

Title (en)

MULTISTAGE SURFACE MODIFICATION PROCEDURE OF SEMICONDUCTING NANOPARTICLES FOR USE IN HYBRID SOLAR CELLS AND PRINTABLE ELECTRONICS

Title (de)

MEHRSTUFIGES OBERFLÄCHENMODULATIONSVERFAHREN VON HALBLEITERNANOPARTIKELN ZUR VERWENDUNG BEI HYBRIDEN SOLARZELLEN UND DRUCKFÄHIGER ELEKTRONIK

Title (fr)

PROCÉDÉ DE MODIFICATION DE SURFACE EN PLUSIEURS ÉTAPES DE NANOPARTICULES SEMI-CONDUCTRICES DESTINÉES À ÊTRE UTILISÉES DANS DES PHOTOPILES HYBRIDES ET DES DISPOSITIFS ÉLECTRONIQUES IMPRIMABLES

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Abstract (en)

[origin: WO2012035005A1] The present invention relates to a method for the treatment of semiconducting nanoparticles wherein in a step A semiconducting nanoparticles comprising long-chain insulating primary ligands are dispersed in a volatile dispersion solvent capable of dissolving insulating primary ligands and precipitated using a washing agent. TGA-MS analysis shows that the treatment according to the method of the present invention allows complete removal of the outer layer of synthesis ligands on the surface of prepared nanoparticles and improves removal of synthesis ligands on the surface of prepared nanoparticles. The present invention also relates to semiconducting nanoparticles, ink formulation and electronic devices comprising the semiconducting nanoparticles obtainable by the procedure of the invention.

IPC 8 full level

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