

List of publications
(updated July 2021)

1. **Matteucci S, Camponeschi F, Clémancey M, Ciofi-Baffoni S, Blondin G, Banci L.** In-cellulo Mössbauer and EPR studies bring new evidences to the long-standing debate on the iron-sulfur cluster binding in human anamorsin. *ANGEW CHEM INT EDIT* doi: 10.1002/anie.202102910, **2021**,. (IF 12.959)
2. **Albuquerque-Gonzalez,B, Bernabé-Garcia M, Bernabé-Garcia A, Ruiz-Sanz J, Lopez-Calderon FF, Gonnelli L, Banci L, P, Peña-García J, Luque I, Nicolas FJ, Cayuela-Fuentes ML, Luchinat E, Perez-Sanchez H, Monto-Garcia S, Conesa-Zamora.** The FDA-Approved Antiviral Raltegravir Inhibits Fascin1-Dependent Invasion of Colorectal Tumor Cells In Vitro and In Vivo, *Cancer*, 13, 861; doi.org/10.3390/cancers13040861 **2021** (IF 5.742)
3. **Suraci D, Saudino G, Nasta V, Ciofi baffoni S, Banci L** ISCA1 orchestrates ISCA2 and NFU1 in the maturation of human mitochondrial [4Fe-4S] proteins, doi.org/10.1016 /j.jmb.2021.16692 *J Mol Biol*, 4, **2021** (IF 5.067)
4. **Cafaro, A, Barillari, G, Moretti, S, Palladino, C, Tripiciano, A; Falchi, M, Picconi, O, Cossut, MRP, Campagna, M, Arancio, A,;Sgadari, C, Andreini, C, Banci, L;Monini, P, Ensoli, B,** HIV-1 Tat Protein Enters Dysfunctional Endothelial Cells via Integrins and Renders Them Permissive to Virus Replication, *Int J Mol Sci.*, 22, 317, doi:10.3390/ijms22010317 **2021** (IF 4.556)
5. **Luchinat E, Barbieri L, Cremonini M, Banci L.** Protein in-cell NMR spectroscopy at 1.2 GHz. *J Biomol NMR* 75(2-3):97-107. 2021, doi: 10.1007/s10858-021-00358-w (IF 2.634)
6. **Prusty NR, Camponeschi F, Ciofi Baffoni S, Banci L.** The human YAE1-ORAOV1 complex of the cytosolic iron-sulfur protein assembly machinery binds a [4Fe-4S] cluster, *InorgChim Acta*, , 518, 1, doi.org/10.1016/j.ica.2021.120252 **2021** (IF 2.304)
7. **Gallo A, Tsika AC, Fourkiotis NK, Cantini F, Banci L, Sreeramulu S, Schwalbe H, Spyroulias GA.** ¹H,¹³C and ¹⁵N chemical shift assignments of the SUD domains of SARS-CoV-2 non-structural protein 3c: "the N-terminal domain-SUD-N". *Biomolecular NMR Assignments*, 1, 85-89 **2021**. doi: 10.1007/s12104-020-09987 (IF 0.677)
8. **Gallo A, Tsika AC, Fourkiotis NK, Cantini F, Banci L, Sreeramulu S, Schwalbe H, Spyroulias GA** ¹H,¹³C and ¹⁵N chemical shift assignments of the SUD domains of SARS-CoV-2 non-structural protein 3c: "The SUD-M and SUD-C domains", *Biomolecular NMR Assignments.*, 1, 165-171 **2021**. doi: 10.1007/s12104-020-10000-9 (IF 0.677)
9. **Camponeschi F., Gallo A, Piccioli M, Banci L.** 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? doi: 10.5194/mr-2021-2 *Magnetic Resonance.*, 2, 203–221, **2021**
10. **Camponeschi F, Prusty NR, Heider SAE, Ciofi-Baffoni S, Banci L.** GLRX3 Acts as a [2Fe-2S] Cluster Chaperone in the Cytosolic Iron-Sulfur Assembly Machinery Transferring [2Fe-2S] Clusters to NUBP1. *J Am Chem Soc.*;142, 10794-10805. doi: 10.1021/jacs.0c02266. **2020** (IF 14.612)
11. **Luchinat E., Barbieri L., Cremonini M., Nocentini A., Supuran C.T., Banci L.** Drug screening in human cells by NMR allows early assessment of drug potency, *Angew. Chem. Int. Ed.*, 59, 6535 –6539 doi.org/10.1002/anie.201913436 **2020** (IF 12.959)

12. **Polykretis P., Luchinat E., Boscaro F. and Banci L.**, Methylglyoxal interaction with superoxide dismutase 1. *Redox biology*, 2020, 30, 101421. (IF: 9.986)
13. **Luchinat E, Barbieri L, Campbell T.F, Banci L**, Real-Time Quantitative In-Cell NMR: Ligand Binding and Protein Oxidation Monitored in Human Cells Using Multivariate Curve Resolution, *Anal. Chem.* 2020, 92, 14, 9997–10006, doi: 10.1021/acs.analchem.0c01677 (IF 6.785)
14. **Luchinat E., Barbieri L., Cremonini M., Nocentini A., Supuran C.T., and Banci L.** Intracellular binding/unbinding kinetics of approved drugs to carbonic anhydrase II observed by in-cell NMR. *ACS Chem. Biol.* 2020 Sept doi.org/10.1021/acscchembio.0c00590 (IF: 4.434)
15. **Bonucci A, Murrall MG, Banci L, Pierattelli R** A combined NMR and EPR investigation on the effect of the disordered RGG regions in the structure and the activity of the RRM domain of FUS. *Sci Rep.* 2020, 10, 20956. doi: 10.1038/s41598-020-77899-x (IF 3.998)
16. **Maione V, Grifagni D, Torricella F, Cantini F, Banci L.**, CIAO3 protein forms a stable ternary complex with two key players of the human cytosolic iron-sulfur cluster assembly machinery. *J Biol Inorg Chem.* 2020 May;25(3):501-508. doi: 10.1007/s00775-020-01778-z. (IF 3.632)
17. **Sreeramulu S.; Richter C., Kuehn T., Azzaoui K.; Blommers M.J.J.; Del Conte R.; Fragai M.; Trieloff N.; Schmieler P.; Nazare M.; Specker E.; Ivanov V.; Oschkinat H.; Banci L.; Schwalbe H.**, NMR quality control of fragment libraries for screening, Doi: 10.1007/s10858-020-00327-9, *J Biomol NMR*, (IF 2.634)
18. **Cantini, F, Banci, L. N. Altincekic, J. K. Bains, K. Dhamotharan, C. Fuks, B. Fürtig, S. L. Gande, B. Hargittay, M. Hengesbach, M. T. Hutchison, S. M. Korn, N. Kubatova, F. Kutz, V. Linhard, F. Löhr, N. Meiser, D. J. Pyper, N. S. Qureshi, C. Richter, K. Saxena, A. Schlundt, H. Schwalbe, S. Sreeramulu, J.-N. Tants, A. Wacker, J. E. Weigand, J. Wöhnert, A. C. Tsika, N. K. Fourkiotis, G. A. Spyroulias**, 1H, 13C, and 15N backbone chemical shift assignments of the apo and the ADP-ribose bound forms of the macrodomain of SARS-CoV-2 non-structural protein 3b. *Biomol NMR Assign.* 2020; 14(2): 339–346. doi:10.1007/s12104-020-09973-4 (IF 0.677)
19. **Camponeschi F., Banci L.** Metal cofactors trafficking and assembly in the cell: a mecular view" *Pure and Applied Chemistry*, Volume 91, 2019, 231-245(IF. 2.350)
20. **Polykretis, P., Luchinat, E., Bonucci, A., Giachetti, A., Graewert, M. A., Svergun, D. I., & Banci, L.** Conformational characterization of full-length X-chromosome-linked inhibitor of apoptosis protein (XIAP) through an integrated approach. *IUCrJ*, 6(5), 2019
21. **Morris C, Andretto P, Banci L, Bonvin A, Chojnowski G, del Cano L, Carazo JM, Conesa P, Daenke Damaskos S, Giachetti A, Haleyf N, Hekkelmang ML, Heuser P, Joosteng RP, Kouřilh D, Křenek A, Kulhanek T, Lamzin V, Nadzirinj N, Perrakisg A, Rosato A, Sanderson F, Segura J, Schaarschmidt J, Sobolev J et al.** West-Life: A Virtual Research Environment for structural biology, *J Struc Biol X*, 1, 100006, 2019 (IF 3.02)
22. **Gourdoupis S, Nasta V, Ciofi-Baffoni S, Banci L, Calderone V.**, In-house high-energy-remote SAD phasing using the magic triangle: how to tackle the P1 low symmetry using multiple orientations of the same crystal of human IBA57 to increase the multiplicity. *Acta Crystallogr D Struct Biol.* 2019 Mar 1;75(Pt 3):317-324. doi: 10.1107/S2059798319000214. Epub Feb 28, 2019 (IF 3.099)
23. **Varone A, Marigiò S, Patheja M, Maione V, Varriale A, Vessichelli M, Spano D, Formiggini F, Lo Monte M, Brancati N, Frucci M, Del Vecchio P, D'Auria S, Flagiello A, Iannuzzi C, Luini A, Pucci P, Banci L, Valente C, Corda D.** A signalling cascade involving receptor-activated phospholipase A2, glycerophosphoinositol 4-phosphate, Shp1 and Src in the activation of cell motility. *Cell Commun Signal.* Mar 1;17(1):20. doi: 10.1186/s12964-019-0329-3. 2019 (IF 5.324)

24. **Nasta V., Da Vela S., Gourdoupis S., Ciofi-Baffoni S., Svergun D., Banci L.**, Structural properties of [2Fe-2S] ISCA2-IBA57: a complex of the mitochondrial iron-sulfur cluster assembly machinery" *Scientific Reports*. (IF 4.525)
25. **Nasta V, Suraci D, Gourdoupis S, Ciofi-Baffoni S, Banci L.** A pathway for assembling [4Fe-4S]₂⁺ clusters in mitochondrial iron-sulfur protein biogenesis. *FEBS J*. 2019 Nov 14. doi: 10.1111/febs.15140 (IF 4.739)
26. **Camponeschi F, Muzzioli R, Ciofi-Baffoni S, Piccioli M, Banci L.** "Paramagnetic 1H NMR Spectroscopy to Investigate the Catalytic Mechanism of Radical S-Adenosylmethionine Enzymes" *Mol Biol*. 2019 S0022-2836(19)30542-(IF 5.067)
27. **Polykretis P, Cencetti F, Donati C, Luchinat E, Banci L.** Cadmium effects on superoxide dismutase 1 in human cells revealed by NMR. *Redox Biol.*; 21:101102. **2019** (IF 7.126)
28. **Cerofolini L, Giuntini S, Barbieri L, Pennestri M, Codina A, Fragai M, Banci L, Luchinat E, Ravera E.** Real-Time Insights into Biological Events: In-Cell Processes and Protein-Ligand Interactions. *Biophys J.*, 116, 239-247. **2019** (IF 3.495)
29. **Luchinat, E., Banci, L.** New structural and functional insights from in-cell NMR. *Emerging Topics in Life Sciences*, 2, 29-38. **2018** (IF: n.d.)
30. **Putignano, V., Rosato, A., Banci, L. & Andreini, C.** PDB in (2018): a database of metal sites in biological macromolecular structures. *Nucleic Acids Res* 4; D459-D464 doi: 10.1093/nar/gkx989 **2018** (IF 10.162)
31. **Barbieri L, Luchinat E, Banci L.** Intracellular metal binding and redox behavior of human DJ-1. *J Biol Inorg Chem*. Jan;23(1):61-69. doi: 10.1007/s00775-017-1509-5. Epub 2017 Dec 7. **2018** (IF 2.95)
32. **Ciofi-Baffoni S, Nasta V, Banci L.** Protein networks in the maturation of human iron-sulfur proteins. *Metalomics*. Jan 24;10(1):49-72. doi: 10.1039/c7mt00269f. Review. **2018** (IF 4.069)
33. **Luchinat E, Chiarella S, Franceschini M, Di Matteo A, Brunori M, Banci L, Federici L.** Identification of a novel nucleophosmin-interaction motif in the tumor suppressor p14arf. *FEBS J*. Mar;285(5):832-847. doi: 10.1111/febs.14373. Epub 2018 Jan 15. **2018** (IF 4.530)
34. **Banci L, Camponeschi F, Ciofi-Baffoni S, Piccioli M.** The NMR contribution to protein-protein networking in Fe-S protein maturation. *J Biol Inorg Chem*. 2018 Jun;23(4):665-685. doi: 10.1007/s00775-018-1552-x. Epub 2018 Mar 22. Review. Erratum in: *J Biol Inorg Chem*. May 31 **2018** (IF 2.95)
35. **Capper MJ, Wright GSA, Barbieri L, Luchinat E, Mercatelli E, McAlary L, Yerbury JJ, O'Neill PM, Antonyuk SV, Banci L, Hasnain SS.** The cysteine-reactive small molecule ebselen facilitates effective SOD1 maturation. *Nat Commun*. Apr 27;9(1):1693. doi: 10.1038/s41467-018-04114-x. **2018** (IF 12.353)
36. **Maione V, Cantini F, Severi M, Banci L.** Investigating the role of the human CIA2A-CIAO1 complex in the maturation of aconitase. *Biochim Biophys Acta Gen Subj*. Sep;1862(9):1980-1987. doi: 10.1016/j.bbagen.2018.05.019. Epub 2018 May 26. **2018** (IF 3.679)
37. **Banci L, Camponeschi F, Ciofi-Baffoni S, Piccioli M.** Correction to: The NMR contribution to protein-protein networking in Fe-S protein maturation. *J Biol Inorg Chem*. Jun;23(4):687. doi: 10.1007/s00775-018-1573-5. **2018** (IF 2.95)

38. **Luchinat E, Banci L.** In-Cell NMR in Human Cells: Direct Protein Expression Allows Structural Studies of Protein Folding and Maturation. *Acc Chem Res.* Jun 19;51(6):1550-1557. doi: 10.1021/acs.accounts.8b00147. Epub 2018 Jun 5. **2018** (IF 20.955)
39. **Saponaro A, Cantini F, Porro A, Bucchi A, DiFrancesco D, Maione V, Donadoni C, Introini B, Mesirca P, Mangoni ME, Thiel G, Banci L, Santoro B, Moroni A.** A synthetic peptide that prevents cAMP regulation in mammalian hyperpolarization-activated cyclic nucleotide-gated (HCN) channels. *Elife.* Jun 20;7. pii: e35753. **2018** (IF 7.616)
40. **Andreini C, Putignano V, Rosato A, Banci L.** The human iron-proteome. *Metallomics.* Sep 19;10(9):1223-1231. doi: 10.1039/c8mt00146d. **2018** (IF 4.069)
41. **Gourdoupis S, Nasta V, Calderone V, Ciofi-Baffoni S, Banci L.** IBA57 Recruits ISCA2 to Form a [2Fe-2S] Cluster-Mediated Complex. *J Am Chem Soc.* Oct 31;140(43):14401-14412. doi: 10.1021/jacs.8b09061. Epub 2018 Oct 17. **2018** (IF 14.357)
42. **Wang Y, Weisenhorn E, MacDiarmid CW, Andreini C, Bucci M, Taggart J, Banci L, Russell J, Coon JJ, Eide DJ.** The cellular economy of the *Saccharomyces cerevisiae* zinc proteome. *Metallomics.* Oct 25. doi: 10.1039/c8mt00269j. [Epub ahead of print] **2018** (IF 4.069)
43. **Cantini F, Calderone V, Di Cesare Mannelli L, Korsak M, Gonnelli L, Francesconi O, Ghelardini C, Banci L, Nativi C.** Interaction of Half Oxa-/Half cis-Platin Complex with Human Superoxide Dismutase and Induced Reduction of Neurotoxicity. *ACS Med Chem Lett.* Oct 1;9(11):1094-1098. doi: 10.1021/acsmchemlett.8b00199. eCollection 2018 Nov 8. **2018** (IF 3.794)
44. **Camponeschi, F., Ciofi-Baffoni, S., and Banci, L.,** Anamorsin/Ndor1 Complex Reduces [2Fe-2S]-MitoNEET via a Transient Protein-Protein Interaction, *J.Am.Chem Soc.*, 139, 9479-9482, **2017** (IF 13.858).
45. **Brancaccio D, Gallo A, Piccioli M, Novellino E, Ciofi-Baffoni S and Banci L.** [4Fe-4S] Cluster Assembly in Mitochondria and Its Impairment by Copper. *J Am Chem Soc* 139: 719-730, **2017**.(IF 13.038)
46. **Putignano V, Rosato A, Banci L, Andreini C.,** MetalPDB in 2018: a database of metal sites in biological macromolecular structures., *Nucleic Acids Res.*, doi: 10.1093/nar/gkx989 **2017** (IF 10.162).
47. **Nasta, V., Giachetti, A., Ciofi-Baffoni, S., and Banci, L.,** Structural insights into the molecular function of human (2Fe-2S) BOLA1-GRX5 and (2Fe-2S) BOLA3-GRX5 complexes, *Biochim Biophys Acta* , 1861, 2119-2131, **2017** (IF 5.34).
48. **Banci L and Luchinat E.** In cell NMR - a topical review. *IUCrJ* 4: 108-118, **2017**.(IF 5.316)
49. **Hou, MM., Polykretis, P., Luchinat, E., Wang, X., Chen, SN, Zuo, HH, Yang, Y., Chen, JL, Ye, Y, Li, C., Banci, L., and Su, X. C.,** Structural insights into the first BIR domain of XIAP in solution and interaction with copper in vitro and in living cells, *Scientific Reports* 7, 16630, **2017**, doi:10.1038/s41598-017-16723-5, (IF 4.259)
50. **Luchinat, E., Barbieri, L., and Banci, L.,** A molecular chaperone activity of CCS restores the maturation of SOD1 fALS mutants, *Scientific Reports* 7, 17433, **2017**. doi: 10.1038/s41598-017-17815-y (IF 4.259)
51. **Ciofi-Baffoni S, Nasta V, Banci L.,** Protein networks in the maturation of human iron-sulfur proteins. *Metallomics.* doi: 10.1039/c7mt00269f, 10, 49-72 **2017** (IF 3.975)

52. **Andreini C, Rosato A and Banci L.** The relationship between environmental dioxygen and iron-sulfur proteins explored at the genome level. *Plos ONE* **12**: e0171279, **2017**.(IF 3.54)
53. **Barbieri, L., Luchinat, E., and Banci, L.,** Intracellular metal binding and redox behavior of human DJ-1, *J Biol Inorg Chem* doi: 10.1007/ s00775-017, 1509-5, **2017** (IF 2.894)
54. **Andreini C, Banci L and Rosato A.** Exploiting bacterial operons to illuminate human iron-sulfur proteins. *J Proteome Res* **15**: 1308-1322, **2016**.(IF 5.001)
55. **Barbieri L, Luchinat E and Banci L .** Characterization of proteins by in cell NMR spectroscopy in cultures mammalians cells in their physiological environment. *Nature Protocols* **11**: 1101-1111, **2016**.(IF 9.67)
56. **Luchinat E and Banci L.** A unique tool for cellular structural biology: in-cell NMR. *J Biol Chem* **291**: 3776-3784, **2016**.(IF 4.573)
57. **Mercatelli E, Barbieri L, Luchinat E and Banci L.** Direct structural evidence of protein redox regulation obtained by in-cell NMR. *BBA - Molecular Cell Research* **1863**: 198-204, **2016**.(IF 5.019)
58. **Nuttle X, Giannuzzi G, Duyzend MH, Schraiber JG, Narvaiza I, Camponeschi F, Ciofi-Baffoni S, Sudmant PH, Penn O, Chiatante G, Malig M, Huddleston J, Benner C, Stessman HAF, Marchetto MCN, Denman L, Harshman L, Baker C, Raja A, Penewit K, Tang WJ, Ventura M, Antonacci F, Akey JM, Amemiya CT, Banci L, Gage FH, Raymond A and Eichler EE.** Emergence of a *Homo sapiens*-specific gene family and the evolution of autism risk at chromosome 16p11.2. *Nature* **536**: 205-209, **2016**.(IF 38.138)
59. **Rippa V, Santini L, LoSurdo P, Cantini F, Veggi D, Gentile M, Grassi E, Brunelli B, Iannello G, Ferlicca F, Palmieri E, Pallaoro M, Arico B, Banci L, Pizza MG and Scarselli M.** Molecular engineering of Ghfp, the gonococcal orthologue of *Neisseria meningitidis* fH binding protein. *Clin Vaccine Immunol* **22**: 769-777, **2016**.(IF 2.37)
60. **Rubino JT, Martinelli M, Cantini F, Castagnetti A, Leuzzi R, Banci L and Scarselli M.** Structural characterization of zinc-bound Zmp1, a zinc-dependent metalloprotease secreted by *Clostridium difficile*. *J Biol Inorg Chem* **21**: 185-196, **2016**.(IF 2.538)
61. **Secci E, Luchinat E and Banci L.** The Casein Kinase 2-dependent phosphorylation of NS5A domain 3 from HepatitisC virus. *ChemBioChem* **17**: 328-333, **2016**.(IF 3.088)
62. **Uzarska MA, Nasta V, Weiler BD, Spantgar F, Ciofi-Baffoni S, Saviello M, Gonnelli L, Muhlenhoff U, Banci L and Lill R.** Mitochondrial Bol1 and Bol3 function as assembly factors for specific iron-sulfur proteins. *Elife* **5**: e16673, **2016**.(IF 8.519)
63. **Valasatava Y, Rosato A, Banci L and Andreini C.** Metalpredator: a web server to predict iron-sulfur cluster binding proteomes. *Bioinformatics* **btw 238**: **2016**.(IF 4.981)
64. **Banci L, Camponeschi F, Ciofi-Baffoni S and Muzzioli R.** Elucidating the molecular function of human BOLA2 in GRX3-Dependent anamorsin maturation pathway. *J Am Chem Soc* **137**: 16133-16134, **2015**.(IF 12.113)
65. **Banci L, Ciofi-Baffoni S, Gajda K, Muzzioli R, Peruzzini R and Winkelmann J.** N-terminal domains mediate [2Fe-2S] cluster transfer from glutaredoxin-3 to anamorsin. *Nat Chem Biol* **11**: 772-778, **2015**.(IF 12.996)
66. **Barbieri L, Luchinat E and Banci L.** Protein interaction patterns in different cellular environments are revealed by in cell NMR. *Scientific Reports* **5**:14456: DOI: 10.1038/srep14456, **2015**.(IF 5.578)

67. **Luchinat E, Gianoncelli A, Mello T, Galli A and Banci L.** Combining in-cell NMR and X-ray fluorescence microscopy to reveal the intracellular maturation states of human superoxide dismutase 1. *Chem Commun* 51: 584-587, **2015**.(IF 6.718)
68. **Morgada MN, Abriata LA, Cefaro C, Gajda K, Banci L and Vila AJ.** Loop recognition and copper-mediated disulfide reduction underpin metal site assembly of Cu_a in human cytochrome oxidase. *Proc Natl Acad Sci USA* 112: 11771-11776, **2015**.(IF 9.674)
69. **Rippa V, Santini L, Lo Surdo P, Cantini F, Veggi D, Gentile M, Grassi E, Brunelli B, Iannello G, Ferlicca F, Palmieri E, Pallaoro M, Arico B, Banci L, Pizza MG and Scarselli M.** Molecular engineering of Ghfp, the gonococcal orthologue of *Neisseria meningitidis* fH binding protein. *Clin Vaccine Immunol* Epub ahead of print: **2015**.(IF 2.37)
70. **Banci L, Blazevits O, Cantini F, Danielsson J, Lang L, Luchinat C, Mao J, Oliveberg M and Ravera E.** Solid-state NMR studies of metal free SOD1 fibrillar structures. *J Biol Inorg Chem* 19: 659-666, **2014**.(IF 3.353)
71. **Banci L and Luchinat C.** Biological inorganic chemists pay tribute to Ivano Bertini. *J Biol Inorg Chem* 19: 487-489, **2014**.(IF 3.353)
72. **Banci L, Brancaccio D, Ciofi-Baffoni S, Del Conte R, Gadepalli R, Mikolajczyk M, Neri S, Piccioli M and Winkelmann J.** [2Fe-2S] cluster transfer in iron-sulfur protein biogenesis. *Proc Natl Acad Sci USA* 111: 6203-6208, **2014**.(IF 9.771)
73. **Barbieri L, Luchinat E and Banci L.** Structural insight of proteins in sub-cellular compartments: in mitochondria NMR. *Biochim Biophys Acta* 1843: 2492-2496, **2014**.(IF 3.848)
74. **Brancaccio D, Gallo A, Mikolajczyk M, Zovo K, Palumaa P, Novellino E, Piccioli M, Ciofi-Baffoni S and Banci L.** Formation of [4Fe-4S] clusters in the mitochondrial iron-sulfur cluster assembly machinery. *J Am Chem Soc* 136: 16240-16250, **2014**
75. **Luchinat E, Barbieri L, Rubino JT, Kozyreva T, Cantini F and Banci L.** In living cells folding and metal binding of SOD1 fALS mutants is impaired. *Nat Commun* 5: 5502, **2014**.(IF 10.742)
76. **Luchinat E, Barbieri L, Rubino JT, Kozyreva T, Cantini F and Banci L.** In-cell NMR reveals potential precursor of toxic species from SOD1 fALS mutants. *Nat Commun* 5: 5502, **2014**
77. **Saponaro A, Pauleta SR, Cantini F, Matzapetakis M, Hamman C, Donadoni C, Hu L, Thiel G, Banci L, Santoro B and Moroni A.** Structural basis for the mutual antagonism of cAMP and TRIP8b in regulating HCN channel function. *Proc Natl Acad Sci USA* 111: 14577-14582, **2014**.(IF 9.771)
78. **Webert H, Freibert SA, Gallo A, Heidenreich T, Linne U, Amlacher S, Hurt E, Muhlenhoff U, Banci L and Lill R.** Functional reconstitution of *de novo* mitochondrial Fe/S cluster synthesis reveals an essential role of ferredoxin. *Nat Commun* 5: 5013-5025, **2014**.(IF 10.742)
79. **Banci L, Bertini I, Calderone V, Ciofi-Baffoni S, Giachetti A, Jaiswal D, Mikolajczyk M, Piccioli M and Winkelmann J.** Molecular view of an electron transfer process essential for iron-sulfur protein biogenesis. *Proc Natl Acad Sci USA* 110: 7136-7141, **2013**.(IF 9.771)
80. **Banci L, Cantini F, Kozyreva T and Rubino JT.** Mechanistic aspects of hSOD1 maturation from the solution structure of Cu¹-loaded hCCS domain 1 and analysis of disulfide-free hSOD1 mutants. *ChemBioChem* 14: 1839-1844, **2013**.(IF 3.944)
81. **Banci L, Barbieri L, Luchinat E and Secci E.** Visualization of redox-controlled protein fold in living cells. *Chem Biol* 20: 747-752, **2013**.(IF 5.829)

82. **Banci L, Ciofi-Baffoni S, Mikolajczyk M, Winkelmann J, Bill E and Pandelia ME.** Human anamorsin binds [2Fe-2S] clusters with unique electronic properties. *J Biol Inorg Chem* 18: 883-893, **2013**.(IF 3.353)
83. **Banci L and Bertini I.** Metallomics and the cell: some definitions and general comments. 2013, p. 1-13.
84. **Banci L, Barbieri L, Bertini I, Luchinat E, Secci E, Zhao Y and Aricescu AR.** Atomic-resolution monitoring of protein maturation in live human cells by NMR. *Nat Chem Biol* 9: 297-299, **2013**.(IF 14.690)
85. **Banci L, Bertini I, Cefaro C, Ciofi-Baffoni S, Gajda K, Felli IC, Gallo A, Pavelkova A, Kallergi E, Andreadaki M, Katrakili N, Pozidis C and Tokatlidis K.** An intrinsically disordered domain has a dual function coupled to compartment-dependent redox control. *J Mol Biol* 425: 594-608, **2013**.(IF 4.008)
86. **Veggi D, Gentile MA, Cantini F, Lo Surdo P, Nardi-Dei V, Seib KL, Pizza M, Rappuoli R, Banci L, Savino S and Scarselli M.** The Factor H Binding Protein of *Neisseria meningitidis* Interacts with Xenosiderophores in Vitro. *Biochemistry* 51: 9384-9393, **2013**.(IF 3.422)
87. **Banci L, Bertini I, Blazevis O, Calderone V, Cantini F, Mao J, Trapananti A, Vieru M, Amori I, Cozzolino M and Carri MT.** Interaction of Cisplatin with Human Superoxide Dismutase. *J Am Chem Soc* 134: 7009-7014, **2012**.(IF 9.019)
88. **Banci L, Bertini I, Cantini F, Kozyreva T, Massagni C, Palumaa P, Rubino JT and Zovo K.** Human SOD1 maturation through interaction with human CCS. *Proc Natl Acad Sci USA* 109: 13555-13560, **2012**.(IF 9.771)
89. **Banci L and Luchinat C.** Ivano Bertini 1940-2012. *Nat Chem Biol* 8: 807, **2012**.(IF 14.690)
90. **Banci L, Bertini I, Calderone V, Cefaro C, Ciofi-Baffoni S, Gallo A and Tokatlidis K.** An electron transfer path through an extended disulfide relay system: the case of the redox protein ALR. *J Am Chem Soc* 134: 1442-1445, **2012**.(IF 9.019)
91. **Banci L, Bertini I, Ciofi-Baffoni S, Jaiswal D, Neri S, Peruzzini R and Winkelmann J.** Structural characterization of CHCHD5 and CHCHD7: two atypical human twin CX(9)C proteins. *J Struct Biol* 180: 190-200, **2012**.(IF 3.406)
92. **Gallo A, Lo Sterzo C, Mori M, Di Matteo A, Bertini I, Banci L, Brunori M and Federici L.** Structure of nucleophosmin DNA-binding domain and analysis of its complex with a G-quadruplex sequence from the c-MYC promoter. *J Biol Chem* 287: 26539-26548, **2012**.(IF 5.328)
93. **Kallergi E, Andreadaki M, Kritsiligkou P, Katrakili N, Pozidis C, Tokatlidis K, Banci L, Bertini I, Cefaro C, Ciofi-Baffoni S, Gajda K and Peruzzini R.** Targeting and maturation of Erv1/ALR in the mitochondrial intermembrane space. *ACS Chem Biol* 7: 707-714, **2012**.(IF 5.838)
94. **Monini P, Cafaro A, Srivastava I, Sharma VA, Andreini C, Chiozzini C, Ferrantelli F, Cossut MR, Tripiciano A, Nappi F, Longo O, Bellino S, Picconi O, Fanales-Belasio E, Borsetti A, Toschi E, Schiavoni I, Bacigalupo I, Kan E, Sernicola L, Maggiorella MT, Montin K, Porcu M, Leone P, Collacchi B, Palladino C, Ridolfi B, Falchi M, Macchia I, Ulmer JB, Butto' S, Sgadari C, Magnani M, Federico MP, Titti F, Banci L, Dallochio F, Rappuoli R, Ensoli F, Barnett SW, Garaci E and Ensoli B.** HIV-1 Tat Promotes Integrin-Mediated HIV Transmission to Dendritic Cells by Binding Env Spikes and Competes Neutralization by Anti-HIV Antibodies. *Plos ONE* 7: e48781, **2012**.(IF 4.092)

95. **Tottey S, Patterson AM, Banci L, Bertini I, Felli IC, Pavelkova A, Dainty SJ, Pernil R, Waldron KJ, Foster AW and Robinson NJ.** Cyanobacterial metallochaperone inhibits deleterious side reactions of copper. *Proc Natl Acad Sci USA* 109: 95-100, **2012**.(IF 9.771)
96. **Arnesano F, Banci L, Bertini I, Felli IC, Losacco M and Natile G.** Probing the interaction of cisplatin with the human copper chaperone Atox1 by solution and in-cell NMR spectroscopy. *J Am Chem Soc* 133: 18361-18369, **2011**.(IF 9.019)
97. **Banci L, Bertini I, Blazejvits O, Cantini F, Lelli M, Luchinat C, Mao J and Vieru M.** NMR characterization of a "fibril-ready" state of demetallated wild-type superoxide dismutase. *J Am Chem Soc* 133: 345-349, **2011**.(IF 9.019)
98. **Banci L, Bertini I, Ciofi-Baffoni S, Boscaro F, Chatzi A, Mikolajczyk M, Tokatlidis K and Winkelmann J.** Anamorsin is a 2Fe2S cluster-containing substrate of the Mia40-dependent mitochondrial protein trapping machinery. *Chem Biol* 18: 794-804, **2011**.(IF 5.603)
99. **Banci L, Bertini I, Calderone V, Cefaro C, Ciofi-Baffoni S, Gallo A, Kallergi E, Lionaki E, Pozidis C and Tokatlidis K.** Molecular recognition and substrate mimicry drive the electron-transfer process between MIA40 and ALR. *Proc Natl Acad Sci USA* 108: 4811-4816, **2011**.(IF 9.771)
100. **Banci L, Bertini I, Cefaro C, Ciofi-Baffoni S and Gallo A.** Functional role of two interhelical disulfide bonds in human Cox17 protein from a structural perspective. *J Biol Chem* 286: 34382-34390, **2011**.(IF 5.328)
101. **Banci L, Bertini I, Ciofi-Baffoni S, Kozyreva T, Mori M and Wang S.** Sco proteins are involved in electron transfer processes. *J Biol Inorg Chem* 13: 391-403, **2011**.(IF 3.287)
102. **Banci L, Bertini I, Ciofi-Baffoni S, D'Alessandro A, Jaiswal D, Marzano V, Neri S, Ronci M and Urbani A.** Copper exposure effects on yeast mitochondrial proteome. *J Proteomics* 74: 2522-2535, **2011**.(IF 3.851)
103. **Banci L, Barbieri L, Bertini I, Cantini F and Luchinat E.** In-cell NMR in E.coli to monitor maturation steps of hSOD1. *Plos ONE* 6: e23561, **2011**.(IF 4.411)
104. **Bertini I, Banci L, Cavallaro G and Ciofi-Baffoni S.** Seeking the determinants of the elusive functions of Sco proteins. *FEBS J* 278: 2244-2262, **2011**.(IF 3.129)
105. **Gentile MA, Melchiorre S, Emolo C, Moschioni M, Gianfaldoni C, Pancotto L, Ferlenghi I, Scarselli M, Pansegrau W, Veggi D, Merola M, Cantini F, Ruggiero P, Banci L and Masignani V.** Structural and functional characterization of the *Streptococcus pneumoniae* RrgB pilus backbone D1 domain. *J Biol Chem* 286: 14588-14597, **2011**.(IF 5.328)
106. **Scarselli M, Arico B, Brunelli B, Savino S, Di Marcello F, Palumbo E, Veggi D, Ciucchi L, Cartocci E, Bottomley MJ, Malito E, Lo SP, Comanducci M, Giuliani MM, Cantini F, Dragonetti S, Colaprico A, Doro F, Giannetti P, Pallaoro M, Brogioni B, Tontini M, Hilleringmann M, Nardi-Dei V, Banci L, Pizza M and Rappuoli R.** Rational design of a meningococcal antigen inducing broad protective immunity. *Sci Transl Med* 3: 91ra62, **2011**
107. **Banci L, Bertini I, Cantini F and Ciofi-Baffoni S.** Cellular copper distribution: a mechanistic systems biology approach. *Cell Mol Life Sci* 67: 2563-2589, **2010**.(IF 5.511)
108. **Banci L, Bertini I, Cantini F, Inagaki S, Migliardi M and Rosato A.** The binding mode of ATP revealed by the solution structure of the N-domain of human ATP7A. *J Biol Chem* 285: 2537-2544, **2010**.(IF 5.520)

109. **Banci L, Bertini I, McGreevy KS and Rosato A.** Molecular recognition in copper trafficking. *Nat Prod Rep* 27: 695-710, **2010**.(IF 7.45)
110. **Banci L, Bertini I, Cefaro C, Cenacchi L, Ciofi-Baffoni S, Felli IC, Gallo A, Gonnelli L, Luchinat E, Sideris DP and Tokatlidis K.** Molecular chaperone function of Mia40 triggers consecutive induced folding steps of the substrate in mitochondrial protein import. *Proc Natl Acad Sci USA* 107: 20190-20195, **2010**.(IF 9.432)
111. **Banci L, Bertini I, Ciofi-Baffoni S, Poggi L, Vanarotti M, Tottey S, Waldron KJ and Robinson NJ.** NMR structural analysis of the soluble domain of ZiaA-ATPase and the basis of selective interactions with copper metallochaperone Atx1. *J Biol Inorg Chem* 15: 87-98, **2010**.(IF 3.6)
112. **Banci L, Bertini I, Luchinat C and Mori M.** NMR in structural proteomics and beyond. *Prog NMR Spectrosc* 56: 247-266, **2010**.(IF 6.162)
113. **Banci L, Bertini I, Ciofi-Baffoni S, Kozyreva T, Zovo K and Palumaa P.** Affinity gradients drive copper to cellular destinations. *Nature* 465: 645-648, **2010**.(31.434)
114. **Banci L, Bertini I, Cantini F, Migliardi M, Natile G, Nushi F and Rosato A.** Solutions structures of the actuator domain of ATP7A and ATP7B, the menkes and wilson disease proteins. *Biochemistry* 48: 7849-7855, **2009**.(IF 3.379)
115. **Banci L, Bertini I and Ciofi-Baffoni S.** Copper trafficking in biology: an NMR approach. *HFSP J* 3: 165-175, **2009**.(IF
116. **Banci L, Bertini I, Boca M, Calderone V, Cantini F, Girotto S and Vieru M.** Structural and dynamic aspects related to oligomerization of apo SOD1 and its mutants. *Proc Natl Acad Sci USA* 106: 6980-6985, **2009**
117. **Banci L, Bertini I, Calderone V, Della Malva N, Felli IC, Neri S, Pavelkova A and Rosato A.** Copper(I)-mediated protein-protein interactions result from suboptimal interaction surfaces. *Biochem J* 422: 37-42, **2009**.(IF 4.371)
118. **Banci L, Bertini I, Cantini F, Massagni C, Migliardi M and Rosato A.** An NMR study of the interaction of the N-terminal cytoplasmic tail of the Wilson disease protein with copper(I)-HAH1. *J Biol Chem* 284: 9354-9360, **2009**.(IF 5.520)
119. **Banci L, Bertini I, Cefaro C, Ciofi-Baffoni S, Gallo A, Martinelli M, Sideris DP, Katrakili N and Tokatlidis K.** MIA40 is an oxidoreductase that catalyzes oxidative protein folding in mitochondria. *Nat Struct Mol Biol* 16: 198-206, **2009**.(IF 10.987)
120. **Banci L, Bertini I, Ciofi-Baffoni S and Tokatlidis K.** The coiled coil-helix-coiled coil-helix proteins may be redox proteins. *FEBS Lett* 11: 1699-1702, **2009**.(IF 3.264)
121. **Cantini F, Banci L, Magnani D and Solioz M.** The Copper-Responsive Repressor CopR of *Lactococcus lactis* is a Winged Helix Type DNA Binding Protein. *Biochem J* 417: 493-499, **2009**.(IF 4.371)
122. **Cantini F, Veggi D, Dragonetti S, Savino S, Scarselli M, Romagnoli G, Pizza M, Banci L and Rappuoli R.** Solution structure of the factor H binding protein, a survival factor and protective antigen of *neisseria meningitidis*. *J Biol Chem* 284: 9022-9026, **2009**.(IF 5.520)
123. **Scarselli M, Cantini F, Santini L, Veggi D, Dragonetti S, Donati C, Giuliani MM, Comanducci M, Di Marcello F, Romagnoli G, Pizza M, Banci L and Rappuoli R.** Epitope mapping of a bactericidal

- monoclonal antibody against the Factor H Binding Protein of Neisseria meningitidis. *J Mol Biol* 386: 97-108, **2009**.(IF 4.146)
124. **Sideris DP, Petrakis N, Katrakili N, Mikropoulou D, Gallo A, Ciofi-Baffoni S, Banci L, Bertini I and Tokatlidis K** . A novel intermembrane space-targeting signal docks cysteines onto Mia40 during mitochondrial oxidative folding. *J Cell Biol* 187: 1007-1022, **2009**.(IF 9.120)
 125. **Abriata LA, Banci L, Bertini I, Ciofi-Baffoni S, Gkazonis P, Spyroulias GA, Vila AJ and Wang S**. Mechanism of Cu(A) assembly. *Nat Chem Biol* 4: 599-601, **2008**.(IF 13.68)
 126. **Andreini C, Banci L, Bertini I and Rosato A**. Occurrence of copper through the three domains of life: a bioinformatic approach. *J Proteome Res* 1: 209-216, **2008**.(IF 5.675)
 127. **Banci L, Bertini I, Ciofi-Baffoni S, Hadjiloi T, Martinelli M and Palumaa P**. Mitochondrial copper(I) transfer from Cox17 to Sco1 is coupled to electron transfer. *Proc Natl Acad Sci USA* 105: 6803-6808, **2008**.(IF 9.598)
 128. **Banci L, Bertini I, Ciofi-Baffoni S, Janicka A, Martinelli M, Kozlowski H and Palumaa P**. A structural-dynamical characterization of human Cox17. *J Biol Chem* 283: 7912-7920, **2008**.(IF 5.81)
 129. **Banci L, Bertini I, Boca M, Giroto S, Martinelli M, Valentine JS and Vieru M**. SOD1 and amyotrophic lateral sclerosis: mutations and oligomerization. *Plos ONE* 3: e1677, **2008**
 130. **Banci L, Bertini I, Cantini F, Rosenzweig AC and Yatsunyk LA**. Metal binding domains 3 and 4 of the Wilson disease protein: solution structure and interaction with the copper(I) chaperone HAH1. *Biochemistry* 47: 7423-7429, **2008**.(IF 3.368)
 131. **Csizmok V, Felli IC, Tompa P, Banci L and Bertini I**. Structural and dynamic characterization of intrinsically disordered human securin by NMR. *J Am Chem Soc* 130: 16873-16879, **2008**.(IF 7.885)
 132. **Singleton C, Banci L, Ciofi-Baffoni S, Tenori L, Kihlken MA, Boetzel R and Le Brun NE**. Structure and Cu(I)-binding properties of the N-terminal soluble domains of *Bacillus subtilis* CopA. *Biochem J* 411: 571-579, **2008**.(IF 4.009)
 133. **Alcaraz LA, Banci L, Bertini I, Cantini F, Donaire A and Gonnelli L**. MMP-inhibitor interaction: the solution structure of the catalytic domain of human matrix metalloproteinase-3 with three inhibitors. *J Biol Inorg Chem* 12: 1197-1206, **2007**.(IF 3.300)
 134. **Andreini C, Banci L, Bertini I, Elmi S and Rosato A**. Non-heme iron through the three domains of life. *Proteins: Struct , Funct , Bioinf* 67: 317-324, **2007**.(IF 3.73)
 135. **Arendt Y, Banci L, Bertini I, Cantini F, Cozzi R, Del Conte R and Gonnelli L**. Catalytic domain of MMP20 (Enamelysin) - the NMR structure of a new Matrix metalloproteinase. *FEBS Lett* 581: 4723-4726, **2007**.(IF 3.37)
 136. **Arnesano F and Banci L**. Copper transporters and chaperones. In: Handbook of Metalloproteins, edited by Messerschmidt A. J.Wiley & Sons, Ltd, 2007.
 137. **Banci L, Bertini I, Giroto S, Martinelli M, Vieru M, Whitelegge J, Durazo A and Valentine JS**. Metal-free SOD1 forms amyloid-like oligomers: a possible general mechanism for familial ALS. *Proc Natl Acad Sci USA* 104: 11263-11267, **2007**.(IF 9.643)
 138. **Banci L, Baumeister W, Enfedaque J, Heinemann U, Schneider G, Silman I and Sussman JL**. Structural proteomics: from the molecule to the system. *Nat Struct Mol Biol* 14: 3-4, **2007**.(IF 11.502)

139. **Banci L, Bertini I, D'Amelio N, Libralesso E, Turano P and Valentine JS.** Metallation of the ALS-Mutant G37R SOD1 Apoprotein Restores its Structural and Dynamical Properties in Solution to those of Metallated Wild Type SOD1. *Biochemistry* 46: 9953-9962, **2007**.(IF 3.63)
140. **Banci L, Bertini I, Ciofi-Baffoni S, Leontari I, Martinelli M, Palumaa P, Sillard R and Wang S.** Human Sco1 functional studies and pathological implications of the P174L mutant. *Proc Natl Acad Sci USA* 104: 15-20, **2007**.(IF 9.643)
141. **Banci L, Bertini I, Cantini F, Della Malva N, Migliardi M and Rosato A.** The different intermolecular interactions of the soluble copper-binding domains of the Menkes protein, ATP7A. *J Biol Chem* 282: 23140-23146, **2007**.(IF 5.81)
142. **Banci L, Bertini I, Ciofi-Baffoni S, Boelens R, Bonvin AM and van Dijk ADJ.** Modeling protein-protein complexes involved in the cytochrome c oxidase copper-delivery pathway. *J Proteome Res* 6: 1530-1539, **2007**.(IF 5.15)
143. **Banci L, Bertini I, Cavallaro G and Rosato A.** The functions of Sco proteins from genome-based analysis. *J Proteome Res* 6: 1568-1579, **2007**.(IF 5.15)
144. **Banci L, Bertini I, Ciofi-Baffoni S, Gerothanassis IP, Leontari I, Martinelli M and Wang S.** A structural characterization of human Sco2. *Structure* 15: 1132-1140, **2007**.(IF 5.74)
145. **Banci L, Bertini I, Cantini F, Ciofi-Baffoni S, Cavet JS, Dennison C, Graham AI, Harvie DR and Robinson NJ.** NMR structural analysis of cadmium-sensing by winged helix repressor CMTR. *J Biol Chem* 282: 30181-30188, **2007**.(IF 5.81)
146. **Banci L, Baumeister W, Heinemann U, Schneider G, Silman I, Stuart DI and Sussman JL.** An idea whose time has come. *Genome Biol* 8: 408, **2007**.(IF 7.172)
147. **Banci L, Bertini I, Chasapis C, Rosato A and Tenori L.** Interaction of the two soluble metal-binding domains of yeast Ccc2 with copper(I)-Atx1. *Biochem Biophys Res Commun* 364: 645-649, **2007**.(IF 2.86)
148. **Coyne HJ, Ciofi-Baffoni S, Banci L, Bertini I, Zhang L, Graham NG and Winge DR.** The characterization and the role of zinc binding in yeast cox4. *J Biol Chem* 282: 8926-8934, **2007**.(IF 5.81)
149. **Danielsson J, Pierattelli R, Banci L and Graslund A.** High-resolution NMR studies of the zinc-binding site of the Alzheimer's amyloid beta-peptide. *FEBS J* 274: 46-59, **2007**.(IF 3.033)
150. **Furlan S, La Penna G, Banci L and Mealli C.** Ab initio molecular dynamics of heme in cytochrome c. *J Phys Chem B* 8: 1157-1164, **2007**.(IF 4.033)
151. **La Penna G, Furlan S and Banci L.** Molecular statistics of Cytochrome c: structural plasticity, molecular environment and redox potential. *J Biol Inorg Chem* 2: 180-193, **2007**.(IF 3.300)
152. **Ab E, Atkinson AR, Banci L, Bertini I, Ciofi-Baffoni S, Brunner K, Diercks T, Dötsch V, Engelke F, Folkers G, Griesinger C, Gronwald W, Gunther H, Habeck M, de Jong R, Kalbitzer HR, Kieffer B, Leeflang BR, Loss S, Luchinat C, Marquardsen T, Moskau D, Neidig KP, Nilges M, Piccioli M, Pierattelli R, Rieping W, Schippmann T, Schwalbe H, Trave G, Trenner JM, Wohnert J, Zweckstetter M and Kaptein R.** NMR in structural proteomics. *Acta Crystallogr D Biol Crystallogr* 62: 1161, **2006**.(IF 1.401)
153. **Achila D, Banci L, Bertini I, Bunce J, Ciofi-Baffoni S and Huffman DL.** Structure of human Wilson protein domains 5 and 6 and their interplay with domain 4 and the copper chaperone HAH1 in copper uptake. *Proc Natl Acad Sci USA* 103: 5729-5734, **2006**.(IF 10.231)

154. **Albeck S, Alzari P, Andreini C, Banci L, Berry IM, Bertini I, Cambillau C, Canard B, Carter L, Cohen S, Diprose J, Dym O, Esnouf R, Felder C, Ferron F, Guillemot F, Hamer R, Ben Jelloul M, Laskowski R, Laurent T, Longhi S, Lopez R, Luchinat C, Malet H, Mochel T, Morris RJ, Moulinier L, Oinn T, Pajon A, Peleg Y, Perrakis A, Poch O, Prilusky J, Rachedi A, Ripp R, Rosato A, Silman I, Stuard DI, Sussman JL, Thierry JC, Thompson JD, Thornton JM, Unger T, Vaughan B, Vranken W, Watson JD, Whamond G and Herik K.** SPINE bioinformatics and data-management aspects of high-throughput structural biology. *Acta Crystallogr D Biol Crystallogr* 62: 1184-1195, 2006.(IF 1.401)
155. **Andreini C, Banci L, Bertini I and Rosato A.** Zinc through the three domains of life. *J Proteome Res* 5: 3173-3178, 2006.(IF 6.901)
156. **Andreini C, Banci L, Bertini I and Rosato A.** Counting the zinc proteins encoded in the human genome. *J Proteome Res* 5: 196-201, 2006.(IF 6.901)
157. **Arnesano F, Banci L and Piccioli M.** NMR structures of paramagnetic metalloproteins. *Q Rev Biophys* 38: 167-219, 2006.(IF 9.765)
158. **Arnesano F, Banci L, Bertini I, Capozzi F, Ciurli S, Luchinat C, Mangani S, Ciofi-Baffoni S, Rosato A, Turano P and Viezzoli MS.** An Italian contribution to structural genomics: understanding metalloproteins. *Coord Chem Rev* 250: 1419-1450, 2006.(IF 9.779)
159. **Banci L, Bertini I, Ciofi-Baffoni S, Su XC, Miras R, Bal N, Mintz E, Catty P, Shokes JE and Scott RA.** Structural basis for metal binding specificity: the N-terminal cadmium binding domain of the P1-type ATPase CadA. *J Mol Biol* 356: 638-650, 2006.(IF 5.542)
160. **Banci L, Bertini I, Cusack S, deJon RN, Heinemann U, Jones EY, Kozielski F, Maskos K, Messerschmidt A, Owens R, Perrakis A, Poterszman A, Schneider G, Siebold C, Silman I, Sixman T, Stewart-Jones G, Sussman JL, Thierry JC and Moras D.** First steps towards effective methods in exploiting high-throughput technologies for the determination of human protein structures of high biomedical value. *Acta Crystallogr D Biol Crystallogr* 62: 1208-1217, 2006.(IF 1.401)
161. **Banci L, Bertini I, Cantini F, Della Malva N, Rosato A, Herrmann T and Wüthrich K.** Solution structure and intermolecular interactions of the third metal-binding domain of ATP7A, the Menkes disease protein. *J Biol Chem* 281: 29141-29147, 2006.(IF 5.854)
162. **Banci L, Bertini I, Luchinat C and Turano P.** Special Cofactors and Metal Clusters. In: *Biological Inorganic Chemistry: Structure & Reactivity*, edited by Bertini I, Gray BH, Valentine JS and Stiefel EI. Sausalito (CA): University Science Books, 2006, p. 43-56.
163. **Banci L, Bertini I, Cantini F, D'Amelio N and Gaggelli E.** Human SOD1 Before Harboring the Catalytic Metal: Solution Structure of Copper-Depleted, Disulfide-Reduced Form. *J Biol Chem* 281: 2333-2337, 2006.(IF 5.854)
164. **Banci L, Bertini I, Luchinat C and Turano P.** Electron transfer proteins. In: *Biological Inorganic Chemistry: Structure & Reactivity*, edited by Bertini I, Gray BH, Valentine JS and Stiefel EI. Sausalito (CA): University Science Books, 2006, p. 229-261.
165. **Banci L, Bertini I, Calderone V, Ciofi-Baffoni S, Mangani S, Martinelli M, Palumaa P and Wang S.** A hint for the function of human Sco1 from different structures. *Proc Natl Acad Sci USA* 103: 8595-8600, 2006.(IF 10.231)
166. **Banci L, Bertini I, Ciofi-Baffoni S, Kandias NG, Spyroulias GA, Su XC, Robinson NJ and Vanarotti M.** The delivery of copper for thylakoid import observed by NMR. *Proc Natl Acad Sci USA* 103: 8325, 2006.(IF 10.231)

167. **Banci L, Bertini I, Cantini F, Felli IC, Gonnelli L, Hadjiliadis N, Pierattelli R, Rosato A and Voulgaris P.** The Atx1-Ccc2 complex is a metal-mediated protein-protein interaction. *Nat Chem Biol* 2: 367-368, **2006**
168. **Cantini F, Savino S, Scarselli M, Masignani V, Pizza MG, Romagnoli G, Swennen E, Veggi D, Banci L and Rappuoli R .** Solution structure of the immunodominant domain of protective antigen GNA1870 of *neisseria meningitidis*. *J Biol Chem* 281: 7220-7227, **2006**.(IF 5.854)
169. **Andreini C, Banci L, Bertini I, Elmi S and Rosato A.** Comparative analysis of the ADAM and ADAMTS families. *J Proteome Res* 4: 881-888, **2005**.(IF 6.917)
170. **Arnesano F, Banci L, Bertini I, Fantoni A, Tenori L and Viezzoli MS.** Structural interplay between calcium(II) and copper(II) binding to S100A13 protein. *Angew Chem Int Ed Engl* 44: 6341-6344, **2005**
171. **Arnesano F, Balatri E, Banci L, Bertini I and Winge DR.** Folding studies of Cox17 reveal an important interplay of cysteine oxidation and copper binding. *Structure* 13: 713-722, **2005**.(IF 5.993)
172. **Arnesano F, Banci L and Piccioli M.** NMR structures of paramagnetic metalloproteins. *Q Rev Biophys* 38: 167-219, **2005**
173. **Arnesano F, Banci L, Bertini I and Martinelli M.** Ortholog search of proteins involved in copper delivery to Cytochrome c Oxidase and functional analysis of paralogs and gene neighbors by genomic context. *J Proteome Res* 4: 63-70, **2005**.(IF 6.917)
174. **Banci L, Bertini I, Cantini F, Chasapis C, Hadjiliadis N and Rosato A.** A NMR study of the interaction of a three-domain construct of ATP7A with copper(I) and copper(I)-HAH1: the interplay of domains. *J Biol Chem* 280: 38259-38263, **2005**.(IF 6.355)
175. **Banci L, Bertini I, Chasapis C, Ciofi-Baffoni S, Hadjiliadis N and Rosato A.** An NMR study of the interaction between the human copper(I) chaperone and the second and fifth metal-binding domains of the Menkes protein. *FEBS J* 272: 865-871, **2005**.(IF 3.609)
176. **Banci L, Bertini I, Calderone V, Cramaro F, Del Conte R, Fantoni A, Mangani S, Quattrone A and Viezzoli MS.** A prokaryotic superoxide dismutase paralog lacking two Cu ligands: from largely unstructured in solution to ordered in the crystal. *Proc Natl Acad Sci USA* 102: 7541-7546, **2005**.(IF 10.272)
177. **Banci L, Bertini I, Ciofi-Baffoni S, Katsari E, Katsaros N, Kubicek K and Mangani S.** A copper(I) protein possibly involved in the assembly of CuA center of bacterial cytochrome c oxidase. *Proc Natl Acad Sci USA* 102: 3994-3999, **2005**.(IF 10.272)
178. **Banci L, Bertini I, Felli IC and Sarrou J.** Backbone-only restraints for fast determination of the protein fold: The role of paramagnetism-based restraints. Cytochrome b(562) as an example. *J Magn Reson* 172: 191-200, **2005**.(IF 2.461)
179. **Banci L, Bertini I, D'Amelio N, Gaggelli E, Libralesso E, Matecko I, Turano P and Valentine JS.** Fully metallated S134N Cu,Zn-Superoxide Dismutase displays abnormal mobility and intermolecular contacts in solution. *J Biol Chem* 280: 35815-35821, **2005**.(IF 6.355)
180. **Banci L, Bertini I, Cantini F, Migliardi M, Rosato A and Wang S.** An atomic level investigation of the disease-causing A629P mutant of the Menkes protein ATP7A. *J Mol Biol* 352: 409-417, **2005**.(IF 5.542)
181. **Banci L, Bertini I and Mangani S .** Integration of XAS and NMR techniques for the structure determination of metalloproteins. Examples from the study of copper transport proteins. *J Synchrotron Rad* 12: 94, **2005**.(IF 1.144)

182. **Banci L, Benvenuti M, Bertini I, Cabelli D, Calderone V, Fantoni A, Mangani S, Migliardi M and Viezzoli MS.** From an inactive prokaryotic SOD homolog to an active protein through site directed mutagenesis. *J Am Chem Soc* 127: 13287-13292, **2005**.(IF 6.903)
183. **Pascal G, Briux M, Rico M, Ciofi-Baffoni S, Banci L, Ramachandran Shastry M, Roder H., de Lumley Woodyear T, Johnson CM, Fersht AR and Barker PD.** Effects of heme on the structure of the denaturated state and folding kinetics of cytochromes. *J Mol Biol* 346: 331-344, **2005**.(IF 5.542)
184. **Anastassopoulou J, Banci L, Bertini I, Cantini F, Katsari E and Rosato A.** Solution structure of the apo-and copper(I) loaded human metallo-chaperone HAH1. *Biochemistry* 43: 13046-13053, **2004**.(IF 3.922)
185. **Andreini C, Banci L, Bertini I, Luchinat C and Rosato A.** A bioinformatic comparison of structures and homology-models of matrix metalloproteinases. *J Proteome Res* 3: 21-31, **2004**.(IF 5.611)
186. **Arnesano F, Banci L, Bertini I and Bonvin AMJJ.** A docking approach to the study of copper trafficking proteins: interaction between metallochaperones and soluble domains of copper ATPases. *Structure* 12: 669-676, **2004**.(IF 5.993)
187. **Arnesano F, Banci L, Bertini I, Martinelli M, Furukawa Y and O'Halloran TV.** The unusually stable quaternary structure of human SOD1 is controlled by both metal occupancy and disulfide status. *J Biol Chem* 279: 47998-48003, **2004**.(IF 6.482)
188. **Arnesano F, Banci L, Bertini I and Ciofi-Baffoni S.** Perspectives in inorganic structural genomics: a trafficking route for copper. *Eur J Inorg Chem* 2004: 1583-1593, **2004**.(IF 2.482)
189. **Banci L, Bertini I, Del Conte R, D'Onofrio M and Rosato A.** Solution structure and backbone dynamics of the Cu(I) and apo-forms of the second metal-binding domain of the Menkes protein ATP7A. *Biochemistry* 43: 3396-3403, **2004**.(IF 3.922)
190. **Banci L, Bertini I, Cavallaro G, Giachetti A, Luchinat C and Parigi G.** Paramagnetism-based restraints for Xplor-NIH. *J Biomol NMR* 28: 249-261, **2004**.(IF 2.420)
191. **Banci L, Bertini I, Ciofi-Baffoni S, Su XC, Borrelly GP and Robinson NJ.** Solution structures of a cyanobacterial metallochaperone: insight into an atypical copper-binding motif. *J Biol Chem* 279: 27502-27510, **2004**
192. **Banci L, Bertini I, Cantini F, Ciofi-Baffoni S, Gonnelli L and Mangani S.** Solution structure of Cox11: a novel type of b-immunoglobulin-like fold involved in CuB site formation of cytochrome c oxidase. *J Biol Chem* 279: 34833-34839, **2004**.(IF 6.482)
193. **Giachetti A, La Penna G, Perico A and Banci L.** Modelling the backbone dynamics of reduced and oxidized solvated rat microsomal Cytochrome b5. *Biophys J* 87: 498-512, **2004**.(IF 4.463)
194. **Pierattelli R, Banci L, Eady N, Bodiguel J, Jones IM, Moody PCE, Raven ML, Jamart-Gregoire B and Brown KA.** Enzyme-catalyzed mechanism of isoniazid activation in class I and class III peroxidases. *J Biol Chem* 279: 39000-39009, **2004**
195. **Arnesano F, Banci L, Bertini I, Mangani S and Thompsett AR.** A redox switch in CopC: an intriguing copper trafficking protein which binds copper(I) and copper(II) at different sites. *Proc Natl Acad Sci USA* 100: 3814-3819, **2003**.(IF 10.700)
196. **Arnesano F, Banci L, Bertini I, Felli IC, Luchinat C and Thompsett AR.** A strategy for the NMR characterization of type II copper(II) proteins: the case of the copper trafficking protein CopC from *Pseudomonas syringae*. *J Am Chem Soc* 125: 7200-7208, **2003**.(IF 6.201)

197. **Arnesano F, Banci L, Benvenuti M, Bertini I, Calderone V, Mangani S and Viezzoli MS.** The evolutionarily conserved trimeric structure of CutA1 proteins suggests a role in signal transduction. *J Biol Chem* 278: 45999-46006, **2003**.(IF 6.70)
198. **Assfalg M, Banci L, Bertini I, Turano P and Vasos PR.** Superoxide dismutase folding/unfolding pathway: role of the metal ions in modulating structural and dynamical features. *J Mol Biol* 330: 145-158, **2003**.(IF 5.359)
199. **Balatri E, Banci L, Bertini I, Cantini F and Ciofi-Baffoni S.** Solution structure of Sco1: a thioredoxin-like protein involved in cytochrome c oxidase assembly. *Structure* 11: 1431-1443, **2003**.(IF 6.030)
200. **Banci L, Bertini I, Cramaro F, Del Conte R and Viezzoli MS.** Solution structure of Apo Cu,Zn superoxide dismutase: role of metal ions in protein folding. *Biochemistry* 42: 9543-9553, **2003**
201. **Banci L and Rosato A.** Structural genomics of proteins involved in copper homeostasis. *Acc Chem Res* 36: 215-221, **2003**.(IF 15.901)
202. **Banci L, Bertini I, Ciofi-Baffoni S, Del Conte R and Gonnelli L.** Understanding copper trafficking in bacteria: interaction between the copper transport protein CopZ and the N-terminal domain of the copper ATPase CopA from *Bacillus subtilis*. *Biochemistry* 42: 1939-1949, **2003**.(IF 4.064)
203. **Banci L, Bertini I, Ciofi-Baffoni S, Gonnelli L and Su XC.** A core mutation affecting the folding properties of a soluble domain of the ATPase protein CopA from *Bacillus Subtilis*. *J Mol Biol* 331: 473-484, **2003**.(IF 5.359)
204. **Banci L, Camarero S, Martinez AT, Martinez MJ, Perez-Boada M, Pierattelli R and Ruiz-Duenas FJ.** NMR study of Mn(II) binding by the new versatile peroxidase from the white-rot fungus *Pleurotus eryngii*. *J Biol Inorg Chem* 8: 751-760, **2003**.(IF 3.911)
205. **Banci L, Bertini I, Felli IC, Krippahl L, Kubicek K, Moura JJG and Rosato A.** A further investigation of the cytochrome *b5* - cytochrome *c* complex. *J Biol Inorg Chem* 8: 777-786, **2003**.(IF 3.911)
206. **Banci L, Bertini I, Ciofi-Baffoni S, Gonnelli L and Su XC.** Structural basis for the function of the N terminal domain of the ATPase CopA from *Bacillus subtilis*. *J Biol Chem* 278: 50506-50513, **2003**.(IF 6.70)
207. **Banci L.** MD simulations of metalloproteins. *Curr Opin Chem Biol* 7: 143-149, **2003**.(IF 7.492)
208. **Banci L, Bartalesi I, Ciofi-Baffoni S and Tien M.** Unfolding and pH studies on manganese peroxidase: role of heme and calcium on secondary structure stability. *Biopolymers* 72: 38-47, **2003**.(IF 2.372)
209. **Banci L, Bertini I, Ciulli A, Fragai M, Luchinat C and Terni B.** Expression and high yield production of matrix metalloproteinase 12 and of an active mutant with increased solubility. *J Mol Catal A: Chemical* 204-205: 401-408, **2003**.(IF 1.729)
210. **Banci L, Bertini I, Del Conte R, Mangani S and Meyer-Klaucke W.** X-ray absorption spectroscopy study of CopZ, a copper chaperone in *Bacillus subtilis*. The coordination properties of the copper ion. *Biochemistry* 8: 2467-2474, **2003**.(IF 4.064)
211. **Banci L, Bertini I and Del Conte R.** The solution structure of apo CopZ from *Bacillus subtilis*: a further analysis of the changes associated with the presence of copper. *Biochemistry* 42: 13422-13428, **2003**.(IF 4.064)

212. **Shipp E, Cantini F, Bertini I, Valentine JS and Banci L.** Dynamic properties of the G93A mutant of copper-zinc superoxide dismutase as detected by NMR spectroscopy: implications for the pathology of familial amyotrophic lateral sclerosis. *Biochemistry* 42: 1890-1899, **2003**.(IF 4.064)
213. **Arnesano F, Banci L, Barker PD, Bertini I, Rosato A, Su XC and Viezzoli MS.** Solution structure and characterization of the heme chaperone CcmE. *Biochemistry* 41: 13587-13594, **2002**
214. **Arnesano F, Banci L, Bertini I, Ciofi-Baffoni S, Molteni E, Huffman DL and O'Halloran TV.** Metallochaperones and metal transporting ATPases: a comparative analysis of sequences and structures. *Genome Res* 12: 255-271, **2002**
215. **Arnesano F, Banci L, Bertini I and Thompsett AR.** Solution structure of CopC: a cupredoxin-like protein involved in copper homeostasis. *Structure* 10: 1337-1347, **2002**
216. **Banci L, Cavallaro G, Kheifets V and Mochly-Rosen D.** Molecular Dynamics Characterization of the C2 Domain of Protein Kinase C β . *J Biol Chem* 277: 12988-12997, **2002**
217. **Banci L, Bertini I, Cramaro F, Del Conte R and Viezzoli MS.** The solution structure of reduced dimeric copper zinc SOD: the structural effects of dimerization. *Eur J Biochem* 269: 1905-1915, **2002**
218. **Banci L, Pierattelli R and Vila AJ.** NMR studies on copper protein. *Adv Prot Chem* 60: 397-449, **2002**
219. **Banci L, Bertini I, Ciurli S, Dikiy A, Dittmer J, Rosato A, Sciarra G and Thompsett A.** NMR solution structure, backbone mobility and homology modeling of c-type cytochromes from gram-positive bacteria. *ChemBioChem* 3: 299-310, **2002**
220. **Banci L, Bertini I, Ciofi-Baffoni S, D'Onofrio M, Gonnelli L, Marhuenda-Egea FC and Ruiz-Dueñas FJ.** NMR characterization of the N-Terminal domain of a potential copper translocating P-type ATPase from bacillus subtilis. *J Mol Biol* 317: 415-429, **2002**
221. **Banci L, Bertini I, Cavallaro G and Luchinat C.** Chemical shift-based constraints for solution structure determination of paramagnetic low spin heme proteins with bis-His and His-Cn axial ligands. The cases of oxidized cytochrome b5 and Met80Ala cyano-cytochrome c. *J Biol Inorg Chem* 7: 416-426, **2002**
222. **Banci L, Felli IC and Kümmerle R.** Direct detection of hydrogen bonds in monomeric superoxide dismutase: biological implications. *Biochemistry* 41: 2913-2920, **2002**
223. **Banci L, Bertini I, Cantini F, D'Onofrio M and Viezzoli MS.** Structure and dynamics of copper-free SOD: The protein before binding copper. *Protein Sci* 11: 2479-2492, **2002**
224. **Banci L, Bertini I, Ciofi-Baffoni S, Finney LA, Outten CE and O'Halloran TV.** A new zinc-protein coordination site in an intracellular metal trafficking: solution structure of the apo and Zn(II) forms of ZntA(46-118). *J Mol Biol* 323: 883-897, **2002**.(IF 5.359)
225. **Primus JI, Boeren S, Nielen MWF, Vervoort J, Banci L and Rietjens IMCM.** Isolation and characterization of a microperoxidase-8 with a modified histidine axial ligand. *J Biol Inorg Chem* 7: 870-878, **2002**
226. **Redaelli C, Monzani E, Santagostini L, Casella L, Sanangelantoni AM, Pierattelli R and Banci L.** Conversion of myoglobin into a peroxidase by the T67R mutation. *ChemBioChem* 3: 226-233, **2002**
227. **Arnesano F, Banci L, Bertini I, Cantini F, Ciofi-Baffoni S, Huffman DL and O'Halloran TV.** Characterization of the binding interface between the copper chaperone Atx1 and the first cytosolic domain of Ccc2 ATPase. *J Biol Chem* 276: 41365-41376, **2001**

228. **Arnesano F, Banci L, Bertini I, Huffman DL and O'Halloran TV.** Solution Structure of the Cu(I) and Apo forms of the Yeast Metallochaperone, Atx1. *Biochemistry* 40: 1528-1539, **2001**
229. **Assfalg M, Banci L, Bertini I, Ciofi-Baffoni S and Barker PD.** ¹⁵N backbone dynamics of ferricytochrome b₅₆₂: comparison with the reduced protein and R98C variant. *Biochemistry* 40: 12761-12771, **2001**
230. **Banci L and Assfalg M.** Mitochondrial cytochrome c. In: Handbook of Metalloproteins, edited by Wieghart K, Huber R, Poulos T and Messerschmidt A. John Wiley & Sons, Ltd, 2001, p. 32-43.
231. **Banci L, Bertini I, Liu G, Reddig T, Tang W, Wu Y and Zhu D.** Effects of Extrinsic Imidazole Ligation on Molecular and Electronic Structure of Cytochrome c. *J Biol Inorg Chem* 6: 628-637, **2001**
232. **Banci L, Bertini I, Del Conte R, Markey J and Ruiz-Dueñas FJ.** Copper trafficking: the solution structure of *Bacillus subtilis* CopZ. *Biochemistry* 40: 15660-15668, **2001**
233. **Banci L, Bertini I, Felli IC, Hajieva P and Viezzoli MS.** Side chain mobility as monitored by CH-CH cross correlation: the example of cytochrome b₅. *J Biomol NMR* 20: 1-10, **2001**
234. **Banci L, Bertini I, Ciofi-Baffoni S, Huffman DL and O'Halloran TV.** Solution structure of the yeast copper transporter domain Ccc2a in the apo and Cu(I)-loaded states. *J Biol Chem* 276: 8415-8426, **2001**
235. **Banci L, Bertini I, Branchini BR, Hajieva P, Spyroulias GA and Turano P.** Dimethyl Propionate Ester Heme- Containing Cytochrome b₅: Structure and Stability. *J Biol Inorg Chem* 6: 490-503, **2001**
236. **Banci L and Assfalg M.** Cytochrome c₇. In: Handbook of Metalloproteins, edited by Wieghart K, Huber R, Poulos T and Messerschmidt A. John Wiley & Sons, Ltd, 2001, p. 109-118.
237. **Chen L, Hahn H, Wu G, Chen C-H, Liron T, Schechtman D, Cavallaro G, Banci L, Bolli R, Dorn II GW and Mochly-Rosen D.** Opposing cardioprotective actions and parallel hypertrophic effects of δ and ϵ PKC. *Proc Natl Acad Sci USA* 98: 11114-11119, **2001**
238. **Mester T, Ambert-Balay K, Ciofi-Baffoni S, Banci L, Jones AD and Tien M.** Oxidation of a Tetramer Non-phenolic Lignin Model Compound by Lignin Peroxidase. *J Biol Chem* 276: 22985-22990, **2001**
239. **Arnesano F, Banci L, Bertini I, van der Wetering K, Czisch M and Kaptein R.** The auto-orientation in high magnetic field of oxidized cytochrome b₅₆₂ as source of constraints for solution structure determination. *J Biomol NMR* 17: 295-304, **2000**
240. **Arnesano F, Banci L, Bertini I, Ciofi-Baffoni S, de Lumley Woodyear T, Johnson CM and Barker PD.** Structural consequences of B - to C - type heme conversion in oxidized Escherichia Coli cytochrome b₅₆₂. *Biochemistry* 39: 1499-1514, **2000**
241. **Arnesano F, Banci L, Bertini I, Koulougliotis D and Monti A.** Monitoring mobility in the early steps of unfolding: the case of oxidized cytochrome b₅ in the presence of 2 M guanidinium chloride. *Biochemistry* 39: 7117-7130, **2000**
242. **Banci L, Bertini I, Rosato A and Scacchieri S.** Solution structure of oxidized microsomal rabbit cytochrome b₅. Factors determining the heterogeneous binding of the heme. *Eur J Biochem* 267: 755-766, **2000**
243. **Banci L and Presenti C.** Perspectives in Inorganic Structural Biology. *JBIC* 5: 422-431, **2000**

244. **Banci L, Bertini I, Cramaro F, Del Conte R, Rosato A and Viezzoli MS.** Backbone Dynamics of Human Cu, Zn Superoxide Dismutase and of its Monomeric F50/EG51E/E133Q Mutant: The influence of Dimerization on Mobility and Function. *Biochemistry* 39: 9108-9118, **2000**
245. **Banci L, Bertini I, Luchinat C and Turano P.** Solution structures of hemoproteins. In: The Porphyrin Handbook, edited by Kadish KM, Smith KM and Guillard R. San Diego, CA: Academic Press, 2000, p. 323-350.
246. **Santucci R, Bongiovanni C, Marini S, Del Conte R, Tien M, Banci L and Coletta M.** Redox equilibria of manganese peroxidase from *Phanerochaetes chrysosporium*: functional role of residues on the proximal side of the heme pocket. *Biochem J* 349: 85-90, **2000**
247. **Arnesano F, Banci L, Bertini I, Faraone-Mennella J, Rosato A, Barker PD and Fersht AR.** The solution structure of oxidized *Escherichia coli* cytochrome *b*₅₆₂. *Biochemistry* 38: 8657-8670, **1999**
248. **Arnesano F, Banci L, Bertini I, Felli IC and Koulougliotis D.** Solution structure of the B form of oxidized rat microsomal cytochrome *b*₅ and backbone dynamics via ¹⁵N rotating frame NMR relaxation measurements: Biological Implications. *Eur J Biochem* 260: 347-354, **1999**
249. **Assfalg M, Banci L, Bertini I, Bruschi M, Giudici-Ortoniconi MT and Turano P.** A proton-NMR investigation of the fully reduced cytochrome *c*₇ from *Desulfuromonas acetoxidans*: comparison between the reduced and the oxidized forms. *Eur J Biochem* 266: 634-643, **1999**
250. **Banci L, Bertini I, Huber JG, Spyroulias GA and Turano P.** Solution structure of reduced horse heart cytochrome *c*. *J Biol Inorg Chem* 4: 21-31, **1999**
251. **Banci L, Ciofi-Baffoni S and Tien M.** Lignin and Mn peroxidase-catalyzed oxidation of phenolic lignin oligomers. *Biochemistry* 38: 3205-3210, **1999**
252. **Banci L and Pierattelli R.** The interaction of the nitrate anion with Cytochrome *c* Peroxidase: a ¹⁵N NMR study. *Spectrochimica Acta Part A* 55: 415-420, **1999**
253. **Banci L, Bertini I, Del Conte R and Viezzoli MS.** Structural and functional studies of a monomeric mutant of Cu,Zn superoxide dismutase without ARG143. *Biospectroscopy* 5: 33-41, **1999**
254. **Banci L, Bertini I, Rosato A and Varani G.** Mitochondrial cytochromes *c*: a comparative analysis. *J Biol Inorg Chem* 4: 824-837, **1999**
255. **Banci L, Bertini I, Del Conte R, Mangani S, Viezzoli MS and Fadin R.** The solution structure of a monomeric reduced form of human Copper, Zinc Superoxide Dismutase bearing the same charge as the native protein. *J Biol Inorg Chem* 4: 795-803, **1999**
256. **Banci L, Bertini I, Capannoli C, Del Conte R and Tien M.** Spectroscopic characterization of active mutants of manganese peroxidase: mutations on the proximal side affect calcium binding on the distal side. *Biochemistry* 38: 9617-9625, **1999**
257. **Ferraroni M, Rypniewski W, Wilson KS, Viezzoli MS, Banci L, Bertini I and Mangani S.** The crystal structure of the monomeric human SOD mutant F50/G51E/E133Q at atomic resolution. The enzyme mechanism revisited. *J Mol Biol* 288: 413-426, **1999**
258. **Arnesano F, Banci L, Bertini I and Koulougliotis D.** Solution structure of oxidized rat microsomal cytochrome *b*₅ in the presence of 2 M guanidinium chloride: Monitoring the early steps in protein unfolding. *Biochemistry* 37: 17082-17092, **1998**

259. **Arnesano F, Banci L, Bertini I and Felli IC.** The solution structure of oxidized rat microsomal cytochrome *b₅*. *Biochemistry* 37: 173-184, 1998
260. **Assfalg M, Banci L, Bertini I, Bruschi M and Turano P.** 800 MHz ¹H NMR solution structure refinement of oxidized cytochrome *c7* from *Desulfuromonas acetoxidans*. *Eur J Biochem* 256: 261-270, 1998
261. **Banci L, Berners-Price S, Bertini I, Clementi V, Luchinat C, Spyroulias GA and Turano P.** Water-protein interaction in native and partially unfolded equine cytochrome *c*. (Dedicated to Prof. R.R. Ernst). *Mol Phys* 95: 797-808, 1998
262. **Banci L and Luchinat C.** Selective *versus* non-selective T₁ experiments to determine metal-nucleus distances in paramagnetic proteins. *Inorg Chim Acta* 373-379, 1998
263. **Banci L, Bertini I, Cavazza C, Felli IC and Koulougliotis D.** Probing the backbone dynamics of oxidized and reduced rat microsomal cytochrome *b₅* via ¹⁵N rotating frame NMR relaxation measurements: biological implications. *Biochemistry* 37: 12320-12330, 1998
264. **Banci L, Bertini I, Spyroulias GA and Turano P.** The conformational flexibility of oxidized cytochrome *c* studied through its interaction with NH₃ and at high temperature. *Eur J Inorg Chem* 1: 583-591, 1998
265. **Banci L, Bertini I, Luchinat C, Pierattelli R, Shokhirev NV and Walker FA.** Analysis of the temperature dependence of the ¹H and ¹³C isotropic shifts of horse heart ferricytochrome *c*: explanation of Curie and anti-Curie temperature dependence and nonlinear pseudocontact shifts in a two-level framework. *J Am Chem Soc* 120: 8472-8479, 1998
266. **Banci L, Benedetto M, Bertini I, Del Conte R, Piccioli M and Viezzoli MS.** Solution structure of reduced monomeric Q133M2 Copper, Zinc Superoxide Dismutase. Why is SOD a dimeric enzyme? *Biochemistry* 37: 11780-11791, 1998
267. **Banci L, Bertini I, Huber JG, Luchinat C and Rosato A.** Partial orientation of oxidized and reduced cytochrome *b₅* at high magnetic fields: Magnetic susceptibility anisotropy contributions and consequences for protein solution structure determination. *J Am Chem Soc* 120: 12903-12909, 1998
268. **Banci L, Bertini I, De la Rosa MA, Koulougliotis D, Navarro JA and Walter O.** The solution structure of oxidized cytochrome *c₆* from the green alga *Monoraphidium braunii*. *Biochemistry* 37: 4831-4843, 1998
269. **Banci L, Felli IC and Koulougliotis D.** Identification of slow motions in the reduced recombinant high-potential iron sulfur protein I (HiPIP I) from *Ectothiorhodospira halophila* via ¹⁵N rotating-frame NMR relaxation measurements. *J Biomol NMR* 12: 307-318, 1998
270. **Banci L, Bertini I, Reddig T and Turano P.** Monitoring the conformational flexibility of cytochrome *c* at low ionic strength by ¹H NMR spectroscopy. *Eur J Biochem* 256: 271-278, 1998
271. **Banci L, Bertini I, Turano P and Luchinat C.** The solution structure of redox proteins and beyond. In: Biological electron transfer chains: genetics and mode of operation, edited by Canters GW and Vijgenboom E. Kluwer Academic Publishers, 1998, p. 225-238.
272. **Banci L, Bertini I, Cremonini MA, Gori Savellini G, Luchinat C, Wüthrich K and Güntert P.** PSEUDODYANA for NMR structure calculation of paramagnetic metalloproteins using torsion angle molecular dynamics. *J Biomol NMR* 12: 553-557, 1998
273. **Banci L, Bertini I, Dal Pozzo L, Del Conte R and Tien M.** Monitoring the role of oxalate in manganese peroxidase. *Biochemistry* 37: 9009-9015, 1998

274. **Ciofi-Baffoni S, Banci L and Brandi A.** Synthesis of oligomeric mimics of lignin. *J Chem Soc , Perkin Trans 1* 3207-3217, **1998**
275. *Molecular modeling and dynamics of bioinorganic systems.* Dordrecht, The Netherlands: Kluwer Academic Press, 1997.
276. **Archer M, Banci L, Dikaya E and Romao MJ.** Crystal structure of cytochrome *c*' from *Rhodocyclus gelatinosus* and comparison with other cytochromes *c*'. *JBIC* 2: 611-622, **1997**
277. **Banci L and Gori Savellini G.** Molecular dynamics of metallo proteins. In: *Molecular Modeling and Dynamics of Bioinorganic Systems*, edited by Banci L and Comba P. Dordrecht, The Netherlands: Kluwer academic publishers, 1997.
278. **Banci L, Bertini I, Bren KL, Gray HB, Sompornpisut P and Turano P.** Solution structure of oxidized *Saccharomyces cerevisiae* Iso-1-cytochrome *c*. *Biochemistry* 36: 8992-9001, **1997**
279. **Banci L, Bertini I, Gray HB, Luchinat C, Reddig T, Rosato A and Turano P.** Solution structure of oxidized horse heart cytochrome *c*. *Biochemistry* 36: 9867-9877, **1997**
280. **Banci L, Bertini I, Gori Savellini G, Romagnoli A, Turano P, Cremonini MA, Luchinat C and Gray HB.** Pseudocontact shifts as constraints for energy minimization and molecular dynamic calculations on solution structures of paramagnetic metalloproteins. *Proteins Struct Funct Genet* 29: 68-76, **1997**
281. **Banci L, Gori Savellini G and Turano P.** A molecular dynamics study in explicit water of the reduced and oxidized forms of yeast iso-1-cytochrome *c*. Solvation and dynamic properties of the two oxidation states. *Eur J Biochem* 249: 716-723, **1997**
282. **Banci L.** Structural properties of peroxidases. *J Biotechnol* 53: 253-263, **1997**
283. **Banci L, Bertini I, Viezzoli MS, Argese E, Orsega E, Choi Ying Chiu and Mullenbach GT.** Tuning the activity of Cu,Zn superoxide dismutase through site directed mutagenesis: a relatively active monomeric species. *J Biol Inorg Chem* 2: 295-301, **1997**
284. **Banci L, Benedetto M, Bertini I, Del Conte R, Piccioli M, Richert T and Viezzoli MS.** Assignment of backbone NMR resonances and secondary structural elements of a reduced monomeric mutant of copper/zinc superoxide dismutase. *Magn Reson Chem* 35: 845-853, **1997**
285. **Banci L, Bertini I, Ferroni F and Rosato A.** Solution structure of reduced microsomal cytochrome *b₅*. *Eur J Biochem* 249: 270-279, **1997**
286. **Bertini I and Rosato A.** Solution structures of proteins containing paramagnetic metal ions. In: *Molecular Modeling and Dynamics of Bioinorganic Systems*, edited by Banci L and Comba P. Dordrecht: Kluwer Academic Publishers, 1997, p. 1-19.
287. **Bujons J, Dikiy A, Ferrer JC, Banci L and Mauk AG.** Charge reversal of a critical active-site residue in cytochrome *c* peroxidase. Characterization of the Arg48-->Glu variant. *Eur J Biochem* 243: 72-84, **1997**
288. **Csiki C, Norenberg KM, Shomaker CM and Zimmer M.** Computational analysis of inorganic and bioinorganic nickel complexes. In: *Molecular modeling and dynamics of bioinorganic systems*, edited by Banci L and Comba P. Dordrecht, The Netherlands: Kluwer, 1997, p. 105-130.
289. **Merz KMJr and Banci L.** Binding of bicarbonate to human carbonic anhydrase II: a continuum of binding states. *J Am Chem Soc* 119: 863-871, **1997**

290. **Baistrocchi P, Banci L, Bertini I, Turano P, Bren KL and Gray HB.** Three-dimensional solution structure of *Saccharomyces cerevisiae* reduced iso-1-cytochrome c. **Biochemistry** 35: 13788-13796, 1996
291. **Banci L, Carloni P, Diaz A and Gori Savellini G.** Molecular dynamics calculations on peroxidases: the effect of calcium ions on protein structure. **JBIC** 1: 264-272, 1996
292. **Banci L, Bertini I, Bren KL, Cremonini MA, Gray HB, Luchinat C and Turano P.** The use of pseudocontact shifts to refine solution structures of paramagnetic metalloproteins: Met80Ala cyano-cytochrome c as an example. **J Biol Inorg Chem** 1: 117-126, 1996
293. **Banci L, Bertini I, Bruschi M, Sompornpisut P and Turano P.** NMR characterization and solution structure determination of the oxidized cytochrome c7 from *Desulfuromonas acetoxidans*. **Proc Natl Acad Sci USA** 93: 14396-14400, 1996
294. **Banci L and Piccioli M.** Cobalt(II) and Nickel(II) substituted proteins. In: Encyclopedia of Magnetic Resonance, edited by Grant DM and Harris RK. Encycl. of Nuclear Magn. Reson., 1996, p. 1365-1373.
295. **Banci L, Bertini I, Quacquareni G, Walter O, Diaz A, Hervás M and De la Rosa MA.** The Solution structure of cytochrome c₆ the from green alga *monoraphidium braunii*. **J Biol Inorg Chem** 1: 330-340, 1996
296. **Banci L, Rosato A and Turano P.** Can the axial ligand strength be monitored through spectroscopic measurements? **JBIC** 1: 364-367, 1996
297. **Banci L, Bertini I, Gori Savellini G and Luchinat C.** Individual Reduction Potentials of the Iron-Ions in Fe₂S₂ and high potential Fe₄S₄ ferredoxins. **Inorg Chem** 35: 4248-4253, 1996
298. **Lu Y, Roe JA, Bender CJ, Peisach CJ, Banci L, Bertini I, Gralla EB and Valentine J.** New type 2 copper-cysteinate proteins. Copper site histidine-to-cysteine mutants of yeast copper-zinc superoxide dismutase. **Inorg Chem** 35: 1692-1700, 1996
299. **Merz KM and Banci L.** Binding of azide to human carbonic anhydrase II: the role of electrostatic complementarity plays in selecting the preferred resonance structure of azide. **J Phys Chem** 100: 17414-17420, 1996
300. **Pierattelli R, Banci L and Turner DL.** Indirect determination of magnetic susceptibility tensors in peroxidases: a novel approach to structure elucidation by NMR. **JBIC** 1: 320-329, 1996
301. **Banci L, Bertini I, Bren KL, Gray HB and Turano P.** pH-dependent equilibria of yeast Met80Ala-iso-1-cytochrome c probed by NMR spectroscopy: a comparison with the wild-type protein. **Chemistry and Biology** 2: 355-363, 1995
302. **Banci L, Pierattelli R and Turner DL.** Determination of haem electronic structure in cytochrome b₅ and metcyanomyoglobin. **Eur J Biochem** 232: 522-527, 1995
303. **Banci L, Bertini I, Pierattelli R, Tien M and Vila AJ.** Factoring of the hyperfine shifts in the cyanide adduct of lignin peroxidase from *P. chrysosporium*. **J Am Chem Soc** 117: 8659-8667, 1995
304. **Banci L, Bertini I, Chiu CY, Mullenbach GT and Viezzoli MS.** Synthesis and characterization of a monomeric mutein of Cu/Zn superoxide dismutase with partially reconstituted enzymatic activity. **Eur J Biochem** 234: 855-860, 1995
305. **Banci L, Bertini I, Bren KL, Gray HB, Sompornpisut P and Turano P.** Three-dimensional solution structure of the cyanide adduct of a Met80Ala variant of *Saccharomyces cerevisiae* iso-1-cytochrome c.

- Identification of ligand-residue interactions in the distal heme cavity. **Biochemistry** 34: 11385-11398, 1995
306. **Banci L, Bertini I, Borsari M, Viezzoli MS and Hallewell RA.** Mutation of the metal bridging-proton donor His 63 residue in human Cu,Zn superoxide dismutase: biochemical and biophysical analysis of the His 63 to Cys mutant. **Eur J Biochem** 232: 220-225, 1995
307. **Banci L, Bertini I, Dikiy A, Kastrau DHW, Luchinat C and Sompornpisut P.** The three-dimensional solution structure of the reduced high potential iron sulfur protein *Chromatium vinosum* through NMR. **Biochemistry** 34: 206-219, 1995
308. **Banci L and Pierattelli R.** 3D structure of HiPIPs in solution through NMR and molecular dynamics study. In: Nuclear magnetic resonance of paramagnetic macromolecules. NATO ASI Series., edited by La Mar GN. Dordrecht: Kluwer Academic, 1995, p. 281-296.
309. **Banci L, Bertini I, Ciurli S, Luchinat C and Pierattelli R.** Rationalization of the reduction potentials within the series of the high potential iron-sulfur proteins. *Dedicated to Prof. F. Basolo.* **Inorg Chim Acta** 240: 251-256, 1995
310. **Banci L.** Advances in the investigation tools in inorganic chemistry: their application to coordination compounds and metalloproteins. In: Synthesis and methodologies in inorganic chemistry, edited by Vigato PA. 1995.
311. **Bren KL, Gray HB, Banci L, Bertini I and Turano P.** Paramagnetic ¹H NMR spectroscopy of the cyanide derivative of Met80Ala-iso-1-cytochrome *c*. **J Am Chem Soc** 117: 8067-8073, 1995
312. **Turano P, Ferrer JC, Cheesman MR, Thomson AJ, Banci L, Bertini I and Mauk AG.** pH, electrolyte, and substrate-linked variation in active site structure of the Trp51Ala variant of cytochrome *c* peroxidase. **Biochemistry** 34: 13895-13905, 1995
313. **Banci L, Bertini I, Eltis LD, Felli IC, Kastrau DHW, Luchinat C, Piccioli M, Pierattelli R and Smith M.** The three dimensional structure in solution of the paramagnetic protein high-potential iron-sulfur protein I from *Ectothiorhodospira halophila* through nuclear magnetic resonance. **Eur J Biochem** 225: 715-725, 1994
314. **Banci L, Carloni P and Gori Savellini G.** Molecular dynamics studies on peroxidases: A structural model for horseradish peroxidase and a substrate adduct. **Biochemistry** 33: 12356-12366, 1994
315. **Banci L, Bertini I and La Penna G.** The enzymatic mechanism of carboxypeptidase: a molecular dynamics study. **Proteins Struct Funct Genet** 18: 186-197, 1994
316. **Banci L, Bertini I, Cambria MT, Capozzi F and Dikiy A.** ¹H 1D and 2D NMR studies of the ferricytochrome c551 from *Rhodocyclus gelatinosus*. **Eur J Biochem** 219: 663-669, 1994
317. **Banci L, Bertini I, Marconi S, Pierattelli R and Sligar SG.** Cytochrome P450 and aromatic bases: a ¹H NMR study. **J Am Chem Soc** 116: 4866-4873, 1994
318. **Banci L, Bertini I, Pierattelli R and Vila AJ.** ¹H ¹³C HETCOR investigations on heme-containing systems. **Inorg Chem** 33: 4338-4343, 1994
319. **Banci L, Bertini I and Luchinat C.** 2D NMR spectra of paramagnetic systems. In: Methods in enzymology, edited by James TL and Oppenheimer NJ. London, vol. 239: Academic press, Inc., 1994, p. 485-514.

320. **Banci L, Carloni P and Orioli PL** . Molecular Dynamics Studies on Mutants of Cu,Zn Superoxide Dismutase: The Functional Role of Charged Residues in the Electrostatic Loop VII. *Proteins Struct Funct Genet* 18: 216-230, **1994**
321. **Banci L, Bertini I, Bruni B, Carloni P, Luchinat C, Mangani S, Orioli PL, Piccioli M, Rypniewski W and Wilson K**. X-ray structure, NMR and molecular dynamics of the reduced form of copper-zinc superoxide dismutase. *Biochem Biophys Res Commun* 202: 1088-1095, **1994**
322. **Ferrer JC, Turano P, Banci L, Bertini I, Morris IK, Smith KM, Smith M and Mauk AG**. Active site coordination chemistry of the cytochrome c peroxidase Asp235Ala variant: spectroscopic and functional characterization. *Biochemistry* 33: 7819-7829, **1994**
323. **Banci L, Bermel W, Luchinat C, Pierattelli R and Tarchi D**. ¹H 3D NOE-NOE spectrum of met-myoglobin-CN: the first 3D NMR spectrum of a paramagnetic protein. *Special issue devoted to Bioinorganic Chemistry. Magn Reson Chem* 31: S3-S7, **1993**
324. **Banci L, Bertini I, Ciurli S, Ferretti S, Luchinat C and Piccioli M**. The electronic structure of (Fe₄S₄)³⁺ clusters in proteins. An investigation of the oxidized high-potential iron-sulfur protein II from *Ectothiorhodospira vacuolata*. *Biochemistry* 32: 9387-9397, **1993**
325. **Banci L, Bertini I, Marconi S and Pierattelli R**. ¹H NMR study of reduced heme proteins: myoglobin and cytochrome P450. *Eur J Biochem* 215: 431-437, **1993**
326. **Banci L**. Nuclear relaxation in paramagnetic metalloproteins. In: Biological Magnetic Resonance, edited by Berliner LJ and Reuben J. New York: Plenum, 1993, p. 79-111.
327. **Banci L, Bertini I, Bini T, Tien M and Turano P**. Binding of horseradish, lignin and manganese peroxidases to their respective substrate. *Biochemistry* 32: 5825-5831, **1993**
328. **Banci L, Bertini I, Kuan I-C, Tien M, Turano P and Vila AJ**. NMR investigation of the isotopically labeled cyanide derivatives of lignin peroxidase and manganese peroxidase. *Biochemistry* 32: 13483-13489, **1993**
329. **Banci L, Bertini I, Capozzi F, Ciurli S, Gori Savellini G and Luchinat C**. NMR and MD Investigation on the Structure-Function Relationship in HiPIP. In: The development of science for the improvement of human life. Proceedings of the II Kyoto-Siena Symposium., Kyoto, Japan: 1993.
330. **Banci L, Bertini I, Luchinat C, Piccioli M and Scozzafava A**. 1D versus 2D ¹H NMR experiments in dicopper, dicobalt superoxide dismutase: a further mapping of the active site. Dedicated to Prof. Lamberto Malatesta. *Gazz Chim Ital* 123: 95-100, **1993**
331. **Banci L**. Nuclear Relaxation in Paramagnetic Metalloproteins. *Biological Magnetic Resonance* 12: 79-111, **1993**
332. **Banci L, Bertini I, Capozzi F, Carloni P, Ciurli S, Luchinat C and Piccioli M**. The iron-sulfur cluster in the oxidized high potential iron sulfur protein from *Ectothiorhodospira halophila*. *J Am Chem Soc* 115: 3431-3440, **1993**
333. **Banci L, Bertini I, Luchinat C, Messori L and Turano P**. Frontiers in 2D NMR of paramagnetic metalloproteins. *Appl Magn Reson* 4: 461-476, **1993**
334. **Banci L, Bertini I, Ferretti S, Luchinat C and Piccioli M**. The structure of iron-sulfur clusters in proteins as monitored by NMR, Mössbauer, EPR and molecular dynamics. *J Mol Struct* 292: 207-220, **1993**

335. **Banci L, Cabelli DE, Getzoff ED, Hallewell RA and Viezzoli MS.** An Essential Role for the Conserved Glu-133 in the Anion Interaction with Superoxide Dismutase. *J Inorg Biochem* 50: 89-100, **1993**
336. **Banci L, Bertini I, Luchinat C and Viezzoli MS.** pH dependent properties of SOD studied through mutants on Lys 136. *Inorg Chem* 32: 1403-1406, **1993**
337. **Banci L, Bertini I and La Penna G.** Molecular dynamics study on carboxypeptidase A: the effect of protonation of Glu 270. *Inorg Chem* 32: 2207-2211, **1993**
338. **Banci L, Bertini I, Eltis LD and Pierattelli R.** Spectroscopic characterization of a recently isolated cytochrome P450 from *Rhodococcus rhodochrous*. *Biophys J* 65: 806-813, **1993**
339. **Banci L, Bertini I, Bauer D, Hallewell RA and Viezzoli MS.** Investigation of a new Cu,ZnSOD mutant: the Thr-Arg137 derivative. *Biochemistry* 32: 4384-4388, **1993**
340. **Peng Z, Merz KMJr and Banci L.** Binding of Cyanide, Cyanate, and Thiocyanate to Human Carbonic Anhydrase II. *Proteins Struct Funct Genet* 17: 203-216, **1993**
341. **Azab HA, Banci L, Borsari M, Luchinat C, Sola M and Viezzoli MS.** Redox chemistry of superoxide dismutase. Cyclic voltammetry of wild-type enzymes and mutants on functionally relevant residues. *Inorg Chem* 31: 4649-4655, **1992**
342. **Banci L, Schroeder S and Kollman PA.** Molecular Dynamics Characterization of the Active Cavity of Carboxypeptidase A and some of its Inhibitor Adducts. *Proteins Struct Funct Genet* 13: 288-305, **1992**
343. **Banci L, Bertini I, Turano P and Vicens Oliver M.** NOE and two-dimensional correlated ¹H NMR spectroscopy of cytochrome c' from *Chromatium vinosum*. *Eur J Biochem* 204: 107-112, **1992**
344. **Banci L, Bertini I, Capozzi F and Luchinat C.** The electron-nucleus coupling: a breakthrough in the investigation of paramagnetic metalloproteins. *Int J Quantum Chem* 42: 1383-1396, **1992**
345. **Banci L, Dugad LB, La Mar GN, Keating KA, Luchinat C and Pierattelli R.** ¹H Nuclear Magnetic Resonance investigation of cobalt(II) substituted carbonic anhydrase. *Biophys J* 63: 530-543, **1992**
346. **Banci L, Carloni P, La Penna G and Orioli PL.** Molecular dynamics studies on superoxide dismutase and its mutants: the structural and functional role of Arg 143. *J Am Chem Soc* 114: 6994-7001, **1992**
347. **Banci L, Piccioli M and Scozzafava A.** Advancements in NMR Investigation of Paramagnetic Molecules in Solution. *Coord Chem Rev* 120: 1-28, **1992**
348. **Banci L, Bertini I, Carloni P, Luchinat C and Orioli PL.** Molecular dynamics simulations on HiPIP from *Chomatium vinosum* and comparison with NMR data. *J Am Chem Soc* 114: 10683-10689, **1992**
349. **Banci L, Bertini I, Pease EA, Tien M and Turano P.** ¹H NMR investigation of manganese peroxidases from *Phanerochaete chrysosporium* A comparison with other peroxidases. *Biochemistry* 31: 10009-10017, **1992**
350. **Getzoff ED, Cabelli DE, Fisher CL, Parge HE, Viezzoli MS, Banci L and Hallewell RA.** Faster Superoxide Dismutase Mutants designed by Enhancing Electrostatic Guidance. *Nature* 358: 347-351, **1992**
351. **Banci L, Bertini I, Briganti F and Luchinat C.** The electronic structure of paramagnetic polynuclear metal clusters in proteins studied through ¹H NMR spectroscopy. *New J Chem* 15: 467-477, **1991**

352. **Banci L, Bertini I and Luchinat C.** *Nuclear and electron relaxation. The magnetic nucleus-unpaired electron coupling in solution.* Weinheim: VCH, 1991.
353. **Banci L, Bertini I, Cabelli DE, Hallewell RA, Luchinat C and Viezzoli MS.** Advances in understanding of the structure-function relationship in Cu,Zn superoxide dismutase. *Free Radical Res Comms* 12-13: 239-251, **1991**
354. **Banci L, Bertini I, Luchinat C and Piccioli M.** Frontiers in NMR of paramagnetic molecules: ¹H NOE and related experiments. In: NMR and biomolecular structure, edited by Bertini I, Molinari H and Niccolai N. VCH, 1991, p. 31-60.
355. **Banci L, Bertini I, Briganti F, Luchinat C and Scozzafava A.** Iron-sulfur proteins: an insight into their electronic structure through ¹H NMR spectroscopy. In: Chemistry and properties of biomolecular systems, edited by Rizzarelli E and Theophanides T. Kluwer Academic Publishers, 1991, p. 73-90.
356. **Banci L, Bertini I, Cabelli DE, Hallewell RA, Tung JW and Viezzoli MS.** A characterization of copper/zinc superoxide dismutase mutants at position 124 - Zinc-deficient proteins. *Eur J Biochem* 196: 123-128, **1991**
357. **Banci L, Bertini I, Turano P, Ferrer JC and Mauk AG.** Comparative ¹H NMR study of ferric low-spin cytochrome c peroxidase and horseradish peroxidase. *Inorg Chem* 30: 4510-4516, **1991**
358. **Banci L, Bertini I and Turano P.** An investigation of Cu₂Zn₂ superoxide dismutase and its Ile-137 mutant at high pH. *Eur Biophys J* 19: 141-146, **1991**
359. **Banci L, Bertini I, Turano P, Tien M and Kirk TK.** Proton NMR investigation into the basis for the relatively high redox potential of lignin peroxidase. *Proc Natl Acad Sci USA* 88: 6956-6960, **1991**
360. **Banci L, Bertini I, Briganti F, Luchinat C, Scozzafava A and Vicens Oliver M.** ¹H NMR spectra of oxidized high-potential iron-sulfur protein (HiPIP) from *Rhodocyclus gelatinosus*. A model for oxidized HiPIPs. *Inorg Chem* 30: 4517-4524, **1991**
361. **Banci L, Bertini I, Briganti F, Luchinat C, Scozzafava A and Vicens Oliver M.** ¹H NOE studies of oxidized high potential iron sulfur protein II from *Ectothiorhodospira halophila*. *Inorg Chim Acta* 180: 171-175, **1991**
362. **Bertini I, Banci L, Luchinat C and Sola M.** The interaction of inhibitors with carbonic anhydrase. In: Carbonic Anhydrase, edited by Botre' F and Storey BT. VCH, 1991, p. 86-94.
363. **Banci L, Bertini I, Caliceti P, Monsu' Scolaro L, Schiavon O and Veronese FM.** Spectroscopic characterization of polyethyleneglycol modified superoxide dismutase:¹H NMR studies on its Cu₂Co₂ derivative. *J Inorg Biochem* 39: 149-159, **1990**
364. **Banci L, Bencini A, Bertini I, Luchinat C and Piccioli M.** ¹H NOE and ligand field studies of copper-cobalt superoxide dismutase with anions. *Inorg Chem* 29: 4867-4873, **1990**
365. **Banci L, Bertini I and Luchinat C.** The ¹H NMR parameters of magnetically coupled dimers - The Fe₂S₂ proteins as an example. *Struct Bonding* 72: 113-135, **1990**
366. **Banci L, Bertini I, Luchinat C and Piccioli M.** Transient versus steady state NOE in paramagnetic molecules. Cu₂Co₂SOD as an example. *FEBS Lett* 272: 175-180, **1990**
367. **Banci L, Bencini A, Bertini I, Luchinat C and Viezzoli MS.** The angular overlap analysis of the spectroscopic parameters of copper zinc SOD and its mutants. Dedicated to Prof. Angelo Mangini. *Gazz Chim Ital* 120: 179-185, **1990**

368. **Banci L, Bertini I, Luchinat C, Donaire A, Martinez M-J and Moratal Mascarell JM.** The factors governing the coordination number in the anion derivatives of carbonic anhydrase. *Comments Inorg Chem* 9: 245-261, **1990**
369. **Banci L, Bertini I, Cabelli D, Hallewell RA, Luchinat C and Viezzoli MS.** Investigation of copper-zinc superoxide dismutase Ser-137 and Ala-137 mutants. *Inorg Chem* 29: 2398-2403, **1990**
370. **Banci L, Bertini I, Luchinat C and Moratal Mascarell JM.** The mechanism of action of carbonic anhydrase. In: Enzymatic and model carboxylation and reduction reactions for carbon dioxide utilization, edited by Aresta M and Schloss JV. Dordrecht: Kluwer Ac., 1990, p. 181-197.
371. **Banci L, Bertini I, Luchinat C and Viezzoli MS.** A comment on the ^1H NMR spectra of cobalt(II) substituted superoxide dismutases with histidines deuterated in e1-position. *Inorg Chem* 29: 1438-1440, **1990**
372. **Bertini I, Luchinat C, Banci L and Viezzoli MS.** ^1H NMR and relaxometry of copper-containing dimers in proteins. *Biol Met* 3: 146-150, **1990**
373. **Bertini I, Banci L, Luchinat C and Piccioli M.** Spectroscopic studies on $\text{Cu}_2\text{Zn}_2\text{SOD}$: a continuous advancement of investigation tools. *Coord Chem Rev* 100: 67-103, **1990**
374. **Dugad LB, La Mar GN, Banci L and Bertini I.** Identification of localized redox states in plant-type two-iron ferredoxins using the nuclear overhauser effect. *Biochemistry* 29: 2263-2271, **1990**
375. **Banci L, Bertini I, Luchinat C, Monnanni R and Moratal Mascarell JM.** ^1H NMR spectra of cobalt(II)-substituted carbonic anhydrase isoenzymes. *Gazz Chim Ital* 119: 23-29, **1989**
376. **Banci L, Bertini I, Luchinat C, Scozzafava A and Turano P.** Binding of fluoride to copper zinc superoxide dismutase. *Inorg Chem* 28: 2377-2381, **1989**
377. **Banci L, Bertini I, Luchinat C, Piccioli M, Scozzafava A and Turano P.** ^1H NOE studies on dicopper(II) dicobalt(II) superoxide dismutase. *Inorg Chem* 28: 4650-4656, **1989**
378. **Banci L, Bertini I, Luchinat C and Scozzafava A.** Cyanide and azide behave in a similar fashion versus cuprozinc superoxide dismutase. *J Biol Chem* 264: 9742-9744, **1989**
379. **Banci L, Bertini I, Hallewell RA, Luchinat C and Viezzoli MS.** Water in the active cavity of copper/zinc superoxide dismutase. A water ^1H -nuclear-magnetic-relaxation-dispersion study. *Eur J Biochem* 184: 125-129, **1989**
380. **Bertini I, Banci L, Luchinat C, Bielski BHJ, Cabelli D, Mullenbach GT and Hallewell RA.** An investigation of a human erythrocyte SOD modified at the position 137. *J Am Chem Soc* 111: 714-719, **1989**
381. **Bertini I, Luchinat C, Viezzoli MS, Banci L, Koenig SH, Leung HT and Coleman JE.** Copper(II) as a probe of the active centers of alkaline phosphatase. *Inorg Chem* 28: 352-358, **1989**
382. **Bertini I, Banci L and Luchinat C.** ^1H NMR of paramagnetic metalloproteins. In: Nuclear Magnetic Resonance, Part B, edited by Oppenheimer NJ and James TL. London: Methods Enzymol., Vol. 177, 1989, p. 246.
383. **Veronese FM, Caliceti P, Pastorino A, Schiavon O, Sartore L, Banci L and Monsu Scolaro L.** Preparation, Physico-Chemical and Pharmacokinetic Characterization of Monomethoxypoly(ethyleneglycol)-Derivatized Superoxide Dismutase. *J Control Rel* 10: 145-154, **1989**

384. **Banci L, Bertini I, Luchinat C, Monnanni R and Scozzafava A.** Water ^1H nuclear magnetic relaxation dispersion (NMRD) of $\text{Cu}_2\text{Zn}_2\text{SOD}$ with some anions and ^1H NMR spectra of $\text{Cu}_2\text{Co}_2\text{SOD}$ in the presence of CN^- . *Inorg Chem* 27: 107-109, **1988**
385. **Banci L, Bertini I, Luchinat C, Viezzoli MS and Wang Y.** The cobalt(II)-alkaline phosphatase system at alkaline pH. *J Biol Chem* 263: 11263-11268, **1988**
386. **Banci L, Bertini I, Luchinat C, Viezzoli MS and Wang Y.** Characterization of Cu_2Co_2^- and Co_2Co_2^- -alkaline phosphatase complexes at acidic pH. *Inorg Chem* 27: 1442-1446, **1988**
387. **Banci L, Bertini I, Luchinat C and Hallewell RA.** An investigation of superoxide dismutase Lys-143, Ile-143, and Glu-143 mutants: $\text{Cu}_2\text{Co}_2\text{SOD}$ derivatives. *J Am Chem Soc* 110: 3629-3633, **1988**
388. **Bertini I, Banci L and Luchinat C.** NMR of paramagnetic systems: magnetically coupled dimetallic systems. Cu_2Co_2^- -superoxide dismutase as an example. In: Metal clusters in proteins, edited by Que L, Jr. Washington, DC: Am. Chem. Soc., 1988, p. 70-84.
389. **Bertini I, Banci L, Luchinat C and Hallewell RA.** The exploration of the active-site cavity of copper-zinc superoxide dismutase. In: Annals of the New York academy of sciences, edited by Blanch HW and Klibanov AM. New York: New York Academy of Science Book, 1988, p. 37-52.
390. **Bertini I, Banci L, Brown III RD, Koenig SH and Luchinat C.** Electronic relaxation of a copper(II) dimer in a macromolecular complex as evaluated from solvent proton relaxation. *Inorg Chem* 27: 951-953, **1988**
391. **Huettermann J, Kappl R, Banci L and Bertini I.** An ENDOR study of human and bovine erythrocyte superoxide dismutase: ^1H and ^{14}N interactions. *Biochim Biophys Acta* 956: 173-188, **1988**
392. **Ming L-J, Banci L, Luchinat C, Bertini I and Valentine JS.** NMR study of cobalt(II)-substituted yeast and human copper-zinc superoxide dismutase. *Inorg Chem* 27: 728-733, **1988**
393. **Ming L-J, Banci L, Luchinat C, Bertini I and Valentine JS.** Characterization of copper-nickel and silver-nickel bovine superoxide dismutase by ^1H NMR spectroscopy. *Inorg Chem* 27: 4458-4463, **1988**
394. **Banci L, Bertini I, Luchinat C, Monnanni R and Scozzafava A.** Characterization of the cobalt(II)-substituted superoxide dismutase-phosphate system. *Inorg Chem* 26: 153-156, **1987**
395. **Banci L, Bertini I, Luchinat C and Scozzafava A.** Nuclear relaxation in the magnetic coupled system $\text{Cu}_2\text{Co}_2\text{SOD}$. histidine-44 is detached upon anion binding. *J Am Chem Soc* 109: 2328-2334, **1987**
396. **Banci L, Bertini I, Gallori E, Luchinat C, Paoletti F, Polsinelli M and Viezzoli MS.** A spectroscopic investigation of cobalt(II) substituted alkaline phosphatase. *J Inorg Biochem* 30: 77-85, **1987**
397. **Mota De Freitas D, Luchinat C, Banci L, Bertini I and Valentine JS.** ^{31}P NMR study of the interaction of inorganic phosphate with bovine copper-zinc superoxide dismutase. *Inorg Chem* 26: 2788-2791, **1987**
398. **Banci L, Bertini I, Luchinat C, Monnanni R, Scozzafava A and Salvato B.** A spectroscopic investigation of Co_2Zn_2^- and Co_2Co_2^- superoxide dismutase. *Gazz Chim Ital* 116: 51-54, **1986**
399. **Banci L, Bertini I and Luchinat C.** Electron relaxation. *Magn Reson Rev* 11: 1-40, **1986**
400. **Banci L, Bertini I, Briganti F and Luchinat C.** The electron-nucleus dipolar coupling in slow rotating systems. 4. The effect of zero-field splitting and hyperfine coupling when $S = 5/2$ and $I = 5/2$. *J Magn Reson* 66: 58-65, **1986**

401. **Owens C, Drago RS, Bertini I, Luchinat C and Banci L.** NMR proton relaxation in bimetallic complexes of zinc(II), nickel(II), and copper(II). *J Am Chem Soc* 108: 3298-3303, **1986**
402. **Banci L.** Homo - and Heterodimer Formation in Metalloporphyrins. *Inorg Chem* 24: 782-786, **1985**
403. **Banci L.** Do NMR and ESR Provide Comparable Information in the Investigation of Metalloporphyrin Aggregation? *Inorg Chim Acta* 98: L23-L25, **1985**
404. **Banci L, Bertini I and Luchinat C.** Lanthanide ions as NMR probes. In: Rare Earths Spectroscopy, edited by Trebiatowska BJ, Legendziewicz J and Streck W. Singapore: World Scientific, 1985, p. 80-99.
405. **Banci L, Bertini I and Luchinat C.** Solvent ^1H NMRD of copper(II) complexes. *Chem Phys Lett* 118: 345-347, **1985**
406. **Banci L.** EPR Detection of Heterodimer Species between Copper(II), Silver(II) and Oxovanadium(IV) Porphyrins. *Inorg Chim Acta* 101: 155-159, **1985**
407. **Banci L, Bertini I and Luchinat C.** ^1H NMRD studies of solutions of paramagnetic metal ions in ethyleneglycol. *Inorg Chim Acta* 100: 173-181, **1985**
408. **Banci L, Benelli C and Gatteschi D.** Dynamic Jahn-Teller Effects in High-Spin Trigonal-Bipyramidal Nickel(II) Complexes. *Inorg Chem* 23: 3262-3263, **1984**
409. **Banci L, Bencini A and Gatteschi D.** Anisotropic Exchange in Transition-Metal Dinuclear Complexes.3. Bis(μ -1,3-azido) bis (1,1,4,7,7-pentamethyldiethylenetriamine)dicopper(II) Bis(tetraphenylborate). *Inorg Chem* 23: 2138-2141, **1984**
410. **Banci L, Bencini A, Dei A and Gatteschi D.** X-Ray Crystal Structure of Bis(N,N'-ethylene-bis-(salicylideneiminato) Oxovanadium(V)) Di- μ -chlorodicopper(I) Chloride, a Compound with a Three-Coordinate Copper(I) Chloride. *Inorg Chim Acta* 84: L11-L12, **1984**
411. **Banci L, Bencini A, Dei A and Gatteschi D.** EPR Spectra of and Exchange Interactions in Trinuclear Complexes.2. Metal(II) Adducts of Tetradentate Schiff Base Copper(II) Complexes. *Inorg Chem* 22: 4018-4021, **1983**
412. **Banci L, Bencini A and Gatteschi D.** EPR Spectra of Trinuclear Complexes. Octachlorodiadeniniumtricopper(II) Tetrahydrate. *Inorg Chem* 22: 2681-2683, **1983**
413. **Banci L, Bencini A and Gatteschi D.** Correlation between Anisotropic Exchange and Structure of Di- μ -hydroxo Bridged Copper(II) Complexes. *J Am Chem Soc* 105: 761-764, **1983**
414. **Banci L, Benelli C, Gatteschi D and Mani F.** Unusual Electronic Spectra of the Pseudotetrahedral Complex [Tris(3,5-dimethyl-1-pyrazolyl)ethyl]amine]cobalt(II) Bis(tetraphenylborate). *Inorg Chem* 21: 1133-1136, **1982**
415. **Banci L, Bencini A and Gatteschi D.** Dynamic Behavior of the Adduct of Copper(II) Bis(hexafluoroacetylacetonate) with a Bidentate Complex Ligand. *Inorg Chem* 21: 1572-1575, **1982**
416. **Banci L, Dei A and Gatteschi D.** Vanadyl Binding to Bleomycin. *Inorg Chim Acta* 67: L53-L55, **1982**
417. **Banci L, Bencini A, Gatteschi D and Zanchini C.** EPR Spectra of Triplet States with Large Zero-Field Splitting. $[\text{Cu}(\text{bipy})(\text{OH})]_2\text{SO}_4 \cdot 4\text{H}_2\text{O}$. *J Magn Reson* 48: 9-19, **1982**
418. **Banci L, Bencini A, Benelli C, Gatteschi D and Zanchini C.** Spectral-Structural Correlations in High-Spin Cobalt(II) Complexes. *Struct Bonding* 52: 37, **1982**

419. **Banci L, Bencini A, Benelli C, Di Vaira M and Gatteschi D.** Crystal Structure and Magnetic Properties of the Tetranuclear $(\text{Cu}(\text{SALMedpt})\text{Cu}(\text{hfa})_2)_2 \cdot 0.6 \text{CHCl}_3$ Complex, Formed by Hexafluoroacetylacetonate and by the Pentadentate $N,N'(4\text{-Methyl-}4\text{-azaheptane-1,7-diyl})$ bis(salicylaldimine) Ligand. *Inorg Chem* 21: 3801-3806, **1982**
420. **Banci L, Bencini A, Benelli C and Gatteschi D.** Exchange Interactions in Heterodinuclear Complexes with One Ion Possessing an Orbitally Degenerate Ground State. Nickel(II)-Cobalt(II) Pairs in Diaquo(1,4-dihydrazinophthalazine)nickel(II) Chloride Hydrate. *Inorg Chem* 21: 3868-3872, **1982**
421. **Banci L, Bencini A and Gatteschi D.** EPR Spectra and Zero-Field Splitting of Exchange-Coupled Copper(II)-Manganese(II) Pairs. *Inorg Chem* 20: 2734-2735, **1981**
422. **Banci L, Benelli C and Gatteschi D.** Magnetic Resonance Spectra of a Heterodinuclear (Ni-Co) Metal Complex. *Inorg Chem* 20: 4397-4400, **1981**
423. **Banci L, Bencini A, Dei A and Gatteschi D.** ESR Spectra of Cobalt(II)- and Copper(II)-Doped Bis(N,N-bis(2-(diethylamino)ethyl)(2-hydroxyethyl)amino-0) dinickel(II) Diphenylchlorate. Characterization of Nickel(II)-Cobalt(II) and Nickel(II)-Copper(II) Exchange-Coupled Pairs. *Inorg Chem* 20: 393-398, **1981**
424. **Banci L, Bencini A, Benelli C, Dei A and Gatteschi D.** ESR Spectra of Nickel(II)-Copper(II) and Nickel(II)-Cobalt(II) Exchange-Coupled Pairs in Transition-Metal Dinuclear Triketonate Complexes. *Inorg Chem* 20: 1399-1402, **1981**
425. **Banci L, Bencini A, Dapporto P, Dei A and Gatteschi D.** Crystal and Molecular Structure and ESR Spectra of a Dimeric Dialkoxo-Bridged Five-Coordinate Copper(II) Complex. *Inorg Chem* 19: 3395-3399, **1980**
426. **Banci L and Dei A.** Synthesis, Characterization and Properties of Dinuclear High-Spin Five-Coordinate 3d Metal Complexes with NN-bis(2-diethylaminoethyl)-2-hydroxyethylamine. *Inorg Chim Acta* 39: 35-41, **1980**
427. **Banci L, Bencini A, Benelli C and Gatteschi D.** ESR Spectra of Low Symmetry High-Spin Cobalt(II) Complexes. 9. Theoretical Considerations on Tetrahedral and Five-Coordinate Complexes. *Nouv J Chim* 4: 593-598, **1980**
428. **Banci L and Dei A.** Conformational Characterization of a Nickel(II) Tetraazamacrocyclic Complex Through Isotropic Shift Studies of the Dinuclear Cobalt(II)-Nickel(II) Derivative. *Inorg Chim Acta* 34: L269-L272, **1979**
429. **Banci L, Bencini A, Gatteschi D and Dei A.** Single Crystal ESR Spectra of a Heterodinuclear Copper(II)-Nickel(II) Tetra-Schiff Base Macrocyclic Complex. *Inorg Chim Acta* 36: L419-L420, **1979**