Magnano Elena

Curriculum vitae

PERSONAL INFORMATION

Magnano Elena
Nationality: Italian
Date of birth: 29-06-1969; married, three sons
ORCID: 0000-0001-6465-807X
SCOPUS ID: 55879960500
http://www.elettra.trieste.it/elettra-beamlines/bach.html

EXPERTISE AND KNOWLEDGE

I worked from 1995 to 2004 at the INFM-TASC Laboratory in Trieste, where I consolidated an extensive experience in the epitaxial growth of materials in UHV and in the characterization of electronic properties of materials by X-ray photoemission and absorption spectroscopies.
In 2004 I moved to the BACH beamline at Elettra synchrotron radiation facility in Trieste, where I currently work as responsible of the beamline.
I consolidated a large experience in the techniques and advanced instrumentation with synchrotron light and UHV and recently I dedicated part of my activity to improve and develop new advanced tools for the *in situ/operando* characterization of materials under realistic working conditions and to pump and probe set-ups with fs lasers. My scientific activity is basically devoted to the study of electronic properties of materials (thin films, nanostructured materials, organic molecules and metal-organic hybrid interfaces, graphene and graphene-like 2D materials, superconductors, oxides, inter-metallic and metal alloys), liquids and interface solid/liquid.

EDUCATION

2003 PhD in Physics at ETHZ (Technische Hochschule Zürich): 'Artificial nanostructure-based interfaces', https://doi.org/10.3929/ethz-a-004690848
1995 Master Degree in Physics at University of Genoa

CURRENT AND PAST POSITIONS

2008 – present CNR Researcher, IOM-CNR Trieste, Italy
2015 – 2021 Senior Research Fellow at the Physics Department UJ (South Africa)
2004 – 2008 INFM-CNR Researcher, National TASC Laboratory, Trieste, Italy
2002 – 2004 INFM Technologist, National TASC Laboratory Trieste, Italy
1998 – 2002 INFM Research Fellowship (Assegno di Ricerca)
1995 – 1998 INFM Research Fellowship (Borsa di studio)

MAJOR COLLABRATIONS

Prof. S. Gross *(Università di Padova)*; Prof. T. Cuk *(RAISEI, CU Boulder, US)*; Prof. N. Saini *(Università di Roma La Sapienza)*; Dr. L. D'Amario *(Freie Universität Berlin, Germany)*; Dr. M. Favaro *(Helmholtz-Zentrum Berlin für Materialien und Energie GmbH, Berlin, Germany)*; Dr. S. Guenther *(Technische Universität München TUM)*; Dr. C. Guerra (*Universidad Madrid, Spain).*

VISITING SCIENTIST AT NATIONAL AND INTERNATIONAL LABORATORIES :

2018 - 2019 CU Boulder (CO, US) (Prof. T. Cuk) (7 months)
2018 University of Johannesburg (South Africa) (Dr. E. Carleschi and B. Doyle) (1 week)
2015 Advanced Light Source (ALS) e JCAP, Berkeley (USA) (Dr. F. Toma) (1 month)
2015 University of Johannesburg (South Africa) (2 weeks)
2014 Advanced Light Source (ALS), Berkeley (USA) (Dr. J. Guo) (1 month)
2000 Brookhaven National Synchrotron Light Source (NSLS) (Dr. E. Vescovo) (1 month)
1999 Università Modena e Reggio Emilia (Prof. C. Mariani and Prof. M.G. Betti) (2 weeks)
1998 Forschungzentrum in Jülich (Germany) (Dr. C. Carbone and Prof. W. Eberhardt) (1 month)
1998 Università di Genova (Prof. M. Canepa and Prof. L. Mattera) (2 weeks)
1997 Forschungzentrum in Jülich (Germany) (Prof. W. Eberhardt) (2 weeks)
1996 Dipartimento di Fisica, Università di Genova (Prof. Ugo Valbusa) (1 month)

SUPERVISION OF STUDENTS

2019 – 2021 Igor Pis, PostDoc
2016 – 2017 Jessica Munaro, Tesi magistrale, Università degli Studi di Padova – Dipartimento di Scienze Chimiche
2012 Silvia Nappini, PostDoc
2006 Stefano Savi, Tesi triennale, Università degli Studi di Trieste – Dipartimento di Fisica

REVIEWER ACTIVITY:

2014 – 2019 Reviewer for the National Research Foundation (NRF)

2007 – present Reviewer for International Journals:
ACS: ACS Applied Materials & Interfaces, ACS Nano,
WILEY: Advanced material Interfaces, Advanced Materials, Physica Status Solidi
MDPI: Applied Sciences
Elsevier: Applied Surface Science, Carbon, Material Chemistry and Physics, Journal of Alloys and Compounds, Materials and Design, Mechanical Systems and Signal processing
APS: Physical Review Letters, Physical Review B

INSTITUTIONAL RESPONSIBILITIES

2017 – present Responsible of BACH beamline at Elettra Synchrotron Radiation Facility
2017 – present In charge of safety for BACH beamline at Elettra Synchrotron Radiation Facility
2018 – present Responsible of Hutch Laser laboratory at Elettra Synchrotron Radiation Facility
2016 – present In charge of user support for Project NFFA-Europe
2011 – present Activity as member of evaluation committees for CNR fellowships and researcher positions

FUNDINGS

2020-2024 Horizon 2020 Framework call: INFRAIA-2019-1 'AHEAD 2020: Integrated Activity for the High Energy Astrophysics Domain' PI of IOM-CNR unit, Deputy for CNR (98.000 €)
2017 CNR: Short Term Mobility Program: 'Unravelling the elemental-projected electronic density of a paradigmatic oxide using resonant ARPES' PI (2100 €)
2012-2017 MIUR: FIRB 2012-Futuro in ricerca 'Beyond graphene: tailored C-layers for novel catalytic materials and green chemistry RBFR128BEC_002' Partecipant (€182.400)
2016 CNR: Short Term Mobility Program: 'Development of a static liquid cell for in situ/operando X-ray absorption spectroscopy at BACH Beamline' PI (3000 €)

2014-2016 FOE 2012 Premiale: 'Atom-based Nanotechnology (ABNANOTECH)' Partecipant (15.000 €)
2015 CNR: Short Term Mobility Program: 'In situ AP-XPS for Electrochemical Reactions in liquid-solid interface (APER)' PI (3000 €)
2013-2016 MIUR: Progetti di rilevante interesse nazionale (PRIN) 'DESCARTES - Development of Energy-targeted Self-assembled supramolecular systems: a Convergent Approach through Resonant information Transfer between Experiments and Simulations' Partecipant (78.746 €)
2012-2015 MIUR: 'European Free Electron Lasers (Eurofel)' PI BACH (145.000 €)
2012-2015 Project in Kind (PIK) 'EX-PRO-REL – Excitation PROcesses and RELaxation in condensed matter and nanostructures: methodological, instrumental and scientific challenges' Partecipant (83.700 €)
2011-2012 CNR: Start up IOM-CNR 2010: 'Determinazione della Densità di stati elettronici del DNA – D3' PI (50.000 €)
1997-2001 CNR Progetto finalizzato MADESS II: 'Synthesis of SiC and Amorphous Carbon Thin Films for Applications in Microelectronics and Electron Emitters Devices' (SICCAMEED) Partecipant (81.000 €)

INVITED TALKS

2018 Invited talk at the Physics Department Faculty of Science University of Johannesburg '*X-ray spectroscopy goes under water',* April 20, 2018
2017 Invited talk at the Congresso internazionale: COEX Combined Electrons with X-rays for integrated in operando experiments *'X-ray spectroscopy goes under water'* September 23-24, 2017
2015 Invited talk at the Physics Department Faculty of Science University of Johannesburg '*The BACH beamline at the Elettra synchrotron radiation facility in Italy: Present performances, research and perspectives'* February 27, 2015
2013 Plenary lecture at SAIP 13 Richards Bay (South Africa) *'Magnetic and electronic properties of surfaces by advanced soft x-ray synchrotron radiation techniques'*, July 8-12, 2013

PUBLICATION RECORDS

Number of papers (ISI): 146.
h-index: 26 (Source Scopus)