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Electromagnetic Sensors for Biomedical Applications

Guest Editors:

Dr. Ruben Specogna

Polytechnic Department of
Engineering and Architecture,
Università degli Studi di Udine,
33100 Udine, Italy

Prof. Dr. Antonio Affanni

Polytechnic Department of
Engineering and Architecture,
University of Udine, Via Delle
Scienze 206, 33100 Udine, Italy

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submissions:

closed (31 July 2022)

Message from the Guest Editors

Dear Colleagues,

Electromagnetic sensors for biomedical applications are receiving increasing attention both in scientific and industrial communities. Substituting existing bulky and expensive instrumentation with smart sensors having a reduced size and lower cost such as micro total analysis systems (μ TAS), lab-on-a-chip, or wearable devices is a challenge from the perspective of telemedicine, point of care analyses, and personalized pharmacological treatment. Topics are including, but are not limited, to:

Modeling, characterization and fabrication of electromagnetic biosensors;

Electrical impedance spectroscopy (EIT);

Electrical impedance tomography (MIT);

Magnetic induction tomography;

μ TAS;

Lab-on-a-chip devices;

Electromagnetic sensors for blood analysis;

Sensors and methods for cells and living tissue electromagnetic
characterization;

Electroencephalography (EEG) and magnetoencephalography (MEG);

Hardware and biosignal processing for electrocardiography (ECG);

Sensors and biosignal processing for stress detection;

Wearable and flexible sensors;

Sensors for well-being in ageing populations (ambient assisted living)

Dr. Ruben Specogna

Dr. Antonio Affanni





sensors



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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

Message from the Editor-in-Chief

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Contact Us

Sensors Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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