

PERSONAL INFORMATION

Family name, First name: Ravera, Enrico

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Date of birth: 01 / Apr / 1986

Nationality: Italian

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• CURRENT POSITION

1/2022 **Associate Professor**
Department of Chemistry, University of Florence, Italy

• PREVIOUS POSITIONS

2019 – 2021 **Tenure-Track Assistant Professor (Ricercatore a tempo determinato di tipologia B)**
Department of Chemistry, University of Florence, Italy

2017 – 2018 **Assistant Professor (Ricercatore a tempo determinato di tipologia A)**
Department of Chemistry, University of Florence, Italy

2016 – 2017 **Senior Scientist**
CIRMMP / Italy

2014 **Visiting Scientist - COST STSM**
FMP Berlin / Germany

2014 **Visiting Scientist - EMBO STF**
Department of Chemistry and Francis Bitter Magnet Laboratory, **Massachusetts Institute of Technology (MIT)** / USA

2013 **Visiting Scientist - COST STSM**
Department of Chemical Physics, **Weizmann Institute of Science** / Israel

2013 – 2015 **Postdoctoral Fellow (Assegnista di Ricerca)**
Department of Chemistry, University of Florence, Italy

• EDUCATION

11/2020 **Habilitation to Full Professorship – ASN 1a fascia**
Inorganic Chemistry
Ministero dell'Istruzione dell'Università e della Ricerca / Italy

04/2017 **Habilitation to Associate Professorship – ASN 2a fascia**
Inorganic Chemistry and Physical Chemistry
Ministero dell'Istruzione dell'Università e della Ricerca / Italy

1/2010 – 02/2013 **PhD in Inorganic Chemistry**
Department of Chemistry / University of Florence / Italy
Supervisor: Prof. Claudio Luchinat / Prof. Ivano Bertini

2012 **Visiting Student**
Department of Chemistry and Francis Bitter Magnet Laboratory/ **MIT** / USA
Co-supervisor: Prof. Robert G. Griffin

9/2008 – 9/2009 **Master in Chemistry of Biological Macromolecules**
Department of Chemistry / University of Florence / Italy
Supervisor: Prof. Claudio Luchinat / Prof. Ivano Bertini

9/2008 – 7/2008 **Bachelor in Chemistry**
Department of Chemistry / University of Florence / Italy
Supervisor: Prof. Roberta Pierattelli / Prof. Ivano Bertini

• CURRENT FUNDING

2020 – 2021 Fondazione Cassa di Risparmio di Firenze – "Ensemble averaging methods in integrated

structural biology” – 23000 € (Principal Investigator)

2018 – 2021 Ministero della Salute – “Myocardial perfusion imaging with cardiovascular magnetic resonance and hyperpolarized contrast media” – 90000/450000 € (Head of Local Unit).

2019 – 2021 University of Florence – “Ensemble averaging methods in integrated structural biology” – 40000 € (Principal Investigator)

• **PREVIOUS FELLOWSHIPS AND FUNDING**

2018 – 2019 Fondazione Cassa di Risparmio di Firenze – “Remediation of contaminated water by very efficient bionanocatalysts” – 20000 € (Principal Investigator)

2017 – 2018 PhosAgro/Unesco/IUPAC Green Chemistry for Life – “Remediation of contaminated water by very efficient bionanocatalysts » – 27000 € (Principal Investigator).

2016 – 2017 AIRC Triennial Fellowship – terminated, CIRMMMP

2015 – 2016 INSTRUCT R&D award – “An in-flow device based on bioinspired nanomaterials for preserving cell viability and monitoring by NMR structural and metabolic changes upon chemical stimuli” - 12000 € (Principal Investigator).

• **SUPERVISION AND CO-SUPERVISION OF STUDENTS AND POSTDOCS**

4/2021 – 10/2021 Lapo Querci, B.Sc. in Chemistry, University of Florence (co-supervisor)

2/2021 – 10/2021 Letizia Fiorucci, M.Sc. in Advanced Molecular Sciences, University of Florence (co-supervisor)

2/2021 – 10/2021 Francesco Bruno, M.Sc. in Advanced Molecular Sciences, University of Florence (supervisor)

4/2020 – 4/2021 Sabrina Antonacci, M.Sc. in Chemistry, University of Florence (co-supervisor)

4/2020 – 4/2021 Francesca Sacco, M.Sc. in Pharmaceutical Chemistry and Technology, University of Florence (supervisor)

9/2019 – 5/2020 Dr. Denise Selegato, Postdoctoral fellow, University of Florence (supervisor)

9/2019 – 6/2021 Daniele Sergi, M.Sc. in Applied Mathematics, University of Florence (co-supervisor)

3/2019 – 12/2019 Francesco Bruno, B.Sc. in Chemistry, University of Florence (supervisor)

3/2019 – 12/2019 Silvia Di Grande, B.Sc. in Chemistry, University of Florence (supervisor)

11/2017 – 03/2021 Lucia Gigli, Ph.D. in Chemistry, University of Florence (supervisor)

03/2017 – 11/2017 Antonio Schirò, B.Sc. in Chemistry, University of Florence (co-supervisor)

11/2013 – 12/2016 Witold Andralojc, Ph.D. in Structural Biology, University of Florence (Marie Curie tutor)

• **TEACHING ACTIVITIES**

2020 – Course for Undergraduate Students – "Laboratorio di Chimica Generale e Inorganica", B.Sc. in Chemistry, University of Florence / Italy

2019 – Course for Undergraduate Students – "Solidi Molecolari", M.Sc. in Chemistry, University of Florence / Italy

2018 – 2020 Course for Undergraduate Students – "Chimica Generale e Inorganica ", B.Sc. in Wood Technology, University of Florence / Italy

2018 – 2018 Course for Graduate Students – "Biological EPR", International doctorate in Structural Biology, University of Florence / Italy

2017 – Course for Undergraduate Students – "Esercitazioni di Chimica Generale e Inorganica", B.Sc. in Chemistry, University of Florence / Italy

2017 – 2018 Course for Undergraduate Students – "Esercitazioni di Chimica Generale e Inorganica ", B.Sc. in Agricultural Sciences, University of Florence / Italy

2015 – 2015 Course for Graduate Students – "Dynamic Nuclear Polarization", International doctorate in Structural Biology, University of Florence / Italy

2015 – 2015 Course for Graduate Students – "Solid-state Biomolecular NMR", International doctorate in Structural Biology, University of Florence / Italy

• **ORGANISATION OF SCIENTIFIC MEETINGS**

2020 “Magnetic Resonances meet the future of biophysics” – BPS virtual networking event, Co-chairman / 40 participants / Online

- 2017 "Biomaterials for Catalysis", Workshop organized in the frame of the PhosAgro/UNESCO/IUPAC Green Chemistry for Life award, Chairman / 12 participants / Italy
- 2014 "Magnetic resonance for cellular structural biology", EMBO Workshop, Local Organiser / 100 participants / Italy
- 2012 "12th Chianti/INSTRUCT Workshop on BioNMR", Member of Organizing Committee / 120 participants / Italy

• **INSTITUTIONAL RESPONSIBILITIES**

- 2017 – Faculty member, Department of Chemistry, University of Florence, Italy
- 2017 – Member of the Board of the Teachers of the International Doctorate in Structural Biology, CERM, University of Florence, Italy

• **REVIEWING ACTIVITIES**

- 2013 – Reviewer for Journal of the American Chemical Society, Angewandte Chemie, Nature Communications, Scientific Reports, ChemComm, Inorganic Chemistry, Biochemistry and Biophysics Reports, Biophys Journal, Dalton Transactions, Proteins, Journal of Biological Inorganic Chemistry, Journal of Brazilian Chemical Society, Applied Nanoscience,
- 2020 – Editorial Board, Magnetochemistry – MDPI publishing group
- 2021 – Editorial Board, AIMS Biophysics – AIMS publishing group
- 2019 – Scientific Evaluation, Austrian Science Fund (FWF)
- 2020 – Scientific Evaluation, NWO, the Dutch Research Council

• **PRIZES AND AWARDS**

- 2020 – Premio Raffaello Nasini, Società Chimica Italiana
- 2016 – GIDRM Under 35 Award
- 2016 – Premio Italfarmaco Gastone de Santis, Società Chimica Italiana
- 2016 – PhosAgro/UNESCO/IUPAC Green Chemistry for Life Award

• **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

- 2017 – Member, American Chemical Society
- 2016 – Member, Groupement Ampère
- 2009 – Member, Gruppo Italiano di Discussione sulle Risonanze Magnetiche
- 2009 – Member, Società Chimica Italiana (Divisione Chimica Inorganica)

Publications:

Total publication in peer-reviewed international journals: 98

Average publication number for year of scientific activity: 8.2

Average impact factor: 6.011

First-name author papers: 22

Corresponding or co-corresponding author papers: 18

The complete list of publications is available at:

<https://scholar.google.it/citations?user=AE42FNcAAAAJ&hl=en&oi=ao>

or

<http://www.ncbi.nlm.nih.gov/sites/myncbi/1t51X2bhuiPAu/bibliography/51026734/public/?sort=date&direction=ascending>

Impact of scientific contributions:

h-index: 30 (Google Scholar), 27 (Scopus)

Total Citation Number: 2582 (Google Scholar – 29/12/2021), 2057 (Scopus – 29/12/2021).

Oral contributions at conferences/schools : 13 (invited), 6 (selected), 5 (schools)

INVITED PRESENTATIONS AT CONFERENCES AND SCHOOLS

- BIO-NMR annual meeting, Budapest (HU), 10-13/06/2013, (invited talk + poster)
- WeNMR practical Course: Advanced methods for the integration of other structural data with NMR data, Florence (IT) 21-24/01/2013, (instructor)
- pNMR practical training: Solid-state NMR of materials and proteins, Lyon (F) 5-6/09/2013, (instructor)
- EMBO practical Course: Solution and Solid-state NMR of paramagnetic molecules (instructor), Sesto Fiorentino (FI), 13-19/07/2014 (instructor)
- pNMR Conference and Applied Training, Cambridge (UK), 16-18/09/2014 (invited talk)
- Kolloquium, ETH Zürich Laboratorium für Physikalische Chemie, Zürich (CH), 5/04/2016 (invited talk)
- Recent Advances in Biomolecular NMR Spectroscopy symposium, Ann Arbor (US), 16-17/04/2016 (invited talk)
- XLV National Congress on Magnetic Resonance, Modena (IT), 5-7/09/2016 (plenary, award talk)
- IUPAC Green Chemistry Conference, Venezia (IT), 4-8/09/2016 (award talk)
- National Congress of the Divisione di Chimica dei Sistemi Biologici of the Italian Chemical Society, Verona (IT), 21-23/09/2016 (plenary, award talk)
- Biophysical Society Thematic Meeting Conformational Ensembles from Experimental Data and Computer Simulations, Berlin (DE), 25-29/08/2017 (invited talk)
- iNEXT course: Bridging Solution Methods: From NMR to X-ray Scattering And Biophysics, Patras (GR), 18-22/09/2017, (instructor)
- Minisymposium: The future of Magnetic Resonance, Frankfurt (DE) 18-19/07/2018 (invited talk)
- Instruct Ultra 2nd Structural Biology Meeting, Bratislava, SK, 15-16/11/2018 (invited talk)
- EMBO Workshop: Synergy of experiment and computation in quantitative systems biology, Nové Hradi (CZ), 23-28/06/2019
- 7th European Conference on Molecular Magnetism, Florence (IT), 15-19/09/2019 (invited talk)
- 2nd WORKSHOP ON BioNMR, São José do Rio Preto (BR), 27/01- 2/02/2020 (instructor)

PUBLICATIONS (* indicates corresponding/co-corresponding authorship)

- 1) E. Ravera*, "Phase distortion-free paramagnetic NMR spectra", *Journal of Magnetic Resonance Open*, **2021**, 8, 100022, IF not available
- 2) G. Licciardi, D. Rizzo, E. Ravera, M. Fragai, G. Parigi, C. Luchinat, "Not only manganese, but fruit component effects dictate the efficiency of fruit juice as an oral magnetic resonance imaging contrast agent", *NMR in Biomedicine*, **2021**, e4623, IF2020= 3.50
- 3) D. Rizzo, L. Cerofolini, A. Pérez y Ràfols, S. Giuntini, F. Baroni, E. Ravera, C. Luchinat, M. Fragai, "Evaluation of the Higher Order Structure of biotherapeutics embedded in hydrogels for bioprinting and drug release", *Analytical Chemistry*, **2021**, 93(32), 11208-11214, IF2020=6.986
- 4) N. Adiram-Filiba, E. Ohaion, G. Verner, A. Schremer, M. Tsubery, T. Lublin-Tennenbaum, K. Keinan-Adamski, M. Lucci, C Luchinat, E. Ravera, G. Goobes, "Structure and dynamics perturbations in ubiquitin adsorbed or entrapped in silica materials are related to disparate surface chemistries resolved by solid-state NMR spectroscopy", *Biomacromolecules*, **2021**, 22(9),3718,3730, IF2020=6.998
- 5) G. Parigi, E. Ravera, M. Fragai, C. Luchinat, "Unveiling protein dynamics in solution with field-cycling NMR relaxometry", *Progress in Nuclear Magnetic Resonance Spectroscopy*, **2021**, 124-125, 85-98, IF2020=9.795
- 6) L. Gigli, S. Di Grande, E. Ravera*, G. Parigi, C. Luchinat, "NMR for single ion magnets", *Magnetochemistry*, **2021**, 7(7), 96, IF2020=2.193
- 7) E. Ravera, L. Gigli, E. Suturina, V. Calderone, M. Fragai, G. Parigi, C. Luchinat, "A high-resolution view of the coordination environment in a paramagnetic metalloprotein from its magnetic properties", *Angewandte Chemie International Edition*, **2021**, 60(27), 14960-14966, IF2020=15.336
- 8) E. Ravera*, L. Gigli, B. Czarniecki, R. Kuemmerle, G. Parigi, M. Piccioli, F. Neese, C. Luchinat, "A quantum chemistry view on two archetypical paramagnetic pentacoordinate nickel(II) complexes offers a fresh look on their NMR spectra", *Inorganic Chemistry*, **2021**, 60(3), 2068-2075, IF2020=5.165
- 9) G. Bellomo, E. Ravera, V. Calderone, M. Botta, M. Fragai, G. Parigi, C. Luchinat, "Revisiting paramagnetic relaxation enhancements in slowly rotating systems: how long is the long range?", *Magnetic Resonance*, **2021**, 2(1), 25-31, IF not available
- 10) D. Rizzo, E. Ravera, M. Fragai, G. Parigi, C. Luchinat, "Origin of the MRI Contrast in Natural and Hydrogel Formulation of Pineapple Juice", *Bioinorganic Chemistry and Applications*, **2021**, ID6666018, IF2020= 7.778
- 11) L. Gigli, E. Ravera*, V. Calderone, C. Luchinat, "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*, **2021**, 11 (1), 43, IF2020 = 4.879
- 12) D.M. Selegato, C. Bracco, C. Giannelli, G. Parigi, C. Luchinat, L. Sgheri, E. Ravera* "Comparison of different reweighting approaches for the calculation of conformational variability of macromolecules from molecular simulations", *ChemPhysChem*, **2021**, 22(1), 127, IF 2020=3.102
- 13) P. Rathner, M. Fahrner, L. Cerofolini, H. Grabmayr, F. Horvath, H. Krobath, A. Gupta, E. Ravera, M. Fragai, M. Bechmann, T. Renger, C. Luchinat, C. Romanin, N.

- Müller “Interhelical interactions within the STIM1 CC1 domain modulate CRAC channel activation”, *Nat. Chem. Biol.*, **2021**, 17(2), 196-204, IF2020 = 15.040
- 14) F. Carniato, L. Tei, M. Botta, E. Ravera, M. Fragai, G. Parigi, C. Luchinat “¹H NMR Relaxometric Study of Chitosan-Based Nanogels Containing Mono- and Bis-Hydrated Gd(III) Chelates: Clues for MRI Probes of Improved Sensitivity”, *ACS Applied Bio Materials*, **2020**, 3(12), 9065-9072, IF not available
 - 15) L. Cerofolini, M. Fragai, C. Luchinat, E. Ravera* “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, IF2020=2.352
 - 16) L. Lang, E. Ravera, G. Parigi, C. Luchinat, F. Neese “Solution of a Puzzle: High-Level Quantum-Chemical Treatment of Pseudocontact Chemical Shifts Confirms Classic Semiempirical Theory”, *J. Chem. Phys. Lett.* **2020**, 11 (20), 8735-8744, IF2020 = 6.475
 - 17) E. Ravera*, C. Luchinat “Using simple algebraic concepts to understand chemical composition problems”, *International Journal of Mathematical Education in Science and Technology*, **2020**, 10.1080/0020739X.2020.1785569, IF not available
 - 18) E. Ravera, M. Fragai, G. Parigi, C. Luchinat “Different flavors of diffusion in paramagnetic systems: Unexpected NMR signal intensity and relaxation enhancements”, *J. Magn. Reson. Open* **2020**, 2, 100003, IF not available
 - 19) F. Bruno, R. Francischello, G. Bellomo, L. Gigli, A. Flori, L. Menichetti, L. Tenori, C. Luchinat, E. Ravera* “Multivariate Curve Resolution for 2D solid-state NMR spectra”, *Analytical Chemistry* **2020**, 92 (6), 4451-4458, IF 2020=6.986
 - 20) L. Cerofolini, E. Ravera, S. Bologna, T. Wiglenda, A. Böddrich, B. Purfürst, I. Benilova, M. Korsak, G. Gallo, D. Rizzo, L. Gonnelli, M. Fragai, B. De Strooper, E.E. Wanker, C. Luchinat “Mixing A β (1–40) and A β (1–42) peptides generates unique amyloid fibrils”, *Chem. Commun.* **2020**, 56 (62), 8830-8833, IF 2020=6.222
 - 21) M. Denis, C. Softley, S. Giuntini, M. Gentili, E. Ravera, G. Parigi, M. Fragai, G. Popowicz, M. Sattler, C. Luchinat, L. Cerofolini, C. Nativi “The photo-catalysed thiol-ene reaction: a new tag to yield fast, selective and irreversible paramagnetic tagging of proteins”, *ChemPhysChem* **2020**, 21 (9), 863-869, IF 2020=3.102
 - 22) A. Schirò, A. Carlon, G. Parigi, G. Murshudov, V. Calderone, E. Ravera*, C. Luchinat “On the complementarity of X-ray and NMR data”, *Journal of Structural Biology* :X **2020**, 100019, IF not available
 - 23) A. Carlon, L. Gigli, E. Ravera, G. Parigi, A.M. Gronenborn, C. Luchinat “Assessing structural preferences of unstructured protein regions by NMR”, *Biophysical Journal*, 2019, 117 (10), 1948-1953, IF2019=3.854
 - 24) M. Fragai, E. Ravera, F. Tedoldi, C. Luchinat, G. Parigi “Relaxivity of Gd-Based MRI Contrast Agents in Crosslinked Hyaluronic Acid as a Model for Tissues”, *ChemPhysChem*, 2019, 20 (17), 2204-2209, IF2019=3.144
 - 25) E. Ravera, G. Parigi, C. Luchinat “What are the methodological and theoretical prospects for paramagnetic NMR in structural biology? A glimpse into the crystal ball”, *J. Magn. Reson.*, 2019, 306, 173-179, IF2019=2.624
 - 26) L. Cerofolini, M. Fragai, E. Ravera, C.A. Diebolder, L. Renault, V. Calderone “Integrative Approaches in Structural Biology: A More Complete Picture from the Combination of Individual Techniques”, *Biomolecules*, 2019, 9 (8), 370, IF2019=4.082

- 27) G. Parigi, E. Ravera, C. Luchinat "Magnetic susceptibility and paramagnetism-based NMR", *Progress in NMR spectroscopy*, 2019, 114-115, 211-236, IF2019=8.892
- 28) L. Cerofolini, J.M. Silva, E. Ravera, M. Romanelli, C.F.G.C. Geraldès, A. Macedo, M. Fragai, G. Parigi, C. Luchinat "How Do Nuclei Couple to the Magnetic Moment of a Paramagnetic Center? A New Theory at the Gauntlet of the Experiments", *J. Phys. Chem. Lett.*, 2019, 10(13),3610-3614, IF2019=6.710
- 29) L. Cerofolini, S. Giuntini, E. Ravera, C. Luchinat, F. Berti, M. Fragai "Structural characterization of a protein adsorbed on aluminum hydroxide adjuvant in vaccine formulation", *npj Vaccines*, 2019, 4, 20, IF2019=7.344.
- 30) G. Bellomo, S. Bologna, L. Cerofolini, S. Paciotti, L. Gattichi, E. Ravera, L. Parnetti, M. Fragai, C. Luchinat, "Dissecting the Interactions between Human Serum Albumin and α -Synuclein: New Insights on the Factors Influencing α -Synuclein Aggregation in Biological Fluids", *J. Phys. Chem. B*, 2019, 123(20), 4380-4386, IF2019=2.857
- 31) G. Parigi, L. Benda, E. Ravera, M. Romanelli, C. Luchinat, "Pseudocontact shifts and paramagnetic susceptibility in classical and quantum chemistry theories", *J Chem Phys*, 2019, 150 (14), 144101, IF2019=2.991, preprint arXiv:1804.09055
- 32) J.M. Silva, L. Cerofolini, S. Giuntini, V. Calderone, C.F.G.C. Geraldès, A.L. Macedo, M. Fragai, G. Parigi, E. Ravera, C. Luchinat, "Metal centers in biomolecular solid-state NMR", *J. Struct. Biol.*, 2019, 206(1), 99-109, IF2019=3.071
- 33) L. Cerofolini, S. Giuntini, L. Barbieri, M. Pennestri, A. Codina, M. Fragai, L. Banci, E. Luchinat, E. Ravera*, "Real-time insights into biological events: in-cell processes and protein-ligand interactions", *Biophys. J.*, 2019, 116 (2), 239-247, IF2019=3.854
- 34) L. Cerofolini, S. Giuntini, A. Carlon, E. Ravera*, V. Calderone, M. Fragai, G. Parigi, C. Luchinat, "Characterization of PEGylated asparaginase: new opportunities from NMR analysis of large pegylated therapeutics", *Chem. Eur. J.*, 2019, 25(8), 1984-1991, IF2019=4.857
- 35) E. Ravera, P.G. Takis, M. Fragai, G. Parigi, C. Luchinat, "NMR Spectroscopy and Metal Ions in Life Sciences", *European Journal of Inorganic Chemistry* 2018 (44), 4752-4770, IF2018=2.578
- 36) J.M. Silva, S. Giuntini, L. Cerofolini, C.F.G.C. Geraldès, A.L. Macedo, E. Ravera, M. Fragai, C. Luchinat, V. Calderone, "Non-crystallographic symmetry in proteins: Jahn–Teller-like and Butterfly-like effects?", *J. Biol. Inorg. Chem.*, 24(1), 91-101, IF2018=3.632
- 37) A. Karmakar, M.S. Dodd, S. Agnihotri, E. Ravera, V.K. Michaelis, "Cu(II)-Doped Cs₂SbAgCl₆ Double Perovskite: A Lead-Free, Low-Bandgap Material", *Chem. Mater.*, 2018, 30, 8280-8290, IF2018=10.159
- 38) L. Gigli, W. Andralojc, A. Dalaloyan, G. Parigi, E. Ravera, D. Goldfarb, C. Luchinat, "Assessing protein conformational landscapes: integration of DEER data in Maximum Occurrence analysis", *Phys. Chem. Chem. Phys*, 2018, 20, 27429-27438 IF2018=3.567
- 39) A. Carlon, E. Ravera, G. Parigi, G.N. Murshudov, C. Luchinat, "Joint X-ray/NMR structure refinement of multidomain/multisubunit systems", *J. Biomol. NMR*, 2018, 73(6-7), 265-278, IF2018=2.319
- 40) G. Bellomo, S. Bologna, L. Gonnelli, E. Ravera, M. Fragai, M. Lelli, C. Luchinat, "Aggregation kinetics of the A β 1–40 peptide monitored by NMR", *Chem. Commun.*, 2018, 54, 7601-7604, IF2018=6.164

- 41) G. Parigi, E. Ravera, M. Bennati, C. Luchinat, "Understanding Overhauser Dynamic Nuclear Polarisation through NMR relaxometry", *Mol. Phys.*, 2018, 117(7-8), 888-897, IF2018=1.571
- 42) E. Ravera, A. Carlon, M. Fragai, G. Parigi, C. Luchinat, "Paramagnetic NMR as a new tool in structural biology", *Emerging topics in Life Sciences*, 2018, 2(1),19-28 IF not available
- 43) A. Louka, I Matlahov, S. Giuntini, L. Cerofolini, A. Cavallo, S. Pillozzi, E. Ravera*, M. Fragai, A. Arcangeli, A. Ramamoorthy, G. Goobes, C. Luchinat, "Engineering L-asparaginase for spontaneous formation of calcium phosphate bioinspired microreactors", *Phys.Chem.Chem.Phys.*, 2018, 20, 12719-12726, IF2018=3.567
- 44) S. Rumpel, E. Ravera, C. Sommer, E. Reijerse, C. Farès, C. Luchinat, W. Lubitz, "1H NMR Spectroscopy of [FeFe] Hydrogenase: Insight into the Electronic Structure of the Active Site, *J. Am. Chem. Soc.*, 2018, 140,131-134, IF2018=14.695
- 45) A.V.Chatzikonstantinou, M.V.Chatziathanasiadou, E. Ravera, M.Fragai, G. Parigi, I.P. Gerathanassis, C. Luchinat, H.L. Stamatis, A.G. Tzakos, "Enriching the biological space of natural products, through real time biotransformation monitoring: the NMR tube bioreactor", *B.B.A. General Subjects*, 2018, 1862, 1-8, IF2018=3.681
- 46) L. Cerofolini, T. Staderini, S. Giuntini, E. Ravera, M. Fragai, G. Parigi, R. Pierattelli, C. Luchinat, "Long-Range paramagnetic NMR data can provide a closer look on metal coordination in metalloproteins", *J.Biol.Inorg.Chem.*, 2018, 23, 71-80, IF2018=3.632
- 47) S. Giuntini, E. Balducci, L. Cerofolini, E. Ravera, M. Fragai, F. Berti, C. Luchinat, "Characterization of conjugation pattern in large polysaccharide-protein conjugates by NMR", *Angew. Chem.*, 2017, 56, 14997-15001, IF2017=12.102
- 48) S. Giuntini, L. Cerofolini, E. Ravera*, M. Fragai, C. Luchinat, "Atomic structural details of a protein grafted onto gold nanoparticles", *Sci. Rep.*, 2017, 7, 17934, IF2017=4.122
- 49) E. Ravera, G. Parigi, C. Luchinat, "Perspectives on paramagnetic NMR from a life sciences infrastructure", *J. Magn. Reson.*, 2017, 282, 154-169, IF2017=2.586
- 50) L. Cerofolini, S. Giuntini, A. Louka, E. Ravera*, M. Fragai, C. Luchinat, "High resolution solid-state NMR characterization of ligand binding to a protein immobilized in a silica matrix", *J. Phys. Chem. B*, 2017, 121, 8094-8101, IF2017=3.146
- 51) A. Bertarello, T. Schubeis, C. Fuccio, E. Ravera, M. Fragai, G. Parigi, C. Luchinat, G. Pintacuda, *Inorganic Chemistry*, 2017, 56, 6624-6629, IF2017 = 4.700;
- 52) W. Andraóójć, Y. Hiruma, W.-M. Liu, E. Ravera, M. Nojiri, G. Parigi, C. Luchinat, M. Ubbink, "Identification of productive and futile encounters in an electron transfer protein complex", *Proc. Nat. Acac. Sci. USA*, 2017, 114 (10), E1840-E1847, IF2017=9.504;
- 53) P.G. Takis, L. Tenori, E. Ravera, C. Luchinat, "Gelified biofluids for HRMAS 1H NMR analysis: the case of urine", *Analytical Chemistry*, 2017, 89 (2), 1054-1058, IF2017 = 6.042;
- 54) L. Benda, J. Mares, E. Ravera, G. Parigi, C. Luchinat, M. Kaupp, J. Vaara, "Pseudo-Contact NMR Shifts over the Paramagnetic Metalloprotein CoMMP-12 from First Principles", *Angewandte Chemie*, 2016, 55 (47), 14713-14717, IF2016=11.994;
- 55) E. Ravera, T. Martelli, Y. Geiger, M. Fragai, G. Goobes, C. Luchinat, "Biosilica and bioinspired silica studied by solid-state NMR", *Coord. Chem. Rev.* 2016, in press, IF2015=13.324;

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