Paolo Olivero
Curriculum vitæ et studiorum

- **Index**

• Personal data (Index)

- first name: Paolo
- family name: Olivero
- degrees: School-leaving certificate at Scientific Lyceum
  Degree in Physics
  Ph.D. in Physics
- occupation: Full-time researcher
  Physics Department, University of Torino
- birth date 2 July 1977
- citizenship: Italian
- marital status: married
- language: Italian: mother tongue
  English: fluent
  French: scholastic
- military service: dispensed for scientific merits under Italian law
- work address: Physics Department, University of Torino
  via P. Giuria 1, 10125 Torino (TO)
- phone numbers: +39 011 670 7366 (work)
- fax: +39 011 670 7020 (work)
- e-mail address: olivero@to.infn.it
- webpages: Solid State Physics Group: https://goo.gl/6GqzSk
  CampusNet: http://goo.gl/zxaNA
  ResearchID: http://goo.gl/SaJRJ

• Brief biography (Index)

- 02/07/1977: date of birth (Cuneo, Italy);
- 1991 – 1996: school-leaving certificate ("G. Peano" Scientific Liceum of Cuneo, Italy);
- 1996 – 2000: master degree in Physics (University of Torino, Italy); award date: 27/10/2000;
- December 2000 – October 2003: PhD. course in Physics (University of Torino, Italy); award date: 22/01/2004;
- 01/12/2003 – 31/01/2004: post-doctoral research position "Development and application of spectroscopic and microscopic techniques for the characterization of semiconductor materials and biological tissues" (University of Torino, Italy);
- 23/02/2004 – 29/02/2004: "casual employee" research position at the University of Melbourne, Australia;
- 01/03/2004 – 09/03/2006: post-doctoral research fellowship "Diamond quantum dots fabricated by ion implantation" (University of Melbourne, Australia);
- 10/03/2006 – 15/12/2007: Australian postoctoral fellowship "The diamond quantum computer" (University of Melbourne, Australia);

- 01/08/2007 – 31/03/2008: visiting scientist at the Ruđer Bošković Institute (Zagreb, Croatia);
- 12/11/2007 – 09/12/2007: scientific visit “Development of ion beam lithography techniques” at the Experimental Physics Department of the University of Torino funded by the National Inter-university Consortium for the Physics Sciences of Matter (CNISM) [34];
- 01/04/2008 – 03/07/2008: post-doctoral research fellowship at the Experimental Physics Department of the University of Torino supported by the program “Action A: Containment of Brain Drain” of Regione Piemonte;
- 01/04/2008 – 30/06/2008: research contract “Development of hardware and software of the registration of cell electrical activity from diamond substrates” at the Department of Neurosciences of the University of Torino;
- 07/07/2008 – 06/07/2011: “ANL-CSP” Nanotechnology grant at the Experimental Physics Department of the University of Torino funded by the Italian Academy of Science (“Accademia Nazionale dei Lincei”);
- 01/11/2009 – 30/11/2009: scientific visit to the School of Physics of the University of Melbourne supported by the Universities of Torino and Melbourne;
- 01/08/2011 – 28/12/2011: post-doctoral research position “Development of ion microscopy techniques for the microfabrication and characterization of advanced materials” at the Experimental Physics Department of the University of Torino;
- 29/12/2011 – 30/11/2018: permanent researcher at the Physics Department of the University of Torino (scientific sectors: FIS/03 - Matter Physics, 02/B1 - Experimental Matter Physics);
- 30/10/2013: national scientific qualification as Associate Professor in the sector “02/B3 - Applied Physics”;
- 29/11/2013: national scientific qualification as Associate Professor in the sector “02/B1 - Experimental Matter Physics”;
- 12/04/2017: national scientific qualification as Full Professor in the sector “02/B1 - Experimental Matter Physics”;
- 12/04/2017: national scientific qualification as Full Professor Evaluator in the sector “02/B1 - Experimental Matter Physics”;
- 1/12/2018 - present: Associated Professor at the Physics Department of the University of Torino (scientific sectors: FIS/03 - Matter Physics, 02/B1 - Experimental Matter Physics).

• Awards (Index)

- “Optime” Award to the best graduated students in 2000 at the University of Torino conferred by Industrial Union of Torino
- “Galluzzi” Physics Award to the best Physics graduated in 2000 conferred by University of Roma 3
- “Best Physics degree thesis of 2000” Award conferred by the University of Torino

- "Emanuele Turinetti di Priero Simonis" Award to the best Physics graduated in 2000 conferred by the University of Torino
- Mention of honor of the poster "Diamond for quantum communication and computing" presented at the 16th Biennial Congress of the Australian Institute of Physics (31 January - 4 February 2005, Canberra, Australia)
- "Zeiss prize" to the best ion microscopy image presented at "ICNMTA2008 - 11th International Conference on Nuclear Microprobe Technology and Applications" (20-25 July 2008, Debrecen, Hungary)
- Mention of honor of the poster "Focused ion beam fabrication and IBIC characterization of a diamond detector with buried electrodes" presented at the conference "ICNMTA2010 - 12th International Conference on Nuclear Microprobe Technology and Applications" (26-30 July 2010, Leipzig, Germany)
- Communication "Amperometric detection of quantal catecholamine secretion from individual cells by an ion beam microfabricated single crystalline diamond biosensor" (F. Picollo et al.): best oral presentation in the "Biophysics and Medical Physics" session of the "XCVIII National Congress of the Italian Physics Society", 17 - 21 September 2012, Naples (Italy)
- Communication "Diamond-based multi-electrode arrays for monitoring dopaminergic neurons activity": best oral presentation in the 4th National Congress on Sensors, 21-23 February 2018, Catania (Italy)

• Education (Index)

- School-leaving certificate ("Diploma di Maturità Scientifica") achieved with full marks (60/60) in 1996 at Scientific Liceum "G. Peano" (Cuneo, Italy)
- Line of University studies: Solid State Physics.
- Characterizing Degree exams:
  - Solid state physics
  - Solid state physics laboratory
  - Statistical mechanics
  - Superior physics
- First-class honours ("110/110 cum laude and honourable mention") Degree in Physics at University of Torino obtained on 27/10/2000.
- Degree thesis: "Photoacoustic spectroscopy on amorphous carbon thin films"; supervisor: prof. Claudio Manfredotti (University of Torino).
- Ph.D. course in Condensed States Physics at the Experimental Physics Department of the University of Torino (2000-2003).
- Ph.D. exams:
  - Semiconductor physics
  - Many-body systems theory
  - Programming in C and C++ language
  - Physics of electronic devices
  - Atomic Force and Scanning Probe Microscopies (AFM and SPM)
- Ph.D. schools:

  - National School “Fundaments of Materials Science” (Genova, 2001) organized by National Institute of Matter Physics (INFM)
  - National School “Nanostructures” (Genova, 2001) organized by National Institute of Matter Physics (INFM)
- Ph.D. Degree in Condensed States Physics on 22/01/2004; title: “Study of electronic and optical properties of wide bandgap materials (diamond and silicon carbide) by means of nuclear and X-ray microprobes, VIS spectroscopic techniques and photoelectron spectroscopy”; supervisor: prof. Claudio Manfredotti; external advisor: prof. Gyorgy Vizkelethy (Sandia National Laboratories, Albuquerque).

• Teaching (Index)

- From 22/01/04, “Cultore della Materia” (tr. “Expert in the Field”) for scientific area “FIS03” in the Graduate Course “Science and Technology applied to Cultural Heritage” of the University of Torino;
- Teaching:
  - “Solid State Physics II” course of the Master Degree in “Physics of Advanced Technologies” at the University of Torino, 2nd year, 2nd quadrimester, academic year 2008-2009;
  - “Solid State Physics” course of the Master Degree in “Materials Science” at the University of Torino, 1st year, 2nd semester, academic year 2008-2009;
  - “Solid State Physics” course of the Master Degree in “Materials Science” at the University of Torino, 1st year, 2nd semester, academic year 2009-2010;
  - Lecture “Ion microbeams for electrical characterization and micro fabrication” in the course “Ion beam analysis techniques” instituted at the University of Firenze in the Degree Course of Physical and Astrophysical Sciences, academic year 2009-2010 (head of the course: dr. Massimo Chiari);
  - “Solid State Physics” course of the Master Degree in “Materials Science” at the University of Torino, 1st year, 2nd semester, academic year 2010-2011;
  - “Solid State Physics” course of the MaMaSELF (“European Master in Materials Science Exploiting Large Scale Facilities”) Master Degree at the University of Torino, 1st year, 2nd semester, academic year 2010-2011;
  - “Solid State Physics” course of the Master Degree in “Materials Science” at the University of Torino, 1st year, 2nd semester, academic year 2011-2012;
  - “Solid State Physics” course of the MaMaSELF (“European Master in Materials Science Exploiting Large Scale Facilities”) Master Degree at the University of Torino, 1st year, 2nd semester, academic year 2011-2012;

- "Semiconductor Physics" course of the Master Degree in Physics at the University of Torino, 1st and 2nd year, 2nd trimester, academic year 2011-2012;
- "Structure of Matter with Laboratory" course of the Bachelor Degree in Materials Science at the University of Torino, 2nd year, 2nd semester, academic year 2011-2012;
- "Chemical and physical properties of industrial materials: origins, typologies and databases" course of the "Materials, Mathematics and Models for Production and Design" II level Post-Degree Master at the University of Torino, academic year 2011-2012;
- "Solid State Physics" course of the Master Degree in "Materials Science" at the University of Torino, 1st year, 2nd semester, academic year 2012-2013;
- "Solid State Physics" course of the MaMaSELF ("European Master in Materials Science Exploiting Large Scale Facilities") Master Degree at the University of Torino, 1st year, 2nd semester, academic year 2012-2013;
- "Semiconductor Physics" course of the Master Degree in Physics at the University of Torino, 1st and 2nd year, 2nd trimester, academic year 2012-2013;
- "Structure of Matter with Laboratory" course of the Bachelor Degree in Physics at the University of Torino, 3rd year, 2nd trimester, academic year 2012-2013;
- "Solid State Physics" course of the Master Degree in "Materials Science" at the University of Torino, 1st year, 2nd semester, academic year 2013-2014;
- "Solid State Physics" course of the MaMaSELF ("European Master in Materials Science Exploiting Large Scale Facilities") Master Degree at the University of Torino, 1st year, 2nd semester, academic year 2013-2014;
- "Semiconductor Physics" course of the Master Degree in Physics at the University of Torino, 1st and 2nd year, 2nd trimester, academic year 2013-2014;
- "Structure of Matter with Laboratory" course of the Bachelor Degree in Physics at the University of Torino, 3rd year, 2nd trimester, academic year 2013-2014;
- "Materials Today" course of the Bachelor Degree in Materials Science and Technology at the University of Torino, 3rd year, 2nd semester, academic year 2013-2014;
- "Solid State Physics" course of the Master Degree in "Materials Science" at the University of Torino, 1st year, 2nd semester, academic year 2014-2015;
- "Solid State Physics" course of the MaMaSELF ("European Master in Materials Science Exploiting Large Scale Facilities") Master Degree at the University of Torino, 1st year, 2nd semester, academic year 2014-2015;

- “Semiconductor Physics” course of the Master Degree in Physics at the University of Torino, 1st and 2nd year, 2nd trimester, academic year 2014-2015;
- “Structure of Matter with Laboratory” course of the Bachelor Degree in Physics at the University of Torino, 3rd year, 2nd trimester, academic year 2014-2015;
- “Materials Today” course of the Bachelor Degree in Materials Science and Technology at the University of Torino, 3rd year, 2nd semester, academic year 2014-2015;
- “Solid State Physics” course of the Master Degree in “Materials Science” at the University of Torino, 1st year, 2nd semester, academic year 2015-2016;
- “Solid State Physics” course of the MaMaSELF (“European Master in Materials Science Exploiting Large Scale Facilities”) Master Degree at the University of Torino, 1st year, 2nd semester, academic year 2015-2016;
- “Semiconductor Physics” course of the Master Degree in Physics at the University of Torino, 1st and 2nd year, 2nd trimester, academic year 2015-2016;
- “Structure of Matter with Laboratory” course of the Bachelor Degree in Physics at the University of Torino, 3rd year, 2nd trimester, academic year 2015-2016;
- “Materials Today” course of the Bachelor Degree in Materials Science and Technology at the University of Torino, 3rd year, 2nd semester, academic year 2015-2016;
- “Solid State Physics” course of the Master Degree in “Materials Science” at the University of Torino, 1st year, 2nd semester, academic year 2016-2017;
- “Solid State Physics” course of the MaMaSELF (“European Master in Materials Science Exploiting Large Scale Facilities”) Master Degree at the University of Torino, 1st year, 2nd semester, academic year 2016-2017;
- “Semiconductor Physics” course of the Master Degree in Physics at the University of Torino, 1st and 2nd year, 2nd trimester, academic year 2016-2017;
- “Structure of Matter with Laboratory” course of the Bachelor Degree in Physics at the University of Torino, 3rd year, 2nd trimester, academic year 2016-2017;
- “Materials Today” course of the Bachelor Degree in Materials Science and Technology at the University of Torino, 3rd year, 2nd semester, academic year 2016-2017;
- “Physics, informatics and risk assessment” course of the Bachelor Degree in Biomedical Laboratory Techniques at the University of Torino, 1st year, 1st semester, academic year 2016-2017;

- “Ion Beam Based Techniques for Materials Science” course of the PhD School of Sciences and Innovative Technologies at the University of Torino, academic year 2016-2017;
- “Solid State Physics” course of the Master Degree in “Materials Science” at the University of Torino, 1st year, 2nd semester, academic year 2017-2018;
- “Solid State Physics” course of the MaMaSELF (“European Master in Materials Science Exploiting Large Scale Facilities”) Master Degree at the University of Torino, 1st year, 2nd semester, academic year 2017-2018;
- “Semiconductor Physics” course of the Master Degree in Physics at the University of Torino, 1st and 2nd year, 2nd trimester, academic year 2017-2018;
- “Structure of Matter with Laboratory” course of the Bachelor Degree in Physics at the University of Torino, 3rd year, 2nd trimester, academic year 2017-2018;
- “Materials Today” course of the Bachelor Degree in Materials Science and Technology at the University of Torino, 3rd year, 2nd semester, academic year 2017-2018;
- “Physics, informatics and risk assessment” course of the Bachelor Degree in Biomedical Laboratory Techniques at the University of Torino, 1st year, 1st semester, academic year 2017-2018;
- “Ion Beam Based Techniques for Materials Science” course of the PhD School of Sciences and Innovative Technologies at the University of Torino, academic year 2017-2018;
- “Solid State Physics” course of the Master Degree in “Materials Science” at the University of Torino, 1st year, 2nd semester, academic year 2018-2019;
- “Solid State Physics” course of the MaMaSELF (“European Master in Materials Science Exploiting Large Scale Facilities”) Master Degree at the University of Torino, 1st year, 2nd semester, academic year 2018-2019;
- “Semiconductor Physics” course of the Master Degree in Physics at the University of Torino, 1st and 2nd year, 2nd trimester, academic year 2018-2019;
- “Structure of Matter with Laboratory” course of the Bachelor Degree in Physics at the University of Torino, 3rd year, 2nd trimester, academic year 2018-2019;
- “Materials Today” course of the Bachelor Degree in Materials Science and Technology at the University of Torino, 3rd year, 2nd semester, academic year 2018-2019;
- “Physics, informatics and risk assessment” course of the Bachelor Degree in Biomedical Laboratory Techniques at the University of Torino, 1st year, 1st semester, academic year 2018-2019;

- "Solid State Physics" course of the Master Degree in "Materials Science" at the University of Torino, 1st year, 2nd semester, academic year 2019-2020;
- "Solid State Physics" course of the MaMaSELF ("European Master in Materials Science Exploiting Large Scale Facilities") Master Degree at the University of Torino, 1st year, 2nd semester, academic year 2019-2020;
- "Semiconductor Physics with Laboratory" course of the Master Degree in Physics at the University of Torino, 1st and 2nd year, 2nd trimester, academic year 2019-2020;
- "Structure of Matter with Laboratory" course of the Bachelor Degree in Physics at the University of Torino, 3rd year, 2nd trimester, academic year 2019-2020;
- "Materials Today" course of the Bachelor Degree in Materials Science and Technology at the University of Torino, 3rd year, 2nd semester, academic year 2019-2020;
- "Physics, informatics and risk assessment" course of the Bachelor Degree in Biomedical Laboratory Techniques at the University of Torino, 1st year, 1st semester, academic year 2019-2020;
- "Ion Beam Based Techniques for Materials Science" course of the PhD School of Sciences and Innovative Technologies at the University of Torino, academic year 2019-2020;
- "Solid State Physics" course of the Master Degree in "Materials Science" at the University of Torino, 1st year, 2nd semester, academic year 2020-2021;
- "Solid State Physics" course of the MaMaSELF ("European Master in Materials Science Exploiting Large Scale Facilities") Master Degree at the University of Torino, 1st year, 2nd semester, academic year 2020-2021;
- "Semiconductor Physics with Laboratory" course of the Master Degree in Physics at the University of Torino, 1st and 2nd year, 2nd trimester, academic year 2020-2021;
- "Structure of Matter with Laboratory" course of the Bachelor Degree in Physics at the University of Torino, 3rd year, 2nd trimester, academic year 2020-2021;
- "Materials Today" course of the Bachelor Degree in Materials Science and Technology at the University of Torino, 3rd year, 2nd semester, academic year 2020-2021;
- "Physics, informatics and risk assessment" course of the Bachelor Degree in Biomedical Laboratory Techniques at the University of Torino, 1st year, 1st semester, academic year 2020-2021;
- "Ion Beam Based Techniques for Materials Science" course of the PhD School of Sciences and Innovative Technologies at the University of Torino, academic year 2020-2021;

  - "Materials for Electronics with Laboratory" course of the Bachelor Degree in in Materials Science and Technology at the University of Torino, 3rd year, 1st semester, academic year 2020-2021.
- Tutoring:
  - Assistant to "Solid State Physics Laboratory" course (Physics Degree, University of Torino, teacher: prof. Claudio Manfredotti), in the academic years 2001/2002, 2002/2003, with contract "Art. 33 comma 3" of the University of Torino Regulations;
  - Assistant to "1st year Physics" course (Materials Science Degree, University of Torino, teacher: prof. Alesssandra Romero) in the academic year 2002/2003, unofficial activity;
  - Assistant to "Solid State Physics" course (Materials Science Degree, University of Torino, teacher: prof. Claudio Manfredotti), in the academic year 2003/2004 with contract "Art. 33 comma 3" of the University of Torino Regulations;
  - Assistant to the courses: "Physics applied to cultural heritage" (Faculty of Letters, University of Torino, academic years 2001/2002 and 2002/2003) and "Materials Physics II P.D." (Faculty of Mathematical, Physical and Natural Sciences, academic year 2002/2003), unofficial activity;
  - Coordinator of Raman/PL laboratory in course "108-450: Analytical Chemistry in Conservation" (subject: "Molecular Spectroscopy") of the "Master of Arts in Cultural Materials in Conservation") at the University of Melbourne, 1st year, 2nd semester, academic year 2006; the activity is documented by Prof. Robyn Sloggett, Director of the "Centre for Cultural Materials Conservation" [1], University of Melbourne;
- Educational events for the broad public and the schools:
  - Organization of the multi-media stand "Talk with Diamond – Developing Tomorrow's Lab-on-a-Chip Clinics" presented at the "EuroScience Open Forum" (ESOF2010, 2-7 July 2010, Torino) within the "Science in the City" program;
  - "Diamond: a 'record' material between technology and history" talk presented on 30/05/2011 at the "G. Natta" (Rivoli, Italy) high-school within the "Student orientation" program of the "Materials Science and Technology" degree of the University of Torino;
  - "Artificial diamond: a record material for technology" talk presented on 30/01/2013 at the "School of Physics 2013" organized by the University of Torino for high-school students;
  - "Research on artificial diamond at the Solid State Physics Group" talk presented on 15/02/2013 at the "A. Spinelli" high-school of Torino within the "Scientific Degrees" Project;
  - "Physics and Materials Science at the University of Torino" talk presented on 27/03/2013 at the NIS inter-departmental centre of the University of Torino for high-school students;
  - "Matter Physics" talk presented on 04/12/2013 at the Physics Department of the University of Torino to high-school students within the "Physics Open Day" event;

- “Optical phenomena and photonics in diamond” talk presented on 07/04/2014 at the “Archimede” library of Settimo Torinese (Italy) for high-school students;
- “Matter Physics” talk presented on 11/09/2014 at the Physics Department of the University of Torino to high-school students;
- “Matter Physics and Materials Science” talk presented on 12/12/2014 at the Physics Department of the University of Torino to high-school students within the “Physics Open Day” event;
- “Matter Physics and Materials Science” talk presented on 09/03/2015 at the Physics Department of the University of Torino to high-school students within the “Scientific Degrees” Project;
- “Science, nanoscience and science fiction” talk presented on 31/03/2015 at the “School of Physics 2015” organized by the University of Torino for high-school students;
- “Materials: how, when and why…” talk presented on 01/04/2015 at the NIS inter-departmental centre of the University of Torino for high-school students, within the “Shool of Physics 2015” event;
- “Materials: how, when and why… - A brief introduction to Materials Science” talk presented on 25/11/2015 at the Chemistry Department of the University of Torino for high-school students, within the “Chemistry Open Day” event;
- “Science, nanoscience and science fiction” talk presented on 20/01/2016at the “8 Marzo” high-school (Settimo Torinese, Italy);
- “How many bits? from the abacus to the quantum computer, passing through the artificial diamond” talk presented on 22/03/2016 at the “School of Physics 2016” organized by the University of Torino for high-school students;
- “Materials: how, when and why… - A brief introduction to Materials Science” talk presented on 23/03/2016 at the NIS inter-departmental centre of the University of Torino for high-school students, within the “Shool of Physics 2016” event;
- “Science and Technology of Artificial Diamond” talk presented on 14/03/2017 at the Physics Department of the University of Torino to high-school students within the “Scientific Degrees” Project;
- “Degree in Materials Science and Technology” talk presented on 10/04/2017 at the NIS inter-departmental centre of the University of Torino for high-school students, within the “Shool of Physics 2017” event;
- “Diamonds for life: cell sensors” talk presented on 11/04/2017 at the “School of Physics 2017” organized by the University of Torino for high-school students;
- Member of the local Orgnizing Committee for the city of Torino of the outreach events “Pint of Science 2016”, “Pint of Science 2017” and “Pint of Science 2018”;
- “From the spooky world of quanta to quantum technologies: towards quantum metrology” science dissemination event at the Academy of Sciences of Torino, 29 May 2019.

- Membership in Teaching Committees:
  - "Student orientation and relationships with High Schools" committee, Materials Science Degree, University of Torino, Academic Years 2010-12;
  - "Teaching" committee, Materials Science Master Degree, University of Torino, Academic Years 2012-2015;
  - "Laboratories" committee, Physics Degree, University of Torino, Academic Years 2012-…;
  - "Laboratories" committee, Materials Science Degree, University of Torino, Academic Years 2012-…;
  - Committee of the PhD Program in Physics and Astrophysics - Doctoral School of Sciences and Innovative Technologies, University of Torino, Academic Years 2012-…;
  - "Student orientation" committee, Materials Science and Technology Bachelor Degree, University of Torino, 2015-…;
  - "Student orientation" committee, Materials Science Master Degree, University of Torino, 2015-…;
  - "Admission to the Master Degree" committee, Materials Science Master Degree, University of Torino, 2015-….
- Outreach Projects :
  - Contact point at the Physics Department of the University of Torino for the "Scientific Degrees" Project of the Italian Ministry for Instruction, University and Research, for the popularization of degree courses in Chemistry, Physics, Mathematics and Materials Science with High Schools, since Academic Year 2012-2013;
  - Contact point at the Physics Department of the University of Torino for the "To3 Nano Outreach" Project of the Inter-university Centre "Agorà Scienza" funded for the Academic Years 2015-2016 and 2016-2017 by "Compagnia di San Paolo".
- Contact point at the School of Natural Sciences of the University of Torino for the "Erasmus Traineeship" bilateral agreements between the University of Torino and the Néel Institute (CNRS, Grenoble), Academic Year 2013-2014;
- Contact point at the School of Natural Sciences of the University of Torino for the "Erasmus Traineeship" bilateral agreements between the University of Torino and the University of Ulm, Academic Year 2014-2015;
- Local tutor of students in stages at the University of Torino:
  - Fiammetta Sardi: Materials Science Master Degree, European Master in Materials Science Exploiting Large Scale Facilities (MaMaSELF), sending institution: Université de Rennes I, internship agreement nr. 78663, February-July 2018, academic supervisor: prof. P. Rabiller;
- Academic supervisor of students in external stages:
  - Veronica Ferrero: Physics Bachelor Degree, University of Torino, stage at the National Institute of Metrologic Research (INRiM), local tutor: L. Boarino, April-June 2012;

- Federico Pillepich, Physics Bachelor Degree, University of Torino, stage at the National Institute of Metrologic Research (INRiM), local tutor: I. Degiovanni, April-June 2013;
- Fabio Scaffidi Muta, Physics Bachelor Degree, University of Torino, stage at the National Institute of Metrologic Research (INRiM), local tutor: I. Degiovanni, April-June 2013;
- Marta Mirolo, Materials Science and Technology Bachelor Degree, University of Torino, stage at the Néel Institute (Grenoble) within the "Erasmus Traineeship" program, local tutor: E. Gheeraert, March-May 2014;
- Matteo Manachino, Physics Bachelor Degree, University of Torino, stage at the National Institute of Metrologic Research (INRiM), local tutor: I. Degiovanni, April-May 2014;
- Francesco Parino, Physics Bachelor Degree, University of Torino, stage at the National Institute of Metrologic Research (INRiM), local tutor: L. Boarino, April-June 2014;
- Chiara Enrico Bena, Physics Master Degree, University of Torino, stage at the Institute of Electron Devices and Circuits of the University of Ulm within the "Erasmus Traineeship" program, local tutor: prof. S. Strehle, March-June 2015;
- Marco Capelli, Physics Master Degree, University of Torino, stage at the Institute of Quantum Optics of the University of Ulm within the "Erasmus Traineeship" program, local tutor: prof. F. Jelezko, March-June 2015;
- Federico Pastore, Physics Bachelor Degree at the University of Torino, stage at the National Institute of Metrologic Research (INRiM), local tutor: L. Boarino, May-July 2015;
- Giulia Pippione, Physics Master Degree, University of Torino, stage at the Institute of Electron Devices and Circuits of the University of Ulm within the "Erasmus Traineeship" program, local tutor: prof. S. Strehle, April-May 2016;
- Cecilia Collà Ruvolo, Physics Bachelor Degree at the University of Torino, stage at the Néel Institute (Grenoble) within the "Erasmus Traineeship" program, local tutor: E. Gheeraert, February-June 2016;
- Irene Ciocca, Materials Science and Technology Bachelor Degree, University of Torino, stage at the National Institute of Metrologic Research (INRiM), local tutor: M. Genovese, November 2017 - February 2018;
- Ernesto Gribaudo, Physics Bachelor Degree at the University of Torino, stage at the Néel Institute (Grenoble) within the "Erasmus Traineeship" program, local tutor: E. Gheeraert, May-June 2018;
- Daniele Nello, Physics Bachelor Degree at the University of Torino, stage at the National Institute of Metrologic Research (INRiM), local tutor: M. Genovese, May - June 2018;
- Alessandro Tarantola, Physics Bachelor Degree at the University of Torino, stage at the National Institute of Metrologic Research (INRiM), local tutor: M. Genovese, May - June 2018;

  - Arianna Ferro, Physics Bachelor Degree at the University of Torino, stage at the National Institute of Metrologic Research (INRiM), local tutor: M. Genovese, May - June 2018;
  - Greta Andrini, Physics Bachelor Degree at the University of Torino, stage at the National Institute of Metrologic Research (INRiM), local tutor: M. Genovese, May - June 2018;
  - Niccolò Avallone, Physics Bachelor Degree at the University of Torino, stage at the National Institute of Metrologic Research (INRiM), local tutor: M. Genovese, May - June 2018;
  - Silvio Gallino, Physics Bachelor Degree at the University of Torino, stage at the National Institute of Metrologic Research (INRiM), local tutor: M. Genovese, June - July 2018;
  - Hobey Garrone, Physics Bachelor Degree at the University of Torino, stage at the National Institute of Metrologic Research (INRiM), local tutor: M. Genovese, September 2018;
  - Nabil El Goumiri, Physics Bachelor Degree at the University of Torino, stage at the National Institute of Metrologic Research (INRiM), local tutor: M. Genovese, November 2018 - January 2019;
  - Juan Pablo Salvatierra, Physics Bachelor Degree at the University of Torino, stage at the National Institute of Metrologic Research (INRiM), local tutor: C. Clivati, July 2018 - September 2019;
  - Vanna Pugliese, Physics Bachelor Degree at the University of Torino, stage at the National Institute of Metrologic Research (INRiM), local tutor: M. Genovese, September - October 2019.
- Academic tutor of High School students in learning stages:
  - Giovanni Feruglio, learning stage at the Physics Department of the University of Torino, academic co-tutor: prof. D. Marocchi (University of Torino), High School tutor: prof. M. Gamba (International Institute “Edoardo Agnelli”, Torino), June 2015;
  - Laura Allegranza, learning stage at the Physics Department of the University of Torino, academic co-tutor: prof. D. Marocchi (University of Torino), High School tutor: prof. M. Gamba (International Institute “Edoardo Agnelli”, Torino), June 2015;
  - Andrea Dorin, learning stage at the Physics Department of the University of Torino, High School tutor: prof. R. Meotto (High School Institute “Aldo Moro”, Rivarolo Canavese), June 2015;
  - Daniel Russo, learning stage at the Physics Department of the University of Torino, academic co-tutor: prof. D. Marocchi (University of Torino), High School tutor: prof. R. Pistarà (High School Institute “Amaldi Sraffa”, Orbassano), June 2015;
  - Alessandra Monti, learning stage at the Physics Department of the University of Torino, academic co-tutor: prof. D. Marocchi (University of Torino), High School tutor: prof. R. Pistarà (High School Institute “Amaldi Sraffa”, Orbassano), June 2015;
  - Giada Tatoli, learning stage at the Physics Department of the University of Torino, academic co-tutor: prof. D. Marocchi (University of Torino), High

School tutor: prof. R. Pistarà (High School Institute “Amaldi Sraffa”, Orbassano), June 2015;
  - Marco Tonietto, learning stage at the Physics Department of the University of Torino, academic co-tutor: prof. D. Marocchi (University of Torino), High School tutor: prof. C. Balladore (High School Institute “Baldessano Roccati”, Carmagnola), giugno 2015;
  - Davide Pecchio, learning stage at the Physics Department of the University of Torino, academic co-tutor: prof. D. Marocchi (University of Torino), High School tutor: prof. C. Balladore (High School Institute “Baldessano Roccati”, Carmagnola), giugno 2015.
- Supervisor of Master Degree students:
  - Genny Giaccardi: Physics Master Degree, University of Torino, “Development of fabrication techniques of microfluidic devices in diamond”, April 2012;
  - Alberto Maulu: Materials Science Master Degree, University of Torino, “Synthesis and characterization of structural and optical properties of phosphors of yttrium oxyortosilicates doped with terbium”, April 2012;
  - Filipppo Pisano: Physics Master Degree at the University of Torino, “Development of optical functionalization techniques in diamond for photonics”, October 2012;
  - Thaer Kassar: Materials Science Master Degree at the University of Torino, “Neutron Diffraction studies of elasticity and ferroelsticity of shape memory alloys”, December 2012;
  - Giulia Garello: Physics Master Degree at the University of Torino, “Development and testing of a cellular bio-sensor in single-crystal diamond”, April 2013;
  - Tarunjot Singh: Materials Science Master Degree at the University of Torino, “Low work function emitter materials”, April 2013;
  - Liya Khadeeva: Materials Science Master Degree at the University of Torino, “Structural and dynamical aspects of oriented DNA fibers”, October 2013;
  - Philipp Braun: Materials Science Master Degree at the University of Torino, “On-the-fly scans for X-ray Ptychography”, July 2013;
  - Mattia Levi: Physics Master Degree at the University of Torino, “Study of single photon emitters in artificial diamond”, April 2014;
  - Alessandro Marsura: Materials Science Master Degree at the University of Torino, “Production and characterization of diamond nanocrystals with single luminescent centers”, December 2014;
  - Marilena Plaitano: Materials Science Master Degree at the University of Torino, “Microfabrication and characterization of multi-electrode devices in diamond for cell sensing”, December 2014;
  - Sviatoslav Tchernij Ditalia: Physics Master Degree at the University of Torino, “Electrical control of luminescent centers in artificial diamond”, April 2015;

- Alessandro Zelferino: Materials Science Master Degree at the University of Torino, “Modeling with *ab initio* methods of the properties of point defects in diamond”, July 2015;
- Marco Capelli: Physics Master Degree at the University of Torino, “Quantum-optical characterization of nitrogen-vacancy centers in artificial diamond for sensing applications”, July 2015;
- Chiara Enrico Bena: Physics Master Degree at the University of Torino, “CVD growth and quantum-optical characterization of nitrogen-vacancy luminescent centers in artificial diamond”, July 2015;
- Maria Beatrice Vallero: Physics Master Degree at the University of Torino, “The Zeeman effect – A teaching challenge with high-school students”, October 2015;
- Filippo Gedda: Physics Master Degree at the University of Torino, “Developmente and testing of multi-electrode biosensors in artificial diamond”, April 2016;
- Matteo Crema: Physics Master Degree at the University of Torino, “Development of an apparatus for the optically detected magnetic resonance in diamond color centers”, April 2016;
- Giulia Bruno: Physics Master Degree at the University of Torino, “Characterization of multi-functional cellular bio-sensors in artificial diamond”, April 2016;
- Fabio Scaffidi Muta: Physics Master Degree at the University of Torino, “Fabrication of graphitic nano-channels in artificial diamond substrates with ion beam lithography techniques”, July 2016;
- Francesco Ercole: Physics Master Degree at the University of Torino, “Characterization of single photon emitters based on color centers in nanodiamonds”, October 2016;
- Valerio Sicari: Physics Master Degree at the University of Torino, “Study of the emission properties of color centers in artificial diamond stimulated with electromagnetic fields”, October 2016;
- Giulia Pippione: Physics Master Degree at the University of Torino, “Characterization of boron doped diamond electrodes”, December 2016;
- Brenda Berenice Martínez Cantú: MaMaSELF (“European Master in Materials Science Exploiting Large Scale Facilities”) Master Degree at the University of Torino, “Processing and characterization of diamond nanocrystals for applications in biosensing”, July 2017;
- Federico Pastore: Physics Master Degree at the University of Torino, “Development and characterization of a diamond-based cellular substrate for micro-radiobiology”, December 2017;
- Santo Santonocito: Physics Master Degree at the University of Torino, “Characterization of the quantum-optical properties of color centers in diamond”, April 2018;
- Daniele Liprandi: Physics Master Degree at the University of Torino, “3D simulations of the behaviour of elastic membranes”, July 2018;

  - Luca Fasolo: Physics Master Degree at the University of Torino, “Superconducting parametric amplifier for quantum metrology with microwave photons”, July 2019;
  - Giulia Petrini: Physics Master Degree at the University of Torino, “Electrical control of luminescent defects in artificial diamond for applications in quantum technologies”, July 2019;
  - Marwan Channab: Physics Master Degree at the University of Torino, “Characterization of single-photon emitters at cryogenic temperatures”, October 2019;
  - Greta Andrini: Physics Master Degree at the University of Torino, “Quantum-optical characterization of He-related and Ne-related photoluminescent defects in artificial diamond”, October 2020;
  - Gianluca Deninno: Physics Master Degree at the University of Torino, “Photoluminescence spectroscopy – Development of innovative instrumentation and characterization of color centers in artificial diamond”, October 2020;
  - Carlo Pepe: Physics Master Degree at the University of Torino, “Photonic structures for broadband collection of photon pairs”, October 2020;
  - Eugenio Sturniolo: Materials Science Master Degree at the University of Torino, “Dielectric materials for the photonic quantum device in the microwave regime”, April 2021.
- Supervisor of Bachelor Degree students:
  - Giuseppe Sansone: Materials Science Bachelor Degree at the University of Torino, “Development of a cellular bio-sensor in single-crystal diamond”, July 2012;
  - Veronica Ferrero: Physics Bachelor Degree at the University of Torino, “Development of reactive ion etching techniques in artificial diamond”, July 2012;
  - Alberto Sassi: Physics Bachelor Degree at the University of Torino, “Development of instrumentation and methodologies for the selective etching of graphite from single-crystal diamond”, July 2012;
  - Giovanni Sofia: Physics Bachelor Degree at the University of Torino, “Development and testing of a system in controlled atmosphere for the selective etching of graphite from synthetic diamond samples”, April 2013;
  - Marta Bassignana: Physics Bachelor Degree at the University of Torino, “Fabrication of opto-mechanical structures in single-crystal diamond”, July 2013;
  - Federico Pillepich: Physics Bachelor Degree at the University of Torino, “Confocal microscopy on diamond color centers”, October 2013;
  - Anna Marsicano: Physics Bachelor Degree at the University of Torino, “Development of an automatized displacement system for a laser microfabrication apparatus”, October 2013;
  - Fabio Scaffidi Muta: Physics Bachelor Degree at the University of Torino, “Parametric amplification and its application to the tomography of bi-photonic fields”, December 2013;

- Matteo Manachino: Physics Bachelor Degree at the University of Torino, “Elettroluminescenza da singoli centri di colore in diamante artificiale”, July 2014;
- Marta Mirolo: Bachelor Degree in Materials Science and Technology at the University of Torino, “CVD growth and characterization of nitrogen- and silicon-related luminescent centres in artificial diamond”, July 2014;
- Erik Cerrato: Bachelor Degree in Materials Science and Technology at the University of Torino, “Development of microfluidic devices in diamond”, October 2014;
- Francesco Parino: Physics Bachelor Degree at the University of Torino, “Development of advanced lithography techniques for the fabrication of sub-micrometric graphitic structures in diamond”, December 2014;
- Federico Camponovo: Physics Bachelor Degree at the University of Torino, “Study of the variation of the graphitization threshold in ion-implanted diamond”, December 2015;
- Federico Pastore: Physics Bachelor Degree at the University of Torino, “Development of advanced lithography techniques for the fabrication of sub-micrometric structures in diamond”, December 2015;
- Jahmall Bersini: Physics Bachelor Degree at the University of Torino, “Realization of a sub-shot-noise quantum microscope”, December 2015;
- Alberto Scazzola: Physics Bachelor Degree at the University of Torino, “Study of electrical conduction in defective diamond”, July 2016;
- Fiammetta Sardi: Physics Bachelor Degree at the University of Torino, “Fabrication and testing of microfluidic channels in artificial diamond”, July 2016;
- Marco Riccardi: Physics Bachelor Degree at the University of Torino, “Electrical characterization and assembling of cellular bionsensors in artificial diamond”, July 2016;
- Pietro Aprà: Physics Bachelor Degree at the University of Torino, “Processing and characterization of artificial nanodiamonds”, October 2016;
- Cecilia Collà Ruvolo: Physics Bachelor Degree at the University of Torino, “Catalytic etching of artificial diamond with Nickel”, October 2016;
- Andrea Alessio: Bachelor Degree in Materials Science and Technology at the University of Torino, “Confocal mapping and spectral characterization of single luminescent centers in artificial diamond”, April 2017;
- Daniel Montesi: Physics Bachelor Degree at the University of Torino, “Single photon optical magnetometry from colour centres in diamond”, July 2017;
- Jonathan Fistetto: Physics Bachelor Degree at the University of Torino, “Electrical characterization of boron-doped conductive microchannels in single-crystal diamond”, December 2017;
- Giulio Umoret: Physics Bachelor Degree at the University of Torino, “Two-state vector formalism and weak measurements”, December 2017;

- Alessandro Zoppo: Physics Bachelor Degree at the University of Torino, “Numerical solution of the Nernst-Planck and Poisson equations in the modelling of electrical diffusion in a simple ion channel”, April 2018;
- Alessandro Tarantola: Physics Bachelor Degree at the University of Torino, “Robust weak values: a new frontier in quantum measurements”, July 2018;
- Niccolò Avallone: Physics Bachelor Degree at the University of Torino, “Characterisation of single-photon-emitting optical centres in synthetic diamond”, July 2018;
- Daniele Nello: Physics Bachelor Degree at the University of Torino, “Time reversibility in weak value measurement”, July 2018;
- Chiara Ferrero: Physics Bachelor Degree at the University of Torino, “Processing and electrical characterization of superficial conductive channels in artificial diamond”, July 2018;
- Ernesto Gribaudo: “Optical properties of wide bandgap semiconductors”, Physics Bachelor Degree at the University of Torino, October 2018;
- David Salomoni: Physics Bachelor Degree at the University of Torino, “Development of a photolithographic process based on a scanning laser microbeam”, October 2018;
- Arianna Ferro: Physics Bachelor Degree at the University of Torino, “Engineering entangled photons for Bell inequalities violation experiments with weak measurements”, October 2018;
- Greta Andrini: Physics Bachelor Degree at the University of Torino, “Study of temperature effects in measurements of optically detected magnetic resonance in color centers in diamond”, October 2018;
- Hobey Garrone: Physics Bachelor Degree at the University of Torino, “Violation of Bell inequalities with sequential weak measurements”, December 2018;
- Massimo Martina: Physics Bachelor Degree at the University of Torino, “Optimization and characterization of of dye-sensitized solar cells”, April 2019;
- Silvio Gallino: Physics Bachelor Degree at the University of Torino, “Measurement of Bell inequalities with weak sequential measurements of incompatible variables”, April 2019;
- Nabil El Goumiri: Physics Bachelor Degree at the University of Torino, “Estimation of the sensitivity in magnetometry with NV centers in diamond”, July 2019;
- Juan Pablo Salvatierra: Physics Bachelor Degree at the University of Torino, “Realization of an ultraviolet laser source for Doppler broadening spectroscopy”, October 2019;
- Vanna Pugliese: Physics Bachelor Degree at the University of Torino, “Magnetometry and thermometry based on nitrogen-vacancy centers in diamond”, December 2019;
- Gabriele Zanelli: Bachelor Degree in Materials Science and Technology at the University of Torino, “Modelling of energetic-ion-induced damage in solid state for applications in lithography”, July 2020;

  - Alma Beatrice Sergi: Physics Bachelor Degree at the University of Torino, “Modelling of energetic-ion-induced damage in solid state for applications in aerospace”, July 2020;
  - Yenet Michael Lopez: Bachelor Degree in Materials Science and Technology at the University of Torino, “Modelling of the optical effects of ion radiation damage in aluminum oxides samples, April 2021.
- Co-supervisor of Master Degree students:
  - Federico Picollo: Materials Science Master Degree, University of Torino, “Fabrication of 3D structures in diamond with deep ion beam lithography”, October 2008, supervisor: prof. Ettore Vittone;
  - Alessandro Sola: Master Physics Degree, University of Torino, “Modulation spectroscopies on dye-sensitized solar cells”, April 2009, supervisor: prof. Claudio Manfredotti;
  - Yinnon Amitay: Master Physics Degree, University of Torino, “Characterization of dye sensitized electrochemical solar cells with capacitive techniques”, July 2009, supervisor: prof. Ettore Vittone;
  - Daniele Gatto Monticone: Physics Master Degree, University of Torino, “Installation and calibration of a system for electrical characterization of microstructures in diamond”, October 2010, supervisor: prof. Ettore Vittone;
  - Valeria Moi: Materials Science Master Degree, University of Torino, “Development of selective etching techniques for the microfabrication of diamond”, December 2010, supervisor: prof. Ettore Vittone;
  - Caterina Tomba: Master Physics Degree, University of Torino, “Development of laser-microfabrication techniques in diamond”, October 2011, supervisor: prof. Ettore Vittone;
  - Fiammetta Sardi: Materials Science Master Degree, European Master in Materials Science Exploiting Large Scale Facilities (MaMaSELF), Université de Rennes I, “Creation and characterization of colour centres in artificial diamond”, August 2018, supervisor: prof. P. Rabiller;
  - Alessandro Sauchelli: Economy and Innovation Management Master Degree, University of Torino, “The Quantum Computer – Its ancestors, history and future”, July 2019, supervisor: prof. S. Bresciani.
- Co-supervisor of Bachelor Degree students:
  - Danilo Gasca: Materials Science Bachelor Degree, University of Torino, “On the characterization of dye-sensitized electrochemical solar cells”, October 2008, supervisor: prof. Claudio Manfredotti;
  - Luca Palladino: Materials Science Bachelor Degree, University of Torino, “Electrical and spectral characterization of DSSC solar cells”, December 2008, supervisor: prof. Claudio Manfredotti;
  - Guido Ielasi: Materials Science Bachelor Degree, University of Torino, “Characterization of dye sensitized electrochemical solar cells with capacitive techniques”, March 2009, relatore: prof. Claudio Manfredotti;
  - Umberto Costa: Bachelor Physics Degree, University of Torino, “Development of a system for high-temperature annealing”, April 2011, supervisor: prof. Ettore Vittone;

  - Davide Benvenuti: Physics Bachelor Degree, University of Torino, “Development of a system for electrical characterization in temperature”, April 2011, supervisor: prof. Ettore Vittone.
- External advisor of Master Degree students:
  - Alessandro Pagliero: Physics Master Degree, University of Torino, “Study of magnetic and thermal effects in Bi-2212 whiskers”, supervisor: prof. Marco Truccato;
  - Patricio Javier Viteri Villacis: Materials Science Master Degree, University of Torino, “Sputtering synthesis, magnetic properties and phase transformation of thin amorphous films in a FeSiBPCu system”, supervisor: prof. Livio Battezzati;
  - Fabio Agnese: Materials Science Master Degree, University of Torino, “Water diffusion on the basal plane of graphite (0001)”, supervisor: prof. Carlo Lamberti;
  - Sophie Molinengo: Physics Master Degree, University of Torino, “Characterization of lapis lazuli with ion beam microscopy techniques (PIXE and IBIL): investigation of rocks with established provenience and of archeological artifacts from museums”, supervisor: prof. A. Lo Giudice;
  - Federico Beccaria: Physics Master Degree, University of Torino, “Deposition and characterization of thin GeMn film”, supervisor: prof. E. Vittone
  - Antonella Picerno: Physics Master Degree, University of Torino, “Characterization of innovative silicon detectors”, supervisor: prof. R. Bellan;
  - Marco Prato: Physics Master Degree, University of Torino, “Development of the control technique for the MBE deposition of thin crystalline films: application to MnxGe(1-x) materials”, supervisor: prof. E. Vittone;
  - Ilaria Finardi: Physics Master Degree, University of Torino, “Production and characterization of hybrid single electron devices”, supervisor: prof. E. Vittone;
  - Daniele Gastaldo: Physics Master Degree, University of Torino, “Synthesis and characterization of diluted magnetic semiconductors”, supervisor: prof. E. Vittone;
  - Alessio Sacco: Physics Master Degree, University of Torino, “Towards Metrological Development of Tip-Enhanced Raman Spectroscopy”, supervisor: prof. E. Vittone;
  - Matteo Manachino: Physics Master Degree, University of Torino, “Modelling and characterization of Bragg reflectors in high-power diode lasers”, supervisor: prof. E. Botta;
  - Giulia Tomagra: Physics Master Degree, University of Torino, “Measurements of production of ossidrilic radicals induced by metallic nanoparticles in standard radio-therapic treatments”, tutor: prof. R. Sacchi;
  - Andrea Melloni: Physics Master Degree, University of Torino, “Metal-functionalization of MOF-5 metallorganic frameworks: a XAS/XES study”, tutor: prof. C. Lamberti;

  - Federico Pillepich: Physics Master Degree, University of Torino, “Non-invasive investigations of 2D materials by means of Raman spectroscopy”, tutor: prof. E. Vittone;
  - Federico Dattila: Physics Master Degree, University of Torino, “Functionalization of dye-sensitized solar cells with graphene and carbon nanotubes”, tutor: prof. E. Vittone;
  - Alberto Maina: Physics Master Degree, University of Torino, “Study of optical filamentation in high-power laser diodes”, tutor: prof. E. Botta;
  - Roger Cattaneo: Physics Master Degree, University of Torino, “Fabrication and characterization of superconducting devices based on BSCCO intrinsic Josephson junctions”, tutor: prof. M. Truccato;
  - Michelangelo Lixi: “Fabrication methods of B-2212 samples potentially useful for THz emission”, Physics Master Degree, University of Torino, tutor: prof. M. Truccato;
  - Luca Ardau: “Optical characterization of automotive displays”, Physics Master Degree, University of Torino, tutor: prof. E. Vittone;
  - Andrea Pezzi: “Non-linear interactions in a diatomic chain”, Physics Master Degree, University of Torino, tutor: prof. M. Onorato;
  - Daniel Montesi: “A UHV-SPM system for the morphological and magnetic characterization of diluted magnetic semiconductors”, Physics Master Degree, University of Torino, tutor: prof. E. Vittone;
  - Matteo Milanesio: “Characterization of the latest ultra-fast silicon detector productions for the MIP timing detector of the CMS experiment”, Physics Master Degree, University of Torino, tutor: prof. M. Costa;
  - Riccardo Quaranta: “Geometrical and parametric characterization of a computed axial tomography apparatus”, Physics Master Degree, University of Torino, tutor: dott. A. Re;
  - Stefano Condio: “Optical lattice clock with an amplified laser diode”, Physics Master Degree, University of Torino, tutor: prof. E. Botta.
- External evaluator of PhD Degree students:
  - Alessio Verna: PhD Degree in Physics, Polytechnic University of Torino, “A transistor based sensing platform and a microfluidic chip for a scaled-up simulation of controlled drug release”, supervisor: prof. F. Pirri;
  - Fadhlia Zafarina Zakaria: PhD Degree in Physics, La Trobe University, “Fabrication and measurement of surface nanoelectronic devices in diamond”, supervisor: prof. C. Pakes;
  - Valeria Caprettini: PhD Degree in Bioengineering and Robotics, University of Genova, “Cell membrane interactions with 3D multifunctional nanostructures”, supervisor: Dr. F. De Angelis;
  - Riccardo Pilotti: PhD Degree in Industrial Engineering, University of Roma “Tor Vergata”, “Design and characterization of an innovative diamond detector for measurements of 14 MeV neutron flux in tokamak fusion reactors”, supervisor: Prof. G. Verona-Rinati;
  - Vibhav Bharadwaj: PhD Degree in Physics, Politecnico di Milano, “Femtosecond laser microfabrication of 3D integrated photonic circuits in

diamond for quantum sensing and magnetometry", supervisor: Prof. R. Ramponi;
  - Jin Huining: PhD Degree in Physics, National University of Singapore, "Light guiding photonic devices in single crystal diamond", supervisor: Prof. A. Bettiol;
  - Siva Pradyumna Tekuru: PhD Degree in Metrology, Politecnico di Torino, "An Application of quantum metrology: enhanced correlated interferometry", supervisor: Dr. Marco Genovese;
  - Roberta Calmo: PhD Degree in Electrical, Electronics and Communication Engineering, Politecnico di Torino, "Development of monolithic glass suspended microchannel resonators designed for bead-based bioassays", supervisor: Prof. Carlo Ricciardi;
  - Davide Scaiola: PhD Degree in Physics, Politecnico di Torino, "Microbridge resonators with embedded nanochannels for attogram resolution in liquid", supervisor: Prof. Carlo Ricciardi;
  - Marcell Kristof Kiss: PhD Degree in Photonics, École Polytechnique Féderale de Lausanne, "Advanced Diamond Microfabrication for Micro-optics and Photonics", supervisor: Prof. Niels Quack.
- Supervisor of post-degree masters and stages:
  - Barbara Fairchild: Master Degree, School of Physics, University of Melbourne, "Micro & nano scale machining of diamond", 2006-2008, co-supervisors: prof. Steven Prawer, prof. Jeff McCallum, dr. Paolo Olivero;
  - Valeria Moi: post-degree scholarship "Development of microfabrication techniques of microfluidic devices in artificial diamond" funded by the Academy of Sciences of Torino [48], University of Torino, August-December 2011, supervisors: prof. Ettore Vittone, dr. Paolo Olivero;
  - Genny Giaccardi: six-month stage "Physical analysis of materials by means of optical and electronic microscopies, for the development of materials and processes in the automotive field" at the "FIAT Mirafiori" Research Center (Torino) – Group Materials Labs, Physical Analysis & Common Testing Department, 2012-2013;
  - Marilena Plaitano: six-month stage "Physical analysis of materials employed in automotive applications" at the "FIAT Mirafiori" Research Center (Torino) – Group Materials Labs, Physical Analysis & Common Testing Department (reference: p0973/15), 2015;
  - Matteo Crema: six-month stage at the "System Evolution S.r.l." company (reference: p1003/16), 2016;
  - Fabio Scaffidi Muta: six-month stage at the FIAT Research Center, Physical Analysis Department (reference: p1112/17), 2017.
- Tutor of PhD students:
  - Federico Picollo: PhD course in Materials Science, University of Torino, "Single crystal diamond micro-fabrication by means of ion beams", XXIV cycle, 2009-2011, tutor: prof. Ettore Vittone, co-tutor: dr. Paolo Olivero;

  - Daniele Gatto Monticone: PhD course in Materials Science, University of Torino, “Creation and characterization of luminescent centres in diamond for applications as single photon emitters”, XXVI cycle, 2012-2014, tutor: prof. Ettore Vittone, co-tutor: dr. Paolo Olivero;
  - Sviatoslav Tchernij Ditalia: PhD course in Physics, University of Torino, XXXI cycle, 2015-2017, “Use of energetic ion beams for the engineering and control of quantum-optical emitters and sensors in artificial diamond”, tutor: dr. Paolo Olivero;
  - Enrico Cepparrone: PhD course in Physics, University of Torino, XXXIV cycle, 2018-2021, tutor: dr. Paolo Olivero;
  - Giulia Petrini: PhD course in Physics, University of Torino, XXXV cycle, 2019-2022, tutor: prof. Paolo Olivero.
- Supervisor of post-doc researchers and teachers:
  - Andrea Marcantoni: one-year (2012) post-doc fellowship “Development and functional characterization of a diamond-based cellular bio-sensor” funded by the “FIRB – Future in Research 2010” project [50], supervisor: dr. Paolo Olivero;
  - Satyajit Mahapatra: four-month (2012) research scholarship “Secretion measurements from chromaffin cells with classical techniques and novel diamond-based microchips” funded by the “FIRB – Future in Research 2010” project [50], supervisor: dr. Paolo Olivero;
  - Alfio Battiato: two-years (2012-2014) post-doc fellowship “Development of micro-fabrication techniques in diamond for the realization of a cellular bio-sensor” co-funded by the Italian Ministry for Instruction, University and Research and the “MicroDiBi” project (“Diamond microchips for drug-screening and biomedical applications”), supervisor: dr. Paolo Olivero;
  - Federico Picollo: casual employee research position “Development and characterization of single-crystal diamond bio-sensors” within the project “Development of lithographic techniques in diamond for cellular bio-sensing” at the Pharmaceutical Science and Technology Department of the University of Torino (2013);
  - Jacopo Forneris: casual employee research position “Development of reactive ion etching (RIE) lithographic techniques in single-crystal diamond” within the project “Development of lithographic techniques in diamond for cellular bio-sensing” at the Pharmaceutical Science and Technology Department of the University of Torino (2013);
  - Federico Picollo: one-year (2013) post-doc fellowship “Development of a cellular bio-sensor in diamond with ion beam lithographic techniques” funded by the “FIRB – Future in Research 2010” project [50], supervisor: dr. Paolo Olivero;
  - Jacopo Forneris: three-years (2013-2016) post-doc fellowship “Development of diamond as a platform for applied photonics” funded by the “FIRB – Future in Research 2010” project [50], supervisor: dr. Paolo Olivero;

- Debora Angelici: one-year (2013) post-doc fellowship “Application of focused ion beams in materials physics” funded by the “FIRB – Future in Research 2010” project [50], supervisor: dr. Paolo Olivero;
- Ettore Bernardi: two-years (2013-2015) post-doc fellowship “Fabrication and characterization of diamond-based devices for applications in bio-sensing and photonics” funded by the “Advanced Diamond-based Nano-technologies” (A.Di.N-Tech.) project, supervisor: dr. Paolo Olivero;
- Daniele Gatto Monticone: 6-months (2014) post-doc fellowship “Application of focused ion beams in materials physics” funded by the “FIRB – Future in Research 2010” project [50], supervisor: dr. Paolo Olivero;
- Andrea Tengattini: two-years (2014-2016) post-doc fellowship “Development of single photon emitters in artificial diamond” funded by the “FIRB – Future in Research 2010” project [50], supervisor: dr. Paolo Olivero;
- Alfio Battiato: 17-months (2015-2016) post-doc fellowship “Development of microfabrication techniques in artificial diamond for bio-sensing” funded by the “FIRB – Future in Research 2010” project [50], supervisor: dr. Paolo Olivero;
- Marco Miniaci: one-year (2014-2015) post-doc fellowship “Development of numerical methods for the optimization of bio-inspired nanomaterials” funded by the ERC Starting grant n. 279985-BIHSNAM;
- Jacopo Forneris: teaching contract art. 76 “Advanced nano-devices” at the University of Torino, within the teching project “To3 Nano Outreach” of the Inter-university Centre “Agorà Scienza” funded for the Academic Year 2015-2016 by “Compagnia di San Paolo”;
- Fabrizio Piacentini: teaching contract art. 76 “Quantum optics” at the University of Torino, within the teching project “To3 Nano Outreach” of the Inter-university Centre “Agorà Scienza” funded for the Academic Year 2015-2016 by “Compagnia di San Paolo”;
- Gianluca Costagliola: one-year (2015-2016) post-doc fellowship “Study of the dynamic properties of complex structures and materials” funded by the ERC Starting grant n. 279985-BIHSNAM;
- Anastasiia Krushynska: two-years (2016-2017) post-doc fellowship “Tunable nonlinear acoustic metamaterials” funded within the “Train2Move” program of the University of Torino;
- Federico Picollo: one-year (2016-2017) post-doc fellowship “Development of cellular bio-sensors in artificial diamond” co-funded by the Italian Ministry for Instruction, University and Research and the National Institute of Nuclear Physics;
- Marilena Plaitano: two-years (2016-2018) scholarship “Micrographic characterization of aluminum-based alloys for cylinder heads and engine blocks, and of cast irons for exhaust manifolds” of the Physics Department of the University of Torino within an industrial research contract funded by the “FIAT Mirafiori” Research Center;

  - Federico Picollo: teaching contract art. 76 “Advanced nano-devices” at the University of Torino, within the teching project “To3 Nano Outreach” of the Inter-university Centre “Agorà Scienza” funded for the Academic Year 2016-2017 by “Compagnia di San Paolo”;
  - Ekaterina Moreva: teaching contract art. 76 “Quantum optics” at the University of Torino, within the teching project “To3 Nano Outreach” of the Inter-university Centre “Agorà Scienza” funded for the Academic Year 2016-2017 by “Compagnia di San Paolo”;
  - Federico Picollo: one-year (2017-2018) post-doc fellowship “Development of artificial diamond sensors for applications in micro-radiobiology” co-funded by the Italian Ministry for Instruction, University and Research and the National Institute of Nuclear Physics;
  - Gianluca Costagliola: two-years (2017-2019) post-doc fellowship “Study of the mechanical properties of complex structures and materials” funded within the H2020 FET Proactive “Neurofibres” project;
  - Fabio Scaffidi Muta: six-months (2018) scholarship “Characterization of optical and morphological properties of coverlenses for display applications” of the Physics Department of the University of Torino within an industrial research contract funded by the “FIAT Mirafiori” Research Center;
  - Sviatoslav Ditalia Tchernji: three-tears (2018-2021) post-doc fellowship “Development of devices based on artificial diamond”;
  - Vincenza Montalbano: one-year (2019-2020) scholarship “Characterization of optical and morphological properties of coverlenses for display applications” of the Physics Department of the University of Torino within an industrial research contract funded by the “FIAT Mirafiori” Research Center.

- Assistant to Degree students (unofficial activity):
  - Samy Strola: Physics Degree, University of Torino, “Development and optimization of a spectroscope for the Raman/PL characterization of diamond, amorphous carbon and silicon carbide”, April 2003, supervisor: prof. Ettore Vittone (University of Torino);
  - Martin Draganski: PhD Degree, Royal Melbourne Institute of Technology (RMIT), “Properties of diamond for quantum based devices”, 2005-2008, supervisors: prof. Peter N. Johnston (RMIT University), prof. David N. Jamieson (University of Melbourne);
  - Ilya Zalziniak: Physics Degree, University of Melbourne, “Investigation of the Physics of Diamond MEMS”, 2004-2005, supervisor: prof. David Jamieson (University of Melbourne).

• Research activity (Index)

In October 2000, Paolo Olivero receives a Degree in Physics with full grades (“110/110 cum laude and honorable mention”) at the University of Torino. The Degree Thesis is titled “Photoacoustic spectroscopy on amorphous carbon films”, under the supervision of prof. Claudio Manfredotti (University of Torino), in

collaboration with prof. Alberto Tagliaferro (Polytechnic of Torino). The research activity reported in the Degree Thesis is centered on the employment of Photoacoustic Spectroscopy (PAS) and Phototermal Deflection Spectroscopy (PDS) in the study of low optical absorption of thin films of amorphous carbon in the visible range. The work is supported by the project “Density Of States and confinement effects in thin films of Amorphous Carbon to be used as active layers in Electronic Devices (DOSACED)” if the National Institute for Matter Physics (INFM). The work is awarded as the best Physics Degree thesis for academic year 1999/2000. In 2000 and 2001, Paolo Olivero receives “Optime”, “Galluzzi” and “Emanuele Turinetto di Priero Simonis” awards for the results achieved in his Physics Degree and for the Degree Thesis (see “Awards” section).

In November 2000 P.O. starts his PhD in Solid State Physics at the Experimental Physics Department of the University of Torino, under the supervision of prof. Claudio Manfredotti. During his 3-years PhD course, P.O. attends 5 post-degree courses and 2 international schools organized by the National Institute for Matter Physics (see “Education” section), and is a delegate at national (INFMeeting 2001 in Rome, INFMeeting 2003 in Genova) and international (XVIII International Conference on Nuclear Microprobe Technology and Applications - ICNMTA 2002 in Takasaki, XVII International Congress on X-Ray Optics and Microanalysis - ICXOM 2003 in Chamonix) conferences. P.O. is member of the Organizing Committee of the “2003 Workshop on CVD Diamond Applications”, in Stockholm. During the three academic years of his PhD, P.O. has official teaching appointments as assistant under contract “Art. 33 comma 3” of the University of Torino Regulations, as well as unofficial supervisor of Degree students (see “Teaching” section). The research activity of P.O. is centered on wide bandgap semiconductors. In particular, P.O. works on the characterization of optical and electronic properties of diamond and silicon carbide with ion and X-ray microscopy techniques integrated with luminescence characterization. IBIC (Ion Beam Induced Charge) and IBIL (Ion Beam Induced Luminescence) techniques are based on the measurement of electrical and luminescence signals induced by focused high-energy ion beams. P.O. actively contributes to the development of experimental apparatuses and to experiments at the accelerators of the Legnaro National Laboratories [2] of the National Institute of Nuclear Physics (INFN) and of the Ruđer Bošković Institute of Zagreb [3]. In particular, P.O. personally develops an experimental apparatus for IBIC and IBIL measurements at cryogenic temperatures. Similarly, P.O. works on the development of XBICC and XBIL (X-ray Beam Induced Charge Collection e X-ray Beam Induced Luminescence, respectively) at the ID21 X-ray microbeam line of the European Synchrotron Radiation Facility of Grenoble [4]. Such activities are documented in a series of refereed publications produced with the Torino research group, in collaboration with researchers internationally renewed for their activity in ion and X-ray microscopy (see “Publications” section). At the laboratories of the of the Solid States Physics research group at the University of Torino, P.O. personally contributes to the development and upgrade of experimental instrumentation: Photoacoustic Spectroscopy (PAS), X-ray Photoelectron Spectroscopy (XPS),

Raman and photoluminescence spectroscopies. During his PhD, P.O. is affiliated to the National Institute of Nuclear Physics (INFN, group V) and to the National Institute for Matter Physics (INFM, section E), and his research activity is supported by CERN collaborations RD42 ("Diamond for ionizing radiation detection") [5] and RD50 (Radiation hard semiconductor devices for very high luminosity colliders") [6], by INFN experiment CRD42 "Nuclear Detectors Microbeam-Diamond Interaction" [7] and by NATO program "Research of charge transport properties in SiC by nuclear microprobe technique" [8] (see "Funded projects" section).
In January 2004, after the completion of his PhD titled "Study of electronic and optical properties of wide bandgap materials (diamond and silicon carbide) by means of nuclear and X-ray microprobes, VIS spectroscopic techniques and photoelectron spectroscopy", P.O. is granted a 2-years research contract titled "Development and application of spectroscopic and microscopic techniques for the characterization of semiconductor materials and biological tissues" at the Experimental Physics Department of the University of Torino, under the supervision of prof. Claudio Manfredotti.
In February 2004, P.O. applies for a research fellowship at the Melbourne node of the "Centre of Excellence for Quantum Computer Technology" in Australia [9]. The research group at the University of Melbourne, under the direction of prof. David Jamieson [10], is internationally recognized for the development of a technique for the implantation of single phosphorous atoms in silicon for applications in quantum computing devices. Since 2003, the Melbourne group had started a research project based on the development of opto-electronic quantum computing devices based on luminescence centers in diamond created by ion implantation. In virtue of his work on ion beams and diamond characterization, P.O. is granted a 3-years post-doctoral position under the direction of prof. Steven Prawer [11], internationally recognized for his work in diamond science.
After having resigned from his position at the University of Torino, from 2004 P.O. works on diamond as a material for quantum computing devices. His activity is centered mainly on two topics: the fabrication of micro- and nano-optical devices in diamond, and the creation of optical centers in diamond by ion implantation and their characterization.
With regards to the first topic, P.O. develops a novel technique to fabricate micro- and nano-structures in diamond; the technique is based on the implantation of high-energy ion microbeams combined with a Focused Ion Beam (FIB) technique. This result represents the first demonstration of fabrication of three-dimensional nanostructures obtained monolithically in single-crystal diamond. Such structures have the potential to be the ideal substrate for opto-electronic devices in diamond; this research work has been published in international journals with a series of papers that have received great interest within the scientific community. In December 2005, the three-dimensional lithography technique is submitted for an international patent through "Qucor Pty Ltd" [12], the enterprise that manages the intellectual property developed at the "Centre of Excellence for Quantum Computer Technology". P.O. is first inventor

in the submitted patent (see “Publications - Patents”). The work on diamond nanofabrication is performed in close collaboration with other Australian and international institutions (CQCT - University of Queensland [13], Department of Engineering - Cambridge University [14], Electrical Engineering Department - Technion Institute - Israel [15]) that work on the characterization of such nanostructures. In September 2006 P.O. starts collaborating with the American enterprise “Tangible Future” [16] for the development of marketing strategies of the diamond nanofabrication technology. In November 2006 P.O. stipulates through the Actuarial Foundation of the University of Melbourne a research agreement with American enterprise “ViaSpace – IonFinity LLC” [17] for the fabrication of prototypical diamond components for a device under development. The technical and commercial details of the above mentioned activities are covered by confidentiality agreements.
With regards to the second topic, P.O. works on the study of the formation of luminescent centers in diamond by ion implantation, in collaboration with research centers in Europe (Department of Materials - Oxford University [18]) and United States (Quantum Structures Research Initiative Department - Hewlett-Packard Laboratories [19], Palo Alto), as documented in a series of joint publications on refereed journals (see “Publications – Refereed articles” section).
In March 2006, P.O. is granted a new three-years “Australian Post-Doctoral (APD) Fellow” position funded by ARC (“The diamond quantum computer” [20]) (see “Funded projects” section). Since February 2007 P.O. has the role of “Australian Project Partner” in the international grant “EQUIND - Engineered Quantum Information in Nanostructured Diamond” funded by the European Union Research Funding [21]. In June 2007, P.O. is co-inventor in a second patent on a diamond lithography technique which extends the fabrication resolution to the nano-scale.
Since 2005, P.O. is coordinator of the “Advanced Spectroscopy Laboratory” of the laboratories of the “Centre of Excellence for Quantum Computer Technology” of the University of Melbourne. P.O. is affiliated to the following institutions: Australian Institute of Physics (AIP) [22], Australian Nanostructural Analysis Network Organisation (NANO) [23] and Australian Research Network for Advanced Materials (ARNAM) [24]. His research activity is supported by projects “Diamond quantum dots fabricated by ion implantation” funded by the Australian Research Council (ARC) [25] and “Critical Components for Ultra Secure Communication Systems” funded by the Australian Government Department of Education, Science and Training (DEST) [26]. P.O. has the role of “chief investigator” in the following projects: “Study of deuterium incorporation in diamond nanocrystals embedded in a fused quartz matrix by means of Secondary Ion Mass Spectroscopy” funded by the Australian Institute of Nuclear Science and Engineering (AINSE) [27] and “The diamond quantum computer” [28] funded by ARC. The teaching activity of P.O. at the University of Melbourne consists in the coordination of Degree, PhD and Master students (see “Teaching” section). From August 2007 to March 2008 P.O. takes a “visiting scientist” position at the Laboratory for Ion Beam Interactions (LIBI) of the Ruđer Bošković

Institute of Zagreb [3], to continue his research activity on ion beam interaction with matter.
The return of P.O. at the Experimental Physics Department of the University of Torino is facilitated by a short scientific visit supported by the National Inter-university Consortium for the Physics Sciences of Matter (CNISM) [34] within a funding scheme aimed at supporting collaborations among European researchers.
In April 2008, P.O. is awarded a two-years post-doctoral position at the Department of Experimental Physics of the University of Torino, entitled "Development and optimization of ion microscopy techniques for the characterization of art objects and modification of advanced materials". The position is funded by the program "Action A: Containment of Brain Drain" of the Regione Piemonte. In the same period, P.O. is awarded a short contract entitled "Development of hardware and software for the registration of electrical activity from cells on conductive surfaces in diamond" at the centre of Excellence "Nanostructured Interfaces and Surfaces - NIS" of the University of Torino [35], funded by Regione Piemonte (funding CIPEREGP04).
Since this date, P.O. continues in Italy his research activity, which is still focused on micro-fabrication and functionalization of advanced materials with high energy ion beams. In July 2008 P.O. is a awarded with a "ANL-CSP" Grant, funded by the "Accademia Nazionale dei Lincei", the Italian Science Academy [31]; the 3-years grant is advertised in Italy every year with two positions (in the fields of nanotechnology and neuroscience, respectively). In the framework of the above mentioned grant, P.O. collaborates intensively with researchers of several national and foreign research institutions: the Italian National Institute of Metrologic Research (INRiM) [39], the inter-departmental centre of Excellence "Nanostructured Interfaces and Surfaces - NIS" of the University of Torino [35], the Legnaro national laboratories of the National Institute on Nuclear Physics (INFN) [2], the LABEC INFN national laboratories [38] and the Laboratory for Ion Beam Interactions (LIBI) of the Ruđer Bošković Institute of Zagreb [3].
Since 2009, P.O. participates to the three-years "External Rarefied Beams - FARE" project funded by the National Institute on Nuclear Physics (INFN) [32], in collaboration with the INFN-LABEC laboratory of Florence [38]. From March 2009 to February 2013, P.O. is the coordinator of the "Dia.Fab." experiment at the ion microbeam line of the Legnaro national laboratories of the National Institute on Nuclear Physics (INFN) [2]. Since October 2009, P.O. participates as local coordinator to CAvEx ("Calcium voltage-dependent Excitability") project [41] together with research groups from the "Neuroscience" and "Biology" departments of the University of Torino, and with the "Physics" department of the Politecnico di Torino.
P.O. has a scientific association to the National Institute of Metrologic Research (INRiM) [39], where at the "NanoFacility Piemonte" laboratory [46] he is responsible of the research program "Microfabrication in diamond".
The role of P.O. in the project consists in the development of diamond-based bio-sensing devices. Since academic year 2008-2009, the teaching activity of P.O. at the University of Torino consists in the assistance to students in their degree and

PHD thesis, and in the teaching of courses “Solid State Physics” and “Solid State Physics II” respectively at the degree courses in Materials Science and Physics.
In November 2009 P.O. visits his former research group at the University of Melbourne to continue joint research work on diamond microfabrication.
In August 2011, after the conclusion of his previous appointment, P.O. is awarded a post-doc position at the Experimental Physics Department of the University of Torino, which supports his research activity on diamond science; the title of the position is “Development of ion microscopy techniques for the microfabrication and characterization of advanced materials”.
In September 2011, the project “Development of microfabrication techniques in diamond for applications in bio-sensing and photonics”, based on a consortium between the University of Torino – NIS and the National Institute of Metrologic research coordinated by P.O., is funded with a budget of 1,064,000 € by the Italian Ministry for Teaching, University and Research (MIUR) within the “FIRB – Future in Research 2010” scheme [50].
Since 2012, P.O. is listed in the Reviewers Register of the Italian Ministry for Teaching, University and Research (MIUR).
Since 2013, P.O. is the coordinator of the project “Advanced Diamond-based Nano-technologies” (A.Di.N-Tech.) funded by the University of Torino in the framework of the “University Research Projects - Junior PI Grants” scheme.
On 30/10/2013, P.O. obtains the national scientific qualifications as Associate Professor in the sector “02/B3 - Applied Physics”. On 29/11/2013, P.O. obtains the national scientific qualifications as Associate Professor in the sector “02/B1 - Experimental Matter Physics”.

• Funded projects (Index)

Paolo Olivero is (or was) a coordinator in the following research projects:

- one-year (2005) project “Study of deuterium incorporation in diamond nanocrystals embedded in a fused quartz matrix by means of Secondary Ion Mass Spectroscopy” funded by the Australian Institute of Nuclear Science and Engineering (AINSE) [27], budget: 20,524 AU$, *Chief Investigator*
- three-year (2006-2009) project “The diamond quantum computer” funded by the Australian Research Council (ARC) within the “ARC Discovery Grant” scheme [20], budget: 446,040 AU$, *Principal Investigator*
- three-year (2005-2008) international collaboration project “The diamond quantum computer” funded by the Australian Research Council within the “ARC Linkage Grant” scheme [28], *Chief Investigator*
- three years (2008-2011) “ANL-CSP” nanotechnology grant funded by the “Accademia Nazionale dei Lincei”, the Italian Science Academy [31], budget: 300,000 €, *Grant Holder*
- two-years (2009-2011) project “CAvEx” (“Calcium voltage-dependent Excitability”) funded by “Compagnia di San Paolo” within the “Neurosciences” funding scheme, coordinator: dr. Andrea Marcantoni (University of Torino), budget: 100,000 €, *Local Coordinator*

- "Dia.Fab." experiment (2009-2013) at the ion microbeam line of the AN2000 accelerator of the National Laboratories of Legnaro (INFN) [2], *Coordinator*
- "Microfabrication in diamond" experiment (2010-present) at "NanoFacility Piemonte" laboratory (INRiM) [46], *Coordinator*
- "Titania" experiment (2011-2013) at the CN accelerator of the National Laboratories of Legnaro (INFN) [2], *Coordinator*
- 54-months (2011-2016) project "Development of microfabrication techniques in diamond for applications in bio-sensing and photonics" funded by the Italian Ministry for Teaching, University and Research (MIUR) within the "FIRB – Future in Research 2010" scheme, CUP: D11J11000450001 [50], budget: 1,064,000 €, *Coordinator*
- "Ion beam microfabrication of artificial diamond" experiment (2011) within the "SPIRIT" [51] Integrated Infrastructure Initiative (I3) funded by the European Commission within the 7th Framework "Capacities" programme, *Coordinator*
- two-years (2011-2013) project "Diamed" ("Development of innovative dosimeters for applications in advanced radiotheraphy applications") funded by INFN [2], national coordinator: dr. Gianluca Verona-Rinati (Università di Roma "Tor Vergata"), budget: 52,000 €, *Team member (1st year) and Local Coordinator (2nd year)*
- 30-months (2013-2015) project "Advanced Diamond-based Nano-technologies" (A.Di.N-Tech.) funded by the University of Torino in the framework of the "University Research Projects - Junior PI Grants" scheme, CUP: D15E13000130003, budget: 74,800 €, *coordinator*
- (2014-2015) "Open Access Labs" grant from the "Compagnia di San Paolo" Foundation for the installation of a cleanroom at the Physics Department of the University of Torino, budget: 50 k€, coordinator
- 4-years (2016-2021) coordinated research project F11020 "Ion beam induced spatio-temporal structural evolution of materials: Accelerators for a new technology era" supported by the International Atomic Energy Agency (IAEA) [52], national coordinator
- 2-years (2017-2019) project "Diamond based detector for in vitro cellular radiobiology" (DIACELL) funded by INFN [2], budget: 79,000 €, coordinators: F. Picollo, P. Olivero (1st year), team member (2nd year)
- 18-months (2017-2019) project "New Micro-Radiobiology Devices for aeroSpace" (MiRaDS) funded by the CRT Foundation, budget: 55,000 €, coordinator: P. Olivero
- 3-years (2018-2021) project "Beyond Classical Optical Metrology" (BeCOMe) funded under the European Metrology Programme for Innovation and Research (EMPIR) of the European Association of National Metrology Institutes (EURAMET), budget: 1,722,464 €, local coordinator: P. Olivero
- 3-years (2018-2021) project "Single-photon sources as new quantum standards" (SIQUST) funded under the European Metrology Programme for Innovation and Research (EMPIR) of the European Association of National Metrology Institutes (EURAMET), budget: 1,799,198 €, local coordinator: P. Olivero

- 2-years (2018-2020) project “Piemonte Quantum Enabling Technology” (PiQuET), funded by the Piemonte Region within the “Infra-P” program (POR-FESR 2014-2020 European funding), budget: 6,000,000 €, local coordinator: P. Olivero
- 2-years (2019-2020) project “Ex post funding of research” of the University of Torino funded by the “Compagnia di San Paolo”, budget: 54,040 €, principal investigator: P. Olivero
- “He-related color centers in diamond for quantum photonics and optoelectronics” experiment (2019-2020) within the “RADIATE” project [89] funded by the European Commission within the Horizon2020 programme, *Co-coordinator*
- 4-years (2020-2024) project “Training on LASer fabrication and ION implantation of DEFects as quantum emitters” (LasIonDef) funded by the European Research Council under the “Marie Skłodowska-Curie Innovative Training Networks” program, budget: 3’281’943 €, local coordinator: P. Olivero
- 2-years (2020-2023) project “Intelligent fabrication of QUANTum devices in DIAmond by Laser and Ion Irradiation (QuantDia)” funded by the Italian Ministry for Instruction, University and Research under the “FISR 2019” program, budget: 1’004’972 €, local coordinator: P. Olivero
- 3-years (2021-2024) project “Pushing bOundaries of nano-dimensional metrology by Light” (POLight) funded under the European Metrology Programme for Innovation and Research (EMPIR) of the European Association of National Metrology Institutes (EURAMET), budget: 1’712’826 €, local coordinator: P. Olivero

Paolo Olivero participates (or participated) as a co-investigator to the following projects:

- two-years (1999-2001) project “Research of charge transport properties in SiC by nuclear microprobe technique” funded by the NATO Scientific Program [8], coordinator: Ettore Vittone (University of Torino)
- two-years (2001-2002) research project of national interest (PRIN) “Silicon carbide radiation detectors for spectrometry at room temperature and high temperatures”, funded by the Italian Ministry for Teaching, University and Research (MIUR), coordinator: Giuseppe Bertuccio (Politecnico di Milano)
- one-year (2003) INFN project “CRD-42 - Nuclear detectors – Interaction diamond microbeam” [7], coordinator: Claudio Manfredotti (University of Torino)
- two-years (2002-2004) INFN project “GAMMANEU - Realization of a neutron spectrometer for applications in BNCT (Boron Neutron Capture Therapy)”, coordinator: Claudio Manfredotti (University of Torino)
- three-years (2003-2006) project “Diamond quantum dots fabricated by ion implantation” funded by the Australian Research Council (ARC) [25], coordinator: prof. Steven Prawer (University of Melbourne)

- grant “Critical Components for Ultra-Secure Communication Systems” funded by the Australian Government Department of Education, Science and Training (DEST) for the acquisition of strategic equipment [26]
- three years (2007-2009) Euroepean grant “EQUIND - Engineered Quantum Information in Nanostructured Diamond” funded by the European Union Research Funding (6th Research Framework Programme), coordinator: J.-F. Roch (École normale supérieure de Cachan), budget: 1,660,000 € [21]
- three years (2007-2009) grant funded by the Australian Government Department of Education, Science and Training (DEST) “Engineered Quantum Information in Diamond”
- holder of funding scheme from the Consortium for the Physics Sciences of Matter (CNISM) [34] for a scientific visit at the Università di Torino from 12/11/2007 to 09/12/2007; coordinator: prof. E. Vittone (Università di Torino)
- three-years (2008-2010) project INFN-DIARAD “Monocrystalline CVD diamond dosimeters for radiotherapy applications”, coordinator: prof. Francesco De Notaristefani (University of Roma 3)
- four-years (2009-2012) project INFN-FARE “Fasci Rarefatti in Esterno”, budget: 47,000 €, coordinator: dr. Lorenzo Giuntini (University of Florence)
- three-years (2010-2013) grant “Particle Detectors - Upgraded Facility for Development of Silicon and Diamond Particle Detector Systems”, funded under the “REGPOT-2009-2” activity of the European Seventh Framework Programme (EC/EP Decision n. 1982/2006/EC of 18 December 2006, published in the Official Journal 30.12.2006 L 412), funding scheme: “Coordination and support action”, grant agreement n. 256783, budget: 1,479,332 €, coordinator: Tome Anticic (Ruđer Bošković Institute)
- two years (2010-2012) research project of national interest (PRIN) “Synthetic single crystal diamond dosimeters for application in clinical radiotherapy”, funded by the Italian Ministry of Teaching, University and Research (MIUR), budget: 156,900 €, coordinator: prof. Marco Marinelli (University of Roma “Tor Vergata”) [44]
- two years (2011-2013) project “MicroDiBi” (“Diamond microchips for drug-screening and biomedical applications”) funded by “Polo di Innovazione Regionale BioPMed”, budget: 623,919 €, coordinator: Prof. Emilio Carbone (University of Torino)
- four-years (2011-2015) project “Modelling and validation of ion beam induced damage in semiconductors” of the International Atomic Energy Agency (IAEA) [52] and the Experimental Physics Department of the University of Torino within the framework of the co-ordinated research project F11016 “Utilization of ion accelerators for studying and modelling of radiation induced defects in semiconductors and insulators” (IAEA research agreement no. 17028), coordinator: Prof. Ettore Vittone (University of Torino)
- “IBIC characterization of diamond detectors” experiment (2011) within the “SPIRIT” [51] Integrated Infrastructure Initiative (I3) funded by the European Commission within the 7th Framework “Capacities” programme, coordinator: dr. Jacopo Forneris (University of Torino)

- "Study and functionalization of solid state systems by means of focused ion beams" project (2012 - …) funded by the University of Torino in the framework of the "Funding for Local Research – Line 2" program, coordinator: dr. Marco Truccato (University of Torino)
- "CHneT" project funded by INFN [2] (2014-2015), coordinator: dr. F. Taccetti (INFN Firenze)
- "Dia.Fab." experiment (2013-present) at the ion microbeam line of the AN2000 accelerator of the National Laboratories of Legnaro (INFN) [2]
- two-year (2014-2015) project "DiNaMo - Diamond NanoModification" funded by INFN [2], budget: 148,000 €, coordinator: dr. F. Picollo (INFN Torino)
- two-year (2016-2017) project "DIESIS - Electrically controlled diamond-based single photon sources" funded by INFN [2], budget: 108,000 €, coordinator: dr. J. Forneris (INFN Torino)
- two-year (2016-2018) project "X-ray nanolithography for oxides (NANO-X)" funded by the University of Torino in the framework of the "University Research Projects – Line 2" scheme, code: Torino_call2014_L2_177, budget: 98,351 €, coordinator: dr. M. Truccato (University of Torino)
- "Micro/Nano-modified diamond lab-on-a-chip for neuronal networks investigation" experiment in the framework of the "Central European Research Infrastructure Consortium - CERIC" funded by the European Commission ("Horizon2020" program), coordinator: dr. Federico Picollo (University of Torino)
- two-year (2020-2022) project "RESOLVE - High dose-rate and spatially resolved X-ray effects on living cells" funded by INFN, coordinator: dr. F. Picollo (INFN Torino)
- two-year (2020-2022) project "PICS4ME - plenoptic imaging with correlations for microscopy and 3d imaging enhancement" funded by INFN, coordinator: prof. M. D'Angelo (INFN Torino)

• Collaborations and contracts with industry (Index)

- collaboration between "Qucor Pty Ltd" [12] (the enterprise that manages the intellectual property developed at the "Centre of Excellence for Quantum Computer Technology") and the US enterprise "Tangible Future" [16] for the development of marketing strategies of the diamond nanofabrication technology, champion of project "Diamond lift-off technology" (October 2006);
- research agreement between the Actuarial Foundation of the University of Melbourne and US enterprise "ViaSpace - IonFinity LLC" for the fabrication of prototypical diamond components for a miniaturized device under development, stipulated on 28/11/2006, submission number: 0611781, Chief Investigator;
- research contract "Optical and electron microscopy characterization of aluminum alloys for applications in automotive" between the "FIAT Mirafiori" Research Center and the Physics Department of the University of Torino, stipulated in May 2016, academic supervisor;

- research contract “Optical and electron microscopy characterization of aluminum alloys for applications in automotive” between the “FIAT Mirafiori” Research Center and the Physics Department of the University of Torino, stipulated in May 2017, academic supervisor;
- research contract “Characterization of optical morphologic properties of coverlenses for display applications” between the “FIAT Mirafiori” Research Center and the Physics Department of the University of Torino, stipulated in February 2018, academic supervisor;
- research contract “Characterization of optical morphologic properties of coverlenses for display applications” between the “FIAT Mirafiori” Research Center and the Physics Department of the University of Torino, stipulated in July 2019, academic supervisor;
- research agreement between the Physics and Drug Science and Technology Departments of the University of Torino and the Italian company “Sepachrom Srl”, stipulated in December 2018, co-investigator;
- research contract “Characterization of metallic materials with electron and ion microscopy” between the “FIAT Mirafiori” Research Center and the Physics Department of the University of Torino, stipulated in September 2020, academic supervisor.

The technical details of the above mentioned activities are covered by confidentiality agreements

• Affiliations (Index)

- 2001-2003: Italian National Institute of Nuclear Physics (INFN, group V, scientific association) [32]
- 2001-2003: Italian National Institute of Matter Physics (INFM, section E) [33]
- 2004-2007: Australian Institute of Physics (AIP) [22]
- 2001-2003: CERN collaboration RD42 (“Diamond for ionizing radiation detection”) [5]
- 2001-2003: CERN collaboration RD50 (“Radiation hard semiconductor devices for very high luminosity colliders”) [6]
- 2004-2007: Australian Nanostructural Analysis Network Organisation (NANO) [23]
- 2005-2007: Australian Research Network for Advanced Materials (ARNAM) [24]
- 2007-present: Inter-departmental Centre “Nanostructured Interfaces and Surfaces” (NIS) [35]
- 2007-2016: Italian National Institute of Nuclear Physics (INFN, group V, scientific association) [32]
- 2008-2017: National Inter-university Consortium for the Physics Sciences of Matter (CNISM) [34]
- 2008-present: CERN collaboration RD42 (“Diamond for ionizing radiation detection”) [5]

- 2008-present: CERN collaboration RD50 (“Radiation hard semiconductor devices for very high luminosity colliders”) [6]
- 2010-present: National Institute of Optics (INO, CNR) [43]
- 2010-present: National Institute of Metrologic Research (INRiM) [39]
- 2011-present: Materials Research Society (MRS) [47]
- 2013-present: member of the Management Committee of the inter-departmental centre “Nanostructured Interfaces and Surfaces” (NIS) [35]
- 2016-present: Italian National Institute of Nuclear Physics (INFN, group V, research association) [32]

• Participation to scientific committees (Index)

1. Member of the Editorial Board of international peer-reviewed journal “Crystals”, “Crystalline Ceramics” Section [82];
2. (2009 – present) Peer reviewer for 39 international scientific journals [web references in square brakets]:
   - “ACS Applied Materials & Interfaces” [86];
   - “Advanced Photonics” [90];
   - “Applied Physics Letters” [54];
   - “Applied Surface Science” [92];
   - “Arabian Journal of Chemistry” [75];
   - “Carbon” [73];
   - “Ceramics International” [58];
   - “Current Applied Physics” [42];
   - “Current Nanoscience” [80];
   - “Diamond and Related Materials” [29];
   - “IEEE Sensors” [88];
   - “International Journal of Nanotechnology” [70];
   - “Journal of Alloys and Compounds” [64];
   - “Journal of Analytical Atomic Spectrometry” [79];
   - “Journal of Applied Physics” [45];
   - “Journal of Lightwave Technology” [69];
   - “Journal of the Optical Society of America B” [71]
   - “Journal of Physics D: Applied Physics” [91];
   - “Journal of Physical Chemistry” [77];
   - “Journal of Spectroscopy” [85];
   - “Laser & Photonics Reviews” [61];
   - “Microelectronic Engineering” [49];
   - “Nanoscale” [65];
   - “Nanotechnology” [30];
   - “Nature Nanotechnology” [93];
   - “New Journal of Physics” [76];
   - “Nuclear Instruments and Methods in Physics Research A: Accelerators, Spectrometers, Detectors and Associated Equipment” [57];

- “Nuclear Instruments and Methods in Physics Research B: Beam Interactions with Materials and Atoms” [40];
- “Optical Materials” [55];
- “Optical Materials Express” [67];
- “Optics Communications” [66];
- “Optics Express” [81];
- “Optics and Lasers in Engineering” [95];
- “Optics Letters” [87];
- “Physica Status Solidi A” [59];
- “Physica Status Solidi B” [96];
- “Physical Chemistry Chemical Physics” [72];
- “Scientific Reports” [78];
- “Surface Coatings & Technology” [74];

3. (2012 – present) Enrolled as a Peer Reviewer by the Italian Ministry for Teaching, University and Research (MIUR)
4. (2012, 2015) Project evaluator for the University of Padova, Italy
5. (2013 – present) Member of the Management Committee of the inter-departmental centre “Nanostructured Interfaces and Surfaces” (NIS) of the University of Torino, Italy
6. (2014) Project evaluator for the Agency for Technology and Innovation of the Puglia Region (ARTI), Italy
7. (2016) Project evaluator for the “Agence Nationale de la Recherche” (ANR), France
8. (2016) Evaluator of scientific products in the “VQR 2011-2014” national reviewing program of the National Agency of Evaluation of the University and Research System (ANVUR)
9. (2017) Project evaluator for the “EDGE Marie Sklodowska Curie COFUND Fellowships” program
10. (2017 – present) Vice-director of the inter-departmental centre “Nanostructured Interfaces and Surfaces” (NIS) of the University of Torino, Italy
11. (2017) Project evaluator for the “PHC Galileo” program of the “Italian-French University” funded by the Italian Ministry for Teaching, University and Research (IT), the Ministère des Affaires Etrangères et du Développement International (FR) and the Ministère de l'Éducation nationale, de l’Enseignement supérieur et de la Recherche (FR)
12. (2017) Project evaluator for the University of Firenze, Italy
13. (2018, 2019) Project evaluator for the “Vinci” program of the “Italian-French University” funded by the Italian Ministry for Teaching, University and Research (IT), the Ministère des Affaires Etrangères et du Développement International (FR) and the Ministère de l'Éducation nationale, de l’Enseignement supérieur et de la Recherche (FR)
14. (2018) Project evaluator for the program “Promotion of Scientific Research and Technological Innovation in Sardinia” of the Sardinia Region, Italy

15. (2018) Project evaluator for the joint program “Quantum at Trento (Q@TN)” of University of Trento, the Italian Research Council (CNR) and the Bruno Kessler Foundation (FBK)
16. (2018) Project evaluator for the “DFG-RFBR Cooperation: Joint German-Russian Project - Proposals in all fields of science (funding period 2019-2021)” program of the Deutsche Forschungsgemeinschaft (DFG)
17. (2019-present) Member of the International Scientific and Technical Advisory Committee of the Central European Research Infrastructure Consortium (CERIC-ERIC)
18. (2020) Project evaluator for the “Rita Levi Montalcini” program for young researchers of the Italian Ministry for Instruction, University and Research
19. (2020) Project evaluator for the “John R. Evans Leaders Fund” program of the “Canada Foundation for Innovation”
20. (2021) Member of the selection committee for the recruitment of a Researcher position at the Politechnic University of Torino
21. (2021) Vice-coordinator of the PhD School in Physics of the University of Torino
22. (2021-…) Coordinator of the PhD School in Physics of the University of Torino

• Organization of Workshops and Meetings (Index)

P.O. participated to the organization of the following workshops and meetings:

1. “1st Workshop on CVD Diamond Applications”, Istituto Italiano di Cultura “C. M. Lerici”, 19-20 September 2003, Stochkolm, *member of the organizing committee*
2. “NIS Colloquium IBATO3 - A Colloquium on Physical Technologies Applied to Material Science, Medicine and Cultural Heritage”, Centre of Excellence “Nanostructures Interfaces and Surfaces” (NIS) – University of Torino, 30 March 2010, Torino, *member of the organizing committee*
3. “Diamond & New Technologies Workshop”, Experimental Physics Department - University of Torino, 14 November 2011, Torino, *organizer*
4. “Spectroscopic Ellipsometry Workshop”, Centre of Excellence “Nanostructures Interfaces and Surfaces” (NIS) – University of Torino, 16 October 2012, Torino, *organizer*
5. “14th International Conference on Nuclear Microprobe Technology and Applications (ICNMTA)”, Padova (Italy), 7-11 July 2014, *member of the organizing committee*
6. “2nd Diamond & New Technologies Workshop”, Physics Department - University of Torino, 16 September 2014, Torino, *organizer*
7. “IFD2015 - INFN Workshop on Future Detectors”, National Institute of Nuclear Physics – Torino Section, 16-18 December 2015, Torino, *member of the organizing committee*

8. “Spatiotemporal structural evolution of matter induced by ion beams: towards new quantum technologies”, IAEA Technical Meeting, 23-27 May 2016, Torino, *member of the organizing committee*
9. “From Foundations of Quantum Mechanics to Quantum Information and Quantum Metrology & Sensing” (Quantum 2017), 8-12 May 2017, Torino, *member of the steering committee*
10. “ICTP-IAEA Advanced school on ion beam driven materials engineering: accelerators for a new technology era”, 1-5 October 2018, Trieste (Italy), *director of the organizing committee*
11. “From Foundations of Quantum Mechanics to Quantum Information and Quantum Metrology & Sensing” (Quantum 2019), 27-31 May 2019, Torino, *member of the steering committee*
12. “Ion beams for future technologies” workshop, 1-3 April 2019, Dubrovnik (Croatia), *member of the program committee*
13. Symposium LATSIS2019 on Diamond Photonics, 19-22 May 2019, Lausanne, Switzerland, *member of the scientific committee*
14. “Quantum Technologies within INFN: Status and Perspectives” workshop, 20-21 January 2020, Padova, Italy, *member of the scientific committee*

- **Participation to conferences (Index)**

Paolo Olivero participated as a delegate to the following conferences:

1. Third Specialist Meeting on Amorphous Carbon (SMAC) (Mondovì, 2000) organized by “Politecnico di Torino”
2. Annual meeting of National Institute of Matter Physics (INFMeeting) (Roma, 2001)
3. XVIII International Conference on Nuclear Microprobe Technology and Applications (ICNMTA) (Takasaki, 2002), organized by Japan Atomic Energy Research Institute (JAERI)
4. Annual meeting of National Institute of Matter Physics (INFMeeting) (Genova, 2003)
5. XVII International Congress on X-ray Optics and Microanalysis (ICXOM) (Chamonix, 2003), organized by the European Synchrotron Radiation Facility (ESRF)
6. "Micro- and Nanotechnology: Materials, Processes, Packaging, and Systems II" (Sydney, 2004), organized by the International Society for Optical Engineering (SPIE)
7. 16th Biennial Congress of the Australian Institute of Physics (Canberra, 2005), best poster contribution
8. 16th European Conference on Diamond, Diamond-Like Materials, Carbon Nanotubes and Nitrides (Toulouse, 2005)
9. 30th Annual Condensed Matter and Materials Meeting (Wagga Wagga, Australia, 2006)

10. 4th International Conference “Diamond and other new Carbon Materials”, held within the 4th Forum on New Materials, CIMTEC 2006 (Acireale, 2006), selected lecturer
11. 31st Annual Condensed Matter and Materials Meeting (Wagga Wagga, Australia, 2007)
12. ECAART9 “9th European Conference on Accelerators in Applied Research and Technology”, Florence, 3-7 September 2007
13. 20th International Conference on the Application of Accelerators in Research and Industry (CAARI 2008), 10-15 August 2008, Fort Worth (Texas), invited talk
14. 16th International Conference on Ion Beam Modification of Materials (IBMM2008), 31 August – 5 September 2008, Dresden (Germany)
15. 19th European Conference on diamond, diamond-like materials, carbon nanotubes and nitrides (Diamond2008), 7-11 September 2008, Sitges (Spain)
16. “SBDD XIV – Hasselt Diamond Workshop 2009”, 2-4 March 2009, Hasselt (Belgium)
17. “New Diamond and Nano Carbons” conference (NDNC2009), 7-11 June 2009, Traverse City (Michigan, US)
18. “SBDD XV – Hasselt Diamond Workshop 2009”, 22-24 February 2010, Hasselt (Belgium)
19. Euroscience Open Forum (ESOF2010), 2-7 July 2010, Torino (Italy)
20. 12th International Conference on Nuclear Microprobe Technology and Applications (ICNMTA), 26-30 July 2010, Leipzig (Germany)
21. 21st European Conference on diamond, diamond-like materials, carbon nanotubes and nitrides (Diamond2010), 5-9 September 2010, Budapest (Hungary)
22. MRS Spring Meeting, 25-29 April 2011, San Francisco (California)
23. International Conference on Materials for Advanced Technologies (ICMAT2011), 26 June - 1 July 2011, Singapore
24. Diamond Detectors Workshop (JAEA, 7th Framework Programme), 7-10 May 2012, Plitvice National Park (Croatia)
25. Ion Beams ’12 - Multidisciplinary applications of nuclear physics with ion beams, 6-8 June 2012, Legnaro (Italy)
26. 22nd International Conference on Application of Accelerators in Research and Industry (CAARI), 5 - 10 August 2012, Fort Worth (Texas)
27. Joint ICTP-IAEA Workshop on Physics of Radiation Effect and its Simulation for Non-metallic Condensed Matter, 13 - 24 August 2012, Trieste (Italy)
28. Summer School “Ion Implantation for Optical Centres in Diamond”, 27 August - 1 September 2012, Bochum (Germany)
29. International Conference on Diamond and Carbon Materials, 3-6 September 2012, Granada (Spain)
30. CERN RD42 Collaboration Meeting, 23-24 May 2013, Geneva (Switzerland)
31. SPIRIT Final Meeting, 11-13 June 2013, Radebeul (Germany)
32. 17th International Conference on Radiation Effects In Insulators (REI-17), 30 June - 5 July 2013, Helsinki (Finland)

33. Italian National Conference on Condensed Matter Physics (FisMat2013), 9-13 September 2013, Milan (Italy)
34. NanotechItaly, 27-29 November 2013, Venice (Italy)
35. 14th International Conference on Nuclear Microprobe Technology and Applications (ICNMTA), 7-11 July 2014, Padova (Italy)
36. MRS Spring Meeting, 6-10 April 2015, San Francisco (California)
37. 26th International Conference on Diamond and Carbon Materials, 6-10 September 2015, Bad Homburg (Germany)
38. 2nd Italian National Conference on Condensed Matter Physics (FisMat2015), 28 September - 2 October 2015, Palermo (Italy)
39. INFN Workshop on Future Detectors (IFD2015), 16-18 December 2015, Torino (Italy)
40. International Union of Materials Research Societies – International Conference on Electronic Materials (IUMRS-ICEM2016), 4-8 July 2016, Singapore
41. 28th International Conference on Diamond and Carbon Materials, 3-7 September 2017, Gothenburg, Sweden
42. 1st Workshop on NanoFluidics and NanoMechanics (NFNM), 14-15 September 2017, Torino, Italy
43. XV International Conference on Quantum Optics and Quantum Information (ICQOQ'2017), 20-23 November 2017, Minsk, Belarus
44. Zeiss Symposium "Optics in the Quantum World", 18 April 2018, Oberkochen, Germany
45. "Ion beams for future technologies" workshop, 1-3 April 2019, Dubrovnik, Croatia
46. Symposium LATSIS2019 on Diamond Photonics, 19-22 May 2019, Lausanne, Switzerland
47. 10th International Conference on Materials for Advanced Technologies (ICMAT2019), 23-28 June 2019, Singapore
48. 63rd General Conference of the International Atomic Energy Agency, 16-20 September 2019, Vienna, Austria

• Bibliometric indexes (Index)

- degree thesis works: **1**
- PhD thesis works: **1**
- peer-reviewed publications: **110**
  - of which as corresponding author: **14**
  - of which as first author: **9**
  - of wich as last author: **12**
- total number of citations (source: Scopus): **2262**
- H index (source: Scopus): **26**
- patent submissions: **3**
- non-peer-reviewed publications: **66**
- invited talks at conferences: **11**
- invited talks at workshops and schools: **11**

- contributed talks at conferences: **17**
- poster presentations at conferences: **18**
- seminars: **19**
- co-author in talks at conferences: **107**
- co-author in posters at conferences: **104**
- ResearcherID: **J-2953-2012** [56]
- ORCiD: **0000-0002-7512-6295** [60]
- Scopus Author ID: **55879970400** [68]

• Publications – Thesis works (Index)

- Degree Thesis in Physics: “Photoacoustic spectroscopy on amorphous carbon thin films”; supervisor: prof. Claudio Manfredotti; published by the University of Torino (2000)

- Ph.D. Degree Thesis in Condensed States Physics: “Study of electronic and optical properties of wide bandgap materials (diamond and silicon carbide) by means of nuclear and X-ray microprobes, VIS spectroscopic techniques and photoelectron spectroscopy”; supervisor: prof. Claudio Manfredotti; external advisor: prof. Gyorgy Vizkelethy (Sandia National Laboratories, Albuquerque); published by the University of Torino (2004)

• Peer-reviewed Publications (Index)

Note: the **§** index refers to publications in which P.O. is corresponding author.

1. “Growth, contacting and ageing of superconducting Bi-2212 whiskers”, M. Truccato, G. Rinaudo, C. Manfredotti, A. Agostino, P. Benzi, P. Volpe, C. Paolini, P. Olivero, **Superconductor Science and Technology 15**, 1304-1320 (2002)

2. “Control of hydrogenation patterning for CVD diamond surfaces by AFM local anodic oxidation”, C. Manfredotti, E. Vittone, C. Paolini, L. Bianco, F. Fizzotti, A. Lo Giudice, P. Olivero, **Surface Engineering 19 (6)**, 441-446 (2003)

3. “Time-resolved ion beam-induced charge collection measurement of minority carrier lifetime in semiconductor power devices by using Gunn's theorem”, C. Manfredotti, F. Fizzotti, A. Lo Giudice, M. Jaksic, Z. Pastuovic, C. Paolini, P. Olivero, E. Vittone, **Materials Science and Engineering: B 102 (1-3)**, 193-197 (2003)

4. “Ion and X-Ray micro-beam induced charge collection and their applications in CVD diamond detector characterisation”, E. Vittone, A. Lo Giudice, C. Paolini, P. Olivero, C. Manfredotti, R. Barrett, V. Rigato, **Nuclear Instruments and Methods in Physics Research B 210**, 159-163 (2003)

5. “Micro-IL and micro-PIXE studies of rich diamond meteorites at Legnaro nuclear microprobe”, A. Lo Giudice, G. Pratesi, P. Olivero, C. Paolini, E. Vittone, C. Manfredotti, F. Sammiceli, V. Rigato, **Nuclear Instruments and Methods in Physics Research B 210**, 429-433 (2003)

6. “Blue Light sensitization of CVD diamond detectors”, C. Manfredotti, F. Fizzotti, A. Lo Giudice, C. Paolini, P. Olivero, E. Vittone, **Diamond and Related Materials 12 (3-7)**, 662-666 (2003)

7. “Investigation of 4H-SiC Schottky diodes by ion and X-ray micro beam induced charge collection techniques”, C. Manfredotti, E. Vittone, C. Paolini, P. Olivero, A. Lo Giudice, M. Jaksic, R. Barrett, **Diamond and Related Materials 12 (3-7)**, 667-671 (2003)

8. “Carbon Influence in the Synthesis of MgB2 by a Microwave Method”, A. Agostino, E. Bonometti, P. Volpe, M. Truccato, C. Manfredotti, P. Olivero, C. Paolini, G. Rinaudo, L. Gozzelino, **International Journal of Modern Physics B 17 (4-6)**, 773-778 (2003)

9. “Investigation of chemical vapour deposition diamond detectors by X-ray micro-beam induced current and X-ray micro-beam induced luminescence techniques”, P. Olivero, C. Manfredotti, E. Vittone, F. Fizzotti, C. Paolini, A. Lo Giudice, R. Barrett, R. Tucoulou, **Spectrochimica Acta Part B 59**, 1565-1573 (2004) **§**

10. “Photocurrent study of beta-ray priming in CVD diamond”, C. Manfredotti, F. Fizzotti, E. Vittone, C. Paolini, P. Olivero, A. Lo Giudice, **Diamond and Related Materials 13 (4-8)**, 914-917 (2004)

11. “Temperature dependent IBIC study of 4H-SiC Schottky diodes”, E. Vittone, V. Rigato, P. Olivero, F. Nava, C. Manfredotti, A. Lo Giudice, Y. Garino, F. Fizzotti, **Nuclear Instruments and Methods in Physics Research B 231**, 491-496 (2005)

12. “Lateral IBIC analysis of GaAs Schottky diodes”, E. Vittone, P. Olivero, F. Nava, C. Manfredotti, A. Lo Giudice, F. Fizzotti, G. Egeni, **Nuclear Instruments and Methods in Physics Research B 231**, 513-517 (2005)

13. “Ion-Beam-Assisted Lift-Off Technique for Three-Dimensional Micromachining of Free Standing Single-Crystal Diamond”, P. Olivero, S. Rubanov, P. Reichart, B. C. Gibson, S. T. Huntington, J. Rabeau, A. D. Greentree, J. Salzman, D. Moore, D. N. Jamieson, S. Prawer, **Advanced Materials 17 (20)**, 2427-2430 (2005) **§**

14. “Radiation-hard seminconductor detectors for SuperLHC”, M. Bruzzi et al. (RD42 Collaboration), **Nuclear Instruments and Methods in Physics Research A 541**, 189-201 (2005)

15. “Development of radiation tolerant semiconductor detectors for the Super-LHC”, M. Moll et al. (RD42 Collaboration), **Nuclear Instruments and Methods in Physics Research A 546**, 99-107 (2005)

16. “Recent advancements in the development of radiation hard semiconductor detectors for S-LHC”, E. Fretwurst et al. (RD42 Collaboration), **Nuclear Instruments and Methods in Physics Research A 552 (1-2)**, 7-19 (2005)

17. “Exposure and characterization of nano-structured hole arrays in tapered photonic crystal fibers using a combined FIB/SEM technique”, B. C. Gibson, S. T. Huntington, S. Rubanov, P. Olivero, K. Digweed-Lyytikäinen, J. Canning, J. D. Love, **Optics Express 13 (22)**, 9023-9028 (2005)

18. “Characterization of three-dimensional microstructures in single crystal diamond”, P. Olivero, S. Rubanov, P. Reichart, B. C. Gibson, S. T. Huntington, J. R. Rabeau, A. D. Greentree, J. Salzman, D. Moore, D. N. Jamieson, S. Prawer, **Diamond and Related Materials 15 (10)**, 1614-1621 (2006) **§**

19. “Critical components for diamond-based quantum coherent devices”, A. D. Greentree, P. Olivero, M. Draganski, E. Trajkov, J. R. Rabeau, P. Reichart, B. C. Gibson, S. Rubanov, S. T. Huntington, D. N. Jamieson, S. Prawer, **Journal of Physics: Condensed Matter 18**, S825-S842 (2006)

20. “Coherent population trapping in diamond n-v centers at zero magnetic field”, C. Santori, D. Fattal, S. M. Spillane, M. Fiorentino, R. G. Beausoleil, A. D. Greentree, P. Olivero, M. Draganski, J. R. Rabeau, P. Reichart, B. C. Gibson, S. Rubanov, D. N. Jamieson, S. Prawer, **Optics Express 14 (17)**, 7986-7994 (2006)

21. “Coherent population trapping of single spins in diamond under optical excitation”, C. Santori, P. Tamarat, P. Neumann, J. Wrachtrup, D. Fattal, R. Beausoleil, J. Rabeau, P. Olivero, A. Greentree, S. Prawer, F. Jelezko, P. Hemmer, **Physical Review Letters 97**, 247401 (2006)

22. “Micromachining structured optical fibers using focused ion beam milling”, C. Martelli, P. Olivero, J. Canning, N. Groothoff, B. Gibson, S. Huntington, **Optics Letters 32 (11)**, 1575-1577 (2007)

23. “Creating diamond color centers for quantum optical applications”, F. C. Waldermann, P. Olivero, J. Nunn, K. Surmacz, Z. Y. Wang, D. Jaksch, R. A. Taylor, I. A. Walmsley, M. Draganski, P. Reichart, A. Greentree, D. Jamieson, S. Prawer, **Diamond and Related Materials 16**, 1887-1859 (2007)

24. “Semiconductor characterization by scanning ion beam induced charge (IBIC) microscopy”, E. Vittone, Z. Pastuovic, P. Olivero, C. Manfredotti, M. Jaksic, A. Lo Giudice, F. Fizzotti, E. Colombo, **Nuclear Instruments and Methods in Physics Research B 266**, 1312–1318 (2008)

25. “Measuring phonon dephasing with ultrafast pulses using Raman spectral interference”, F. C. Waldermann, B. J. Sussman, J. Nunn, V. O. Lorenz, K. C. Lee, K. Surmacz, K. H. Lee, D. Jaksch, I. A. Walmsley, P. Spizziri, P. Olivero, S. Prawer, **Physical Review B 78**, 155201 (2008)

26. “Fabrication of Ultrathin Single-Crystal Diamond Membranes”, B. A. Fairchild, P. Olivero, S. Rubanov, A. D. Greentree, F. Waldermann, R. A. Taylor, I. Walmsley, J. M. Smith, S. Huntington, B. C. Gibson, D. N. Jamieson, S. Prawer, **Advanced Materials 20 (24)**, 4793-4798 (2008)

27. “Direct fabrication of three-dimensional buried conductive channels in single crystal diamond with ion microbeam induced graphitization”, P. Olivero, G. Amato, F. Bellotti, O. Budnyk, E. Colombo, M. Jakšić, A. Lo Giudice, C. Manfredotti, Ž. Pastuović, F. Picollo, N. Skukan, M. Vannoni, E. Vittone, **Diamond and Related Materials 18**, 870-876 (2009) **§**

28. “IBIC analysis of CdTe/CdS solar cells”, E. Colombo, A. Bosio, S. Calusi, L. Giuntini, A. Lo Giudice, C. Manfredotti, M. Massi, P. Olivero, A. Romeo, N. Romeo, E. Vittone, **Nuclear Instruments and Methods in Physics Research B 267**, 2181-2184 (2009)

29. “Charge collection efficiency mapping of interdigitated 4H-SiC detectors”, E. Vittone, N. Skukan, Ž. Pastuović, P. Olivero, M. Jakšić, **Nuclear Instruments and Methods in Physics Research B 267**, 2197-2202 (2009)

30. “Multitechnique characterization of lapis lazuli for provenance study”, A. Lo Giudice, A. Re, S. Calusi, L. Giuntini, M. Massi, P. Olivero, G. Pratesi, M. Albonico, E. Conz, **Analytical and Bioanalytical Chemistry 395 (7)**, 2211-2217 (2009)

31. “Direct fabrication and IV characterization of sub-surface conductive channels in diamond with MeV ion implantation”, P. Olivero, G. Amato, F. Bellotti, S. Borini, A. Lo Giudice, F. Picollo, E. Vittone, **The European Physical Journal B 75 (2)**, 127-132 (2010)

32. “Finite element analysis of ion-implanted diamond surface swelling”, F. Bosia, P. Olivero, E. Vittone, F. Picollo, A. Lo Giudice, M. Jakšić, N. Skukan, L. Giuntini, M. Massi, S. Calusi, M. Vannoni, S. Lagomarsino, S. Sciortino, **Nuclear Instruments and Methods in Physics Research B 268**, 2991-2995 (2010)

33. "Controlled variation of the refractive index in ion-damaged diamond", P. Olivero, S. Calusi, L. Giuntini, S. Lagomarsino, A. Lo Giudice, M. Massi, S. Sciortino, M. Vannoni, E. Vittone, **Diamond and Related Materials 19 (5-6)**, 428-431 (2010) **§**

34. "Formation of buried conductive micro-channels in single crystal diamond with MeV C and He implantation", F. Picollo, P. Olivero, F. Bellotti, Ž. Pastuović, N. Skukan, A. Lo Giudice, G. Amato, M. Jakšić, E. Vittone, **Diamond and Related Materials 19 (5-6)**, 466-469 (2010) **§**

35. "Luminescence centers in proton irradiated single crystal CVD diamond", C. Manfredotti, S. Calusi, A. Lo Giudice, L. Giuntini, M. Massi, P. Olivero, A. Re, **Diamond and Related Materials 19 (5-6)**, 854-860 (2010)

36. "Evidence of light guiding in ion-implanted diamond", S. Lagomarsino, P. Olivero, F. Bosia, M. Vannoni, S. Calusi, L. Giuntini, M. Massi, **Physical Review Letters 105**, 233903 (2010)

37. "A LDL-masked liposomal-doxorubicin reverses drug resistance in human cancer cells", J. Kopecka, I. Campia, P. Olivero, G. Pescarmona, D. Ghigo, A. Bosia, C. Riganti, **Journal of Controlled Release 149**, 196-205 (2011)

38. "Lateral IBIC characterization of single crystal synthetic diamond detectors", A. Lo Giudice, P. Olivero, C. Manfredotti, M. Marinelli, E. Milani, F. Picollo, G. Prestopino, A. Re, V. Rigato, C. Verona, G. Verona-Rinati, E. Vittone, **Physica Status Solidi – Rapid Research Letters 5 (2)**, 80-82 (2011) **§**

39. "Diamond pixel modules", D. Asner et al. (RD42 Collaboration), **Nuclear Instruments and Methods in Physics Research A 636**, S125-S129 (2011)

40. "Modification of the structure of diamond with MeV ion implantation", F. Bosia, N. Argiolas, M. Bazzan, P. Olivero, F. Picollo, A. Sordini, M. Vannoni, E. Vittone, **Diamond and Related Materials 20**, 774-778 (2011)

41. "Ultra-smooth single crystal diamond surfaces resulting from implantation and lift-off processes", T. N. Tran Thi, B. Fernandez, D. Eon, E. Gheeraert, J. Härtwig, T. A. Lafford, A. Perrat-Mabilon, C. Peaucelle, P. Olivero, E. Bustarret, **Physica Status Solidi A 208 (9)**, 2057-2061 (2011)

42. “Focused ion beam fabrication and IBIC characterization of a diamond detector with buried electrodes”, P. Olivero, J. Forneris, M. Jakšić, Ž. Pastuović, F. Picollo, N. Skukan, E. Vittone, **Nuclear Instruments and Methods in Physics Research B 269**, 2340-2344 (2011)

43. “Monte Carlo analysis of a lateral IBIC experiment on a 4H-SiC Schottky diode”, P. Olivero, J. Forneris, P. Gamarra, M. Jakšić, A. Lo Giudice, C. Manfredotti, Ž. Pastuović, N. Skukan, E. Vittone, **Nuclear Instruments and Methods in Physics Research B 269**, 2350-2354 (2011)

44. “Spectroscopic measurement of the refractive index of ion-implanted diamond”, A. Battiato, F. Bosia, S. Ferrari, P. Olivero, A. Sytchkova, E. Vittone, **Optics Letters 37 (4)**, 671-673 (2012)

45. “An upper limit on the lateral vacancy diffusion length in diamond”, J. O. Orwa, K. Ganesan, J. Newnham, C. Santori, P. Barclay, K. M. C. Fu, R. G. Beausoleil, I. Aharonovich, B. A. Fairchild, P. Olivero, A. D. Greentree, S. Prawer, **Diamond and Related Materials 24**, 6-10 (2012)

46. “Fabrication and electrical characterization of three-dimensional graphitic microchannels in single crystal diamond”, F. Picollo, D. Gatto Monticone, P. Olivero, B. A. Fairchild, S. Rubanov, S. Prawer, E. Vittone, **New Journal of Physics 14**, 053011 (2012) **§**

47. “Complex refractive index variation in proton-damaged diamond”, S. Lagomarsino, P. Olivero, S. Calusi, D. Gatto Monticone, L. Giuntini, M. Massi, S. Sciortino, A. Sytchkova, A. Sordini, M. Vannoni, **Optics Express 20 (17)**, 19382-19394 (2012)

48. “Splitting of photoluminescent emission from nitrogen-vacancy centers in diamond induced by ion-damage-induced stress”, P. Olivero, F. Bosia, B. A. Fairchild, B. C. Gibson, A. D. Greentree, P. Spizzirri, S. Prawer, **New Journal of Physics 15**, 043027 (2013) **§**

49. “IBIC characterization of an ion-beam-micromachined multi-electrode diamond detector”, J. Forneris, V. Grilj, M. Jakšić, A. Lo Giudice, P. Olivero, F. Picollo, N. Skukan, C. Verona, G. Verona-Rinati, E. Vittone, **Nuclear Instruments and Methods in Physics Research B 306**, 181-185 (2013)

50. “Direct measurement and modelling of internal strains in ion-implanted diamond”, F. Bosia, N. Argiolas, M. Bazzan, B. A. Fairchild, A. D. Greentree, D. W. M. Lau, P. Olivero, F. Picollo, S. Rubanov, S. Prawer, **Journal of Physics: Condensed Matter 25**, 385403 (2013)

51. “A new diamond biosensor with integrated graphitic microchannels for detecting quantal exocytic events from chromaffin cells”, F. Picollo, S. Gosso, E. Vittone, A. Pasquarelli, E. Carbone, P. Olivero, V. Carabelli, **Advanced Materials 25 (34)**, 4696-4700 (2013)

52. “Systematic study of defect-related quenching of NV luminescence in diamond with time correlated single photon counting spectroscopy”, D. Gatto Monticone, F. Quercioli, R. Mercatelli, S. Soria, S. Borini, T. Poli, M. Vannoni, E. Vittone, P. Olivero, **Physical Review B 88**, 155201 (2013) **§**

53. “Measurement and modelling of anomalous polarity pulses in a multi-electrode diamond detector”, J. Forneris, V. Grilj, M. Jakšić, P. Olivero, F. Picollo, N. Skukan, C. Verona, G. Verona-Rinati, E. Vittone, **Europhysics Letters 104**, 28005 (2013)

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9. “Ion micro-beam fabrication of single-crystal diamond”, P. Olivero et al., “2011 MRS Spring Meeting”, 25-29 April 2011, San Francisco, California

10. “Overview of the research activity on ion-beam lithography of single-crystal diamond at the University of Torino and partner institutions”, P. Olivero, “Ion Beams ’12 - Multidisciplinary applications of nuclear physics with ion beams”, 6-8 June 2012, Legnaro (Italy)

11. “Detection of quantal catecholamine secretion from single chromaffine cells with a diamond-based biosensor fabricated with MeV ion beam lithography”, P. Olivero, F. Picollo, S. Gosso, A. Battiato, V. Carabelli, A. Pasquarelli, E. Carbone, E. Vittone, “International Conference on Diamond and Carbon Materials”, 3-6 September 2012, Granada (Spain)

12. “A diamond-based biosensor for exocytosis detection from chromaffin cells realized with ion beam lithography”, F. Picollo, V. Carabelli, E. Carbone,

S. Gosso, P. Olivero, A. Pasquarelli, E. Vittone, "17th International Conference on Radiation Effects In Insulators (REI-17)", 30 June - 5 July 2013, Helsinki (Finland)

13. "Optical waveguides fabrication in single-crystal diamond using focused ion microbeams", P. Olivero, A. A. Bettiol, F. Bosia, S. Calusi, D. Gatto Monticone, V. S. Kumar, L. Giuntini, S. Lagomarsino, M. Massi, M. Vannoni, "Italian National Conference on Condensed Matter Physics (FisMat2013)", 9-13 September 2013, Milan (Italy)

14. "Super-resolution imaging of single color centers in diamond via nonclassical photon statistics", P. Olivero, D. Gatto Monticone, K. Katamadze, J. Forneris, E. Moreva, P. Traina, I. Ruo Berchera, I. P. Degiovanni, G. Brida, M. Genovese, MRS Spring Meeting 2015, 6-10 April 2015, San Francisco (California)

15. "Tuning diamond stiffness through defect control", A. Battiato, E. Bernardi, F. Bosia, M. Lorusso, F. Picollo, D. Ugues, A. Zelferino, R. Orlando, R. Dovesi, E. P. Ambrosio, P. Olivero, 26th International Conference on Diamond and Carbon Materials, 6-10 September 2015, Bad Homburg (Germany)

16. "Single crystal diamond multi electrode array fabricated by ion beam lithography: an all-carbon sensor for the study of neuroendocrine cells activity", F. Picollo, A. Battiato, E. Bernardi, E. Carbone, S. Gosso, P. Olivero, A. Pasquarelli, V. Carabelli, 26th International Conference on Diamond and Carbon Materials, 6-10 September 2015, Bad Homburg (Germany)

17. "Color centers in diamond for applications in single-photon generation and quantum sensing", J. Forneris, M. Genovese, M. Jakšić, F. Jelezko, K. Katamadze, J. Meijer, P. Olivero, G. Verona-Rinati, Zeiss Symposium "Optics in the Quantum World", 18 April 2018, Oberkochen, Germany

- **Personal conference contributions – Posters (Index)**

1. "Ion and X-Ray micro-beam induced charge collection and their applications in CVD diamond detector characterisation", E. Vittone, A. Lo Giudice, C. Paolini, P. Olivero, C. Manfredotti, R. Barrett, V. Rigato, "ICNMTA2002 - XVIII International Conference on Nuclear Microprobe Technology and Applications", 8-11 September 2002, Takasaki, Japan

2. "Micro-IL and micro-PIXE studies of rich diamond meteorites at Legnaro nuclear microprobe", A. Lo Giudice, G. Pratesi, P. Olivero, C. Paolini, E. Vittone, C. Manfredotti, F. Sammiceli, V. Rigato, "ICNMTA2002 - XVIII

International Conference on Nuclear Microprobe Technology and Applications", 8-11 September 2002, Takasaki, Japan

3. "Ion and X-ray micro beam induced charge collection and their applications in CVD diamond detector characterisation", E. Vittone, A. Lo Giudice, C. Paolini, P. Olivero, C. Manfredotti, R. Barrett, V. Rigato, "INFMeeting2003 - Annual Meeting of the National Institute of Matter Physics", 23-25 June 2003, Genova, Italy

4. "Investigation of SiC Schottky diodes and CVD diamond detectors by X-ray micro Beam Induced Current (XBIC) and X-ray micro Beam Induced Luminescence (XBIL) techniques", P. Olivero, C. Manfredotti, E. Vittone, F. Fizzotti, C. Paolini, A. Lo Giudice, R. Barrett, R. Tucoulou, "ICXOM2003 - XVII International Congress on X-Ray Optics and Microanalysis", 22-26 September 2003, Chamonix, France

5. "Diamond for quantum communication and computing", S. Prawer, D. N. Jamieson, F. Jelezko, S. T. Huntington, A. D. Greentree, J. Rabeau, P. Olivero, P. Reichart, "16th Biennial Congress of the Australian Institute of Physics", 31 January - 4 February 2005, Canberra, Australia, best poster award
6. "Micromachining of single crystal diamond using a novel lift-off technique", P. Olivero, S. Rubanov, P. Reichart, B. C. Gibson, S. T. Huntington, J. Rabeau, A. D. Greentree, J. Salzman, D. Moore, D. N. Jamieson, S. Prawer, "16th Biennial Congress of the Australian Institute of Physics", 31 January - 4 February 2005, Canberra, Australia

7. "Fabrication of nanostructures in single-crystal diamond", P. Olivero, B. Fairchild, A. Cimmino, M. Draganski, B. C. Gibson, Andrew D. Greentree, D. Hoxley, S. T. Huntington, J. Rabeau, P. Reichart, S. Rubanov, A. Stacey, J. Salzman, B. Meyler, I. Bayn, A. Lahav, D. N. Jamieson, S. Prawer, "Wagga2007 - 31st Annual Condensed Matter and Materials Meeting", 6-9 February 2007, Wagga Wagga, Australia

8. "Fabrication of nanostructures in single-crystal diamond", P. Olivero et al., "ECAART9 - 9th European Conference on Accelerators in Applied Research and Technology", 3-7 September 2007, Firenze, Italy

9. "Three-dimensional buried conductive channels fabricated in single crystal diamond with ion microbeam induced graphitization", P. Olivero et al., "IBMM2008 - 16th International Conference on Ion Beam Modification of Materials", 31 August - 5 September 2008, Dresden, Germany

10. "The Refractive Index of Ion-Damaged Diamond", P. Olivero, S. Calusi, L. Giuntini, S. Lagomarsino, A. Lo Giudice, M. Massi, S. Sciortino, M.

Vannoni, E. Vittone, “SBDD XIV - Hasselt Diamond Workshop 2009”, 2-4 March 2009, Hasselt, Belgium

11. “Deep ion beam lithography of diamond”, P. Olivero, F. Bosia, O. Budnyk, A. Lo Giudice, F. Picollo, H. Wang, E. Vittone, S. Calusi, M. Massi, L. Giuntini, Ž. Pastuović, N. Skukan, M. Jakšić, A. Sordini, M. Vannoni, A. Sytchkova, S. Lagomarsino, S. Sciortino, B. Fairchild, S. Rubanov, S. Prawer, “SBDD XV - Hasselt Diamond Workshop 2010”, 22-24 February 2010, Hasselt, Belgium

12. “Focused ion beam fabrication and IBIC characterization of a diamond detector with buried interdigitated electrodes”, P. Olivero, J. Forneris, M. Jakšić, Ž. Pastuović, F. Picollo, N. Skukan, E. Vittone, “ICNMTA2010 - 12th International Conference on Nuclear Microprobe Technology and Applications”, 26-30 July 2010, Leipzig, Germany, best poster award

13. “Light Guiding in Ion-Implanted Diamond”, S. Lagomarsino, F. Bosia, S. Calusi, L. Giuntini, M. Massi, P. Olivero, S. Sciortino, A. Sordini, A. Sytchkova, M. Vannoni, E. Vittone, poster a “Diamond2010 - 21st European Conference on diamond, diamond-like materials, carbon nanotubes and nitrides”, 5-9 September 2010, Budapest, Hungary

14. “Lateral IBIC characterization of single crystal synthetic diamond detectors”, D. Ambu, A. Lo Giudice, C. Manfredotti, M. Marinelli, P. Olivero, F. Picollo, C. Pullara, A. Re, G. Verona-Rinati, poster a “Diamond2010 - 21st European Conference on diamond, diamond-like materials, carbon nanotubes and nitrides”, 5-9 September 2010, Budapest, Hungary

15. “Ellipsometric characterization of ion-implanted single-crystal diamond”, A. Battiato, P. Olivero, F. Bosia, A. Sytchkova, E. Vittone, “17th International Conference on Radiation Effects In Insulators (REI-17)”, 30 June - 5 July 2013, Helsinki, Finland

16. “Photoluminescence of Nitrogen-Vacancy centres in diamond: the quenching effect of radiation damage in proton implanted diamond”, D. Gatto Monticone, F. Quercioli, R. Mercatelli, S. Soria, M. Vannoni, A. Lo Giudice, P. Olivero, E. Vittone, “17th International Conference on Radiation Effects In Insulators (REI-17)”, 30 June - 5 July 2013, Helsinki, Finland

17. “Micro- and nano-fabrication in artificial diamond for applications in bio-sensing, photonics and radiation detection”, P. Olivero et al., NanotechItaly, 27-29 November 2013, Venice, Italy

18. “Near-infrared emitting single colour centres in CVD diamond”, P. Olivero, D. Gatto Monticone, P. Traina, E. Moreva, J. Forneris, I. P. Degiovanni,

F. Taccetti, L. Giuntini, G. Brida, G. Amato, M. Genovese, “Quantum 2014 - Advances in foundations of quantum mechanics and quantum information with atoms and photons” workshop, 25-31 May 2014, Torino, Italy

- **Invited talks at workshops and schools (Index)**

1. “Modification and nano-fabrication of diamond with focused ion beams”, 7th NIS Colloquium organized by the “Nanostructured Interfaces and Surfaces Centre of Excellence”, 19-20 December 2006, Torino

2. “A novel MeV ion implantation strategy for the direct fabrication of three-dimensional buried conductive channels in diamond”, 7th NIS Colloquium “Material Analysis and Modification by Ion Beams” organized by the “Nanostructured Interfaces and Surfaces Centre of Excellence”, 22 December 2008, Torino

3. “Applications of ion microbeam lithography in diamond”, “Diamond Detectors - Development and Applications, 2nd RBI Detector Workshop”, 7-10 May 2012, Plitvice Lakes National Park (Croatia)

4. “Ion Beam Lithography I and II: state of the art and the diamond case study”, “Joint ICTP-IAEA Workshop on Physics of Radiation Effect and its Simulation for Non-metallic Condensed Matter”, 13-24 August 2012, Trieste (Italy)

5. “Ion beam lithography in diamond - An overview”, Summer School “Ion Implantation for Optical Centres in Diamond”, 27 August - 1 September 2012, Bochum (Germany)

6. “Focused and collimated ion beams for the deep ion beam lithography of diamond”, “Joint Training Course on Ion Beam Microscopy” organized by INFN and IAEA, 3-4 July 2014, Legnaro (Italy)

7. “Fabrication of conductive micro/nano-structures in diamond with MeV ion beams”, “Building with Molecules and Nano-objects – BuildMoNa Module 2016-T4” graduate school of the University of Leipzig, 19-20 September 2016, Leipzig (Germany)

8. “Diamond-based devices: from detectors to bio-sensors and single-photon emitters”, Advanced School on Detectors (“Giornate di Studio sui Rivelatori”), 12-16 February 2018, Cogne (Italy)

9. “Single-photon sources based on defects in solid state”, ICTP-IAEA Advanced school on ion beam driven materials engineering: accelerators for a new technology era, 1-5 October 2018, Trieste (Italy)

10. “Single color centers in wide-bandgap semiconductors”, ICTP-IAEA Advanced school on ion beam driven materials engineering: accelerators for a new technology era, 1-5 October 2018, Trieste (Italy)

11. “Electric control of optically active defects in diamond”, Symposium LATSIS2019 on Diamond Photonics, 19-22 May 2019, Lausanne, Switzerland

- **Seminars (Index)**

1. “Ion-Beam Nanofabrication and Functionalization of Single Crystal Diamond”, seminar at the University of Torino, 12 September 2007, Torino

2. “Ion-Beam Nanofabrication and Functionalization of Single Crystal Diamond”, seminar at the National Institute of Metrologic Research (INRiM), 5 October 2007, Torino

3. “Ion-beam nanofabrication of single crystal diamond: Integrated optics and new bio-physics applications”, seminar at the University of Padova, 8 October 2007, Padova

4. “Ion-Beam Nanofabrication and Functionalization of Single Crystal Diamond”, seminar at the FIAT Research Center (CRF), 10 October 2007, Torino

5. “Ion-beam nanofabrication and functionalization of single crystal diamond”, seminar at the Ruđer Bošković Institute, 28 November 2007, Zagreb (Croatia)

6. “Fabrication of buried conductive channels in single crystal diamond with ion microbeam induced graphitization”, seminar at the Ruđer Bošković Institute, 14 March 2008, Zagreb (Croatia)

7. “Three-dimensional lithography and functionalization of single crystal diamond with focused keV and MeV ion beams”, seminar at the “Nanostructured Interfaces and Surfaces Centre of Excellence”, 30 June 2008, Torino

8. “Three-dimensional lithography and functionalization of single crystal diamond with focused keV and MeV ion beams”, seminar at the “Sandia National Laboratories”, 20 August 2008, Albuquerque (New Mexico)

9. “Micro-fabrication of diamond with ion beams”, School of Physics colloquium at the University of Melbourne, 20 November 2009, Melbourne (Australia)

10. “Ion micro-fabrication of diamond”, NIS Colloquium “Physical Technologies Applied to Material Science, Medicine and Cultural Heritage”, organized by

the “Nanostructured Interfaces and Surfaces Centre of Excellence”, 30 March 2010, Torino

11. “Ion beam micro-fabrication of diamond”, seminar at the Néel Institute (CNRS), 4 May 2010, Grenoble (France)

12. “Ion beam micro-fabrication of diamond”, seminar at the Delft University of Technology, 23 July 2010, Delft (Netherlands)
13. “FIRB project: Development of microfabrication techniques in diamond for applications in bio-sensing and photonics”, seminar at the Annual Congress of the Italian Society of Optics and Photonics (SIOF) [53], 16 December 2011, Naples

14. “Ion beam microfabrication on diamond”, INFN Workshop on diamond detectors, 6 December 2012, Roma (Italy)

15. “IBIC characterization of homoepitaxial CVD diamond detectors at Torino”, CERN RD42 Collaboration Meeting, 23-24 June 2013, Geneva (Switzerland)

16. “Ion microbeam fabrication and characterization of artificial single-crystal diamond”, SPIRIT Final Meeting, 11-13 June 2013, Radebeul (Germany)

17. “Artificial diamond based devices for radiation detection, bio-sensing and photonics”, seminar at the National Enterprise for nanoScience and nanotechnology (NEST), 14 March 2014, Pisa (Italy)

18. “Diamond science & technology @ UniTo: from bio-sensing to quantum optics”, seminar at the Italian Institute of Technology, 4 December 2015, Genova (Italy)

19. “Ion beam damage in materials and devices”, seminar at Thales – Alenia Space, 3 November 2016, Torino (Italy)

- **Co-authorship in conference contributions – Talks (Index)**

1. “Study of the influence of adsorbate on the surface conductivity of hydrogen-terminated CVD diamond”, E. Vittone, F. Fizzotti, A. Lo Giudice, C. Manfredotti, P. Olivero, C. Paolini, E. Ravizza, “SBDD VIII - European Workshop on Surface and Bulk Defects in CVD Diamond Films”, 16-18 February 2003, Hasselt, Belgium

2. “Diamond Based Quantum Information Processing”, S. Prawer, D. N. Jamieson, S. Huntington, A. Greentree, J. Rabeau, P. Olivero, P. Reichart, B. Gibson, J. Salzman, F. Jelezko, “ICNDST & ADC 2006 - MRS

/ International Conference on New Diamond Science and Technology", 15-18 May 2006, North Carolina

3. "Creation and characterization of buried microstructures in diamond by ion implantation", M. A. Draganski, P. Reichart, P. Olivero, S. Rubanov, P. N. Johnston, D. N. Jamieson, S. Prawer, "ICONN2006 - International Conference on Nanoscience and Nanotechnology", 3-7 July 2006, Brisbane, Australia

4. "Ion beam lithography on diamond: fabrication of devices at the micron scale", I. Zalziniak, D.N. Jamieson, S. Prawer, P. Olivero, P. Reichart, S. Rubanov, "ICNMTA2006 - 10th International Conference on Nuclear Microprobe Technology and Applications", 9-14 July 2006, Singapore

5. "Systematic study of stress-induced splitting of nitrogen-vacancy luminescence in ion implanted single-crystal diamond", P. Olivero, M. Draganski, B. C. Gibson, A. D. Greentree, C. Santori, S. Prawer, "Diamond2006 - 17th European Conference on Diamond, Diamond Like Materials, Carbon Nanotubes and Nitrides", 3-8 September 2006, Estoril, Spain

6. "Micro-fabrication advances in single-crystal diamond", B. Fairchild, P. Olivero et al., "Australian Research Network for Advanced Materials (ARNAM) 2007 Annual Workshop", 8-11 July 2007, Canberra, Australia, best student presentation award

7. "Micro-fabrication advances in single-crystal diamond", B. Fairchild, P. Olivero et al., "NCTA2007 - 15th AINSE Conference on Nuclear and Complementary Techniques of Analysis", 21-23 November 2007, Melbourne, Australia

8. "First photonic crystal device on diamond", I. Bayn, B. Meyler, A. Lahav, J. Salzman, P. Olivero, B. Fairchild, S. Prawer, "IMEC13 - 13th Israel Materials Engineering Conference", 9-10 December 2007, Haifa, Israel

9. "Fabrication of optical devices in sub micron layers of single crystal diamond", B. Fairchild, P. Olivero et al., "ICONN2008 - International Conference on Nanoscience and Nanotechnology", 25-29 February 2008, Melbourne, Australia

10. "Ion beam engineering of diamond nanostructures: a TEM study", S. Rubanov, P. Olivero et al., "ACMM20 - 20th Australian Conference on Microscopy and Microanalysis" e "IUMAS-IV - 4th Congress of the International Union of Microbeam Analysis Societies", 10-15 February 2008, Perth, Australia

11. “Lapis lazuli provenance study by means of ionoluminescence and cathodoluminescence”, A. Lo Giudice, M. Albonico, S. Calusi, E. Colombo, E. Conz, L. Giuntini, P. Mandó, M. Massi, P. Olivero, G. Pratesi, A. Re, E. Vittone, “Technart 2009 - Non-destructive and Microanalytical Techniques in Art and Cultural Heritage”, 27-30 April 2009, Athens, Greece

12. “Luminescence centres in proton irradiated single crystal CVD diamond”, C. Manfredotti, S. Calusi, A. Lo Giudice, L. Giuntini, M. Massi, P. Olivero, A. Re, “Diamond2009 - 20th European Conference on diamond, diamond like materials, carbon nanotubes and nitrides”, 6-10 September 2009, Athens, Greece

13. “Caratterizzazione di lapislazzuli per studi di provenienza mediante tecniche di microscopia ionica”, A. Re, S. Calusi, L. Giuntini, A. Lo Giudice, M. Massi, P. Olivero, G. Pratesi, E. Vittone, “XCV National Congress of the Italian Physics Society”, 28 September - 3 October 2009, Bari, Italy

14. “Modeling Mechanical Deformation and Optical Waveguiding Properties of Ion-Implanted Diamond with COMSOL Multiphysics”, F. Bosia, P. Olivero, E. Vittone, “European COMSOL Conference”, 14-16 October 2009, Milano, Italy

15. “Provenance studies of Lapis Lazuli: preliminary characterization of stones from different mines”, A. Re, A. Lo Giudice, P. Olivero, G. Pratesi, D. Angelici, “VI National Archaeometry Congress (AIAr)”, 15-18 February 2010, Pavia, Italy

16. “Lapis lazuli provenance study by means of ionoluminescence and PIXE”, A. Lo Giudice, S. Calusi, L. Giuntini, M. Massi, P. Olivero, G. Pratesi, A. Re, “ICNMTA2010 - 12th International Conference on Nuclear Microprobe Technology and Applications”, 26-30 July 2010, Leipzig, Germany

17. “Structural and electrical characterization of buried graphitic micro-channels fabricated in single crystal diamond by deep ion beam lithography”, F. Picollo, P. Olivero, D. Gatto Monticone, G. Amato, L. Boarino, E. Enrico, B. Fairchild, M. Jakšić, A. Lo Giudice, Ž. Pastuović, S. Prawer, S. Rubanov, N. Skukan, H. Wang, E. Vittone, “CAARI2010 - 20th International Conference on the Application of Accelerators in Research and Industry”, 9-13 August 2010, Fort Worth, Texas, invited

18. “Carbon microbeam IBIC studies of diamond detectors with planar and buried intredigitated electrodes”, M. Jakšić, P. Olivero, Ž. Pastuović, F. Picollo, N. Skukan, E. Vittone, “CAARI2010 - 20th International Conference on the Application of Accelerators in Research and Industry”, 9-13 August 2010, Fort Worth, Texas

19. “Micro-fabbricazione del diamante mediante litografia ionica”, F. Bosia, A. Lo Giudice, P. Olivero, F. Picollo, H. Wang, E. Vittone, S. Calusi, M. Massi, L. Giuntini, G. Amato, L. Boarino, S. Borini, E. Enrico, Ž. Pastuović, N. Skukan, M. Jakšić, A. Sordini, M. Vannoni, A. Sytchkova, S. Lagomarsino, S. Sciortino, B. Fairchild, S. Prawer, S. Rubanov, “XCVI National Congress of the Italian Physics Society”, 20-24 September 2010, Bologna, Italy

20. “Charge collection efficiency mapping of a CVD diamond Schottky diode”, J. Forneris, A. Lo Giudice, C. Manfredotti, M. Marinelli, E. Milani, P. Olivero, F. Picollo, G. Prestopino, A. Re, C. Verona, G. Verona-Rinati, E. Vittone, “RESMDD2010 - 8th International Conference on Radiation Effects on Semiconductor Materials Detectors and Devices”, 12-15 October 2010, Firenze, Italy

21. “Ultrasmooth single crystal diamond surfaces resulting from implantation and lift-off processes”, T. N. Tran Thi, E. Gheeraert, D. Eon, B. Fernandez, J. Härtwig, A. Perrat-Mabilon, C. Peaucel, P. Olivero, E. Bustarret, “SBDD XVI – Hasselt Diamond Workshop”, 21-23 February 2010, Hasselt, Belgium

22. “Fabrication and characterization of buried light-waveguides in diamond by means of proton micro-beam writing”, P. Olivero, F. Bosia, S. Lagomarsino, M. Vannoni, S. Calusi, L. Giuntini, M. Massi, “REI16 - Radiation Effects in Insulators”, 14 - 19 August 2011, Beijing (China)

23. “Modification of the optical properties of single-crystal diamond and fabrication of buried optical waveguides in single-crystal diamond”, F. Bosia, P. Olivero, A. Battiato, D. Gatto Monticone, E. Vittone, S. Lagomarsino, M. Vannoni, A. Sordini, S. Calusi, L. Giuntini, M. Massi, A. Sytchkova, International Workshop on Ion Beam Applications of Functional Materials, 19-22 agosto 2011, Jinan (China), invited

24. “Fabrication with ion beam lithography and IBIC characterization of a particle detector in single-crystal diamond with integrated graphitic micro-electrodes”, J. Forneris, L. La Torre, A. Lo Giudice, C. Manfredotti, M. Marinelli, P. Olivero, F. Picollo, A. Re, C. Verona, G. Verona-Rinati, E. Vittone, 22nd European Conference on diamond, diamond-like materials, carbon nanotubes and nitrides (Diamond2011), 4-8 September 2011, Garmisch (Germany)

25. “Focused ion beam fabrication and IBIC characterization of a diamond detector with buried interdigitated electrodes”, J. Forneris, M. Jakšić, P. Olivero, Ž. Pastuović, F. Picollo, N. Skukan, “XCVII National Congress of the Italian Physics Society”, 26-30 September 2011, L’Aquila (Italy)

26. “A fully ion beam micromachined diamond biosensor designed for the detection of quantal catecholamine secretion from chromaffin cells”, E. Vittone, V. Carabelli, E. Carbone, S. Gosso, L. La Torre, P. Olivero, F. Picollo, V. Rigato, MRS Fall Meeting, 28 November – 2 December 2011, Boston (USA)

27. “Ion beam microfabrication of microfluidic devices in artificial diamond”, F. Picollo, P. Olivero et al., SPIRIT Annual Meeting, 5-6 March 2012, Leuven (Belgium)

28. “Modelling and Validation of Ion Beam Induced Damage in Semiconductors”, J. Forneris, P. Olivero, F. Picollo, E. Vittone, 1st Research Coordination Meeting of the “Utilization of Ion Accelerators for Studying and Modelling of Radiation Induced Defects in Semiconductors and Insulators” project of the International Atomic Energy Agency (IAEA), 19-23 March 2012, Vienna (Austria)

29. “Focused ion beam fabrication of a diamond detector with buried graphitic electrodes”, P. Olivero, J. Forneris, M. Jakšić, F. Picollo, Ž. Pastuović, N. Skukan, E. Vittone, “Diamond Detectors - Development and Applications, 2nd RBI Detector Workshop”, 7 10 May 2012, Plitvice Lakes National Park (Croatia)

30. “Sharing of anomalous polarity pulses in a ion-beam-micromachined multi-electrode diamond detector”, J. Forneris, V. Grilj, M. Jakšić, N. Skukan, C. Verona, G. Verona Rinati, A. Lo Giudice, P. Olivero, F. Picollo, E.Vittone, “Diamond Detectors - Development and Applications, 2nd RBI Detector Workshop”, 7 10 May 2012, Plitvice Lakes National Park (Croatia)
31. “Lifetime photoluminescence mapping for the the study of the effect of subsitutional nitrogen and radiation damage in luminescence quenching of Nitrogen-Vacancy centers”, D. Gatto Monticone, F. Quercioli, R. Mercatelli, S. Soria, M. Vannoni, S. Borini, A. Lo Giudice, P. Olivero, E. Vittone, New Diamond and Nano Carbons Conference, 20-24 May 2012, San Juan (Puerto Rico)

32. “Controlled Refractive Index Increase in Ion Implanted Diamond for Optical Waveguide Applications”, F. Bosia, P. Olivero, A. Battiato, D. Gatto Monticone, E. Vittone, A. Krasilnikova Sytchkova, M. Bazzan, N. Argiolas, J. Meijer, S. Calusi, A. Bettiol, V. S. Kumar, New Diamond and Nano Carbons Conference, 20-24 May 2012, San Juan (Puerto Rico)

33. “Amperometric detection of quantal catecholamine secretion from individual cells by an ion beam micromachined monocrystalline diamond biosensor”, F. Picollo, V. Carabelli, E. Carbone, S. Gosso, L. La Torre, P. Olivero,

A. Pasquarelli, V. Rigato, E. Vittone, New Diamond and Nano Carbons Conference, 20-24 May 2012, San Juan (Puerto Rico)

34. "Optical characterization and waveguide fabrication in ion implanted single crystal diamond", F. Bosia, P. Olivero, A. Battiato, D. Gatto Monticone, E. Vittone, A. Bettiol, V. S. Kumar, N. Argiolas, M. Bazzan, M. Massid, J. Meijer, 18th International Conference on Ion Beam Modifications of Materials (IBMM 2012), 2-7 settembre 2012, Qingdao (China)

35. "Diamond-based biosensor microfabricated by means of ion beam lithography: amperometric detection of quantal catecholamine secretion from individual chromaffin cells", F. Picollo, A. Battiato, V. Carabelli, E. Carbone, S. Gosso, P. Olivero, A. Pasquarelli, E. Vittone, 13th International Conference of Nuclear Microprobe Technology and Applications (ICNMTA2012), 22 - 27 July 2012, Lisbon (Portugal)

36. "Focused ion beam engineering of nanostructures in diamond", S. Rubanov, B. A. Fairchild, P. Olivero, S. Prawer, IVth All-Russian Conference and the School of Young Scientists and Specialists, 23-26 October 2012, Novosibirsk (Russia), invited

37. "Diamond: optical characterization of luminescence centers produced by ion implantation", F. Pisano, P. Olivero, International Conference of Physics Students (ICPS2012) , 4-10 August 2012, Utrecht-Enschede (Netherlands)

38. "Stress effects on optical waveguides in ion implanted diamond", F. Bosia, P. Olivero, M. Piccardo, D. Gatto Monticone, S. Lagomarsino, M. Vannoni, L. Giuntini, E. Vittone, N. Pugno, E-MRS Fall Meeting, 17-21 September 2012, Warsaw (Poland)

39. "Amperometric detection of quantal catecholamine secretion from individual cells by an ion beam microfabricated single crystalline diamond biosensor", F. Picollo, V. Carabelli, E. Carbone, S. Gosso, P. Olivero, A. Pasquarelli, E. Vittone, "XCVIII National Congress of the Italian Physics Society", 17 - 21 September 2012, Naples (Italy), *best presentation of the "Biophysics and Medical Physics" session*

40. "Ion beam fabrication and IBIC characterization of a diamond particle detector with integrated graphitic microelectrodes", J. Forneris et al., 1st Adamas Workshop, 16-18 December 2012, GSI, Darmstadt (Germany)

41. "Optical waveguides in ion-implanted diamond", F. Bosia, P. Olivero, D. Gatto Monticone, S. Lagomarsino, M. Vannoni, L. Giuntini, A. A. Bettiol, V. S. Kumar, "SBDD XVIII – Hasselt Diamond Workshop", 27 February - 1 March 2013, Hasselt, Belgium

42. “A Monte Carlo software with graphical user interface for the simulation of IBIC experiments in 1-dimensional geometries”, J. Forneris, P. Olivero, F. Picollo, E. Vittone, 2° Research Coordination Meeting of the “Utilization of Ion Accelerators for Studying and Modelling of Radiation Induced Defects in Semiconductors and Insulators” project of the International Atomic Energy Agency (IAEA), 13-17 May 2013, Vienna (Austria)

43. “Ion beam micro-fabrication and IBIC characterization of a diamond detector with buried graphitic multi-electrodes”, J. Forneris, V. Grilj, M. Jakšić, N. Skukan, C. Verona, G. Verona-Rinati, A. Lo Giudice, P. Olivero, F. Picollo, E.Vittone, E-MRS Spring Meeting 2013 - Symposium M, 27-31 May 2013, Strasbourg (France)

44. “Focused on beam micro-fabrication and IBIC characterization of a multi-electrode diamond detector with buried graphitic electrodes”, J. Forneris, V. Grilj, M. Jakšić, N. Skukan, C. Verona, G. Verona-Rinati, A. Lo Giudice, P. Olivero, F. Picollo, E.Vittone, Carbon 2013, 14-19 July 2013, Rio de Janeiro (Brazil)

45. “A ion beam micromachined diamond biosensor for detecting quantal exocytic events from chromaffin cells”, F. Picollo, V. Carabelli, E. Carbone, S. Gosso, P. Olivero, A. Pasquarelli, E. Vittone, Carbon 2013, 14-19 July 2013, Rio de Janeiro (Brazil)

46. “Conventional and analytical electron microscopy study of phase transformation in implanted diamond layers”, S. Rubanov, B. A. Fairchild, A. Suvorova, P. Olivero, S. Prawer, “8th Pacific Rim International Conference on Advanced Materials and Processing (PRICM8) - Symposium N”, 4-9 August 2013, Waikoloa (Hawaii)

47. “Strain modelling in ion implanted single crystal diamond”, F. Bosia, N. Argiolas, M. Bazzan, B. A. Fairchild, A. D. Greentree, D. W. M. Lau, P. Olivero, F. Picollo, S. Rubanov, S. Prawer, International Conference on Diamond and Carbon Materials, 2-5 September 2013, Riva del Garda (Italy)

48. “Bright NIR-emitting single colour centres in monocrcrystalline CVD diamond”, D. Gatto Monticone, E. Moreva, P. Traina, I. Degiovanni, E. Bernardi, M. Genovese, L. Giuntini, F. Taccetti, P. Olivero, E. Vittone, International Conference on Diamond and Carbon Materials, 2-5 settembre 2013, Riva del Garda

49. “Characterization of ion-implanted single-crystal diamond with spectroscopic ellipsometry”, A. Battiato, P.Olivero, F. Bosia, A. Sytchkova, E.Vittone,

Italian National Conference on Condensed Matter Physics (FisMat2013), 9-13 September 2013, Milan (Italy)

50. “An Electric Force Microscopy investigation of sub-superficial graphite microchannels in diamond”, E. Bernardi, F. Picollo, A. Battiato, P. Olivero, E. Vittone, Italian National Conference on Condensed Matter Physics (FisMat2013), 9-13 September 2013, Milan (Italy)

51. “Experimental/numerical analysis of strains in irradiated single-crystal diamond”, F. Bosia, N. Argiolas, M. Bazzan, B. A. Fairchild, A. D. Greentree, D. W. M. Lau, P. Olivero, F. Picollo, S. Rubanov, S. Prawer, Italian National Conference on Condensed Matter Physics (FisMat2013), 9-13 September 2013, Milan (Italy)

52. “Micro-fabrication and characterization by means of focused ion beams of a diamond detector with integrated graphitic micro-electrodes”, J. Forneris, V. Grilj, M. Jakšić, N. Skukan, C. Verona, G. Verona-Rinati, P. Olivero, F. Picollo, E.Vittone, Italian National Conference on Condensed Matter Physics (FisMat2013), 9-13 September 2013, Milan (Italy)

53. “Single colour centres in CVD diamond emitting in the 750-800 nm region”, D. Gatto Monticone, E. Moreva, P. Traina, I. Degiovanni, E. Bernardi, P. Olivero, L. Giuntini, F. Taccetti, L. Boarino, E. Enrico, M. Genovese, Italian National Conference on Condensed Matter Physics (FisMat2013), 9-13 September 2013, Milan (Italy)

54. “A diamond-based biosensor for exocytosis detection from chromaffin cells realized with ion beam lithography”, F. Picollo, S. Gosso, E. Vittone, A. Pasquarelli, E. Carbone, P. Olivero, V. Carabelli, Italian National Conference on Condensed Matter Physics (FisMat2013), 9-13 September 2013, Milan (Italy)

55. “Bright single colour centers in CVD diamond emitting in the 750-800 nm region”, D. Gatto Monticone, E. Moreva, P. Traina, I. Degiovanni, E. Bernardi, P. Olivero, L. Giuntini, F. Taccetti, M. Genovese, 2013 JSAP-MRS Joint Symposia, 16-20 September 2013, Kyoto (Japan)

56. “High performing SPS based on native NIR-emitting single colour centers in diamond”, P. Traina, D. Gatto Monticone, E. Moreva, J. Forneris, M. Levi, K. Katamadze, G. Brida, I. P. Degiovanni, E. Enrico, G. Amato, L. Boarino, P. Olivero, M. Genovese, SPIE Photonics Europe 2014, 14-17 April 2014, Brussels (Belgium)

57. “Electroluminescence of NV centers in diamond driven by ion-beam fabricated buried graphitic electrodes”, J. Forneris, D. Gatto Monticone, P. Traina, V. Grilj, G. Brida, I. P. Degiovanni, E. Moreva, N. Skukan,

M. Jaksic, M. Genovese, P. Olivero, "23rd Conference on Application of Accelerators in Research and Industry" (CAARI 2014), 25-30 maggio 2014, San Antonio, Texas

58. "Kelvin probe microscopy characterization of buried graphitic channels microfabricated by mev ion beam implantation", E. Bernardi, A. Battiato, P. Olivero, F. Picollo, E. Vittone, "23rd Conference on Application of Accelerators in Research and Industry" (CAARI 2014), 25-30 maggio 2014, San Antonio, Texas

59. "Single-Photon Confocal Microscopy at INRIM: Studying, engineering and exploiting Single Color Centers in Diamond", P. Traina, D. Gatto Monticone, E. Moreva, J. Forneris, K. Katamadze, M. Levi, G. Brida, I. Ruo Berchera, F. Piacentini, E. Enrico, G. Amato, L. Boarino, N. De Leo, M. Fretto, F. Taccetti, L. Giuntini, P. Olivero, I. P. Degiovanni, M. Genovese, "Quantum 2014 - Advances in foundations of quantum mechanics and quantum information with atoms and photons" workshop, 25-31 May 2014, Torino, Italy

60. "Diamond-based Multi Electrode Array biosensors: systematic detection of exocytosis from cultured and single chromaffin cells", A. Battiato, E. Bernardi, V. Carabelli, E. Carbone, S. Gosso, P. Olivero, A. Pasquarelli, F. Picollo, E. Vittone, E-MRS Spring Meeting, 26-30 May 2014, Lille, France

61. "Deep Ion Beam Lithography in diamond: towards the nanoscale", F. Picollo, A. Battiato, E. Bernardi, P. Olivero, E. Vittone, 14th International Conference on Nuclear Microprobe Technology and Applications (ICNMTA 2014), 6-11 July 2014, Padova (Italy)

62. "Sub-diffraction imaging of single-photon emitters", I. P. Degiovanni, D. Gatto Monticone, K. Katamadze, J. Forneris, E. Moreva, P. Traina, I. Ruo Berchera, G. Brida, P. Olivero, M. Genovese, 23rd Annual International Laser Physics Workshop (LPHYS'14), 14-18 July 2014, Sofia (Bulgaria), invited

63. "Strain modeling of annealed ion-implanted diamond", F. Bosia, P. Olivero, F. Picollo, L. Giuntini, A. Sordini, M. Vannoni, B. Fairchild, A. Greentree, D. Lau, S. Prawer, 25th International Conference on Diamond and Carbon Materials, 7-11 September 2014, Madrid (Spain)

64. "A novel optical super-resolution technique exploiting second-order autocorrelation function", D. Gatto Monticone, K. Katamadze, J. Forneris, E. Moreva, P. Traina, I. Ruo Berchera, I. Degiovanni, P. Olivero, M. Genovese, 25th International Conference on Diamond and Carbon Materials, 7-11 September 2014, Madrid (Spain)

65. “Sub-diffraction imaging of colour-centres in diamond”, I. P. Degiovanni, J. Forneris, P. Traina, D. Gatto Monticone, A. Tengattini, K. Katamadze, I. Ruo Berchera, G. Brida, E. Moreva, M. Genovese, P. Olivero, “NOMADS - Novel Materials and Devices for NEMS” Workshop, 26 February 2015, Torino (Italy)

66. “Electrical stimulation of colour centres in diamond with ion-beam-micromachined sub-superficial graphitic electrodes”, J. Forneris, P. Traina, D. Gatto Monticone, A. Tengattini, V. Grilj, G. Brida, G. Amato, L. Boarino, E. Enrico, I. P. Degiovanni, E. Moreva, N. Skukan, M. Jakšić, C. Verona, G. Verona-Rinati, M. Genovese, P. Olivero, “SBDD XX - Hasselt Diamond Workshop 2015”, 25-27 February 2015, Hasselt, Belgium

67. “Production and optical characterization of nitrogen-vacancy single photon emitters in diamond nanocrystals”, A. Tengattini, J. Forneris, C. Enrico Bena, P. Traina, E. Moreva, I. Degiovanni, M. Genovese, P. Olivero, “Fotonica 2015 – Italian congress of photonic technologies”, 6-8 May 2015, Torino, Italy, invited

68. “Fabrication of single-photon electroluminescent devices in single crystal diamond by means of MeV ion microbeams”, A. Tengattini, J. Forneris, P. Traina, V. Grilj, G. Brida, G. Amato, L. Boarino, E. Enrico, I. P. Degiovanni, E. Moreva, N. Skukan, M. Jakšić, C. Verona, G. Verona-Rinati, M. Genovese, P. Olivero, “Fotonica 2015 – Italian congress of photonic technologies”, 6-8 May 2015, Torino, Italy

69. “Quantum enhanced optical imaging: sensitivity beyond classical limits exploiting quantum correlated states”, G. Brida, I. P. Degiovanni, J. Forneris, D. Gatto Monticone, M. Genovese, K. Katamadze, E. Lopaeva, A. Meda, E. Moreva, S. Olivares, P. Olivero, I. Ruo-Berchera, P. Traina, “Fotonica 2015 – Italian congress of photonic technologies”, 6-8 May 2015, Torino, Italy

70. “Simultaneous detection of quantal exocytic events from neuroendocrine cells directly grown on a diamond-based multi electrode biosensor”, F. Picollo, A. Battiato, E. Bernardi, E. Carbone, S. Gosso, P. Olivero, A. Pasquarelli, V. Carabelli, “4th International Conference on Bio-Sensing Technology”, 10-13 May 2015, Lisbon (Portugal)

71. “Nanoindentation measurements for the investigation of Young’s modulus variation in ion-implanted diamond”, A. Battiato, E. Bernardi, E. P. Ambrosio, F. Bosia, M. Lorusso, P. Olivero, D. Ugues, F. Picollo, “NDNC2015 – 9th International Conference on New Diamond and Nano Carbons”, 24-28 May 2015, Shizuoka, Japan

72. “Diamond-based multi electrode biosensor for simultaneous detection of quantal exocytic events from neuroendocrine cells”, E. Bernardi, F. Picollo, A. Battiato, E. Carbone, S. Gosso, P. Olivero, A. Pasquarelli, V. Carabelli, “NDNC2015 – 9th International Conference on New Diamond and Nano Carbons”, 24-28 May 2015, Shizuoka, Japan

73. “Stimulation of the electroluminscence of colour centres in diamond with sub-superficial graphitic micro-electrodes”, J. Forneris, P. Traina, D. Gatto Monticone, A. Tengattini, V. Grilj, G. Brida, G. Amato, L. Boarino, E. Enrico, I. P. Degiovanni, E. Moreva, N. Skukan, M. Jakšić, C. Verona, G. Verona-Rinati, M. Genovese, P. Olivero, “NDNC2015 – 9th International Conference on New Diamond and Nano Carbons”, 24-28 May 2015, Shizuoka, Japan

74. “Use of nonclassical photon statistics for the sub-diffraction imaging of color centers in diamond”, P. Olivero, D. Gatto Monticone, K. Katamadze, J. Forneris, E. Moreva, P. Traina, I. Ruo Berchera, I. Degiovanni, G. Brida, M. Genovese, “NDNC2015 – 9th International Conference on New Diamond and Nano Carbons”, 24-28 May 2015, Shizuoka, Japan

75. “Determination and tuning of Young's modulus modification in ion ion-implanted diamond”, A. Battiato, E. Bernardi, E. P. Ambrosio, F. Bosia, M. Lorusso, P. Olivero, D. Ugues, F. Picollo, Annual Conference on Carbon (“Carbon 2015”), 12-17 luglio 2015, Dresden, Germany

76. “Diamond based-electrochemical sensor: a multi electrode array for simultaneous detection of quantal exocytic events from neuroendocrine cells”, F. Picollo, A. Battiato, E. Bernardi, E. Carbone, S. Gosso, P. Olivero, A. Pasquarelli, V. Carabelli, “4th International Symposium on Sensor Science” (I3S 2015), 13-15 luglio 2015, Basel, Switzerland

77. “Beating the diffraction limit with single-photon emitters”, I. P. Degiovanni, D. Gatto Monticone, P. Traina, I. Ruo Berchera, E. Moreva, K. Katamadze, J. Forneris, G. Brida, P. Olivero, M. Genovese, “Single Photon Workshop 2015”, 13-17 July 2015, Geneva, Switzerland

78. “Electrical excitation and charge state control of deep colour centres in diamond by means of sub-superficial graphitic micro-electrodes”, J. Forneris, P. Traina, S. Ditalia Tchernij, A. Tengattini, F. Picollo, V. Grilj, G. Brida, G. Amato, L. Boarino, E. Enrico, I. P. Degiovanni, E. Moreva, N. Skukan, M. Jakšić, C. Verona, G. Verona-Rinati, M. Genovese, P. Olivero, 26th International Conference on Diamond and Carbon Materials, 6-10 September 2015, Bad Homburg (Germany)

79. “Towards the Zeeman effect”, M. B. Vallero, D. Marocchi, P. Olivero, 101th National Congress of the Italian Physical Society, 21-25 September 2015, Roma (Italy)

80. “Diamond based-electrochemical sensor for simultaneous detection of quantal exocytic events from neuroendocrine cells”, F. Picollo, A. Battiato, E. Bernardi, E. Carbone, S. Gosso, P. Olivero, A. Pasquarelli, V. Carabelli, 2nd Italian National Conference on Condensed Matter Physics (FisMat2015), 28 September – 2 October 2015, Palermo (Italy)

81. “Towards innovative bioimaging techniques exploiting NV centers in nanodiamonds”, P. Traina, E. Moreva, J. Forneris, A. Tengattini, I. P. Degiovanni, F. Picollo, A. Battiato, E. Bernardi, C. Enrico Bena, L. Boarino, N. De Leo, G. Amato, E. Enrico, V. Carabelli, L. Guarina, E. Carbone, P. Olivero, M. Genovese, 2nd Italian National Conference on Condensed Matter Physics (FisMat2015), 28 September – 2 October 2015, Palermo (Italy)

82. “Teaching experiments on magnetism”, M. B. Vallero, D. Marocchi, P. Olivero, 7th National Congress on Physics and Mathematics Teaching, 7-9 October 2015, Torino (Italy)

83. “Diamond multielectrode arrays for real-time detection of oxidizable neurotransmitter release and cell excitability”, V. Carabelli, A. Marcantoni, F. Picollo, A. Battiato, E. Bernardi, A. Pasquarelli, P. Olivero, E. Carbone, 16th International Conference “Monitoring Molecules in Neuroscience”, 29 May – 2 June 2016, Gothenburg (Sweden), invited

84. “Beating the diffraction limit with single-photon emitters”, P. Traina, J. Forneris, I. Ruo Berchera, E. Moreva, D. Gatto Monticone, K. Katamadze, G. Brida, P. Olivero, I. P. Degiovanni, M. Genovese, Conference on Lasers and Electro-Optics (CLEO 2016), 5-10 June 2016, San Jose (California)

85. “Bulk diamond optical waveguides fabricated by focused femtosecond laser pulses”, J. P. Hadden, B. Sotillo, V. Bharadwaj, F. Bosia, F. Picollo, M. Sakakura, A. Chiappini, T. T. Fernandez, R. Osellame, K. Miura, M. Ferrari, R. Ramponi, P. Olivero, P. E. Barclay, S. M. Eaton, SPIE Photonics West, 28 January – 2 February 2017, San Francisco (California), invited

86. “Fabrication and characterization of graphite-diamond-graphite junctions for the electrical control of diamond color centers”, J. Forneris, S. Ditalia Tchernij, V. Sicari, P. Olivero, B. Naydenov, F. Jelezko, V. Grilj, N. Skukan, M. Jakšić, G. Amato, L. Boarino, I. P. Degiovanni, E. Enrico,

E. Moreva, P. Traina, M. Genovese, Hasselt Diamond Workshop, 8-10 March 2017, Hasselt (Belgium)

87. "Electrical control of NV centers in diamond with graphitic electrodes fabricated by MeV ion implantation", S. Ditalia Tchernij, J. Forneris, V. Sicari, P. Olivero, B. Naydenov, F. Jelezko, V. Grilj, N. Skukan, M. Jakšić, G. Amato, L. Boarino, I. P. Degiovanni, E. Enrico, E. Moreva, P. Traina, M. Genovese, "From Foundations of Quantum Mechanics to quantum information and quantum metrology & sensing" Workshop ("Quantum 2017"), 7-13 May 2017, Torino (Italy)

88. "Super-resolution from single photon emission: toward biological application", P. Traina, E. Moreva, J. Forneris, I. Ruo-Berchera, F. Picollo, S. Ditalia, P. Olivero, V. Carabelli, I. P. Degiovanni, G. Brida, M. Genovese, 24th Central European Workshop on Quantum Optics, 26-30 June 2017, DTU Lyngby (Denmark), invited

89. "Fabrication by ion implantation and optical characterization of single-photon emitters in nanodiamonds", J. Forneris, E. Moreva, A. Tengattini, P. Traina, F. Picollo, S. Ditalia Tchernij, A. Battiato, G. Brida, I. Degiovanni, M. Genovese, P. Olivero, 19th International Conference on Radiation Effects in Insulators (REI-19), 2-7 July 2017, Versailles (France)

90. "Super-resolution from single photon emission: toward biological application", E. Moreva, P. Traina, J. Forneris, S. Ditalia Tchernij, L. Guarina, C. Franchino, F. Picollo, I. Ruo Berchera, G. Brida, I. P. Degiovanni, V. Carabelli, P. Olivero, M. Genovese, SPIE - Quantum Photonic Devices, 6 – 10 August 2017, San Diego (USA), invited

91. "Multi-modal detection of mouse dopaminergic neurons activity by diamond-based multi electrode arrays", V. Carabelli, G. Tomagra, F. Picollo, A. Battiato, A. Pasquarelli, P. Olivero, E. Carbone, A. Marcantoni, XIX Europe's Analytical Chemistry Meeting (Euroanalysis 2017), 28 August – 1 September 2017, Stockholm (Sweden)

92. "Diamond-based detector for a multi-sensing approach in neuronal cells investigation", F. Picollo, A. Battiato, E. Carbone, A. Marcantoni, A. Pasquarelli, G. Tomagra, V. Carabelli, P. Olivero, 28th International Conference on Diamond and Carbon Materials, 3-7 September 2017, Gothenburg (Sweden)

93. "Diamond-based multi-electrode arrays for monitoring dopaminergic neurons activity", G. Tomagra, A. Battiato, E. Bernardi, E. Carbone, P. Olivero, A. Pasquarelli, V. Carabelli, F. Picollo, 4th National Congress on Sensors, 21-23 February 2018, Catania (Italy), best presentation award

94. “Formation of novel optical centers in diamond upon ion implantation and annealing”, S. Ditalia Tchernij, F. Picollo, P. Traina, E. Moreva, I. P. Degiovanni, T. Herzig, J. Küpper, S. Pezzagna, G. Prestopino, M. Marinelli, E. Milani, C. Verona, G. Verona-Rinati, N. Skukan, M. Jakšić, M. Genovese, J. Meijer, P. Olivero, J. Forneris, “SBDD XXIII – Hasselt Diamond Workshop 2018”, 7-9 March 2018, Hasselt (Belgium)

95. “Diamond-based multi-functional biosensors realized by means of MeV ion beam lithography”, F. Picollo, A. Battiato, V. Bonino, E. Carbone, V. Carabelli, A. Marcantoni, L. Mino, A. Pasquarelli, G. Tomagra, M. Truccato, P. Olivero, 16th International Conference on Nuclear Microprobe Technology and Applications (ICNMTA 2018), 8-13 July 2018, Guilford (UK)

96. “Color centres in diamond from Single Photon Sources to ODMR in cells”, E. Moreva, P. Traina, J. Forneris, S. Ditalia Tchernij, F. Picollo, I. P. Degiovanni, V. Carabelli, P. Olivero, M. Genovese, SPIE Nanoscience + Engineering: Quantum Photonic Devices, 19-23 August 2018, San Diego (California)

97. “Spontaneous firing and secretory activity of dopaminergic neurons measured with diamond-based micro electrode arrays”, G. Tomagra, F. Picollo, A. Marcantoni, A. Battiato, A. Pasquarelli, E. Carbone, P. Olivero, V. Carabelli, XXIV National Congress of the Italian Society of Pure and Applied Biophysics (SIBPA), 10-13 September 2018, Ancona (Italy)

98. “Color centers in diamond: from single-photons to nanoscale sensing”, P. Traina, E. Moreva, J. Forneris, S. Ditalia Tchernij, F. Picollo, I. Degiovanni, V. Carabelli, P. Olivero, M. Genovese, Nanophotonics and Micro/Nano Optics International Conference, 1-3 ottobre 2018, Rome (Italy)

99. “New single photon emitters in diamond based on group IV impurities”, S. Ditalia Tchernij, P. Olivero et al., European Quantum Technology Conference (EQTC19), 18-22 February 2019, Grenoble (France)

100. “Novel single-photon-emitting defects in diamond”, S. Ditalia Tchernij et al., “From Foundations of Quantum Mechanics to Quantum Information and Quantum Metrology & Sensing” Conference (Quantum 2019), 27-31 May 2019, Torino (Italy)

101. “Recent Results from Polycrystalline CVD Diamond Detectors”, L. Bäni et al. (RD42 collaboration), 2019 Meeting of the Division of Particles and Fields of the American Physical Society (DPF2019), 29 July - 2 August 2019, Northeastern University, Boston (USA)

102. “Diamond-based sensor for radiobiology: real-time detection of dopamine release from single cells triggered by synchrotron X-ray nano-beam irradiation”, F. Picollo, G. Tomagra, V. Bonino, V. Carabelli, L. Mino, P. Olivero, A. Pasquarelli, E. Vittone, M. Truccato, 30th International Conference on Diamond and Carbon Materials, 8-12 September 2019, Seville (Spain)

103. “Electrical control of Nitrogen – Vacancy centers in diamond”, S. Ditalia Tchernij, J. Forneris, N. Skukan, M. Jakšić, G. Amato, L. Boarino, I. P. Degiovanni, E. Enrico, E. Moreva, P. Traina, M. Genovese, P. Olivero, Single Photon Workshop 2019, 21-25 October 2019, Milan (Italy)

104. “Magnetic sensing with Nitrogen-vacancy center based on lock-in detection”, E. Moreva, E. Bernardi, P. Traina, G. Petrini, S. Ditalia Tchernij, J. Forneris, F. Picollo, V. Pugliese, A. Sosso, Ž. Pastuović, I. P. Degiovanni, P. Olivero, M. Genovese, Conference on Precision Electromagnetic Measurements (CPEM 2020), 24-26 August 2020, virtual meeting

105. “Ion-beam-based micro-fabrication of graphite-patterned diamond sensors for in vitro detection of excitable cells activity”, P. Aprà, G. Tomagra, A. Battiato, C. Collà Ruvolo, A. Pasquarelli, A. Marcantoni, E. Carbone, V. Carabelli, P. Olivero, F. Picollo, 17th International Conference on Nuclear Microprobe Technology and Applications (ICNMTA 2020), 14-15 September 2020, virtual meeting

106. “High sensitivity Nitrogen-Vacancy-assisted magnetic/electric field sensing at INRIM”, E. Moreva, E. Bernardi, V. Pugliese, P. Traina, A. Sosso, S. Ditalia Tchernij, J. Forneris, F. Picollo, G. Petrini, Ž. Pastuović, I. P. Degiovanni, P. Olivero, M. Genovese, IMEKO TC-4 International Symposium, 14-16 September 2020, virtual meeting

107. “Fluorescent nanodiamonds for optically trackable drug delivery”, P. Aprà, M. Sacco, G. Tomagra, V. Carabelli, V. Boscaro, M. Gallicchio, A. Barge, P. Olivero, E. Vittone, F. Picollo, 106th national congress of the Italian Physics Society, 14-18 September 2020, virtual meeting

- **Co-authorship in conference contributions – Posters (Index)**

1. “Ionoluminescence in CVD diamond and in cubic boron nitride”, C. Manfredotti, E. Vittone, A. Lo Giudice, C. Paolini, P. Olivero, F. Fizzotti, V. Ralchenko, S. V. Nistor, G. Dinca, “INFMeeting2002 - Annual Meeting of the National Institute of Matter Physics”, 24-28 June 2002, Bari, Italy

2. “Cathodoluminescence in natural and CVD diamond”, C. Manfredotti, E. Vittone, A. Lo Giudice, C. Paolini, P. Olivero, F. Fizzotti, N. Bo, “INFMeeting2002 - Annual Meeting of the National Institute of Matter Physics”, 24-28 June 2002, Bari, Italy

3. “Radio induced photoconductivity in CVD diamond”, C. Manfredotti, F. Fizzotti, A. Lo Giudice, C. Paolini, P. Olivero, E. Vittone, “Diamond2002 - 13th European Conference on Diamond, Diamond-like materials, Carbon Nanotubes, Nitrides and Silicon Carbide”, 8-13 September 2002, Granada, Spain

4. “Investigation of 4H SiC Schottky diodes by ion and x-ray micro beam induced charge collection techniques”, C. Manfredotti, F. Fizzotti, A. Lo Giudice, C. Paolini, P. Olivero, E. Vittone, “Diamond2002 - 13th European Conference on Diamond, Diamond-like materials, Carbon Nanotubes, Nitrides and Silicon Carbide”, 8-13 September 2002, Granada, Spain

5. “Study of 4H SiC Schottky diodes as nuclear detectors”, F. Fizzotti, F. Fasolo, A. Lo Giudice, C. Manfredotti, P. Olivero, C. Paolini, E. Vittone, G. Bertuccio, A. Cavallini, F. Nava, C. Lanzieri, M. Jaksic, R. Barrett, “III National Meeting on Silicon Carbide”, 28-29 March 2003, Chivasso, Italy

6. “Photocurrent study of X-ray priming in CVD diamond”, E. Vittone, A. Lo Giudice, C. Paolini, P. Olivero, C. Manfredotti, “INFMeeting2003 - Annual Meeting of the National Institute of Matter Physics”, 23-25 June 2003, Genova, Italy

7. “Diamond microdosimeters and microdetectors”, E. Vittone, A. Lo Giudice, C.Paolini, P. Olivero, C. Manfredotti, “INFMeeting2003 - Annual Meeting of the National Institute of Matter Physics”, 23-25 June 2003, Genova, Italy

8. “Study of surface conductivity of hydrogen terminated diamond surface”, E. Vittone, A. Lo Giudice, C. Paolini, P. Olivero, C. Manfredotti, E. Ravizza, “INFMeeting2003 - Annual Meeting of the National Institute of Matter Physics”, 23-25 June 2003, Genova, Italy
9. “Investigation of 4H SiC Schottky diodes by ion and x-ray micro beam induced charge collection techniques”, E. Vittone, A. Lo Giudice, C. Paolini, P. Olivero, C. Manfredotti, “INFMeeting2003 - Annual Meeting of the National Institute of Matter Physics”, 23-25 June 2003, Genova, Italy

10. “Three-dimensional device fabrication in monocrystalline diamond using FIB and a novel lift-off technique”, P. Olivero, S. Rubanov, P. Reichart, S. T. Huntington, B. C. Gibson, J. Salzman, S. Prawer, D. N. Jamieson,

"Microscopy and Microanalysis 2005", 31 July - 4 August 2005, Honolulu, Hawaii

11. "Investigation of the physics of diamond MEMS: diamond allotrope lithography", I. Zalziniak, P. Olivero, D. N. Jamieson, S. Prawer, P. Reichart, S. Rubanov, S. Petriconi, "NCTA2005 - 14th AINSE Conference on Nuclear and Complementary Techniques of Analysis", 20-22 November 2005, Wellington, New Zealand

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94. “EELS study of pure amorphous diamond”, S. Rubanov, P. Olivero, A. Battiato, A. Suvorova, F. Picollo, 6th International Symposium on Advanced Microscopy and Theoretical Calculations (AMTC6), 14-15 June 2019, Nagoya (Japan)

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96. “EELS study of tetrahedral amorphous carbon fabricated using ion implantation and annealing”, S. Rubanov, P. Olivero, A. Battiato, F. Picollo, A. Suvorova, 30th International Conference on Diamond and Carbon Materials, 8-12 September 2019, Seville (Spain)

97. “Somatodendritic release of dopamine and role of L- and R-type Ca^{2+} channels in regulating the spontaneous firing of midbrain dopaminergic neurons”, V. Carabelli, G. Tomagra, M. Bonardi, F. Picollo, B. Picconi, A. Pasquarelli, P. Olivero, P. Calabresi, E. Carbone, A. Marcantoni, 16th ANA - 25th APHAR Meeting, 25-27 September 2019, Innsbruck (Germania)

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100. “Fabrication of diamond-based quantum emitters upon ion implantation”, J. Forneris, S. Ditalia Tchernij, P. Traina, E. Moreva, I. P. Degiovanni, T. Luhmann, T. Herzig, S. Pezzagna, J. Meijer, M. Jakšić, M. Genovese, P. Olivero, Single Photon Workshop 2019, 21-25 October 2019, Milan (Italy)

101. “A European effort for the development of single-photon sources as new quantum standards – the SIQUST-project”, S. Kück, H. Georgieva, M. López, B. Rodiek, F. Manoocheri, G. Porrovecchio, M. Smid, G. Brida, P. Traina, T. Kübarsepp, C. E. Giusca, P. Dolan, L. Hao, C. J. Chunnilall, T. Dönsberg, P. Lombardi, C. Toninelli, B. Alén, S. Götzinger, J. Forneris, S. Rodt, S. Reitzenstein, P. Fuchs, C. Becher, P. Olivero, M. Jetter,

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103. "A simple method to enhance sensitivity of NV based temperature sensors", E. Bernardi, E. Moreva, P. Traina, A. Sosso, V. Pugliese, S. Ditalia Tchernij, J. Forneris, F. Picollo, G. Brida, Ž. Pastuović, I. P. Degiovanni, P. Olivero, M. Genovese, Basel Quantum Metrology and Sensing Conference, 12-14 February 2020, Basel (Switzerland)

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- **Links (Index)**

[1] http://www.culturalconservation.unimelb.edu.au/courses/mcoursework.html
[2] http://www.lnl.infn.it/
[3] http://www.irb.hr/
[4] http://www.esrf.fr/
[5] http://rd42.web.cern.ch/RD42/
[6] http://rd50.web.cern.ch/rd50/
[7] http://csn5.roma2.infn.it/mweb/
[8] http://www.nato.int/science/
[9] http://www.qcaustralia.org/home.htm
[10] http://www.ph.unimelb.edu.au/~dnj/
[11] http://www.ph.unimelb.edu.au/~sdp/cv/contact.htm
[12] http://www.qucor.com.au/
[13] http://www.uq.edu.au/uqresearchers/unit/cqct.html
[14] http://www-g.eng.cam.ac.uk/edm/index.html
[15] http://www-ee.technion.ac.il/
[16] http://www.tangiblefuture.com/
[17] http://www.viaspace.com/default_ionfinity.asp
[18] http://www.materials.ox.ac.uk/
[19] http://www.hpl.hp.com/palo_alto/

[20] http://www.arc.gov.au/grant_programs/default.htm, project code: “discoveryproject DP0663724”
[21] http://www.equind.org/
[22] http://www.aip.org.au/
[23] http://www.ausnano.net/
[24] http://arnam.anu.edu.au/index.php?page=profiles&profile=289
[25] http://www.arc.gov.au/grant_programs/default.htm, project code: “discoveryproject DP0344998”
[26] http://www.dest.gov.au/, project code: “CG090191”
[27] http://www.ansto.gov.au/ainse/, project code “AINGRA05127P”
[28] http://www.arc.gov.au/grant_programs/default.htm, project code: “linkage international grant LX0667284”
[29] http://www.elsevier.com/wps/find/journaldescription.cws_home/522587/description#description
[30] http://www.iop.org/EJ/journal/Nano
[31] http://www.lincei.it/
[32] http://www.infn.it/indexen.php
[33] http://www.infm.it/
[34] http://110.infm.it/cnism/
[35] http://www.nis.unito.it/
[36] http://www.abc.net.au/science/articles/2008/03/27/2200425.htm
[37] http://www.research.unimelb.edu.au/ventures/
[38] http://labec.fi.infn.it/
[39] http://www.inrim.it/
[40] http://www.elsevier.com/wps/find/journaldescription.cws_home/505674/description#description
[41] http://www.compagnia.torino.it/contenuto.php?sezioneID=14&ID=1153
[42] http://www.elsevier.com/wps/find/journaldescription.cws_home/621284/description#description
[43] http://www.ino.it/
[44] http://cercauniversita.cineca.it/php5/prin/cerca.php?codice=2008WAT4CE
[45] http://jap.aip.org/
[46] http://www.nanofacility.it/index.php?evt[projectInterface-viewList]&id=22
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[64] http://www.journals.elsevier.com/journal-of-alloys-and-compounds/
[65] http://pubs.rsc.org/en/journals/journalissues/nr#!recentarticles&all
[66] http://www.journals.elsevier.com/optics-communications/
[67] http://www.opticsinfobase.org/ome/home.cfm
[68] http://www.scopus.com/authid/detail.url?authorId=55879970400
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[70] http://www.inderscience.com/jhome.php?jcode=ijnt
[71] http://www.opticsinfobase.org/josab/home.cfm
[72] http://pubs.rsc.org/en/journals/journalissues/cp
[73] http://www.journals.elsevier.com/carbon/
[74] http://www.journals.elsevier.com/surface-and-coatings-technology/
[75] http://www.journals.elsevier.com/arabian-journal-of-chemistry/
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[81] https://www.osapublishing.org/oe/home.cfm
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[83] http://unitonews.it/index.php/it/news_detail/ricercatori-del-dipartimento-di-fisica-delluniversita-di-torino-scoprono-una-nuova-tipologia-di-emettitori-di-singolo-fotone#
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