

Curriculum Vitae

Personal information

First name / SURNAME **Lucia SORBA**

Work address: NEST, Istituto Nanoscienze-CNR and Scuola Normale Superiore di Pisa,
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Nationality Italian

Date of birth December 27, 1958

Gender Female

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

Professional carrier

2010 Director of the Institute of Nanoscience-CNR

2009-today Research Director of the National Research Council at the CrS Nano Nest, Pisa (Italy)

2006 – 2009 Associate Professor at Scuola Normale Superiore di Pisa (Italy)

1999 – 2006 Associate Professor at the University of Modena and Reggio Emilia (Italy).

1999 – today Scientific Coordinator of the High mobility MBE group at the TASC-INFM laboratory in Trieste (Italy).

1988-97 Staff Scientist, TASC-INFM Laboratory, Trieste (Italy).

1993-95 Staff Scientist, ICMAT Institute of the National Research Council (CNR), Rome (Italy).

1986-93 Staff Scientist, Acoustics Institute of the National Research Council (CNR), Rome (Italy).

1984-86 Postdoctoral research fellow at the Fritz Haber Institut of the Max Planck Gesellschaft, Berlin (Germany).

1983-84 Scientist, Department of Physics of the University of Rome "La Sapienza", Rome (Italy).

Education and training

1997-1999 Fellowship from the Alexander von Humboldt Foundation at the Walter Schottky Institut, TU Munchen, Garching (Germany), in the group of Prof. G. Abstreiter.

1984-86 Postdoctoral Research Associate at the Fritz Haber Institut of the Max Planck Gesellschaft, Berlin (Germany), in the group of Professor A. Bradshaw.

1983-84 Research Associate, University of Rome "La Sapienza", Rome (Italy).

1983 Laurea summa cum laude in Physics, University of Rome "La Sapienza" (Italy). Thesis: "Photoemission Spectroscopy with Synchrotron Radiation and Electron Energy Loss Spectroscopy on the GaAs(110):H surface"; Supervisor: Professor S. Nannarone.

Personal skills and competences

My main research interest is in the field of experimental semiconductor physics and materials science. The main current research lines are the following:

- Synthesis by molecular beam epitaxy and chemical beam epitaxy of III-V materials.
- Magneto-transport properties of two dimensional electron gases in AlGaAs/GaAs e InAlAs/InGaAs systems.
- Scattering mechanisms, morphological and structural of InAlAs/InGaAs heterostructures.
- Chemical and morphological studies of nanostructures fabricated by local anodic oxidation technique.
- Chemical composition study of self-assembled InAs-GaAs QD and QR.
- Catalyst-assisted growth, transport and structural properties of semiconductor nanowires.

Mother tongue(s) **Italian**

Other language(s)	Understanding		Speaking		Writing
Self-assessment	Listening	Reading	Spoken interaction	Spoken production	
<i>European level (*)</i>					
English	C2	C2	C2	C2	C2
German	B2	B2	B2	B2	B2

(*) [Common European Framework of Reference for Languages](#)

Organisational skills and competences

My main management experience is in:

- Scientific management of medium and large Projects
- Board memberships and Refereeing activities
- Chair or Member of the Program Committee of more than 10 International Conferences
- Guest Editor of the Proceedings of the EPD2S-MMS Conference, Physica E 40 (2008).
- Coordinator of the high mobility MBE facility at the TASC laboratory of CNR (since 1999).
- Several ongoing international collaborations.

Research projects

1. 2009 Local responsible of the project of the Italian Ministry of University and Research MIUR PRIN "Growth and structural characterisation of field effect devices based on semiconductor nanowires", 40 KEuro.
2. 2008 Responsible of the internal project at Scuola Normale Superiore on "Magneto transport of semiconductor nanowires", 35KEuro.
3. 2007 Responsible of the internal project at Scuola Normale Superiore on "Synthesis by CBE of Sb-based semiconductor nanowires", 54KEuro.
4. 2006-2008 Local responsible of the project of the Italian Ministry of University and Research MIUR PRIN Prot. 2006022932 "Few electron phenomena in quantum dot based devices", 103KEuro.
5. 2003-2005 Local responsible of the project of the Italian Ministry of University and Research MIUR PRIN Prot. 2003020984 "Growth and theoretical modelling of coupled quantum dots", 197KEuro.
6. 2004 Scientific responsible of the Commercial Project with Macchine Intelligenti Srl for the development and fabrication of an optical integrated sensor of angular velocity for gyroscopic systems, 100KEuro.
7. 2002-2004 Local responsible of the project of the Italian Ministry of University and Research MIUR FIRB Cod. RBAU01ZEML_003 "Quantistic phases in semiconductors at very low density", total 65KEuro.
8. 2002 Local responsible of the project of the Italian Ministry of University and Research MIUR PRIN "Collective electronic states in coupled QDs", 303 KEuro
9. 2001 Local responsible of the project of the Italian Ministry of University and Research MIUR PRIN Prot. 2001021539 "Collective states of two dimensional electronic couples", total 72KEuro

Board memberships and Refereeing activities

- Partecipazione all'Advisor Board meeting dei progetti EU FET (2014)
- Partecipazione al Consiglio Scientifico del festival della Scienza di Genova (2013)
- Responsabile della Divisione Semiconduttori ed Isolanti della Società Europea di Fisica (2004-oggi)
- DC Member per l'Italia dei progetti Europei EU-COST (2010-oggi)
- Membro del Comitato Science Europe's Scientific (2012)
- Membro del Comitato Scientifico dello Spin-off Soft Materials and Technology (2012)
- Membro del Comitato di Selezione del MIUR dei Progetti PRIN (2012)
- Membro del Comitato di Selezione del Premio NEST (2009-2013)
- Membro del Comitato Pari Opportunità della Scuola Normale Superiore (2008)
- Membro del Comitato Esecutivo del Centro NEST INFM, Pisa (2001-2009)
- Valutatore di progetti: SEED dell'INFM-CNR(2009), "Bando Ricerca scientifica applicata", Regione Piemonte (2004), CIPE (2000), FAR Università di Trieste (2012)
- Membro del Comitato di Selezione Progetti del Swedish Research Council (2004-2005-2006)
- Coordinatore del network INFM "Semiconduttori e isolanti" (2001)
- Membro di selezione di numerosi concorsi: assegni di ricerca INFM, posizioni da ricercatore e primo ricercatore CNR, posizioni alla Scuola Normale Superiore (Cat. D2007-2008) e di Professore Associato presso l'Università di Perugia (2003)
- Referee di riviste internazionali tra cui Physical Review Letters, Applied Physics Letters, J. of Applied Physics, Nanotechnology, Solid State Communications, Nanoletters, Optics Express e altre

Citation Statistics: To date (September 2014) I have published 290 papers in peer reviewed international Journals and they have been cited over 3068 times **H index=32**.

**TRATTAMENTO DEI DATI
PERSONALI, INFORMATIVA E
CONSENSO**

Il D.Lgs. 30/6/2003, n. 196 “*Codice in materia di protezione dei dati personali*” regola il trattamento dei dati personali, con particolare riferimento alla riservatezza, all’identità personale e al diritto di protezione dei dati personali; l’interessato deve essere previamente informato del trattamento .

La norma in considerazione intende come “trattamento” qualunque operazione o complesso di operazioni concernenti la raccolta, la registrazione, l’organizzazione, la conservazione, la consultazione, l’elaborazione, la modifica, la selezione, l’estrazione, il raffronto, l’utilizzo, l’interconnessione, il blocco, la comunicazione, la diffusione, la cancellazione e la distruzione di dati, anche se non registrati in una banca dati.

In relazione a quanto riportato, autorizzo il CNR al trattamento dei dati contenuti nel presente *curriculum vitae* e nella documentazione della quale fa parte integrante

(*barrare la casella*)

Si, acconsento