

Special Issue

Sensor-Based Surgical and Medical Robotics: Challenges and Opportunities

Message from the Guest Editors

This Special Issue aims to discuss innovative sensor-based surgical and medical robots, as well as the intelligent algorithms that make full use of the sensors. Authors are invited to submit articles relating to "Sensor-Based Surgical Robotics: Challenges and Opportunities", with topics including, but not limited to, the following:

- AI-based medical/surgical algorithms;
- AI-enabled medical/surgical robotics;
- Clinical applications of sensors;
- Computer vision for medical/surgical robotics;
- Deep learning methods for medical/surgical robotics;
- Sensors for the automation of medical/surgical robotics;
- Hardware–software integration in medical/surgical robotics;
- Human–computer interaction methods in medical/surgical robotics;
- Planning and control algorithms in medical/surgical robotics;
- Preoperative medical image computing;
- Probability and uncertainty analysis in medical/surgical robotics;
- Perception techniques in medical/surgical robotics;
- Medical/surgical robots and systems;
- Navigation, localization, mapping, and SLAM in medical/surgical robotics;
- Neurorobotics;
- Safety in medical/surgical robotics;
- VR/AR techniques in medical/surgical robotics.

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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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