Special Issue

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

Message from the Guest Editor

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

Guest Editor

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Deadline for manuscript submissions

closed (28 February 2025)

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/169607

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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.

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