

Special Issue

Microwave Circuit Design and Propagation in Microwave Sensing Applications

Message from the Guest Editors

The development of microwave circuits is essential for advancing microwave sensing applications, including synthetic aperture radar (SAR) and wireless power transmission (WPT). High-performance circuit components such as antennas, filters, power dividers, and waveguide structures play a crucial role in enhancing sensing accuracy, signal integrity, and energy efficiency in these systems. Additionally, understanding wave propagation characteristics is vital for optimizing sensing performance across diverse environments. In this Special Issue of *Sensors*, we explore the latest innovations in microwave circuit design tailored for sensing applications. Topics of interest include advanced antenna designs for high-resolution SAR, filters for precision signal processing, or any innovative microwave circuits such as novel waveguide structures for multi-sensor systems. Research on wave propagation modeling and experimental validation is also encouraged to be shared. We hope the selected articles provide insights into the integration of circuit innovations with next-generation microwave sensing solutions.

Guest Editors

Prof. Dr. Tae-Hak Lee

Department of Electrical and Electronic Engineering, Yuhan University,
Bucheon 14780, Republic of Korea

Prof. Dr. Seongmin Pyo

Department of Information and Communication Engineering, Hanbat
National University, Daejeon 34158, Republic of Korea

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Sensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

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