

GIUSEPPE DELLA VALLE

CURRICULUM VITAE ET STUDIORUM

CONTACT INFORMATION

IDENTITY RECORD:	ADDRESS:	CONTACTS:
FIRST NAME: Giuseppe LAST NAME: Della Valle CITIZENSHIP: Italian BORN: April 27, 1974	Dipartimento di Fisica Politecnico di Milano Piazza L. da Vinci, 32 20133 – MILANO ITALY	e-mail: giuseppe.dellavalle@polimi.it phone: (+39) 02 2399 6021 fax: (+39) 02 2399 6126

CAREER DEVELOPMENT

- Aug 2014 - : Associate Professor of Physics at the Politecnico di Milano
- Aug 2008 - Jul 2014: Assistant Professor of Physics at the Politecnico di Milano
- Oct 2007 - Jul 2008: Visiting Scientist at the Department of Physics and Nanotechnology of Aalborg University (Denmark) within the Plasmonics Group of Prof. S. I. Bozhevolnyi
- Jan 2005 - Oct 2007: Research Assistant of Physics at the Politecnico di Milano

EDUCATION

- May 2006: PhD degree in *Physics* from the Politecnico di Milano
PhD Thesis: "*Photonic devices at 1.5 micron manufactured by ion exchange and femtosecond laser writing*", PhD Advisor: Prof. Paolo Laporta
- Apr 2003 - May 2006: PhD School of Physics at the Dipartimento di Fisica - Politecnico di Milano
- 2001: MSc ("Laurea") degree in *Electronics Engineering* from Politecnico di Milano
MSc Thesis: "*Waveguide lasers at 1.5 μm based on doped glasses for telecom applications*" (*Sorgenti laser in guida d'onda su vetro drogato a 1.5 μm per applicazioni alle comunicazioni ottiche*), MSc Supervisor: Prof. Paolo Laporta
- 1993: High-school degree ("*Diploma di Maturità Scientifica*"), from the Liceo Scientifico A. Calini in Brescia (experimental class of Physics, Chemistry Biology, Mathematics and Computer Science)

TEACHING EXPERIENCE

- Lecturer in General Physics ("Fisica Sperimentale A+B", "Fisica Sperimentale A+C", "Fisica") at the Politecnico di Milano (one-semester course for 1st-year BSc program in Electrical Engineering and Computer Science - "Ingegneria Informatica"): since the a.y. 2005-2006.
- Lecturer in "Micro- and Nano-optics" at the Politecnico di Milano (half-semester course for 2nd-year MSc program in Engineering Physics): since the a.y. 2013-2014.
- Lecturer in "Plasmonics" for the PhD School of Physics at the Politecnico di Milano: aa.yy. 2010-2011, 2012-2013, 2014-2015, 2016-2017, 2018-2019.
- Since 2003, he has been given seminars and exercise lectures for several courses at the Politecnico di Milano: Fisica Sperimentale I, Fisica Sperimentale A+C, Principi e Applicazioni dei Laser, Complementi di Ottica e Laser, Micro- e Nano-Ottica.
- Since 2003, he has been given laboratory lectures for several courses at the Politecnico di Milano: Fisica Sperimentale I, Fisica Sperimentale II, Fisica Sperimentale A+B, Tecnologie Ottiche.
- Since 2005, he has been supervisor (relatore) of 7 BSc Thesis, 10 MSc Thesis, 2 PhD Thesis, at the Politecnico di Milano.

RESEARCH EXPERIENCE, METRICS AND HIGHLIGHTS

The research activity of Giuseppe Della Valle (GDV) is devoted to both theoretical and experimental research in photonics, with particular interest to optical structures at the micro- and nano-scale for the generation and coherent control of light, and to coherently-driven mesoscopic quantum systems in low dimensions. More precisely, the research activity of GDV has been focused on the following topics:

- Active photonic devices (optical amplifiers and lasers).
- Quantum simulations in photonic structures.
- Linear and non-linear optics in periodic media, plasmonic structures and metasurfaces.

Since 2003, GDV has co-authored more than 200 research publications, including **107 articles** published in international peer-referred journals indexed by ISI Web of Science and by SCOPUS (among which 1 *Nature Communications*, 4 *Physical Review Letters*, 2 *Nano Letters*, 1 *PNAS*, 1 *Laser and Photonics Reviews*) and **3 invited contributions in books** with international editors (among which 2 Springer Book Editions);

He has co-authored more than **20 invited communications** in international conferences and workshops and **more than 60 communications** in international conferences.

The **h-index** of G. Della Valle is **34** according to SCOPUS (39 according to Google Scholar).
Total number of citations: 3430 (SCOPUS); 5470 (Google Scholar).

GDV was the recipient of the *QEOD Thesis Prize* of the European Physical Society for applied aspects in 2007.

GDV serves as a referee for several international peer-referred journals including *Nature Photonics and Physical Review Letters*.

RESEARCH PROJECTS

- January 2018 - : Local Principal investigator for the Politecnico di Milano within the Massachusetts Institute of Technology (MIT) Seed Funds (Rocca) research project: "Disorder-Aware Engineering of Metasurfaces for Advanced Photonics".
- February 2017 - : Co-investigator for the Politecnico di Milano within the MIUR PRIN research project "Hot-electrons in self-organised plasmonic metasurfaces coupled to semiconducting MoS2 nanosheets: Photon harvesting in 2D materials" (contract number 2015WTW7J3).
- January 2012 - July 2015: Principal investigator within the Fondazione Cariplo research project: "New Frontiers in Plasmonic Nanosensing" (contract number 2011-0338).
- 2009 - March 2012: Co-investigator for the Politecnico di Milano within the MIUR PRIN research project: "Quantum-Optical Analogies in Photonic Waveguide Structures" (contract number PRIN-2008-YCAAK).
- September 2006 - August 2009: Co-investigator for the Politecnico di Milano within the European project: "HYBISCUS - Hybrid integrated biophotonic sensors created by ultrafast laser systems" (contract number IST-2005-034562).
- March 2006 - February 2008: Co-investigator for the Politecnico di Milano within the European Network of Excellence: "e-Photon/ONE+ - Optical Networks: Towards Bandwidth Manageability and Cost Efficiency" (contract number FP6-027497).
- 2005-2007: Co-investigator for the Politecnico di Milano within the MIUR PRIN research project: "Near-infrared single-frequency fiber lasers for applications to advanced sensing" (contract number PRIN-2005-099872).
- 2003-2006: Co-investigator for the Politecnico di Milano within the MIUR FIRB research project: "Miniaturized systems for electronics and photonics".
- January 2003 - February 2005: Co-investigator for the Politecnico di Milano within the European project: "DACO - Development and Application of Compact Mode-Locked Lasers" (contract number G1ST-CT-2002-50266).
- 2002-2005: Co-investigator for the for Politecnico di Milano within the CNR MADESS II research project "Lasers and integrated optoelectronic devices in glasses".

Milano, 17th January, 2020