



Giovanni Crupi

CURRICULUM VITAE

05/03/2025

PERSONAL DATA

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| Name Surname | Giovanni Crupi |
| Birth's city | Lamezia Terme (CZ), Italy |
| Birth's day | 15/09/1978 |
| Fiscal code | CRPGNN78P15M208M |
| Position held | Full Professor |
| Affiliation | BIOMORF Department, University of Messina, Messina, Italy |
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| E-mail | crupig@unime.it |
| Skype contact | giocrupi |
| LinkedIn profile | www.linkedin.com/in/GiovanniCrupi |
| University profile | https://unime.unifind.cineca.it/get/person/029881 |

EDUCATION

- 15/12/2006 Ph.D. degree in “Advanced Technologies for Optoelectronics, Photonics and Electromagnetic Modeling”, University of Messina, Italy
Thesis's title: “Characterization and modelling of advanced GaAs, GaN and Si microwave FETs”
Advisors: Prof. A. Caddemi (University of Messina, Italy)
Prof. D. M. M.-P. Schreurs (Katholieke Universiteit Leuven, Belgium)
- 15/04/2003 M.S. degree in “Electronic Engineering” cum Laude (with Honors), University of Messina, Italy
Thesis's title: “Microwave pHEMT characterization and small signal modeling by direct extraction procedures”
Advisors: Prof. A. Caddemi, Prof. N. Donato (University of Messina, Italy)
- 08/1997 High school degree “Diploma di maturità classica” with full grade 60/60 from the “Liceo Classico-Ginnasio Pitagora” of Crotona, Italy

NATIONAL SCIENTIFIC QUALIFICATION (ASN)

- 28/08/2018 Italian national scientific qualification to function as Full Professor (ASN 2016, sector: 09/E3 - “Electronics”)
- 04/02/2014 Italian national scientific qualification to function as Associate Professor (ASN 2012, sector: 09/E3 - “Electronics”)

PROFESSIONAL EXPERIENCE

- 07/01/2025-present Full Professor, BIOMORF Department, University of Messina
- 30/12/2017-06/01/2025 Associate Professor, BIOMORF Department, University of Messina
- 01/01/2015-29/12/2017 Tenure Track Assistant Professor, BIOMORF Department, University of Messina
- 01/06/2013-31/12/2014 Untenured Assistant Professor, DICIEAMA Department, University of Messina
- 02/05/2012-01/05/2013 Research Contract, Dipartimento di Fisica della Materia e Ingegneria Elettronica, University of Messina
Scientific Supervisor: Prof. Alina Caddemi
- 01/09/2011-01/03/2012 Research Contract, Engineering Department, University of Ferrara
Scientific Supervisor: Prof. Giorgio Vannini
- 05/09/2007-04/09/2010 Research Contract under the context of “IMT-ARSEL” FIRB project, Dipartimento di Fisica della Materia e Ingegneria Elettronica, University of Messina
Scientific Supervisor: Prof. Alina Caddemi
- 01/08/2006-15/07/2007 Employment Contract, Katholieke Universiteit Leuven, Belgium
In the framework of the project “Nano-RF” (2002-2006), funded by the European Commission within the Sixth Framework Programme
Research subject: Small- and large-signal modeling of Fin transistors/varactors
Scientific Supervisor: Prof. Dominique Schreurs
- 23/06/2009-02/07/2009 Visiting Scientist, Warsaw University of Technology, Warsaw, Poland
Research subject: Noise modeling of advanced microwave transistors
Scientific Supervisor: Dr. Wiatr Wojciech
- 15/03/2010-14/05/2010 Visiting Scientist, Katholieke Universiteit Leuven and Interuniversity Microelectronics Center (IMEC), Leuven, Belgium
01/11/2008-30/11/2008
01/01/2008-29/02/2008 Research subject: Small- and large-signal modeling of advanced microwave transistors
01/02/2006-31/07/2006 Scientific Supervisor: Prof. Dominique Schreurs
- 01/09/2005-31/12/2005 Visiting Scientist, Katholieke Universiteit Leuven and Interuniversity Microelectronics Center (IMEC), Leuven, Belgium
01/05/2005-30/06/2005 In the framework of the European FP6 Network of Excellence “Top Amplifier Research Groups in a European Team (TARGET)” (2004-2007)
Research subject: Small- and large-signal modeling of GaN HEMTs
Scientific Supervisor: Prof. Dominique Schreurs

TEACHING ACTIVITIES

- 2019/2020-2021/2022, “Electrical and Electronic Devices - Module B”, Ph.D. course in “Bioengineering Applied to Medical Sciences”, University of Messina
2023/2024
- 2015/2016-2024/2025 “Electronics”, School of Specialization in “Nuclear Medicine”, University of Messina
- 2022/2023-2024/2025 “Fundamentals of Electronics”, Bachelor Degree in “Biomedical Engineering”, University of Messina
- 2020/2021-2024/2025 “Principles and Applications of Optoelectronics”, Master Degree in “Electronic Engineering for Industry”, University of Messina
- 2019/2020-2024/2025 “Computer Science”, Bachelor Degree in “Psychiatric Rehabilitation Technique”, University of Messina
- 2022/2023-2024/2025 “Computer Science”, Bachelor Degree in “Medical Radiology, Imaging and Radiotherapy Techniques”, University of Messina
- 2022/2023 “Computer Science”, Master Degree in “Science of Health Professions and Diagnostic

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| | Techniques”, University of Messina |
| 2017/2018-2021/2022 | “Electronic and Computer Bioengineering”, Bachelor Degree in “Orthoptic and Ophthalmological Assistance”, University of Messina |
| 2013/2014-2021/2022 | “Bioengineering”, Bachelor Degree in “Neurophysiopathology Techniques”, University of Messina |
| 2018/2019-2021/2022 | “Electronic and Computer Bioengineering”, Master Degree in “Health Professions of Rehabilitation Sciences”, University of Messina |
| 2021/2022 | “Wireless Technologies”, Master Degree in “Engineering and Computer Science”, University of Messina |
| 2015/2016-2020/2021 | “Laboratory of Wireless Technologies”, Master Degree in “Engineering and Computer Science”, University of Messina |
| 2010/2011, 2014/2015 | “Microwave Electronics”, Master Degree in “Electronic Engineering”, University of Messina |
| 2012/2013 | “Design and Lab”, Master in “Micro and Nanotechnologies for Extra High Frequency - MINTEHF”, University of Messina |
| 2009/2010 | “Optoelectronics”, Master Degree in “Electronic Engineering”, University of Messina |
| 2007/2008 | “Fundamentals of Electronics”, Master in “Meccatronica per le Nuove Attività Produttive - MECAP”, University of Messina |

ACADEMIC ACTIVITIES

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| 02/2024-present | Coordinator of the AQ-RDTM Committee (Quality Assurance for Departmental Research and Third Mission) of the Department BIOMORF, University of Messina |
| 11/2024-present | Vice-coordinator of the Bachelor Degree in “Biomedical Engineering”, University of Messina |
| 03/2022-present | Member of the AQ-RDTM Committee (Quality Assurance for Departmental Research and Third Mission) of the Department BIOMORF, University of Messina |
| 02/2023-12/2024 | Member of the Joint Committee Teachers-Students (Commissione Paritetica Docenti-Studenti) of the Department BIOMORF for the 2022-2024 biennium, University of Messina |
| 12/2018-12/2024 | Member of the Executive Committee (Giunta) of the Department BIOMORF for the two triennia 2018-2021 and 2021-2024, University of Messina |
| 05/2021-present | Member of the Quality Assurance Group for the Bachelor Degree in “Biomedical Engineering,” University of Messina |
| 11/2024-present | International Mobility Coordinator for the Master Degree in “Bioengineering,” University of Messina |
| 11/2021-present | International Mobility Coordinator for the Bachelor Degree in “Biomedical Engineering,” University of Messina |
| 03/2018-11/2021 | International Mobility Coordinator for the International Master Degree in “Engineering and Computer Science,” University of Messina |
| 11/2019-present | Member of the Steering Committee of the Ph.D. course in “Bioengineering Applied to Medical Sciences” for XXXV, XXXVI, XXXVII, XXXVIII, and XXXIX cycles, University of Messina |
| 11/2017-10/2021 | Member of the Steering Committee of the international Ph.D. course in “Cyber Physical Systems” for XXXIII and XXXIV cycles, University of Messina |

- 05/2014-11/2019 Aggregate Member of the Steering Committee of the Ph.D. course in “Civil, Environmental, and Security Engineering” for XXX, XXXI, and XXXII cycles, Mediterranea University of Reggio Calabria, University of Messina, and Kore University of Enna
- 2023/2024 External evaluator for the PhD thesis of Kikuchi Ken, XXXVI cycle candidate of Doctoral Program in “Engineering Science” at the University of Ferrara, Italy
- 2023/2024 External evaluator for the PhD thesis of Simone Spataro, XXXVI cycle candidate of Doctoral Program in “Systems, Energy, Computer and Telecommunication Engineering” at the University of Catania, Italy
- 2023 External evaluator for the PhD thesis of A. Benish Chris, candidate of Doctoral Program at the SRM Institute of Science and Technology (SRMIST), Chennai, India
- 2022 External evaluator for the PhD thesis of Pragyey Kumar Kaushik, candidate of Doctoral Program at the Centre for Applied Research in Electronics (CARE), Indian Institute of Technology Delhi (IITD), India
- 2019/2020 External evaluator and Member of the Examination Committee for the PhD thesis of Xiue Bao, candidate of Doctoral Program in “Engineering” at the Katholieke Universiteit Leuven, Belgium
- 2019/2020 External evaluator and President of the Examination Committee for the PhD thesis of Giovanni Gugliandolo, XXXII cycle candidate of Doctoral Program in “Metrology” at the Politecnico of Turin, Italy
- 2017/2018 External evaluator for the PhD thesis of Francesco Trevisan, XXX cycle candidate of Doctoral Program in “Engineering Science” at the University of Ferrara, Italy
- 2017/2018 External evaluator for the PhD thesis of Ahsin Murtaza Bughio, XXX cycle candidate of Doctoral Program in “Electronic Engineering” at the Politecnico of Turin, Italy

PROJECT MANAGEMENT

- 10/2022-presente Task Leader for the Task 3.4 “Innovative Wearable Sensors Design, Development and Characterization”, member for the Task 3.2 “Advanced BioChip Design, Development and Characterization”, and member for the Task 6.2 “Sensors and Systems for Smart Monitoring and Fruition of Cultural Heritage Sites” of the MUR-PNRR project SAMOTHRACE. – “SiciliAN MicronanOTech Research And innovation CENter” (ECS00000022). (budget for the University of Messina: 21.233.853,77 € –36 months).
- 12/2023 Recipient of the “Finanziamento Attività di Base della Ricerca di Ateneo” (FFABR) Unime 2023
- 12/2021 Recipient of the “Finanziamento Attività di Base della Ricerca di Ateneo” (FFABR) Unime 2021
- 12/2017 Recipient of the 2017 FFABR national research grant by the Italian Ministry of Education, University and Research (MIUR)
- 06/2008 Coordinator of the project “Progetto Giovani Ricercatori 2005” (“Project for Young Researchers 2005”) funded by the University of Messina. The project aim is the characterization and modeling of advanced HEMT for microwave applications
- 05/2005-present Involved with several European and Italian projects:
 European FP6 Network of Excellence “Top Amplifier Research Groups in a European Team (TARGET)” (2004-2007) under contract IST-1-507893-NOE; project “Nano-RF” (2002-2006) funded by the European Commission within the Sixth Framework Programme under contract IST-027150; PON “PANREX” (budget for the University of Messina: 1.208.400 €); FIRB “IMT-ARSEL” project prot. RBIP06R9X5 with financial support by Italian MIUR (budget for the University of Messina: 309.000 €); “CMOGAN” project through the contribution of the Italian Ministero degli Affari

Esteri, Direzione Generale per la Promozione e la Cooperazione Culturale (budget for the University of Messina: 50.000 €); “TEMPUS” project for the “Development of Master study programmes in Telecommunications and Control” at the University of Nis, Serbia (budget for the University of Messina: 30.000 €); PON “TETI” (budget 9.086.970,34 €); Progetto “COBS4FUN” (budget for the University of Messina: 159.706,00 €)

MEMBERSHIPS AND ACTIVITIES INSIDE INTER-UNIVERSITY CENTERS AND CONSORTIA

- 09/2023-present Representative of the University of Messina inside the Microwave Engineering Center for Space Applications (MECSA), an inter-university center among several Italian Universities that is specialised in microwave and millimetre-wave electronics, for the triennium 2023/25
- 07/2015-present Member of the reserach unit of the University of Messina inside the Microwave Engineering Center for Space Applications (MECSA), an inter-university center among several Italian Universities that is specialised in microwave and millimetre-wave electronics
- 07/2023-present Member of the reserach unit of the University of Messina inside the National Inter-University Consortium for Telecommunications (CNIT), a non-profit consortium bringing together 42 public Italian universities to perform research, innovation and education/training activities in the field of the Information and Communication Technology

SCIENTIFIC SOCIETY MEMBERSHIPS AND ACTIVITIES

- 05/2012-present Chair of the IEEE MTT-S Graduate Fellowship Program
The award of fellowships to outstanding graduate students working in the microwave and RF technologies is one of the longest continuing education-related activities of the IEEE MTT-S. The objective of the Graduate Fellowship Program is to recognize and provide financial assistance to graduate students who show promise and interest in pursuing a graduate degree in microwave engineering. Up to 15 Fellowships (6000\$ plus 1500\$ to attend the IEEE MTT-S International Microwave Symposium (IMS)) may be granted each year. The recipients are formally recognized at a Student Awards Luncheon held at every IMS conference. Full details of the Fellowship Awardees are available in an article published yearly in the IEEE Microwave Magazine (IF: 3.6)
- 05/2012-present IEEE MTT-S Education Committee Member
The Education Committee of the IEEE MTT-S is responsible for the promotion and coordination of activities furthering the cause of education as it relates to the Society
- 10/2012-present IEEE Microwave Theory and Techniques Society (MTT-S) Member
- 07/2013-present IEEE Senior Member
- 10/2012-07/2013 IEEE Member
- 01/2004-12/2004 IEEE Student Member

JOURNAL EDITORIAL BOARD MEMBERSHIPS

- 07/2023-present Associate Editor of *IEEE Transactions on Electron Devices* (IF: 3.1)
- 10/2022-12/2024 Associate Editor of *IEEE Microwave and Wireless Technology Letters* formerly *IEEE Microwave and Wireless Components Letters* (IF: 3.0)
- 09/2012-present Editor-in-Chief (07/2022-present), Senior Editor (01/2022-06/2022), Editor (04/2019-12/2021), and Associate Editor (09/2012-04/2019) of *Wiley International Journal of Numerical Modelling: Electronic Networks, Devices and Fields* (IF: 1.6)

- 09/2021-present Associate Editor of *IEEE Access* (IF: 3.9)
- 04/2021-present Editor-in-Chief of Microwave and Wireless Communications Section (12/2022-present) and Section Associate Editor of Microwave and Wireless Communications Section (04/2021-12/2022) of *MDPI Electronics* (IF: 2.9)
- 10/2015-present Academic Editor (01/2023-present), Associate Editor (10/2017-12/2022), and Member of the Editorial Board (10/2015-10/2017) of *Wiley International Journal of RF and Microwave Computer-Aided Engineering* (IF: 1.7)
- 01/2022-present Advisory Editor of *Wiley Engineering Reports* (IF: 2.0)

GUEST EDITOR

- 2023 Guest Editors: X. Bao, M. B. Lodi, G. Crupi, Special Issue: “Recent advancements in miniaturized microwave sensors and systems,” *Electronics*, to appear in 2023
- 2023 Guest Editors: G. Campobello, N. Donato, G. Crupi, Special Issue: “Advanced resonant sensors and signal processing techniques for IoT-enabled applications,” *Sensors*, to appear in 2023
- 09/2021-10/2021 Guest Editors: V. Vadalà, G. Crupi, Special Issue: “Modeling of umWave and mmWave electronic devices for wireless systems: Connecting technologies to applications,” *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, September/October 2021
- 05/2016 Guest Editors: G. Crupi, P. Colantonio, mini Special issue: “Integrated Nonlinear Microwave and Millimetre-wave Circuits (INMMIC) 2015,” *IEEE Transactions on Microwave Theory and Techniques*, May 2016
- 11/2014 Guest Editors: G. Crupi, A. Raffo, mini Special issue: “Integrated Nonlinear Microwave and Millimetre-wave Circuits (INMMIC) 2014,” *IEEE Transactions on Microwave Theory and Techniques*, November 2014
- 09/2014-12/2014 Guest Editors: G. Crupi, D. M. M.-P. Schreurs, A. Caddemi, Special Issue: “Modeling of high-frequency silicon transistors,” *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, September/December 2014

AWARDS

- 10/2022 “Best Paper Presented by a Young Researcher” for the contribution “A combined approach using Lorentzian fitting and ANNs for microwave resonator modeling,” Z. Marinkovic, G. Gugliandolo, G. Campobello, G. Crupi, N. Donato, *IEEE International Conference on Metrology for eXtended Reality, Artificial Intelligence and Neural Engineering* (IEEE MetroXRINE), Rome, Italy, 26-28 October 2022, pp. 608-612.
- 10/2022 “Best Poster Award” for the contribution “Salt content detection using a microwave sensor,” X. Bao, Z. Wang, J. Bao, G. Gugliandolo, H. Yuan, Z. Zhao, J. Li, N. Donato, G. Crupi, B. Nauwelaers, D. M. M.-P. Schreurs, *IEEE International Workshop on Metrology for the Sea* (MetroSea), Milazzo, Italy, 3-5 October 2022, pp. 479-483.
- 09/2020 “Best Paper Presented by a Young Researcher” for the contribution “Development and metrological evaluation of a microstrip resonator for gas sensing applications,” G. Gugliandolo, D. Aloisio, G. Campobello, G. Crupi, N. Donato, *IMEKO TC-4 International Symposium*, Palermo, Italy, 14-16 September 2020, pp.1-4.
- 06/2010 “Outstanding Paper Award” for the contribution “Source-pull characterization of FinFET noise,” W. Wiatr, G. Crupi, A. Caddemi, A. Mercha, D. M. M.-P. Schreurs, *IEEE International Conference Mixed Design of Integrated Circuits and Systems* (MIXDES), Wrocław, Poland, 24-26 June 2010, pp. 425-430.
- 07/2005 “Mario Sannino” award at the Meeting of Italian Electronics Group for the contribution

“Caratterizzazione completa di GaAs HEMT: prestazioni DC ed LF, parametri di scattering e parametri di rumore e loro dipendenza dalla temperatura,” A. Caddemi, G. Crupi, N. Donato, F. Catalfamo, *Riunione annuale del Gruppo Elettronica (GE)*, Giardini Naxos (ME), Italy, 30 June - 2 July 2005.

05/2004 “Student Travel Grant” awarded by IES Student Activities Committee to participate to the conference IEEE-ISIE 2004 for the contribution “Bias and temperature dependent modeling of on wafer HEMT’s by a direct and fast procedure,” G. Crupi, N. Donato, *IEEE International Symposium on Industrial Electronics (ISIE)*, Ajaccio, France, 4-7 May 2004, pp. 1543-1548.

CHAIR AND MEMBER OF TECHNICAL PROGRAM COMMITTEES FOR CONFERENCES

- 10/2015 Chair of the TPC of the *IEEE International Workshop on Integrated Nonlinear Microwave and Millimetre-wave Circuits (INMMiC)*, Taormina, Italy, 1-2 October 2015
- 04/2014 Chair of the TPC of the *IEEE International Workshop on Integrated Nonlinear Microwave and Millimetre-wave Circuits (INMMiC)*, Leuven, Belgium, 2-4 April 2014
- 09/2012-present Member of the TPC of the *IEEE International Workshop on Integrated Nonlinear Microwave and Millimetre-wave Circuits (INMMiC)*
- 02/2015-present Member of the TPC of the *IEEE International Conference on Advanced Technologies, Systems and Services in Telecommunications (TELSIKS)*
- 06/2019-present Member of the TPC of the *IEEE International Conference on Integrated Circuits, Technologies and Applications (ICTA)*
- 08/2023-present Member of the TPC of the *IEEE International Conference on Circuits and Systems (ICCS)*
- 02/2022-05/2022 Member of the TPC of the *IEEE Microwave Mediterranean Symposium (MMS)*

OTHER CONFERENCE ORGANIZATION ROLES

- 10/2022 Local Committee Member, *IEEE International Workshop on Metrology for the Sea (MetroSea)*, Milazzo, Italy, 3-5 October 2022
- 06/2022 Special Sessions Chair, *IEEE International Symposium on Medical Measurements and Applications (MeMeA)*, Giardini Naxos-Taormina, Italy, 22-24 June 2022
- 04/2014 Component of the Jury for the “Best Student Paper Award” supported by the GAAS Association, *IEEE International Workshop on Integrated Nonlinear Microwave and Millimetre-wave Circuits (INMMiC)*, Leuven, Belgium, 2-4 April 2014
- 04/2014 Poster Session Chair, *IEEE International Workshop on Integrated Nonlinear Microwave and Millimetre-wave Circuits (INMMiC)*, Leuven, Belgium, 2-4 April 2014

SESSION ORGANIZATION AND CHAIRING

- 10/2022 Chair of the Tutorial Session “Seafloor interdisciplinary observatories: A global vision for monitoring underwater processes, and submarine active volcanoes by technological enhancement and new scientific results”, *IEEE International Workshop on Metrology for the Sea (MetroSea)*, Milazzo, Italy, 3-5 October 2022
- 06/2022 Chair of the Special Session “Advanced Micro Devices and Systems for Next Generation of Miniaturized Neuro-Transducers”, *IEEE International Symposium on Medical Measurements and Applications (MeMeA)*, Giardini Naxos-Taormina, Italy, 22-24 June 2022

- 10/2021 Organizer and Chair of the Special Session “Bioelectronic Applications of RF and Microwaves,” *IEEE International Conference on Advanced Technologies, Systems and Services in Telecommunications (TELSIKS)*, Nis, Serbia, 20-22 October 2021
- 10/2019 Organizer and Chair of the Special Session “Bioengineering Applications of Microwave Techniques,” *IEEE International Conference on Advanced Technologies, Systems and Services in Telecommunications (TELSIKS)*, Nis, Serbia, 23-25 October 2019
- 10/2019 Organizer and Chair of the Special Session “Electromagnetics in Biomedical Applications and Healthcare,” *IEEE International Conference on Advanced Technologies, Systems and Services in Telecommunications (TELSIKS)*, Nis, Serbia, 23-25 October 2019
- 05/2019 Organizer of the Workshop “Advances in Smart Modeling Techniques for Microwave Engineering,” *European Microwave Conference in Central Europe (EuMCE)*, Prague, Czech Republic, 13-15 May 2019
- 10/2011 Organizer and Chair of the Workshop “From De-embedding to Waveform Engineering,” *European Microwave Week (EuMW)*, Manchester, UK, 9-14 October 2011
- 10/2008 Session Chair of the Workshop “Advances in Characterization and Modeling of Emerging Low-Power and High-Power Devices,” *European Microwave Week (EuMW)*, Amsterdam, Netherlands, 27-31 October 2008
- 09/2007 Session Chair, *IEEE International Conference on Telecommunications in Modern Satellite, Cable and Broadcasting Service (TELSIKS)*, Nis, Serbia, 26-28 September 2007

INVITED LECTURES AND SEMINARS

- 09/2023 Invited Webinar title: “Connecting technologies to applications for humanity's benefit: GaN HEMT modeling based on microwave and mm-Wave measurements,” Workshops on "Evolution of Transistor and Emerging Research Devices" supported by IEEE EDS as part of the “Celebration of 75 Years of Invention of the Transistor,” Delhi, India, 21 September 2023
- 08/2020 Invited Webinar title: “Empowering measurement-based FET models: Going towards higher frequencies,” 2020 International Workshop on “(Sub)mmW Components, Measurement and Applications,” China, 10-11 August 2020
- 02/2007 Invited Lecture title: “Implementation of non-linear model based on lookup table approach”, 3rd TARGET Winter School on “CAD Implementation of Non-Linear Device Model and Advanced Measurements,” Santander, Spain, 19-23 February 2007 (ISBN 978-84-8102-452-4)

REVIEWER ACTIVITIES

Reviewer for the following journals:

- IEEE - Transactions Microwave Theory and Techniques
- IEEE - Microwave and Wireless Components Letters
- IEEE - Transactions on Instrumentation and Measurement
- IEEE - Transactions on Electron Devices
- IEEE - Electron Device Letters
- IEEE - Transactions on Circuits and Systems II
- IEEE - Transactions on Computer-Aided Design of Integrated Circuits and Systems
- IEEE - Transactions on Nanotechnology
- IEEE - Transactions on Device and Materials Reliability
- IEEE - Transactions on Semiconductor Manufacturing
- IEEE - Sensors Journal
- IEEE - Microwave Magazine
- IEEE - Journal of Electromagnetics, RF, and Microwaves in Medicine and Biology
- IEEE - Access
- IEEE - Journal of the Electron Devices Society
- IEEE - Journal of Microwaves
- IEEE - Journal on Multiscale and Multiphysics Computational Techniques
- IEEE - Computational Intelligence Magazine
- IEEE - Open Journal of Nanotechnology
- Wiley - International Journal of Numerical Modelling: Electronic Networks, Devices and Fields
- Wiley - International Journal of RF and Microwave Computer-Aided Engineering
- Wiley - Microwave and Optical Technology Letters
- Wiley - International Journal of Communication Systems
- Wiley - Engineering Reports
- Elsevier - Solid-State Electronics
- Elsevier - Microelectronic Engineering
- Elsevier - Microelectronics Journal
- Elsevier - Measurement
- Elsevier - Superlattices and Microstructures
- Elsevier - Micro and Nanostructures
- Elsevier - Integration, the VLSI Journal
- Elsevier - Materials Science in Semiconductor Processing
- Elsevier - Engineering Science and Technology, an International Journal
- IOP Publishing Ltd. - Semiconductor Science and Technology
- IOP Publishing Ltd. - Journal of Physics D: Applied Physics
- IOP Publishing Ltd. - Physica Scripta
- IOP Publishing Ltd. - Journal of Micromechanics and Microengineering
- IOP Publishing Ltd. - ECS Journal of Solid State Science and Technology
- IOP Publishing Ltd. - Flexible and Printed Electronics
- IOP Publishing Ltd. - Engineering Research Express
- IET - Electronics Letters
- IET - Circuits, Devices & Systems
- IET - Microwaves, Antennas & Propagation
- IET - Power Electronics
- Cambridge University Press - International Journal of Microwave and Wireless Technologies
- Taylor & Francis - Journal of Electromagnetic Waves and Applications
- Taylor & Francis - IETE Technical Review
- Taylor & Francis - International Journal of Electronics Letters
- Taylor & Francis - Automatika
- Springer Nature - Scientific Reports
- Springer - Journal of Infrared, Millimeter, and Terahertz Waves
- Springer - Journal of Materials Science: Materials in Electronics
- Springer - Journal of Computational Electronics
- Springer - Analog Integrated Circuits and Signal Processing
- Springer - Silicon
- Electrochemical Society, Inc. - ECS Journal of Solid State Science and Technology
- EMW Publishing - Progress in Electromagnetics Research
- American Scientific Publishers - Nanoscience and Nanotechnology Letters
- MDPI - Electronics
- MDPI - Applied Sciences
- MDPI - Micromachines

- MDPI - Energies
- MDPI - Journal of Low Power Electronics and Applications
- Walter de Gruyter GmbH - Frequenz
- Walter de Gruyter GmbH - Bulletin of the Polish Academy of Sciences: Technical Sciences
- Serbia and Montenegro IEEE MTT-S Chapter - Microwave Review
- Hindawi - International Journal of Microwave Science and Technology
- Hindawi - Active and Passive Electronic Components
- Hindawi - Journal of Sensors

Reviewer for the following conferences:

- IEEE International Workshop on Integrated Nonlinear Microwave and Millimetre-wave Circuits (INMMiC)
- IEEE International Conference on Advanced Technologies, Systems and Services in Telecommunications (TELSIKS)
- IEEE International Symposium on Medical Measurement and Applications (MeMeA)
- IEEE International Conference on Integrated Circuits, Technologies and Applications (ICTA)
- IEEE Microwave Mediterranean Symposium (MMS)
- International Conference on Micro/Nanoelectronics Devices, Circuits and Systems (MNDCS)

Reviewer of books for the following publishers:

- Academic Press (an imprint of Elsevier)
- John Wiley & Sons

Other reviewer activities:

- External expert reviewer for the Romanian National Research Council (CNCS), through Executive Agency for Higher Education, Research, Development and Innovation Funding, (UEFISCDI)
- External expert reviewer for the Science Fund of the Republic of Serbia, Program IDEAS and Program PROMIS 2023
- Reviewer for the FAR 2021 and the FAR 2023 – Projects Call for Applications, through which UniMoRe and Modena Foundation intend to finance innovative and interdisciplinary projects aimed at enhancing the scientific groundwork of the University, also in view of a more effective participation in EU Framework Programmes
- Reviewer for the NIST (National Institute of Standards and Technology, Boulder, CO, USA) internal review process: BERB (Boulder Editorial Review Board) review
- Reviewer for the IEEE MTT-S Undergraduate/Pre-Graduate Scholarship Program

Reviewer recognitions:

- Recognized member of the “Golden List” of Reviewers for:
 - IEEE Transactions on Electron Devices in 2011, 2014, 2015, 2016, 2017, 2018, 2020, 2021, and 2022
 - IEEE Electron Device Letters in 2015, 2017, and 2022
- “Outstanding Reviewer Award” for Semiconductor Science and Technology in 2017

PUBLICATION SUMMARY

International Journals: 181 (9 Editorial, 7 Invited, 6 Feature, 1 Review, 1 Call for Papers, 13 Education News)

The reported Impact Factors refer to the year 2022

- IEEE - Transactions on Microwave Theory and Techniques: 13 IF: 4.3
- IEEE - Microwave and Wireless Technology Letters: 14 IF: 3.0
formerly IEEE - Microwave and Wireless Components Letters
- IEEE - Microwave Magazine: 13 IF: 3.6
- IEEE - Transactions on Instrumentation and Measurement: 2 IF: 5.6
- IEEE - Transactions on Computer-Aided Design of Integrated Circuits and Systems: 2 IF: 2.9
- IEEE - Transactions on Power Electronics: 1 IF: 6.7
- IEEE - Transactions on Electron Devices: 1 IF: 3.1
- IEEE - Transactions on Circuits and Systems I: Regular Papers: 1 IF: 5.1
- IEEE - Transactions on Circuits and Systems II: Express Briefs: 1 IF: 4.4
- IEEE - Journal of Biomedical and Health Informatics: 1 IF: 7.7
- IEEE - Sensors Journal: 1 IF: 4.3
- IEEE - Access: 4 IF: 3.9
- IEEE - Journal of the Electron Devices Society: 2 IF: 2.3
- IEEE - Instrumentation & Measurement Magazine: 1 IF: 2.1
- IEEE - Journal of Electromagnetics, RF, and Microwaves in Medicine and Biology: 1 IF: 3.2
- IEEE - Sensors Letters: 1 IF: 2.8
- Wiley - International Journal of Numerical Modelling: Electronic Networks, Devices and Fields: 33 IF: 1.6
- Wiley - Microwave and Optical Technology Letters: 11 IF: 1.5
- Wiley - International Journal of RF and Microwave Computer-Aided Engineering: 9 IF: 1.7
- Wiley - International Journal of Circuit Theory and Applications: 1 IF: 1.8
- Elsevier - Solid-State Electronics: 9 IF: 1.7
- Elsevier - Microelectronic Engineering: 4 IF: 2.3
- Elsevier - Microelectronics Journal: 3 IF: 2.2
- Elsevier - Materials Science in Semiconductor Processing: 1 IF: 4.1
- Elsevier - Microelectronics Reliability: 1 IF: 1.6
- IOP Publishing Ltd. - Semiconductor Science and Technology: 2 IF: 1.9
- IOP Publishing Ltd. - Engineering Research Express: 1 IF: 1.7
- IET - Electronics Letters: 2 IF: 1.1
- IET - Circuits, Devices & Systems: 2 IF: 1.3
- Cambridge University Press - International Journal of Microwave and Wireless Technologies: 1 IF: 1.4
- MDPI - Electronics: 15 IF: 2.9
- MDPI - Sensors: 2 IF: 3.9
- MDPI - Micromachines: 4 IF: 3.4
- MDPI - Chemosensors: 1 IF: 4.2
- MDPI - Instruments: 2
- Springer - Silicon: 3 IF: 3.4
- Springer - Transactions on Electrical and Electronic Materials: 2 IF: 1.9
- Springer - Journal of Materials Science: Materials in Electronics: 1 IF: 2.8
- Taylor & Francis - International Journal of Remote Sensing: 1 IF: 3.0
- Taylor & Francis - International Journal of Electronics: 1 IF: 1.3
- INOE Publishing House - Journal of Optoelectronics and Advanced Materials: 1 IF: 0.5
- IMEKO - Acta IMEKO: 3
- Serbia and Montenegro IEEE MTT-S Chapter - Microwave Review: 3
- University of Belgrade - Journal of Automatic Control: 1
- University of Banja Luka - Electronics: 1
- ISRAMT - International Journal of Microwave and Optical Technology: 1

Conferenze Internazionali: 103 (9 Invited)

- IEEE International Conference on Advanced Technologies, Systems and Services in Telecommunications (TELSIKS): 24
- IEEE International Workshop on Integrated Nonlinear Microwave and Millimetre-wave Circuits (INMMiC): 10
- IEEE International Symposium on Medical Measurement and Applications (MeMeA): 8
- European Microwave Integrated Circuits Conference (EuMIC): 4
- IEEE International Conference on Metrology for eXtended Reality, Artificial Intelligence and Neural Engineering (MetroXRINE): 4
- IEEE International Scientific Conference on Information, Communication and Energy Systems and Technologies (ICEST): 4
- IEEE International Workshop on Metrology for the Sea (MetroSea): 3

- IEEE Automatic RF Techniques Group Conference (ARFTG) : 3
- International Conference Mixed Design of Integrated Circuits and Systems (MIXDES): 3
- IEEE International Conference on Microelectronics (MIEL): 3
- International Microwave Symposium (IMS): 2
- IEEE Instrumentation and Measurement Technology Conference (IMTC): 2
- IEEE Mediterranean Microwave Symposium (MMS): 2
- IEEE International Conference on Integrated Circuits, Technologies and Applications (ICTA): 2
- IMEKO TC-4 International Symposium: 2
- IEEE MTT-S International Wireless Symposium (IWS): 1
- IEEE United Conference on Millimetre Waves and Terahertz Technologies (UCMMT): 1
- IEEE International Conference on Metrology for Archaeology and Cultural Heritage (MetroArchaeo): 1
- IEEE Symposium on VLSI Technology: 1
- IEEE International Conference on Emerging Electronics (ICEE): 1
- IEEE International Symposium on Industrial Electronics (ISIE): 1
- IEEE International Conference on Microwaves, Radar, and Wireless Communications (MIKON): 1
- IEEE International Workshop on Metrology for Living Environment (IEEE MetroLivEnv): 1
- IEEE International Conference on Circuits and Systems (ICCS): 1
- IEEE Calcutta Conference (CALCON): 1
- International Symposium on SiO₂ Advanced Dielectrics and Related Devices (SiO₂): 1
- International Symposium on Microwave and Optical Technology (ISMOT): 1
- International Conference Semiconductor Dresden (SCD): 1
- European Radar Conference (EuRAD): 1
- Symposium on Neural Network Applications in Electrical Engineering (NEUREL): 1
- AIP Proceeding on the 20th International Conference on Noise and Fluctuations (ICNF): 1
- Conference for Electronics, Telecommunications, Computers, Automatic Control and Nuclear Engineering (ETRAN): 1
- International Conference on Numerical Simulation of Optoelectronic Devices (NUSOD): 1
- International Microwave Symposium (IMS) Workshop on “Parameter Extraction Strategies for Compact Transistor Models”: 1
- Automatic RF Techniques Group Conference (ARFTG) Workshop on “Nonlinear measurements to investigate memory effects of RF transistors and active devices”: 1
- European Microwave Week (EuMW) Workshop on “Advanced in Characterization and Modeling of Emerging Low-Power and High-Power Devices”: 1
- European Microwave Week (EuMW) Workshop on “From De-embedding to Waveform Engineering”: 1
- European Microwave Conference in Central Europe (EuMCE) Workshop on “Advances in Smart Modeling Techniques for Microwave Engineering”: 1
- International Workshop on High Temperature Superconductors in High Frequency and Fields (HTSHFF): 1
- International MOS-AK Meeting: 1
- Materials for Advanced Metalization: 1
- TARGET Winter School on CAD Implementation of Non-Linear Device Model and Advanced Measurements: 1

BIBLIOMETRIC INDICATORS

- | | |
|---|----------------------------|
| ➤ ORCID-ID: | 0000-0002-6666-6812 |
| ➤ Number of publications, number of citations, h-index (Scopus): | 263, 3319, 32 |
| ➤ Number of publications, number of citations, h-index (ISI Web of Science): | 225, 2671, 31 |

MAIN RESEARCH AREAS

- Characterization/modeling of microwave electronic devices for wireless communication applications
- Characterization/modeling of microwave sensors for bioengineering and healthcare applications

INTERNATIONAL JOURNALS

- [J181] G. He, B. Wu, Z. Ding, **G. Crupi**, and X. Bao, "An integrated ring-based magnetic-resonance near-field super-resolution sensing model with effective second mode suppression," accepted for publication in *IEEE Transactions on Microwave Theory and Techniques*.
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