



Photonics in Single Molecule Detection and Analysis Techniques

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

This Special Issue of Photonics, devoted to techniques allowing the observation and analysis of molecular systems on a few-single molecule scale, does not have the ambition to constitute an exhaustive panorama of the state of art in this fascinating branch of physics; it is rather intended to provide an interdisciplinary forum for different professionals involved in the research on the topic.

High quality original research articles are welcomed in the following and other related topics: single-molecule fluorescence resonance energy transfer and fluorescence fluctuation spectroscopy experiments; super-resolution fluorescence microscopy studies; manipulation and imaging techniques exploiting the ability of inducing or at least monitoring through photonics the response of single molecules to nano-mechanical stress, such as molecular tweezers and atomic force microscopy. Well documented reviews on either single-molecule techniques or the performances of detectors and light sources in single-molecule applications are also solicited.

