

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

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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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