

## Special Issue

# Embedded FET for Application as a Biosensor

### Message from the Guest Editors

This Special Issue seeks to showcase research papers, short communications, and review articles that focus on advancing FET-based platforms, including its state-of-the-art and novel trends toward novel and innovative bioanalytical and molecular detection approaches. We welcome manuscripts that address all aspects of FET engineering and integration for biosensor applications, including but not limited to the following topics:

- Low-dimensional materials for FET biosensors, e.g., nanowires and 2D-material-based FETs;
- Thin-film transistor (TFT)-based FET biosensors;
- Metal-organic framework (MOF)-based FET biosensors;
- Organic FET biosensors, e.g., paper- and polymer-based FETs;
- Nanoparticle-integrated FET biosensors;
- FET-based lab-on-a-chip and micro total analysis system ( $\mu$ TAS);
- Wearable and implantable FET sensors;
- Interfacial/surface engineering of FET biosensors;
- Light-addressable potentiometric sensor (LAPS);
- High-electron-mobility transistor (HEMT) biosensors;
- Artificial intelligence (AI) and machine learning (ML) in FET biosensors.

---

### Guest Editors

Dr. Agnes Purwidyantri

School of Chemistry and Chemical Engineering, Queen's University Belfast, Belfast BT7 1NN, Northern Ireland, UK

Dr. Inmaculada Ortiz-Gómez

Department of Analytical Chemistry, Faculty of Sciences, University of Granada, Granada, Spain

---

### Deadline for manuscript submissions

closed (16 August 2024)



## Electronics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.6  
CiteScore 6.1



[mdpi.com/si/130498](https://mdpi.com/si/130498)

*Electronics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[electronics@mdpi.com](mailto:electronics@mdpi.com)

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





# Electronics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.6  
CiteScore 6.1



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



## About the Journal

### Message from the Editor-in-Chief

*Electronics* is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guestedited by leading experts in selected topics of interest.

---

### Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Ei Compendex and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) /  
CiteScore - Q1 (Electrical and Electronic Engineering)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.4 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).