Special Issue

Functionalization of FET-Nano/Micro-Sensors with Emerging Materials

Message from the Guest Editor

Screening and diagnosis by current techniques do not allow for the detection of different types of biomarkers at the same time, due to technological limitations and high costs. Array chip techniques for both proteomics and genomics often require several stages of amplification, sophisticated instrumentation, and highly skilled operators for reliable biomarking analysis. Thus, the development of novel technological designs that can provide the basis for more precise, sensitive, easy-to-use, and robust biomolecule detection has emerged as a clear "unmet need". This Special Issue aims to introduce emerging/functional materials for "nano/micro-biosensors" application. Topics include, but are not limited, to the following:

- Graphene/graphene-like material based FET-biosensors
- Nanonet-FET-biosensors
- Electrical testing of nano/micro-biosensors
- Contemporary materials to functionalize nano/micro-sensors
- Plasmonic nano-biosensors
- Liquid-gated FET nano-biosensors
- Dynamic electrical characterization of nano/micro-biosensors
- Electronic and mechanical packaging of nano/microsensors

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Deadline for manuscript submissions

closed (31 March 2021)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/30331

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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