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TITLE

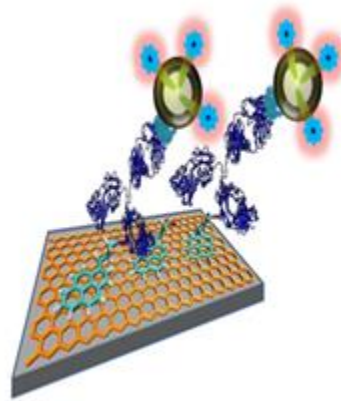
Graphene biosensor for the analysis of exosomes in biological fluids, its preparation processes and its uses

INVENTORS

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DESCRIPTION

The invention relates to a device able to recognize, purify, and analyze exosomes from biological fluids. It is composed by a surface-modified graphene that can be supported on different substrates, including SiC or glass. The surface is modified with antibodies or aptamers which allow to bind the target. Thanks to this modification, exosomes are recognized with a high degree of specificity. After/during the recognizing step, the device can be analyzed by optical or electrical methods such as microscopy or electrical conductivity measurements, respectively.



APPLICATIONS

Exosome detection, biological fluids analysis

KEYWORDS

Graphene, exosomes, cancer, tumor, antibody, aptamer, recognizing device, optical microscopy.

BIBLIOGRAPHIC DATA

Biosensore grafenico per l'analisi di esosomi in fluidi biologici, suoi procedimenti di preparazione e relativi usi

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