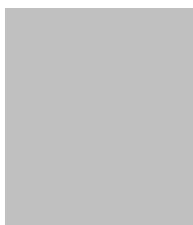


# CV

## PERSONAL INFORMATION

Andrea Malagoli



<https://www.spin.cnr.it/people/researchers/malagoli-andrea>

Enterprise	University	EPR
<input type="checkbox"/> Management Level	<input type="checkbox"/> Full professor	<input checked="" 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 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

January 2021 - present

### 2nd level Technologist

CNR-SPIN, Genova, I

May 2019 - present

### Deputy Director of the Genoa Unit

CNR-SPIN, Genova, I

March 2010 – March 2011

### Visiting Scientist / Researcher at

Applied Superconductivity Center, NHMFL, Tallahassee, FL, USA

April 2008 – December 2020

### Level III Technologist (permanent position)

CNR-SPIN, Genova, I

May 2003 – March 2008

### Level III Technologist (tenure track)

INFM - LAMIA, Genova, I

May 2001 – April 2003

### Research Scientist (fixed-term)

INFM - LAMIA, Genova, I

in the framework of the European Project GSRD CT 2000 426 "BIGPOWA".

September 1999 – April 2001

### Fellowship

INFM, Genova, I

## EDUCATION AND TRAINING

April 2005

### PhD in Material Science

University of Genova, I

July 1999

### Degree (Laurea, 4 years curriculum) in Physics

University of Genova, I

## PERSONAL SKILLS

Mother tongue

Italian

Other Languages

English: English Independent User B2

Job-related skills

- Expert representative for CNR in Comitato CT/90 "Superconduttività" del Comitato Elettrotecnico Italiano
- Editor for Journal of Physics: conference series (JPCS) of IOP  
<https://iopscience.iop.org/article/10.1088/1742-6596/507/0/001001>
- Key-note talk at European Conference on Applied Superconductivity, EUCAS2017, Geneva, Switzerland, 2017
- Selected lecture at CIMTEC06, Catania, Italy, 2006
- Invited talk at WAMHTS- Workshop on Accelerator Magnets in HTS, Hamburg, Germany, 2014
- Invited talk at International Conference on Superconductivity and Magnetism, ICSM2016, Fethiye,

	<p>Turkey, 2016.</p> <ul style="list-style-type: none"> <li>- Invited talk at 15th International Conference on Advanced Materials, IUMRS-ICAM, Kyoto, Japan, 2017</li> <li>- Invited talk at INFN ELOISATRON PROJECT 61st Workshop: Industrialization of Critical Technical Sub-systems of a 100 TeV Collider, Erice, Italy, 2019.</li> <li>- Invited talk at MRS-Spring 2022, Honolulu, Hawaii, US</li> </ul>
Technology Transfer skills	<ul style="list-style-type: none"> <li>- Co-founder of the INFM-CNR Spin-off "Columbus Superconductors" for the development of Superconducting MgB2 wires and tapes, 2002. Now it is a unit within ASG Superconductors SpA.</li> <li>- International Patents               <ol style="list-style-type: none"> <li>1. "Method including a heat treatment of manufacturing superconducting wires based on MgB2 with improved properties in the presence of a static magnetic field", by G Grasso, <u>A Malagoli</u>, Patent Nr. Pct/ep 02/11567, 16/10/2002, Appl. N.US20040492791 20040416.</li> <li>2. "Superconducting composite wire made from Magnesium Diboride", by G Grasso, <u>A Malagoli</u>, A S Siri, Patent Nr. Pct/it 2004/000437, 30/07/2004, Pub. No. WO2006011170.</li> </ol> </li> </ul>
Higher Education & Training skills	<ul style="list-style-type: none"> <li>- Holder of the teaching course "Technology of Superconducting wires, tapes and cables", PhD school in Physics at the University of Genova, Academic Years 2020 - 2021 - 2022</li> <li>- Supervisor of 1 PhD Thesis in Material Science, 1 PhD Thesis in Physics, 1 Master Thesis in Physics, 3 Master Thesis in Material Science, 1 Degree Thesis in Material Science</li> <li>- Member of the Scientific and Organizing Committee of the International workshop on "Iron-based Superconductors: advances towards applications" (IBS2app), 2020; Member of the Organizing Committee of SuperFox2020, 5th Conference on Superconductivity and Functional Oxides, 2020; Member of the Organizing Committee and Program Committee of the 11th European Conference on Applied Superconductivity EUCAS 2013</li> </ul>
Project Management skills	<ul style="list-style-type: none"> <li>- Head of the project "Facility per la qualifica di materiali superconduttori in alto campo magnetico" P.O.R. FESR LIGURIA 2014-2020 – Asse 1 "Ricerca ed Innovazione" - Azione 1.5.1 – "Sostegno alle infrastrutture di Ricerca considerate critiche/cruciali per i sistemi regionali" 2020-2022</li> <li>- Principal Investigator of the project: "Accordo di collaborazione tra DSFTM e SPIN per lo svolgimento di attività di studio e ricerca finalizzate alla realizzazione del progetto IGNITOR"</li> <li>- Work Package Leader in the project "Alternative HTS wires" within the Enabling Research Program of the EUROfusion Consortium; Euratom research and training programme 2014-2018 under grant agreement No 63305301, 2017-2018</li> <li>- Principal Investigator in the sub-project "New processing concept for Bi-2212 wires" within the Addendum FCC-GOV-CC-0086, EDMS 1750320 to the Memorandum of Understanding for the FCC study with CERN, 2017-2020</li> <li>- Head of the project "Transport properties of MgB2 superconducting wires with improved behaviour in high magnetic field"; 7th framework European program "Transactional Access" - EuroMagNET II, 2007 - 2009</li> <li>- Head of the "Programma di ricerca per l'affinamento delle proprietà superconduttive di nastri di diboruro di magnesio e per ottenere nastri/fili prototipi"; funded by Columbus Superconductors S.p.A.; 2006-2009</li> </ul>
Other skills	<ul style="list-style-type: none"> <li>- Powder-In-Tube (PIT) technique for the fabrication of superconducting wires and tapes and metallurgic techniques</li> <li>- Solid state reactions for synthesis of powders of superconductors.</li> <li>- X-ray diffraction (XRD) for characterization of powders and tapes.</li> <li>- Transport properties characterization of samples vs. temperature and magnetic field (resistivity, magnetoresistivity, use of PPMS, transport critical current by I-V characteristics vs. temperature and field, AC transport measurements). I built three new sample holders working in the 13T magnet at GHMFL, Grenoble (F) and in a 7T magnet at CNR-SPIN at variable temperature (4.2K – 40K).</li> <li>- Magnetic properties characterization (magnetization, critical current, use of SQUID).</li> </ul>

## ADDITIONAL INFORMATION

Projects	<ul style="list-style-type: none"> <li>-European Projects GSRD CT 2000 426 "BIG POWA" and GSRD-CT-2000-00219 "SUITABLE" on Bi-2223</li> <li>- GSRT-CT-2002-005077 "SCENET 2"; EU-FP6 STRP NMP3-CT-2004-505724 "HIPERMAG" on MgB2</li> <li>- "MgB2: from microscopic mechanisms to large scale applications" funded by the Italian Foreign Affairs</li> </ul>
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Ministry (MAE) – General Direction for the Cultural Promotion and Cooperation in the framework of the scientific and technological bilateral cooperation Italy – USA, years 2008 and 2009

- VHFSMC – Very High Field Superconducting Magnet Collaboration U.S. DOE funded project

- FP7-NMP-2011-EU-Japan GA n. 283204 “SUPER-IRON” 2011-2014 on Fe-based superconductors

- HIBiSCUS - High performance-low cost Iron BaSed Coated conductorS for high field magnets, PRIN Bando 2017, Prot. 201785KWLE, 2019 - 2023

- Publications Bibliografic metric: 65 publications on peer-reviewed journals (database: scopus); 2072 citations; h-index: 22
- Leveratto A. *et al.* Sci Rep 11 (2021), 11660 DOI 10.1038/s41598-021-91222-2
  - AAbada et al., Eur Phys J C 79 (2019) 474 DOI 10.1140/epjc/s10052-019-6904-3
  - Pallecchi I. *et al.* Supercond Sci Technol, 28 (2015), 114005, DOI 10.1088/0953-2048/28/11/114005
  - Malagoli A. *et al.* J Appl Phys, 104 (2008) 103908, DOI 10.1063/1.3021468
  - Malagoli A. *et al.* Supercond Sci Technol, 22 (2009) 105017, DOI 10.1088/0953-2048/22/10/105017
  - Grasso G. *et al.* Appl Phys Lett 79 (2001) DOI 10.1063/1.1384905
  - Malagoli A. *et al.* Supercond Sci Technol, 24 (2011) 075016, DOI 10.1088/0953-2048/24/7/075016
  - Malagoli A. *et al.* Supercond Sci Technol, 23 (2010) 025032, DOI 10.1088/0953-2048/23/2/025032
  - Malagoli A. *et al.* Supercond Sci Technol, 28 (2015) 095015, DOI 10.1088/0953-2048/28/9/095015
  - Malagoli A. *et al.* Supercond Sci Technol 26 (2013) 045004, DOI 10.1088/0953-2048/26/4/045004
  - Book Chapter: A Malagoli and V Braccini “MgB2 wires fabricated using the ex situ technique”, Chapter 4b in “MgB2 superconducting wires, Basics and applications”, ed. by R. Flukiger, published by World Scientific in Applications of Superconductivity and Related Phenomena, vol. 2 (2016)
  - 1 Book: I Pallecchi, V Braccini, A Malagoli “I materiali superconduttori per le applicazioni su larga scala” ed. by inriga edizioni (2022)

- Collaborations INFN - Istituto Nazionale per la Fisica Nucleare  
Unige-DIFI  
ENEA - Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile  
CERN - European Organization for Nuclear Research