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# Label and Label-Free Aptasensors

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### Message from the Guest Editors

Dear Colleagues,

Depending on the mechanism of sensing, aptamer-based sensors are classified under label and label-free formats. The labels can either be radioactive, fluorescent-active, electro-active molecules, metallic complex, nanoparticles, enzyme, or antibodies with detectable probes. In the case of label-free aptasensors, the aptamer is directly incorporated onto the transducer surface, which generates the analytical signal against its physiochemical interaction with the target analyte. Thus, the generated signal is measured in correlation to the analyte's concentrations, whereas in the labeled apatsensing formats, the signals measured are usually generated from notable changes in the labelled/tagged moieties. Aptamer-based sensors have played an important role in various fields, such as environmental, agriculture, biomedical, and forensic applications. The main topics of this issue is related but not limited to.

- biosensors
- aptamers
- labelled aptamers
- label-free aptamers
- electrochemical sensors
- optical sensors
- colorimetric sensors
- aptamer-based theranostics
- chemiluminescence sensors

**Special**sue





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### Message from the Editor-in-Chief

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