry</i> , 2003, 42, 10396-10405.	2.5	26
49	Assignment of active-site protons in the ¹ H-NMR spectrum of reduced human Cu/Zn superoxide dismutase. <i>FEBS Journal</i> , 1991, 197, 691-697.	0.2	25
50	Sequence-specific assignment of the ¹ H and ¹⁵ N nuclear magnetic resonance spectra of the reduced recombinant high-potential iron-sulfur protein I from <i>Ectothiorhodospira halophila</i> . <i>FEBS Journal</i> , 1994, 225, 703-714.	0.2	25
51	The NMR contribution to protein-protein networking in Fe-S protein maturation. <i>Journal of Biological Inorganic Chemistry</i> , 2018, 23, 665-685.	2.6	25
52	Transient versus steady state NOE in paramagnetic molecules Cu ₂ Co ₂ SOD as an example. <i>FEBS Letters</i> , 1990, 272, 175-180.	2.8	24
53	Paramagnetic NMR Analysis of the Seven-Iron Ferredoxin from the Hyperthermoacidophilic Archaeon <i>Desulfurolobus ambivalens</i> Reveals Structural Similarity to other Dicluster Ferredoxins. <i>FEBS Journal</i> , 1996, 236, 92-99.	0.2	24
54	¹ H NMR investigation of reduced copper-cobalt superoxide dismutase. <i>European Biophysics Journal</i> , 1991, 20, 269-279.	2.2	23

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55	Advances in the NMR investigation of paramagnetic molecules in solution. <i>Coordination Chemistry Reviews</i> , 1992, 120, 1-28.	18.8	22
56	Structure and dynamics of <i>Helicobacter pylori</i> nickel-chaperone HypA: an integrated approach using NMR spectroscopy, functional assays and computational tools. <i>Journal of Biological Inorganic Chemistry</i> , 2018, 23, 1309-1330.	2.6	20
57	A15N NMR Mobility Study on the Dicalcium P43M Calbindin D9k and Its Mono-La ³⁺ -Substituted Form. <i>Biochemistry</i> , 2002, 41, 5104-5111.	2.5	19
58	Asymmetry in ¹³ C- ¹³ C COSY Spectra Provides Information on Ligand Geometry in Paramagnetic Proteins. <i>Journal of the American Chemical Society</i> , 2005, 127, 12216-12217.	13.7	19
59	PRE-driven protein NMR structures: an alternative approach in highly paramagnetic systems. <i>FEBS Journal</i> , 2021, 288, 3010-3023.	4.7	18
60	A Quantum Chemistry View on Two Archetypical Paramagnetic Pentacoordinate Nickel(II) Complexes Offers a Fresh Look on Their NMR Spectra. <i>Inorganic Chemistry</i> , 2021, 60, 2068-2075.	4.0	18
61	The Solution Structure of the Monomeric Copper, Zinc Superoxide Dismutase from <i>Salmonella enterica</i> : Structural Insights To Understand the Evolution toward the Dimeric Structure. <i>Biochemistry</i> , 2008, 47, 12954-12963.	2.5	17
62	Assignment of backbone NMR resonances and secondary structural elements of a reduced monomeric mutant of copper/zinc superoxide dismutase. <i>Magnetic Resonance in Chemistry</i> , 1997, 35, 845-853.	1.9	16
63	Paramagnetic ¹ H NMR Spectroscopy to Investigate the Catalytic Mechanism of Radical S-Adenosylmethionine Enzymes. <i>Journal of Molecular Biology</i> , 2019, 431, 4514-4522.	4.2	16
64	Toward Structural Dynamics: Protein Motions Viewed by Chemical Shift Modulations and Direct Detection of ¹⁵ N Multiple-Quantum Relaxation. <i>Journal of the American Chemical Society</i> , 2010, 132, 3594-3600.	13.7	15
65	NOE-NOESY, a Further Tool in NMR of Paramagnetic Metalloproteins. <i>Journal of Magnetic Resonance Series B</i> , 1994, 103, 278-283.	1.6	14
66	Paramagnetic Metal Centers in Proteins Investigated through Heterocorrelated NMR Spectroscopy. <i>Journal of Magnetic Resonance Series B</i> , 1994, 104, 95-98.	1.6	14
67	A simple protocol to study blue copper proteins by NMR. <i>FEBS Journal</i> , 2003, 270, 600-609.	0.2	14
68	Measuring transverse relaxation in highly paramagnetic systems. <i>Journal of Biomolecular NMR</i> , 2020, 74, 431-442.	2.8	14
69	The influence of a surface charge on the electronic and steric structure of a high potential iron-sulfur protein. <i>Journal of Biological Inorganic Chemistry</i> , 1996, 1, 257-263.	2.6	12
70	Development of NMR Instrumentation to Achieve Excitation of Large Bandwidths in High-Resolution Spectra at High Field. <i>Journal of Magnetic Resonance</i> , 2001, 150, 161-166.	2.1	12
71	NMR in the SPINE Structural Proteomics project. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2006, 62, 1150-1161.	2.5	12
72	Insights into Interprotein Electron Transfer of Human Cytochrome <i>c</i> Variants Arranged in Multilayer Architectures by Means of an Artificial Silica Nanoparticle Matrix. <i>ACS Omega</i> , 2016, 1, 1058-1066.	3.5	11

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73	Thermochromic Conformational Change of Methanobacterium thermoautotrophicum Iron Superoxide Dismutase. <i>Inorganic Chemistry</i> , 1999, 38, 614-615.	4.0	10
74	Sequence-specific assignments in NMR spectra of paramagnetic systems: A non-systematic approach. <i>Inorganica Chimica Acta</i> , 2021, 514, 119984.	2.4	10
75	NMR of paramagnetic metalloproteins in solution: Ubi venire, quo vadis?. <i>Journal of Inorganic Biochemistry</i> , 2022, 234, 111871.	3.5	10
76	The structure of iron-sulfur clusters in proteins as monitored by NMR, Mössbauer, EPR and molecular dynamics. <i>Journal of Molecular Structure</i> , 1993, 292, 207-219.	3.6	9
77	Two-dimensional ¹ H NMR spectra of ferricytochrome c 551 from <i>Pseudomonas aeruginosa</i> . <i>FEBS Letters</i> , 1993, 324, 305-308.	2.8	9
78	¹ H, ¹³ C and ¹⁵ N assignment of the paramagnetic high potential iron-sulfur protein (HiPIP) PioC from <i>Rhodospseudomonas palustris</i> TIE-1. <i>Biomolecular NMR Assignments</i> , 2020, 14, 211-215.	0.8	9
79	The long-standing relationship between paramagnetic NMR and iron-sulfur proteins: the mitoNEET example. An old method for new stories or the other way around?. <i>Magnetic Resonance</i> , 2021, 2, 203-221.	1.9	9
80	Paramagnetic NMR spectroscopy of native and cobalt substituted manganese superoxide dismutase from <i>Escherichia coli</i> . <i>FEBS Letters</i> , 1997, 401, 15-19.	2.8	8
81	Folding properties of iron-sulfur proteins. <i>Inorganica Chimica Acta</i> , 1998, 283, 12-16.	2.4	8
82	Redox-Related Chemical Shift Perturbations on Backbone Nuclei of High-Potential Iron-Sulfur Proteins. <i>Inorganic Chemistry</i> , 2002, 41, 1679-1683.	4.0	8
83	New Routes to the Detection of Relaxation Allowed Coherence Transfer in Paramagnetic Molecules. <i>Journal of the American Chemical Society</i> , 2003, 125, 14978-14979.	13.7	8
84	Paramagnetic NMR Spectroscopy Is a Tool to Address Reactivity, Structure, and Protein-Protein Interactions of Metalloproteins: The Case of Iron-Sulfur Proteins. <i>Magnetochemistry</i> , 2020, 6, 46.	2.4	8
85	¹ H NMR studies on lanthanides substituted transferrins. <i>Journal of Inorganic Biochemistry</i> , 1991, 42, 185-190.	3.5	7
86	Tailored HCCH-TOCSY Experiment for Resonance Assignment in the Proximity of a Paramagnetic Center. <i>Journal of Magnetic Resonance</i> , 2002, 155, 236-243.	2.1	7
87	¹³ C direct detected COCO-TOCSY: A tool for sequence specific assignment and structure determination in protonless NMR experiments. <i>Journal of Magnetic Resonance</i> , 2006, 182, 325-329.	2.1	7
88	Electrochemical nitration of myoglobin at tyrosine 103: Structure and stability. <i>Archives of Biochemistry and Biophysics</i> , 2013, 529, 26-33.	3.0	7
89	Interconversion between [2Fe-2S] and [4Fe-4S] cluster glutathione complexes. <i>Chemical Communications</i> , 2022, 58, 3533-3536.	4.1	7
90	Copper-cobalt superoxide dismutase: A re-examination of the ¹ H NMR spectrum through a novel selectively deuteriated derivative. <i>Magnetic Resonance in Chemistry</i> , 1993, 31, S17-S22.	1.9	5

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91	Monitoring the Early Steps of Unfolding of Dicalcium and Mono-Ce ³⁺ -Substituted Forms of P43M Calbindin D9k. <i>Biochemistry</i> , 2003, 42, 13066-13073.	2.5	5
92	New Approaches to NMR of Paramagnetic Molecules. , 1995, , 1-28.		5
93	Cobalt(II) as a probe of the metal binding sites of transferrins. <i>Inorganica Chimica Acta</i> , 1990, 174, 137-140.	2.4	4
94	Multiple selective excitation as a tool for NMR studies of paramagnetic metalloproteins. <i>Magnetic Resonance in Chemistry</i> , 2000, 38, 827-832.	1.9	4
95	Electron self-exchange of cytochrome c measured via ¹³ C detected protonless NMR. <i>Journal of Porphyrins and Phthalocyanines</i> , 2013, 17, 142-149.	0.8	4
96	The biogenesis of iron-sulfur proteins: from cellular biology to molecular aspects. <i>Journal of Biological Inorganic Chemistry</i> , 2018, 23, 493-494.	2.6	4
97	NMR assignment of reduced form of copper, zinc superoxide dismutase from <i>Salmonella enterica</i> . <i>Biomolecular NMR Assignments</i> , 2007, 1, 65-67.	0.8	3
98	Mobility Studies in Proteins by ¹⁵ N Nuclear Magnetic Resonance: Rusticyanin as an Example. <i>Principles and Practice</i> , 2004, , 15-33.	0.3	2
99	Role of the iron axial ligands of heme carrier HasA in heme uptake and release. <i>Journal of Biological Chemistry</i> , 2013, 288, 2190.	3.4	1
100	Hypothesis: The Sound of the Individual Metabolic Phenotype? Acoustic Detection of NMR Experiments. <i>OMICS A Journal of Integrative Biology</i> , 2015, 19, 147-156.	2.0	1
101	The conformation of biliverdin in dimethyl sulfoxide: implications for the coordination with copper. <i>Structural Chemistry</i> , 2019, 30, 2159-2166.	2.0	1
102	Locating the Metal Ion in Calcium-Binding Proteins by Using Cerium(III) as a Probe. <i>ChemBioChem</i> , 2001, 2, 550-558.	2.6	1