

Personal Data

Name Matteo
Surname Cialone
Date of birth 9th November 1985
Place of birth L'Aquila (Italy)
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Scopus stats Total publications: **20**; total citations: **112**; *h*-index: **8**.
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Work and education

- Present - **Research Fellow on applied superconductivity in the department of physics (DIFI)**, *University of Genova*, Genova, Italy.
2022
- 2022 - 2021 **Postdoctoral researcher on applied superconductivity in the group of SuPerconducting and other INnovative materials and devices institute (SPIN)**, *Consiglio Nazionale delle Ricerche (CNR)*, Genova, Italy.
- 2020 - 2019 **Postdoctoral researcher in the group of smart nanoengineered materials, nanomechanics and nanomagnetism (G-nm³)**, *Autonomous University of Barcelona*, Cerdanyola, Spain.
Project Involved in the framework of the SPIN-PORICS project (ERC Consolidator Grant, Agreement Nr. 648454 awarded to Prof. Jordi Sort)
- 2019 - 2015 **Ph.D. Chemistry and Materials Science - Awarded with honors**, *University of Torino & INRiM*, Torino, Italy.
Marie Curie research fellow - Smart Electrodeposited Alloys for Environmentally sustainable applications (SELECTA - H2020-MSCA-2014 Nr.642642)
- Thesis *Low dimensional dense and nanoporous Fe-based alloys for smart materials*
Supervisors Prof. Paola Rizzi & Dr. Paola Tiberto
2015 **M.Sc. Physics**, *Freie Universität Berlin*, Berlin, Germany.
Thesis *Photoemission electron microscopy study of multiferroics systems*
Supervisor Prof. Dr. Alexei Erko
Direct Dr. Florian Kronast & Dr. Sergio Valencia Molina
advisors
- 2011 **B.Sc. Physics**, *Università degli studi dell' Aquila*, L'Aquila, Italy.
Thesis *Experimental study of graphene oxide edges through electron microscopy and x-ray spectroscopy techniques*
Supervisors Prof. Luca Ottaviano & Prof. Gianni Profeta

Scientific Affiliations

- Present - **Università degli studi di Genova**, *Dipartimento di Fisica*, Università di Genova, Via Dodecaneso, 33, 16146, Genova.
Italia
- Present - **Consiglio Nazionale delle Ricerche**, *CNR - SPIN*, C.so Ferdinando Maria Perrone, 24, 16152, Genova.
Italia
- 2020 - 2022 **Universitat Autònoma de Barcelona**, *Departament de Física*, Bellaterra, 08193, Barcelona.
Spagna
- 2015 - 2019 **Università di Torino**, *Dipartimento di Chimica e NIS*, Via Pietro Giuria, 9, 10125, Torino.
Italia
- 2015 - 2019 **Istituto Nazionale di Ricerca Metrologica - INRIM**, *Divisione Nanoscienza e Materiali*, Strada delle Cacce, 91, 10135, Torino.
Italia
- 2014 - 2015 **Helmholtz-Zentrum Berlin fuer Materialien und Energie**, Albert-Einstein-Strasse 15, D-12489, Berlin.
Germania

Memberships of Scientific Societies

- Present - **The European Society for Applied Superconductivity (ESAS)**, *Affiliated*.
2023
- Present - **IEEE Council on Superconductivity - Young Professional**, *Affiliate*.
2022

Conferences and seminars

- 3-7/09/2023 **EUCAS conference**.
attendance of the European Conference on Applied Superconductivity, Bologna (Italy) - **Presentation of the poster** "Highly textured INVAR 36 substrates for low-cost and high-performance iron based superconductors". **Presentation of the poster** "Inter-filament resistance in MgB₂ wires: an experimental and numerical investigation." **Chair** of the session 3-MO-FM1 Fe-Based Materials.
- 14/06/2023 **Unige**.
Department of Chemistry, University of Genova, Genova (Italy) - **Invited seminar** "X-Ray Magnetic Circular Dichroism. Shedding light to explore the Magnetic worlds."
- 30/11-
1/12/2022 **IFW workshop**.
attendance of joint workshop IFW Dresden - University of Genova, Superconducting and Topological Materials, Dresden (Germany) - **Invited talk** "Development of a simple architecture for the realization of Fe(Se,Te) coated conductors".
- 23-
28/10/2022 **ASC conference**.
attendance of the Applied Superconductivity Conference, Honolulu (USA) - **Contributed talk** "Highly textured metallic substrates for high-performance and low-cost iron based superconductors".
- 13-
15/10/2021 **iWOE conference**.
attendance of the International Workshop on Oxide Electronics, Genova (Italy) - **Contributed talk** "Voltage-induced ON switching of magnetism in ordered array of nanoporous iron oxide microdisks".
- 11-
13/04/2021 **Materials challenges conference**.
attendance of the Materials Challenges for Memory, virtual conference - **Presentation of the poster** "Electric-field control of magnetism in arrays of nanoporous iron oxide microdisks".
- 7-
11/12/2020 **JEMS conference**.
attendance of the Joint European Magnetic Symposia, Lisboa (held virtually) - **Contributed talk** "Control of Magnetism in Porous Iron Oxide Films and Nanostructures via Electric Field Induced Magneto-Ionic Effect".

- 26- **Heraeus Seminar.**
 29/1/2020 attendance of the Energy Efficient Magnetolectric Materials by Ionic Approaches: Fundamentals, Challenges and Perspectives, Bad Honnef (Germany) - **Presentation of the poster** "Magnetolectric effects in nanoporous CoPt microstructures".
- 30/1 - **MAGNET conference.**
 1/2/2018 attendance of the Italian Conference on Magnetism, Messina (Italy) - **Contributed talk** "Magnetic force microscopy study of electrodeposited FePd sub-micron structures" .
- 3-7/9/2018 **JEMS conference.**
 attendance of the Joint European Magnetic Symposia, Mainz - **Contributed talk** "Magnetization reversal in electrodeposited FePd sub-micron structures" .
- 15- **ICM conference.**
 20/7/2018 Attendance of the International Conference on Magnetism, San Francisco (USA) - **Presentation of the poster** "Influence of deposition techniques on the magnetic properties and microstructure of FePd thin films". **Presentation of the poster** "Innovative technique for thin films magnetostriction measurements by scanning probe microscopy".
- 18- **ISMAMAM conference.**
 23/6/2017 Attendance of the 24th international symposium on metastable, amorphous and nanostructured materials, San Sebastian (Spain). **Presentation of the poster** "Comparative study of sputtered and electrodeposited FePd thin films".
- 12- **EMSA conference.**
 15/7/2016 Attendance of the 11th European magnetic sensors and actuators conference, Torino (Italy). **Presentation of the poster** "Structural and magnetic characterization of Fe_{1-x}Pd_x thin films".
- 20- **DPG conference.**
 15/5/2015 Attendance of the 79th Deutsche Physikalische Gesellschaft spring meeting in Berlin (Germany). **Presentation of the poster** "Photoemission electron microscopy of two phase multiferroics system".
- [Conference as organizer](#)
- 18- **Graphita.**
 15/6/2011 Organization and attendance of Graphita Workshop, a multidisciplinary and intersectorial European conference/workshop on synthesis, characterization and technological exploitation of Graphene, held at Laboratori Nazionali del Gran Sasso - Assergi - L'Aquila.

Publications

- A. Vannozi, L. Piperno, A. Rufoloni, S. Botti, F. Bonfigli, M. Iebole, L. Savio, M. Cialone, A. Masi, A. Mancini, A. Augieri, G. Celentano, V. Braccini, M. Putti - *Zr:CeO₂ buffer by CSD on Ni-W substrate for low-cost Fe(Se,Te) coated conductor.* - IEEE Transactions on Applied Superconductivity (2024) - **DOI:** 10.1109/TASC.2024.3354220
- L. Rossi, et al. [including M. Cialone] - *IRIS - a new distributed research infrastructure on applied superconductivity.*- IEEE Transactions on Applied Superconductivity (2023) - **DOI:** 10.1109/TASC.2023.3341984
- D. Raj, G. Barrera, F. Scaglione, F. Celegato, M. Cialone, M. Coisson, P. Tiberto, J. Sort, P. Rizzi, E. Pellicer - *Electrochemical Synthesis, Magnetic and Optical Characterisation of FePd Dense and Mesoporous Nanowires.*- Nanomaterials **13** (2023) - **DOI:**10.3390/nano13030403
- L. Piperno, A. Vannozi, A. Augieri, A. Masi, A. Mancini, A. Rufoloni, G. Celentano, V. Braccini, M. Cialone, M. Iebole, N. Manca, A. Martinelli, M. Meinero, M. Putti, A. Meledin - *High-performance Fe(Se,Te) films on chemical CeO₂-based buffer layers.*- Scientific Reports **13** (2023) - **DOI:** 10.1038/s41598-022-24044-5
- Z. Tan, J. de Rojas, S. Martins, A. Lopeandia, A. Quintana, M. Cialone, J. Herrero-Martín, J. Meersschart, A. Vantomme, J. Costa-Krämer, J. Sort, E. Menéndez, Enric - *Frequency-dependent stimulated and post-stimulated voltage control of magnetism in transition metal nitrides: towards brain-inspired magneto-ionics.*- Material Horizons (2022) - **DOI:** 10.1039/D2MH01087A

- D. Torsello, M. Fracasso, R. Gerbaldo, G. Ghigo, F. Laviano, A. Napolitano, M. Iebole, M. Cialone, N. Manca, V. Braccini, A. Leo, G. Grimaldi, A. Vannozzi, G. Celentano, E. Silva, M. Putti, L. Gozzelino- *Proton irradiation effects on the superconducting properties of Fe(Se,Te) thin films*. Transactions on Applied Superconductivity, **32(4)** (2022) - DOI: 10.1109/TASC.2021.3136135
- L. Piperno, A. Vannozzi, V. Pinto, A. Augieri, A. Angisani Armenio, F. Rizzo, A. Mancini, A. Rufoloni, G. Celentano, V. Braccini, M. Cialone, M. Iebole, N. Manca, A. Martinelli, M. Putti, G. Sotgiu, A. Meledin - *Chemical CeO₂ -based buffer layers for Fe(Se,Te) films*. Transactions on Applied Superconductivity, **32 (4)** (2022) - DOI: 10.1109/TASC.2022.3142709
- S. Martins, J. de Rojas, Z. Tan, M. Cialone, A. Lopeandia, J. Herrero-Martin, J. L. Costa-Kramer, E. Menendez, J. Sort - *Dynamic electric-field-induced magnetic effects in Cobalt oxide thin films: towards magneto-ionic synapses* . Nanoscale **3(14)** (2022) - DOI: 10.1039/D1NR06210G
- G. Barrera, F. Celegato M. Cialone, M. Coisson, P. Rizzi, P. Tiberto - *Effect of the Substrate Crystallinity on Morphological and Magnetic Properties of Fe₇₀Pd₃₀ Nanoparticles Obtained by the Solid-State Dewetting*.- Sensors **21 (21)** (2021) - DOI: 10.3390/s21217420
- M. R. Khan, A. Leo, A. Nigro, A. Galluzzi, M. Polichetti, V. Braccini, M. Cialone, M. Scuderi, G. Grimaldi - *Effective Magnetic Field Dependence of the Flux Pinning Energy in FeSe_{0.5}Te_{0.5} Superconductor* .- Materials **14 (18)** (2021) - DOI: 10.3390/ma14185289
- G. Barrera, F. Celegato M. Cialone, M. Coisson, P. Rizzi, P. Tiberto - *Structural, wetting and magnetic properties of sputtered Fe₇₀Pd₃₀ thin film with nanostructured surface induced by dealloying process*.- Nanomaterials **11(2)** (2021) - DOI:10.3390/nano11020282
- M. Cialone, F. Celegato, F. Scaglione, G. Barrera, D. Raj, M. Coisson, P. Tiberto, P. Rizzi - *Nanoporous FePd alloy as multifunctional ferromagnetic SERS-active substrate*.- Applied Surface Science **53** (2021) - DOI:10.1016/j.apsusc.2020.148759
- M. Cialone, A. Nicolenco, S. Robbenholt, E. Menendez, G. Rius, J. Sort - *Voltage-induced ON switching of magnetism in ordered arrays of non-ferrimagnetic nanoporous iron oxide microdisks*. - Advanced Materials Interfaces **8** (2021) - DOI:10.1002/admi.202001143
- G. Barrera, F. Celegato, M. Cialone, M. Coisson, P. Rizzi, P. Tiberto - *Role of the substrate crystallinity on morphological and magnetic properties of Fe₇₀Pd₃₀ nanoparticles obtained by the solid-state dewetting*. . Sensors, **21(21)** (2021) - DOI:10.3390/s21217420
- E. Dislaki, M. Cialone, F. Celegato, P. Rizzi, P. Tiberto, S. Vadilonga, D. Töbrens, J. Sort, E. Pellicer - *Unraveling the properties of sharply defined submicron scale FeCu and FePd magnetic structures fabricated by electrodeposition onto electron-beam-lithographed substrates*. - Materials & Design **193** (2020) - DOI: 10.1016/j.matdes.2020.108826
- M. Coisson, W. Hüttenes; M. Cialone, G. Barrera, F. Celegato, P. Rizzi, Z. H. Barber, P. Tiberto - *Measurement of thin film magnetostriction using field-dependent atomic force microscopy*. - Applied Surface Science **52** (2020) - DOI: 10.1016/j.apsusc.2020.146514
- M. Cialone, M. Fernandez-Barcia, F. Celegato, M. Coisson, G. Barrera, M. Uhlemann, A. Gebert, J. Sort, E. Pellicer, P. Rizzi, P. Tiberto. - *A comparative study of the influence of the deposition technique (electrodeposition versus sputtering) on the properties of nanostructured Fe₇₀Pd₃₀ films*. Science and Technology of Advanced Materials **21(1)** (2020) - DOI: 10.1080/14686996.2020.1780097
- G. Barrera, F. Scaglione, M. Cialone, F. Celegato, M. Coisson, P. Rizzi, P. Tiberto - *Structural and Magnetic Properties of FePd Thin Film Synthesized by Electrodeposition Method*. Materials **13(6)** (2020) - DOI:10.3390/ma13061454
- G. Barrera, F. Celegato, M. Coisson, M. Cialone, P. Rizzi, P. Tiberto - *Formation of free standing magnetic particles by solid state dewetting of Fe₈₀Pd₂₀ thin films*. Journal of Alloys and Compounds **742** (2018) - DOI:10.1016/j.jallcom.2018.01.373

- M. Cialone, F. Celegato, M. Coisson, G. Barrera, G. Fiore, R. Shvab, U. Klement, P. Rizzi, P. Tiberio. - *Tailoring magnetic properties of multicomponent layered structure via current annealing in FePd thin films*. Scientific Reports **7** (2017) - DOI: 10.1038/s41598-017-16963-5
- A. Palau, S. Valencia, N. Del-Valle, C. Navau, M. Cialone, A. Arora, F. Kronast, D.A. Tennant, X. Orbadós, A. Sanchez, T. Puig - *Encoding Magnetic States in Monopole-Like Configurations Using Superconducting Dots*. Advanced Science **3(11)** (2016) - DOI:10.1002/advs.201600207

Patents

- J.Sort, E. Manendez, M. Cialone, V. Sireus, A. Nicolenco, J. de Rojas, G. Rius - *A magneto-electric device and uses of the magnetolectric device*. European Patent nr. EP3940702A1.

Participation in Research Projects

As principal investigator

- 18 - **Synchrotron proposal.**
24/10/2021 Awarded with 144 hours of beamtime for the *Structural studies of superconducting Fe(Se,Te) microstructures via X-ray diffraction* (REF. Nr. 18207390), at KMC2 beamline, BESSY II storage ring, Berlin. Germany. Project budget \simeq 65000 e
- 23 - **Synchrotron proposal.**
26/5/2021 Awarded with 72 hours of beamtime for the *Unraveling the origin of magnetoelectric effects on arrays of ordered nanoporous iron oxide microdisks* (REF. Nr. 2020094553), at BOREAS beamline, ALBA synchrotron light facility, Bellaterra, Spain. Project budget \simeq 50000 e
- 8 - **Synchrotron proposal.**
12/5/2020 Awarded with 72 hours of beamtime for the *Unraveling the origin of magnetoelectric effects in nanoporous iron oxide thin films* (REF. Nr. 25376), at I10 beamline, Diamond light source, Oxfordshire, United Kingdom.
- 10 - **Synchrotron proposal.**
16/5/2019 Awarded with 144 hours of beamtime for the *Structural studies of electrodeposited FePd and FeCu nanostructures via X-ray diffraction* (REF. Nr. 18207390), at KMC2 beamline, BESSY II storage ring, Berlin. Germany. Project budget \simeq 65000 e

As investigator

- Present - **Research and Innovation Operational Program.**
1/2/2023 National Research and Innovation Operational Program. Research on innovation topics.(DM 1062)
Principal investigator: Dr. M. Putti
- 3 - 9/6/2023 **Synchrotron proposal.**
Awarded with 168 hours of beamtime for the *Investigation of the magnetic correlations in the novel Eu_2Pd_2Sn compound by XANES and XMCD* (REF. Nr. HC5212), at ID12 beamline, ESRF, Grenoble. France. **Principal investigator:** Dr. A. Martinelli
- 13 - **Synchrotron proposal.**
20/6/2022 Awarded with 168 hours of beamtime for the *Investigation of the magnetic correlations in the novel $EuPdSn_2$ compound by XANES and XMCD* (REF. Nr. HC4799), at ID12 beamline, ESRF, Grenoble. France. **Principal investigator:** Dr. A. Martinelli
- 2020-2021 **HiBISCUS.**
High performance-low cost iron based coated conductors for high field magnets. Financed by the Ministero dell'istruzione, dell'università e della ricerca (Agreement PRIN 2017). **Principal investigator:** Prof. M. Putti (CNR-SPIN coordinator: Dr. V. Braccini)
- 2019-2020 **SPINPORICS.**
Merging Nanoporous Materials for Energy-Efficient Spintronics. Financed by the European Research Council (Consolidator Grant - Agreement Nr. 648454). **Principal investigator:** Prof. J. Sort
- 2015-2018 **SELECTA.**
Smart ELECTrodeposited Alloys for environmentally sustainable applications: from advanced protective coatings to micro/nano-robotic platforms. Financed by the European Commission (Marie Skłodowska-Curie Innovative Training Networks (ITN-ETN - H2020-MSCA-2014 Nr.642642). **Principal investigator:** Prof. J. Sort

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Birth date 09 November 1985

Main collaborations

- Dr. T. Spina at ASG superconductors, MgB₂ unity. Research and development group. Genova, Italy.
- Prof. M. Breschi's group at the electric energy and data science at the University of Bologna, Bologna, Italy.
- Prof. J. Sorts' group at the Physics Department of Universitat Autònoma de Barcelona, Bellaterra, Spain.
- Prof. P. Rizzi's group at Chemistry department and NIS of the University of Torino, Italy.
- Dr. P. Tiberto's group at Italian Institute for Metrological Research (INRiM), Torino, Italy.
- Prof. E. Silva's group at Department of Industrial, Electronic and Mechanical Engineering, University of Roma tre, Roma, Italy.
- Dr. G. Celentano's group at ENEA, Frascati Research Center, Rome, Italy.
- Prof. L. Gozzelino's group at Department of Applied Science and Technology, Politecnico di Torino, Torino, Italy.
- Prof. M. Putti's group at Physics department of the University of Genova, Italy.
- Dr. G. Riuss from the microelectronic institute of Barcelona (IMB-CNM-CSIC), Spain.
- Dr. A. Nicolenco from the Institute of Applied Physics, Chisinau, Moldova.
- Prof. Z.H. Barber's group from the Device Materials group at University of Cambridge, Cambridge, United Kingdom.
- Dr. A. Gebert's group from the Department of functionals materials of the Leibniz Institute for Solid State and Material Research, Dresden, Germany.

Stays in public or private research centres and universities

- 1/5/2019 - **Universitat Autònoma de Barcelona**, *Department of physics, Cerdanyola*, Spain.
- 31/12/2020 - Secondment with the task of the synthesis of sub-micron FePd structures via electrodeposition into pre-patterned substrates.
- 9/1 - **Leibniz Institute for solid state and materials research**, *Department of chemistry of functional materials, Dresden*, Germany.
- 10/3/2017 - Secondment with the task of developing of a suitable electrolyte for the electrodeposition of FePd. Electrodeposition of FePd thin films with tunable stoichiometry.
- 28/11 - **Chalmers University of Technology**, *Department of Industrial and Materials Science, Goteborg*, Sweden.
- 9/12/2016 - Secondment with the task of studying the composition of FePd thin films via X-ray photoemission spectroscopy.
- 1/5/2014 - **Helmholtz Zentrum Berlin**, *BESSY II storage ring, Berlin*, Germany.
- 30/7/2015 - Student assistant with the task of supporting the research activities at the S-PEEM end station of UE49 - PGM beamline. Design and development of dedicated sample holders for custom experiments.
- 1/4 - **Brandenburg University of Technology**, *Department of mathematics, natural science and computer science, Cottbus*, Germany.
- 30/7/2012 - Research project "Graphene - Writing graphene: ion-beam modification of thin polymer layer" with the main task of maintenance and improvement of a scanning tunneling microscope with the scope to develop a system capable to perform in-situ characterization of atomic layer deposited thin films.
- A.Y. **Student assistant**, *University of L'Aquila, L'Aquila*, Italy.
- 2009/2008 - Support to the activity of Center for Electron Microscopy of University of L'Aquila.
- 1/10/2007 - **Technical University of Wien**, *Department of applied physics, Wien*, Austria.
- 1/04/2008 - Erasmus of six month during which I was involved in a project work on surface analysis. Analysis of surface of Solid Oxides Fuel Cells were analyzed by means of x-ray photoemission electron spectroscopy.

Trainings

- 21 - **Italian School on Magnetism**, *University of Torino, Torino, Italy*.
25/5/2018 Attendance of the Italian school of magnetism in advanced magnetic materials and devices for biomedical applications. Presentation of the poster "Magnetic force microscopy study of the magnetization reversal in electrodeposited FePd sub-micron structures".
- 7/1 - **Winter school**, *University of Cambridge, Cambridge, United Kingdom*.
12/1/2018 Gateway to industry: Introducing materials to market. Practical aspects. Contributed as speaker.
- 3 - 7/9/2017 **Summer school**, *University of Ioannina, Ioannina, Greece*.
Gateway to Academics: Materials modelling for target applications. Contributed as speaker.
- 3 - 7/9/2017 **Workshop**, *Chalmers University of Technology, Goteborg, Sweden*.
Bridging innovation and entrepreneurship with sustainable materials development. Contributed as speaker.
- 29/5 - **Crystallography school**, *University of Torino, Interdepartmental Centre for Crystallography (Crisdi), Torino, Italy*.
7/6/2017 Attendance of the basic and advanced courses.
- 29 - **Workshop**, *Happy Plating, Wiener Neustadt, Wien, Austria*.
31/08/2016 Micro and nano-electrodeposition for MEMS/NEMS and micro/nano-robotic platforms. Overview of lithography methods. Impact to society. Contributed as speaker.
- 6 - **Workshop**, *IFW, Dresden, Germany*.
10/03/2016 Training on research methodologies, characterization techniques and reporting scientific results. Contributed as speaker.
- 3 - **Workshop**, *University of Kragujevac, Vrnjacka Banja, Serbia*.
7/11/2015 Fundamentals of electrodeposition of metallic alloys: state-of-the-art at European and International levels. Contributed as speaker.

Trainings in soft skills

- 6 - 7/7/2023 **Horizon Europe - ERC Masterclasses**, *University of Genova, Genova, Italy*.
Trainer: Dr. Marco Ferraro
- 7 - **Interview skills**, *University of Cambridge, Cambridge, United Kingdom*.
12/1/2018 Trainer: Ms. Katie Hewitt
- 3 - 7/9/2017 **Competitive Grant Writing**, *University of Ioannina, Ioannina, Greece*.
Trainer: Ms. Lotte Jaspers, Yellow Research
- 29 - **How to write scientific papers**, *Happy Plating, Wiener Neustadt, Wien, Austria*.
31/08/2016 Trainer: Prof. Lindsay Greer, editor of Philosophical Magazine
- 6 - **Effective oral presentations**, *IFW, Dresden, Germany*.
10/03/2016 Trainer: Mr. Jean-Luc Doumont, Principia
- 3 - **EURAXESS network**, *University of Kragujevac, Vrnjacka Banja, Serbia*.
7/11/2015 Internationalization of research, bridging scientific research environment between Eastern and Western Europe. Trainer: Prof. Dr. Miroslav Trajanovic - Serbia EURAXESS network, Researchers in Motion, pan-European initiative

Teaching activities

- A.Y. **Course lecturer**, *Teaching activity for the General Physics course of the degree in marine engineering. University of Genova, Genova, Italy, 12 CFU*.
2022/2023 & 23/24
- A.Y. **Course lecturer**, *Teaching activity for the Physics 1 course of the degree in management engineering. University of Genova, Genova, Italy, 6 CFU*.
2022/2023 & 23/24
- A.Y. **Tutoring**, *Tutoring activity for the General Physics 2 course of the degree in Material science. University of Genova, Genova, Italy, 6 CFU*.
2021/2022

Students supervision and trainings

- A.Y. **Ph.D. Student**, *University of Genova, department of physics*, Genova, Italy.
2023/2025
Title Study of the properties of superconducting wires for high field magnets for future particle accelerators
Student Michela Bracco
- A.Y. **Bachelor thesis**, *University of Genova, department of physics*, Genova, Italy.
2022/2023
Title Study of high-temperature thallium-based superconductors
Student Nuredin Geziqi
- A.Y. **Bachelor thesis**, *University of Genova, department of physics*, Genova, Italy.
2022/2023
Title Optimization of iron-based superconductive powders of the Ba-122 family
Student Massimiliano de Fecondo
- A.Y. **Training**, *Universitat Autònoma de Barcelona, Cerdanyola*, Spain.
2019/2020 Training of the students of the early stage researcher students of the **mCBEEs** ITN on the Vibrating-sample Magnetometer (VSM).
- A.Y. **Master thesis**, *University of Turin, department of physics*, Torino, Italy.
2018/2019
Title Preparation of nanosystems for biomedical applications by physical techniques and study of their magnetic and hyperthermic properties.
Student Valerio Vallana
- A.Y. **Bachelor thesis**, *University of Turin, department of chemistry*, Torino, Italy.
2018/2019
Title Synthesis, characterization and dealloying of thin films of Fe₇₀Pd₃₀.
Student Giuliana Ducano
- A.Y. **Master thesis**, *University of Turin, department of chemistry*, Torino, Italy.
2017/2018
Title Synthesis and characterization of FePd thin films for magnetic applications.
Student Vanessa Bordignon

Institutional responsibilities

- 2023 **Guest Editor**.
Special Issue *Application of Electric Fields in Controlling the Properties of Ferromagnetic Materials*.
Magnetochemistry (ISSN 2312-7481)
- 2023 **Board member**.
Member of the selection board for a postdoctoral fellowship, National Research Center (CNR), Genova, Italy
- 2023 **Committee member**.
Member of the evaluation committee for the applicants to the XXXIX cycle of Ph.D. in physics. University of Genova
- 2022 **Proposal Reviewer**.
Reviewer for the OPUS funding opportunity (CallID **43 2021-12-15**) of the National Science Center of Poland
- 2018-present **Reviewer**.
Reviewer for the journal *Materials Chemistry and Physics*

- 2019-present **Reviewer.**
Reviewer for the journal Applied Surface Science
- 2015-2018 **Students representative.**
Representant of the student in the framework of the MSCA-ETN Action SELECTA with responsibility on the project management
- 2015-Present **MCAA.**
Member of the Marie Curie Alumni Association

Awards and professional recognitions

- April 2023 **CNR qualification as technologist.**
Qualification as technologist for the SPIN institute, call n. 367.357. Overall score of 79/100
- February 2019 **Journal front cover.**
Front Cover of the *IEEE Transactions on Magnetics*, February 2019, Volume 55, Number 2
- November 2018 **Journal front cover.**
Front Cover of the *IEEE Transactions on Magnetics*, November 2018, Volume 54, Number 11
- April 2018 **INTERMAG conference.**
Awarded with the "People's choice" prize in the "Art in magnetism" contest for the image *My nano sunflowers*
- July 2018 **ICM conference.**
Awarded with the "Judge's choice" prize in the "Magnetism as Art Showcase" contest for the image *One explosion*
- July 2018 **ICM conference.**
Awarded with a student travel grant for the attendence of the international conference on magnetism in San Francisco

Personal Skills

Good problem solving skills gained all along training and educational path.

Good organizational skills gained as organizer of both cultural and scientific events.

Good attitude in working in team and in an international environment gained during work and educational experiences abroad.

Knowledge of different operating systems, in particular Linux (mainly Ubuntu distribution).

Knowledge of different software for data and image analysis (mainly ImageJ and Gwiddion).

General knowledge of photo editing and graphics software. Basic attitude in code writing (mainly bash and python for the data analysis).

Languages

- Italian **Mother tongue**
- English **Proficient user (C1)**
- Spanish **Independent user (B2)**
- Catalan **Independent user (B1)**
- German **Basic user (A2)**

Interests

- Travels
- Technology
- Cooking
- Enology