Special Issue

Sensor-Enabled Intelligent Surgery: Intelligent Sensing and Imaging, Surgical Robotics, and Smart Image-Guided Technology

Message from the Guest Editors

This Special Issue focuses on sensor-enabled intelligent surgery. The recent advancement of artificial intelligence as well as smart sensing and imaging techniques is revolutionizing every area of surgery. As these technologies continue to evolve, they offer unprecedented opportunities to surgery, generating potential benefits, including reduced incision size and scarring, minimized soft tissue damage, and improved safety. In response to the continued and growing demand, we welcome contributions that explore the integration of intelligent sensing and imaging techniques, surgical robotics, and smart image-guided technology to develop intelligent solutions for computer-assisted surgery. Submissions should focus on a range of applications, including, but not limited to, the following:

- Intelligent sensing and imaging techniques for surgical inventions;
- Intelligent medical image analysis techniques for the planning and execution of surgeries;
- Intelligent radiotherapy surgeries;
- Surgical robotics;
- Surgical data science;
- Intelligent integration of augmented reality or virtual reality for surgical interventions;
- Smart image-guided technology.

Guest Editors

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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.

Editor-in-Chief

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