

Filippo GIANNAZZO - CV

Filippo Giannazzo obtained the PhD in Materials Science from the University of Catania in 2002. He joined CNR-IMM as a Researcher in 2006 and is Research Director from 2020.

His research activities cover the following fields:

- Nanometer resolution electrical characterization methods based on scanning probe microscopy for the study of charge transport in advanced materials for micro- and nano-electronics (semiconductors heterostructures, wide-bandgap semiconductors, nanostructured metal films, functional oxides, organic materials, graphene and 2D materials).
- Development of advanced processes (ion implantation, contacts, dielectrics) for the fabrication of high power and/or high frequency devices based on wide bandgap semiconductors (SiC, GaN,..).
- Investigation of the electronic properties of graphene and other 2D materials and of their heterostructures with semiconductors (SiC, GaN). Development of high-frequency and energy efficient electronic devices bases on the integration of 2D materials with nitride semiconductors.

Dr. Giannazzo is author or co-author of >380 papers in international peer-reviewed journals, 1 book, 12 book chapters and 3 US patent. Bibliometric data: H-index=47, Tot citations: >7500 (Source Scopus).

He is frequently invited speaker in national and international conferences. He has been in the organizing committee of several international conferences, co-chair of two EMRS Fall symposia (2010, 2014) on advanced characterizations, co-organizer of the “International School of Physics and Technology of Matter” (Otranto, 2014).

He holds several national and international collaborations with academic institutions and industries. He has been involved in several National and EU projects. From 2016 to 2023 he coordinated 2 FlagERA projects (GraNitE and ETMOS) on 2D materials integration with GaN and SiC, and is currently coordinating the national PRIN project “2D materials Integration with Nitride semiconductors for advanced Electronics (2DIntegratE)”.