

MAJOR RESEARCH INTERESTS

Synthesis and studies of nanostructured and molecular materials; organic electronics; bioelectronics; memristive devices and systems and nanomedicine. Active and passive gas- and bio-sensors, trace-gas detection and related applications.

EDUCATION

1976 – *Laurea* Degree in Physics at the University of Bologna

1984 – PhD. in Chemistry at the (GWC)² (Guelph Waterloo Centre for Graduate Work in Chemistry-Waterloo - Ontario Canada)

CURRENT POSITION

Director of CNR Istituto dei Materiali per l'Elettronica ed il Magnetismo (IMEM) and of the BIOGENA-P Center, BIOelectronics GENomics and NANomedicine of CNR and University of Parma. He is Professor at the PhD School on Science and Technology of Materials of the University of Parma (since 2009).

PROFESSIONALS AND INTRAMURAL RESPONSIBILITIES

He has been visiting several research institutes among which the Nanoscale Facility of Cornell University and has been visiting scientist at the Lash Miller Laboratory of the University of Toronto (Ontario-Canada). He has been member of the board of directors of the Bruno Kessler Foundation (FBK) and of scientific/stirring committees of national and International conferences (among some recent ones: ECOS-26 –European Conference on Solid Surface August 2009, CIMTEC 2012; MAMA –Hybrids October 2012; 20th International Symposium on Metastable, Amorphous and Nanostructured Materials - ISMANAM 2013, ICNAAM 2014 Symposium on "Adaptive Materials, Devices and Systems Towards Unconventional Computing and Robotics: Modeling and Implementation", E-MRS 2016 Symposium on "Adaptive Materials, Devices and Systems"). He is coordinator of several research projects on a national and international basis in the fields of nanostructured, molecular, hybrid materials and systems including their applications to gas and bio-sensing, energy (photovoltaics in particular). He is co-author of more than 150 papers on journals with international editorial boards with more than 3100 citations and he has been invited speaker to more than 50 international conferences. He is also author or co-author of several monographs, among which: "Cluster Beam Synthesis of Nano-structured Materials" – Springer – Berlin (<http://link.springer.com/book/10.1007/978-3-642-59899-9>). He is promoter of several national, European and international scientific collaborations/initiatives and member of the International Union for Vacuum Science Techniques and Applications (IUVSTA) - Nanostructures Division Committee. He is also member of the board of directors of the Ph. D. Schools: Science and Technology of the University of Parma. Since 2014 he is President of the Panel Energy, Micro- and Nanoelectronics for the evaluation of proposal within the MISE-FCS Programme (the Italian Ministry of Economical Developments Programme for Competitive Growth). He has been acting as research proposal reviewer for several international agencies.