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Biosensors and Bioelectronics Based on Molecular Logic Computing

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Deadline for manuscript submissions:

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Message from the Guest Editor

Dear Colleagues,

As a promising substitute for semiconductor computers, capable of performing Boolean logic at a molecular level, molecular logic computing has made prosperous developments; DNAs, enzymes, proteins, and other elements can be used as building blocks, and optical, electrochemical signals are taken as binary outputs. In recent decades, apart from traditional computing functions, great efforts have been made to explore those areas where “silicon logic circuits cannot go”, such as smart biosensing, disease diagnostics, pharmaceutical analysis, food quality control, and accurate biotherapy.

This Special Issue aims to highlight recent advances in molecular computing and logic-programmed smart biosensing applications. We welcome both original works and reviews that are related to biomolecular computing and logical/point-of-care (POC) sensors for detecting various targets (tumor biomarkers, nucleic acids, proteins, drugs, antibiotics, etc.). We hope that this Special Issue will not only inform experts and newcomers in this research area, but that it will also be a reference for future advancements of this field.



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Special Issue



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Message from the Editor-in-Chief

Biosensors is a leading journal, devoted to fast publication of the latest achievements, technological developments and scientific research in the exciting multidisciplinary area of biosensors. Both experimental and theoretical papers are published, including all aspects of biosensor design, technology, proof of concept and application. Special issues are devoted to specific technologies and applications, and a selection of the most outstanding papers each year is recognized. Pushing the boundaries of the discipline, we invite original papers, as well as timely reviews on cutting edge fields within the subject area.

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