



Conference Proceeding

# Single Molecule Investigations on DNA Origami Platform

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## Abstract

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DNA nanotechnology provides a robust method for building nanoscale architectures. The programmable surfaces of 2D DNA origami provide an idea functional template to control the spatial orientation of individual molecules in accurate position. Such programmable DNA surfaces can be utilized for investigating biological molecules at single molecule level. DNA -based platform strategies was successfully applied to single molecule manipulation, activities of enzymes, surface polymerization and molecular recognition. This approach will benefit not only for DNA nanotechnology, but also for single molecule detection.

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