

Title (en)
PHOTOACTIVE NANOCOMPOSITE AND METHOD FOR THE PRODUCTION THEREOF

Title (de)
FOTOAKTIVES NANOKOMPOSIT UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
NANOCOMPOSITE PHOTOACTIF ET SON PROCEDE DE FABRICATION

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Abstract (en)
[origin: WO2006018575A1] The invention relates to a photoactive nanocomposite (3) comprising at least one pair of donor-acceptor semiconductor elements, wherein an element consists of a nanowires (7) doped with an sp³ structure and another element in embodied in the form of an organic compound (8). Said elements are carried by the substrate (1) of a device. A production method is also disclosed and consists, in a first embodiment, in picking, functionalising and solubilizing the grown nanowires in the organic element (8) and in depositing the mixture by coating on the device substrate. In the second embodiment, the nanowires (7) are formed on a growth substrate (5) which is embodied in the form of the device substrate. The organic element (8) is associated with the nanowires (7) in such a way that an active layer (3) is formed. The inventive photoactive nanocomposite makes it possible to produce a photovoltaic cell.

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