



ISTITUTO ITALIANO  
DI TECNOLOGIA

## TITLE

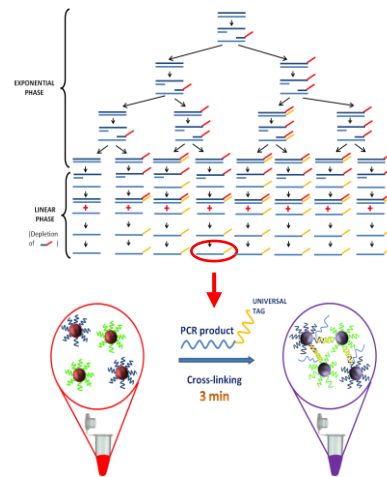
Procedimento per la rivelazione colorimetrica dell'amplificazione di una sequenza di acido nucleico bersaglio

## INVENTORS

Pier Paolo Pompa, Paola Valentini

## DESCRIPTION

The invention relates to a system for the detection of Polymerase Chain Reaction (PCR) products which is based on gold nanoparticles (AuNP) functionalized with DNA oligonucleotides. Unlike currently used technologies, does not require instrumentations, nor processing steps, being, on the contrary, a rapid one-step assay only requiring the addition of pre-mixed reagents to the PCR reaction products, which returns a visual readout in few minutes. This rapid test will have relevance in molecular biology applications both in scientific research and in clinical laboratories, and it will be particularly useful in those situations where simplifying large scale genetic screening (for instance, for searching infectious diseases nucleic acids) may be relevant. Other advantages, including low-cost, time-saving, easy of fabrication, and the employment of universal detection probes, make it an ideal candidate for the parallel detection of several different PCR products.



## APPLICATIONS

PCR, molecular biology, visual readout

## KEYWORDS

PCR, test, biology, low-cost, time-saving

## BIBLIOGRAPHIC DATA

Process for the rivelation of the colorimetric amplification of a target nucleic acid sequence

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Applicants Fondazione Istituto Italiano di Tecnologia

## CONTACTS

Technology Transfer Office

Augusta Galano

augusta.galano@iit.it

+39 010 71781 568