

Special Issue

Advanced Electrochemical Sensors and Biosensors: Design and Applications

Message from the Guest Editors

The intention of this Special Issue is to focus on the latest advances in electrochemical (bio)sensing, considering the several aspects characterizing the attainment of these devices. A broad spectrum of topics can be covered in this Special Issue, and some interesting suggestions are as follows:

- New potential nanomaterial synthesis methods.
- New strategies of surface (bio)functionalization.
- Development of new electrochemical transduction/amplification signal techniques.
- Employment of computational studies for sensing mechanism prediction/explanation.
- Artificial intelligence (AI) employment in data processing/analysis.
- 3D-printing techniques for (bio)sensors manufacturing.
- Miniaturization and incorporation of electrochemical (bio)sensors into wearable electronics, lab-on-a-chip systems, and portable devices.
- Application to environmental monitoring, food quality control, medical diagnostics/monitoring, and so on.

We sincerely hope this Special Issue will be able to give researchers a valid contribution in sharing their most recent discoveries and advancements in the fields of electrochemical (bio)sensors.

Guest Editors

Dr. Rosaceleste Zumpano

Prof. Dr. Franco Mazzei

Dr. Giulia Simonetti

Deadline for manuscript submissions

closed (30 April 2026)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/205856

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
appls@mdpi.com

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





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



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



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, 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), Ei Compendex, Inspec, Embase, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)