Special Issue

Ultrasonic Sensors and Ultrasonic Signal Processing

Message from the Guest Editor

The significant advancements in materials science and micro/nanotechnology are driving the development of ultrasonic sensor technology towards high precision, and strong environmental adaptability. With the continuous integration with advanced technologies such as artificial intelligence and edge computing, the application scope of ultrasonic technology has expanded from traditional fields. For this Special Issue of Sensors, we invite scholars from the fields of chemistry, materials, and mechanical engineering to delve into the complex challenges and technological breakthroughs encountered in the development and iteration of ultrasonic sensing devices. We also look forward to high-quality research papers on ultrasonic signal acquisition and signal processing. Submissions are encouraged which address topics that include, but are not limited to, the following:

- Signal processing and data fusion in sensor systems;
- Advanced materials for sensing;
- Sensor technology and applications in agriculture, industry, and the environment;
- Physical sensors;
- Smart/intelligent sensors;
- MEMS/NEMS;
- Sensor networks;
- Micro- and nano sensors.

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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