



PRESENTER INFORMATION

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BIOGRAPHICAL SKETCH

Luca Boarino degreed in Physics in 1987 at University of Torino. He joined INRiM (Istituto Nazionale di Ricerca Metrologica), working on phothermal spectroscopy in semiconductors, porous silicon and on gas doping in silicon nanostructures. His research interests are related to nanofabrication, self-assembly and silicon nanowires. Since 1998 to 2007 he contributed to clarify the interaction mechanisms between silicon nanostructures and nitrogen dioxide. Since 2009 he is founder and responsible of Nanofabrication laboratory by electron and ion beams. He is author of more than 190 international publications and manages a number of metrological European projects (EMPIR).

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TITLE: Porous silicon as an entry key to the nanotechnology world

ABSTRACT

The seminar will describe the activity on porous silicon (PS) carried on at INRiM since 1991, with a focus on PS gas doping and on Silicon Nanowires obtained by Self-Assembly and MACE.

Eleonora Cara, INRiM PostDoc, will describe the nanofabrication approach and the applications in metrology and sensing of ordered arrays of porous silicon nanowires.