Special Issue

High-Frequency Spectroscopy and Imaging: Techniques and Applications

Message from the Guest Editors

This Special Issue of *Sensors* highlights advancements in high-frequency techniques for measuring dielectric and magnetic properties and imaging structures across fields like medicine, cultural heritage, and material science. We invite contributions on novel experimental configurations and image processing techniques. Highfrequency electromagnetic waves, from microwave to optical wavelengths, enable non-invasive surface or sub-surface measurements, offering insights into material composition and inclusions. Microwaves are widely used in medicine and cultural heritage for measurements and treatments, while near-field measurements using atomic force microscopy aid material science investigations. We welcome submissions on the use of vector network analyzers (VNAs), time-domain techniques, and the processing of scattering parameters for spectroscopy, imaging, and local property determination. Contributions on innovative spectroscopy and imaging concepts using high-frequency measurements and reconstruction algorithms are particularly encouraged.

Guest Editors

Dr. Romolo Marcelli

CNR-IMM Roma, Via del Fosso del Cavaliere 100, 00133 Roma, Italy

Dr. Emanuela Proietti

CNR-IMM Roma, Via del Fosso del Cavaliere 100, 00133 Roma, Italy

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Sensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
sensors@mdpi.com

mdpi.com/journal/ sensors





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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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