







an Open Access Journal by MDPI

# **Sensors Based on Electrophysiology Measurements**

Guest Editor:

## Prof. Dr. Daniel Fologea

Department of Physics, Boise State University, Boise, ID, USA

Deadline for manuscript submissions:

closed (30 April 2021)

## Message from the Guest Editor

Dear Colleagues,

The past two decades have seen an exponential growth in investigations focused on developing analytical devices inspired from measurements typical to a traditional electrophysiology setups. The working principles rely on the ability to measure tiny changes in the ionic currents through a conducting pathway created in a supporting membrane upon specific or nonspecific interactions with analytes of interest. The large interest in this technology was fueled by the promise of fast and reliable DNA sequencing. However, this principle was extended for a large variety of sensing applications. The goal of this SI is to present recent advancements in this field that employ unregulated synthetic nanopores, wild-type or modified pore-forming proteins reconstituted into bilayer lipid membranes, and natural or artificial channels that include conductance regulation mechanisms upon exposure to physical or chemical stimuli. Original research articles and reviews that address the most recent advancements in approaches identical or similar sensing electrophysiology setup are welcome.

For more details, please clink: mdpi.com/si/37622

Prof. Dr. Daniel Fologea *Guest Editor* 













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 (*Chemistry, Analytical*) / CiteScore - Q1 (Instrumentation)

#### **Contact Us**