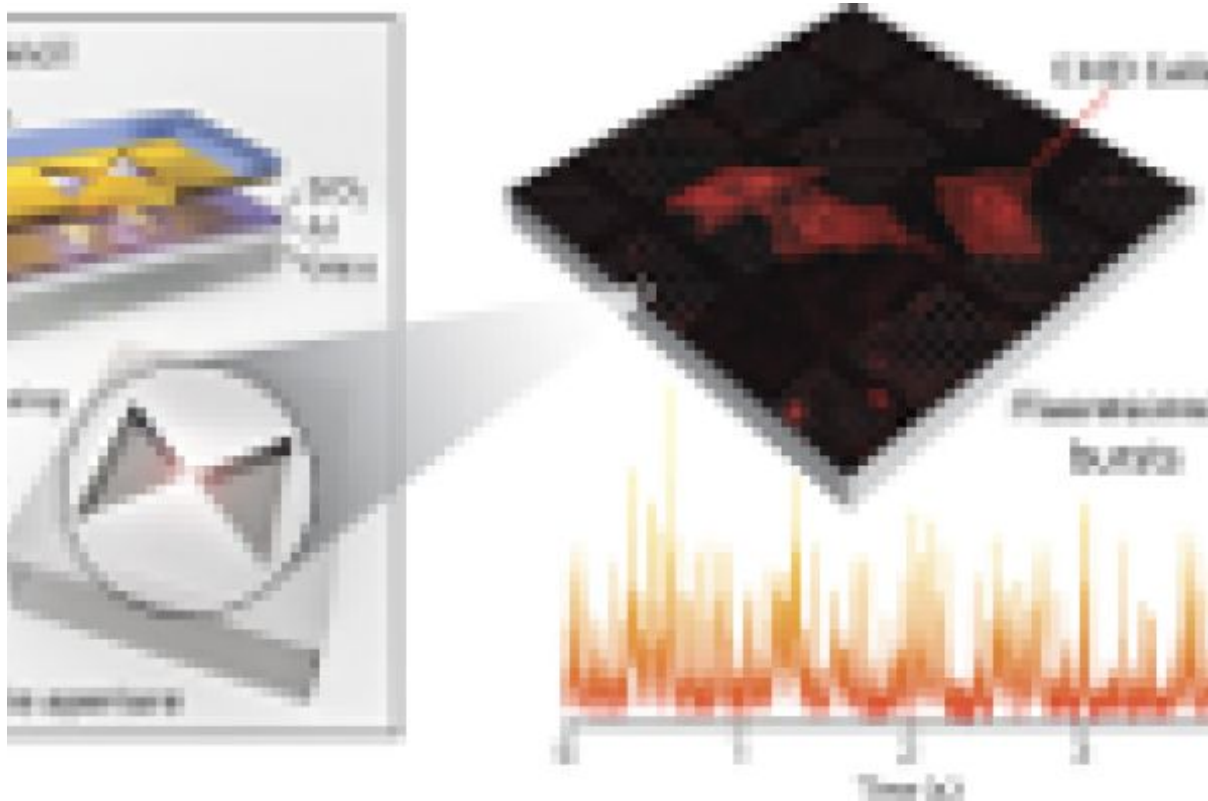




NanoVista Project In Brief

CORDIS publishes a summary of this successful ICFO led European Project

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The European Commission has a very clear strategy for the effective dissemination and exploitation of EU-funded research results in which CORDIS (Community Research and Development Information Service) plays a primary role. The NANO-VISTA project, coordinated by ICREA Professor at ICFO Dr. Maria Garcia-Parajo, was recently highlighted by the European Commission's Project Officer and selected by the CORDIS Editorial Team to be written about in a "Results in Brief" article, given the exciting results and promising aspects of the project.

NANO-VISTA (Advanced photonic antenna tools for biosensing and cellular nanoimaging) is a FP7- ICT project aimed at exploiting novel concepts of photonic antennas to develop a new generation of bionanophotonic tools for ultrasensitive detection, nanoimaging and nanospectroscopy of biomolecules, both in-vitro and in living cells. By taking advantage of

the extraordinary field enhancement, directionality and nanofocusing of photonic antennas, the approach followed in NANO-VISTA successfully allowed single biomolecule detection in ultra-reduced detection volumes, including living cells.

The article published by CORDIS further highlighted the extraordinary results obtained in the project. The team notably showcased single biomolecule (DNA & different proteins) detection in zepto-liters illumination volumes, enhanced the fluorescence signal from individual molecules by factors 100000 times larger than the emission of a single molecule when excited by conventional confocal illumination, revealed excitonic coupling in individual light harvesting complexes, and collaborated with immunologists to provide insights into the processes of immune cell adhesion and migration.