

CURRICULUM VITAE
Prof. Roberta Galeazzi



PERSONAL INFORMATION

Name

ROBERTA GALEAZZI

E-mail

r.galeazzi@univpm.it

r.galeazzi@staff.univpm.it

Nationality

Italiana

WORKING EXPERIENCE

- Date (form-to)
- Name and address of employer
 - Type of business or sector
 - Job type
- Date (form-to)
- Name and address of employer
 - Type of business or sector
 - Job type
- Date (form-to)
- Name and address of employer
 - Type of business or sector
 - Job type

10/2022 – PRESENT

Università Politecnica delle Marche

University/Academic

Professore Associato in Chimica Organica (PA) CHIM/06

10/2001 – 9/2022

Università Politecnica delle Marche

University/Academic

Ricercatore a tempo indeterminato (RU) CHIM/06

02/1996 – 09/2001

Università Politecnica delle Marche

University/Academic

Qualified Technician in Chemistry (cat. D)

01/1995 – 07/1995

CHEMIOFARM

Pharmaceutical Chemical Company

05/1994 – 12/1994 E 05/1993 – 12/1993

Università Politecnica delle Marche

University/Academic

Fixed-term contracts according Article 26 of D.P.R. 382/1980, stipulated with the University of Ancona for professional services related to the use of particularly complex scientific and educational equipment within the teaching of the Chemistry Laboratory course at the Faculty of Science.

ISTRUZIONE E FORMAZIONE

- Date (from-to)
- Name and type of education or training institution

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- Name and type of education or training institution
- Main subjects / professional skills covered
 - Qualification obtained

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- Name and type of education or training institution
- Main subjects / professional skills covered
 - Qualification obtained

PERSONAL SKILLS AND EXPERTISE

NATIVE LANGUAGE ITALIAN

OTHER LANGUAGES

- Reading skills EXCELLENT
- Writing skills VERY GOOD
- Speaking skills VERY GOOD

RESEARCHER UNIQUE IDENTIFIER(S)

December 2023

National qualification for Full Professor (organic chemistry)
(Abilitazione Scientifica Nazionale a professore di I fascia)

November 2020

National Qualification for Associate Professor (Organic Chemistry)
(Abilitazione Scientifica Nazionale a professore di II fascia (SSD CHIM/06))

March 1993

Qualification to practice as a chemist

1987 – 1992

Università degli Studi di Bologna

Chemistry, grade 110/110 with honors, thesis on the spectroscopic properties and reactivity of fullerenes (Prof. G. Orlandi)
Master Degree

1982 – 1987

"Galileo Galilei" Scientific High School - Ancona

Scientific Maturity, 60/60

High School Diploma - Maturity

ORCID: <http://orcid.org/0000-0003-1792-654X>;

Scopus ID: 7005671848 ;

Google scholar:

<https://scholar.google.com/citations?user=8vLvlmAAAAAJ&hl=en&oi=ao>

Web of Science ResearcherID-2555-2009

- 130 scientific papers published in international peer review Journals
 - More than 100 participation to National/international Congresses
 - **H index** global: 29 (Scopus), 32 (Google Scholar)
 - **Total Citations:** 2284 (Scopus), 2885 (Google scholar)
- Website: www.mmddlab.org

TECHNICAL KNOWLEDGE AND EXPERTISE.

- Since October 1, 2001, permanent Researcher at the Department of Life and Environmental Sciences (DISVA) (formerly the Faculty of Sciences) at the Marche Polytechnic University, in the Scientific-Disciplinary Sector CHIM/06 - Organic Chemistry.
- In November 2020, obtained the National Qualification as Associate Professor in the scientific sector 03/C1 - Organic Chemistry (CHIM/06).
- In December 2023, I obtained the National Qualification as Full Professor in the same scientific sector 03/C1 - Organic Chemistry (currently CHEM-05).

- **Teaching Activities**

In addition to my institutional teaching duties as a researcher, by assignment (Aggregate Professor pursuant to Art. 1, Paragraph 11 of Law 230/2005), since 2001 I have been responsible for courses in the Bachelor's Degree in Biology and the Master's Degree in Molecular and Applied Biology.

- **Current Courses (A.Y. 2024-2025):**

- Organic Chemistry (CHIM/06) (7 CFU) – Bachelor's Degree in Biological Sciences (1st year)
- Laboratory of Modeling and Rational Design of Bioactive Molecules (6 CFU) – Master's Degree in Molecular and Applied Biology, Computational Biology curriculum

- **Lecturer for courses at the Faculty of Sciences, Marche Polytechnic University A.Y. 2001/2002 to A.Y. 2024/2025:**

- Chemistry I (A-L) (integrated course) – Module 1 (CHIM/03) and Module 2 (CHIM/06) (9 CFU) (until A.Y. 2020/2021) – Bachelor's Degree in Biological Sciences
- Modeling of Biological Systems (CHIM/06) (5 CFU) – Master's Degree in Molecular and Applied Biology
- Applied Organic Chemistry (CHIM/06) – Bachelor's Degree in Biological Sciences
- Biomolecular Modeling and Design (CHIM/06 – CHIM/08) – Master's Degree in Industrial Biology and Applied Biology
- Structure and Chemistry of Receptors (formerly Chemistry of Receptors) (CHIM/08) – Master's Degree in Industrial Biology and Applied Biology
- Chemistry II (CHIM/06) (A-L) (8 CFU) – Bachelor's Degree in Biological Sciences (2nd year)

- **Doctoral Teaching:** I have been and continue to be responsible for courses at the Doctoral School of the Department of Life and Environmental Sciences (DISVA) (formerly Faculty of Sciences):

- **Computational Methods Applied to Biologically Relevant Systems** – PhD in Science, Biomolecular Sciences curriculum (A.Y. 2001/2002 – 2019/2020)
 - 27 hours (3 CFU) until A.Y. 2015/2016, 16 hours (2 CFU) currently
 - **Advanced Molecular Modeling Applied to Drug Discovery** – 8 hours (1 CFU) for PhD students in the Department of Life and Environmental Sciences, Biomolecular Sciences curriculum (since A.Y. 2021/2022)

- **PhD Program Faculty Membership**
 - From 2009 to 2012, I was a member of the PhD faculty board for the Doctoral School in Applied Biomolecular Sciences (which, since 2014, has become a curriculum within the Doctoral School of Life and Environmental Sciences – DISVA).
 - Since 2020, I have been a full member of the PhD board for the DISVA Doctoral Program, Biomolecular Sciences curriculum.
- **Thesis Supervision and Tutoring Activities:** I have served as a scientific supervisor (tutor) for PhD research in Applied Biomolecular Sciences and as a thesis advisor for Master's degree students in Applied Biology. Specifically:
- **PhD Tutor in Applied Biomolecular Sciences, Faculty of Sciences/DISVA:**
 - **VIII cycle:** Dr. Lucia Brunetti – *"Molecular Dynamics of Novel β -Peptidic Foldamers and of pH-Dependent Protein Folding/Unfolding."*
 - **XII cycle:** Dr. Luca Massaccesi – *"Molecular Dynamics Applied to the Study of Complex Biological Systems."*
 - **XV cycle (EUREKA scholarship):** Dr. Emiliano Laudadio – *"Rational Design of Functionalized Lipids with Antioxidant and Scavenging Activity as Components of Innovative Artificial Tears."*
- **PhD Tutor in Biomolecular Sciences, DISVA:**
 - **XXXIV cycle (EUREKA scholarship):** Dr. Mattia Cantarini – *"Melatonin Agonists for Glaucoma Treatment: A Computational Strategy for the Search of Active Compounds and Their Delivery in the Eye."*
 - **XXXVI cycle:** Dr. Giorgia Giorgini, Rational drug design of new efflux pump inhibitors of Gram-negative bacteria: novel in silico/in vitro combined approach to overcome antimicrobial resistance
- **Thesis Supervisor** for numerous experimental theses in Industrial Biology, Applied Biology, and for the Master's Degree in Molecular and Applied Biology.

- **Research Activities**

Over the years, my research has covered various fields of Organic, Bioorganic, and Computational Chemistry.

In the last decade, my work has primarily focused on the application of computational chemistry and molecular modeling techniques, such as molecular dynamics and docking, to identify new bioactive compounds (both synthetic and natural) and to rationalize the molecular basis of biological and epigenetic processes underlying relevant diseases.

More specifically, I have worked on:

- **Development of novel liposomal systems for drug delivery** – My research has involved predicting the stability of mixed-composition liposomes containing new synthetic lipids through molecular dynamics

simulations (European PRACE project and national ISCRA-CINECA projects).

- **Mechanistic and dynamic studies on the stability of antioxidant molecules within the lipid bilayer** – These studies aimed at designing new liposomal compositions and developing liposomes capable of protecting against oxidative stress (PRIN2010 and ongoing projects). This includes the computational design of efficient transport and encapsulation systems for antioxidant molecules.
- **Identification, design, and synthesis of potential bacterial efflux pump inhibitors** – Specifically, I have worked on high-throughput virtual screening of natural compound libraries and rational drug design of inhibitors targeting efflux pumps in Gram-negative bacteria such as *Pseudomonas aeruginosa* and *Escherichia coli* (Strategic University Project 2016–2018).
- **Investigation of the activation mechanisms of serotonin receptors (particularly 5-HT_{2C} and 5-HT_{1A})** – This research has focused on understanding the mechanisms of agonists and antagonists to provide a rational basis for the design and synthesis of highly selective active molecules.
- **Study of inhibitors and the catalytic mechanism of Aromatase** – This enzyme is involved in the estradiol pathway and is a key target for anticancer drugs, particularly in breast cancer treatment.
- **Rational design and synthesis of EGFR inhibitors** – Focused on overcoming resistance mechanisms in the treatment of non-small cell lung cancer (NSCLC). In this area, I have been and continue to be the academic tutor for two AIRC research fellowships awarded to Dr. Cristina Minnelli (12 months from January 2019 and 24 months from January 2021).
- **Other research projects:**
 - Design of molecularly imprinted polymers (MIPs) targeting the SARS-CoV-2 Spike protein (in collaboration with the University of Calabria, funded by FISIR 2020–2021).
 - Development of new DNA-based vaccines for COVID-19 (in collaboration with the University of Camerino).
- Currently, I am responsible for the **Molecular Modeling Laboratory at DISVA** (www.mmddlab.org) and routinely use a wide range of computational tools and methods for my research, including **AMBER**, **Gaussian09**, **GROMACS**, **Autodock**, **Chimera**, and **VMD/NAMD**.

FUNDING AND GRANTS

Scientific Project Leadership:

I have been (or currently am) the scientific lead or principal investigator for multiple research projects:

- **Scientific Coordinator of the Ancona unit for the FISIR project of the Italian Ministry of University and Research (MIUR), 2021; Title:**

Molecularly imprinted “monoclonal-type” synthetic antibodies for COVID-19 treatment (**MISMA for Covid-19**). Project Code: **FISR2020IP_04831**.

- **Principal Investigator & Scientific Coordinator of the Strategic University Project (2016–2018)** (peer-reviewed funding assignment):
Title: *Pseudomonas aeruginosa* biofilm persistent infections: improved detection of non-culturable forms and identification of efflux system inhibitors (EPIs) from natural sources able to counteract biofilm development and antibiotic efflux using a combined in silico/in vitro screening. **Funding received: €43,000. Duration: 24 months (2016–2018).**
- **Scientific Coordinator of two EUREKA Projects (peer-reviewed);** Funded for the co-financing of a PhD scholarship in Life and Environmental Sciences as part of the **EUREKA – PhD Research Scholarships for Innovation program by Regione Marche**. In collaboration with **Sooft Italia S.p.A. – FIDIA Pharma Group**.
 - 1) XV cycle PhD: “Rational Design and Synthesis of Functionalized Lipids with Antioxidant and Free Radical Scavenging Activity as Components of Innovative Artificial Tears”;
 - 2) XXXIV cycle, new series: “Innovative Strategies for the Delivery of Antioxidants in Artificial Tears for Free Radical Scavenging and Adjunctive Treatment of Ocular Diseases(Thesis Title: Melatonin Agonists for Glaucoma Treatment: A Computational Strategy for the Search of Active Compounds and Their Delivery in the Eye)
- Principal investigator and coordinator of “Computer facility Projects” founded in **ISCRA_CINECA High Performance Computing** (granted in peer review):
- CINECA-ISCRA C 2010-2011: “*DFT investigation of SN2 ' reaction mechanism mediated by chiral tertiary bases*”; code: **HP10C8FDT8** Total core hours: **10000 h**; SP6 (PI: R.Galeazzi).
- CINECA-ISCRA C 2011-2012: “*Combined Docking and Molecular Dynamics of agonists and antagonists 5-HT2C G-coupled Receptor*”; code: **HP10C7SS74** Total core hours: **30000 h**; SP6/PLX /FERMI (PI: R.Galeazzi).
- CINECA-ISCRA C 2012-2013: “*In silico investigation of the effect of amino acids mutation in ligand binding modes of serotonin agonists and antagonists in complex with 5-HT2C G-coupled Receptor in its biological environment by full atom molecular dynamics.*”; code: **HP10CC8CNW** Total core hours: **250000 h**; FERMI /PLX (PI: R.Galeazzi).
- CINECA-ISCRA C 2013-2014: “*Design of new functionalized lipids with antioxydant activity*”; code: **HP10CH0P7F** Total core hours: **50000 h**; EURORA (PI: R.Galeazzi).
- CINECA-ISCRA C 2014-2015: “*All atoms MD simulations of mixed DOPC/DOPE based membrane bilayers for Neutral Liposomes (NLs) as synthetic vectors in Gene therapy*” **HP10C4DI1B** Total core hours: **70000 h**; Galielo/EURORA (PI: R.Galeazzi).
- CINECA-ISCRA C 2015-2016: “*Molecular dynamics of liposomal nanovectors with antioxidant activity: a structure-activity study*”, **HP10C6BRNO** Total core hours: **60000 h**; Galielo (PI: R.Galeazzi).

- CINECA-ISCRA C 2016-2017: "Influence of lipid matrix in lipid bilayer stabilization for liposomal nanovectors with antioxidant activity: a Molecular Dynamics study" .**HP10C6GRB6** Total core hours: **90000 h**; Galileo (PI: R.Galeazzi).
- CINECA-ISCRA C 2017-2018: "Influence of lipid matrix composition in liposomal encapsulation and stabilization of morelloflavone and epigallocatechingallate: A molecular dynamics investigation", **HP10CXYXY**, Total core hours: **20000 h**; MARCONI BDW (PI: R.Galeazzi).
- CINECA-ISCRA C 2018-2019: "Molecular dynamics of EGCG ether derivatives in mixed composition liposomes: modulation of the lipophilic character in order to increase its antioxidant activity", **HP10CGQ6X2**, Total core hours: **18.500 h** on GALILE2 (PI: R.Galeazzi).
- CINECA-ISCRA C 2019-2020: "Innovative strategies for melatonin and its lipophilic derivatives delivery in artificial tears for the control of intraocular pressure (IOP) in glaucoma", Total core hours: **15000 h** on GALILE2 (PI: R.Galeazzi). **HP10C5DIYQ**
- CINECA-ISCRA C 2021-2022: "Design of Pseudomonas aeruginosa Multidrug Efflux Pumps Inhibitors targeting MexXY EP system overcoming MDR aminoglycoside resistance", Total core hours: **28.000 h** on M100, **HP10CF1EHF**.
- CINECA-ISCRA C 2022: "Berberine-based compounds as Pseudomonas aeruginosa Multidrug Efflux Pumps allosteric Inhibitors: a new strategy to overcome MDR aminoglycoside resistance." Assigned budget: 14.000 core h on M100 ,**HP10C4NTDO**.
- CINECA-ISCRA C 2023: "Multi-target agents against antibiotic-resistant and biofilm-producing Pseudomonas aeruginosa in cystic fibrosis." Assigned budget: 80.000 on LEONARDO_B, 20.000 on M100 1.333 on G100, **HP10C4DI1B**
- CINECA-ISCRA C 2024: "Berberine-based compounds as Pseudomonas aeruginosa Multidrug Efflux Pumps allosteric Inhibitors: a new strategy to overcome MDR aminoglycoside resistance." Assigned budget: 32.000 on LEONARDO_B, 1.333 on G100, **HP10CKLOJT**
- **Project Coordinator** of the EUROPEAN PROJECT in Peer Review PRACE (<http://www.prace-ri.eu/>): **EUROPEAN FACILITY PROJECTS**: PRACE DECI-9 HPC grant, project name: DOPE Link:<http://www.prace-ri.eu/deci-9th-call/#BioSciences>).
Project Title: Molecular Dynamics simulations of mixed DOPC/DOPE based membrane bilayer;
Resource Awarded: 3,000,000 core hours on CINECA – PLX
The results were published in a special issue 2015, "Women in HPC," highlighting key frontier topics in research.
- **Project Coordinator** for a **European POR Marche FSE 2014/2020 research project** (granted through peer review): This project enabled the activation of a two-year research fellowship focused on the recovery of extracts and residues from hop processing. Specifically, the project studied the antioxidant and antimicrobial properties of the main organic

components of the extracts.

- **Scientific tutor** for two AIRC Marche fellowships 2018–2019 and 2020–2022 (fellow Dr. Cristina Minnelli) (activated on an internationally peer-reviewed project - AIRC fellowship) – project title: "Anticancer agents derived from Epigallocatechin gallate targeting EGFR/HER2 in non-small-cell lung cancer therapy."
- **Scientific Supervisor of Research Grants:**
 - Research Grant Supervisor (12 months)** – Faculty of Sciences (2004-2005, Dr. Gianluca Martelli, SSD CHIM/06) as part of the research program *"Synthesis and Characterization of New Bioactive Pyrrolidine-based Molecules."*
 - **Research Grant Supervisor (12 months)** – Dr. Luca Massaccesi, within the PRIN project coordinated by Prof. M. Ischia (2010-2011) (see titles in PRIN2011 section), project title: *"Modeling of Functionalized Lipids with Antioxidant Activity and Study of Their Effect on Liposome Stability and Liposome-DNA Complexes, as Well as Radical Oxidative Damage in Relation to Their Structure and Arrangement in Model Membranes."* SSD CHIM/06-CHIM/08.
 - **Scientific Supervisor of a 12-month Research Grant** – Dr. Emiliano Laudadio, as part of the University Strategic Project PSA 2016 (see titles in Strategic Project 2016 section); project title: *"New Virtual Screening Protocol to Identify Natural Compounds as Efflux Pump Inhibitors (EPIs), to Be Used in Synergy with Antibiotics."* SSD CHIM/06-CHIM/08.
 - **Scientific Supervisor of a 12-month Research Grant (1/01/2019 - 31/12/2019)** – **AIRC funds**, Dr. Cristina Minnelli, project title: *"Anticancer Agents Derived from Epigallocatechin Gallate Targeting EGFR/HER2 in Non-Small-Cell Lung Cancer Therapy."*
 - **Scientific Supervisor of a 24-month Research Grant (1/01/2021 - 31/12/2023)** – **AIRC funds**, Dr. Cristina Minnelli, project title: *"Non-Covalent EGCG-based Inhibitors Targeting EGFR to Overcome T790M and C797S Resistance in Advanced NSCLC."*
- **Participation in Nationally Relevant Research Projects (PRIN):**
 - Participant in the Univpm Operational Unit of PRIN 2002** (from 16/12/2002 to 15/01/2005), coordinated by Prof. Raniero Rocchi. Project title: *"Non-Proteinogenic Beta-Amino Acids and Oligopeptides with Conformational Constraints: Synthesis and Computational Study"* (Protocol 2002034574_003).
 - Participant in the Univpm Operational Unit of PRIN 2004** (from 30/11/2004 to 21/12/2006), coordinated by Prof. Raniero Rocchi. Project title: *"Oligopeptides and Foldamers from New Beta-Amino Acids: Synthesis and Computational Study"* (Protocol 2004037781_003).
 - Participant in the Univpm Operational Unit of PRIN 2010-2011** (from 01/02/2013 to 01/02/2016), coordinated by Prof. Marco D'Ischia.

Project title: "Oxidative and Radical Processes: Innovative Aspects and Applications in the Development of Melanic Biopolymers and Antioxidants of Biomedical and Technological Relevance (PROxi)" (Protocol 2010PFLRJR_003).

EDITORIAL AND PEER REVIEW ACTIVITIES

- **Reviewer for the following journals:**
Medicinal Chemistry Research, Current Computer Aided Drug Design (CCADD), Molecules, Expert Opinion on Drug Discovery, Journal of Computational Chemistry, Journal of Molecular Modeling, ACS Journal of Chemical Theory and Computation (JCTC), Chirality, Entropy Tetrahedron, Letters in Drug Design and Discovery, International Molecular Structure, Expert opinion in Drug Discovery, Anticancer Agent in Medicinal Chemistry, Journal of Molecular Structure, Membranes, Journal of Molecular Chemistry.

- **Editorial Board** member for:

- **Honorary Editor** for *International Journal of Molecular Sciences* (IJMS, <http://www.mdpi.com/journal/ijms>, ISSN 1422-0067, IF 3.687), for the section titled "Molecular Informatics". (IF 5.924 Q1 – Chemistry multidisciplinary)

https://www.mdpi.com/journal/ijms/sectioneditors/molecular_informatics

- **Guest Editor** for the same journal IJMS: Special Issue "Computer Simulation of Membrane Receptors", 30th september 2019.

- **Guest Editor** per *Molecules*; Special Issue in Biomolecular Simulation March 2017: http://www.mdpi.com/journal/molecules/special_issues/simulations

- **Guest Editor** per SIMMETRY: special issue in "Symmetry in Molecular dynamics" 2018: http://www.mdpi.com/journal/symmetry/special_issues/Symmetry_Molecular_Dynamics

- **Guest Editor** per *Pharmaceuticals* Special Issue "Molecular Dynamics in Drug Design": https://www.mdpi.com/journal/pharmaceuticals/special_issues/molecular_dynamics_drug; 30th june 2019

- **Referee** for National and International institutions:

- **MIUR-CINECA** national projects FIRB 2012 ; FIRB2013; PRIN 2012, PRIN 2015.
- Scientific Referee **VQR_2004-2010** (GEV 03 and GEV 05) and **VQR_2011-2014** (GEV03), **VQR_2015-2019** (GEV03).
- **Scientific Advisor and Referee** for l'ISCRa (Cineca HPC High Performance scientific Computing) (2011-present) and PRACE (2014-present)
- **Referee** Unimore FAR2015

PATENTS AND SPIN-OFFS

- Patent for the synthesis and use of a new lipophilic antioxidant derivative of epigallocatechin-3-gallate (Patent number: 102019000019190).

- Participation in the establishment of the University spin-off company, BIOSOLVING s.r.l., a start-up dedicated to providing services and products to companies operating in the nutraceutical sector, focusing on the use of natural organic substances to formulate products with enhanced efficacy by studying the interactions between bioactive organic substances and their corresponding molecular targets (www.biosolving.com).

List of Publications (peer-reviews):

*corresponding author

first author or responsible for the computational section

1. Luccarini, A.; Marcheggiani, F.; Galeazzi, R.; Zuccarotto, A.; Castellano, I.; Damiani, E. Characterizing the Ultraviolet (UV) Screening Ability of L-5-Sulfanylhistidine Derivatives on Human Dermal Fibroblasts. *Mar. Drugs* 2025, 23, 57. <https://doi.org/10.3390/md23020057>
2. Mari, Eleonora, Silvia Vilasi, Paolo Moretti, Maria Rosalia Mangione, Giorgia Giorgini, Roberta Galeazzi, and Maria Grazia Ortore. 2025. "Saponins Effect on Human Insulin Amyloid Aggregation" *Biomolecules* 15, no. 1: 40. <https://doi.org/10.3390/biom15010040>
3. Marco Dattilo, Francesco Patitucci, Marisa Francesca Motta, Sabrina Prete, Roberta Galeazzi#, Silvia Franz, Ida Perrotta, Mariangela Cavarelli, Ortensia Ilaria Parisi, Francesco Puoci. Molecularly imprinted polymers (MIPs) for SARS-CoV-2 omicron variant inhibition: An alternative approach to address the challenge of emerging zoonoses, *Colloids and Surfaces B: Biointerfaces*, **2025**, 247, 114408
4. Flavio Costa, Giorgia Giorgini, Cristina Minnelli, Giovanna Mobbili, Carlo Guardiani, Alberto Giacomello* and Roberta Galeazzi,* Membrane Composition Allows the Optimization of Berberine Encapsulation in Liposomes. *Mol. Pharmaceutics* 2024, 21, 11, 5818–5826
5. Sabbatini G., et al., Hop leaves: From waste to a valuable source of bioactive compounds – A multidisciplinary approach to investigating potential applications, *Helyon*, Volume 10, Issue 18, 30 September 2024, e37593
6. Emiliano Laudadio, Federica Piccirilli, Henrick Vondracek, Giovanna Mobbili, Marta S. Semrau, Paola Storici, Roberta Galeazzi, Elena Romagnoli, Leonardo Sorci, Andrea Toma, Vincenzo Aglieri, Giovanni Birarda and Cristina Minnelli, Probing conformational dynamics of EGFR mutants via SEIRA spectroscopy: potential implications for tyrosine kinase inhibitor design, *Phys. Chem. Chem. Phys.*, 2024,26, 22853-22857
7. Lishan Cui, Junbiao Wang, Fiorenza Orlando, Robertina Giacconi, Marco Malavolta, Beatrice Bartozzi, Roberta Galeazzi, Giorgia Giorgini, Luca Pesce, Francesco Cardarelli, Erica Quagliarini, Serena Renzi, Siyao Xiao, Daniela Pozzi, Mauro Provinciali, Giulio Caracciolo, Cristina Marchini, and Augusto Amici, Enhancing Immune Responses against SARS-CoV-2 Variants in Aged Mice with INDUK: A Chimeric DNA Vaccine Encoding the Spike S1-TM Subunits, *ACS Omega* 2024, 9, 34624–34635, DOI: 10.1021/acsomega.4c03285
8. C. Minnelli, Davide Gramigna, Eleonora Pavoni, Emiliano Laudadio, Giovanna Mobbili, Gianni Barucca, Pierluigi Stipa, Roberta Galeazzi, Paolo Mengucci, Elaheh Mohebbi, Elena Romagnoli, Massimo Marcaccio, "Copper-Layered Double Hydroxide for Methanol Electrooxidation: A Combined DFT and Experimental Characterization,"

- 2024 IEEE International Workshop on Metrology for Living Environment (MetroLivEnv), Chania, Greece, 2024, pp. 202-206, doi: 10.1109/MetroLivEnv60384.2024.10615350.
9. Mohebbi, E.; Pavoni, E.; Minnelli, C.; Galeazzi, R.; Mobbili, G.; Sabbatini, S.; Stipa, P.; Fakhrabadi, M.M.S.; Laudadio, E. Adsorption of Polylactic-co-Glycolic Acid on Zinc Oxide Systems: A Computational Approach to Describe Surface Phenomena. *Nanomaterials* 2024, 14, 687. <https://doi.org/10.3390/nano14080687>
 10. Verga, J.U., Padovano, C., da Silveira, W.A. et al. A Systems Biology Approach Reveals the Endocrine Disrupting Potential of Aflatoxin B1. *Expo Health* 16, 321–340 (2024). <https://doi.org/10.1007/s12403-023-00557-w>
 11. Giorgia Giorgini, Alessandra Di Gregorio, Gianmarco Mangiaterra, Nicholas Cedraro, Cristina Minnelli, Giulia Sabbatini, Giovanna Mobbili, Serena Simoni, Carla Vignaroli, Roberta Galeazzi, Inhibition of polymorphic MexXY-OprM efflux system in *Pseudomonas aeruginosa* clinical isolates by Berberine derivatives, *ChemMedChem*, 2024, 19, e202300568
 12. Luccarini, A.; Zuccarotto, A.; Galeazzi, R.; Morresi, C.; Masullo, M.; Castellano, I.; Damiani, E. Insights on the UV-Screening Potential of Marine-Inspired Thiol Compounds. *Mar. Drugs* 2024, 22, 2. <https://doi.org/10.3390/md22010002>
 13. Bellachioma, L.; Morresi, C.; Albacete, A.; Martínez-Melgarejo, P.A.; Ferretti, G.; Giorgini, G.; Galeazzi, R.; Damiani, E.; Bacchetti, T. Insights on the Hypoglycemic Potential of *Crocus sativus* Tepal Polyphenols: An In Vitro and In Silico Study. *Int. J. Mol. Sci.* 2023, 24, 9213. <https://doi.org/10.3390/ijms24119213>.
 14. Minnelli, C.; Piva, F.; Cecati, M.; Armeni, T.; Mobbili, G.; Galeazzi, R.; Melecchi, A.; Cristaldi, M.; Corsaro, R.; Rusciano, D. Meldonium Inhibits Cell Motility and Wound-Healing in Trabecular Meshwork Cells and Scleral Fibroblasts: Possible Applications in Glaucoma. *Pharmaceuticals* 2023, 16, 594. <https://doi.org/10.3390/ph16040594>
 15. Mobbili, G.; Romaldi, B.; Sabbatini, G.; Amici, A.; Marcaccio, M.; Galeazzi, R.; Laudadio, E.; Armeni, T.; Minnelli, C. Identification of Flavone Derivative Displaying a 4'-Aminophenoxy Moiety as Potential Selective Anticancer Agent in NSCLC Tumor Cells. *Molecules* 2023, 28, 3239. <https://doi.org/10.3390/molecules28073239>
 16. Damiani, E.; Sella, F.; Astolfi, P.; Galeazzi, R.; Carnevali, O.; Maradonna, F. First In Vivo Insights on the Effects of Tempol-Methoxycinnamate, a New UV Filter, as Alternative to Octyl Methoxycinnamate, on Zebrafish Early Development. *Int. J. Mol. Sci.* 2023, 24, 6767. <https://doi.org/10.3390/ijms24076767>
 17. Cantarini, M.; Rusciano, D.; Amato, R.; Canovai, A.; Cammalleri, M.; Monte, M.D.; Minnelli, C.; Laudadio, E.; Mobbili, G.; Giorgini, G.; Galeazzi R. Structural Basis for Agonistic Activity and Selectivity toward Melatonin Receptors hMT1 and hMT2. *Int. J. Mol. Sci.* 2023, 24, 2863. <https://doi.org/10.3390/ijms24032863>
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