Special Issue

Biosensors Applied in Neuroscience

Message from the Guest Editor

The current popularity of organic transistors has occurred due to the recent success of organic semiconductors with more than 5 cm2/Vs carrier mobility. Future biosensors must match the non-toxicity of compounds with semiconductor technology and accurate receptor affinity. Hence, integration solutions may come from the immobilization of the enzyme or antibody layers in contact with the organic films included in organic thin-film transistors. For immuno-transistors, protein G functionalization facilitates the antibody orientation for maximal ligand affinity. The latest advances in electronic biosensors indicate an increased interest in compatible technology between thin-film transistors and bio-receptors for smart co-integration. Therefore, this Special Issue will focus on, but is not limited to: green synthesis routes for organic bio-transistors; bio-receptor technology; enzyme co-integration with organic thin-film transistors; new enzymes; DNA fragments and antibody receptors to enlarge the analyte pallet; immunosensor affording with organic films; nano-material linkers; and label-free detection.

Guest Editor

Prof. Dr. Cristian Ravariu
Department of Electronic Devices, Circuits and Architectures, Politehnica University of Bucharest, 060042 Bucharest, Romania

Deadline for manuscript submissions

closed (31 December 2024)

Biosensors

an Open Access Journal by MDPI

Impact Factor 5.6
CiteScore 9.8
Indexed in PubMed

mdpi.com/si/161683

Biosensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biosensors@mdpi.com

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About the Journal

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.

Editor-in-Chief

Prof. Dr. Giovanna Marrazza
Department of Chemistry "Ugo Schiff", University of Florence, Via della Lastruccia 3, 50019 Sesto Fiorentino, Italy

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