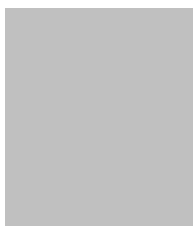


PERSONAL INFORMATION



Consiglio Nazionale delle Ricerche (CNR), Istituto dei Materiali per l'Elettronica ed il Magnetismo (IMEM), Parco Area delle Scienze 37/A – 43123 Parma - Italy



[Redacted]



[Redacted]



[Redacted]



[Redacted]

Sex | Date of birth | Nationality

Enterprise	University	EPR
<input type="checkbox"/> Management Level	<input type="checkbox"/> Full professor	<input type="checkbox"/> Research Director and 1st level Technologist / First Researcher and 2nd level Technologist
<input type="checkbox"/> Mid-Management Level	<input type="checkbox"/> Associate Professor	<input checked="" type="checkbox"/> Level III Researcher and Technologist
<input type="checkbox"/> Employee / worker level	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

09.2009 - today

Researcher

Full position contract, IMEM-CNR Parma

- Responsible of the SEM/FIB facility since 2014: SEM-EDX analysis of advanced functional materials and Focused Ion Beam (FIB) processing of structures
- Epitaxial deposition

04.2005 – 08.2009

Post Doc Researcher

Post Doc researcher in the frame of "Laboratorio PROMINE-R", and "Laboratorio MIST-ER" Regione Emilia Romagna, IMEM-CNR Parma

- Epitaxial deposition

EDUCATION AND TRAINING

2002 - 2004

PhD degree in Science and Technology of Innovative Materials

Università degli studi di Parma – (EQF level 8)

- Molecular Beam Epitaxy preparation and study of quantum dot nanostructures with 980 nm room temperature optical emission.

1996 - 2001

Master degree in physics with specialization in condensed matter physics

Università degli studi di Parma - Vote: 110/110 cum laude.

- Molecular Beam Epitaxy of low dimensional semiconductor nanostructures

PERSONAL SKILLS

Mother tongue(s)

Italian

Other language(s)

English (scientific professional level)

Other skills

Expert in scanning electron microscopy / focused ion beam techniques and energy-dispersive X-ray spectroscopy for the study and processing of functional material of interest in the fields of pharmaceuticals, medicine, sensing, energy.

15-years experience in molecular beam epitaxy of thin layers, low dimensional structures and heterostructures.



ADDITIONAL INFORMATION

Publications total number of publications in peer-review journals: 88 (Web of Science)
total number of citations: 955 (Web of Science)
H index: 19 (Web of Science)

Projects
Responsibilities

Ongoing since 2022: Collaborative Research Agreement IMEM-CNR – Bormioli Pharma S.p.A. **Role: IMEM-CNR Responsible.** Activity: identification of innovative treatments and processes for pharmaceutical glass.

Ongoing since 2020: Collaborative Research Agreement IMEM-CNR – Food and Drug Department of the Parma University. **Role: IMEM-CNR Responsible.** Activity: study of micro- and nanostructured materials for pharmaceutical applications.

2014 – 2016: Collaborative Research Agreement IMEM-CNR - Institute of Semiconductor and Solid State Physics of the Johannes Kepler University. **Role: IMEM-CNR Responsible.** Activity: deposition of thin layers of semiconducting material with desired characteristics.

Projects
Participations
last 5 years

2023 – 2025: “MoRe-SPIN - Tailoring magneto-electric and magneto-elastic couplings in artificial heterostructures for multifunctional devices and reconfigurable sensors” – Progetto PRIN 2022. **Role: Participant.** Activity: responsible for SEM analysis of materials and devices realized by the project partners.

Ongoing since 2022: "ECOSYSTEM FOR SUSTAINABLE TRANSITION OF EMILIA-ROMAGNA" – National Recovery and Resilience Plan (NRRP), Mission 4, Component 2 Investment 1.4, funded from the European Union – NextGenerationEU. **Role: Spoke1-WP1 co-leader and CNR Responsible.** Activity: coordination of Spoke1-WP1 partner activities; scientific research on the improvement of the sustainability of glass packaging production.

2018 – 2021: “UNEXPLODE - Portable sensors for unmanned explosive detection” – NATO “Science for Peace and Security (SPS)”. **Role: Participant.** Activity: responsible for SEM characterization and FIB assisted-deposition of nanocontacts.

2018 – 2019: “Sensors based on germanium and carbon nanostructures” – Progetto bilaterale CNR. **Role: Participant.** Activity: responsible for SEM morphological and compositional analysis of the nanostructures.