

LUCIA BANCI

List of publications

(updated Jan 2022)

1. **Luchinat E, Cremonini M, Banci L.** Radio Signals from Live Cells: The Coming of Age of In-Cell Solution NMR, *Chem. Rev.*, DOI: 10.1021/acs.chemrev.1c00790. **2022**
2. **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. Ed.*, doi: 10.1002/anie.202102910, **2021**
3. **Luchinat E, Barbieri L, Cremonini M, Pennestri M, Nocentini A, Supuran CT, Banci L.** Determination of intracellular protein-ligand binding affinity by competition binding in-cell NMR. *Acta Crystallogr. Sect. D-Struct. Biol.*, 77, 1270-1281. doi: 10.1107/S2059798321009037 **2021**
4. **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**
5. **Grifagni D, Calderone V, Giuntini S, Cantini F, Fragai M, Banci L.** SARS-CoV-2 Mpro inhibition by a zinc ion: structural features and hints for drug design. *Chem. Commun. (Camb)*. Aug 10;57(64):7910-7913. doi: 10.1039/d1cc02956h. **2021**
6. **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**
7. **Saudino G, Suraci D, Nasta V, Ciofi-Baffoni S, Banci L.** Molecular Basis of Multiple Mitochondrial Dysfunctions Syndrome 2 Caused by CYS59TYR BOLA3 Mutation. *Int. J. Mol. Sci.* May 3;22(9):4848. doi: 10.3390/ijms22094848 **2021**
8. **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**
9. **Torricella F, Bonucci A, Polykretis P, Cencetti F, Banci L.** Rapid protein delivery to living cells for biomolecular investigation. *Biochem. Biophys. Res. Commun.* Sep 17;570:82-88. doi: 10.1016/j.bbrc.2021.07.006. **2021**

10. **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., doi: 10.1007/s10858-021-00358-w **2021**
11. **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, *Inorg. Chim. Acta*, 518, 1, doi.org/10.1016/j.ica.2021.120252 **2021**
12. **Wienk, H., Banci, L., Daenke, S., Pereiro, E., Schwalbe, H., Stuart, D. I., Weiss, M. S., Perrakis, A.** iNEXT-Discovery and Instruct-ERIC: Integrating High-End Services for Translational Research in Structural Biology. *J. Vis. Exp.*177, e63435, **2021**
13. **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". *Biomol. NMR Assign.*, 1, 85-89, doi: 10.1007/s12104-020-09987, **2021**
14. **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", *Biomol. NMR Assign.*, 1, 165-171, doi: 10.1007/s12104-020-10000-9, **2021**.
15. **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? *Magn. Reson.*, 2, 203–221, doi: 10.5194/mr-2-203-2021, **2021**
16. **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**
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18. **Polykretis P., Luchinat E., Boscaro F. and Banci L.,** Methylglyoxal interaction with superoxide dismutase 1. *Redox Biol.*, 2020, 30, 101421.
19. **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
20. **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

21. **Bonucci A, Murralli 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
22. **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.
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24. **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
25. **Camponeschi F., Banci L.** Metal cofactors trafficking and assembly in the cell: a mecular view" *Pure Appl. Chem.*, Volume 91, 2019, 231-245
26. **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
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29. **Varone A, Mariggìò 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

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35. **Luchinat, E., Banci, L.** New structural and functional insights from in-cell NMR. *Emerg. Top. Life Sci.*, 2, 29-38, doi: 10.1042/ETLS20170136. **2018**
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41. **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**
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