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Surface Modification of Functional Nanomaterials for Biosensing Purposes

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Message from the Guest Editors

The design and development of electrochemical or optoelectronic biosensors is a highly challenging venture. Some of the most critical issues concern the utilization of highly complex composite electrodes, characterized by ambiguous charge transfer kinetics. Next, the anchoring of biological molecules used in the majority of current biosensors, onto either metallic or carbonaceous surfaces, is a particularly demanding aspect of surface synthesis. This procedure cannot be approached by chance, and requires a good understanding as the immobilized biomolecule on the surface of electrode must persistently retain its biological activity in relation to the recognized analyte. High sensitivity, selectivity, and reproducibility are the most demanded features, often offering not only qualitative but also quantitative analysis of target compounds.

It is our pleasure to invite you to submit full papers, communications, and reviews focused on functionalization routes, optical and electrochemical methods, functional materials, structure-related properties, and applications for biosensing are all welcome.

Assoc. Prof. Dr. Jacek Ryl
Assoc. Prof. Dr. Robert Bogdanowicz
Guest Editors



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Special Issue



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Message from the Editor-in-Chief

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