PERSONAL INFORMATION

Caterina Credi

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Sex Female | Date of Birth 12/01/1987 | Nationality Italian

CURRENT POSITION

Researcher at the National Institute of Optics – National Research Council (INO-CNR); affiliated to the European Laboratory for Non-Linear Spectroscopy (LENS)

WORK EXPERIENCES

July 2020 – present

National Institute of Optics – National Research Council (INO-CNR)

Permanent researcher

Research activities:

- optofluidic SERS sensors for the molecular screening of biological fluids
- Synthesis and functionalization of organic and inorganic materials for biomedical applications

Set 2017 – June 2020

The Biophysics Biophotonics Lab, European Laboratory for non-linear Spectroscopy (LENS)

Post-doctoral researcher

Bioimaging group – Prof. Francesco Saverio Pavone

Research Fellowship – University of Florence, (01/09/2019 al 01/01/2021) (competition announcement n. 5449/2019). Open competition on qualifications and examinations.

Research Fellowship – University of Florence, (01/09/2017 al 31/08/2018) (competition announcement n. 4916/2017). Open competition on qualifications and examinations.

Research Activities:

- Development of novel fiber-based optical sensors for the early stage diagnosis of neurodegenerative diseases through the molecular screening of liquid biopsies.
- Development and management of a multimodal colon cancer imaging database for disease modeling.

Feb 2015 - Aug 2017

Department of Chemistry, Materials and Chemical Engineering (DCMIC) “Giulio Natta”, Politecnico di Milano.

Post-doc researcher

Laboratory of Chemistry and Characterization of Innovative Polymers (ChipLab) – Prof. Stefano Turri

3D Printing laboratory +Lab – Prof.ssa Marinella Levi

Research Fellowship – Politecnico di Milano, (01/02/2015 - 31/01/2016) (competition announcement n.1169/2014). Open competition on qualifications and examinations.

Research Activities

- Synthesis and functionalization of novel polymer and nanocomposites to be processed by stereolithography for different fields of applications: biocompatible and bioactive photopolymers for scaffolding and bioreactors for tissue engineering; superomniphobic photopolymers for self-cleaning and anti-fouling microfluidics polymer cells devices; magnetically-active nanocomposites for microactuators and microrobot with applications in drug delivery.
- Rapid prototyping of capacitive accelerometers through wet processes metallization of 3D

printed devices.

- Cross-linking processes of polyamides with improved mechanical properties (collaboration with Italian company Domo)

Mar 2016 –Feb 2017

Educational Activity - Politecnico di Milano

- I semester AA 2015/2016 - period 7/3/2016 - 31/7/2016 - class number 087100 class name "Polymeric Materials B" (regular teacher prof. Stefano Turri) within the master degree course in Materials Engineering and Nanotechnologies - Politecnico di Milano. Collaboration granted after open competition on qualification (n.139/2016 prot.n. 4707 del 22/01/2016).

- I semester AA 2016/2017 - period 4/11/2016 - 28/02/2017 – class number 096241 class name "Principles of Polymer Chemistry" (regular teacher prof. Stefano Turri) within the master degree course in Materials Engineering and Nanotechnologies - Politecnico di Milano. Collaboration granted after open competition on qualification (Prot. n. 0075431 del 30/09/2016).

- II semester AA 2016/2017 – period 4/11/2016 - 28/02/2017 – class number 089723 class name "Polymer Technology and Sustainability" (regular teacher prof. Stefano Turri) within the master degree course in Materials Engineering and Nanotechnologies - Politecnico di Milano. Collaboration granted after open competition on qualification (Prot. n. 0016316 del 28/02/2017).

Jan 2012 – Dec 2014

Department of Chemistry, Materials and Chemical Engineering (DCMIC) "Giulio Natta" - Politecnico di Milano

PhD Student in Materials Engineering - Winner of the PhD research fellowship ministerial grant, (cicle XXVII)

Research Activities:

- Study and optimization of cross-linking processes of biocompatible hydrogels for biomimetic substrates and applications in tissue engineering.
- Synthesis, characterization and functionalization of fluoropolymers with advanced anti-fouling properties for applications in the microfluidics.
- Study and optimization of processes for protein and biomolecules patterning onto polymeric materials. Development of novel advanced diagnostic platforms.

Sep 2013 –Mar 2014

Institute for BioEngineering of Catalonia (IBEC), Spain

PhD visiting

Nano-bioengineering research group, Prof. J. Samitier Martì - Institute for Bioengineering of Catalonia (IBEC), Barcelona, Spain

Nanomalaria research group, Prof. X. Fernandez-Busquets - Barcelona - Centre for International Health Research (CRESIB), Spain

Research Activities:

- Study and implementation of advanced fabrication and functionalization processes for biomolecules patterning onto polymeric materials.

EDUCATION AND TRAINING

2015

PhD in Materials Engineering *cum Laude*

Politecnico di Milano

- PhD Thesis: "Polymeric Materials for Advanced Human Health Applications"
- Advisor: Prof. Stefano Turri

- During my PhD, the research activities were focused on the synthesis, functionalization and characterization of novel polymeric materials for biomedical applications. I worked on the study and optimization of crosslinking processes of biocompatible hydrogels for scaffolding and application in the tissue engineering. The second part of the PhD activity was mainly focused on the synthesis, functionalization and characterization of fluoropolymers for application in the development of advanced diagnostic platforms.

2011 **Master Degree in Biomedical Engineering**

Politecnico di Milano

- Final mark: 110/110
- Title of the thesis: “Manufacturing process of poly(ethylene glycol) methacrylate microfluidic channels”
- Supervisor: Prof. Stefano Turri

▪ During my thesis work, the research activity was focused on the development and optimization of photopolymers mixtures to be processed by photo-lithography for the fabrication of biocompatible microfluidics devices.

2008 **Bachelor Degree in Mechanical Engineering**

Università degli Studi di Firenze

- Final mark: 104/110
- Title of the thesis: “Modeling of carotid atherosclerotic plaques growth”
- Supervisor: Prof. Andrea Corvi

▪ During my thesis work, the research activity was focused on the development of a fluidodynamic model explaining the growth of atherosclerotic plaques depending on the morphological properties of the carotid cross-sections.

PERSONAL SKILLS

Mother tongue: Italian

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
French	A1	A1	A1	A1	A1
Spanish	B1	B1	B1	B1	B1

Communication skills

Good communication skills acquired through my experience as scientific conferences speaker, during didactic classes held in front of more than 200 students and during my research experience abroad in foreign scientific laboratories.

Organisational/managerial skills

- Excellent organisational skills and excellent ability in problem solving and team working. Very effective at time management. Excellent ability in leadership position acquired during the work as supervisor of students.
- Good skills in research project writing and administration acquired during my work as post-doc researcher.

Job-related skills

- Synthesis and functionalization of polymeric materials (hydrogels, perfluoropolyethers, polyamides, nanocomposites, polyurethanes) for tissue engineering, diagnostics devices, microfluidics devices, photovoltaics polymer cells and 3D printing.
- Synthesis and functionalization of inorganic nanoparticles for biomedical applications
- Development and optimization of optical sensors for diagnostic devices
- Polymer characterization: Rheology, Thermogravimetry (TGA), Differential Scanning Calorimetry (DSC) and photo-calorimetry (UV-DSC), Dynamic-mechanical analyses (DMA), Nuclear Magnetic Resonance (NMR)
- Functionalization and characterization of organic and inorganic substrates: wettability tests, IR spectroscopy, Raman spectroscopy, x-rays spectroscopy
- Micro and nanofabrication processes: photolithography, soft-lithography, microfluidics, hot embossing, microcontact arrayer.
- Microscopy: Atomic force microscopy, optical microscopy, scanning electron microscopy, fluorescence microscopy
- Competencies on standard cells cultures
- Excellent expertise on 3D printing technologies

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient User	Proficient user	Proficient user	Proficient user	Proficient user

- Operative system: Windows (XP, 7, 10)
- Word processors: Microsoft Office Word, LibreOffice Writer, Latex
- Data analysis: Origin, Microsoft Office Excel, Mestre, Omnic
- Programming: C++, Arduino
- Finite elements programs (FEM): Fluent
- 3D images analysis and visualization: FIJI (ImageJ)
- Adobe Suits programs: Photoshop, Illustrator
- 3D modelling programs: Solidworks, FreeCad, Inventor, AutoCAD

SCIENTIFIC ACTIVITIES

Scientific Publications

Scientific Paper on international peer-reviewed journals

1. C. Credi, S. Biella, C. De Marco, M. Levi, R. Suriano and S. Turri, "Fine tuning and measurements of mechanical properties of crosslinked hyaluronic acid hydrogels as biomimetic scaffold coating in regenerative medicine", *Journal of the Mechanical Behavior of Biomedical Materials* 29 (2014) 309-316.
2. E. Molena, C. Credi, C. De Marco, M. Levi, S. Turri and G. Simeone, "Protein antifouling and fouling-release in perfluoropolyether surfaces", *Applied Surface Science* 309 (2014) 160–167.
3. R. Suriano, C. Credi, M. Levi and S. Turri, "AFM Nanoscale indentation in air of polymeric and hybrid materials with highly different stiffness", *Applied Surface Science* 311 (2014) 558-566.
4. C. De Marco, C. Credi, F. Briatico-Vangosa, E. Bianchi, A. Ciftlik, M. Gijs, G. Dubini, M. Levi and S. Turri, "Fabrication of biocompatible monolithic microchannels with high-pressure resistance using direct polymerization of PEG-modified PMMA", *Journal of Applied Polymer Science* 131(21), 41031 (2014).
5. M.M. Nava, M.T. Raimondi, C. Credi, C. De Marco, S. Turri, G. Cerullo and R. Osellame, "Interactions between structural and chemical biomimetism in synthetic stem cell niches", *Biomedical Materials* 10 015012 (2015).
6. C. Credi, C. De Marco, E. Molena, M.M. Nava, M.T. Raimondi, M. Levi and S. Turri, "Direct photo-patterning of hyaluronic acid baits onto a fouling-release perfluoropolyether surface for selective cancer cells capture and immobilization", *Materials Science and Engineering C* 62 (2016) 414–422.
7. A. Bianciardi, C. Credi, M. Levi, F. Rosa and A. Zecca, "Biomimicry Thinking: methodological improvements and practical implementation", *Bioinspired, Biomimetic and Nanobiomaterials*. 6(2) (2016) 87-101.
8. C. Credi, C. De Marco, E. Molena, M. Pla-Roca, J. Samitier-Martì, J. Marques, X. Fernandez- Busquets, M. Levi and S. Turri, "Heparin micropatterning onto fouling-release perfluoropolyether- based polymers via photobiotin activation", *Colloids and Surfaces B: Biointerfaces* 146 (2016) 250–259.
9. C. Credi, A. Fiorese, M. Tironi, R. Bernasconi, L. Magagnin, M. Levi and S. Turri, "3d printing of cantilever-type microstructures by stereolithography of ferromagnetic photopolymers", *ACS Applied Materials & Interfaces*. 8, 26332−26342 (2016).
10. R. Bernasconi, C. Credi, M. Tironi, M. Levi and L. Magagnin, "Electroless Metallization of Stereolithographic Photocurable Resins for 3D Printing of Functional Microdevices", *Journal of The Electrochemical Society* 164 (5) B3059-B3066 (2017).
11. C. Credi, M. Levi, S. Turri and G. Simeone, "Stereolithography of perfluoropolyethers for the microfabrication of robust omniphobic surfaces", *Applied Surface Science*. 404 (2017) 268–275
12. C. Credi, D. Pintossi, C.L. Bianchi, M. Levi, G. Griffini and S. Turri, "Combining stereolithography and replica molding: on the way to superhydrophobic polymeric devices for photovoltaics", *Materials and Design*. 133 (2017) 143–153.

13. V. Zega, C. Credi, R. Bernasconi, G. Langfelder, L. Magagnin, M. Levi and A. Corigliano, "The first 3d-printed z-axis accelerometers with differential capacitive sensing", IEEE Sensors *Journal* 18(1) (2018) 53-60.

14. C. Credi, G. Griffini, M. Levi and S. Turri, "Biotinylated photopolymers for 3D-Printed Unibody Lab-on-a-chip optical platforms", *Small*. 14(1), 1702831 (2018).

15. R. Bernasconi, F. Cuneo, E. Carrara, G. Chatzipirpiridis, M. Hoop, X. Chen, B.J. Nelson, S. Pané, C. Credi, M. Levi and L. Magagnin, "Hard-magnetic cell microscaffolds from electroless coated 3D printed architectures", *Materials Horizons* 5, 699 (2018).

16. A.P. Di Giovanna, C. Credi, A. Franceschini, M.C. Mullenbroich, L. Silvestri and F.S. Pavone, "Tailored sample mounting for light-sheet fluorescence microscopy of clarified specimens by polydimethylsiloxane casting", *Frontiers in Neuroanatomy*, 13 35 (2019).

17. J.L. Lagarto, C. Credi, F. Villa, S. Tisa, F. Zappa, V. Shcheslavskiy, F.S. Pavone and R. Cicchi, "Multispectral depth-resolved fluorescence lifetime spectroscopy using SPAD array detectors and fiber probes", *Sensors (Switzerland*), 19, 12, (2019).

18. R. Bernasconi, E. Carrara, M. Hoopè, F. Mushtaq, X. Chen, B.J. Nelson, S. Pané, C. Credi, M. Levi and L. Magagnin, "Magnetically navigable 3D printed multifunctional microdevices for environmental applications", *Additive Manufacturing* 28, 127-135 (2019).

19. C. Credi, O. Bibikova, C. Dallari, B. Tiribilli, F. Ratto, S. Centi, R. Pini, V. Artyushenko, R. Cicchi and F.S. Pavone, "Fiber-cap biosensors for SERS analysis of liquid samples", *Journal of Materials Chemistry B* 8, 1629-1639 (2020).

20. C. Dallari, C. Credi, E. Lenci, A. Trabocchi, R. Cicchi and F.S. Pavone, "Nanostars—decorated microfluidic sensors for surface enhanced Raman scattering targeting of biomolecules", *J. Phys. Photonics* 2, 024008 (2020).

21. C. Dallari, C. Capitini, M. Calamai, A. Trabocchi, F.S. Pavone and C. Credi, "Gold nanostars bioconjugation for selective targeting and sers detection of biofluids", *Nanomaterials,* 11(3), pp. 1–16, 665 (2021).

22. C. Credi, V. Balducci, U. Munagala, C. Cianca, S. Bigiarini, A.A.F. de Vries, L.M. Loew, F.S. Pavone, E. Cerbai, L. Sartiani and L. Sacconi, "Fast Optical Investigation of Cardiac Electrophysiology by Parallel Detection in Multiwell Plates", Frontiers in Physiology, 12, 692496 (2021)

23. V. Balducci, C. Credi, L. Sacconi, M.N. Romanelli, and L. Sartiani, "The HCN channel as a pharmacological target: Why, where, and how to block it", Progress in Biophysics and Molecular Biology, 166, pp. 173–181 (2021)

24. L. Turrini, M. Sorelli, G. de Vito, C. Credi, N. Tiso, F. Vanzi, and F.S. Pavone, "Multimodal Characterization of Seizures in Zebrafish Larvae", Biomedicines, 19(5), 951 (2022)

25. C. Dallari, R. Innocenti, E. Lenci, A. Trabocchi, F.S. Pavone and C. Credi, "Design and Synthesis of Novel Raman Reporters for Bioorthogonal SERS Nanoprobes Engineering", International Journal of Molecular Sciences, 23(10), 5573 (2022)

26. R. Innocenti, C. Dallari, E. Lenci, F.S. Pavone, F. Bianchini, C. Credi and A. Trabocchi, "Design, synthesis and evaluation of RGD peptidomimetic – Gold nanostar conjugates as M21 cell adhesion inhibitors", Bioorganic Chemistry, 126, 105873 (2022)

Conference Proceedings

27. R. Bernasconi, F. Cuneo, C. Credi, M. Levi, A. Lucotti, P.L. Cavallotti and L. Magagnin, "Low temperature electroless deposition of hard magnetic alloys for the metallization of additive manufactured functional microstructures", *ECS Transactions.* 75(34) (2016) pp. 43-60.

28. R. Bernasconi, C. Credi, G. Natale, M. Tironi, F. Cuneo, M. Levi and L. Magagnin, "Electroless metallization of stereolithographic photocurable resins for 3D printing", *ECS Transactions* 72(21) (2016) pp. 9-21.

29. E. Montin, S. Migliori, C. Chiastra, C. Credi, R. Fedele, C. Aurigemma, M. Levi, F. Burzotta, F. Migliavacca and L.T. Mainardi, "A method for coronary bifurcation centerline reconstruction from angiographic images based on focalization optimization", *38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Orlando, FL, 2016, pp. 4165- 4168.* (2016).

30. C. Credi, V. Zega, R. Bernasconi, G. Langfelder, A. Cigada, L. Magagnin, M. Levi and A. Corigliano, "Design, fabrication and testing of the first 3D-printed and wet metallized z-axis accelerometer", *EUROSENSORS 2017* Proceedings 2017, 1, 614.

31. V. Zega, C. Credi, M. Invernizzi, R. Bernasconi, G. Langfelder, A. Cigada, L. Magagnin, M. Levi and A. Corigliano, "3D-printing and wet metallization for uniaxial and multi-axial accelerometers", *19th conference on thermal, mechanical and multi-physics simulation and experiments in microelectronics and microsystems*, EUROSIME 2018, pp. 1-4.
32. C. Credi, O. Bibikova, C. Dallari, B. Tiribilli, F. Ratto, S. Centi, R. Pini, V. Artyushenko, R. Cicchi and F.S. Pavone, "Disposable and versatile optical sensors for real-Time SERS analysis of liquid samples by fiber-based spectroscopy", *Progress in Biomedical Optics and Imaging - Proceedings of SPIE,* 10872,108720 BIOS 2019
33. C. Credi, C. Dallari, E. Lenci, A. Trabocchi, S. Nocentini, D. Wiersma, R. Cicchi and F.S. Pavone, "3D printing of multifunctional optofluidic systems for high-sensitive detection of pathological biomarkers in liquid biopsies", *The International Society for Optical Engineering – Proceedings of SPIE,* 11361, Biophotonics in Point-of-Care, 2020

Talk at conferences

1. C. Credi, M. Levi, S. Turri, "*Design and characterization of hyaluronic acid hydrogels with controlled tunable mechanical properties"*, European Polymer Congress – EPF 2013, Pisa, Italia.
2. C. Credi, R. Cicchi and F. S. Pavone, "Disposable Elastomeric Caps for In Liquid SERS Detection", *Biomaterials and Novel technologies for healthcare (BioMah), 2nd edition*, Frascati (RM), Italia, 2018
3. C. Credi, R. Cicchi and F. S. Pavone, "SERS-active disposable elastomeric caps for real-time optical diagnosis", *Fotonica, XX Edition,* Lecce, Italia, 2018.
4. C. Credi, O. Bibikova, C. Dallari, B. Tiribilli, F. Ratto, S. Centi, R. Pini, V. Artyushenko, R. Cicchi and F.S. Pavone, "Disposable and versatile optical sensors for real-Time SERS analysis of liquid samples by fiber-based spectroscopy", *Progress in Biomedical Optics and Imaging* BIOS 2019, San Francisco (CA), USA
5. C. Credi, O. Bibikova, C. Dallari, B. Tiribilli, F. Ratto, S. Centi, R. Pini, V. Artyushenko, R. Cicchi and F.S. Pavone, "Disposable and versatile optical sensors for SERS analysis of liquid samples by fiber-based spectroscopy", European Conferences on Biomedical Optics ECBO 2019, Monaco, Germany.
6. C. Credi, "Tunable optical sensors for SERS detection of biomolecules in liquid samples", INO Annual Symposium 2020, Florence, Italy
7. C. Dallari, R. Innocenti, E. Lenci, A. Trabocchi, F.S. Pavone, and C. Credi, "Bioorthogonal SERS nanotags for multiplex detection of biomolecules: a versatile straightforward method towards multicolor-custom palette", Sensors 2021, Milan, Italy

Invited Talk at conferences

1. C. Credi, C. Dallari, E. Lenci, A. Trabocchi, S. Nocentini, D.S. Wiersma and F.S. Pavone, "Engineering versatile optical sensors for highly sensitive SERS analysis of liquid biopsies", 15th Serbian Photonics Workshop, Kopaonik, Serbia

Bibliometric indexes (Scopus)

Number of citations: 384
H-index: 12

Research Project

Project Leader

- Multifunctional optofluidic devices for the early-stage diagnosis of Alzheimer's Disease through the molecular screening of cerebrospinal fluid (DoptoScreen), **Role: Principal Investigator,** Funding source: Fondo di Beneficenza Intesa San Paolo, Period: 2020-2021
- Sistemi DIagnostici a basso costo per lo screening VIrologico differenziale rapido e ad ampio raggio della popolazione attraverso l'analisi ottica/molecolare della Saliva, **Role: CNR-INO unit Leader**, Funding source: Regione Toscana, Period: 2022-2024
- Twinning for excellence of the Serbian Research center for quantum biophotonics (BioQantSense), **Role: CNR-INO unit Leader,** Funding source: EU – Horizon Europe, Period: 2022-2024

Project Member

- Multimodal highly-sensitive PhotonICs endoscope for improved in-vivo COLOn Cancer diagnosis and clinical decision support (PICCOLO), **Role: researcher**, Funding source: EU – H2020, Period: 2017-2019
- SERS-based immunoassay for accurate and timely in situ sepsis diagnosis, **Role: researcher,** Funding source: Fondazione Cassa di Risparmio di Firenze, Period: 2019
- Advanced Multimodal Photonics Laser Imaging Tool for Urothelial Diagnosis in Endoscopy (AMPLITUDE), **Role: researcher,** Funding source: EU – H2020, Period: 2020-2024
- Restoring Cardiac Mechanical Function by Polymeric Artificial Muscular Tissue (REPAIR), **Role: researcher,** Funding source: EU – H2020, Period: 2020-2024
- Studio clinico e modelli cellulari per la PREdizione e prevenzione del rischio CARdiovascolare in pazienti coVID-19 (PRECARVID), **Role: researcher**, Funding source: Regione Toscana, Period: 2021-2023

Supervisor of thesis

Bachelor's degree

1. Ludovica Cantarelli, Lorenzo Ferreri, Francesco Lipari, Guido Masotti, Alex Valeri: "La salute in 3D - Stereolitografia per la medicina rigenerativa e cardiovascolare", Bachelor Degree in Materials Engineering and Nanotechnologies, Politecnico di Milano. (Supervisor Prof.ssa Marinella Levi, Co-supervisor: Dr. Caterina Credi)
2. Valentina Ghinassi: "Development of gold nanoparticles filled hydrogels for drug delivery", Bachelor Degree in Mechanical Engineering, Università degli Studi di Firenze. (Supervisors Prof. Federico Carpi, Dr. Caterina Credi)
3. Chiara Merli: "Design of hydrogel-based photopolymers for high resolution scaffolds by stereolithography", Bachelor Degree in Mechanical Engineering, Università degli Studi di Firenze. (Supervisors Prof. Federico Carpi, Dr. Caterina Credi)

Master's degree

1. Vittoria Banchelli: "Nicchie staminali ingegnerizzate tramite grafting di idrogeli polimerici sulla superficie di scaffold tridimensionali fabbricati con polimerizzazione a due fotoni", Master Degree in Biomedical Engineering, Politecnico di Milano. (Supervisor Prof. Stefano Turri, Co-supervisor: Dr. Caterina Credi)
2. Martina Mongelli, Francesca Morena: "Tecnologie fotolitografiche e soft-litografiche per la realizzazione di patterns biomolecolari su superfici antifouling di perfluoropolieteri", Master Degree in Biomedical Engineering, Politecnico di Milano. (Supervisor Prof. Stefano Turr, Co-supervisor: Dr. Caterina Credi)
3. Alessandro Fiorese: "Microfabrication by stereolithography of UV-curable polymers", Master Degree in Materials Engineering and Nanotechnologies. (Supervisor Prof. Stefano Turri, Co-supervisor: Dr. Caterina Credi)
4. Caterina Dallari: "Sviluppo e ottimizzazione di nuovi substrati per sensori SERS.", Master Degree in Chemistry, Università degli Studi di Firenze. (Supervisor Prof. Francesco Saverio Pavone, Co-supervisor: Dr. Caterina Credi)
5. Carolina Cianca: "Development of an optical platform for high-throughput screening of induced pluripotent cardiac stem cells", Master Degree in Biomedical Engineering, Università degli studi di Firenze. (Supervisors Dr. Leonardo Sacconi, Prof. Leonardo Bocchi, Co-supervisor: Dr. Caterina Credi)
6. Giada Beconi: "Development of a mesoscale light sheet fluorescence microscope", Master Degree in Biomedical Engineering, Università degli Studi di Firenze. (Supervisors Dott. Leonardo Sacconi, Prof. Leonardo Bocchi, Co-supervisor: Dr. Caterina Credi)
7. Mirco Mancini: "Experimental method for sampling and analysis of microplastic particles from Florence Wastewater Treatment Plant effluents", Master Degree in Civil Engineering, Università degli studi di Firenze. (Supervisors Prof. Enio Paris, Prof. Francesco S. Pavone)

PhD Thesis

1. Caterina Dallari: "Plasmonic-based sensors for chemical and biochemical sensing applications", European PhD in Atomic and Molecular Photonics

Service activities

2020 – Member of the Topic Editorial Board and the Reviewer Board of *Sensors* (MDPI)

2022 – Member of the Rewiever Board of Frontiers in Bioengineering and Biotechnology