

Associate Professor of Electromagnetic Field Theory
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MIRKO BARBUTO (Senior Member, IEEE) was born in Rome, Italy, on April 26, 1986. He received the B.S., M.S. and Ph.D. degrees from "Roma Tre" University, Rome, Italy, in 2008, 2010 and 2015, respectively. Since November 2024, he has been Associate Professor of Electromagnetic Field Theory at Roma Tre University, Department of Industrial, Electronic, and Mechanical Engineering. From 2013 to 2024, he served at Niccolò Cusano University, where he progressed from Assistant to Associate Professor, and he directed the Applied Electromagnetics Laboratory and coordinated the undergraduate program in Electronic and Computer Engineering.

His main research interests focus on advanced electromagnetic structures, particularly metamaterials and metasurfaces, with applications in antenna systems and wave manipulation. He works on reconfigurable devices that adapt in real time, including plasma-based reconfigurable electromagnetic components, as well as dynamic beamforming using Huygens metasurfaces and the generation of vortex and composite vortex electromagnetic modes. His interests also include electromagnetic structures loaded with nonlinear and waveform-selective components.

He serves as Associate Editor for IEEE TAP (since October 2022) and for IEEE AWPL (2019-2025), receiving recognition for his outstanding contributions in 2021, 2022, 2024 and 2025. He is a member of the Editorial Board of the Radioengineering Journal (since 2019), of the Technical Program Committee of the International Congress on Artificial Materials for Novel Wave Phenomena (since 2017), and of secretarial office of the International Association METAMORPHOSE VI (the Virtual Institute for Artificial Electromagnetic Materials and Metamaterials). He serves as a Technical Reviewer of the major international conferences and journals related to electromagnetic field theory and metamaterials and he has been the recipient of the Outstanding Reviewers Awards assigned by the Editorial Board of the IEEE Transactions on Antennas & Propagation (for nine consecutive years, 2015-2023) and by the Editorial Board of the IEEE Antennas and Wireless Propagation Letters (for four consecutive years, 2016-2019). In 2017 he has been selected as one of the Best Reviewers by the Editorial Board of Radioengineering Journal. He has been Technical Program Coordinator (Track "Electromagnetics and Materials") for the 2016 IEEE Antennas and Propagation Symposium and he served as Guest Editor of three special issues on metamaterials and metasurfaces.

Since 2015, he is the Proceeding Editor for the annual International Congress on Artificial Materials for Novel Wave Phenomena – Metamaterials and, in 2019, he has been appointed as General Chair of the 39th EUPROMETA doctoral school on metamaterials held in Rome, Italy.

Prof. Barbuto is currently a member of the Board of Directors of the Virtual Institute for Artificial Electromagnetic Materials and Metamaterials (Metamorphose VI AISBL), a member of the Italian Society on Electromagnetics (SIEM) and of the National Inter-University Consortium for Telecommunications (CNIT), and a Senior Member of the Institute of Electrical and Electronics Engineers (IEEE) and of the International Union of Radio Science(URSI). Currently, he is the author of more than 200 papers in international journals and conference proceedings.