

Title (en)
SURFACE TREATMENT OF SILICON NANOPARTICLES

Title (de)
OBERFLÄCHENBEHANDLUNG VON SILIZIUMNANOPARTIKELN

Title (fr)
TRAITEMENT DE SURFACE DE NANOPARTICULES DE SILICIUM

Publication
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Application
EP 09750044 A 20090505

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Abstract (en)
[origin: WO2009141563A2] The present invention relates to the treatment of photoluminescent silicon nanoparticles in order to give them surface functionalities, for example amine radicals or other radicals, that favour their use especially in biology for labelling applications. A reaction is then applied to the nanoparticles in order to create a surface coating that gives the nanoparticles these functionalities, especially a protection against dissolution in an aqueous medium. The process in the sense of the invention comprises, prior to this coating reaction, a passivation of the silicon nanoparticles that favours the creation of bonds of Si-OH type at the surface, this type of bond making it possible to obtain a multiplicity of functionalities including, in particular, amines, thiols, polyethylene glycol, as surface radicals.

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