



Giovanni Crupi

CURRICULUM VITAE

05/03/2025

INFORMAZIONI PERSONALI

Nome Cognome	Giovanni Crupi
Luogo di nascita	Lamezia Terme (CZ), Italia
Data di nascita	15/09/1978
Codice fiscale	CRPGNN78P15M208M
Impiego attuale	Professore Ordinario
Afferenza	Dipartimento BIOMORF, Università degli Studi di Messina, Messina, Italia
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Sito web	https://unime.unifind.cineca.it/get/person/029881

ISTRUZIONE E FORMAZIONE

- 15/12/2006 Dottorato di Ricerca in “Tecnologie Avanzate per l’Optoelettronica e la Fotonica e Modellizzazione Elettromagnetica” (XIX ciclo), Università degli Studi di Messina
Titolo della tesi: “Characterization and modelling of advanced GaAs, GaN and Si microwave FETs”
Relatori: Prof. A. Caddemi (Università degli Studi di Messina, Italia)
Prof. D. M. M.-P. Schreurs (Katholieke Universiteit Leuven, Belgio)
- 15/04/2003 Laurea in “Ingegneria Elettronica” con votazione di 110/110 e lode, Università degli Studi di Messina
Titolo della tesi: “Caratterizzazione di pHEMT a microonde e modellistica per piccoli segnali da estrazione diretta”
Relatori: Prof. A. Caddemi, Prof. N. Donato (Università degli Studi di Messina, Italia)
- 08/1997 Diploma di maturità classica con votazione di 60/60 presso il Liceo Classico-Ginnasio “Pitagora” di Crotona, Italia

ABILITAZIONE SCIENTIFICA NAZIONALE (ASN)

- 28/08/2018 Conseguimento dell’abilitazione scientifica nazionale (ASN 2016) a professore di I Fascia nel settore scientifico concorsuale 09/E3 - “Elettronica” nel V Quadrimestre della tornata 2016
- 04/02/2014 Conseguimento dell’abilitazione scientifica nazionale (ASN 2012) a professore di II Fascia nel settore scientifico concorsuale 09/E3 - “Elettronica” nel I Quadrimestre della tornata 2012

ESPERIENZE PROFESSIONALI

- 07/01/2025-presente Professore Ordinario, Dipartimento BIOMORF, Università degli Studi di Messina
- 30/12/2017-06/01/2025 Professore Associato, Dipartimento BIOMORF, Università degli Studi di Messina
- 01/01/2015-29/12/2017 Ricercatore RTD-B, Dipartimento BIOMORF, Università degli Studi di Messina
- 01/06/2013-31/12/2014 Ricercatore RTD-A, Dipartimento DICIEAMA, Università degli Studi di Messina
- 02/05/2012-01/05/2013 Assegno di ricerca, Dipartimento di Fisica della Materia e Ingegneria Elettronica, Università degli Studi di Messina
Responsabile scientifico: Prof. Alina Caddemi
- 01/09/2011-01/03/2012 Contratto di collaborazione coordinata e continuativa, Dipartimento di Ingegneria, Università degli Studi di Ferrara
Responsabile scientifico: Prof. Giorgio Vannini
- 05/09/2007-04/09/2010 Contratto Giovani Ricercatori, attivato sul Progetto FIRB “Metodologie e Tecnologie Innovative per Radar Avionici con Antenna a Scansione Elettronica (IMT ARSEL)”, Dipartimento di Fisica della Materia e Ingegneria Elettronica, Università degli Studi di Messina
Responsabile scientifico: Prof. Alina Caddemi
- 01/08/2006-15/07/2007 Contratto di ricerca come Scientific Researcher con la Katholieke Universiteit Leuven, nell'ambito del progetto “Nano-RF”, Progetto UE VI Programma Quadro, per svolgere attività di ricerca presso la Katholieke Universiteit Leuven in collaborazione con l'Interuniversity Microelectronics Center (IMEC), Leuven, Belgio
Tematica di ricerca: Modellistica a piccolo ed ampio segnale di transistor e varactor basati su FinFET
Responsabile scientifico: Prof. Dominique Schreurs
- 23/06/2009-02/07/2009 Visiting Scientist, Warsaw University of Technology, Varsavia, Polonia
Tematica di ricerca: Modellistica di rumore di transistor avanzati a microonde
Responsabile scientifico: Dr. Wiatr Wojciech
- 15/03/2010-14/05/2010 Visiting Scientist, Katholieke Universiteit Leuven in collaborazione con
01/11/2008-30/11/2008 l'Interuniversity Microelectronics Center (IMEC), Leuven, Belgio
01/01/2008-29/02/2008 Tematica di ricerca: Modellistica a piccolo ed ampio segnale di transistor avanzati a
01/02/2006-31/07/2006 microonde
Responsabile scientifico: Prof. Dominique Schreurs
- 01/09/2005-31/12/2005 Visiting Scientist, Katholieke Universiteit Leuven in collaborazione con
01/05/2005-30/06/2005 l'Interuniversity Microelectronics Center (IMEC), Leuven, Belgio
Nell'ambito del progetto “Top Amplifier Research Groups in a European Team (TARGET)”, Rete di Eccellenza, Progetto UE VI Programma Quadro
Tematica di ricerca: Modellistica a piccolo ed ampio segnale di GaN HEMTs
Responsabile scientifico: Prof. Dominique Schreurs

ATTIVITÀ DIDATTICA

- 2019/2020-2021/2022 “Electrical and Electronic Devices - Module B” (SSD ING-INF/01, 1 CFU), Dottorato
2023/2024 di Ricerca in “Bioengineering Applied to Medical Sciences”, Università degli Studi di Messina
- 2015/2016-2024/2025 “Elettronica” (SSD ING-INF/01, 1 CFU) del corso integrato di “Esame Teorico Pratico I Anno”, Scuola di Specializzazione in “Medicina Nucleare”, Università degli Studi di Messina
- 2022/2023-2024/2025 “Fondamenti di Elettronica” (SSD ING-INF/01, 9 CFU), Corso di Laurea Triennale in “Ingegneria Biomedica”, Università degli Studi di Messina
- 2020/2021-2024/2025 “Principi e Applicazioni di Optoelettronica” (SSD ING-INF/01, 6 CFU), Corso di

	Laurea Magistrale in “Ingegneria Elettronica per l'Industria”, Università degli Studi di Messina
2019/2020-2024/2025	“Informatica” (SSD INF/01, 2 CFU) del corso integrato di “Scienze Propedeutiche di Base”, Corso di Laurea Triennale in “Tecnica della Riabilitazione Psichiatrica”, Università degli Studi di Messina
2022/2023-2024/2025	“Informatica” (SSD INF/01, 2 CFU) del corso integrato di “Scienze Propedeutiche”, Corso di Laurea Triennale in “Tecniche di Radiologia Medica, per Immagini e Radioterapia”, Università degli Studi di Messina
2022/2023	“Informatica” (SSD INF/01, 1 CFU) del corso integrato di “Scienze Statistiche Propedeutiche”, Corso di Laurea Magistrale in “Scienze delle Professioni Sanitarie Tecniche Diagnostiche”, Università degli Studi di Messina
2022/2023	“Informatica” (SSD INF/01, 1 CFU) del corso integrato di “Scienze Statistiche per la Gestione Sanitaria”, Corso di Laurea Magistrale in “Scienze delle Professioni Sanitarie Tecniche Diagnostiche”, Università degli Studi di Messina
2017/2018-2021/2022	“Bioingegneria Elettronica e Informatica” (SSD ING-INF/06, 2 CFU) del corso integrato di “Scienze Interdisciplinari e del Management Sanitario”, Corso di Laurea Triennale in “Ortottica e Assistenza Oftalmologica”, Università degli Studi di Messina
2013/2014-2021/2022	“Bioingegneria” (SSD ING-INF/06, 2 CFU) del corso integrato di “Strumenti di Laboratorio ed Elaborazioni Dati”, Corso di Laurea Triennale in “Tecniche di Neurofisiopatologia”, Università degli Studi di Messina
2018/2019-2021/2022	“Bioingegneria Elettronica e Informatica” (SSD ING-INF/06, 3 CFU) del corso integrato di “Metodologia della Ricerca e Riabilitazione”, Corso di Laurea Magistrale in “Scienze Riabilitative delle Professioni Sanitarie”, Università degli Studi di Messina
2021/2022	“Wireless Technologies” (SSD ING-INF/01, 6 CFU), Corso di Laurea Magistrale in “Engineering and Computer Science”, Università degli Studi di Messina
2015/2016-2020/2021	“Laboratory of Wireless Technologies” (SSD ING-INF/01, 6 CFU), Corso di Laurea Magistrale in “Engineering and Computer Science”, Università degli Studi di Messina
2010/2011, 2014/2015	“Elettronica delle Microonde” (SSD ING-INF/01, 6 CFU), Corso di Laurea Magistrale in “Ingegneria Elettronica”, Università degli Studi di Messina
2012/2013	“Progettazione e Laboratorio” (SSD ING-INF/01, 130 ore), Master Universitario di II livello in “Micro and Nanotechnologies for Extra High Frequency - MINTEHF”, Università degli Studi di Messina
2009/2010	“Optoelettronica” (SSD ING-INF/01, 6 CFU), Corso di Laurea Magistrale in “Ingegneria Elettronica”, Università degli Studi di Messina
2007/2008	“Fondamenti di Elettronica” (SSD ING-INF/01, 33 ore), Master Universitario di I livello in “Meccatronica per le Nuove Attività Produttive - MECAP”, Università degli Studi di Messina

ATTAVITÀ IN AMBITO ACCADEMICO

02/2024-presente	Coordinatore della Commissione AQ-RDTM (di Assicurazione della Qualità per la Ricerca e la Terza Missione Dipartimentale) del Dipartimento BIOMORF, Università degli Studi di Messina
11/2024-presente	Vice-coordinatore del Corso di Laurea Triennale in “Ingegneria Biomedica”, Università degli Studi di Messina
03/2022-presente	Componente della Commissione AQ-RDTM (di Assicurazione della Qualità per la Ricerca e la Terza Missione Dipartimentale) del Dipartimento BIOMORF, Università degli Studi di Messina

02/2023-12/2024	Componente della Commissione Paritetica Docenti-Studenti (CPDS) del Dipartimento BIOMORF per il biennio 2022/2024, Università degli Studi di Messina
12/2018-12/2024	Componente della Giunta del Dipartimento BIOMORF per i trienni 2018/2021 e 2021/2024, Università degli Studi di Messina
05/2021-presente	Componente del Gruppo AQ (di Assicurazione della Qualità) per il Corso di Laurea Triennale in “Ingegneria Biomedica,” Università degli Studi di Messina
11/2024-presente	Referente per la mobilità internazionale per il Corso di Laurea Magistrale in “Bioingegneria,” Università degli Studi di Messina
11/2021-presente	Referente per la mobilità internazionale per il Corso di Laurea Triennale in “Ingegneria Biomedica,” Università degli Studi di Messina
03/2018-11/2021	Referente per la mobilità internazionale per il Corso di Laurea Magistrale Internazionale in “Engineering and Computer Science,” Università degli Studi di Messina
11/2019-presente	Componente del Collegio dei docenti del Dottorato di Ricerca in “Bioengineering Applied to Medical Sciences” per i cicli XXXV, XXXVI, XXXVII, XXXVIII e XXXIX Università degli Studi di Messina
11/2017-10/2021	Componente del Collegio dei docenti del Dottorato di Ricerca in “Cyber Physical Systems” per i cicli XXXIII e XXXIV, Università degli Studi di Messina
05/2014-11/2019	Partecipazione in qualità di membro aggregato al Collegio di Dottorato di Ricerca in “Ingegneria Civile, Ambientale e della Sicurezza” per i cicli XXX, XXXI e XXXII, istituito presso le Università degli Studi Mediterranea di Reggio Calabria, di Messina e Kore di Enna
2023/2024	Valutatore esterno della tesi di dottorato di Kikuchi Ken, Dottorato di Ricerca XXXVI ciclo in “Engineering Science” presso l’Università degli Studi di Ferrara, Italia
2023/2024	Valutatore esterno della tesi di dottorato di Simone Spataro, Dottorato di Ricerca XXXVI ciclo in “Systems, Energy, Computer and Telecommunication Engineering” presso l’Università di Catania, Italia
2023	Valutatore esterno della tesi di dottorato di A. Benish Chris, Dottorato di Ricerca presso il SRM Institute of Science and Technology (SRMIST), Chennai, India
2022	Valutatore esterno della tesi di dottorato di Pragyey Kumar Kaushik, Dottorato di Ricerca presso il Centre for Applied Research in Electronics (CARE), Indian Institute of Technology Delhi (IITD), India
2019/2020	Valutatore esterno della tesi di dottorato e componente della Commissione giudicatrice per l’esame finale di Xiue Bao, Dottorato di Ricerca in “Engineering” presso la Katholieke Universiteit Leuven, Belgio
2019/2020	Valutatore esterno della tesi di dottorato e presidente della Commissione giudicatrice per l’esame finale di Giovanni Gugliandolo, Dottorato di Ricerca XXXII ciclo in “Metrology” presso il Politecnico di Torino, Italia
2017/2018	Valutatore esterno della tesi di dottorato di Francesco Trevisan, Dottorato di Ricerca XXX ciclo in “Engineering Science” presso l’Università degli Studi di Ferrara, Italia
2017/2018	Valutatore esterno della tesi di dottorato di Ahsin Murtaza Bughio, Dottorato di Ricerca XXX ciclo in “Electronic Engineering” presso il Politecnico di Torino, Italia

PROGETTI DI RICERCA

10/2022-presente	Task Leader per il Task 3.4 “Innovative Wearable Sensors Design, Development and Characterization”, componente del Task 3.2 “Advanced BioChip Design, Development and Characterization” e componente del Task 6.2 “Sensors and Systems for Smart Monitoring and Fruition of Cultural Heritage Sites” nell’ambito del Progetto
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SAMOTHRACE – “SiciliAn MicronanOTech Research And innovation CEnter” finanziato dal PNRR, Missione 4 “Istruzione e ricerca” - Componente 2 “Dalla ricerca all’impresa”- Investimento 1.5 - D.D.G. MUR 3277 del 30.12.2021 - Ecosistemi dell’Innovazione (ECS0000022). Budget assegnato all’Università di Messina 21.233.853,77 euro – Durata 36 mesi.

- 12/2023 “Finanziamento Attività di Base della Ricerca di Ateneo” (FFABR) Unime 2023 (1.500 euro)
- 12/2021 “Finanziamento Attività di Base della Ricerca di Ateneo” (FFABR) Unime 2021 (1.500 euro)
- 12/2017 “Fondo di Finanziamento delle Attività Base della Ricerca” (FFABR) 2017, Ministero dell’Istruzione, dell’Università e della Ricerca (3.000 euro)
- 06/2008 Responsabile del “Progetto Giovani Ricercatori 2005” finanziato dall’Università degli Studi di Messina: “Caratterizzazione e modellistica di HEMT per applicazioni avanzate nel campo delle microonde” (2.000 euro)
- 05/2005-presente Partecipazione a diversi progetti Italiani ed Europei:
- 2004 “Top Amplifier Research Groups in a European Team (TARGET)”, Rete di Eccellenza, Progetto UE VI Programma Quadro (contratto IST-1-507893-NOE) - Durata: 48 mesi
 - 2006 “Nano-RF”, Progetto UE VI Programma Quadro (contratto IST-027150) - Durata: 36 mesi
 - 2012 P.O.N. “Ricerca e Competitività” 2007-2013 - Asse I - Ob.Oper. 4.1.1.4, Az. I, PON01_01322: “Packaging basato su nanomateriali per ricevitori ed exciter compatti per applicazioni radar con antenna a scansione elettronica del fascio (PANREX)”. Budget assegnato all’Università di Messina 1.208.400 euro - Durata: 36 mesi
 - FIRB Idee Progettuali 2006: “Metodologie e Tecnologie Innovative per Radar Avionici con antenna a Scansione Elettronica (IMT-ARSEL)” cofinanziato dal MIUR (prot. RBIP06R9X5). Budget assegnato all’Università di Messina 309.000 euro - Durata: 40 mesi
 - 2008 MAE - Progetto Bilaterale di Grande Rilevanza Scientifica Italia-Polonia: “Characterization and modeling of GaN devices for the design of advanced microwave circuits (CMOGAN)”, cofinanziato al 50% dal Ministero degli Affari Esteri (Com. Prot.269/P/0127743). Budget assegnato all’Università di Messina 50.000 euro - Durata: 24 mesi
 - Progetto “TEMPUS”: “Development of Master study programmes in Telecommunications and Control” finanziato dalla Comunità Europea per lo sviluppo e la realizzazione di un ciclo sperimentale di laurea specialistica in Ingegneria delle Telecomunicazioni e Controllo presso l’Università di Nis, Serbia (project JEP 41112 2006). Budget assegnato all’Università di Messina 30.000 euro - Durata: 24 mesi
 - Progetto “TETI - TECnologie innovative per il controllo, il moniToraggio e la sIcurezza in mare,” PON “Ricerca e Innovazione” 2014-2020 - Azione II. 2 Cluster “Sostegno all’innovazione”, Area di Specializzazione “Blue Growth” (Codice progetto: ARS01_00333). Budget complessivo 9.086.970,34 euro. Durata: 30 mesi
 - Progetto “COBS4FUN”: “Compression Of Biometric Signals for Future Networks applications” (CUP: C49J24000250004) ammesso al finanziamento con DDG n.713 del 04/03/2024 del Politecnico di Torino (Spoke 4 RESTART). Budget assegnato all’Università di Messina 159.706,00 euro - Durata: 18 mesi

PARTECIPAZIONE A CENTRI E CONSORZI INTERUNIVERSITARI

- 09/2023-presente Rappresentante dell’Università degli Studi di Messina nel Comitato di Gestione del Centro Interuniversitario di Ingegneria delle Microonde per Applicazioni Spaziali (MECSA) per il triennio 2023/25
- 07/2015-presente Membro dell’Unità di Ricerca dell’Università Studi di Messina del Centro Interuniversitario di Ingegneria delle Microonde per Applicazioni Spaziali (MECSA)
- 07/2023-presente Membro dell’Unità di Ricerca dell’Università Studi di Messina del Consorzio Nazionale

PARTECIPAZIONE A SOCIETÀ SCIENTIFICHE

- 05/2012-presente Chair del programma IEEE MTT-S Graduate Fellowships
Il programma è finalizzato all'assegnazione annuale di 15 prestigiose borse di studio (6000 dollari cadauna oltre 1500 dollari per partecipare alla conferenza IEEE MTT-S IMS) per candidati meritevoli al fine di sviluppare progetti di ricerca nell'ambito di corsi di studio post-laurea nel campo dell'ingegneria elettronica delle microonde. La cerimonia di premiazione "Student Awards Luncheon" si svolge ogni anno negli Stati Uniti in occasione della conferenza IEEE MTT-S International Microwave Symposium (IMS) e l'elenco dei vincitori viene pubblicato sulla rivista IEEE Microwave Magazine (IF: 3.6)
- 05/2012-presente IEEE MTT-S Education Committee Member
Il comitato è composto dai maggiori esperti delle Università e delle industrie nel campo dell'ingegneria elettronica delle microonde al fine di offrire varie iniziative per studenti, avendo come obiettivo quello di promuovere ed incoraggiare la formazione avanzata dei futuri leader nel settore
- 10/2012-presente IEEE Microwave Theory and Techniques Society (MTT-S) Member
- 07/2013-presente IEEE Senior Member
- 10/2012-07/2013 IEEE Member
- 01/2004-12/2004 IEEE Student Member

PARTECIPAZIONE A COMITATI EDITORIALI DI RIVISTE

- 07/2023-presente Associate Editor della rivista *IEEE Transactions on Electron Devices* (IF: 3.1)
- 10/2022-12/2024 Associate Editor della rivista *IEEE Microwave and Wireless Technology Letters* previously *IEEE Microwave and Wireless Components Letters* (IF: 3.0)
- 09/2012-presente Editor-in-Chief (07/2022-presente), Senior Editor (01/2022-06/2022), Editor (04/2019-12/2021), ed Associate Editor (09/2012-04/2019) della rivista *Wiley International Journal of Numerical Modelling: Electronic Networks, Devices and Fields* (IF: 1.6)
- 09/2021-presente Associate Editor della rivista *IEEE Access* (IF: 3.9)
- 04/2021-presente Editor-in-Chief di Microwave and Wireless Communications Section (12/2022-presente) e Section Associate Editor di Microwave and Wireless Communications Section (04/2021-12/2022) della rivista *MDPI Electronics* (IF: 2.9)
- 10/2015-presente Academic Editor (01/2023-present), Associate Editor (10/2017-12/2022), e Member of the Editorial Board (10/2015-10/2017) della rivista *Wiley International Journal of RF and Microwave Computer-Aided Engineering* (IF: 1.7)
- 01/2022-presente Advisory Editor della rivista *Wiley Engineering Reports* (IF: 2.0)

GUEST EDITOR DI SPECIAL ISSUES DI RIVISTE

- 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

PREMI

- 10/2022 "Best Paper Presented by a Young Researcher" per il lavoro "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" per il lavoro "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" per il lavoro "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" per il lavoro "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), Wroclaw, Poland, 24-26 June 2010, pp. 425-430.
- 07/2005 Premio "Mario Sannino" alla riunione annuale del Gruppo Nazionale di Elettronica per il lavoro "Caratterizzazione completa di GaAs HEMT: prestazioni DC ed LF, parametri di scattering e parametri di rumore e loro dipendenza dalla temperature," 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 Premio "Student Travel Grant" da IES Student Activities Committee per partecipare alla conferenza IEEE ISIE 2004 per il lavoro "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.

PARTECIPAZIONE A COMITATI DI PROGRAMMA DI CONFERENZE

- 10/2015 Chair del Technical Program Committee della conferenza *IEEE International Workshop on Integrated Nonlinear Microwave and Millimetre-wave Circuits* (INMMiC), Taormina, Italy, 1-2 October 2015
- 04/2014 Chair del Technical Program Committee della conferenza *IEEE International Workshop on Integrated Nonlinear Microwave and Millimetre-wave Circuits* (INMMiC), Leuven, Belgium, 2-4 April 2014
- 09/2012-presente Membro del Technical Program Committee della conferenza *IEEE International Workshop on Integrated Nonlinear Microwave and Millimetre-wave Circuits* (INMMiC)
- 02/2015-presente Membro del Technical Program Committee della conferenza *IEEE International Conference on Advanced Technologies, Systems and Services in Telecommunications* (TELSIKS)

- 06/2019-presente Membro del Technical Program Committee della conferenza *IEEE International Conference on Integrated Circuits, Technologies and Applications (ICTA)*
- 08/2023-presente Membro del Technical Program Committee della conferenza *IEEE International Conference on Circuits and Systems (ICCS)*
- 02/2022-05/2022 Membro del Technical Program Committee della conferenza *IEEE Microwave Mediterranean Symposium (MMS)*

ALTRE ATTIVITÀ ORGANIZZATIVE NELL'AMBITO DI CONFERENZE

- 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 Componente della giuria per l'assegnazione del premio "Best Student Paper Award" sponsorizzato dalla 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

ATTIVITÀ ORGANIZZATIVE NELL'AMBITO DI SESSIONI DI CONFERENZE

- 10/2022 Chair della 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 della 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 Organizzatore e Chair della 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 Organizzatore e Chair della 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 Organizzatore e Chair della 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 Organizzatore del 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 Organizzatore e Chair del Workshop "From De-embedding to Waveform Engineering," *European Microwave Week (EuMW)*, Manchester, UK, 9-14 October 2011
- 10/2008 Session Chair del 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

LEZIONI E SEMINARI SU INVITO

- 09/2023 Webinar su invito dal titolo “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 Webinar su invito dal titolo “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 Lezioni, in aula e laboratorio CAD, tenute su invito presso l’Università di Cantabria in occasione della 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).
Titolo: “Implementation of Non-Linear Model Based on Lookup Table Approach”

ATTIVITÀ DI REVISORE

Revisore per le seguenti riviste:

- 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
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- 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)

Revisore di libri per le seguenti case editrici:

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

Altre attività di revisore:

- Revisore di progetti di ricerca per conto del CNCS (National Research Council - Consiglio Nazionale delle Ricerche) del governo della Romania, tramite l'agenzia UEFISCDI (The Executive Agency for Higher Education, Research, Development and Innovation Funding – l'Unità Esecutiva per il Finanziamento dell'Istruzione Superiore, della Ricerca, Sviluppo e Innovazione)
- Revisore di progetti di ricerca per conto del SFRS (Science Fund of the Republic of Serbia), Programma IDEAS e Programma PROMIS 2023
- Revisore di progetti nell'ambito dei Bandi FAR Progetti 2021 e FAR Progetti 2023 - con i quali UniMoRe e la Fondazione di Modena intendono finanziare progetti di natura innovativa e interdisciplinare mirati a rafforzare le basi scientifiche dell'Ateneo, anche in vista di una più efficace partecipazione ai Programmi Quadro dell'Unione Europea
- Revisore per il NIST (National Institute of Standards and Technology, Boulder, CO, USA) in qualità di membro del BERB (Boulder Editorial Review Board)
- Revisore per le borse di studio IEEE MTT-S Undergraduate/Pre-Graduate Scholarship Program

Riconoscimenti per attività di revisore:

- Componente della "Golden List" dei revisori per le seguenti riviste IEEE:
 - IEEE Transactions on Electron Devices per gli anni 2011, 2014, 2015, 2016, 2017, 2018, 2020, 2021 e 2022.
 - IEEE Electron Device Letters per gli anni 2015, 2017 e 2022.
- "Outstanding Reviewer Award" dalla rivista Semiconductor Science and Technology per il 2017

PUBBLICAZIONI

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

I valori riportati di impact factor sono riferiti all'anno 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
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- 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
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- 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

INDICATORI BIBLIOMETRICI

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| ➤ ORCID-ID: | 0000-0002-6666-6812 |
| ➤ Numero di pubblicazioni, numero di citazioni, h-index (Scopus): | 263, 3319, 32 |
| ➤ Numero di pubblicazioni, numero di citazioni, h-index (ISI Web of Science): | 225, 2671, 31 |

PRINCIPIALI TEMATICHE DI RICERCA

- Caratterizzazione/modellistica di dispositivi elettronici a microonde per applicazioni di comunicazione wireless
- Caratterizzazione/modellistica di sensori a microonde per applicazioni di bioingegneria

- [R181] 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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