

Part I – General Information

Full Name	Antonio Polimeni
Date of Birth	██████████
Place of Birth	██████
Citizenship	Italian
E-mail	antonio.polimeni@uniroma1.it
Spoken Languages	Italian

Part II – Education

<i>Type</i>	<i>Year</i>	<i>Institution</i>	<i>Degree</i>
University graduation	1993	Sapienza Università di Roma,	110/110 cum laude
PhD in Physics	1997	Sapienza Università di Roma	

Part III – Appointments

<i>Start</i>	<i>End</i>	<i>Institution</i>	<i>Position</i>
Jan 1997	Oct 1999	School of Physics and Astronomy, University of Nottingham (UK)	Research Assistant
Nov 1999	Nov 2010	Sapienza, Università di Roma	Ricercatore Universitario
Dec 2010	present	Sapienza, Università di Roma	Professore Associato
2013 and 2018			Habilitation as Full Professor

Part IV – Teaching experience

<i>Year</i>	<i>Institution</i>	<i>Lecture/Course</i>
1998/1999	<i>School of Physics and Astronomy, Nottingham University, United Kingdom</i>	<i>Tutor (4 students)</i>
1999/2000	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	Laboratory classes <i>Physical Experimentations II</i> Exercise classes <i>General Physics II</i>
2000/2001	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	Exercise classes <i>General Physics I</i> Series of lectures for the Doctorate in Physics (<i>Advanced Methods for Condensed Matter Physics</i>)
2001/2002	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	Exercise classes <i>General Physics II</i> Series of lectures for the Doctorate in Physics (<i>Advanced Methods for Condensed Matter Physics</i>)
2002/2003	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	Exercise classes <i>Electricity/Magnetism and Electromagnetism</i> courses
2003/2004	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	Exercise classes <i>Electricity/Magnetism</i> course and Laboratory classes <i>Optics and Electromagnetism</i> course
2004/2005	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	Laboratory classes <i>Optics and Electromagnetism</i>
2005/2006	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Optics and Electromagnetism</i> course
2006/2007	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	Exercise classes <i>Thermodynamics</i> Laboratory classes <i>Optics and Electromagnetism</i> Series of lectures for the Master course <i>Physics of surfaces and nanostructures</i>
2007/2008	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Semiconductor Physics</i> course <u>Tenure</u> of the <i>Optics and Electromagnetism</i> course
2008/2009	<i>Dipartimento di Biologia Ambientale, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Physics</i> course
2009/2010	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Optics and Laboratory</i> course Series of lectures for the Doctorate in Physics (<i>Advanced Methods for Condensed matter Physics</i>)
2010/2011	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Optics and Laboratory</i> course Series of lectures for the Doctorate in Physics (<i>Advanced Methods for Condensed matter Physics</i>)
2011/2012	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Optics and Laboratory</i> course Series of lectures for the Doctorate in Physics (<i>Experimental Methods for Determining the Structural and Electronic of Low-Dimensional systems</i>) Series of lectures for the Physics Olympic Games

2012/2013	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Optics and Laboratory</i> course
	<i>Dipartimento di Ingegneria dell'Informazione, elettronica e Telecomunicazioni, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Advanced Physics (Fisica Superiore)</i> course
2013/2014	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Optics and Laboratory</i> course
2014/2015	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Optics and Laboratory</i> course
	<i>Dipartimento di Chimica, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Physics I and Laboratory</i> course
2015/2016	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Optics and Laboratory</i> course
	<i>Dipartimento di Ingegneria dell'Informazione, elettronica e Telecomunicazioni, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Quantum and Solid State Physics</i> course
2016/2017	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Optics and Laboratory</i> course
	<i>Dipartimento di Ingegneria dell'Informazione, elettronica e Telecomunicazioni, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Quantum and Solid State Physics</i> course
2017/2018	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Optics and Laboratory</i> course Series of lectures for the Physics Olympic Games
	<i>Dipartimento di Ingegneria dell'Informazione, elettronica e Telecomunicazioni, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Quantum and Solid State Physics</i> course
2018/2019	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Condensed Matter Physics</i> course <u>Tenure</u> of the <i>Optics and Laboratory</i> course
2019/2020	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Condensed Matter Physics</i> course Laboratory assistant of the <i>Optics and Laboratory</i> course
	<i>Dipartimento di Ingegneria Civile e Ambiente e Territorio, Sapienza Università di Roma</i>	Teaching assistant of the course <i>Physics I</i> course
2020/2021	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	<u>Tenure</u> of the <i>Condensed Matter Physics</i> course <u>Tenure</u> of the <i>Solid State Sensors</i> course Laboratory assistant of the <i>Optics and Laboratory</i> course
2000-2020	<i>Dipartimento di Fisica, Sapienza Università di Roma</i>	<i>Tutor</i> of groups of students within the laboratory activity of the course of <i>Laboratory of Matter Physics</i>

Supervisor of **10** Laurea thesis (4-years duration)

Supervisor of **15** Master thesis

Supervisor of **31** Laurea breve thesis (*dissertazioni*)

Supervisor of **13** PhD thesis in Physics (7) and Materials Sciences (6).
The list of the tutees and the PhD Thesis titles are reported below.

████████████████████ (Physics XV cycle)
Tuning of the electronic and lattice properties of (InGa)(AsN)/GaAs heterostructures induced by atomic hydrogen irradiation

████████████████████ (Materials Science XVI cycle)
Hydrogen induced changes in the electronic and lattice properties of dilute nitrides

████████████████████ (Materials Science XIX cycle)
Isoelectronic Traps in Semiconductors: Fundamental Properties and Interaction with Atomic Hydrogen

████████████████████ (Physics XIX cycle)
III-V-N compounds: the role of N in GaAsN and H in InN

████████████████████ (Materials Science XXI cycle)
Electronic properties and response to hydrogen incorporation in novel semiconductor materials: GaAsN, GaAsBi and InN

████████████████████ (Materials Science XXI cycle)
Hydrogen-assisted defect engineering in dilute nitride semiconductors

████████████████████ (Materials Science XXVII cycle)
Optical and magneto-optical studies of III-V semiconductor nanowires

████████████████████ (Physics XXVII cycle)
Fabrication, characterization, and applications of novel nanostructures based on dilute nitride semiconductors

████████████████████ (Mathematical Models for Engineering, Electromagnetics and Nanosciences XXX cycle)
Addressing and tailoring the electronic properties of semiconductor nanostructures: nanowires and transition metal dichalcogenides

████████████████████ (Physics XXXI cycle)
Single-Photon Emitters Based on Selective Hydrogenation of (In)GaAsN

████████████████████ (Physics XXXI cycle)
Laser writing of nanostructures based on dilute nitrides

████████████████████ (Physics XXXIII cycle)
Carrier dynamics in semiconductor nanowires

████████████████████ (Physics XXXV cycle)
Controlling the optoelectronic properties of layered materials under external perturbations (provisory)

Part V – Awards, Honors and Society memberships

<i>Year</i>	<i>Title</i>
2000	“ <u>Umberto Maria Grassano</u> ” Prize of the Italian Physical Society to a young researcher working on Solid State Physics.
2000	First prize for the best oral presentation at the LXXXVI National Conference of the Italian Physical Society (Palermo) (Condensed Matter Physics section).
2002	Appointment of a two year grant “ <i>Young Researcher Project</i> ” by the Italian Ministry of University and Scientific and Technological Research for the study of the band structure of (InGa)(AsN) alloys.
2003	“ <u>Ugo Campisano</u> ” Prize of the National Institute of Matter Physics awarded to young researchers in the field of Materials Science.
2009	“ <u>Premio Tomassoni</u> ” by Sapienza Università di Roma to Sapienza Laureate.
2015	Prize for “ <u>Excellence in University Teaching</u> ” by Facoltà di Scienze Matematiche, Fisiche e Naturali, Sapienza Università di Roma
2017	Outstanding referee 2017, Institute of Physics (London, UK).
2017	“ <u>Somiya Award for international collaboration</u> ” for Semiconductor Nanowires: Growth, Characterization, Processing and Optoelectronic Devices (Kyoto, Japan).
2012	Member of the Engineering and Physical Sciences Research Council (EPSRC) Peer Review College
2016-2020	Member of the Editorial board of Journal of Semiconductors (Institute of Physics, London UK)
2018	Member of the International Advisory Board of Materials Research Express (Institute of Physics, London UK)
2018	Editorial board member of Materials (MDPI, Basel Switzerland)

Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

<i>Year</i>	<i>Title</i>	<i>Program</i>	<i>Grant value (€)</i>
2002	Study of the band structure of (InGa)(AsN) alloys	“ <i>Young Researcher Project</i> ” by the Italian Ministry of University and Scientific and Technological Research (PI)	10316 €
2004	Studio della massa efficace e del fattore giromagnetico dei portatori in composti II-VI (III-V) contenenti l'impurezza isoelettronica ossigeno (azoto) e degli effetti di un irraggiamento con idrogeno.	Ateneo 2004 (PI)	25000 €
2005	Studio di fattibilita' di nuove strutture nanometriche semiconduttrici e loro caratterizzazione	Ateneo 2005 (PI)	23750 €
2005-2006	Study of the physical properties of strategic materials for telecommunications and high efficiency conversion of solar energy	“Programma Vigoni” funds by the Italian Ministry of University and Deutscher Akademischer Austauschdienst (Germany) (PI)	4000 €
2006	Punti e fili quantici in nitruri diluiti: un nuovo metodo per la loro realizzazione	Ateneo 2006 (PI)	23000 €
2009	Semiconduttori inorganici e organici nanostrutturati	Ateneo 2009 (PI)	36600 €
2011	SITELiTE-Deterministic coupling between SITE-controlled, dilute nitride-based Light Emitters and tailor-made photonic-crystal structures	Marie Curie Action—Intra-European Fellowship by EU (coordinator)	193726 €
2013	Untangling the electronic band structure of InP nanowires by photoluminescence and photoluminescence excitation spectroscopy	Ateneo 2013 (PI)	7700 €
2014	Improving light emission efficiency in semiconductor nanowires by hydrogen-assisted surface and hetero-interface passivation	Progetti Awards Sapienza (PI)	53000 €
2015	Exploring the tunability of electronic and vibrational properties of few-layer transition metal dichalcogenides via light atom incorporation and intercalation	Ateneo 2015 (PI)	12000 €
2015	PROMIS, Postgraduate Research on Dilute Metamorphic Nanostructures and Metamaterials in Semiconductor Photonics	Work package <i>leader</i> of an EU project (Innovative Training Network) in Horizon 2020 (I)	516122 €
2016	Caratterizzazione ottica di film sottili per dispositivi fotovoltaici a base di CZTS	Ministero dello Sviluppo Economico and ENEA (PI of the Sapienza activities)	35000 €

2018	Strain-driven patterning of two-dimensional materials	Progetti Grandi (with external referee) Sapienza Università di Roma (PI)	63800 €
2018	Trattamento sicuro dei dati mediante l'informazione con singoli fotoni a richiesta	Regione Lazio (L.R. 13/2008 - art. 7 Progetti di Gruppi di Ricerca) (PI)	149000 €
2020	A two-day meeting on the progress of two-dimensional materials (2Day)	Finanziamenti per convegni, seminari, workshop Ateneo Sapienza (PI)	4000 €

As part of the funding information, the successful applications as PI for magnet time at the High Field Magnet Laboratory (HMFL; Grenoble, France and Nijmegen, The Netherlands) and European Magnetic Field Laboratory (EMFL; Nijmegen, The Netherlands) are reported below

2002, *Magnetophotoluminescence spectroscopy of (InGa)(AsN)/GaAs heterostructures*, 40 hrs

2007, *Determination of the electron effective mass in highly degenerate indium nitride*, 45 hrs

2008, *Carrier effective mass and gyromagnetic factor in GaAsBi highly mismatched alloys*, 24 hrs

2009 and 2011, *Magneto-optical studies of novel dilute nitride-based nanostructures*, 40 + 30 hrs

2011 and 2012, *Carrier mass and g-factor determination in wurtzite GaAs*, 35 hrs

2018, *Probing the direct/indirect band gap structure of mechanically deformed WS₂ single layers*, 30 hrs

The total grant value amounts to about 490000 € (equivalent to a cost of 2000 € per hour).

Part VII – Institutional Activities

<i>Start</i>	<i>End</i>	<i>Institution</i>	<i>Position</i>
2008		Dipartimento di Fisica, Sapienza Università di Roma	Coordinator of the Guidance Activities (<i>Orientamento</i>) provided to freshmen and students by the Physics Department. Co-author of the Department booklet devoted to freshmen.
2009	2010	Dipartimento di Fisica, Sapienza Università di Roma	Coordinator of the participation of the Physics Department to the program “Scientist Around Youth” promoted by the European Commission
2011	2012	Dipartimento di Fisica, Sapienza Università di Roma	Member of the Committee for the Autonomy and Innovation of Teaching at the Physics Department of Sapienza Università di Roma.
2013	2015	Dipartimento di Fisica, Sapienza Università di Roma	<u>Member of the Department Council (Giunta).</u>
2013	2015	Facoltà di Scienze Matematiche, Fisiche e Naturali, Sapienza Università di Roma	<u>Member of the Faculty Council (Giunta).</u>
2005		Dipartimento di Fisica, Sapienza Università di Roma	Responsible for the management of liquid nitrogen supply for the departmental experimental groups.
2012		Sapienza Università di Roma	Member of the Council of the Doctorate in Mathematical Models for Engineering, Electromagnetics and Nanosciences.
2014		Dipartimento di Fisica, Sapienza Università di Roma	<u>Member of Maintenance Commission of the Department buildings</u>
2015		National agency for the evaluation of universities and research institutes (ANVUR)	<u>Reviewer ANVUR 2011-2014</u>
2016		Facoltà di Scienze Matematiche, Fisiche e Naturali, Sapienza Università di Roma	Participant to the Lab2go project (outreach activity in secondary schools) by Dipartimento di Fisica and INFN
2019		Dipartimento di Fisica, Sapienza Università di Roma	<u>Chair of the “Spazio e ospiti” commission.</u>
2019		Dipartimento di Fisica, Sapienza Università di Roma	Member of the group subjected to the assessment of the didactic activity by ANVUR.

Exam and selection procedure commissions

2008	Dipartimento di Fisica, Università degli Studi di Firenze	Member of the committee of Doctorate final exam XXI cycle
2009	Sapienza Università di Roma	Member of the committee of entrance exam XXI cycle Doctorate in Materials Science
2011	Sapienza Università di Roma	Member of the committee of entrance exam XXI cycle Doctorate in Physics
2012	Sapienza Università di Roma	Member of the committee of entrance exam for the training school devoted to high school teachers in Physics (Tirocinio Formativo Attivo)
2014	Dipartimento di Fisica, Sapienza Università di Roma	Member of the committee of Doctorate final exam XXVI cycle
2014	Sapienza Università di Roma	Member of the committee of entrance exam for the training school devoted to high school teachers in Physics (Tirocinio Formativo Attivo)
2015	Sapienza Università di Roma	Member of the committee of entrance exam XXXI cycle Doctorate in Physics
2017	Dipartimento di Fisica, Università degli Studi di Roma, Tor Vergata	Member of the committee of Doctorate final exam XXIX cycle
2017	CNR Institute Nanoscienze (Pisa)	Member of the exam committee for Researcher position
2019	Dipartimento di Fisica, Università degli Studi di Firenze	Member of the committee of Doctorate final exam XXXI cycle
2019	Universidad de Cádiz (Spain), Department of Materials Science and Metallurgic Engineering and Inorganic Chemistry	Member of the committee of Doctorate final exam Doctor of Philosophy
2020	CNR Institute for Microelectronics and Microsystems	Member of the selection committee for a fellowship

Part VIII – Professional and Organizational Activities

Reviewing activities

Scientific journals: Physical Review Letters, Physical Review B, Physical Review Materials, Nature Materials, Nature Photonics, ACS Nano, Scientific Reports, npj 2D Materials & Applications, Semiconductor Science and Technology, Nanotechnology, Applied Physics Letters, Journal of Applied Physics, Journal of Physics D, Materials Research Express

Funding agencies

European Commission
Project reviewer FET-Quantum Technologies Flagship
Innovation Expert of Quantum Technologies Flagship
 Academy of Sciences of the Czech Republic
 Engineering and Physical Sciences Research Council (EPSRC, UK)
 Romanian National Council for Scientific Research (Romania)
 Israel Science Foundation (Israel)
 National Science Center (Poland)
 SêrCymru (Welsh Government)
 Deutscher Akademischer Austausch Dienst (DAAD) German Academic Exchange Service (Germany)
 Beacon of Excellence Support Form Scheme (The University of Nottingham, UK)
 Agenzia Regionale per la Tecnologia e l'Innovazione (Regione Puglia, Italy)
 Deutsche Forschungsgemeinschaft (German Research Foundation)

- 2005 Member of the Campisano Prize committee (Istituto Nazionale di Fisica della Materia)
- 2008 Member of the organizing committee of the 22nd conference of the Condensed Matter Division of the European Physical Society (2008)
- 2008 Member of the international advisory committee of the international conference “Recent Advances of Low Dimensional Structures and Devices”
- 2009-2013 Member of the EU COST Action MP0805 “Novel gain materials and devices based on III-N-V compounds”
- 2014 Member of the European Magnetic Field Laboratory User committee
- 2015 Member of the organizing committee of the 101st conference of the Italian Physical Society (2015)
- 2017 Organizer of the International Workshop on “Characterisation of Photonic Materials and Devices”
- 2020 Member of the Expert Panel for the evaluation of proposals for the National Science Centre (Poland)
- 2020 Chair of the International Workshop “A two-day meeting on the progress of two-dimensional materials (2Day)”

Part IX – Research Activities

Keywords	Brief Description [numbers refer to the full publication list at page 20]
Disorder effects in low-dimensional semiconductors (1992-1996)	Experimental characterization and modeling of the effects of microscopic disorder on the optical properties of semiconductor quantum wells [9,10,12].
Laser applications of quantum dots (1997-1999)	Engineering, realization, characterization, and optimization of lasers based on InGaAs self-assembled quantum dots with top-notch performances [19,32,54]. <i>Performed at School of Physics and Astronomy, University of Nottingham (UK)</i>
Electronic properties of quantum dots (1997-1999)	Investigation of the thermal stability of the optical properties of quantum dots and their implementation in devices [33,42,43,50]. <i>Performed at School of Physics and Astronomy, University of Nottingham (UK)</i>
Transport properties of quantum dot containing devices (1997-1999)	Capacitance-voltage and magneto-tunneling spectroscopy (transport measurements) applied to n-i-n/p-i-p and resonant tunneling diodes incorporating quantum dots [20,51,52]. <i>Performed at School of Physics and Astronomy, University of Nottingham (UK)</i>
Hydrogen in semiconductor materials and nanostructures (2000-present)	Discovery of the N passivation effects in hydrogenated dilute nitrides [62,63,159], observation of doping effects in GaAsBi [145,149], observation of tunable ferromagnetism in ZnO [190,205], variable band gap energy in nitrides [186], and laser level scheme in Si/Ge nanostructures [192].
Electronic properties of dilute nitrides (2001-2013)	Optical studies of dilute nitrides (materials of relevance for telecom and photovoltaic applications) under high magnetic field and hydrostatic pressure and determination of the fundamental transport and spin properties [110,118,122].
Nano-photonics (2014-present)	Implementation of H-related effects in dilute nitrides for the realization of single-photon sources and their implementation in photonic structures [114,151,177,202,203,207].
Electronic properties of Nanowires (2012-present)	Comprehensive study of the optical and magneto-optical properties of nanowires aimed at the determination of the electronic, transport, and spin properties [174,180,183,184,191,193,194,199,209,210,220].
Optoelectronic and mechanical properties of two-dimensional materials (2019-present)	Pioneering of a novel method for creating strain-engineered atomically thin two-dimensional materials via the formation of hydrogen bubbles. These latter exhibit high light emission efficiency and exceptional mechanical properties [212,213,218,222].

Short stays in international laboratories

2005	Philipps-University of Marburg (Germany)
<i>Following stays were granted on an international competitive basis upon scientific proposal review</i>	
2001	European Synchrotron Radiation Facility (ESRF), Grenoble (France)
2002	Grenoble High Magnetic Field Laboratory (GHMLF), Grenoble (France)
2009 and 2019	Synchrotron SOLEIL Paris (France)
2008, 2009, 2011, 2012, 2014, 2019	High Field Magnet Laboratory (HMFL), Nijmegen (The Netherlands)

Part X – Summary of Scientific Achievements**Total**

Product type	Number
Papers [international]	229
Papers [invited]	4
Papers [proceedings]	35
Books [scientific]	5 (book chapters)
Invited talks and seminars	36
Total Impact factor	776.8
Total Citations	5281 (Google Scholar); 4202 (Scopus); 4191 (WoS)
Hirsch (H) index	40 (Google Scholar); 36 (Scopus); 35 (WoS)

Part XI– Seminars, invited talks, and full list of publications**Invited talks**

- June 2019 “*Controlled micro/nano-dome formation in proton-irradiated bulk transition-metal dichalcogenides*”
4th International Conference on Physics of 2D Crystals 2019 (Hangzhou, China)
- December 2018 “*Position-controlled patterning of the electronic and structural properties of bulk transition-metal dichalcogenides by proton-driven micro/nano-dome formation*”
Nanoscience & Nanotechnology 2018 (Frascati, Italy)
- May 2018 “*Proton-driven patterning of bulk transition-metal dichalcogenides*”
International Workshop on Electronic Structure of Superconductors and Novel Materials (Rome, Italy)
- December 2017 “*Proton-driven generation of atomically thin, light emitting domes in transition metal dichalcogenides*”
Psi-k workshop, 2D layered materials for opto-electronics: a theoretical/computational perspective (Rome, Italy)
- September 2017 “*Nano-micro domes produced in bulk transition metal dichalcogenides by proton irradiation*”
NanoInnovation 2017 (Rome, Italy)
- September 2017 “*Transport and spin properties of excitons, electrons, and holes in wurtzite nanowires*”
15th International Conference on Advanced Materials by the Materials Research Society (Kyoto, Japan)
- September 2014 “*Addressing carrier confinement, mass and gyromagnetic factor in semiconductor nanostructures*”
Workshop on Optical Properties of Individual Nanowires and Quantum Dots in High Magnetic Field, (Toulouse, France)
- August 2014 “*Magneto-Optical Properties of Wurtzite-Phase Semiconductor Nanowires*”
8th Nanowire Growth Workshop and Nanowires 2014, (Eindhoven, The Netherlands)
- July 2013...“*H effects in dilute III-N-V alloys: from defect engineering to nanostructuring*”
27th International Conference on Defects in Semiconductors, (Bologna, Italy)
- June 2012 “*Band structure of high-quality wurtzite GaAs in InGaAs-GaAs core-shell nanowires*”
Nano-structures self-assembly 2012, S. Margherita di Pula (Sardinia, Cagliari, Italy)
- July 2011 “*Nanostructures and novel materials investigated by magneto-photoluminescence spectroscopy at HFML (Nijmegen)*”
EuroMagnet meeting, Laboratoire National des Champs Magnétiques Intenses, Toulouse (France)
- July 2010 “*Unusual compositional dependence of the exciton reduced mass in GaAsBi*”
1st International Workshop on Bismuth Containing Semiconductors, University of Michigan (USA)
- February 2010 “*Hydrogen-mediated nanostructuring of dilute nitride semiconductors*”
XVIII Ural International Winter School on the Physics of Semiconductors, Ekaterinburg (Russia)
- June 2009 “*Hydrogen-induced defect engineering in dilute nitrides semiconductors*”
15th Semiconducting and Insulating Materials Conference, Vilnius (Lithuania)
- April 2007 “*Hydrogen-induced nitrogen passivation in dilute nitrides: a novel approach to defect engineering*”
Material Research Society spring Meeting, San Francisco (CA, USA)
- January 2005 “*Carrier localization in (InGa)(AsN) alloys*”
Optoelectronics 2005, San Jose (CA, USA)

- July 2004 “*Probing the electronic properties of dilute nitrides by carrier localization and effective mass measurements*”
General Conference of the Condensed Matter Division, European Physical Society, Prague (Czech Republic)
- July 2003 “*Hydrogen related effects in diluted nitrides*”
XXII International Conference on Defects in Semiconductors
Aarhus (Denmark)
- June 2002 “*Hydrogen as a probe for studying the electronic properties of (InGa)(AsN)/GaAs heterostructures*”
International symposium on “N-containing III-V semiconductors: Fundamentals and Applications” of the European Materials Research Society, E-MRS, Strasbourg (France)
- April 2002 “*Hydrogen as a probe of the nitrogen charge distribution in (InGa)(AsN)/GaAs*”
19th General Conference of the Condensed Matter Division of the European Physical Society, Brighton (United Kingdom)
- February 2002 “*Interplay of Nitrogen and Hydrogen in (InGa)(AsN)/GaAs heterostructures*”
XIV “Ural International Winter School on the Physics of Semiconductors Electronic properties of low-dimensional semi- and superconductor structures”, Ekaterinburg (Russia)

Invited seminars

- December 2019 “*Proton-induced mechanical deformations of transition metal dichalcogenides*”
Department of Physics, University of Basel (Switzerland)
- May 2018 “*Hydrogen-driven generation of atomically thin, light emitting domes in transition metal dichalcogenides*”, Dipartimento di Fisica, Università di Roma “Tor Vergata”
- October 2017 “*Nano-micro domes produced in bulk transition metal dichalcogenides by proton irradiation*”, National Research Council, Institute for Microelectronics and microsystems (Rome, Italy).
- September 2017 “*Proton irradiation in bulk transition metal dichalcogenides*”
Electronic Engineering Department, Tor Vergata University (Rome, Italy).
- July 2017 “*Proton irradiation in bulk transition metal dichalcogenides*” and “*Addressing the fundamental electronic properties of wurtzite GaAs nanowires by magneto-optical spectroscopy*” Department of Physics, Regensburg University (Regensburg, Germany)
- January 2014 “*Optical and Magneto-Optical Studies of III-V Semiconductor Nanowires*” Scuola Normale Superiore, Pisa.
- December 2009 “*Polarization control by strain-engineering in GaAsN/GaAsN:H heterostructures*”
Laboratory of Analysis and Architecture of Systems (CNRS), Toulouse, France.
- May 2009 “*Spatial nanostructuring of dilute nitrides by hydrogen*” University of Essex, United Kingdom.
- April 2008 “*Defect Engineering in Dilute Nitride Semiconductors*” TASC National Laboratory, Trieste (Italy).
- May 2003 “*Effects of hydrogen on the electronic and lattice properties of (InGa)(AsN)*” Department of Physics and Material Sciences Center, Philipps-University, Marburg (Germany).
- July 1999 “*Carrier hopping in self-assembled quantum dots*” Nippon Telegraph and Telephone (NTT), Tokyo (Japan).
- February 1999 “*Carrier hopping in InAs/Al_yGa_{1-y}As self-organized quantum Dots*” Max-Planck Institute of Microstructure Physics, Halle (Germany).

February 1998 “*Next generation laser diodes*”, Department of Physics, University of Sheffield (United Kingdom).

January 1998 “*Optical and Microstructural Studies of Heterostructures and Injection Lasers incorporating (InGa)As Quantum Dots*”, Institut für Festkörperphysik, TU Berlin (Germany).

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Autorizzo il trattamento dei miei dati personali presenti nel cv ai sensi dell’art. 13 del Decreto Legislativo 30 giugno 2003, n. 196 “Codice in materia di protezione dei dati personali” e dell’art. 13 del GDPR (Regolamento UE 2016/679)

