

## Special Issue

# Intelligent Humanoid Mobile Robots

### Message from the Guest Editors

In the last decades, a growing interest in humanoid robotics has been observed. Not surprisingly, a complete humanoid robot would be the holy grail of service robotics. A fully capable humanoid robot is presently almost as desirable as unreachable. Although impressive advances have been made, there is still a long way to go. There are still many problems that require robust solutions in order to develop such a robot:

- Human-robot interaction;
- Perception and sensor integration;
- Decision making and artificial intelligence;
- Locomotion (legged);
- Navigation (legged and wheeled);
- High- and low-level humanoid control;
- Humanoid applications of soft robotics;
- Low-cost humanoid manufacturing (including 3D printing).

The aim of this Special Issue is to propose potential solutions to these problems and therefore to contribute to the final purpose of building reliable and affordable humanoid robots.

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### Guest Editors

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### Deadline for manuscript submissions

closed (15 June 2022)



## Actuators

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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.

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