Special Issue

Advances in Robotic Microsurgery and Opto-Mechatronics

Message from the Guest Editor

Interest in robotic microsurgery for many surgical specialties has significantly increased. It requires a motion-stable patient, precise instrument movements and high-dexterity hands with minimal tremor, in order to carry out precise surgical tasks. Robotic and optomechatronic technologies are among the most promising trends for advances in robotic microsurgery. As a result, many applications and imaging guided devices are demonstrated by optomechatronic technologies including, but not limited to, tremor reduction, haptic feedback, micro-sensing and imaging. This Special Issue welcomes the latest achievements, challenges and prospects for medical devices, actuators, sensors, controls, optical diagnostics and treatments and applications in the area of robotic microsurgery and optomechatronics. The accepted contributions will include theoretical considerations, experimental verifications, and proof-of-concept applications. Open for Submissions: https://www.mdpi.com/journal/applsci/special_issues/rob otic_microsurgery_opto_mechatronics

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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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