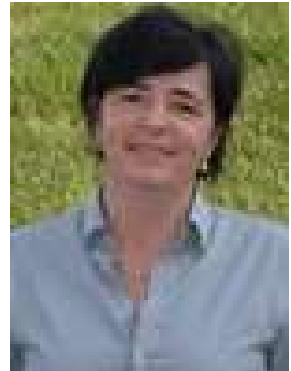


Lucia Sorba

Present position: Director of the Institute of Nanoscience - CNR, Italy



Research

My main research interest is in the field of experimental semiconductor physics and materials science.

The current research lines include:

Synthesis of quantum materials by molecular beam epitaxy and chemical beam epitaxy.

Structural and morphological characterization of low dimensional semiconductor systems.

Quantum transport in hybrid low dimensional systems.

Over 400 publications in peer reviewed international Journals, cited over 4100 times (1 Nature, 2 Nature Physics, 1 Nature Nanotech, 1 Nature Photonics, 1 Nature Comm, 7 Nano Letter and 16 PRL): [full publication list](#). h-index 39 (ISI WoS 2021)

Positions

2010-today	Director, Istituto Nanoscienze-CNR, Pisa.
2009-2010	Director, NEST-INFM, Pisa.
2006- 2009	Associate Professor, Scuola Normale Superiore, Pisa.
1999-2006	Associate Professor, Università di Modena e Reggio Emilia.
1998-1999	Visiting scientist, Walter Schottky Institut, Technische Universität Munich
1988-1999	Researcher, Consiglio Nazionale delle Ricerche (TASC-INFM, Trieste; IAC, ICMAT Roma).
1984-1986	Postdoctoral fellow at the Fritz Haber Institut of the Max Planck Gesellschaft, Berlin.
1983-1984	Research Associate, University of Rome "La Sapienza", Roma
1983	Laurea summa cum laude in Fisica, Università "La Sapienza" di Roma.

Distinctions

Fellow of the European Physical Society (2021)

Fellow, Alexander von Humboldt foundation (1998-1999).

Scientific advisory and evaluation committes:

EU-FET advisory board (2014-2016)

Advisory board of the FET project EFFECT (2017-2018)

Strategic committee, Bruno Kessler Foundation – CNR

Strategic committee, Scuola Normale Superiore – CNR

Selection committee of the NEST prize (2009-2017)

Management committee of COST Action "European Network for Innovative and Advanced Epitaxy (2021)

Evaluation Committee, IMM Institute of University of Nijmegen NL(2015)
MIUR selection committee of national Projects PRIN (2012)
Italian DC Member of EU-COST (2010-2014)
Executive board of the NEST INFM Laboratory, Pisa. (2001-2009)
Research proposal review committee of the Swedish Research Council (2004-2005-2006).
Research proposal review committee "Bando Ricerca scientifica applicata 2004" Piedmont region.
Coordinator of the INFM network for the semiconductor and insulator selection (2001)

Manuscript referee for the following international Journals: Physical Review Letter, Applied Physics Letters, Crystal Growth and Design, Nanotechnology, Semiconductor Science and Technology, and Nanoletters.

Main scientific research projects:

2019-2023 Principal investigator of the CNR Unit of the FET-OPEN "Andreev qubit for scalable quantum computation"

2017-2019 Principal investigator of a contract with Microsoft and with the Institute of Niels Bohr of the University of Copenhagen, Denmark on the growth of SAG structures.

2018-2020 Principal investigator of the CNR Unit of the Quanterra Project on "Topologically protected states in double nanowire superconductor hybrids".

2014-2017 Principal investigator of the bilateral project RFBR-CNR on Semiconductor Nanowires: from fundamental studies to innovative devices.

2015-2016 Principal investigator of the CNR Unit of the project BRIC-INAI.

2015-2018 Principal investigator of the CNR Unit of the project "Felix" of the establishment of research infrastructures supported by Tuscany Region.

2009-2011 Principal investigator of the CNR Unit of the MIUR PRIN project on the growth and structural characterization of field effect devices based on semiconductor nanowires.

2008 Principal investigator of the project granted by Scuola Normale Superiore on Magneto transport of semiconductor nanowires.

2007 Principal investigator of the project granted Scuola Normale Superiore on the synthesis by CBE of Sb-based semiconductor nanowires.

2006 - 2008 Principal investigator for the Università di Modena e Reggio Emilia Unit of the MIUR PRIN on Few electron phenomena in quantum dot based devices.

2004 Principal investigator of the contract on Macchine Intelligenti Srl for the development and the fabrication of an optical integrated sensor for measuring the angular speed in giroscopic systems

2003 - 2005 Principal investigator for the Università di Modena e Reggio Emilia Unit of the MIUR PRIN Project on Growth and theoretical modelling of coupled quantum dots.

2002 - 2004 Principal investigator for TASC-INFM Unit of the MIUR FIRB project on Quantistic phases in semiconductors at very low density.

2002 - 2003 Principal investigator for TASC-INFM Unit of the PA-INFM ICONS project on Intersubband Confined Electrodynamics.

2001 Principal investigator for the Università di Modena e Reggio Emilia Unit of the MIUR PRIN on Collective states of electron pairs in two-dimensional systems.

2001 - 2003 Principal investigator for TASC-INFN Unit of the PRA-INFN MESODYF project on MESOscopic DYnamics of Fractional charge.

1999 Principal investigator of the project on Advanced Instrumentation of INFN for the installation of a MBE new facility dedicated to the growth of ultra-pure III-V materials.