Special Issue

Sensing Technology for Image-Guided Therapy and Medical Robotics

Message from the Guest Editor

This Special Issue aims to spotlight advancements in sensing technology for image-guided therapies. These may include improved sensors for capturing virtual biological parameters, motion tracking, mechanical parameters measurement, innovating imaging modalities for enhanced tissue visualization, and sophisticated data analysis algorithms for extracting meaningful information from collected data. Potential topics include, but are not limited to, the following:

- Shape sensing;
- Vision-based tracking;
- Thermal mapping;
- Active tracking in real-time MRI;
- Active and passive optical tracking;
- Electromagnetic tracking;
- Force sensing in MRI environments;
- MRI-compatible encoders;
- Respiratory motion tracking;
- Tactile sensors:
- Multispectral imaging;
- EEG signal monitoring;
- FMRI:
- Medical data processing

Guest Editor

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Deadline for manuscript submissions

closed (20 May 2025)



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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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