Special Issue

Human-Robot Interaction Based on Rehabilitation Sensing and Signal Processing

Message from the Guest Editors

Over the last decade, there has been an increased amount of research into the use of bio-sensing and signal processing in rehabilitation due to the increasing number of elderly and disabled people with neural diseases, such as stroke, worldwide. The emerging signal sensing and processing technologies are crucial in the design and development of intelligent rehabilitation devices and interactive control systems. Rapid advances in soft actuators, wearable sensors and robots or exoskeletons, as well as human-in-the-loop control of such soft mechatronic systems, in the last several years, have demonstrated the growing significance and potential utility of this unique advantage in the rehabilitation practice. Potential topics of this special issue include, but are not limited to, the following:

- Soft sensing and wearable sensors, robotics and exoskeletons for rehabilitation;
- Signal processing, health monitoring and rehabilitation assessment;
- Compliant human–robot interaction and intelligent control;
- Applications and clinical practices of bio-mechatronic technologies.

Guest Editors

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Deadline for manuscript submissions

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Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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