Special Issue

Nano-Carbons in Biosensors

Message from the Guest Editor

Carbon-based nanomaterials, including graphene, carbon nanotubes (CNTs), carbon dots, and metal nanomaterials, have revolutionized the field of biosensing due to their unique physicochemical and electrochemical properties, such as high surface area, excellent electrical conductivity, biocompatibility, and chemistry of surface functional groups. These nanocarbons play a pivotal role in enhancing the sensitivity, selectivity, and response time of biosensors, enabling rapid and accurate detection of a wide range of biological and chemical analytes and offer the benefit of second modification such as nanozymes, aptamer. enzyme, and polymers. This Special Issue aims to present recent advances in nano-carbon-based biosensors, with a focus on their design, fabrication, and applications. We invite original research articles, reviews, and short communications that explore fundamental studies, innovative materials engineering, integration with wearable and flexible platforms, and real-world applications in clinical diagnostics, environmental monitoring, food safety, and more.

Guest Editor

Dr. An-Yi Chang

Aiiso Yufeng Li Family Department of Chemical and Nano Engineering, University of California San Diego, La Jolla, CA 92093, USA

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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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