Short CV

Paolo Mengucci

Paolo Mengucci graduated in Physics at the Bologna University in 1985, obtained the PhD in Materials Engineering in 1992. Now, Associate professor of Physics at the Faculty of Engineering, Polytechnic University of Marche (Ancona, Italy). The research activity is devoted to the microstructural characterisation of bulk materials and thin films by scanning and transmission electron microscopy, energy dispersive microanalysis (EDX), X-ray diffraction techniques (grazing incidence, Bragg-Brantano) and X-ray Reflectometry (XRR). In particular, the research activity was developed in the following fields: p-n junctions (investigated by electron interferometry), metal alloys, metal matrix composites, light alloys (AI, Mg, Ti), thin films deposited by pulsed laser ablation and reactive laser ablation, heat treatment of thin films by electron and laser beams, Si-Ge heterostructures deposited by molecular beam epitaxy (MBE), ferroelectric thin films obtained by sol-gel and laser ablation, metallic multilayers, Mg-based materials for solid-state hydrogen storage. The most recent research activity concerns study and microstructural characterisation of materials and parts obtained by additive manufacturing. In collaboration with national and international research groups is involved in international scientific projects.