Special Issue

Robotic Surgery and Surgical Navigation

Message from the Guest Editor

Robotic surgery and surgical navigation are extremely active areas of research, leading to a market that is expected to reach USD 9.47 billion by 2027. By providing more precise and accurate surgical instrument manipulation that is less prone to human errors, and a more efficient surgical performance, an ever-increasing number of surgical procedures are now being significantly improved by this advanced technology. Shorter surgical and recovery times, better surgical outcomes, less pain, lower costs, and more surgeries per day are just a few examples of the benefits of robotic surgery and surgical navigation, a fascinating field of research that integrates robotics, motion tracking, haptics, artificial intelligence, human–computer interaction, as well as virtual, augmented and mixed reality. This Special Issue is focused on new methods, algorithms, applications, and validations of the use of robotic surgery and surgical navigation systems.

Guest Editor

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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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