



Intelligent Systems, Robots and Devices for Healthcare and Rehabilitation

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Deadline for manuscript
submissions:

closed (30 June 2025)

Message from the Guest Editors

We invite researchers to submit original research papers and review articles that address novel methods for rehabilitation that promote advances to help patients and older adults with motor impairments, including brain-machine interfaces, prosthetics, rehabilitation robots, and control actuators. These new methods promote the advancement of intelligent healthcare and biomedical systems.

Potential topics include, but are not limited to, the following:

- Actuator control methods for interactions between human and devices.
- Novel rehabilitation/healthcare systems.
- Assistive technologies for patients with motor control impairments.
- Personalized rehabilitation interfaces for adapted physical activity.
- New techniques using deep learning and machine learning.
- Internet of Medical Things (IoMT).
- Biomimetic robots and home support robots.





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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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