

Special Issue

Genetically Encoded Biosensors: Advances in Studying Normal and Pathological Processes in Living Cells

Message from the Guest Editor

Currently, significant progress is being made in the creation of sensory systems that allow studying the processes occurring in eukaryotic and prokaryotic cells. Genetically encoded biosensors are used to study normal and pathological processes. Their use allows us to visualize and quantify processes that were previously hidden and poorly studied. The most important advantage of genetically encoded biosensors is the ability to study processes and measure the concentrations of various substances on living cells and organisms in real time. This allows us to conduct experiments in physiological conditions and test various effects on the studied biological systems. This Special issue of *Sensors* is devoted to progress in the development of new genetically encoded biosensors, as well as their application for the study of normal and pathological processes in vitro and in vivo.

- Synthetic biology
- Biosensor engineering and design
- Cell pathology
- Redox reactions
- Cell compartments
- pH measurement
- Cell models of disease
- Biosensors in vivo
- Visualization technology
- Data and image analysis

Guest Editor

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Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. *Sensors* organizes Special Issues devoted to specific sensing areas and applications each year.

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