



Riccardo Ferrando

Full professor

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Education and training

1988

Laurea in Fisica

Studio della diffusione in potenziali periodici - 110/110 e lode
Università di Genova - Genova - IT

1993

Dottorato in Fisica

Dinamica di Fokker-Planck in sistemi periodici - ottimo
Università di Genova - Genova - IT

Academic experience

1995 - 2005

Ricercatore in Fisica Generale

Università di Genova - Genova

2005 - 2018

Professore Associato di Fisica della Materia Teorica

Università di Genova - Genova - IT

Language skills

Italian

Mother tongue

English

Proficient

French

Independent

Teaching activity

Since 1995, teaching courses in General Physics, Condensed Matter Physics, Computer Simulation Methods, Optics

Postgraduate research and teaching activity

Supervision of PhD students, residents and post-doctoral fellows

Supervisor of 17 Master Thesis in Physics and of 1 Master Thesis in Education Sciences

Supervisor of 8 PhD Thesis in Physics and of 1 PhD Thesis in Materials

Science

PhD committees membership

I am member of the "Collegio dei Docenti" for the PhD studies in Physics at the University of Genoa since 2002.

Postgraduate (PhD) teaching activity

I am teaching courses for PhD students in Physics at the University of Genoa since 1995

Research interests

- Modelling of atom diffusion on crystal surfaces
- Computer simulation of crystal growth
- Modelling of the structural properties of atomic clusters and nanoparticles
- Modelling of the aggregation processes in colloidal suspensions
- Development of computational methods for global optimization
- Simulation of the interaction between metallic nanoparticles and biological membranes
- Theory of stochastic processes and its application to thermal activation in condensed matter systems

Grants

2003 - 2006

Supra Self Assembly of transition metal nanoclusters

European Science Foundation

Principal investigator

European project in the framework of the EUROCORES-SONS initiative

2004 - 2007

Growth and Supra-Organization of Transition and Noble Metal Nanoclusters

European Union

Participant

Project of FP7

2010 - 2014

COST Action MP0903 NANOALLOY

COST

Principal investigator

Research network comprising more than 70 laboratories of 25 european countries plus 9 non-european institutions

Editorial activity

- Editor of Advances in Physics X (APX) since 2016. APX is published Taylor &

Francis (ISSN 2374-614), and it is indexed by Web of Science e Google Scholar.

- Associate Editor of the Journal of Nanoparticle Research (JNR) since 2015. JNR is published by Springer Verlag (ISSN: 1388-0764 (print version) ISSN: 1572-896X (electronic version)) and indexed by Web of Science, Scopus and Google Scholar

- Reviewer of research projects for National Science Foundation (NSF), USA; Department of Energy (DoE), USA; Petroleum Research Fund della American Chemical Society, USA; Agence Nationale de la Recherche (ANR), France; Swiss National Science Foundation, Switzerland; Engineering and Physical Sciences Research Council (EPSRC), UK; Academy of Finland; Academy of Sciences of the Czech Republic; Israel Science Foundation; FONDECYT National Research Funding Agency, Chile; German Israeli Foundation for Scientific Research and Development; Royal Society, UK; Welsh Government's Sêr Cymru II Programme, Wales

- Reviewer for the following journals: Physical Review Letters, Physical Review B, Physical Review E, Physical Review Materials, Nature Materials, Nature Communications, Nano Letters, ACS Nano, Advanced Materials, Chemistry of Materials, Nanoscale, Journal of the American Chemical Society, Journal of Physics Condensed Matter, European Physical Journal B, European Physical Journal D, Physical Chemistry Chemical Physics, Journal of Chemical Physics, Journal of Physical Chemistry C, Surface Science, Physica A, Physica B, Physics Letters A, ChemPhysChem, Small, Crystal Growth and Design, Langmuir, ACS Applied Materials and Interfaces, Advanced Functional Materials.

Assigments abroad

Invited Professor at the laboratory "Interfaces, Confinement, Matériaux et Nanostructures" (ICMN) of the University of Orléans, France, June 2017.

Invited Professor at the Faculty of Science of the University of Limoges, France, January 2016.

Invited Professor at the Chemistry Department of the Université Pierre et Marie Curie, Parigi, France, October 2014.

Associated Researcher at the laboratory "Science des Procédés Céramiques et de Traitements de Surface" (SPCTS) of CNRS, Limoges, France, November 2009 - January 2010.

Associated Researcher at the Theory Division of the Los Alamos National Laboratory, USA, September 2001

Invited Professor at the Physics Department of the Université Blaise Pascal in Clermont-Ferrand, France July 2000