

PERSONAL INFORMATION

Gaudenzio Meneghesso



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Sex: Male | Nationality Italian

Enterprise	University	EPR
<input type="checkbox"/> Management Level	<input checked="" type="checkbox"/> Full professor	<input type="checkbox"/> Research Director and 1st level Technologist / First Researcher and 2nd level Technologist
<input type="checkbox"/> Mid-Management Level	<input type="checkbox"/> Associate Professor	<input type="checkbox"/> Level Researcher and Technologist
<input type="checkbox"/> Employee / worker level	<input type="checkbox"/> Researcher and Technologist of V V V and V level / Technical collaborator	<input type="checkbox"/> Researcher and Technologist of V V V and V level / Technical collaborator

WORK EXPERIENCE

- 2018-today **Department's Director**
University of Padova – Department of Information Engineering (www.de.unpd.it)
Business or sector Information Communication Technologies - ICT
- 2011-today **Full Professor**
University of Padova – Department of Information Engineering (www.de.unpd.it)
Business or sector Microelectronics Engineering
- 2022-2011 **Associate Professor**
University of Padova – Department of Information Engineering (www.de.unpd.it)
Business or sector Microelectronics Engineering
- 1998-2002 **Researcher**
University of Padova – Department of Information Engineering (www.de.unpd.it)
Business or sector Microelectronics Engineering

EDUCATION AND TRAINING

- 1994-1997 **Ph.D. Electrical and Telecommunication Engineering EQF8**
University of Padova – Department of Information Engineering (www.de.unpd.it)
• Characterization of devices on compound semiconductors (GaAs, InP)
• Hot-electron characterization, effects and reliability of GaAs-based and InP-based HEMT's and pseudomorphic HEMT's
- 1992-1994 **Research assistance for international project EQF7**
University of Padova – Department of Information Engineering (www.de.unpd.it)
• Characterization of devices on compound semiconductors (GaAs, InP)
• Hot-electron characterization, effects and reliability of GaAs-based and InP-based HEMT's
- 1986-1992 **Laurea Degree in Electronic Engineering**
University of Padova – Department of Information Engineering (www.de.unpd.it)
• Characterization of devices on compound semiconductors (GaAs, InP)
• Hot-electron characterization, effects and reliability of GaAs-based and InP-based HEMT's

Expertise.

His research interests are:

- Power devices on wide bandgap semiconductors (GaN, SiC)
- Microwave and optoelectronics devices on III-V and III-N;
- RF-MEMS switches for reconfigurable antenna arrays;
- Electrostatic discharge (ESD) protection structures;
- organic semiconductors devices;
- photovoltaic solar cells.

Within these activities, he published **more than 800 technical papers** (of which more than 100 Invited Papers and 14 best paper awards).

Bibliometric indexes (**updated January 2022**):

- **Scopus:** Documents: **692**, Tot. Citations **11671**, h-index: **51**
- **Google Scholar:** Documents: **861**, Tot. Citations **15771**, h-index: **62**

He has been the local coordinator of several research project (H2020, ENIAC, ECSEL, PRIN.) and the Prime responsible of several research contract with industry and research institute. Nowadays he is the **Project Coordinator** of a European project H2020 – InRel-NPower (<http://www.inrel-npower.eu/>) H2020-NMBP-2016-2017, Grant Agreement number 720527.

He is reviewer of several international journals: IEEE Transactions on Electron Devices, IEEE Electron Device Letters, IEE Electronics Letters, Journal of Applied Physics, Applied Physics Letters and Semiconductor Science and Technology (IOP), Microelectronics Reliability (Elsevier).

He served several years for the IEEE-International Electron Device Meeting (IEDM): he was in the Quantum Electronics and Compound Semiconductors sub-committee as a member in 2003, and 2017 as chair in 2004 and 2005 while in 2006 and 2007 he has been in the Executive Committee as European Arrangements Chair. He is also serving the IEEE International Electron Device Meeting (IEDM) since 2017 as TPC committee member.

He is serving since 2005 in the TPC of the IEEE International Reliability Physics (IRPS) Symposium (being TPC Chair of the Compound Semiconductor from 2008 to 2010) and since 2009 he is with the management committee. He has been be the **Technical Program Committee Chair of IEEE IRPS 2018, the vice General Chair of IEEE IRPS 2019, and the General Chair of IEEE IRPS 2020**. He has been the General Chairs of several other conferences and Workshops.

He has been **Associate Editor of IEEE Electron Device Letters and of the IEEE Transaction on Electron Devices** for the compound semiconductor devices area.

He has been nominated to **IEEE Fellow class 2013**, with the following citation: “for contributions to the reliability physics of compound semiconductors devices”.

PERSONAL SKILLS

Mother tongue(s)	Ita an
Other Language (s)	Eng sh
Job-related skills	See above
Digital skills	Very good digital skills (LinkedIn, Facebook, operational systems,)

ADDITIONAL INFORMATION

Publications **Top 5 most cited Publications related to the National Center (updated January 2022)**

1. H. Amano, Y. Banerjee, E. Beam, G. Meneghesso,, Y. Zhang, “The 2018 GaN power electronics roadmap”, TOPICAL REVIEW, J. Phys. D: Appl. Phys. 51 (2018) 163001: **“Reliability of GaN power devices: normally-on and normally-off”**, pp.18-20, ISSN: 00223727, doi: **10.1088/1361-6463/aaaf9d Cited 489 times.**
2. Meneghesso, G., Verzees, G., Danesin, F., Rampazzo, F., Zanon, F., Tazzo, A., Meneghin, M., Zanon, E., **Reliability of GaN high-electron-mobility transistors: State of the art and perspectives**, (2008) IEEE Transactions on Device and Materials Reliability, 8 (2), art. no. 4497830, pp. 332-343. DOI: **10.1109/TDMR.2008.923743 Cited 489 times.**
3. Meneghesso, G., Verzees, G., Perobon, R., Rampazzo, F., Chin, A., Mshra, U.K., Cana, C., Zanon, E., **Surface-related drain current dispersion effects in AlGaIn-GaN HEMTs**, (2004) IEEE Transactions on Electron Devices, 51 (10), pp. 1554-1561. DOI: **10.1109/TED.2004.835025, Cited 266 times.**
4. Bis, D., Meneghin, M., De Sant, C., Chin, A., Dammann, M., Bruckner, P., Mku, M., Meneghesso, G., Zanon, E. **Deep-level characterization in GaN HEMTs-Part I: Advantages and limitations of drain current transient measurements** (2013) IEEE Transactions on Electron Devices, 60 (10), art. no. 6605590, pp. 3166-3175. DOI: **10.1109/TED.2013.2279021, Cited 242 times.**
5. Meneghesso, G., Rampazzo, F., Kordoš, P., Verzees, G., Zanon, E., **Current collapse and high-electric-field reliability of unpassivated GaN/AlGaIn/GaN HEMTs**, (2006) IEEE Transactions on Electron Devices, 53 (12), pp. 2932-2940. DOI: **10.1109/TED.2006.885681, Cited 137 times.**