Institut Européen de Chimie et Biologie

I E C B

Multiplexing light outputs/inputs in nucleic acid sensors AND actuators

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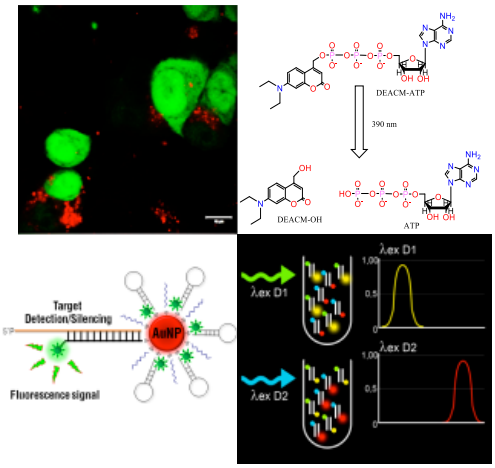
The challenge of monitoring and controlling multiple events occurring simultaneously asks for the use of multiple fluorophores that can be individually addressed for probing or triggering a particular event. We have been using this multiplexing approach on nucleic acids sensors and actuators.
We will show the experimental requirements for the development of multiple channel detection and actuaction and case applications to i) gold-nanobeacons for in vivo reporting, ii) photorelease of nucleotides for in vitro initiation and iii)FRET sensors for in vitro reporting.



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