Special Issue

Electrochemical DNA- and Aptasensors for the Detection of Low-Molecular Compounds (2nd Edition)

Message from the Guest Editor

Electrochemical DNA- and aptasensors have gained significant interest due to their potential for rapid, reliable detection in medical, food, and environmental applications within point-of-care scenarios. Developing these sensors involves advanced biorecognition elements and innovative signal amplification methods, leveraging supramolecular chemistry, nanotechnology, and self-assembly. Topics for review and original research in this Special Issue include:

- Novel modifiers and protocols for DNA- and aptasensor assembly.
- Enhanced electrochemical signals via new mediator systems and robust biosensor designs.
- Biochemical signal amplification systems.
- Multiplex electrochemical DNA- and aptasensor analysis.
- Miniaturization, automation, electrochemical microfluidics, and origami biosensors.
- Sampling methods, sample treatment, and validation for real-world applications.
- Emerging biorecognition elements (chimeric DNA, protein nucleic acids, hybrid immuno/DNA sensors).

For the previous edition, visit:
https://www.mdpi.com/journal/sensors/special_issues/NUN8U0ET4S

Guest Editor

Prof. Dr. Tibor Hianik

Faculty of Mathematics, Physics and Informatics, Comenius University, Mlynská dolina F1, 842 48 Bratislava, Slovakia

Deadline for manuscript submissions

25 April 2026

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/247523

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

mdpi.com/journal/sensors

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

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 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)