Erika Ponzini

+39 3496432973



Post-doctoral researcher in the field of applied physics (FIS/07), specialized in mass spectrometry applied to biopolymer analysis and proteome investigation.

Work and research experience

01 july 2023 - present

ASSISTANT PROFESSOR/ DEPARTMENT OF MATERIALS SCIENCE, UNIVERSITY OF MILANO-BICOCCA, IT

01 april 2019 – 31 march 2023

RESEARCH FELLOW/ DEPARTMENT OF MATERIALS SCIENCE, UNIVERSITY OF MILANO-BICOCCA, IT

On the topic: "LACrimar: Lenti A Contatto, ricerca di indicatori per la valutazione dei materiali e del rilascio".

01 november 2018 - 31 march 2019

RESEARCH FELLOW/ DEPARTMENT OF BIOTECHNOLOGIES AND BIOSCIENCES, UNIVERSITY OF MILANO-BICOCCA, IT

On the topic: "Studies on the tear proteome of amyotrophic lateral sclerosis patients by biophysical techniques".

01 june 2018 – 30 september 2018

RESEARCH FELLOW/ DEPARTMENT OF BIOTECHNOLOGIES AND BIOSCIENCES, UNIVERSITY OF MILANO-BICOCCA, IT

On the topic: "Studies on the tear proteome of amyotrophic lateral sclerosis patients by biophysical techniques".

01 april 2015 - 31 march 2017

RESEARCH FELLOW/ DEPARTMENT OF BIOTECHNOLOGIES AND BIOSCIENCES, UNIVERSITY OF MILANO-BICOCCA, IT

On the topic: "Production and characterization of chemically and biochemically modified polysaccharides from leguminous plants with improved biostability and versatile properties for industrial applications".

Education

November 2015 - 22 june 2018

DOCTORAL DEGREE IN NATURAL SCIENCES/ INSTITUTE OF ORGANIC CHEMISTRY, JOHANNES KEPLER UNIVERSITY, LINZ, A

Result: passed with honours. Thesis title: "Biochemically modified polysaccharides from leguminous plants with versatile properties for industrial applications" (Supervisors: Prof. Norbert Müller and Prof. Rita Grandori).

September 2012 – 07 november 2014

MASTER'S DEGREE IN INDUSTRIAL BIOTECHNOLOGIES/ DEPARTMENT OF BIOTECHNOLOGIES AND BIOSCIENCES, UNIVERSITY OF MILANO-BICOCCA, IT

Score: 110/110. Thesis title: "Large scale overexpression and purification of stable isotope labelled RsbW Kinase for NMR studies" (Supervisors: Prof. Rita Grandori and Prof. Norbert Müller).

September 2009 – 15 november 2012

BACHELOR'S DEGREE IN BIOTECHNOLOGIES/ DEPARTMENT OF BIOTECHNOLOGIES AND BIOSCIENCES, UNIVERSITY OF MILANO-BICOCCA, IT

Score: 107/110. Thesis title: "Proteome equalization strategies for low-abundance protein identification" (Supervisor: Prof. Rita Grandori).

- 2023 "Cyber Security Awareness" lvl. 1 (12 modules)
- 2023 "Corso specifica lavoratori medio rischio 8h" by RTI Sintesi (8 hours)
- 2020 "Rientro in Ateneo in sicurezza: misure anti-COVID-19" by University of Milano-Bicocca
- 2018 "Formazione lavoratori Generale" by University of Milano-Bicocca (4 hours)
- 2017 "Formazione per nuovi addetti al Primo Soccorso" by University of Milano-Bicocca (12 hours)
- 2016 "LC3. Strategie per lo sviluppo di metodi robusti in HPLC e UHPLC" by Phenomenex (8 hours)
- 2016 "LC2. Ottimizzazione delle variabili cromatografiche in HPLC e UHPLC" by Phenomenex (8 hours)
- 2016 "LC1. Pronti, partenza..HPLC!" by Phenomenex (8 hours)
- 2015 "Corso sulla gestione delle emergenze" by University of Milano-Bicocca (1 hour)
- 2012 "Introduzione alle buone pratiche per la sicurezza in laboratorio" (2 hours)

Academic teaching experience

Academic year 2023/2024

LECTURER OF THE COURSE "HISTORY OF MODERN PHYSICS AND OF OPTICAL INSTRUMENTS"

Bachelor's degree program in Optics and Optometry/ Department of Materials science, University of Milano-Bicocca, IT

20 december 2022 (2 Hours); 19 january 2023 (2 Hours)

CO-LECTURER OF OPTICS OF CONTACT LENSES WITH DR. ZERI FABRIZIO

Bachelor's degree program in Optics and Optometry/ Department of Materials science, University of Milano-Bicocca, IT

17 december 2021 (2 Hours); 16 december 2022 (2 Hours); 27 november 2023 (2 Hours)

CO-LECTURER OF PROTEOMICS WITH PROF. RITA GRANDORI

Master's degree program in Industrial biotechnologies/ Department of Biotechnologies and Biosciences, University of Milano-Bicocca, IT

Academic year 2021/2022 - present

"CULTORE DELLA MATERIA" OF PROTEOMICS

Master's degree program in Industrial biotechnologies/ Department of Biotechnologies and Biosciences, University of Milano-Bicocca, IT

8 july 2019 (45 minutes)

LECTURER OF THE COURSE "INTERAZIONI PROTEINA-PROTEINA: METODI SPERIMENTALI E ANALISI COMPUTAZIONALE"

Organized by Gruppi SIB (Italian Society of Biochemistry and Molecular Biology) Biologia computazionale e di Sistemi & Proteine with the collaboration of the Interdepartmental Center "Luigi Galvani" For Bioinformatics, Biophysics And Biocomplexity, University of Bologna, IT/ Laboratory of Biocomputing, University of Bologna, IT

Academic year 2017/2018

TUTOR OF BACHELOR'S STUDENTS IN BIOTECHNOLOGIES WITH LEARNING DISABILITIES

Course: Biochemical and biomolecular methodologies of Prof. Rita Grandori

2019 – present

CO-SUPERVISOR OF THE TRAINEESHIP OF BACHELOR'S STUDENTS IN OPTICS AND OPTOMETRY

"Variazione dello stato di idratazione e della bagnabilità in vivo di lenti a contatto morbide di vari materiali durante il porto giornaliero" (Irene Cannistrà)

"Confronto tra la bagnabilità superficiale di lenti a contatto morbide nuove e portate di materiali diversi" (Tatiana Ivanov)

"Analisi del contenuto proteico del film lacrimale in relazione all'uso di lenti a contatto di diverso materiale" (Gianluca Amoruso)

"Analisi del contenuto proteico del film lacrimale in presenza di lenti a contatto di diverso materiale" (Simone Vassallo)

"Analisi delle variazioni del contenuto proteico del film lacrimale a seguito dell'uso di lenti a contatto morbide di materiali differenti" (Mattia Colombo)

"Contenuto proteico e osmolarità del film lacrimale. Analisi con il porto di lenti a contatto di diverso materiale" (Sara Bolla)

"Concentrazione proteica e stabilità del film lacrimale con l'uso di lenti a contatto di diversi materiali" (Giorgia Molteni)

"Analisi della concentrazione proteica nel film lacrimale" (Elena Cappelletto)

2016 - present

CO-SUPERVISOR OF THE TRAINEESHIP OF MASTER'S STUDENTS IN INDUSTRIAL BIOTECHNOLOGIES

"Individuazione di biomarcatori spettroscopici del porto di lenti a contatto dall'analisi di microspettroscopia Raman del fluido lacrimale" (Andrea Bonacina)

"Sviluppo di un metodo di proteomica targeted per l'identificazione dell'alfa sinucleina nel fluido lacrimale" (Raffaello Viganò)

"Caratterizzazione di aerogel derivati da galattomannani enzimaticamente ossidati" (Fabrizio Usai)

2016 - present

CO-SUPERVISOR OF THE TRAINEESHIP OF BACHELOR'S STUDENTS IN BIOTECHNOLOGIES

"Analisi di HRV-A2 e delle sue particelle subvirali mediante spettrometria di massa e gas phase mobility molecular analysis" (Giorgio Schillaci)

Research and educational projects

July 2022 (36 months)

Principal investigator of the research project "LACrimar: Lenti A Contatto, ricerca di indicatori per la valutazione dei materiali e del rilascio" (approval of the Ethical Committee of the University of Milano-Bicocca, Prot. N. 0069839).

November 2022 (6 months)

Co-leader of the lesson planning and teaching of the educational project of the University of Milano-Bicocca "Lenti a contatto morbide e film lacrimale" founded by Bausch & Lomb – lom, Italia on the topics: tear film assessment, superficial wettability and friction of contact lenses in vitro and in vivo and measurement methods, anterior segment optical coherence tomography (AS-OCT).

July 2019 (24 months)

Team member of the research project "LACrimar: Lenti A Contatto, ricerca di indicatori per la valutazione dei materiali e del rilascio" (approval of the Ethical Committee of the University of Milano-Bicocca, Prot. N. 0055071).

March 2015 (24 months)

Team member of the research project "Chemically and biochemically modified polysaccharides from leguminous plants with improved biostability and versatile properties for industrial applications (POLIBIO)" (PI: Dr. Yves Galante) founded by Fondazione CARIPLO (grant n. 2014-0478 for integrated research in industrial biotechnology.

Other projectual activities carried out at the University of Milano-Bicocca

Contact lens characterization i) determining the in-vitro affinity for nicotine of different soft contact lens (SCL) materials by spectrophotometry, ii) assessing the wettability of SCLs by contact angle measurement, iii) determining the tribological properties of SCLs by nanotribometry, iv) characterizing the dehydration profile of SCLs by a gravimetric method.

Tear proteomics i) implementing a high-performance platform for label-free quantitative proteomics, ii) developing an automated pipeline for single-tear protein profiling, iii) assessing impact of contact-lens wear on human tears.

Tear-based vibrational spectroscopy applied to neurodegenerative diseases i) implementing Raman and Fourier transform infrared spectroscopies for tear analysis, ii) assessing impact of neurodegenerative diseases on human tears for biomarker discovery, with particular focus on Alzheimer's disease, Parkinson's disease, and amyotrophic lateral sclerosis, iii) establishing collaborations between the University of Milano-Bicocca and several hospitals, including Istituti Clinici Scientifici Maugeri Spa SB (Milano, IT), Azienda Ospedaliero Universitaria Città della

Salute e della Scienza di Torino (Torino, IT), Istituto Auxologico Italiano (Milano, IT), Ospedale San Gerardo (Monza, IT), Istituto Neurologico "Carlo Besta" (Milano, IT).

Fungal proteomics for the Department of Earth and Environmental Sciences, University of Pavia, IT i) assessing the differences in the proteomes of different fungal species ii) determining the differences in the proteomic profiles of different mycelium stages.

Research project for Frastema Ophthalmics, IT i) comparing the performance of different disposable cones for applanation ocular tonometry, ii) evaluating the effect of the addition of different optic filters on the cone performances.

Characterization of chemical synthesis products i) determining molecular weight and fragmentation of chemical synthesis products.

Protein structural investigation i) monitoring and mapping methionine oxidation in human α -synuclein exposed to dopamine or epigallocatechin gallate (EGCG); ii) profiling of dopamine-induced oxidized proteoforms of β -synuclein by top-down mass spectrometry (MS); iii) characterizing and classifying intrinsically disordered protein (IDP) conformers by native MS and charge-state distribution analysis.

Polysaccharides characterization i) developing a new quantification method for sugar epimers in galactomannans (GMs), based on the characteristic fragmentation patterns of mannose and galactose in tandem mass spectrometry (MS/MS) analyses; ii) monitoring and characterizing the chemo-enzymatic oxidation of GM by mass spectrometry (MS); iii) testing GM-based aerogels as delivery systems of enzymes, such as proteases and lipases; iv) characterizing the chemical modifications of aerogels from enzymatically oxidized GM from different leguminous plants by MS and Fourier-transform infrared spectroscopy (FTIR) and the polymer structure by liquid-state and semi-quantitative solid-state nuclear magnetic resonance spectroscopy; v) determining the chemical stability of GM-based aerogels under variable conditions of pH, ionic strength and solvent nature.

Research experience abroad

November 2015 – 22 june 2018

INSTITUTE OF ORGANIC CHEMISTRY, JOHANNES KEPLER UNIVERSITY, LINZ, A

Doctoral program in Natural Sciences, Biological chemistry (supervisor: Prof. Norbert Müller).

24 september 2017 - 05 october 2017

FUNDACIÒ INSTITUT DE RECERCA BIOMÈDICA (IRB BARCELONA), BARCELONA, ES

Top-down and middle-down proteomics for the analysis of PTMs and covalent labelling (supervisor: Prof. Marta Vilaseca).

15 september 2013 - 30 june 2014

INSTITUTE OF ORGANIC CHEMISTRY, JOHANNES KEPLER UNIVERSITY, LINZ, A

Master's internship (supervisor: Prof. Norbert Müller).

Publications

Under revision

Accepted

A QUANTITATIVE COEFFICIENT TO DESCRIBE THE DEHYDRATION KINETICS OF SOFT CONTACT LENSES:
 COMPARISON BETWEEN THE RECENTLY DEVELOPED KALIFILCON A AND OTHER MATERIALS

<u>Ponzini E</u>*, Maspero F, Galli A, Tavazzi S Feb 2023 in Scientific reports.

TEAR BIOMARKERS

Ponzini F

Sep 2023 in Advances in Clinical Chemistry, edited by Dr. Gregory Makowski.

Published

1. RED AND GREEN DEFOCUS CURVES AND DUOCHROME TEST IN DIFFERENT AGE GROUPS

Rolandi R, Zeri F, Duse A, Rizzo GC, <u>Ponzini E</u>, Tavazzi S Jan 2024 in Journal of Optometry. DOI: 10.1016/j.optom.2023.100497

2. COMPARING AUTOMATED AND MANUAL ASSESSMENTS OF TEAR BREAK-UP TIME USING DIFFERENT NON-INVASIVE DEVICES AND A FLUORESCEIN PROCEDURE

Zeri F, Rizzo GC, Ponzini E, Tavazzi S

Jan 2024 in Scientific reports. DOI: 10.1038/s41598-024-52686-0

3. MODULATION OF ALPHA-SYNUCLEIN CONFORMATIONAL ENSEMBLE AND AGGREGATION PATHWAYS BY DOPAMINE AND RELATED MOLECULES

Natalello A, Brocca S, Ponzini E, Santambrogio C, Grandori R

Oct 2023 in the special issue From protein misfolding to dementia: basic research, innovative diagnosis and early biomarkers of Frontiers in Bioscience. DOI: 10.31083/j.fbl2810266

4. ITALIAN TRANSLATION AND VALIDATION OF THE CONTACT LENS DRY EYE QUESTIONNAIRE-8 Zeri F, Tavazzi S, Naroo SA, Recchioni A, Menduni F, Ponzini E, Chalmers R, Desiato A Jun 2023 in Contact Lens and Anterior Eye. DOI: 10.1016/j.clae.2023.101842

5. PHYSICAL PROPERTIES AND INTERACTION WITH THE OCULAR SURFACE OF WATER-GRADIENT CONTACT LENSES

<u>Ponzini E</u>*, Recchioni A, Cheloni R, Zeri F, Tavazzi S

Feb 2023 in Eye and Contact Lens. DOI: 10.1097/ICL.000000000000974

6. CONTACT LENS WEAR INDUCES ALTERATIONS OF LACTOFERRIN FUNCTIONALITY IN HUMAN TEARS

<u>Ponzini E</u>, Tavazzi S, Musile G, Tagliaro F, Grandori R, Santambrogio C Oct 2022 in Pharmaceutics. DOI: 10.3390/pharmaceutics14102188

7. NATIVE MASS SPECTROMETRY FOR PROTEIN STRUCTURAL (DIS)ORDER

Santambrogio C, Ponzini E, Grandori R

Oct 2022 in Biochimica et biophysica acta. Proteins and proteomics DOI: 10.1016/j.bbapap.2022

8. VISCOELASTIC PROPERTIES OF THE HUMAN TEAR FILM

Recchioni A, Mocciardini E, <u>Ponzini E</u>*, Tavazzi S

Jun 2022 in Experimental Eye Research DOI: 10.1016/j.exer.2022.109083

9. TEAR-BASED VIBRATIONAL SPECTROSCOPY APPLIED TO AMYOTROPHIC LATERAL SCLEROSIS

Ami D, Duse A, Mereghetti P, Cozza F, Ambrosio F, <u>Ponzini E</u>, Grandori R, Lunetta C, Tavazzi S, Pezzoli F, Natalello

Dec 2021 in Analytical Chemistry DOI: 10.1021/acs.analchem.1c02546

10. SINGLE-TEAR PROTEOMICS: A FEASIBLE APPROACH TO PRECISION MEDICINE

 $\underline{Ponzini\ E}^*$, Ami D, Duse A, Santambrogio C, De Palma A, Di Silvestre D, Mauri P, Pezzoli F, Natalello A, Tavazzi S, Grandori R

Oct 2021 in International Journal of Molecular Sciences. DOI: 10.3390/ijms221910750

11. DOES BLUE-VIOLET FILTERING IN CONTACT LENSES IMPROVE CONTRAST SENSITIVITY?

*Tavazzi S, Ponzini E**, *Caridi A, Secreti S, Miglio F, Duse A, Zeri F*Dec 2021 in Contact Lens and Anterior Eye. DOI: 10.1016/j.clae.2021.101558

12. IN VITRO AFFINITY FOR NICOTINE OF SOFT CONTACT LENSES OF DIFFERENT MATERIALS

Miglio F, <u>Ponzini E</u>*, Zeri F, Borghesi A, Tavazzi S

Aug 2021 in Contact Lens and Anterior Eye. DOI: 10.1016/j.clae.2021.101490

13. THE EFFECT OF ACTIVE SMOKING, PASSIVE SMOKING, AND E-CIGARETTES ON THE TEAR FILM: AN UPDATED COMPREHENSIVE REVIEW

Miglio F, Naroo S, Zeri F, Tavazzi S, Ponzini E*

Jul 2021 in Experimental Eye Research DOI: 10.1016/j.exer.2021.108691

14. MASS SPECTROMETRY-BASED TEAR PROTEOMICS FOR NONINVASIVE BIOMARKER DISCOVERY

<u>Ponzini E</u>*, Santambrogio C, De Palma A, Mauri P, Tavazzi S, Grandori R Mar 2021 in Mass Spectrometry Reviews. DOI: 10.1002/mas.21691

15. PROFILING DOPAMINE-INDUCED OXIDIZED PROTEOFORMS OF B-SYNUCLEIN BY TOP-DOWN MASS SPECTROMETRY

Luise A, De Cecco E, <u>Ponzini E</u>, Sollazzo M, Mauri P, Sobott F, Legname G, Grandori R, Santambrogio C

Jun 2021 in Antioxidants. DOI: 10.3390/antiox10060893

16. LACTOFERRIN CONCENTRATION IN HUMAN TEARS AND OCULAR DISEASES: A METAANALYSIS

Ponzini E*, Scotti L, Grandori R, Tavazzi S, Zambon A

Oct 2020 in Investigative Ophthalmology and Visual Science. DOI: 10.1167/IOVS.61.12.9

- 17. METHIONINE OXIDATION IN A-SYNUCLEIN INHIBITS ITS PROPENSITY FOR ORDERED SECONDARY STRUCTURE <u>Ponzini E</u>, De Palma A, Cerboni L, Natalello A, Rossi R, Moons R, Konijnenberg A, Narkiewicz J, <u>Legname G, Sobott F, Mauri P, Santambrogio C, Grandori R</u> Apr 2019 in Journal of Biological Chemistry. DOI: 10.1074/JBC.RA118.001907
- 18. CONFORMATIONAL CHARACTERIZATION AND CLASSIFICATION OF INTRINSICALLY DISORDERED PROTEINS BY NATIVE MASS SPECTROMETRY AND CHARGE-STATE DISTRIBUTION ANALYSIS

Santambrogio C, Natalello A, Brocca S, <u>Ponzini E</u>, Grandori R Mar 2019 in Proteomics. DOI: 10.1002/PMIC.201800060

- 19. STRUCTURAL CHARACTERIZATION OF AEROGELS DERIVED FROM ENZYMATICALLY OXIDIZED GALACTOMANNANS OF FENUGREEK, SESBANIA AND GUAR GUMS

 Ponzini E, Natalello A, Usai F, Bechmann M, Peri F, Müller N, Grandori R

 Mar 2019 in Carbohydrate Polymers. DOI: 10.1016/J.CARBPOL.2018.11.100
- 20. CHARACTERIZATION OF AEROGELS FROM CHEMO-ENZYMATICALLY OXIDIZED GALACTOMANNANS AS NOVEL POLYMERIC BIOMATERIALS

Rossi B, <u>Ponzini E</u>, Merlini L, Grandori R, Galante YM Aug 2017 in European Polymer Journal. DOI: 10.1016/J.EURPOLYMJ.2017.06.016

- 21. AEROGELS OF ENZYMATICALLY OXIDIZED GALACTOMANNANS FROM LEGUMINOUS PLANTS: VERSATILE DELIVERY SYSTEMS OF ANTIMICROBIAL PEPTIDES AND ENZYMES
 - Campia P, <u>Ponzini E</u>, Rossi B, Farris S, Silvetti T, Merlini L, Brasca M, Grandori R, Galante YM Feb 2017 in Carbohydrate Polymers. DOI: 10.1016/J.CARBPOL.2016.11.089
- 22. QUANTIFICATION OF SUGAR EPIMERS IN POLYGALACTOMANNANS BY ESI-MS/MS

 <u>Ponzini E</u>, Borgonovo G, Merlini L, Galante YM, Santambrogio C, Grandori R

 Oct 2015 in Journal of Analytical & Bioanalytical Techniques. DOI: 10.4172/2155-9872.1000281

*corresponding author

Editorial activity

2023: Guest editor of the special issue "Application Progress of Lactoferrin in Biomedicine" of Pharmaceutics

Since 2023: Review editor for Frontiers in Pharmacology (Integrative and Regenerative Pharmacology)

Since 2019: 21 verified peer review records of 16 manuscripts for Carbohydrate polymers, Allergy, ACS Omega, Metabolites, Scientific reports, Clinical ophthalmology, Clinical proteomics, International journal of molecular sciences (Web of Science ResearcherID: X-9593-2019)

Prices, awards and memberships

Prices and awards

2023: Special mention at the ITWIIN 2023 Award - XIV Edition of the ITWIIN association, Monza, IT **2021:** 3rd prize of the Young Talents Award of the University of Milano-Bicocca (with the sponsorship of the Accademia Nazionale dei Lincei,), Milan, Italy. The Award aims to recognize the quality, originality and impact of the scientific production of researchers and encourage their training through international mobility actions. **2020:** 3rd prize of the Young Talents Award of the University of Milano-Bicocca (with the sponsorship of the

Accademia Nazionale dei Lincei,), Milan, Italy. The Award aims to recognize the quality, originality and impact of the scientific production of researchers and encourage their training through international mobility actions.

2019: Travel Stipend Winner for Austrian Proteomics and Metabolomics Research Symposium (APMRS) 2019, awarded by the Organizing committee.

2018: Grant for the III International Caparica Christmas Conference on sample treatment, awarded by the Scientific Committee.

Memberships

2019-present: Member of CoMiB (Optics and Optometry research center), Milan, IT.
Ordinary member of Austrian Proteomics and Metabolomics Association (**2019**), IMaSS (Italian mass spectrometry society) (**2022**), AILAC (Accademia italiana lenti a contatto) (**2022**), SIF (Italian society of physics) (**2022-present**), ITWIIN (Italian Association of Women Inventors and Innovators) (**2023-present**)

Contribution to meetings and symposia

Talks

- Comparison of tear film stability assessment procedures by non-invasive and fluorescein tear breakup time measurement 2023 109th National Congress of the Italian Physical Society, Fisciano, IT
- Single-tear proteomics for noninvasive biomarker discovery and precision medicine 2022 108th National Congress of the Italian Physical Society, Milan, IT
- Lactoferrin as a biomarker of ocular diseases and contact lens discomfort 2022 108th National Congress of the Italian Physical Society, Milan, IT
- (Invited) Single-tear proteomics: a feasible approach to precision medicine **2022** 8th International Caparica conference on Analytical Proteomics, Caparica, PT
- Mass spectrometry-based proteomics of human tears for noninvasive biomarker discovery and precision medicine
 2022 Giovani e spettrometria di massa, Torino, IT
- (Invited) Concetti di Biotribologia 2021 Alcon Experience Accademy, Milan, IT
- (Invited) Biomarcatori del film lacrimale: prospettive per nuovi test diagnostici 2021 VI Congresso AILAC (Accademia italiana lenti a contatto) - "BES(of)T PRACTICE, EVERY DAY", webinar
- Conformational ensembles of intrinsically disordered proteins by native-MS 2019 Proteonet, Unitech Omics, Milan, IT
- Polygalactomannans: Studies on structure and materials thereof derived 2017 Johannes Kepler University, Linz, A
- Polygalactomannans: Analytical studies and biotechnological applications 2015 BtBs (Biotechnologies and Biosciences) Day, Milan, IT
- Polygactomannans: Characterization by ESI-MS/MS and possible applications 2015 Johannes Kepler University, Linz, A

Posters

- Mass spectrometry-based proteomics of human tears for noninvasive biomarker discovery and precision medicine
 2022 Young Biochemists in Lombardy, Milan, IT
- Affinità di lenti a contatto di diverso materiale per la nicotina 2020 SOPTI (Società Optometrica Italiana), Verona,
- Probing lactoferrin by terbium fluorescence in unprocessed human tears 2019 APMRS (Austrian Proteomics and Metabolomics Research Symposium), Salzburg, A
- Studies on structure and stability of aerogels of enzymatically oxidized galactomannans from leguminous plants **2018** 3rd International Caparica Christmas conference on Sample Treatment, Caparica, PT
- Studies on structure and stability of aerogels of enzymatically oxidized galactomannans from leguminous plants **2017** BtBs (Biotechnologies and Biosciences) Day, Milan, IT
- A structural perspective on disordered proteins and innovative materials for industry and biotechnology 2017 BtBs (Biotechnologies and Biosciences) Day, Milan, IT
- A structural perspective on disordered proteins and innovative materials for industry and biotechnology 2016 BtBs (Biotechnologies and Biosciences) Day, Milan, IT
- Analysis of PGMs from leguminous plant seed by ESI-MS/MS 2015 3rd Mediterranean Sea Region Countries Mass Spectrometry Workshop, Athens, GR

Institutional responsibilities

2023-present: Faculty member of Optics and Optometry, Department of Materials Science, University of Milano-Bicocca, IT

2023-present: Member of the Faculty Committee for Traineeships and graduation theses, Optics and Optometry, Department of Materials Science, University of Milano-Bicocca, IT

2023-present: Member of the Faculty Committee for Orientation, Optics and Optometry, Department of Materials Science, University of Milano-Bicocca, IT

2023-present: Member of the Faculty Committee for International relationships and with companies, Optics and Optometry, Department of Materials Science, University of Milano-Bicocca, IT

Activities, interests and other

- Volunteering: blood and plasma donor since 2012. Subscribed to the Italian Bone Marrow Donor Registry (IBMDR) since 2019.
- Language skills: Italian mother tongue; English Cambridge ESOL Level 1 Certificate in ESOL International. Level B2; German Goethe-Zertifikat B1, Zertifikat Deutsch Zeugnis. Level B1.
- Computer skills: European Computer Driving Licence Advanced
- Car driving license cat. B

In compliance with the Italian Legislative Decree no. 196 dated 30/06/2003, I hereby authorize the recipient of this document to use and process my personal details for the purpose of recruiting and selecting staff and I confirm to be informed of my rights in accordance to art. 7 of the above mentioned decree.