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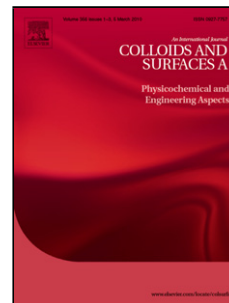
Title: Silane functionalization of nanodiamond for polymer nanocomposites-effect of degree of silanization

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## Highlights

- Surface modification of oxND was carried out by vinyltrimethoxysilane (VTS) using esterification method in an alcoholic solution.
- Degree of silane functionality of oxND was controlled by the VTS concentration in the solution.
- The maximum silane functionality of oxND was obtained at a solution containing VTS/oxND of 5:1 (w/w).
- Nanodiamond with the maximum degree of silanization exhibited uniform dispersion in nonpolar solvent and strong interfacial interaction with PDMS.

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