







an Open Access Journal by MDPI

# Wearable and Stretchable Strain Sensors: Materials, Sensing Mechanisms, and Applications

Guest Editors:

### Dr. Noemí Aguiló-Aguayo

Research Institute of Textile Chemistry and Textile Physics, University of Innsbruck, Hoechsterstrasse 73, 6850 Dornbirn, Austria

#### Prof. Dr. Thomas Bechtold

Research Institute of Textile Chemistry and Textile Physics, University of Innsbruck, Hoechsterstrasse 73, 6850 Dornbirn, Austria

Deadline for manuscript submissions:

closed (31 October 2022)

# **Message from the Guest Editors**

Dear Colleagues,

Substantial research effort is focused on the development of reliable and durable strain sensors in wearable applications for technical as well as medical purposes. A sensor utilizes a certain physical or chemical sensing principle, which leads to an electrical signal that is measured. In the particular case of a wearable and flexible strain sensor, the formation, transmission and recording of the signal has to overcome certain limitations, such as long-term stability under corrosive environments and harsh mechanical conditions (e.g., tensile, fatigue and cycling tests). In this Special Issue, we are seeking contributions on new concepts for flexible strain sensors, sensing mechanisms, and the evaluation of their signal under applicatory conditions will be presented. New potential applications and assessments under simulated conditions will be welcome, such as case studies of flexible strain sensors in medicine and physiotherapy.

Dr. Noemí Aguiló-Aguayo Prof Dr Thomas Bechtold













an Open Access Journal by MDPI

## **Editor-in-Chief**

### Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

## **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.

#### **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases. **Journal Rank:** JCR - Q2 (*Instruments & Instrumentation*) / CiteScore - Q1

(Instrumentation)

#### **Contact Us**