

Daniele M. TRUCCHI

CNR-ISM (Institute of Structure of Matter), Montelibretti Section

DiaTHEMA Lab (Diamond, Thermal & Harsh Environment Materials & Applications)

Ph.D. in Electronic Engineering, in 2002 he joined CNR. From 2002 to 2006 he organized the technical-scientific activity of the EU Project “Diamond” for CNR. Co-author of the ECO-Diamond National Project (2007-2009), his activities were initially focused on the design, development and evaluation of the performance of diamond-based UV, X-ray, γ radiation detectors, innovative electron multipliers, nuclear- and thermal-to-electric energy converters.

Since 2010 he the leader of the DiaTHEMA. From 2010 to 2013 he coordinated the activities of the FP7-Energy project E²PHEST²US for CNR, focused on the development of an innovative conversion module for solar concentrating systems based on thermionic and thermoelectric mechanisms. He was the coordinator of the FP7-Energy FET Project ProME³ThE²US², aimed at developing efficient high-temperature semiconductor converters for solar concentration, and of several industrial projects funded by Prysmian SPA. He was also the local coordinator at CNR-ISM for the activities of the FP7-Energy IRP project STAGE-STE, of the regional project HALL, of the joint collaboration with CNR-IFP for the development of neutron CVD diamond spectrometers at the JET and ISIS sources, and of specific R&D activities funded by Italian SMEs (CAEN Spa, MiTEC Srl, Biosentec Technologies Srl, etc.).

Responsible for the CNR partner of the H2020 FET-OPEN project AMADEUS (2017 - 2019), focused on the development of a thermionic-photovoltaic energy conversion stage for ultra-high-temperature sources, and coordinator of the H2020 FET-OPEN Launchpad DMS project (2017 - 2018), aimed at valorizing an innovative proprietary dielectric microstructure technology, now he is coordinating at CNR-ISM the development of new flexible sensors for pollutants of museal interest.

He is author of almost 100 papers on refereed international scientific journals and inventor of 3 patents on materials science and energy conversion.