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New Advances in Electrochemical Biosensors

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

New advances in nanotechnology and biomolecular engineering have paved the way for the construction of novel and efficient biosensing systems in some domains. The most widely used detection platforms are based on electrochemical transducers, mainly due to their sensitivity, low cost, and easy miniaturization. However, challenges such as the lowering of detection limit and the direct analysis within the sample matrix or long-term in vivo use still need to be solved before feasible commercial products can be designed. Interdisciplinary efforts in the synthesis of new functional nanomaterials combined with new advances in protein engineering and nucleic acid aptamers selection can support the current demands.

This Special Issue welcomes original research papers and reviews addressing the current progress in the development of electrochemical biosensors, from synthesis of new advanced nanomaterials for biosensing and engineering of their functional properties, to their integration with biological elements, designing of biosensing devices and evaluation of their performance.

Prof. Dr. Luisa Pilan *Guest Editor*









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Message from the Editor-in-Chief

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