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(54) Title: WATER-SOLUBLE, SURFACE-FUNCTIONALIZED NANOPARTICLE FOR BIOCONJUGATION VIA UNIVER-
SAL SILANE COUPLING

(57) Abstract: The invention provides a process for the preparation of a surface-functionalized nanoparticle comprising: (a) re-
acting a nanoparticle with a functionalized silane and a base in a substantially non-aqueous solvent to obtain a partially conjugated
silanated nanoparticle, wherein the functionalized silane and the base are present in relative amounts such that said functionalized
silane undergoes substantially only a single hydrolysis reaction; (b) reacting the partially conjugated silanated nanoparticle formed
in step (a) with a base in a solvent in which the partially conjugated silanated nanoparticle is substantially insoluble and in which the
base is substantially soluble. The invention also provides a surface-functionalized nanoparticle prepared therefrom and a bioconju-
gate comprising said a surface-functionalized nanoparticle.



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