

Curriculum Vitae of Massimo Solzi (2018)

Personal data of Massimo Solzi

- Born in Soresina (CR), December 14, 1959.

Education

- 1988: *Diploma* degree of the Speciality in Science and Technology of Materials, at the University of Parma
- 1984: *Laurea* degree in Physics (Solid State Physics) at the University of Parma.

Experience

- 1990-2004: Research Associate in General Physics at the Faculty of Engineering of the University of Parma.
- 1989-1990: CNR Research Associate with a forward contract at the MASPEC-CNR Institute, Parma.
- 1988: Research Grant given by Tecinter (Olivetti group, Ivrea)
- 1986-1987: Research Fellow at the MASPEC-CNR Institute, Parma.

Present position

- 2004-: Associate Professor of Experimental Physics at the Department of Mathematical, Physical and Computer Sciences, University of Parma. The research activity is carried out in the frame of the Parma Research on Magnetism Laboratory (PaRMA).
- Member of the Consorzio Nazionale Interuniversitario per le Scienze Fisiche della Materia (CNISM), of the Italian Magnetism Association (AIMagn) and associated to IMEM-CNR with a research assignment.

Teaching and tutoring activity

- 2004-: General Physics Courses of Graduation Classes in Physics and in Mathematics at the University of Parma;
- 2014-: "Highlights in Condensed Matter Physics" Course of Graduation Class in Physics;
- 2006-2014: Laboratory of General Physics Course of Graduation Class in Physics;
- 2004-2012: Laboratory of Magnetism and Magnetic Materials Courses for the second cycle degrees in Physics of Matter and in Science and Technology of Materials;
- 1990-2004: General Physics Courses of Graduation Classes in Electronic, Telecommunication and Computer Science Engineering;
- 2004-2015: Supervisor of 13 theses for the first cycle and 12 theses for the second cycle degrees in Physics and in Science and Technology of Materials; 5 PhD theses in Physics and in Science and Technology of Materials;
- Supervisor of 5 Post-doc research fellows;

Research interests

- Magnetic properties and magnetic phase transitions of high-anisotropy materials: rare-earth intermetallic compounds
- Design of instruments for the measurement of magnetic and magneto-thermal quantities
- Materials showing magnetocaloric effect with application in the field of magnetic refrigeration: Heusler alloys
- Ferromagnetic and ferroelectric properties of multiferroic compounds, in particular perovskite oxides
- Magnetization processes in nanostructured magnetic materials (thin films, exchange-spring multilayers, nanoparticles): experimental study and development of micromagnetic models

Publications and Conferences (2018)

- 131 papers published on international peer-reviewed journals; 13 chapters and articles on books; 122 presentations at international and 68 at national Conferences.

Recent research project

- 2016-2018: participation to a Regional Project POR-FESR 2014-2020 on Magnetic Refrigeration.
- 2011-2013: MS was responsible of a Research Project funded by the Fondazione Cariparma, "Multifunctional materials for applications in spintronics and magnetic recording".
- 2010-2012: MS has been general and local coordinator of an Italian PRIN 2008 Project entitled "Thermal stability of exchange-spring magnetic planar nanostructures with perpendicular and lateral exchange coupling".

Editorial and referee activity

- Referee activity for: Physical Review B, Physical Review Letters, Nanotechnology, Journal of Physics D: Applied Physics, Journal of Physics C: Condensed Matter, Physics Letters A, Measurement Science and Technology, Journal of Magnetism and Magnetic Materials.
- Evaluation of Research Projects for the following organizations: European Science Foundation (ESF); U.S. Department of Energy (Physical Behavior of Materials - Basic Energy Sciences); Austrian Science Fund (FWF), TU Wien; National Fund for Scientific and Technological Development (FONDECYT) of the Chilean Government Commission for Scientific and Technological Development (CONICYT).