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Biomimetic Strategies and Artificial Optical Biosensors

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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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Message from the Editor-in-Chief

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