

Title (en)

NANOWIRES ON SUBSTRATE SURFACES, METHOD FOR PRODUCING SAME AND USE THEREOF

Title (de)

NONODRÄHTE AUF SUBSTRATOBERFLÄCHEN, VERFAHREN ZU DEREN HERSTELLUNG SOWIE DEREN VERWENDUNG

Title (fr)

NANOFILS À LA SURFACE D'UN SUBSTRAT, LEUR PROCÉDÉ DE FABRICATION ET D'UTILISATION

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Application

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Abstract (en)

[origin: WO2010057652A1] The invention relates to a method for producing anchored nanowires on substrate surfaces. The method according to the invention for producing anchored nanowires does not include any deposition steps from the gas phase and comprises at least the following steps: a) providing a substrate surface having a predefined two-dimensional geometric arrangement of nanoparticles or nanoclusters; b) contacting the substrate surfaces having the nanoparticles or nanoclusters with at least one solution of the material forming the nanowires, wherein the material forming the nanowires is deposited selectively on the nanoparticles or nanoclusters and grows further there. The method according to the invention preferably also comprises the steps of: a) applying a seed material to the nanoparticles or nanoclusters by contacting the substrate surface with a solution of the seed material such that the seed material is selectively deposited on the nanoparticles or nanoclusters; and step b) the material forming the nanowires is deposited selectively on the nanoclusters or nanoparticles provided with seed material and grows further there.

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