



an Open Access Journal by MDPI

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-ofcare 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 Esensor design
- Multiplex analysis using electrochemical DNA and aptasensors
- Miniaturization and automation prospects for lowmolecular-weight analyte detection
- Sampling, sample treatment, and validation of electrochemical DNA and aptasensors for real sample analysis
- Future prospects in biorecognition element design









an Open Access Journal by MDPI

Editor-in-Chief

Message from the 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

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