# Special Issue

## Actuators and Robots for Biomedical Applications

### Message from the Guest Editors

This Special Issue is intended to bring together a collection of scholarly research articles that deal with actuators and robots, emphasizing studies related to applications directed to human biology, with a focus on medicine. We invite papers that deal with research into the design, control, and biomedical application of modern robots and all types of actuators and actuation technologies, actuator control systems, and their biomedical applications. These robots could yield significant positive impacts, but they also carry the potential to cause negative impacts. Therefore, these impacts should be considered and discussed from the perspectives of not only technical solutions but also relevant safety issues, law, ethics, psychology, and philosophy. We especially welcome the submission of articles with topics such as object manipulation, miniaturization, navigation, and deep learning that arise in developing the makeup of modern robots as well as experimental components.

### Guest Editors

Prof. Dr. Wojciech Wolański

Dr. Damian Gąsiorek

Prof. Dr. Hartmut Witte

Dr. Mariusz Ptak

### Deadline for manuscript submissions

closed (30 September 2024)


**Actuators**

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**Impact Factor 2.3**
**CiteScore 4.3**

mdpi.com/si/133644

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# About the Journal

## Message from the Editorial Board

We are just entering the Next Wave of Technology (NWT) where actuators will play the same role as the computer chip did for computers/social media approximately four decades ago. Just in the U.S., production of $1 trillion year of electromechanical systems (vehicles, orthotics, manufacturing cells, freight trains, aircraft, etc.) will be impacted by the NWT, all driven by actuators. Five key trends can be found for the future perspectives: “Performance to Reliability”, “Hard to Soft”, “Macro to Nano”, “Homo to Hetero” and “Single to Multi functional”. We invite papers that primarily impact these economic sectors; those illustrating basic scientific principles are also welcome.

## Editors-in-Chief

Prof. Dr. Kenji Uchino
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