
Education

M.Sc. Degree in Electronic Engineering, cum laude, from the University of Naples, Italy, March 1997 ♦ Ph.D. in Electronics and Information Technology from the University of Naples, Italy, March 2002.

Career

Professor of Reliable Power Electronics at Aalborg University, Denmark, from 2014 to present ♦ Visiting professor at Huazhong University of Science and Technology, Wuhan, China, in 2019 ♦ Visiting Professor at Zhejiang University, China, in 2018 ♦ Visiting Professor at Aalborg University, Denmark, 2013 (three months) ♦ Associate Professor at the University of Cassino and southern Lazio, Italy, 2012 to 2014 ♦ Aggregate Professor at the University of Cassino and southern Lazio, Italy, 2006 to 2012 ♦ Researcher at the University of Cassino and southern Lazio, Italy, 2000 to 2006

Research topics

Reliability and non-destructive characterization of power devices in normal and extreme operating conditions (*overload, short circuit, over temperature*) ♦ Lumped-charge simulation models for power electronic devices ♦ Simulation and optimization of new driving topologies for reliability ♦ Condition monitoring ♦ Failure mechanisms of power devices and related modeling ♦ **Reliability of wide-bandgap power devices (SiC MOSFETs, GaN HEMTs), modeling and characterization**

Membership of scientific communities and services

IEEE-IAS Power Electronic Device and Component Committee vice-president ♦ Co-founder of the Italian IEEE Electron Device Society chapter ♦ Associated editor of IEEE Open Journal of Power Electronics, IEEE Transactions on Industry Applications, IEEE Journal of Emerging and Selected Topics in Power Electronics, EPE Journal and Elsevier Microelectronics Reliability ♦ General Chair of ESREF 2018, the 29th European Symposium on Reliability of Electron devices, Failure physics and analysis (www.esref2018conf.org) ♦ **Appointed General Chair of EPE-ECCE Europe 2023**

Scientific contributions and awards

Total publications: 251 ♦ Journals/conferences/patents/book chapters: 122/120/4/5 ♦ Total citations (Publons/Scopus/Google Scholar): 1318/1985/2587 ♦ h-index (Publons/Scopus/Google Scholar): 17/21/24 ♦ Invited as tutorial lecturer on reliability to first conferences, i.e. ECCE USA 2019, APEC 2016, 2017, 2018 and 2019, PCIM 2016, 2017, 2018 and 2019, ISPSD 2017, EPE 2015, 2018, 2019 and 2020, IRPS 2020, VPPC 2020, ECPE Course on thermal management, 2019 ♦ Recipient of a number of best paper awards at first international conferences. W. Portnoy Award 2017 of the IEEE Industry Application Society ♦ **Edited the IET "Modern Power Electronic Devices: Physics, Applications, and Reliability" book (Dec. 2020)**

Recent applications and running projects

2019 (co-applicant) "ELMAC: Electronic Systems Manufactured for Climate", Danmarks Innovationsfond. Total amount/Aalborg University's part: 32.000.000 DKK / 4.500.000 DKK (running) ♦ 2016 (co-applicant) "DfR² Tools for Reliable and Robust Power Electronics in Energy Systems" (DfR² - APETT), Danmarks Innovationsfond, Aalborg university: 48.500.000 DKK (running) ♦ **2019 (co-applicant) "X-Power - Power Electronics Reliability Test Facilities"**, supported by the Danish Agency for Science and Higher Education, Aalborg University: 62.000.000 DKK (running) ♦ 2017-2019 (main responsible) A number of consultancy projects with European companies, Aalborg University, in total: +2.000.000 DKK (running)

Relevant publications

Y. Duan, **F. Iannuzzo** and F. Blaabjerg, "A New Lumped-Charge Modeling Method for Power Semiconductor Devices," IEEE Transactions on Power Electronics, April 2020 ♦ Y. Chang, H. Luo and **F. Iannuzzo**, A. Garcia-Bediaga, W. Li, X. He, F. Blaabjerg, "Compact Sandwiched Press-Pack SiC Power Module With Low Stray Inductance and Balanced Thermal Stress," IEEE Transactions on Power Electronics, March 2020 ♦ P. D. Reigosa, H. Luo and **F. Iannuzzo**, "Implications of Ageing Through Power Cycling on the Short-Circuit Robustness of 1.2-kV SiC MOSFETs," IEEE Transactions on Power Electronics, Nov. 2019 ♦ L. Ceccarelli, R. M. Kotecha, A. S. Bahman, **F. Iannuzzo** and H. A. Mantooh, "Mission-Profile-Based Lifetime Prediction for a SiC MOSFET Power Module Using a Multi-Step Condition-Mapping Simulation Strategy," IEEE Transactions on Power Electronics, Oct. 2019.