



# Giovanni Crupi

## CURRICULUM VITAE

20/08/2026

### 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                                          |
| Telefono          | +39-338-3179173                                                                                                   |
| E-mail            | crupig@unime.it                                                                                                   |
| Contatto Skype    | giocrupi                                                                                                          |
| Contatto LinkedIn | <a href="http://www.linkedin.com/in/GiovanniCrupi">www.linkedin.com/in/GiovanniCrupi</a>                          |
| Sito web          | <a href="https://unime.unifind.cineca.it/get/person/029881">https://unime.unifind.cineca.it/get/person/029881</a> |

### 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 Crotone, 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

- 2015/2016-2026/2027 “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
- 2022/2023-2026/2027 “Fondamenti di Elettronica” (SSD ING-INF/01, 9 CFU), Corso di Laurea Triennale in “Ingegneria Biomedica”, Università degli Studi di Messina
- 2020/2021-2026/2027 “Principi e Applicazioni di Optoelettronica” (SSD ING-INF/01, 6 CFU), Corso di Laurea Magistrale in “Bioingegneria” (dal 2025/2026) e Corso di Laurea Magistrale in “Ingegneria Elettronica per l'Industria”, Università degli Studi di Messina
- 2025/2026 “Elettronica per la Bioingegneria” (SSD ING-INF/01, 1 CFU), Dottorato di Ricerca in “Bioengineering Applied to Medical Sciences”, Università degli Studi di Messina

|                                  |                                                                                                                                                                                                                                                             |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2019/2020-2021/2022<br>2023/2024 | “Dispositivi Elettrici ed Elettronici - Modulo B” (SSD ING-INF/01, 1 CFU), Dottorato di Ricerca in “Bioengineering Applied to Medical Sciences”, 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                                                                       |

#### ATTIVITÀ 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   |

degli Studi di Messina

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|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 07/2024-04/2026  | Componente del Comitato Tecnico Scientifico (CTS) per il Macrosettore ERC "Scienze della Vita" (LS) per le attività di valutazione previste per i progetti PRIN 2022 PNRR, 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-XXXXII 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                                                                                                 |
| 2026             | Valutatore esterno della tesi di dottorato di Amartya Paul, Dottorato di Ricerca presso il Department of Electronics and Communication Engineering, National Institute of Technology (NIT) Meghalaya, Laitumkhrach. Shillong, India                    |
| 2025/2026        | Valutatore esterno della tesi di dottorato di Ifra Saeed, Dottorato di Ricerca XXXVIII ciclo in "Fisica e Astronomia" presso l'Università degli Studi di Milano-Bicocca, Italia                                                                        |
| 2026             | Valutatore esterno della tesi di dottorato di Geeta Pattnaik, Dottorato di Ricerca presso il Department of Electronics and Communication Engineering, Institute of Technical Education and Research, Siksha 'O' Anusandhan, Bhubaneswar, Odisha, India |
| 2025             | Valutatore esterno della tesi di dottorato di Moupani Roy, Dottorato di Ricerca presso il Department of Electronics and Communication Engineering, National Institute of Technology (NIT) Meghalaya, Laitumkhrach. Shillong, India                     |
| 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

- 10/2022-03/2026 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 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 (ECS00000022). Budget assegnato all'Università di Messina 21.233.853,77 euro – Durata 36 mesi
- 03/2026 "Finanziamento Attività di Base della Ricerca di Ateneo" (FFABR) Unime 2025 (2.000 euro)
- 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
  - 2006 FIRB Idee Progettuali: "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
  - 2006 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
  - 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
  - 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

- 2021 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
- 2023 Progetto “LS\_TTO NETWORK”: “Life Science Italian Technology Transfer Network”, nell’ambito del Piano Nazionale per gli investimenti complementari (PNC) al PNRR - Programma “Ecosistema innovativo della Salute” (Codice Progetto: PNC E3-2022-23683268 - CUP: J43C22001490001), finanziato dal Ministero della Salute in collaborazione con l’Ente coordinatore/Hub Centro Cardiologico S.p.A. - Fondazione Monzino. Budget complessivo assegnato all’Università di Messina 450.470,00 euro - Durata: 66 mesi
- 2024 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
- 2025 Progetto “AGRITECH”: “National Research Centre for Agricultural Technologies”, PNRR - Missione 4, Componente 2, Investimento 1.4 “Potenziamento strutture di ricerca e creazione di 'campioni nazionali di R&S' su alcune Key Enabling Technologies”, finanziato dall’Unione Europea – NextGenerationEU (Codice Progetto MUR: AGRITECH – CUP: CN00000022) - Durata: 8 mesi
- 2026 Progetto “HE-LIX”: “Heritage Empowerment by Leveraging Innovation and eXchange” (articolato nei sotto-progetti “HE-RMES” e “HE-RA”), PN RIC 2021-2027 (transizione verde e digitale - piattaforma STEP), finanziato dal MUR con D.D. n. 782 del 03/03/2026. Azione 1.1.2 (HE-RMES - CUP: B49H26000450007) e Azione 1.1.3b (HE-RA - CUP: B42F26000290005) in partenariato con la Fondazione SAMOTHRACE e la Fondazione CHANGES. Budget assegnato all’Università di Messina 2.269.999,99 euro - Durata: 24 mesi
- 2026 Progetto “QUANTAS”: “QUAntum enabled micro and Nano Technologies for Agriculture and Sustainability” (articolato nei sotto-progetti “SYNERGIA” e “TESLA”), PN RIC 2021-2027 (transizione verde e digitale - piattaforma STEP), finanziato dal MUR con D.D. n. 782 del 03/03/2026. Azione 1.1.2 (SYNERGIA - CUP: B49H26000440007) e Azione 1.1.3b (TESLA - CUP: B42F26000520005) in partenariato con la Fondazione SAMOTHRACE e MUSA S.C.A.R.L. Budget assegnato all’Università di Messina 1.315.501,64 euro - Durata: 24 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 Interuniversitario per le Telecomunicazioni (CNIT)                                                             |

## PARTECIPAZIONE A SOCIETÀ SCIENTIFICHE

- |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 05/2012-presente | <p>Chair del programma IEEE MTT-S Graduate Fellowships</p> <p>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</p> |
| 05/2012-presente | <p>IEEE MTT-S Education Committee Member</p> <p>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,</p>                                                                                                                                                                                                                                                                                                                                                                                                                                         |

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

|                  |                                                                                                                                                                                                                                                       |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 <i>Wiley International Journal of Numerical Modelling: Electronic Networks, Devices and Fields</i> |
| 02/2026-presente | Editor-in-Chief della rivista <i>Taylor &amp; Francis International Journal of Optomechatronics</i>                                                                                                                                                   |
| 07/2023-10/2025  | Associate Editor della rivista <i>IEEE Transactions on Electron Devices</i>                                                                                                                                                                           |
| 10/2022-12/2024  | Associate Editor della rivista <i>IEEE Microwave and Wireless Technology Letters</i> previously <i>IEEE Microwave and Wireless Components Letters</i>                                                                                                 |
| 09/2021-04/2026  | Associate Editor della rivista <i>IEEE Access</i>                                                                                                                                                                                                     |
| 04/2021-presente | Editor-in-Chief di Microwave and Wireless Communications Section (02/2023-02/2025) e Section Associate Editor di Microwave and Wireless Communications Section (04/2021-presente) della rivista <i>MDPI Electronics</i>                               |
| 10/2015-12/2022  | Associate Editor (10/2017-12/2022), e Member of the Editorial Board (10/2015-10/2017) della rivista <i>Wiley International Journal of RF and Microwave Computer-Aided Engineering</i>                                                                 |
| 01/2022-presente | Advisory Editor della rivista <i>Wiley Engineering Reports</i>                                                                                                                                                                                        |

#### 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," <i>International Journal of Numerical Modelling: Electronic Networks, Devices and Fields</i> , September/October 2021 |
| 05/2016         | Guest Editors: G. Crupi, P. Colantonio, mini Special issue: "Integrated Nonlinear Microwave and Millimetre-wave Circuits (INMMIC) 2015," <i>IEEE Transactions on Microwave Theory and Techniques</i> , May 2016                                                                            |
| 11/2014         | Guest Editors: G. Crupi, A. Raffo, mini Special issue: "Integrated Nonlinear Microwave and Millimetre-wave Circuits (INMMIC) 2014," <i>IEEE Transactions on Microwave Theory and Techniques</i> , November 2014                                                                            |
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#### PREMI

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| 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, <i>IEEE International Conference</i> |
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- 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 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 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

- 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

In oltre vent'anni di carriera accademica, ha svolto attività di revisore per oltre 80 prestigiose riviste internazionali (tra cui 19 IEEE Transactions/Journals, e numerose riviste per Wiley, Elsevier, Springer Nature, Taylor & Francis, IOP Publishing, IET, Cambridge University Press e MDPI, insieme ad altri principali editori scientifici), per le principali conferenze di settore e per libri internazionali di editori quali Academic Press (Elsevier), Artech House e John Wiley & Sons. Ha inoltre agito come esperto valutatore esterno per 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), per conto del SFRS (Science Fund of the Republic of Serbia), per il NIST (National Institute of Standards and Technology, USA) attraverso il Boulder Editorial Review Board (BERB), e per i progetti di ricerca italiani FAR per UniMoRe, oltre ad agire come valutatore per il programma di borse di studio IEEE MTT-S Undergraduate and Pre-Graduate Scholarship Program.

## PUBBLICAZIONI

Riviste Internazionali: 210 (9 Editorial, 8 Invited, 6 Feature, 2 Review, 1 Call for Papers, 15 Education News)

|                                                                                                                  |    |
|------------------------------------------------------------------------------------------------------------------|----|
| ➤ IEEE - Transactions on Microwave Theory and Techniques:                                                        | 16 |
| ➤ IEEE - Microwave and Wireless Technology Letters:<br>formerly IEEE - Microwave and Wireless Components Letters | 16 |
| ➤ IEEE - Microwave Magazine:                                                                                     | 15 |
| ➤ IEEE - Transactions on Instrumentation and Measurement:                                                        | 4  |
| ➤ IEEE - Transactions on Computer-Aided Design of Integrated Circuits and Systems:                               | 3  |
| ➤ IEEE - Transactions on Power Electronics:                                                                      | 1  |
| ➤ IEEE - Transactions on Electron Devices:                                                                       | 1  |
| ➤ IEEE - Transactions on Circuits and Systems I: Regular Papers:                                                 | 1  |
| ➤ IEEE - Transactions on Circuits and Systems II: Express Briefs:                                                | 1  |
| ➤ IEEE - Transactions on Aerospace and Electronic Systems                                                        | 1  |
| ➤ IEEE - Journal of Biomedical and Health Informatics:                                                           | 1  |
| ➤ IEEE - Open Journal of Circuits and Systems                                                                    | 1  |
| ➤ IEEE - Sensors Journal:                                                                                        | 1  |
| ➤ IEEE - Access:                                                                                                 | 4  |
| ➤ IEEE - Journal of the Electron Devices Society:                                                                | 3  |
| ➤ IEEE - Instrumentation & Measurement Magazine:                                                                 | 1  |
| ➤ IEEE - Journal of Electromagnetics, RF, and Microwaves in Medicine and Biology:                                | 1  |
| ➤ IEEE - Sensors Letters:                                                                                        | 1  |
| ➤ Wiley - International Journal of Numerical Modelling: Electronic Networks, Devices and Fields:                 | 42 |
| ➤ Wiley - Microwave and Optical Technology Letters:                                                              | 13 |
| ➤ Wiley - International Journal of RF and Microwave Computer-Aided Engineering:                                  | 9  |
| ➤ Wiley - International Journal of Circuit Theory and Applications:                                              | 2  |
| ➤ Elsevier - Solid-State Electronics:                                                                            | 9  |
| ➤ Elsevier - Microelectronic Engineering:                                                                        | 4  |
| ➤ Elsevier - Microelectronics Journal:                                                                           | 3  |
| ➤ Elsevier - Materials Science in Semiconductor Processing:                                                      | 1  |
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| ➤ Elsevier - AEU - International Journal of Electronics and Communications                                       | 1  |
| ➤ IOP Publishing Ltd. - Semiconductor Science and Technology:                                                    | 2  |
| ➤ IOP Publishing Ltd. - Engineering Research Express:                                                            | 1  |
| ➤ IET - Electronics Letters:                                                                                     | 2  |
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| ➤ Cambridge University Press - International Journal of Microwave and Wireless Technologies:                     | 1  |
| ➤ MDPI - Electronics:                                                                                            | 15 |
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| ➤ Springer - Transactions on Electrical and Electronic Materials:                                                | 2  |
| ➤ Springer - Journal of Materials Science: Materials in Electronics:                                             | 1  |
| ➤ Taylor & Francis - International Journal of Remote Sensing:                                                    | 1  |
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| ➤ The Royal Society of Chemistry - Physical Chemistry Chemical Physics:                                          | 1  |
| ➤ INOE Publishing House - Journal of Optoelectronics and Advanced Materials:                                     | 1  |
| ➤ IMEKO - Acta IMEKO:                                                                                            | 3  |
| ➤ Italian Physical Society - Il Nuovo Cimento C                                                                  | 1  |
| ➤ 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: 110 (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): 12
- 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 (MetroXRAINE): 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): 4
- International Microwave Symposium (IMS): 2
- IEEE Instrumentation and Measurement Technology Conference (IMTC): 2
- IEEE Mediterranean Microwave Symposium (MMS): 2
- IEEE International Workshop on Metrology for AeroSpace (MetroAeroSpace): 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 Green Technologies, Renewable Energy and Ecological Sustainability (IEEE MetroGREENST): 1
- IEEE International Workshop on Metrology for Living Environment (MetroLivEnv): 1
- IEEE International Conference on Circuits and Systems (ICCS): 1
- IEEE Calcutta Conference (CALCON): 1
- International Symposium on SiO<sub>2</sub> Advanced Dielectrics and Related Devices (SiO<sub>2</sub>): 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

- **ORCID-ID:** 0000-0002-6666-6812
- **Numero di pubblicazioni, numero di citazioni, h-index (Scopus):** 298, 3923, 34
- **Numero di pubblicazioni, numero di citazioni, h-index (ISI Web of Science):** 271, 3217, 32

## 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

- [R210] W. Wang, L. He, S. Chen, H. Gu, J. Cai, Z. Zhang, X. Y. Zhou, **G. Crupi**, and G. Wang, "High efficiency multi-band outphasing amplifiers using streamlined impedance synthesis methodology," *IEEE Transactions on Microwave Theory and Techniques*, vol. 74, no. 8, pp. 6727-6741, Aug. 2026.
- [R209] Z. Miao, S. Xu, Y. Du, L. Pang, X. Bao, **G. Crupi**, and G. He, "A decade bandwidth SFCW RF front-end with high harmonic suppression," *IEEE Microwave and Wireless Technology Letters*, vol. 36, no. 8, pp. 1353-1356, August 2026.
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- [R206] Y. Hong, Z. Hao, J. Cai, **G. Crupi**, S. Chen, and C. Yu, "Design of post-matching broadband Doherty PA using modified PSO algorithm," *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, vol. 39, no. 4, e70194, July/August 2026.
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- [R204] L. Guo, S. Ma, X. Shen, W. Wang, J. Huang, J. Cai, **G. Crupi**, S. Chen, and J. Ren, "A wideband dual-mode high-efficiency MMIC power amplifier based on outphasing architecture," *IEEE Transactions on Aerospace and Electronic Systems*, vol. 62, pp. 12437-12449, June 2026.
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- [R201] R. U. Ahmed, P. Saha, S. Majumdar, and **G. Crupi**, "Look-up table framework for p-channel double-gate MOSFETs: silicon vs. germanium evaluation," *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, vol. 39, no. 3, e70180, May/June 2026 ([Invited Review Paper](#)).
- [R200] Y. Xu, K. Li, Y. Wu, H. Liu, Y. Yu, C. Zhao, G. Gugliandolo, N. Donato, **G. Crupi**, and K. Kang, "A 320-GHz scalable equivalent-circuit model with dispersive NQS effect for CMOS transistors: From theory to experimental validation," *IEEE Transactions on Microwave Theory and Techniques*, vol. 74, no. 3, pp.2326-2334, March 2026.
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- [R196] L. Arruzzoli, G. Gugliandolo, E. Zirilli, M. Latino, A. Pistone, **G. Crupi**, and N. Donato, "Through-hole spiral microstrip resonator for inline dielectric characterization of liquids," *Sensors*, vol. 26, no. 5, 1544, March 2026.
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- [R191] M. Geng, H. Zhang, **G. Crupi**, J. Cai, S. Chen, and B. Pan, "Design of reconfigurable PA based on spoof surface plasmon polaritons," *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, vol. 38, no. 5, e70127, September/ October 2025.

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- [R189] 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," *IEEE Transactions on Microwave Theory and Techniques*, vol. 73, no. 8, pp. 4557-4565, August 2025.
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