

Valentina Zannier



Valentina Zannier received the Master Degree in Chemistry in 2011 and the PhD in Nanotechnology in 2015 from University of Trieste (Italy). The main research activity she carried out, for which she won the “best PhD career award” of the University of Trieste, was the growth of II-VI semiconductor nanowires by Molecular Beam Epitaxy and their characterization by means of microscopic and spectroscopic techniques. From January 2015 she joined the Nanoscience Institute of the National Research Council (CNR) in Pisa (Italy) as a post-doc, where she became staff scientist in 2020. She is currently involved in the growth of III-V semiconductor nanowires by Chemical Beam Epitaxy at NEST Laboratory of Scuola Normale Superiore and Nanoscience Institute - CNR in Pisa, Italy. The main activities she carries out are: growth of nanowires and related heterostructures, selective area growth of patterned nanostructures, morphological, structural and chemical analysis of nanostructures. She is particularly interested in studying the growth dynamics of nano-heterostructures: quantum dots, axial nanowire heterostructures, core-shell and core-multi-shell nanowires, to understand and tune their structural, electrical, and optical properties. At present she has contributed to the publication of 63 peer-reviewed papers, reaching an H-index of 16 (Scopus metrics) and she has presented her results in many International conferences. In 2019 she was also member of the organizing committee of the Nanowire Week international conference, the major event committed to the experimental and theoretical investigation of nanowires and nanowire-based devices. She’s been participating to several Italian and European projects, all involving nanowires and nanostructures for applications in optoelectronics, thermoelectrics and quantum technologies.

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