







an Open Access Journal by MDPI

# Microfluidic Based Organ-on-Chips and Biomedical Application

Guest Editor:

## Dr. Hongju Mao

State Key Laboratory of Transducer Technology, Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences, Shanghai 200050, China

Deadline for manuscript submissions:

closed (20 January 2023)

# **Message from the Guest Editor**

The main topic of this Special Issue is the study of microfluidic-based organ-on-chip technology in the biomedical field (e.g., drug screening, cancer therapy, pathology and disease model). This Special Issue aims to gather original articles and reviews showing research advances, fabrication, innovative applications, new challenges, and future perspectives of organ-on-chip technology in important areas such as biomedicine, precision medicine and disease research.

Organ-on-chip is a new frontier technology involving different disciplines. It refers to a bionic microphysiological system created on a bioengineered microfluidic device, which represents the functional unit at the organ level. It can generalize the physiologically related structure and function of organs, as well as the interactions between multiple organs in the body, thus providing an alternative model for predicting human responses to various drugs and environmental stimuli.













an Open Access Journal by MDPI

## **Editor-in-Chief**

#### Prof. Dr. Giovanna Marrazza

Department of Chemistry "Ugo Schiff", University of Florence, Via della Lastruccia 3, 50019 Sesto Fiorentino, Italy

# **Message from the Editor-in-Chief**

Biosensors is a leading journal, devoted to fast publication of the latest achievements, technological developments and scientific research in the exciting multidisciplinary area of biosensors. Both experimental and theoretical papers are published, including all aspects of biosensor design, technology, proof of concept and application. Special issues are devoted to specific technologies and applications, and a selection of the most outstanding papers each year is recognized. Pushing the boundaries of the discipline, we invite original papers, as well as timely reviews on cutting edge fields within the subject area.

### **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, Embase, CAPlus / SciFinder, Inspec, and other databases.

**Journal Rank:** JCR - Q1 (Chemistry, Analytical) / CiteScore - Q1 (Engineering (miscellaneous))

### **Contact Us**