CURRICULUM VITAE

1. Contact and personal information

Surname and Name	Salerno Marco
Home address	via A. Castelli 2/21, Genova
Phone numbers (+39)	010-3356248 (Office), 010-4809481 Q (home), 349-2675277 (cell phone)
E-mail addresses	marco.salerno@unige.it, marco.salerno@igdore.org, postmaster@pec.selladerbi.eu
Nationality	Italian
Birth date	23/02/1967
Family status	married, with two 17 years old sons
Habits/preferences	non-smoker, teetotaler, blood donor, non-smartphone addicted, pro-vaxxer

2. National Scientific habilitations

Academic Recruitment Field	**Possible role**	**Run**	**Expiry**
02/B1 Experimental Physics of Matter	Associate	2017 / I	12/4/26
' '	Full	2021 / III	7/10/32
09/D1 Materials Science and Technology	Associate	2017 / III	1/12/26

3. Working experience *(inverse chronological order)*

Dates	May 2023 – current
Name and address of the Employer	University of Genoa, Department of Physics, via Dodecaneso 33, 16146 Genoa, Italy
Position held	Junior Researcher – Biophysics group
Main activities/responsibilities	Leader of the optical nanoscopy group working on Minflux concept for application to living cells subunits down to the molecular scale

Dates	May 2021 – December 2022
Name and address of the Employer	Technical University Dresden, Institute for Materials Science, Max Bergmann Center, Budapester Str.27, 01069 Dresden, Germany
Position held	Senior Researcher – Honorary Professor
Main activities/responsibilities	Co-Responsible for the SPM laboratory together with Prof. Enrico Gnecco, activity on nanoscale friction

Dates	July 2017 – June 2020
Name and address of the Employer	Military University of Technology, Advanced Technologies and Chemistry, Gen. S. Kaliskiego Str. 2, 00-908 Warsaw, Poland
Position held	Senior Researcher – Consultant
Main activities/responsibilities	Collaborator to the research activities of the anodization group, Prof. Wojciech Stepniowski

Dates	February 2012 – January 2017
Name and address of the Employer	Istituto Italiano di Tecnologia, via Morego 30, Genova, Italy
Position held	Technologist
Main activities/responsibilities	Responsible for the SPM lab service of the Materials Characterization Facility

Dates	February 2007 – January 2012
Name and address of the Employer	Istituto Italiano di Tecnologia, via Morego 30, Genova, Italy
Position held	Team Leader (Principal Investigator)
Main activities/responsibilities	Inorganic materials activity of the Nanophysics Department. Development of advanced dental nanocomposites and nanopatterning of surfaces by anodization

Dates	February 2004 – January 2007
Name and address of the Employer	NNL (National Nanotechnology Laboratory) of INFM-CNR, Lecce, Italy
Position held	Research Scientist
Main activities/responsibilities	Research and education in the Plastic Photonics Division (Prof. Giuseppe Gigli). Clean-room EBL fabrication of patterned Si and fused silica substrates for WOLEDs and DFB polymer lasers

Dates	September 2002 – January 2004
Name and address of the Employer	S^3 Center (nanoStructures and bioSystems at Surfaces) of INFM-CNR, at the University of Modena and Reggio Emilia, Modena, Italy
Position held	Research Assistant (Post-Doc)
Main activities/responsibilities	EC-STM of biomacromolecules (metalloprotein Azurin). Fabrication of EC-STM tips. Photolithographic fabrication of interdigitated electrodes of Au on glass

Dates	February 1997 – October 1998
Name and address of the Employer	PNB-PST (National Pole of Bioelectronics – Science and Technology Park) Elba, Marciana Alta, Elba island, Leghorn, Italy
Position held	Junior Researcher
Main activities/responsibilities	Responsible for the SPM Lab. Reporting to Ministry of University and Research on "Force sensors controlled by artificial neuronal networks". Setup of a home-built AFM with automatic software control by neural-network setting of scanning parameters

4. Education

Date	18 November 1993
Institution which issued the degree	State University of Pisa (Lab of Biophysics and Cybernetics of CNR), Italy
Type of degree awarded	MSc in Experimental Physics. Thesis on the nanoscale measurement of friction by AFM. Supervisors Prof. Cesare Ascoli and Maria Allegrini. Use of home-built AFM, data processing and analysis of measurements on films of ceramics, superconductors, and protein patterns; FEM modeling of AFM probes

Date	23 May 2002
Institution which issued the degree	Karl-Franzens University of Graz (Lab of Experimental Physics and Laser Optics), Austria
Type of degree awarded	PhD in Experimental Physics. Thesis on the SNOM investigation of Au particle plasmons. Supervisors Prof. Joachim Krenn and Franz Aussenegg. Modification of commercial AFM to work as aperture SNOM, EBL fabrication of Au oblate/prolate nanoparticles arrays on ITO; FEM modeling of tuning forks.

5. Computer skills

- Standard word processing – desktop publishing, plotting and data analysis programs (Windows Word – Powerpoint - Excel – Origin/Scidavis);
- Basics in programming and calculation (Igor Pro, Matlab, C++);
- Basic knowledge in Finite Element Methods programs (Comsol Multiphysics);
- Advanced image analysis and processing (Gwyddion, Image-J).

6. International Referees

The following international experts can provide an independent opinion on my research work. They possess a high scientific qualification and international reputation, and we have a limited number of joint publications.

Name	*Institution of origin*	*Address*	*e-mail address (telephone)*
Prof. Maria Raposo	New University of Lisbon, Physics Department	Campus de Caparica, 2829-516 Caparica, Lisbon, Portugal	mfr@fct.unl.pt (+351 21 294 8576)
Prof. Wojciech Stepniowski	Military University of Technology, Institute of Materials Science and Engineering	ul. gen. Sylwestra Kaliskiego 2, 00-908 Warszawa 49, Warsaw, Poland	wojciech.stepniowski@wat.edu.pl (+48 608 812 076)
Prof. Attilio Converti	University of Genoa, Dept. of Civilian, Chemical & Environmental Engineering	via Opera Pia 15, 16145 Genoa, Italy	converti@unige.it (+39 010 353 2592)

7. Scientific Activity

h-index: 34 (Scopus), total documents: 180 total no. **citations: 4784** (as of March 22th, 2024)
i10-index: (Google Scholar) 125, **since 2019: 86**
h-index/(academic working period): ~**1.09**

The three most important research activities of my career are listed in the following (the color codes for the papers in the full publication list, attached separately).

7.1.

Characterization of material surfaces by scanning probe microscopy, including force-spectroscopy – aiming to determine the contact stiffness and possibly the elastic modulus of materials – and electrical modes – mainly aiming to determine the surface potential. This involved also advanced image analysis and processing. The international recognition of the work is demonstrated by the research articles published on this topic and listed in green background in the trailing publication list.

7.2.

Micro-nanofabrication, first by lithography (electron beam and partly optical and soft lithography), later on by self-organization during anodization to form anodic porous alumina (APA). This resulted into a 2-years, 120-k€ iit interdepartmental grant, demonstrating the concept of using APA as a platform for surface-enhanced Raman scattering (SERS) based sensors. This project allowed me to hire one PostDoc (Dr. Chiara Toccafondi). The activity resulted in several research articles published, highlighted in cyan in the publication list (a couple of news-and-views / opinion articles are also included). At the end of the Project I could find a position for the PostDoc in the same area at Ecole Politechnique - Paris Saclay.

7.3.

Characterization and development of dental restorative materials, especially composites. This resulted in an international patent on innovative composite with mechanical interlocking replacing the chemical bonding agent between matrix and fillers. The whole work was conceived, designed and directed by me. International recognition is demonstrated by the articles published, highlighted in yellow in the publication list (one review in also included). Unfortunately, publishing on this topic in dental materials journals has been difficult due to resistance of the community to new concepts and technical solutions. Other works in the biomedical area have also been aggregated to this group.

8. National and international projects and project proposals

Year	Title	Program	Grant value
1998-2000	TMR Project "NanoSNOM"	Network, with Universities of Ulm, Basel, Dublin, Pisa, KFUni-Graz, CSIC Madrid, CNRS Paris. Progress-report presentations at meetings in Ulm 1999, Paris 2000, Basel 2001, Madrid 2002	approx. 80 k€
2004-2007	FP6-IST Project "OLLA", OLEDs for lighting; lead by Philips, Uni-Ghent, Uni-Leuven, EPFL Lausanne, Starck GmbH, Uni-Kassel, Merck, Aixtron, TU-Dresden, Siemens, OSRAM, Novaled, CNRS, CNR, INFM, Uni-Groeningen, Uni-Nantes	Responsible (for INFM-NNL Lecce) of WP on patterning glass substrates to scatter light off the guiding polymer. Progress-report presentations at meetings in Eindhoven 2004, Frankfurt 2005, Lecce 2006	approx. 280 k€
2011	"Advanced Microscopic Imaging of Nanodiamonds"	bilateral Italy-Mexico agreement, laboratory selected for travelling and visiting stay (2 weeks) by Prof. Vladimir Basiuk, Universidad Autonoma de Mexico, Mexico City.	approx. 6 k€
2012	"Ultrastructural characterization of Starch granules"	bilateral Italy-Poland agreement, assigned with 4 months stay of visiting PhD student (Agnieska Zukowska) Lublin Institute of Agrophysics (tutor: Prof. Marek Molenda).	approx. 4 k€
2013-2015	"APA-based active substrates for SERS cell bio-sensors". A PostDoc was paid for 2 years on the project, who selected on purpose.	iit interdepartmental program.	120 k€
2017	"Use of Anodic Porous Alumina as a substrate for bioassays".	The National Brasilian Agency for Funding of Biomedical and BioMaterials Research (PI: Prof. Attilio Converti, University of Genova, Chemistry Faculty)	80 k€ received for 3 years
2010-2013 *(failed attempts)*	During this period several proposals have been written and submitted by me, basically the same project re-formulated differently each time (even if failed, I assume that attempts were better than not trying at all): - FP7 PoreSens, "APA-based biosensors/bioassays"; - Life++ AquaSens,	Different funding entities involved, according to project version: either EU or foreign country (bilateral agreement frame) or local bank/foundation	Different money requested according to project extension (between 20 k€ and 150 k€)

	"Biosensors/bioassays for endocrine disruptors in water"; - bilateral ITA-USA version of PoreSens (prof. Thomas Thundat); - local version of PoreSens (CARIGE, CARIPLO)		

9. Collaborations with companies

2014	"Installazione di un laboratorio di elettrochimica atto alla realizzazione in sede del trattamento superficiale di anodizzazione controllata per rendere rugosi sulla nanoscala gli impianti dentali endossei, al fine di favorirne l'osteointegrazione"	Private consultancy for Stark sarl, Montecarlo, Principato di Monaco, (after approval of iit to protect the IP).	1 k€ + 3% royalties, (the product unfortunately never reached the market)
2016	"Caratterizzazione delle resine di apparecchi ortodontici removibili trasparenti e sviluppo di un composito ad hoc"	Contratto privato di Studio di fattibilità (4 mesi), affidato da Micerium Lab SrL, Genova	11 k€
2017-2020	"Caratterizzazione delle polveri abrasive per air-polishing dentale e possibile sviluppo di una polvere innovativa"	Contratto quadro con commesse progressive, affidate da Mectron SpA, Carasco (Genova)	approx. 15 k€

10. Patents

- WO2013/132455 A; EU, Eurasia, Africa; "Process and device for the determination of alterations in neuronal connectivity and/or morphology"; **S. Dante**, L. Berdondini, *M. Salerno*, E. Marconi, D. De Pietri; iit.
- WO2014/053946 A1; EU, Eurasia, Africa; "Combined material including anodic porous alumina and a polymer matrix, and its use for dental restoration"; ***M. Salerno***, S. Thorat, A. Diaspro; iit.

11. Tutor / Advisor / Supervisor experience

Year	Institution	Candidate person
1999	co-tutor (with Marco Sartore) for the Physics Faculty, University of Catania (experimental work at Polo Nazionale Bioelettronica, Elba Island)	MSc student Raffaele Pace; Thesis: "Realizzazione e verifica di un microscopio AFM per l'uso in ultra alto vuoto".
2006	Tutor (Supervisor: Prof. Giuseppe Gigli) for the Physics Faculty, University of Lecce	MSc student Manuela Montinaro, Thesis: "Imprinting of 1D gratings on thermoplastic photoluminescent polymers"
2009	Tutor (Supervisor: Prof. Carmelina Ruggiero) for the Biomedical Engineering Faculty, University of Genoa	BSc student Silvia Campa; Thesis: "Analisi della biocompatibilità di APA per applicazioni d'ingegneria tissutale"
2008-2010	Supervisor for the IIT Doctoral School in Robotics, curriculum of Neuroscience and Nanotechnology, University of Genoa, Italian Doctorate Cycle no. XXIII.	PhD student Niranjan Patra (selected among 3 applicants after Skype interviews); Thesis: "Preparation and characterization of application/oriented oxide nanostructures: titania nanocomposites and nanoporous alumina"
2012	Tutor (Supervisor: Prof. Roberto Raiteri) for the Bioengineering Faculty, University of Genova.	MSc student Stefano Cresti; Thesis: "Analisi al profilometro della microstruttura dell'interfaccia titanio-cemento-disilicato di litio in impianti dentali con corone CAD/CAM"
2013	Tutor (Supervisor: Prof. Roberto Raiteri) for the Bioengineering Faculty, University of Genova	MSc student Marco Frezzato; Thesis title: "Valutazione morfologica in vitro mediante AFM di impianti dentali pre e post-inserimento con diverso trattamento superficiale".
2011-2013	Supervisor for the IIT Doctoral School in Robotics, curriculum of Neuroscience and Nanotechnology, University of Genoa, Cycle no. XXVI	PhD student Sanjay Thorat (selected among 4 applicants after Skype interviews); Thesis: "Characterization and development of novel dental restorative composites".
2013-2015	co-Supervisor (with Silvia Dante and Gobind Das) for iit	Post-Doc Chiara Toccafondi; project: "APA-based active substrates for SERS cell bio-sensors"
2014-2017	Supervisor for the IIT Doctoral School in Bioengineering and Robotics, curriculum Bioengineering and bioelectronics, University of Genoa, Cycle no. XXIX	PhD student Amirreza Shayganpour (assigned); Thesis: "Development of nanoporous oxides for biomedical applications".
2015-2017	Supervisor for iit Nanophysics Dept	Post-Doc Mohamed Abdellatif, assigned to SPM Lab. Activity: AFM imaging disclosure of physical effects in materials
2016	Tutor (Supervisor: Prof. Carla Gambaro) for the Mechanical Engineering Faculty, University of Genoa.	MSc student Laura Grattarola; Thesis: "Misura con metodo AMFM del modulo di Young di compositi dentali".
2017	' '	BSc student Anna Trucco; Thesis: "Effetti del trattamento al plasma sulla resistenza meccanica di giunti incollati tra parti in polipropilene".

2017	‘ ‘	PhD student Marco Pizzorni; Thesis: “Incollaggio di substrati in titanio con adesivi epossidici: correlazioni tra proprietà superficiali e meccaniche dei giunti”.
2016-2018	Tutor (Supervisor: Silvia Dante) for the IIT Doctoral School in Bioengineering and robotics, curriculum in Bioengineering and bioelectronics, University of Genoa, Cycle no.XXXI	PhD student Barbara Salis; Thesis: “Nanostructured surfaces for living cells substrates and sensors”.
2016-2018	‘ ‘	PhD student Amira el Merhie; Thesis: “Single layer graphene biointerface: studying neuronal network development and monitoring cell behavior over time”.
2018-2020	Tutor (Supervisors: Silvia Dante and Claudio Canale) for the IIT Doctoral School in Bioengineering and robotics, curriculum in Bioengineering and bioelectronics, University of Genoa, Cycle no. XXXV	PhD student Samira Jadavi; Thesis: “Control and characterization of substrates for adhesion of living cells in culture”
2021	Tutor of 3-months visiting student from Universidad de Extremadura (Supervisor: Prof. Amparo Maria Gallardo Moreno). Trained on SKPM	PhD student Daniel Romero Guzman, Thesis on electrical surface measurements on plasma- and wet-etching treated Ti alloys.
2021-2022	Tutor (Supervisor: Mirko Prato) for the IIT Doctoral School in Nanochemistry, curriculum in Sciences and Technologies of Chemistry and Materials, University of Genoa, Cycle no. XXXVI	PhD student Fang Chen, Thesis: “Halide perovskite nanocrystal-based light emitting diodes”.
2021, 2022	co-Tutor (with Roman Krahne) of 2 times x 3 months visiting PhD student (Supervisor: Fredj Hassen), University of Monastir, Tunisie. Trained on SKPM, CAFM, lab practice / methods	PhD student Khouloud Abiedh, Thesis: “Synthesis and characterization of Perovskites for energy applications”.
2021-2022	Tutor (Supervisor: Enrico Gnecco) for the PhD school in Nanotechnology of the University of Jena, Germany	PhD student Donggun Kang, tentative Thesis title: “Characterization of nanoscale friction by AFM”
2023-ongoing	Tutor (Supervisor: Alberto Diaspro) for the PNRR SeeLife project Eurobioimaging on super-resolved optical microscopy by Minflux	PhD students Mohammadmehdi Roushenas-Kimiya Pakravanan, tentative Thesis titles: “Multimodal approach combining fluore-scence and label-free imaging of chromatin”-“Fluorophore tracking in living cells”

12. Activity as Referee

According to Publons (now WoS: webofscience.com/wos/author/record/1344531) my record in peer review scores around 205 verified reviews of papers since 2002 (ie during the past 21 years), among which:

- 30 for Nanotechnology (IOP),
- 21 for Materials (MDPI),
- 16 for Microscopy research and Technique (Wiley),
- 10 Materials Letters (Elsevier),
- 8 for Journal of optics A: pure and applied optics (IOP)
- 4 for Physical Review Letters,
- 4 for Journal of Micromechanics and Microengineering (IOP),
- 3 for Review of Scientific Instruments (AIP),
- 3 for Applied Surface Science (Elsevier);
  plus Nanoscale, Langmuir, Thin Solid Films, etc.

During all these years I have always provided review reports within 2 weeks since task acceptance. I have also reviewed 3 times project proposals funded by the Cszech Science Foundation.

13. Editorial activity

- Editorial Board Member of the journal Materials (publisher MDPI), ISSN 1996-1944, sections of Composites, Dental materials, and Nanoporous materials, IF approx. 3.3; 1/5/11 - ongoing.
- Editorial Board Member of the journal Soft Nanoscience Letters (SCIRP), ISSN 2160-0600, IF approx. 1.0; 1/1/12 - ongoing.
- Editorial Board Member of the Journal of Materials Science and Nanotechnology (Annex Publishers), ISSN 2348-9812; 1/6/12 - ongoing.
- Editorial Board Member of the International Journal of Materials Engineering and Technology (PPHMJ), ISSN 0975-0444, IF approx. 1.2; 1/3/13 - ongoing.
- Editorial Board Member of the journal "Frontiers in Materials" (Frontiers), ISSN 2296-8016, section on Environmental Materials; 1/9/17 - ongoing.
- Guest Editor of a Special Issue on Journal of Materials Science and Nanotechnology about "Anodization of valve metals", closed 31/8/14, with 10 contributions by authors from 5 different nationalities.
- Co-guest Editor, with Dr. Wojciech Stepniowski, of a Special Issue on MDPI-Materials about "Intermetallic alloys: fabrication, properties and applications", closed 30/4/15, with 9 contributions.
- Co-guest Editor, with Dr. Niranjan Patra, of a Special Issue on Journal of Nanomaterials (Hindawi, IF≈1.8) about "Advances in electrospun nanofibers", published in August 2016, with 7 contributions; 1/1/16-31/8/16.
- Co-guest editor, with Prof. Andrea Reverberi, of a Special Issue on MDPI-Materials about “Advances in physical and wet-chemical methods for inorganic nanoparticles synthesis”, closed 31/7/2016, 7 contributions.
- Co-guest Editor, with Prof. Brian Darvell (Honorary Professor of the University of Birmingham), of a Special Issue on the MDPI-Dentistry, about "Dental Materials: advances and perspectives", closed 31/7/17, 3 contributions accepted.
- Co-guest Editor, with Prof. Carla Renata Arciola (University of Bologna and Rizzoli Orthopedic Institute), of a Special Issue on MDPI-Materials about "State-of-the-Art Materials Science in Italy", closed 31/5/18, 11 contributions.
- Co-guest editor, with Prof. Andrea Reverberi, of a Special Issue on MDPI-Materials about “Green and eco-friendly nanotechnology”, closed 30/9/2020, 10 contributions.

14. Participation in international Conferences / Workshops

- Oral presentation at the LANMAT 2001 "Interaction of Laser Radiation with Matter at Nanoscopic Scales: From Single Molecule Spectroscopy to Materials Processing", 3/10/01-6/10/01.
- Poster presentation at NaNax3 - Nanoscience with Nanocrystals, 2008, Lecce, 21/5/08-23/5/08.
- Poster presentation at IEEE 2009, Genova, International Workshop on Nanotechnology, University of Genova, DIST, 26/7/09-30/7/09.
- Poster presentation at the Congress of the Italia Society of Biomaterials (SIB), 2010, Camogli, 24/5/10-26/5/10.
- Poster presentation at the national Workshop Fotonica 2011, Palazzo Ducale, Genova, 13° Convegno Nazionale delle Tecnologie Fotoniche, 9/5/11-11/5/11.
- Oral presentations (two contributions) at the International Workshop no. 13° on "Ceramics, cells and tissues", Faenza, CNR-ISTEC, 17/5/11-20/5/11.
- Poster presentation at the International Conference ECOF14 (Genova) "European Conference on Organised Films", 29/6/15-2/7/15.
- Poster presentation at NanoSEA 2016, 6th International Conference on NANOstructures and nanomaterials SElf-Assembly, Giardini Naxos (Taormina, ME), 3/7/16-8/7/16.
- Oral presentation at MRS 2016 Fall Meeting & Exhibit, Boston, 27/11/16-2/12/16.
- Oral presentation at AIC 19th INTERNATIONAL CONGRESS and CONSEURO, Bologna, 11/5/17-13/5/17.
- Oral presentation at TRACE: Tissue Regeneration: Advanced Ceramics & Composites, Genoa, 18/10-20/10/17.
- Oral presentation at the 11th Aluminium 2000 World Congress, Treviso, April 9-13, 2019.
- Invited talk at 1st Italy-Russia workshop organized by Tomsk Polytechnic University, May 13, 2021

15. Society memberberships, Awards and Honors

2006	Included in Who'sWho in Science and Engineering 2006-2007
2010	Membership to IEEE
2010	Membership to ACS for Polymeric base Materials Science
Permanent	Membership to SISM (Italian Microscopy Society, www.sism.it) and EMS (European Microscopy Society, www.eurmicsoc.org)
Permanent	Membership to ADI (Association of Italian PhD, www.dottorato.it)
2016	July-August: Invited Visiting Scientist at the Military University of Warsaw, Poland

16. Teaching activity *(inverse chronological order)*

Year	Institution	Lecture/Course
Mar 2024 -	Course assistant to Prof. Alberto Diaspro, Fisica per Biotecnologi 80757	Lecture on Metodi di osservazione e misura, Lab practice
Feb.Mar 2024	PhD course for the University of Genova	Course module on "Scanning Probe Microscopy: Force Sensing" (total 14 h)
Apr-May 2023	PhD course for the University of Genova, started at iit ended at UniGE	Course of "Nanostructured sensors" (total: 14 h)
10 June 2022	CNIS (Center of Nanotechnology for Engineering – Sapienza), Rome, Prof. Marco Rossi	Invited Seminar, intensive course "AFM – a comprehensive introduction" (5 h)
Mar.Apr 2022	PhD course for the University of Genova, at iit	Course module on "Scanning Probe Microscopy: Force Sensing" (total 14 h)
Mar.Apr 2021	Liceo Scientifico "E. Fermi", Genova Sampierdarena	Corso teorico/pratico "Introduzione alle Nanotecnologie" (totale 10 h)
Apr-May 2021	PhD course for the University of Genova, at iit	Course of "Nanostructured sensors" (total: 14 h)

Mar-May 2021	University of Silesia in Katowice, Biomedical Engineering and Materials Science	Course of "Microscopy and sensing" (total: 30 h lectures + 30 h consultancy)
Feb. 2021	Tomsk Polytechnic University	Course of "Atomic Force Microscopy, theory and practice", (total: 14 h)
June 2020	University of Genoa, Physics Dept.	Invited e-lectures (3 x 2 h) in the course of Prof. Ornella Cavalleri, on "Cantilever-based sensors"
Mar.Apr 2020	PhD course for the University of Genova, at iit	Course module on "Scanning Probe Microscopy: Force Sensing" (total 14 h)
Jan.Feb 2020	UniPO, collaboration in the Materials Science course, Prof. Enrico Boccaleri	Laboratory experiences on anodization (approx. 10 h)
2019	University of Genova, Faculty of Chemistry (Prof. Attilio Converti), PhD School in Chemical, Materials and Process Engineering	Short Course on "Microscopic characterization and surface morphology of materials" (total 10 h)
2019	University of Genoa, DIFI	Lectures in the course of Prof. Claudio Canale, "Advanced biomaterials" (total 4 h)
2018	University of Genoa, DICCA	Lectures on "Nanostructured sensors" in the course of Prof. Ombretta Paladino "Environmental Risk Assessment of Chemicals" (total 4 h)
2017-2019	iit, Genova	Course module for PhD students of iit Nanochemistry Dept on "AFM: basics and applications as a force sensor", (total 16 h, repeated thrice)
2016	University of Genova, DICCA (Dipartimento d'Ingegneria Civile, Chimica e Ambientale)	Course module (3 classes, 2 h each) in "Nan otechnology challenges", after assignment of a contract for support to teaching in the course "Reliability, safety and risk management" by Prof. Bruno Fabiano
2015	University of Genova, DIBE (Dipartimento di Ingegneria Biofisica ed Elettronica)	2 invited lectures (2 h each) in the Course of Biosensors and Microsystems (Prof. Roberto Raiteri), on "Compositi dentali" and "Allumina Porosa Anodica"; participation in the oral exam commission in May 2015
2014	PhD course for the University of Genova, at iit	May-October 2014: approx. 20 h course modules on the topics "Scanning Probe Microscopy", "Materials Characterization" and "Radiation Lithography".
2012	University of Genova, DIBE (Department of Biophysical and Electronic Engineering)	2 lectures (2h each) in Course Biosensors and Microsystems (Prof. Roberto Raiteri), on "Scanning probe microscopy" and "Nanofabrication"; oral exam commission.
2010	PhD course for the University of Genova, at iit	June-July: 10 h module on "Scientific writing: internal reports, research articles, and project proposals"
2007-2009	PhD courses for the University of Genova, at iit	Approx. 6 h module on "Fabrication and imaging of nanostructures".
2006	Istituto Superiore Universitario di Formazione Interdisciplinare (ISUFI), Lecce	Whole course (30 h) in "Material analysis and modification at microscopic scale", including final written and oral exams

2002, 2003	University of Modena and Reggio Emilia	2 seminars (1 h each) on STM-AFM-SNOM, as a part of the course of Prof. Paolo Facci "Elements of Biophysics"
2000, 2001	University of Graz (Austria), Institute for Experimental Physics	Laboratory assistant of Physics I and Physics II in the course of Prof. Joachim Krenn (approx. 120 h total)

17. Institutional offices and roles in Italian and foreign Universities and/or public and private institutions with scientific and/or technology transfer aims

Responsible of research line unit for MURST project "Neural Networks assisted AFM learning", PNB-PST Elba, 1996-1998.

President of Tender Commission for the purchase of an EBL system (approx. cost 1.2 M€) for high-resolution lithography, which was installed at the iit Central Site of Genova Morego; 2007

Member of the Scientific Committee organizing IEEE 2009 Genova, International conference on Nanotechnology, Università di Genova, DIST; 26/7/09-30/7/09.

Member of Tender Commission for the purchase "in economia" of a Vis-NIR laser, which was installed at the iit unit of the Politecnico di Milano; 20/1/12

Member of the oral exam commission in Turin for the courses Physics I for Civilian and Industrial Engineering of the University e-Campus, (Prof.s Salvatore Motta e Luca Terenzi), 2015

Member of the Committee evaluating the Final PhD Exam of Giulia Romagnoli (Advisor Prof. Carla Gambaro) on "Micro-fabricated Silicon Devices for Advanced Thermal Management and Integration of Particle Tracking Detectors", Università di Genova, DIME; 18/3/16

Member of the Scientific Committee organizing TRACE 2017, International conference on "Tissue Regeneration: Advanced Ceramics and Composites", Università di Genova, DISC; 19/10/17-20/10/17.

Member of the Scientific Committee organizing Materials 2018, International conference, San Diego, 7/2/18-9/2/18.

Member of the Committee evaluating the Final PhD Exam of Catherine Grogan (Advisor Prof. Fiona Lyng) on "Micro-cantilever-based chemical sensors and biosensors", Centre for Radiation and Environmental Science, Dublin Institute of Technology, Dublin, Ireland; 12/4/19

Referee of national research project proposals submitted to the Czech Science Foundation (GRIS); reviewed projects on August 2019 (20-27960J "Nanoscale wear of 2- and 3-D materials"), July 2020 (21-33284S "Metal-oxide-based semiconducting nanorod arrays as emerging photoanodes for solar hydrogen generation"), August 2021 (22-17346S "Preparation and properties of nanoporous membranes with functionalized nanoparticles")

18. Web IDs

https://www.researchgate.net/profile/Marco-Salerno
https://orcid.org/0000-0003-4522-828X
https://www.webofscience.com/wos/author/record/E-8309-2011
https://www.scopus.com/authid/detail.uri?authorId=35325450600
https://scholar.google.com/citations?user=AepQU6gAAAAJ&hl=it
https://loop.frontiersin.org/people/114412/overview

19. Own equipment available for transfer

- AFM-like instrument NanoEducator (NT-MDT, Russia) for mainly educational purposes (value: ~10 k€);
- Leica StereoMicroscope with camera (value ~1 k€);
- various laboratory small equipment (hotplate with stirrer, ultrasonication bath, thermocryostat, HV DC power supply, micropipettes, spin-coater; overall value ~4 k€).

Genova, March 22nd, 2024