

Curriculum Vitae	
First name(s) / Surname(s)	Alessandra Quarta
Occupational field	Nanomaterials and Biomaterials for Imaging and delivery applications
Summary	<p>Development of nanoparticles and nanostructures for applications in bioimaging and delivery of biomolecules. She has been involved in projects dealing with the preparation of both inorganic and organic nanoparticles to be employed for the encapsulation of bioactive compounds that need to be hosted, protected and delivered to the target site.</p> <p>Functionalization chemistries of the nanoparticles surface, especially in the case of inorganic nanocrystals, have been set to afford water solubilization of the particles and to improve their biocompatibility and targeting capability, as well.</p> <p>Study of the biological interactions between nanostructures and living models, from human cells to complex organisms.</p> <p>More recently, study of the transport of nanoparticles through the intestinal epithelium and of the penetration of drugs into hydrogel-based 3D tumor models.</p>
Job positions	Permanent Senior Researcher at CNR Nanotec
Dates	2023-in course
Occupation or position held	Senior Researcher at CNR Nanotec, Italy
Main activities and responsibilities	Applied Research in Bionanomaterials for Imaging and Theranostics
Dates	2015-2022
Occupation or position held	Researcher at CNR Nanotec, Italy
Main activities and responsibilities	Applied Research in Bionanomaterials
Dates	2010-2015
Occupation or position held	Researcher at Institute of Nanoscience, Italy
Main activities and responsibilities	Working on the preparation hybrid organic/inorganic nanosystems to be used as imaging tools able to cross biological barriers
Dates	2008-2010
Occupation or position held	Post Doc at Istituto Italiano di Tecnologia, Genoa, Italy
Main activities and responsibilities	Working on the development of multifunctional magnetic nanocomposites within the frame of the EU Project Magnifyco
Education and training	
Dates	2005-2008
Title of qualification awarded	PhD in Innovative Materials and Technologies

Name and type of organisation providing education and training	University of Salento, Lecce, Italy
Dates	2004
Title of qualification awarded	Master Degree in Biology (110/110 cum laude)
Name and type of organisation providing education and training	University of Salento, Lecce, Italy

Publications Co-author of 59 papers in peer-review journals (H-index 25, source Scopus).

Technology transfer Patent (2021)
Magnetic nanoparticles for use in the treatment of tumors
US 2021/0052637
Markus BARTHEL, Marco CASSANI; Mariangela FIGINI, Juan GRANJA, Teresa PELLEGRINO, **Alessandra QUARTA**

Patent (2018)
Iron Oxide Nanocubes As A Platform For Tumor Targeting, Oxaliplatin Delivery And Magnetic Hyperthermia
IT102018000005104
Granja Juan, Figini Mariangela, Barthel Marcus, Cassani Marco, Pellegrino Teresa and **Quarta Alessandra**

Additional information

- Co-tutor of Bachelor and Master Theses in Biology, Biotechnology and Pharmaceutical Chemistry from Italian Universities,
- Co-tutor of pH students
- Reviewer for several international peer-review journals
- Guest Editor of MDPI Special Issues
- Participation to National and International research projects
- Work Package leader in National research projects
- Actively involved in scientific dissemination for middle and high school students

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV.

Date, 30/01/2025