Special Issue

Advanced Ultrasound Sensing Technologies for Biomedical Applications

Message from the Guest Editor

Various technologies have propelled the expansion of ultrasound into new areas. These technologies include machine learning, integration with other imaging modalities, improved transducer technology, image and data processing algorithms, and physical modeling of ultrasound signals. This Special Issue addresses advances in medical ultrasound that improve upon medical diagnosis. Each article will aim to describe the relationship of each advancement to ultrasound imaging and show how the method can be applied to a specific problem in diagnostic medicine. The value of ultrasound systems, as sensors, depends on the ability to both acquire clean signals and to interpret those signals meaningfully. Articles in this Special Issue may describe the following:

- Methods such as beam forming, new transducer materials, and transducer configurations to enhance signal quality.
- Methods that match data acquisition methods with data analysis and interpretation;
- Application of newly available data analysis and interpretation methods, including artificial intelligence, to elucidate the disease state of a patient.

Guest Editor

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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.

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