



Hybrid Human-Machine Interfaces for Robot-Aided Rehabilitation and Assistance

Guest Editors:

Dr. Luca Tonin

Department of Information Engineering, University of Padova, 35131 Padova, Italy

Dr. Stefano Tortora

Department of Information Engineering, University of Padova, 35131 Padova, Italy

Deadline for manuscript submissions:

closed (20 May 2023)

Message from the Guest Editors

An extensive body of literature has demonstrated the benefits of using advanced robots for mediating rehabilitation therapy. Following recent attempts to overcome the limitations of Brain-machine interfaces (BMIs), hybrid human-machine interface (h-HMI) technologies have been proposed to provide a more robust input to robotic devices and to extend their use to a wider population of patients. This special issue call seeks original manuscripts describing new research in the field of h-HMIs for the control of rehabilitation or assistive devices. Papers should include at least one (neuro)physiological interface in their hybrid approach. All categories of medical devices—robotic (e.g., end-effector robots, exoskeletons) or non-robotic (e.g., electrical stimulations)—are welcome. Methodological papers, reviews, and theoretical contributions are also welcome.

Keywords: hybrid human-machine interface; brain-machine interface; electroencephalography; electromyography; electro-oculography; rehabilitation robotics; assistive robotics; neurofeedback; functional electrical stimulation; multimodal classification





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Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

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