ADVANCED ROBOTICS Call for Papers

Special Issue on

The Future of Assistive Robotics: Innovative Approaches and Insights into Enhancing Lives

Guest Editors:

Prof. Hiroaki Kawamoto (University of Tsukuba, Japan)

Prof. Jun Ueda (Georgia Institute of Technology, USA)

Prof. Olmo A Moreno (Istituto Italiano di Tecnologia, Italy)

Prof. Hideki Toda (University of Toyama, Japan)

Prof. Junji Ohyama (National Institute of Advanced Industrial Science and Technology, Japan)

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Assistive robotics has become one of the key innovations to ensure that everyone, including vulnerable groups like the elderly and people with disabilities, can live independently and enrich their lives without feeling left behind. These robots are expected to find wide applications across various fields, particularly in providing daily life support and medical rehabilitation for people with disabilities and those in need of nursing care, as well as offering labor support for caregivers. However, for assistive robots to be widely implemented throughout modern society and incorporated into our daily lives, many challenges must still be addressed. Nevertheless, significant advancements in AI, data science, VR, AR and soft materials have expanded the potential to create assistive robotics with unprecedented varieties and applications in the near future.

This special issue invites contributions that lead the development of assistive robotics and those from related fields that leverage these advanced technologies. It also welcomes contributions on the operational methods of assistive robotics, based on accumulated insights from verification experiments aimed at their societal implementation. We sincerely hope that by sharing innovative and practical research in this special issue with the community, we can collectively advance the field of assistive robots, creating a future where everyone's life experiences can be enhanced.

Topics relevant to the special issue include (but are not limited to):

- Exoskeletal robots / Wearable robots
- Robotic prosthetic limbs

- Soft assistive robotics
- Assistive mobility
- Assistive manipulators
- VR/AR integration
- Data analysis and its effective utilization
- Implementation of machine learning
- Clinical research / Translational research
- Operational method

Submission:
The full-length manuscript (either in PDF or Microsoft Word format) should be sent to the editorial office of Advanced Robotics, the Robotics, Society of Japan, through its website at: https://www.rsj.or.jp/pub/ar/submission.html. Manuscript templates and author instructions are available on the website.