



Electrochemical DNA- and Aptasensors for the Detection of Low-Molecular Compounds

Guest Editors:

Prof. Dr. Gennady Evtugyn

Analytical Chemistry
Department, Kazan Federal
University, Kazan 420008, Russian

Prof. Dr. Tibor Hianik

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

Deadline for manuscript
submissions:

31 August 2024

Message from the Guest Editors

Electrochemical DNA and aptasensors have gained popularity due to their promising applications in point-of-care detection in medicine, food industry, and environmental monitoring. These sensors require new materials from supramolecular chemistry, nanotechnology, and self-assembly for biorecognition elements and signal amplification. This Special Issue welcomes reviews and research articles on topics including:

- DNA and aptasensor design with new modifiers and assembly protocols
- New mediator systems for enhanced electrochemical signals and robust biosensors
- Biochemical systems for signal amplification and E-sensor design
- Multiplex analysis using electrochemical DNA and aptasensors
- Miniaturization and automation prospects for low-molecular-weight analyte detection
- Sampling, sample treatment, and validation of electrochemical DNA and aptasensors for real sample analysis
- Future prospects in biorecognition element design





sensors



an Open Access Journal by MDPI

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

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.

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 & Instrumentation*) / CiteScore - Q1 (*Instrumentation*)

Contact Us

Sensors Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sensors
sensors@mdpi.com
[X@Sensors_MDPI](#)