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Advances in Biosensors Based on Reflectometry

Guest Editors:

Dr. Günther Proll

Institute of Physical and Theoretical Chemistry, Eberhard Karls Universität, Auf der Morgenstelle 18, 72076 Tübingen, Germany

Dr. Peter Fechner

Institute of Physical and Theoretical Chemistry, Eberhard Karls Universität, Auf der Morgenstelle 18, 72076 Tübingen, Germany

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Message from the Guest Editors

Dear Colleagues,

In the last 10-15 years, reflectometric measurement methods in particular, which are usually derived from ellipsometry, have gained in importance over refractometric transduction principles, although the boundaries between these areas sometimes seem to become blurred. Basically, however, reflectometry in biosensing is characterized by the typical feature that multiple reflections of electromagnetic radiation on at least one thin layer are used for signal generation. The driving force behind the many current developments is, among other things, applications that benefit, for example, from the ease of parallelization, the connection to common sample handling formats or, finally, the robustness towards temperature fluctuations in real-world operation. Against this background, this special issue of "Biosensors" will highlight the latest developments in reflectometric transduction and report on current applications such as the screening of biologics, biomolecular interaction analysis of receptors and ligands relevant to molecular medicine, as well as cell-based assays and diagnostics.







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Editor-in-Chief

Prof. Dr. Giovanna Marrazza

Department of Chemistry "Ugo Schiff", University of Florence, Via della Lastruccia 3, 50019 Sesto Fiorentino, Italy

Message from the Editor-in-Chief

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