

CURRICULUM VITAE ET STUDIORUM: ERIKA FERRARI



Personal data: Born in Modena (Italy), 08/04/1975
Present Position: Associate Professor
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EDUCATION

- **July 1999** Master Degree in Chemistry (*summa cum laude*) at the University of Modena and Reggio Emilia with a thesis entitled “Sintesi e Proprietà Ferro-chelanti di Curcuminoidi”, under the supervision of Prof. Romano Grandi.
- **February 2003** PhD in Chemistry the University of Modena and Reggio Emilia with a thesis entitled “Metal Binding of Biomolecules for Pharmaceutical Use”, under the supervision of Prof. Monica Saladini.

PREVIOUS POSITIONS AND FELLOWSHIPS

- **December 2020 – today** Associate Professor in Inorganic Chemistry at the department of Chemistry (until 2013) and at the Department of Chemical and Geological Sciences (2013-today) of the University of Modena and Reggio Emilia.
- **February 2006 – November 2020** Assistant Professor in Inorganic Chemistry at the department of Chemistry (until 2013) and at the Department of Chemical and Geological Sciences (2013-today) of the University of Modena and Reggio Emilia.
- **June 2003-February 2006** Scientific Technician at the Department of Chemistry of the University of Modena and Reggio Emilia.

MATERNITY/PARENTAL LEAVES

- **2014** Parental Leave from 07/07/2014 to 22/07/2014 (art. 32 D.Lgs. 151/2001) (D.R. n. 0126 del 31/07/2014).
- **2013** Parental Leave from 01/07/2013 to 12/07/2013 (art. 32 D.Lgs. 151/2001) (D.R. n. 0134 del 18/10/2013).
- **2011-2012** Maternity leave (art. 16 D.Lgs. 151/2001) from 19/08/2011 to 25/01/2012 + Parental leave (art. 32 D.Lgs. 151/2001) dal 26/01/2012 al 10/03/2012 e dal 11/03/2012 al 16/03/2012 – disposto con D.R. n. 074 del 30/03/2012 (**7 months**).
- **2008** Maternity leave (art. 16 D.Lgs. 151/2001) dal 20/03/2008 al 20/08/2008, disposto con D.R. n. 0317 del 29/09/2008 (**5 months**).

VISITS AND STAYS

- **May 2017** Visiting scientist at the Institute of Nuclear Chemistry of Johannes Gutenberg-Universität Mainz (Mainz, Germany);
- **October 2016** Visiting scientist at the Department of Biophysics of the Institute of Experimental Physics SAS (Košice, Slovakia);
- **February 2008** Visiting scientist at the Institute of Organic and Analytical Chemistry of the Université d'Orléans.

BRIEF DESCRIPTION OF THE RESEARCH ACTIVITY

The scientific interests of Prof. Ferrari are focused on coordination chemistry, in particular bio-inorganic and inorganic medicinal chemistry; the research covers different aspects showing a strong interdisciplinary approach though maintaining inorganic chemistry as a fundamental pillar around

which developing research activities. Dr Ferrari has expertise in the design and characterization of metal-ligand systems of both natural and synthetic origin.

In particular, the research covers the following topics:

- Metal-based drugs
- Metal trafficking in vitro (thermodynamic characterization of metal complexes in solution)
- Development of novel metal-chelating agents for theranostic purposes
- Development and characterization of iron-based drugs
- Organic, inorganic and metal-organic synthesis
- Development of advanced NMR techniques for complex matrices
- Inorganic Drug Delivery Systems (IDDS)

She is focused on the solution study of metal complexes and on the development of chelators for therapeutic purposes. She is especially keen on solution study, thermodynamic characterization of Metal/ligand systems by means of NMR spectroscopy, potentiometry and UV-Vis spectroscopy of metal-based drugs particularly iron metal complexes. She has deeply exploited NMR techniques such as in the determination of coordinating sites and structure of complex species, often switching the point of view from the ligand to the metal ion, in particular working on ¹⁹⁵Pt, and developing both 1D and 2D methods, titration techniques, dynamic studies, diffusion study on complex macromolecular matrixes such as humic substances, soils, and oxygen-binding heme proteins. Besides, she developed the use of Ga³⁺ as NMR probe that resembles Fe³⁺ behaviour. She is also an expert in the study of metal trafficking *in vitro* in order to evaluate and predict the efficacy of metal-sequestering agents in relation to metal homeostasis in biological systems.

During the last years, she focused her interests on the synthesis and characterization of naturally occurring molecules, among which Curcumin, with the purpose of biological metals trafficking, in view of therapeutic application, ranging from toxic metals removal to radio-imaging. She recently focused on the design and development of new ⁶⁸Ga/⁴⁴Sc-labelled radiotracers for nuclear medicine applications.

MAJOR COLLABORATIONS

National:

Mattia Asti - Nuclear Medicine Unit, Oncology and Advanced Technologies Department - IRRCS – Santa Maria Nuova Reggio Emilia.

Ornella Francioso - University of Bologna.

Carol Imbriano, Maria Cristina Menziani, Maria Giovanna Vezzalini - University of Modena and Reggio Emilia.

International:

Frank Rösch - Institute of Nuclear Chemistry, Johannes Gutenberg University of Mainz (DE)

Raphael Tripier - Université de Bretagne Occidentale (FR)

Zuzana Gazova - Institute of Experimental Physics, Slovak Academy of Sciences, Kosice (SK)

Hanne Hjorth Tønnesen – School of Pharmacy – University of Oslo (N)

FUNDING AND PROJECTS

- **2011-present** Funding agent: IRRCS –Santa Maria Nuova Reggio Emilia

Title: PHYTORAD: NUOVE STRATEGIE NELLO SVILUPPO DI RADIOTRACCIANTI (in collaboration with Dr. Mattia ASTI - Nuclear Medicine Unit, Oncology and Advanced Technologies Department - IRRCS – Santa Maria Nuova Reggio Emilia). *Role: co-PI*

- **2016-2019** Funding agent: MIUR (PRIN-2015)

Title: ZAPPING. High-pressure nano-confinement in Zeolites: the Mineral Science know-how APPLIED to engineerING of innovative materials for technological and environmental applications. *Role: Participant PI: Gianmario Martra*

- **2016-2018** Funding agent: FONDO DI ATENEIO PER LA RICERCA ANNO 2015 (FAR2015)

Title: Rational design of curcumin-based bifunctional ligands for early diagnosis and therapy of Alzheimer's disease. *Role: Participant; PI: Maria Cristina Menziani*

- **2017** Funding agent: MIUR (Finanziamento delle attività base di ricerca). *Role: PI*
- **2015-2017** Funding agent: FONDAZIONE DI VIGNOLA
Title: Diagnosi precoce della malattia di Alzheimer: nuovi agenti diagnostici bi-modali per *imaging*: **RAD** (radiotracers for Alzheimer's Disease) *Role: PI*
- **2012-2013** Funding agent: FONDAZIONE DI VIGNOLA
Title: Vetri bioattivi: nuovi materiali per il rilascio controllato di antitumorali derivati dalla curcumina.
Role: Participant, PI: Gianluca Malavasi

TEACHING ACTIVITIES

- A.A. 2022/23 "Chimica" (Corso di Laurea in Fisica - Università di Modena e Reggio Emilia, 6 CFU - 48 h);
- A.A. 2019/20- present "Chimica Generale ed Inorganica" (Corso di Laurea in Chimica - Università di Modena e Reggio Emilia, A.A. 2019/20-2021/22 3 CFU - 36 h Laboratorio; A.A. 2022/23 3CFU - 30h Lezioni frontali);
- A.A. 2019/20- 2021/22 "Chimica Generale e Inorganica" (Corso di Laurea in Chimica e Tecnologia Farmaceutiche - Università di Modena e Reggio Emilia, 9 CFU - 72 h);
- A.A. 2017/18-present "Inorganic Industrial and Environmental Chemistry" (Corso di Laurea in Chimica - Università di Modena e Reggio Emilia, 6 CFU - 48 h; Language: ENGLISH);
- A.A. 2015/16-2018/19 "Laboratorio di Chimica" (Corso di Laurea in Scienze Naturali - Università di Modena e Reggio Emilia, 1 CFU - 12 h);
- A.A. 2013/14-2016/2017 "Chimica Inorganica Industriale e Ambientale" (Corso di Laurea in Chimica - Università di Modena e Reggio Emilia, 6 CFU - 48 h);
- A.A. 2009/10; 2012/13 "Chimica Generale con elementi di Chimica Inorganica" (Corso di Laurea in Scienze e Tecnologie Erboristiche - Università di Modena e Reggio Emilia, 7 CFU - 56 h); "Introduzione al Laboratorio chimico" (Corso di Laurea in Scienze e Tecnologie Erboristiche - Università di Modena e Reggio Emilia, 2 CFU - 16 h);
- A.A. 2006/07-2008/09 "Elementi di Chimica Generale ed Inorganica" (Corso di Laurea in Tecniche Erboristiche - Università di Modena e Reggio Emilia, 9 CFU - 72 h); "Introduzione al Laboratorio chimico" (Corso di Laurea in Tecniche Erboristiche - Università di Modena e Reggio Emilia, 2 CFU - 16 h)
- A.A. 2006/07-2012/13 "Composti di coordinazione di interesse farmaceutico" (12 h), Teaching activity for PhD students of the Doctorate School "Scienze e tecnologie dei prodotti per la salute" (Università di Modena e Reggio Emilia).
- A.A. 2006/07-2008/09 Lecturer for the SicurMORE project "Formazione a distanza, portale FAD626 (FAD 81)"
- A.A. 2006/07 Lecturer for "Master universitario di I livello in presenza o a distanza *Prevenzione dei rischi e gestione della sicurezza del lavoro - Safety Management*".
- A.A. 2005/2006 "Chimica Analitica" (Corso di Laurea in Farmacia e CTF - Università di Modena e Reggio Emilia, 5 CFU - 40 h)

SUPERVISION OF PhD STUDENTS AND FELLOWSHIPS

- **2021-** Supervisor of Dr Matteo Mari, M3ES PhD Student committed to the project "Development of new PET radiotracers based on monocarboxylate transporter inhibitors for theranostic applications in oncology"
- **2021-** Co-Supervisor of Debora Carrozza, M3ES PhD Student involved in the project "Development of hybrid bio-materials for theranostic applications"
- **2021** Supervisor of post-graduated fellowship, Dr Debora Carrozza, working on a project entitled "Development of iron-citrate metal complexes for therapeutic applications".
- **2017-2018** Supervisor of post-doctoral fellowship (Dr Luca Rigamonti) working on a project entitled "Development of curcumin-based radiotracers for nuclear medicine applications".

- **2015-2018** Supervisor of PhD Student, Dr Giulia Orteca working on a thesis “New smart materials for metal trafficking control.”
- **2011-2012** Supervisor of post-doctoral fellowship (Dr Maurizio Bonavia) working on a project entitled “Development of radiotracers for nuclear medicine applications”.
- **2010-2012** Co-Supervisor of PhD Student, Dr Ettore Venturi working on the research project: “Sintesi e caratterizzazione di composti beta-dichetonici di interesse farmaceutico”
- **2008-2010** Co-Supervisor of PhD Student, Dr Francesca Pignedoli working on a thesis entitled “Il ruolo della chimica di coordinazione nello sviluppo di potenziali agenti terapeutici derivati dalla Curcumina.”
- **2006-2008** Co-Supervisor of PhD Student, Dr Sandra Lazzari, working on a thesis entitled: “Synthesis, characterization and coordinative properties of new molecules of pharmaceutical interest”

AWARDS

- **2017**: National Scientific Enabling (ASN) for the position of Associate Professor in the sector **03/B1** (FONDAMENTI DELLE SCIENZE CHIMICHE E SISTEMI INORGANICI)
- **2018** National Scientific Enabling (ASN) for the position of Full Professor in the sector **03/B1** (FONDAMENTI DELLE SCIENZE CHIMICHE E SISTEMI INORGANICI).
- **2018**: best abstract for oral presentation “VII Congresso Nazionale del Gruppo interdisciplinare di Chimica dei Radiofarmaci (GICR) - Ferrara 11-12 Maggio 2018”.

PhD SCHOOL MEMBERSHIPS AND APPOINTMENTS

- Member of the Faculty of Doctorate School "**MODELS AND METHODS FOR MATERIAL AND ENVIRONMENTAL SCIENCES – M3ES**" of the University of Modena and Reggio Emilia (from the academic years **2013/2014** to present)
- Member of the Commission for Education of M3ES PhD School
- Member of the Doctorate School "**SCIENZE E TECNOLOGIE DEI PRODOTTI PER LA SALUTE**" of the University of Modena and Reggio Emilia (from the academic years **2006/2007** to **2011/2012**)

MEMBERSHIPS AND APPOINTMENTS

- Management Committee Substitute and Participant of the **COST ACTION CA 18202 – NECTAR – Network for Equilibria and Chemical Thermodynamics Advanced Research.** (<https://cost-nectar.eu/>)
- PEER Reviewer- Area Chimica (GEV03) – VQR 2011-2014
- REPRISE (albo degli esperti scientifici istituito presso il MIUR) (“Ricerca di Base” 2018-oggi)
- Management Committee of the *Società Chimica Italiana - Sezione Emilia Romagna* (2012-2014)
- Management Committee (Secretary/ Treasurer) of the *Società Chimica Italiana Sezione Emilia Romagna* (2009-2011)
- Member of the Inorganic Chemistry and Nuclear Magnetic Resonance Divisions of the Italian Chemical Society.
- Member of GICR “Gruppo Interdisciplinare di Chimica dei Radiofarmaci”.
- Member of the Biogest Siteia Technopole consortium.
- Member of CRIS - Centro di Ricerca Interdipartimentale sulla Sicurezza e Prevenzione dei Rischi di UNIMORE (2012-)
- Member of CIPRAL - Centro Interdipartimentale di Prevenzione dei Rischi negli Ambienti di Lavoro – UNIMORE (2008-2010)
- DSCG (Dipartimento di Scienze Chimiche e Geologiche) Representative Member in the Centro Interdipartimentale Grandi Strumenti (C.I.G.S.) Committee of the University of Modena and Reggio Emilia (2020-oggi)
- Tutor for the Master Degree in *Chimica e Tecnologia Farmaceutiche* (2019-oggi)
- Member of the *Commissione Sviluppo e Ricerca* of DSCG (2018-2019)
- Member of the Web Committee of DSCG (2012-2018)

- Member of the Self-Evaluation Committee of the Pharmacy Faculty (2006-2012)
- Member of the *Commissione Immagine* of the Pharmacy Faculty (2007-2012)
- Tutor for the Degree in *Tecniche Erboristiche* and *Scienze e Tecnologie Erboristiche* (2007-2012)
- Member of the *Commissione per la valutazione delle conoscenze in ingresso e test di ammissione ai corsi di laurea in Farmacia, Chimica e Tecnologia Farmaceutiche* (2008-2012)

ORGANISATION OF SCIENTIFIC MEETINGS AND SCHOOLS

- Scientific committee “Network di Ricerca in Radiochimica: 2^o meeting internazionale italiani in sede e italiani all'estero – 21 Marzo 2020”
- Principal Organizer of the PhD school “Introduction to Radiochemistry” (October 2018).
- “Introduction to Radiochemistry” (1-3 Ottobre 2018, Modena).
- XIV Giornata della Chimica dell'Emilia Romagna, Parma – 18 December 2014 (Scientific Committee)
- XIII Giornata della Chimica dell'Emilia Romagna Area della Ricerca del CNR di Bologna - 18 December 2013 (Scientific Committee)
- XII Giornata della Chimica dell'Emilia Romagna - 17 December 2012, Dipartimento di Scienze Chimiche e Farmaceutiche dell'Università di Ferrara (Scientific Committee)
- Celebration of the International Year of Chemistry: “Il concetto di responsabilità: Etica, Chimica, Ambiente” - Modena, 28-30 April 2011 (Organizing Committee).
- X Giornata della Chimica dell'Emilia Romagna – Parma, 26 November 2010 (Scientific Committee)
- IX Giornata della Chimica in Emilia Romagna – Bologna, 4 December 2009 (Scientific Committee)

ACTIVITIES IN REFERRED SCIENTIFIC JOURNALS.

- *Editorial Board Member for Molecules* (<https://www.mdpi.com/journal/molecules/editors>)
- *Guest-Editor* Special Issue “25th Anniversary of Molecules-Recent Advances in Inorganic Chemistry” https://www.mdpi.com/journal/molecules/special_issues/molecules_25th_Anniversary_of_Molecules_Inorganic_Chemistry
- *Guest-Editor* Special Issue “Curcumin” in Molecules journal http://www.mdpi.com/journal/molecules/special_issues/molecules_Curcumin2019)
- *Reviewer for the peer-reviewed journals*: Journal of Medicinal Chemistry; Inorganic Chemistry; European Journal of Medicinal Chemistry; Dalton Transactions; Molecules; International Journal of Molecular Sciences; Journal of Inorganic Biochemistry; Journal of Bioinorganic Chemistry; Journal of Nanomaterials; Molecules; Arabian Journal of Chemistry; International Journal of Molecular Structure.

TECHNOLOGICAL TRANSFER

2021 ITALIAN PATENT 102021000005132 “Materiale fotoassorbente ad ampio spettro, procedimento per la sua preparazione ed usi relativi” INVENTORS: R. Arletti, G. Vezzalini, A. Zambon, E. Ferrari, R. Fantini, C. Baraldi, L. Mino, M. Fabbiani, R. Cavalli, M. Argenziato, Deposit Date (04/03/21)

2020 INVENTION PATENT (BREVETTO D'INVENZIONE nr.102018000002279) “Sintesi di derivati della curcumina con un gruppo chelante per la complessazione di metalli e radionuclidi.” Submission date: 31st January 2018, Approval date: 17th March 2020. Inventors: Mattia Asti, Giulia Orteca, Erika Ferrari, Sara Rubagotti, Michele Iori, Pier Cesare Capponi.

2011-2013 PROGETTO SPINNER2013 - idea imprenditoriale innovativa e/o ad alto contenuto di conoscenza: BIT4ENERGY (PI: Erika Ferrari)

2009-2010 PROGETTO SPINNER DI RICERCA INDUSTRIALE: H2STIT (PI: Erika Ferrari)

PUBLIC ENGAGEMENT

- Participant to the project PLS, leading seminars and laboratory activities for high school students.
- Seminars for high school teachers (2007, 2014, 2017)
- Participant to the project “ACQUA FONTE DI VITA NELLO SPAZIO E NEL TEMPO...” financed by the Fondazione Cassa di Risparmio di Modena. Scuola primaria “KING” - ISTITUTO COMPRENSIVO MODENA 3 (November 2015)
- Seminars, laboratorial activities and guided tours during the temporary exhibition: CRISTALLI AI RAGGI X (Modena, 24 January - 29 March 2015).

- Researchers' Night (2015, 2016, 2017).

RECENT SCIENTIFIC PUBLICATIONS ON INTERNATIONAL PEER-REVIEWED JOURNALS WITH IF (2022-2014).

* corresponding author

1. Curcumin-based β -diketo ligands for Ga^{3+} : thermodynamic investigation of potential metal-based drugs. Matteo Mari, Debora Carrozza, Gianluca Malavasi, Ettore Venturi, Giulia Avino, Pier Cesare Capponi, Michele Iori, Sara Rubagotti, Silvia Belluti, Mattia Asti, Erika Ferrari* *Pharmaceuticals* **2022**, 15, 854-875 (DOI: 10.3390/ph15070854)
2. Taxonomical and functional composition of strawberry microbiome is genotype-dependent. Daniela Sangiorgio, Antonio Cellini, Irene Donati, Erika Ferrari, Benjawan Tanunchai, Sara Fareed Mohamed Wahdand, Dolaya Sadubsarn, Brian Farneti, Alice Checcucci, François Buscotd, Francesco Spinelli,* Witoon Purahong *J Adv Res* **2022**, (DOI: 10.1016/j.jare.2022.02.009)
3. Boosting sunscreen stability: new hybrid materials from UV filters encapsulation. Riccardo Fantini, Giovanna Vezzalini, Alfonso Zambon, Erika Ferrari, Francesco Di Renzo, Marco Fabbiani, Rossella Arletti*. *Micropor & Mesopor Mat* **2021**, 328, 111478. (DOI: 10.1016/j.micromeso.2021.111478)
4. Applications of Radiolabelled Curcumin and Its Derivatives in Medicinal Chemistry. Matteo Mari, Debora Carrozza, Erika Ferrari and Mattia Asti.* *Int. J. Mol. Sci.* **2021**, 22, 7410. (DOI: 10.3390/ijms22147410)
5. 25th Anniversary of Molecules—Recent Advances in Inorganic Chemistry. Burgert Blom,* Erika Ferrari, Vassilis Tangoulis, Cédric R. Mayer, Axel Klein and Constantin C. Stoumpos. *Molecules* **2021**, 26(9), 2589 (DOI: 10.3390/molecules26092589)
6. From solid state to in vitro anticancer activity of copper(II) compounds with electronically-modulated NNO Schiff base ligands. Luca Rigamonti,* Francesco Reginato, Erika Ferrari, Laura Pigani, Lara Gigli, Nicola Demitri, Pavel Kopel, Barbora Tesarova and Zbynek Heger. *Dalton Trans.* **2020**, 49, 14626-14639 (DOI: 10.1039/D0DT03038D)
7. Gallium-68 and scandium-44 labelled radiotracers based on curcumin structure linked to bifunctional chelators: synthesis and characterization of potential PET radiotracers. Giulia Orteca, Jean-Philippe Sinnes, Sara Rubagotti, Michele Iori, Pier Cesare Capponi, Markus Piel, Frank Rösch, Erika Ferrari* and Mattia Asti. *J Inorg Biochem* **2020**, 204, 110954 (DOI: 10.1016/j.jinorgbio.2019.110954).
8. Combined Effect of Cadmium and Lead on Durum Wheat. Alessio Aprile,* Erika Sabella, Enrico Francia, Justyna Milc, Domenico Ronga, Nicola Pecchioni, Erika Ferrari, Andrea Luvisi, Marzia Vergine and Luigi De Bellis. *Int J Mol Sci* **2019**, 20, 5891-5907 (DOI:10.3390/ijms20235891).
9. Development of a Potential Gallium-68-Labelled Radiotracer Based on DOTA-Curcumin for Colon-Rectal Carcinoma: From Synthesis to In Vivo Studies. Giulia Orteca, Federica Pisaneschi, Sara Rubagotti, Tracy W. Liu, Giacomo Biagiotti, David Piwnica-Worms, Michele Iori, Pier Cesare Capponi, Erika Ferrari,* Mattia Asti. *Molecules* **2019**, 24, 644-663. (DOI 10.3390/molecules24030644)
10. Potent Anti-Cancer Properties of Phthalimide-Based Curcumin Derivatives on Prostate Tumor Cells. Silvia Belluti, Giulia Orteca, Valentina Semeghini, Giovanna Rigillo, Francesca Parenti, Erika Ferrari*, Carol Imbriano*. *Int J Mol Sci* **2019**, 20, 28-49. (DOI:10.3390/ijms20010028)
11. Curcumin derivatives and $A\beta$ -fibrillar aggregates: An interactions' study for diagnostic/therapeutic purposes in neurodegenerative diseases. Giulia Orteca, Francesco Tavanti, Zuzana Bednarikova, Zuzana Gazova, Giovanna Rigillo, Carol Imbriano, Valentina Basile, Mattia Asti, Luca Rigamonti, Monica Saladini, Erika Ferrari,* Maria Cristina Menziani. *Bioorg & Med Chem* **2018**, 26, 4288-4300. (DOI: 10.1016/j.bmc.2018.07.027)
12. Spectroscopic-chemical fingerprint and biostimulant activity of a protein-based product in solid form. Andrea Ertani*, Ornella Francioso, Erika Ferrari, Michela Schiavon, Serenella Nardi. *Molecules* **2018**, 23, 1031-1047 (DOI: 10.3390/molecules23051031)
13. New curcumin-derived ligands and their affinity towards Ga^{3+} , Fe^{3+} and Cu^{2+} : spectroscopic studies on complex formation and stability in solution. Luca Rigamonti, Giulia Orteca, Mattia Asti, Valentina Basile, Carol Imbriano, Monica Saladini and Erika Ferrari* *New J Chem*, **2018**, 42, 7680-7690 (DOI: 10.1039/C8NJ00535D, IF 3.201)

- 14.** Excited state dynamics of bis-dehydroxycurcumin *tert*-butyl ester, a diketo-shifted derivative of the photosensitizer curcumin. Luca Nardo,* Angelo Maspero, Andrea Penoni, Giovanni Palmisano, Erika Ferrari, Monica Saladini. *PLoSOne*. **2017**, *12*, e0175225. (DOI: 10.1371/journal.pone.0175225)
- 15.** Uptake of Ga-curcumin derivatives in different cancer cell lines: toward the development of new potential ⁶⁸Ga-labelled curcuminoids-based radiotracers for tumour imaging. Sara Rubagotti, Stefania Croci, Erika Ferrari,* Giulia Orteca, Michele Iori, Pier C. Capponi, Annibale Versari and Mattia Asti *J Inorg Biochem* **2017**, *173*, 113-119.
- 16.** Synthesis, characterization and metal coordination of a potential β -lactamase inhibitor: 5-Methyl-2-phenoxyethyl-3-*H*-imidazole-4-carboxylic acid (PIMA) Chiara Romagnoli, Fabio Prati, Rois Benassi, Giulia Orteca, Monica Saladini, Erika Ferrari* *Arab J Chem* **2017**, *10*, 1061-1069 (doi:10.1016/j.arabjc.2015.11.007)
- 17.** *In vitro* study on potential pharmacological activity of Curcumin analogues and their copper complexes. Erika Ferrari,* Rois Benassi, Monica Saladini, Giulia Orteca, Zuzana Gazova and Katarina Siposova. *Chem Biol & Drug Des*, **2017**, *89*, 411-419, (DOI: 10.1111/cbdd.12847)
- 18.** Process intensification by experimental design application to microwave-assisted extraction of phenolic compounds from *Juglans regia* L. Roberto Rosa, Lorenzo Tassi, Giulia Orteca, Monica Saladini, Carla Villa, Paolo Veronesi, Cristina Leonelli, Erika Ferrari* *Food Anal Methods* **2017**, *10*, 575-586 (IF: 2.167; DOI: 10.1007/s12161-016-0624-1).
- 19.** Affinity of ^{nat/68}Ga-Labelled Curcumin and Curcuminoid Complexes for β -Amyloid Plaques: towards the Development of New Metal-Curcumin Based Radiotracers. Sara Rubagotti, Stefania Croci, Erika Ferrari,* Michele Iori, Pier C. Capponi, Luca Lorenzini, Laura Calzà, Annibale Versari and Mattia Asti. *Int J Mol Sci* **2016**, *17*(9), 1480. (doi:10.3390/ijms17091480, IF 3.687)
- 20.** SiO₂-CaO-P₂O₅ bioactive glasses: A promising curcuminoids delivery system. Valentina Nicolini, Monica Caselli, Erika Ferrari, Ledi Menabue, Gigliola Lusvardi, Monica Saladini, Gianluca Malavasi. *Materials* **2016**, *9*, 290-300. (DOI: 10.3390/ma9040290, IF 2.467).
- 21.** Phytochemical compounds or their synthetic counterparts? A detailed comparison of the quantitative environmental assessment for the synthesis and extraction of Curcumin. Elisabetta Zerazion, Roberto Rosa, Erika Ferrari, Paolo Veronesi, Cristina Leonelli, Monica Saladini, Anna Maria Ferrari. *Green Chem* **2016**, *18*, 1807-1818 (DOI: 10.1039/C6GC00090H; IF 8.5)
- 22.** Litter quality changes during decomposition investigated by thermal analysis. Giocchini P, Montecchio D, Ferrari E, Ciavatta C, Masia A, George E, Tonon G. *iForest - Biogeosciences and Forestry*. **2015** (doi: 10.3832/ifor1297-007)
- 23.** Snow vole (*Chionomys nivalis* Martins) affects the redistribution of soil organic matter and hormone-like activity in the alpine ecosystem: ecological implications. Diego Pizzeghello, Stefania Cocco, Ornella Francioso, Erika Ferrari, Alessandra Cardinali, Serenella Nardi, Alberto Agnelli & Giuseppe Corti. *Ecology and Evolution*. **2015**, *5* (20), 4542-4554 (doi: 10.1002/ece3.1727)
- 24.** Development of an electrochemical sensor for NADH determination based on caffeic acid redox mediator supported on carbon black. Chiara Zanardi, Fabiana Arduini, Erika Ferrari, Laura Pigani, Renato Seeber *Chemosensors* **2015**, *3*(2), 118-128. doi:10.3390/chemosensors3020118
- 25.** Antibacterial phototoxic effects of synthetic asymmetric and glycosylated curcuminoids in aqueous formulations Studies on curcumin and curcuminoids. LIV. Marianne Lilletvedt Tovsen, Ellen Bruzell, Erika Ferrari, Monica Saladini, Vivek S. Gaware, Már Mátsson, Solveig Kristensen, Hanne Hjorth Tønnesen *J Photochem Photobiol B: Biology* **2014**, *140*, 150-156.
- 26.** Synthesis and First Biological Assessments of Ga-68-Labelled Curcuminoids Complexes as Potential Radiotracers for Imaging Alzheimer's Disease. Annibale Versari · M. Asti · E. Ferrari, S. Croci, G. Atti, S. Rubagotti, M. Iori, P. C. Capponi, A. Zerbini, M. Saladini, A. Versari. *Eur J Nucl Med Mol Imag* **2014**
- 27.** Curcumin derivatives as metal-chelating agents with potential multifunctional activity for pharmaceutical applications. Erika Ferrari, Rois Benassi, Stefania Sacchi, Francesca Pignedoli, Mattia Asti, Monica Saladini *J Inorg Biochem* **2014**, *139*, 38-48. (DOI: 10.1016/j.jinorgbio.2014.06.002).
- 28.** Synthesis and characterization of ⁶⁸Ga-labelled curcumin and curcuminoids complexes as potential radiotracers for imaging of cancer and Alzheimer's disease. Mattia Asti; Erika Ferrari; Stefania Croci; Giulia Atti; Sara Rubagotti; Michele Iori; Pier C. Capponi; Alessandro Zerbini; Monica Saladini; Annibale Versari *Inorg Chem* **2014**, *53*, 4922-4933.

BOOK CHAPTERS.

- Erika Ferrari, chapter title: "Curcumin derivatives as metal-chelating agents: Implications for potential therapeutic agent for neurological disorders". In *"Curcumin for Neurological and Psychiatric Disorders: Neurochemical and Pharmacological Properties"*. 2018, Tahira Farooqui and Akhlaq A. Farooqui Editors, Elsevier/Academic Press.

- Roberto Rosa, Erika Ferrari and Paolo Veronesi (July 4th 2018). From Field to Shelf: How - Microwave-Assisted Extraction Techniques Foster an Integrated Green Approach, Emerging Microwave Technologies in Industrial, Agricultural, Medical and Food Processing Kok Yeow You, IntechOpen, DOI: 10.5772/intechopen.73651. Available from: <https://www.intechopen.com/books/emerging-microwave-technologies-in-industrial-agricultural-medical-and-food-processing/from-field-to-shelf-how-microwave-assisted-extraction-techniques-foster-an-integrated-green-approach>.

- Caterina Durante, Erika Ferrari; Giorgia Foca, Stefania Benvenuti, Lorenzo Tassi. Capitolo 4 (pp.17-27): "Produzioni castanicole e identità territoriale: parliamone!" In *"Sorella Castagna, Fratello Marrone"* (2017). ISBN:978 88 6462 505 8

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