

Chiara Maurizio
Curriculum vitae

1. Formation and contracts

From 2017: associate professor at University of Padova (SSD FIS/03-Physics of Matter, SC 02/B1), Physics and Astronomy Dept.

2010-2017: Researcher (FIS/03, 02/B1), University of Padova.

2002-2010: Researcher INFN-CNR (Italian Institute for Physics of Matter-National Research Council), at the Italian Lab of the European Synchrotron Radiation Facility-ESRF (Grenoble-F).

2002: PhD in Physics, University of Padova. Title of the thesis: “Binary alloy nanocluster formation by ion implantation in dielectrics: a study based on EXAFS spectroscopy”, tutor prof. P. Mazzoldi.

1998: Degree in Physics (110/100 e lode), University of Padova.

2. Research activity

The research activity, mainly experimental, is on the nucleation and growth of multielement nanostructures starting from thin films. The aim is to correlate their structure in the nm and sub-nm length scale with their relevant technological and macroscopic properties. The experiments mainly use synchrotron radiation as structural probe, with X-ray Absorption Spectroscopies (including High-Energy Resolution Fluorescence Emission, X-ray Magnetic Circular Dichroism) and elastic X-ray scattering (diffraction, small angle scattering and anomalous diffraction). The experiments (mainly 2-3 per year) are performed at Italian and European Synchrotrons after passing a peer-review selection.

The results of the experiments have been published in more than 100 papers in international peer-review journals, presented in several international and national congresses and in invited presentations. Some of the results have been awarded.

Part of the research has been funded by projects, of which the most recent are two local projects (2015-17 –post-doc grant, and 2017-19-research project).

H-index: 22 (Web of Science, 12/2017).

3. Other activities.

2017-2020: Member of the Proposal Review Panel (ESRF), of CERIC-ERIC (Central European Infrastructure Consortium) Review Panel.

2011-2014: Responsible of the ESRF Users’ Organization Committee, whose duties include

the scientific organization of the annual ESRF Users' Meeting (about 300 participants).

2008-2018: Member of the ESRF Users' Organization Committee, representative of Material Science.

Referee for several international journals including 'Nature', for Italian projects.

Part of the PhD committee for different Italian universities (Padova, Ca' Foscari-Venezia, Trento) and for the Australian National University (2010).

3. Teaching.

'Fisica Superiore' (LM Astronomy), 'Metodi Fisici di Caratterizzazione dei materiali e laboratorio' (LM Material science), 'Advanced Characterization techniques for material analysis' (PhD School in Science and Engineering of Materials and Nanostructures), 'Fisica Sperimentale 1' (L Ottica e Optometria, 2012-2015).

X-ray Absorption Spectroscopy and Radiation-Matter interaction for International Schools (Higher European Research Course For Users Of Large Experimental Systems-Hercules, Université Joseph Fourier-CEA-F, International Master on Nanotechnology-CIVEN-I) e National one (TEDAT-ENEA Brindisi, SIDART-Università di Lecce).