

# Special Issue

## Sensor Technology in Robotic Surgery

### Message from the Guest Editor

Within the complex operation room (OR), smart sensor technology has the potential to reduce the mental load and improve patient outcomes. In future robotic systems in particular, smart sensors and actuators will play an important role in the development of automated surgery and tissue annotation, saving tissue instrument interaction, and monitoring staff dynamics for workflow optimization and body posture for improved ergonomics. Outside the OR, new sensor and actuation technology is needed for smart and affordable training hardware that allows for objective training assessment due to the use of performance metrics. Topics of interest include, but are not limited to:

- robotics
- sustainable
- SMART
- AI
- frugal
- automated
- interaction

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### Guest Editor

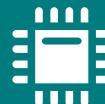
Dr. Tim Horeman

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### Deadline for manuscript submissions

closed (31 December 2025)



## Sensors

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*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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### Editor-in-Chief

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