

Dr. Antonino Picciotto is currently an associate researcher and supervisor of technological processes at the Micro-Nano Fabrication Facility (MNF) division of the Materials and Microsystems Center (CMM) of the Bruno Kessler Foundation (Trento), as an R&D researcher and clean-room process engineer. In this role, he deals with the construction of particle and radiation detectors for scientific and industrial applications, participating in national and international projects with research institutes such as the National Institute of Nuclear Physics (INFN), National Institute of Astrophysics (INAF), universities such as Politecnico di Milano and private international companies such as Horiba Ltd. In the MNF group, he is responsible for research and development for PECVD-ICP (Plasma Enhanced Chemical Vapor Deposition), LPCVD (Low pressure chemical vapor deposition) systems, ionic implantation and ellipsometry. In addition, Dr. Picciotto is involved in the design and manufacture of advanced materials for the application of unconventional particle acceleration systems (laser driven) and for applications to clean nuclear fusion reaction processes in collaboration with European partners such as the Prague Asterix Laser System (PALS-Academy of Sciences of Prague), the HiLase Institute (Prague) and in particular with the pan-European project defined as Extreme Light Infrastructure Institute (ELI), also in Prague, Czech Republic. Recently he was involved, as a proponent of the Bruno Kessler Foundation, in a series of preliminary experiments on the possibility of improving the effectiveness of standard proton therapy techniques, by triggering the ultra-clean boron-proton nuclear fusion, in collaboration with the INFN Institute, ELI Institute and University of Naples. All these activities are well documented by numerous articles in international scientific journals and national and international patents, accepted, presented and printed.