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Biomimetic Strategies and Artificial Optical Biosensors

Guest Editors:

Dr. Donato Calabria

Department of Chemistry
"Giacomo Ciamician", University
of Bologna, Via Piero Gobetti 85,
40129 Bologna, Italy

Dr. Mara Mirasoli

Department of Chemistry
"Giacomo Ciamician", University
of Bologna, Via Piero Gobetti 85,
40129 Bologna, Italy

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Message from the Guest Editors

Dear Colleagues,

Receptors or enzymes generated by natural evolution in living organisms show a surprising ability to specifically recognize target molecules. When used as biosensor recognition elements, these biomolecules provide very high selectivity. However, they suffer from instability and low durability. The design of alternative robust artificial receptors and antibodies circumvents these limits.

The topic of this Special Issue is related to biomimetic detection exploiting alternatives to natural receptors, such as antibodies, enzymes, etc., separated into the following categories:

- (1) Artificial receptors as molecularly imprinted polymers and aptamers etc.
- (2) Nucleic acids and nanozymes, nanoparticles or soft (sol-gel, hydrogel, etc.) and self-assembled materials used as artificial enzymes or extracellular matrix.



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Special Issue



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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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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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Biosensors Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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