

CERM Publications
(December 2020)

1. 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.* 2020;142, 10794-10805. doi: 10.1021/jacs.0c02266. (IF 14.612)
2. Bonaccorsi M, Knight MJ, Le Marchand T, Dannatt HRW, Schubeis T, Salmon L, Felli IC, Emsley L, Pierattelli R, Pintacuda G. Multimodal Response to Copper Binding in Superoxide Dismutase Dynamics. *J Am Chem Soc.* 142(46):19660-19667. doi: 10.1021/jacs.0c09242. (IF 14.612)
3. Picometer Resolution Structure of the Coordination Sphere in the Metal-Binding Site in a Metalloprotein by NMR. Bertarello A, Benda L, Sanders KJ, Pell AJ, Knight MJ, Pelmenschikov V, Gonnelli L, Felli IC, Kaupp M, Emsley L, Pierattelli R, Pintacuda G. *J Am Chem Soc.* 30 142, 16757-16765. doi: 10.1021/jacs.0c07339 (IF 14.612)
4. Stevanato G, Casano G, Kubicki DJ, Rao Y, Esteban Hofer L, Menzildjian G, Karoui H, Siri D, Cordova M, Yulikov M, Jeschke G, Lelli M, Lesage A, Ouari O, Emsley L Open and Closed Radicals: Local Geometry around Unpaired Electrons Governs Magic-Angle Spinning Dynamic Nuclear Polarization Performance. *J Am Chem Soc.* 2020 Sep 30;142(39):16587-16599. doi: 10.1021/jacs.0c04911. (IF 14.612)
5. Heller G. T., Aprile FA, Michaels TCT, Limbocker R, Perni M., Ruggeri FS, Mannini B, T. Lohr, M. Bonomi, C. Camilloni, A. De Simone, I. C. Felli, R. Pierattelli, T. P. J. Knowles, C. M. Dobson, M. Vendruscolo, Small-molecule sequestration of amyloid-beta. as a drug discovery strategy for Alzheimer's disease. *Sci. Adv.* 6, eabb5924, 2020, (IF 13.116)
6. 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.* 2020, 59, 6535 –6539 doi.org/10.1002/anie.201913436 (IF 12.959)
7. Pontoriero L., Schiavina M., Murralli M., Pierattelli P., Felli I.C., Monitoring the Interaction of α -Synuclein with Calcium Ions through Exclusively Heteronuclear Nuclear Magnetic Resonance Experiments, *Angew. Chem. Int. Ed.* 2020, 132, 18696-18704, doi.org/10.1002/ange.202008079 (IF 12.959)
8. Orton HW, Stanek J, Schubeis T, Foucaudeau D, Ollier C, AW Draney, Le Marchand T, Cala-De Paepe D, Felli IC, Pierattelli R, Hiller S, Bermel W, Pintacuda G, Protein NMR resonance assignment without spectral analysis: 5D Solid-state Automated Projection Spectroscopy (SO-APSY) *Angew. Chem. Int. Ed.*, 2020, 59, 2380-2384 (IF 12.959)
9. Rathner P, Fahrner M, Cerofolini L, Grabmayr, Horvath F, Krobath H, Gupta A, Ravera E, Fragai A, Bechmann M, Renger T, Luchinat C, Romanin C, Müller N, Interhelical interactions within the STIM1 CC1 domain modulate CRAC channel activation, *Nature Chemical Biology*, (2020) epub ahead of print (IF 12.587)

10. Perrin E, Ghini V, Giovannini M, Di Patti F, Cardazzo B, Carraro L, Fagorzi C, Turano P, Fani R, Fondi M. Diauxie and co-utilization of carbon sources can coexist during bacterial growth in nutritionally complex environments. *Nat Commun.* 2020 Jun 19;11(1):3135. doi: 10.1038/s41467-020-16872-8. (IF 12.121)
11. Shukla R, Medeiros-Silva J, Parmar A, Vermeulen BJA, Das S, Paioni AL, Jekhmene S, Lorent J, Bonvin AMJJ, Baldus M, Lelli M, Veldhuizen EJA, Breukink E, Singh I, Weingarth M Mode of action of teixobactins in cellular membranes. *Nat Commun.* 2020 Jun 5;11(1):2848. doi: 10.1038/s41467-020-16600-2. (IF 12.121)
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. Lund A., Casano G, Menzildjian G., Kaushik M., Stevanato G., Yulikov M., Jabbour R., Wisser D., Renom-Carrasco M., Thieuleux C., Bernada F., Karoui H., Siri D., Rosay M., Sergeev I.V., Gajan D., Lelli M., Emsley L., Ouari O. and Lesage A., TinyPols: a family of water-soluble binitroxides tailored for dynamic nuclear polarization enhanced NMR spectroscopy at 18.8 and 21.1 T. *Chem. Sci.*, 2020, 11, 2810-2818. doi: 10.1039/C9SC05384K (IF 9.346)
14. McLeod S.M., Robison L., Parigi G., Olszewski A., Drout R.J., Gong X., Islamoglu T., Luchinat C., Farha O.K., Meade T.J., "Maximizing Magnetic Resonance Contrast in Gd(III) Nanoconjugates: Investigation of Proton Relaxation in Zirconium Metal–Organic Frameworks", *ACS Appl. Mater. Interfaces* (2020), 12, 41157-41166 (IF 8.758)
15. Ruocco C., Ragni M., Rossi F., Carullo P., Ghini V., Piscitelli F., Cutignano A. Manipulation of dietary amino acids prevents and reverses obesity in mice through multiple mechanisms that modulate energy homeostasis, *Diabetes* 69 (11), 2324-2339, 2020 (IF 7.72)
16. Lang, L, Ravera, E.; Parigi, G.; Luchinat, C.; Neese, F Solution of a Puzzle: High-Level Q.-quantum-Chemical Treatment of Pseudocontact Chemical Shifts Confirms Classic Semiempirical, *The Journal of Physical Chemistry Letters*, 2020 Sept, doi.org/10.1021/acs.jpcllett.0c02462 (IF 7.329)
17. Bruno F, Francischello R, Bellomo G, Gigli L, Flori A, Menichetti L, Tenori L, Luchinat C, Ravera E. Multivariate Curve Resolution for 2D Solid-State NMR spectra *Anal Chem.* 2020 Mar 17;92(6):4451-4458. doi: 10.1021/acs.analchem.9b05420 (IF 6.785).
18. 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)
19. Berruyer P, Björgvinsdóttir S, Bertarello A, Stevanato G, Rao Y, Karthikeyan G, Casano G, Ouari O, Lelli M, Reiter C, Engelke F, Emsley L Dynamic Nuclear Polarization Enhancement of 200 at 21.15 T Enabled by 65 kHz Magic Angle Spinning. *J Phys Chem Lett.* 2020 11, 8386-8391. doi: 10.1021/acs.jpcllett.0c02493 (IF 6.71)
20. Cerofolini L, Ravera E, Bologna S, Wiglenda T, Böddrich A, Purfürst B, Benilova I, Korsak M, Gallo G, Rizzo D, Gonnelli L, Fragai M, De Strooper B, Wanker EE, Luchinat C. Mixing A β (1-40)

- and A β (1-42) peptides generates unique amyloid fibrils. *Chem Commun (Camb)*. 2020; 56, 8830-8833. doi: 10.1039/d0cc02463e (IF 6.164)
21. Vignoli, A.; Muraro, E.; Miolo, G.; Tenori, L.; Turano, P.; Di Gregorio, E.; Steffan, A.; Luchinat, C.; Corona, G. Effect of Estrogen Receptor Status on Circulatory Immune and Metabolomics Profiles of Her2-Positive Breast Cancer Patients Enrolled for Neoadjuvant Targeted Chemotherapy. *Cancers* 2020, 12 (2). doi.org/10.3390/cancers12020314. (IF: 6.162)
 22. Ghini V, Laera L, Fantechi B, Monte F, Benelli M, McCartney A, Tenori L Metabolomics to Assess Response to Immune Checkpoint Inhibitors in Patients with Non-Small-Cell Lung Cancer. *Cancers* 2020 12 (12), 3574 (IF: 6.162)
 23. Mateos B; Conrad-Billroth C; Schiavina M.; Beier A; Kontaxis G; Konrat R; Felli IC; Pierattelli R The ambivalent role of proline residues in an intrinsically disordered protein: from disorder promoters to compaction facilitators *J Mol Biol*. 2020 doi: 10.1016/j.jmb.2019.11.015 (IF 5.067)
 24. E.I. Vrettos, I.E. Valverde, A. Mascarin, P.N. Pallier, L. Cerofolini, M. Fragai, G. Parigi, B. Hirmiz, N. Bekas, N.M. Grob, E. Stylos, H. Shaye, M. Del Borgo, M.-I. Aguilar, F. Magnani, N. Syed, T. Crook, E. Waqif, E. Ghazaly, V. Cherezov, R.E. Widdop, C. Luchinat, A.T. Michael-Titus, T.L. Mindt, A.G. Tzakos, "Single Peptide Backbone Surrogate Mutations to Regulate Angiotensin GPCR Subtype Selectivity", *Chem. Eur. J.* (2020) 26, 10690-10694. (IF 4.857)
 25. Ciambellotti S, Pozzi C, Mangani S, Turano P. Iron Biomineral Growth from the Initial Nucleation Seed in L-Ferritin. *Chem. Eur. J.* 2020 May 7;26(26):5770-5773. (IF 4.857)
 26. Sala, D, Cerofolini L, Fragai L, Giachetti A, Luchinat C, Rosato A, A protocol to automatically calculate homo-oligomeric protein structures through the integration of evolutionary constraints and NMR ambiguous contacts. *Computational and Structural Biotechnology Journal* 18, 2020, 114-124 (IF 4.720)
 27. 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)
 28. Trindade I B; Invernici M; Cantini F.; Louro R O; Piccioli M; PRE-driven Protein NMR Structures: an Alternative Approach in Highly Paramagnetic Systems *FEBS J.*, 2020, early access Nov-2020, 10.1111/febs.15615 (IF 4.392)
 29. Rocca M. S.; Vignoli A.; Tenori L.; Ghezzi M.; De Rocco Ponce M.; Vatsellas G.; Thanos D.; Padriani R.; Foresta C.; De Toni L. Evaluation of Serum/Urine Genomic and Metabolomic Profiles to Improve the Adherence to Sildenafil Therapy in Patients with Erectile Dysfunction. doi.org/10.3389/fphar.2020.602369 *Front. Pharmacol.* 2020, 11.. (IF 4.225)
 30. Lalli D, Rosa C, Allegrozzi M, Turano P. Distal Unfolding of Ferricytochrome c Induced by the F82K Mutation. *Int J Mol Sci*. 2020 Mar 20;21(6). doi: 10.3390/ijms21062134. (IF 4.183)
 31. Ghini V.; Tenori L.; Capozzi F.; Luchinat C.; Bub A.; Malpuech-Brugere C.; Orfila C.; Ricciardiello L.; Bordoni A. DHA-Induced Perturbation of Human Serum Metabolome. Role of the Food

- Matrix and Co-Administration of Oat β -Glucan and Anthocyanins. *Nutrients* 2020, 12 (1). doi.org/10.3390/nu12010086. (IF: 4.171)
32. Murrall MG, Felli IC, Pierattelli R, Adenoviral E1A Exploits Flexibility and Disorder to Target Cellular Proteins; <https://doi.org/10.3390/biom10111541>, *Biomolecules* 2020, 10, 1541 (IF 4.082)
33. Gigli L, Ravera E, Calderone V, Luchinat C, On the mechanism of bioinspired formation of inorganic oxides: structural evidence of the electrostatic nature of the interaction between a mononuclear inorganic precursor and lysozyme, *Biomolecules*, 2020 In Press (IF 4.082)
34. Ghini V, L Tenori, M Pane, A Amoroso, G Marroncini, DF Squarzanti Effects of Probiotics Administration on Human Metabolic Phenotype *Metabolites* 10 (10), 396 (IF 4.097)
35. Vignoli, A., Tenori, L., Luchinat, C., Saccenti, E. Differential Network Analysis Reveals Molecular Determinants Associated with Blood Pressure and Heart Rate in Healthy Subjects DOI: 10.1021/acs.jproteome.0c00882 (2020) *J.Proteom Res*, (IF 4.074)
36. Vignoli A, Santini G, Tenori L, Macis G, Mores, Macagno N, Pagano F, Higenbottam T Luchinat C, Montuschi P, NMR-Based Metabolomics for the Assessment of Inhaled Pharmacotherapy in Chronic Obstructive Pulmonary Disease Patients, *J.Proteom Res*. 2020, 19, 64-74. doi: 10.1021/acs.jproteome.9b00345 (IF 4.074)
37. Vignoli, A.; Tenori, L.; Giusti, B.; Valente, S.; Carrabba, N.; Balzi, D.; Barchielli, A.; Marchionni, N.; Gensini, G. F.; Marcucci, R.; Gori, A. M.; Luchinat, C.; Saccenti, E. Differential Network Analysis Reveals Metabolic Determinants Associated with Mortality in Acute Myocardial Infarction Patients and Suggests Potential Mechanisms Underlying Different Clinical Scores Used to Predict Death. *J.Proteom Res*. 2020, 19 (2), 949–961. doi.org/10.1021/acs.jproteome.9b00779 (IF 4.074)
38. Vignoli A, Paciotti S, Tenori L, Eusebi P, Biscetti L, Chiasserini D, Scheltens P, Turano P, Teunissen C, Luchinat C, Parnetti L., Fingerprinting Alzheimer's Disease by ^1H Nuclear Magnetic Resonance Spectroscopy of Cerebrospinal Fluid., *J Proteome Res*. 2020, 19, 1696-1705. doi: 10.1021/acs.jproteome.9b00850. Epub 2020 Mar 12 (IF 4.074)
39. Kosol S, Contreras-Martos S, Piai A, Varadi M, Lazar T, Bekesi A, Lebrun P, Felli IC, Pierattelli R, Tompa P. Interaction between the scaffold proteins CBP by IQGAP1 provides an interface between gene expression and cytoskeletal activity. *Sci Rep*. 2020 Apr 1;10(1):5753. doi: 10.1038/s41598-020-62069-w. (IF 3.998)
40. Antonaros F, Ghini V, Pulina F, Ramacieri G, Cicchini E, Mannini E, Martelli A, Feliciello A, Lanfranchi S, Onnivello S, Vianello R, Locatelli C, Cocchi G, Pelleri MC, Vitale L, Strippoli P, Luchinat C, Turano P, Piovesan A, Caracausi M. Plasma metabolome and cognitive skills in Down syndrome *Sci Rep*. 2020 26;10, 10491. doi: 10.1038/s41598-020-67195-z. (IF 3.998)
41. Schiavina M, Salladini E, Murrall MG, Tria G, Felli IC, Pierattelli R, Longhi S Ensemble description of the intrinsically disordered N-terminal domain of the Nipah virus P/V protein from combined NMR and SAXS. *Sci Rep*. 2020 Nov 11;10(1):19574. doi: 10.1038/s41598-020-76522-3. PMID: 33177626 (IF 3.998)

42. 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 (IF 3.998)
43. Odermatt, N.T.; Lelli, M.; Herrmann, T; Abriata, L.A.; Japaridze, A.; Voilquin, H.; Singh, R.; Piton, J.; Emsley, L.; Dietler, G.; Cole, S.T. Structural and DNA binding properties of mycobacterial integration host factor mIHF. *J. Struct. Biol.* 2020, 209,107434. doi: 10.1016/j.jsb.2019.107434.(IF 3.754)
44. Schirò A, A. Carlon, G. Parigi, G. Murshudov, V. Calderone, E. Ravera, C. Luchinat, On the complementarity of X-ray and NMR data, *J. Struct. Biol.* X (2020) 4, 100019 (IF 3.754)
45. Nannini G, Meoni G, Amedei A, Tenori L. Metabolomics profile in gastrointestinal cancers: Update and future perspectives. 10.3748/wjg.v26.i20.2514 *World J Gastroenterol* 2020; 26(20): 2514-2532 (IF 3.66)
46. 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)
47. Dourou, A.-M.; Brizzolara, S.; Meoni, G.; Tenori, L.; Famiani, F.; Luchinat, C.; Tonutti, P. The Inner Temperature of the Olives (Cv. Leccino) before Processing Affects the Volatile Profile and the Composition of the Oil. *Food Research International* 2020, 129. doi.org/10.1016/j.foodres.2019.108861. (IF: 3.579)
48. Citterio F, Romano F, Meoni G, Iaderosa G, Grossi S, Sobrero A, Dego F, Corana M, Berta GN, Tenori L, Aimetti M, Changes in the Salivary Metabolic Profile of Generalized Periodontitis Patients after Non-surgical Periodontal Therapy: A Metabolomic Analysis Using Nuclear Magnetic Resonance Spectroscopy doi: 10.3390/jcm9123977, *J Clin Med* 2020, 9, 3977 (IF 3.303)
49. Selegato MD, Bracco C, Giannelli C, Parigi G, Luchinat C, Sgheri L, Ravera E. Comparison of different reweighting approaches for the calculation of conformational variability of macromolecules from molecular simulations, *ChemPhysChem* (2020) 10.1002/cphc.202000714R1 (IF 3.144)
50. Denis M, Softley C, Giuntini S, Gentili M, Ravera E, Parigi G, Fragai M, Popowicz G, Sattler M, Luchinat C, Cerofolini L, Nativi C., The Photocatalyzed Thiol-ene reaction: A New Tag to Yield Fast, Selective and reversible Paramagnetic Tagging of Proteins *ChemPhysChem*. 2020, doi: 10.1002/cphc.202000071. (IF 3.077)
51. Brunetti J, Piantini S, Fragai M, Scali S, Cipriani G, Depau L, Pini A, Falciani C, Menichetti S, Bracci L., A New NT4 Peptide-Based Drug Delivery System for Cancer Treatment., *Molecules*. 2020 Feb 28;25(5). doi: 10.3390/molecules25051088. (IF 3.060)

52. Invernici M; Trindade I B; Cantini F.; Louro R O; Piccioli M; Measuring Transverse Relaxation in highly paramagnetic systems, *J. Biomol. NMR* 2020, 74 (8-9) 431-442. 10.1007/s10858-020-00334-w (IF 2.634)
53. Sreeramulu S.; Richter C., Kuehn T., Azzaoui K.; Blommers M.J.J.; Del Conte R.; Fragai M.; Trieloff N.; Schmieder 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)
54. Avalos CE, Richert S, Socie E, Karthikeyan G, Casano G, Stevanato G, Kubicki DJ, Moser JE, Timmel CR, Lelli M, Rossini AJ, Ouari O, Emsley L Enhanced Intersystem Crossing and Transient Electron Spin Polarization in a Photoexcited Pentacene-Trityl Radical. *J Phys Chem A*. 2020 124, 6068-6075. doi: 10.1021/acs.jpca.0c03498. (IF 2.60)
55. Bonucci A, Ouari O, Guigliarelli B, Belle V, Mileo E. In-Cell EPR: Progress towards Structural Studies Inside Cells. *Chembiochem*. 2020, 21, 451-460. doi: 10.1002/cbic.201900291 (IF 2.576)
56. Meoni G., Tenori L., Luchinat C. Nuclear Magnetic Resonance-Based Metabolomic Comparison of Breast Milk and Organic and Traditional Formula Milk Brands for Infants and Toddlers *OMICS A Journal of Integrative Biology*, 2020, 24(7), pp. 424–436 (IF 2.529)
57. Basoglu A.; Baspinar N.; Tenori L.; Licari C.; Gulersoy E. Nuclear Magnetic Resonance (NMR)-Based Metabolome Profile Evaluation in Dairy Cows with and without Displaced Abomasum. *Veterinary Quarterly* 2020, 40 (1), 1–15. doi.org/10.1080 /01652176.2019.1707907. (IF: 2.340)
58. Olsen G.L., Szekely O., Mateos B., Kadeřávek P., Ferrage F., Konrat R., Pierattelli R., Felli I.C., Bodenhausen G., Kurzbach D., Frydman L., Sensitivity-enhanced three-dimensional and carbon-detected two-dimensional NMR of proteins using hyperpolarized water. *J Biomol NMR* 74, 161–171 (2020). <https://doi.org/10.1007/s10858-020-00301-5> (IF 2.319)
59. Trindade I B; Invernici M; Cantini F.; Louro R O; Piccioli M; Sequence-specific Assignments in NMR Spectra of paramagnetic systems: A non-systematic approach, *Inorg. Chim. Acta* , 2021, 514, 119984, 10.1016/j.ica.2020.119984 (IF 2.304)
60. Imrie CT, Paterson DA, Storey JMD, Chamignon C, Lelli M, Emsley JW, Luckhurst GR Phase transitions in a high magnetic field of an odd, symmetric liquid crystal dimer having two nematic phases, $N_{\{U\}}$ and $N_{\{TB\}}$, studied by NMR spectroscopy. *Phys Rev E*. 2020, 042706. doi: 10.1103/PhysRevE.102.042706 (IF 2.296)
61. Piccioli M.; Paramagnetic NMR spectroscopy is a tool to address reactivity, structure and protein-protein interactions of metalloproteins: the case of Iron–Sulfur proteins *Magnetochemistry*, 2020, 6(4), 46; <https://doi.org/10.3390/magnetochemistry6040046>. (IF 1.947)

62. Cerofolini L, Fragai M, Luchinat C, Ravera E. Orientation of immobilized antigens on common surfaces by a simple computational model: Exposition of SARS-CoV-2 Spike protein RBD epitopes. *Biophys Chem.* 2020, 265:106441. doi: 10.1016/j.bpc.2020.106441 (IF 1.745)
63. Cerofolini L, Ravera E, Fragai M, Luchinat C. NMR of Immobilized Enzymes. *Methods Mol Biol.* 2020, 2100:363-383. doi: 10.1007/978-1-0716-0215-7_24 (IF 1.698)
64. Chatzikonstantinou AV, Tsialianis AD, Gerotheranassis IP, Stamatias H, Ravera E, Fragai M, Luchinat C, Parigi G, Tzakos AG. The NMR tube bioreactor *Methods Enzymol.* 2020; 633:71-101. doi: 10.1016/bs.mie.2019.10.032. (IF 1.394)
65. Brancaccio D, Di maro S, Cerofolini L, Giuntini S, Fragai M, Luchinat C, Tomassi S, Limatola A, Russomanno P, Merlino F, HOPPI-NMR: Hot-Peptide-Based Screening Assay for Inhibitors of Protein--Protein Interactions by NMR. *ACS Medicinal Chemistry Letters*, 5 1047-1053, 2020 (IF 1.158)
66. Tenori L., Turano P., Luchinat C. Metabolic profiling by nmr DOI: 10.1002/9780470034590.emrstm1623 (2020) *eMagRes*, 9 (2), 199-204. (IF 1.00)
67. 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)
68. Trindade IB, Invernici M, Cantini F, Louro RO, Piccioli M. ¹H, ¹³C and ¹⁵N assignment of the paramagnetic high potential iron-sulfur protein (HiPIP) PioC from *Rhodopseudomonas palustris* TIE-1. *Biomol NMR Assign*, 2020 doi: 10.1007/s12104-020-09947-6 (IF 0.576)
69. Basoglu A., Baspinar N., Licari C., Tenori L., Naseri A. Nmr based serum metabolomics for monitoring newborn preterm calves' health DOI: 10.14943/jjvr.68.2.105 (2020) *Japanese Journal of Veterinary Research*, 68 (2), pp. 105-115. (IF 0.323)
70. Basoglu, A., Turgut, K., Baspinar, N., Tenori, L., Licari, C., Ince, M.E., Ertan, M., Suleymanoglu, H., Sayiner, S. Nmr based serum extracts' metabolomics for evaluation of canine ehrlichiosis DOI: 10.14943/jjvr.68.4.227 (2020) *Japanese Journal of Veterinary Research*, 68 (4), pp. 227-236. (If 0.323)
71. Ravera, E. C. Luchinat. Using simple algebraic concepts to understand chemical composition problems, *Int. J Math Ed in Sci and Technology*, 2020, doi: 10.1080/0020739X.2020.1785569 (IF 0.31)
72. Ravera E, Fragai M, Parigi G, Luchinat C, Different flavors of diffusion in paramagnetic systems: Unexpected NMR signal intensity and relaxation enhancements, *Journal of Magnetic Resonance Open*, 2020, doi: 10.1016/j.jmro.2020.100003

73. Carniato F, Tei L, Botta M, Ravera E, Fragai M, Parigi G, Luchinat C, "1H NMR Relaxometric Study of Chitosan-Based Nanogels Containing Mono- and Bis-Hydrated Gd(III) Chelates: Clues for MRI Probes of Improved Sensitivity", *ACS Appl. Bio Mater.* (2020) <https://doi.org/10.1021/acsabm.0c01295>

BOOK chapters

Cerofolini L, Ravera E, Fragai M, Luchinat C, NMR of Immobilized Enzymes}, Immobilization of Enzymes and Cells, 363—383, 2020, Guisan, J.M., Bolivar, J.M., López-Gallego, F., Rocha-Martín, J. Humana, New York, NY

Luchinat E, Banci L, In-cell NMR in eukaryotic cells – II (direct protein expression), Serie: NEW DEVELOPMENTS IN NMR. In In-cell NMR Spectroscopy: From Molecular Sciences to Cell Biology, editors: Yutaka Ito, Volker Dötsch, Masahiro Shirakawa, RSC 2020

Banci L, Luchinat E, Protein folding, maturation and redox state, Serie: NEW DEVELOPMENTS IN NMR. In In-cell NMR Spectroscopy: From Molecular Sciences to Cell Biology, editors: Yutaka Ito, Volker Dötsch, Masahiro Shirakawa, RSC 2020