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Advances of Ultrasonic Transducers: Imaging, Therapeutics and Sensing

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Message from the Guest Editor

Ultrasound has been applied in many fields due to its unique properties. The ultrasonic transducer plays an important role among all these applications and varies according to different purposes. For example, in ultrasonic imaging, the bandwidth is an important parameter as it relates to axial resolution. Simulation and fabrication processes can support the different needs of the ultrasonic transducer, according to specific applications.

This Special Issue aims to provide a forum across medical and industrial fields to advance the development of passive and active materials, single-element transducers, one or more dimension arrays, as well as simulation and fabrication processes. This Special Issue also aims to provide the solutions for imaging, therapeutics, and sensing in light of the ultrasonic transducer. Potential topics include, but are not limited to, the following:

- Innovative passive and active materials for transducers;
- Simulation for acoustic field and transducers;
- Advanced transducer fabrication;
- Single-element ultrasonic transducers;
- 1D and more dimension arrays;
- The applications of the transducers in imaging, therapeutics and sensing.



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Special Issue



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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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