



ISTITUTO ITALIANO
DI TECNOLOGIA

TITLE

Method for the preparation of a substrate for a plasmonic device

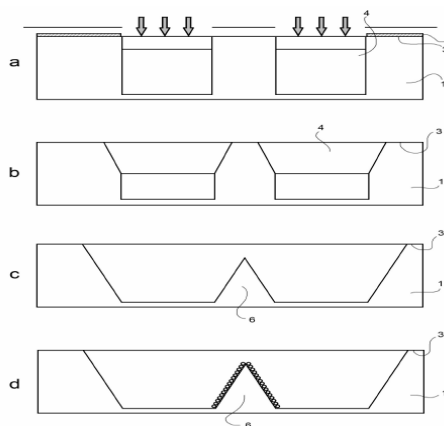
INVENTORS

Intartaglia Romuald, Beke Szabolcs, Das Gobind, Diaspro Alberto, Brandi Fernando

DESCRIPTION

Method for the preparation of a substrate for a plasmonic device comprising the steps of:

- providing a substrate chosen in the group consisting of silicon oxide or diamond having a first surface;
- treating said first surface with a light beam so as to obtain a plurality of substantially conical microstructures;
- depositing on said plurality of microstructures a layer of metal nanoparticles characterized in that said metal nanoparticles are produced by laser irradiation of a metal sheet in aqueous solution.



APPLICATIONS

Plasmonic devices, laser processing

KEYWORDS

Plasmonic, substrate, laser, biocompatibility

BIBLIOGRAPHIC DATA

Metodo Di Preparazione Di Un Substrato Per Un Dispositivo Plasmonico

Application Number

IT TO2013A000639

Priority Date

July 29, 2013

Applicants

Fondazione Istituto Italiano di Tecnologia

CONTACTS

Technology Transfer Office

Augusta Galano

+39 010 71781 568

augusta.galano@iit.it