



## Advances in Intelligent Minimally Invasive Surgical Robots

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### Message from the Guest Editors

Nowadays, minimally invasive procedures have become common practice in many surgical interventions, with huge benefits for patients and physicians. This advance goes hand-in-hand with the great technical advances of medical robots in recent years. Medical robots have allowed us to reduce the invasiveness of surgeries by providing more sophisticated tools to operate, with higher accuracy and range of motion.

This Special Issue aims to advance medical robot research, the automation of medical procedures, surgical scene understanding and decision making, surgical skill assessment, new medical devices, and related areas. Topics of interest include, but are not limited to, the following:

- Intelligent medical devices;
- Autonomous surgical tasks;
- Machine learning in minimally invasive procedures;
- Medical imaging for surgical scene understanding;
- The design of new advanced medical devices;
- Human–robot interfaces for medical procedures.





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## Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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