

GUEST EDITORIAL

EuMW special issue

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Every year the European Microwave Association (EuMA) devote a special issue of the *International Journal of Microwave and Wireless Technologies* to its flagship annual event, the European Microwave Week (EuMW). In 2014, the 17th EuMW took place in Rome on October 5–10. EuMW 2014 featured three leading conferences in the field of microwaves, namely the 44th European Microwave Conference (EuMC), the 9th European Microwave Integrated Circuits Conference (EuMIC), and the 11th European Radar Conference (EuRAD), and gathered more than 1400 scientists and practitioners from all over the world to present and discuss the most recent advances in all relevant microwave topics.

With a total of 1124 submitted contributions, EuMW 2014 has been one of the most successful edition since the inception of this conference series. The submitted abstracts were reviewed by 520 reviewers, and a total of 662 papers were selected by the 102 members of the Technical Program Committee (TPC), for inclusion in the final conference program. Based on the scores of the reviewers and on the recommendations of the TPC, the authors of the top ranked papers were invited to submit a significantly extended contribution to the *International Journal of Microwave and Wireless Technologies*.

As an outcome of this very selective process a total of 29 papers have been accepted for publication in this special issue. These papers address applications ranging from microwave frequencies up to the terahertz region, and they cover a variety of topics presented during the EuMW, including filters, passive components, interconnects, characterization of novel materials, emerging technologies, wireless power transfer systems, active components, monolithic microwave integrated circuits, power amplifiers, sub-systems and system design, sensors, antennas and arrays, radars systems, advanced radar signal processing, and applications.

As Guest Editors, we would like to express our sincere gratitude to Professor Almudena Suarez (Editors-in-Chief of this journal) and to the editorial staff for their help and support in preparing this special issue. Finally, we wish to thank the authors for their high-level contributions and all the reviewers for devoting their valuable time and expertise to review the submitted manuscripts.



Fabrizio Berizzi was born in Piombino (Italy) on 25th of November 1965. He received the electronic engineering and Ph.D. degrees from the University of Pisa (Italy) in 1990 and 1994, respectively. He became a University researcher in 1992 and he was promoted to an Associate Professor in October 2000. Since

December 2009, he has been a full Professor at the University of Pisa. He is IEEE Senior Member since 2006. He has been the

Italian Academic national member of the NATO SET panel member since 30th of April 2014. He is Cochair of the NATO SET 196 task group and member of the NATO SET 195, 207, 227, 215. He is the Local Host organizer of the NATO SET Fall 2015 Panel Business meeting that will be held in Pisa on October 2015. He is the Italian academic member in the EDA Captech Radio Frequency System Technology (RFST). Since September 2014, he has been the Italian academic member of the Scalable Multifunction Radio Frequency (SMRF), Umbrella Management Group (UMG), and Technical Support Group in EDA. He is the Head of the Radar Laboratory of the University of Pisa (Italy) and the Deputy Director of the Radar and Surveillance System (RaSS) Laboratory of the CNIT (National Inter-University consortium for Telecommunication) in Italy. His main research interests are in the field of radar system design and signal processing, and specifically in radar imaging (SAR/ISAR/InSAR, 3D imaging), polarimetric, passive, Over the Horizon, multichannel/multistatic, and cognitive radars.



Paolo Colantonio was born in Roma on March 1969 and he received the Laurea degree in Electronic Engineering and Ph.D. degrees in Microelectronics and Telecommunications from the University of Roma “Tor Vergata” in 1994 and 2000, respectively. In 1999, he became a research assistant at the Electronic Engineering Department of the University of

Roma “Tor Vergata” and since 2002 he has been an Associate Professor of microwave electronics at the same University. His research activities are mainly focused on the field of microwave and millimeter-wave electronic, and in particular on design criteria for nonlinear microwave subsystems. Such activity resulted in the development of innovative design criteria for high efficient and high linear power amplifiers, oriented to the optimization of power performances making use of harmonic tuning classes of operation. Professor Colantonio is a member of the European Microwave Association (EuMA) and a member of the Associazione Gruppo Italiano di Elettronica (GE). He is Associate Editors of the *International Journal of Microwave Science and Technology* (since 2012), *The Scientific World Journal*, *Journal of Engineering* (since 2012), and *International Journal of Microwave and Wireless Technologies* (since 2015). He was the Technical Program Chair of the European Microwave Integrated Circuit Conference (EuMIC 2014). Professor Colantonio authored or coauthored more than 200 scientific papers, 70 of them published in international journals, four contributions to Wiley Encyclopedia of Electrical and Electronics Engineering,

one book on “High Efficiency RF and Microwave Solid State Power Amplifiers” (John Wiley & Sons), and two book chapters.



Luca Perregrini received the Laurea degree in Electronic Engineering and the Ph.D. degree in Electronics and Computer Science from the University of Pavia, Pavia, Italy, in 1989 and 1993, respectively. In 1992, he joined the Department of Electronics of the University of Pavia, Pavia, Italy, where he is now an Associate Professor of electro-

magnetics. He has been an Invited Professor at the Polytechnic University of Montreal, Montreal, QC, Canada, in 2001, 2002, 2005, and 2006. His main research interests are in numerical methods for the analysis and optimization of waveguide circuits, frequency-selective surfaces, reflect arrays, printed microwave circuits, substrate-integrated circuits, large reflector antennas, and industrial and medical applications of microwaves. Professor Perregrini is Senior Members

of the Institute of Electrical and Electronics Engineers (IEEE), the European Microwave Association (EuMA), the Società Italiana di Elettromagnetismo (SIEm), and has been a member of the General Assembly of the European Microwave Association for the period 2011–2013. He is Associate Editors of the *International Journal of Microwave and Wireless Technologies* (since 2011), the *IEEE Transactions on Microwave Theory and Techniques* (since 2013), and the *IET Electronic Letters* (since 2015). He has been an associate editor of the *IEEE Microwave and Wireless Components Letters* (2010–2013). He was the Technical Program Chair of the European Microwave Conference (EuMC 2014) and of the IEEE International Conference on Numerical and Electromagnetic Modeling and Optimization (NEMO 2014), and a member of the Technical Program Review Committee of the IEEE International Microwave Symposium (since 2003) and of the Technical Program Committee of the European Microwave Conference (since 2009). Professor Perregrini authored or coauthored more than 300 scientific papers, 75 of them published in international journals, and six book chapters. He was the coeditor of the book “Periodic Structures”, Research Signpost, 2006.