

Special Issue

Field-Effect Sensors: From pH Sensing to Biosensing

Message from the Guest Editors

Mainly, three types of (bio-)chemical field-effect sensors are discussed in literature, i.e., ISFETs (ion-sensitive field-effect transistors), most of the time called nanowire devices in nanometer dimensions, LAPS (light-addressable potentiometric sensors), and capacitive EIS (electrolyte–insulator–semiconductor) sensors. This Special Issue is devoted to the different types of field-effect devices and to the scopes of their applications, compiling examples of state-of-the-art technologies. The topic may include but is not exclusively related to:

- Device concepts for field-effect sensors for (bio-)chemical sensing;
- Modelling and theory of field-effect sensors;
- Nanomaterial-modified field-effect (bio-)chemical sensors;
- Field-effect sensors for biomedical analysis, food control, and environmental monitoring;
- Field-effect sensors for recording of neuronal and cell-based signals;
- Chemical imaging with field-effect sensors

Guest Editors

Prof. Dr. Michael J. Schöning

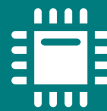
Director, Institute of Nano- and Biotechnologies, Aachen University of Applied Sciences, Heinrich-Mußmann-Str. 1, 52428 Jülich, Germany

Prof. Dr. Sven Ingebrandt

Director, Institute of Materials in Electrical Engineering 1, RWTH Aachen University, Sommerfeldstr. 24, 52074 Aachen, Germany

Deadline for manuscript submissions

closed (31 May 2022)



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 7.3
Indexed in PubMed



mdpi.com/si/81908

Sensors

MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
sensors@mdpi.com

[mdpi.com/journal/
sensors](https://mdpi.com/journal/sensors)





Sensors

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 7.3
Indexed in PubMed



[mdpi.com/journal/
sensors](https://mdpi.com/journal/sensors)



About the Journal

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.

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

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)