

Title (en)
METAL/SILICA CORE/SHELL NANOPARTICLES, MANUFACTURING PROCESS AND IMMUNOCHROMATOGRAPHIC TEST DEVICE COMPRISING SUCH NANOPARTICLES

Title (de)
METALL/SILICA-/KERN-HÜLLE-NANOTEILCHEN, HERSTELLUNGSVERFAHREN UND IMMUNCHROMATOGRAPHISCHE TESTVORRICHTUNG MIT DERARTIGEN NANOPARTIKELN

Title (fr)
NANOPARTICULES COEUR-COQUILLE MÉTAL-SILICE, PROCÉDÉ DE FABRICATION ET DISPOSITIF DE TEST PAR IMMUNOCHROMATOGRAPHIE COMPRENANT DE TELLES NANOPARTICULES

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Application
EP 12783974 A 20121105

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Abstract (en)
[origin: WO2013072213A2] The present invention relates to a core/shell nanoparticle comprising at least one core made from at least one first metallic material based on at least one metal exhibiting plasmon resonance in a domain chosen from the ultraviolet, the visible and the near-infrared, and a silica shell, said silica comprising functional groups. According to the invention, the silica comprises, on its surface, covalently bonded agents for stabilizing said nanoparticle. The present invention also relates to a core/shell nanoparticle comprising a core made from at least said first material and a metallic shell made from a second material based on at least one metal exhibiting plasmon resonance in a domain chosen from the ultraviolet, the visible and the near-infrared, said second material being different from the first material, the metallic shell being stabilized by a halogen-free surfactant. The present invention also relates to an immunochromatographic test device for detecting at least one analyte, comprising binders specific to the analyte, said binders being marked by nanoparticles, in which the nanoparticles comprise at least one core, made from at least said first material, and a silica shell, said silica comprising functional groups.

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