

Special Issue

Intelligent Approaches in Biosensing

Message from the Guest Editors

Currently, biosensors are becoming an increasingly multidisciplinary field of science. Modern biosensor systems should provide high sensitivity and selectivity, a high detection rate, small sample volume, compact size, and low cost. Increasing the efficiency of their performance requires cooperative solutions for specialists in the field of physics, chemistry, engineering, information technology, medicine, etc. Information technologies such as machine learning, intelligent data processing, embedded and mobile computing can significantly improve the quality of identification, characterization, processing of samples, as well as to carry out an intelligent analysis of the results. Automation of analysis based on integrated microfluidic biosensor systems can provide extremely high-quality screening in healthcare, ecology, chemical and food industries.

Guest Editors

Dr. Tatiana M. Zimina

Department of Micro- and Nanoelectronics, Saint Petersburg Electrotechnical University "LETI", 197022 Saint Petersburg, Russia

Dr. Dmitrii Kaplun

Department of Automation and Control Processes, Saint Petersburg Electrotechnical University "LETI", 197022 Saint Petersburg, Russia

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

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