Special Issue

Bioprocess Monitoring, Measurement, and Control by Biosensor-Based Technologies

Message from the Guest Editors

Online analysis of bioprocesses is of increasing interest because it helps to reduce the time delay for offline sample preparation and following analyses via conventional methods. Continuous monitoring of reaction components is a prerequisite for the direct control of biotransformations. This Special Issue encompasses a broad range of optical spectral sensors including UV/NIR/MIR spectroscopy, Raman spectroscopy, fluorescence spectroscopy, optical waveguide sensing and surface plasmon resonance, and their at-line and online applications. Novel optics or fiber/waveguide probes with improved collection efficiency are welcome. The application scenarios include but are not limited to the production of pharmaceuticals, chemicals, fuels, and food. The main topic is related but not limited to:

- online monitoring
- bioprocessing
- ultraviolet spectroscopy
- near-infrared spectroscopy
- Mid-IR infrared spectroscopy
- raman spectroscopy
- surface plasmon resonance
- optical waveguide resonances
- data analysis
- chemometrics
- machine learning

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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.

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