

Special Issue

Advanced Sensors/Devices for Functional Electrical Stimulation Systems

Message from the Guest Editors

In 1961, Dr. Wladimir Theodore Liberson first defined the term “functional electrotherapy” to describe the application of electrical stimulation to skeletal muscle to activate the ankle dorsiflexors during hemiplegic gait. Since Liberson’s novel application, FES has been used for myriad patient populations and for various applications, ranging from gait and breathing assistance to bladder control. Likewise, FES devices have advanced with miniaturization, sophisticated control systems, multiple channels, implantable devices, electrode development, and the use of sensors with control systems to regulate stimulation delivery. For this Special Issue, we invite manuscripts that advance sensor and device development for FES systems and clinical studies demonstrating the efficacy of FES systems using wearable devices in clinical populations.

Keywords:

- functional electrical stimulation (FES)
- wearable sensors
- functional orthosis
- implantable devices
- electrode design
- brain-computer interface
- rehabilitation
- neuroplasticity

Guest Editors

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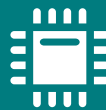
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Deadline for manuscript submissions

closed (31 December 2021)



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Message from the Editor-in-Chief

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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