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Synthesis of organotrialkoxysilanes and preparation of hybrid organosilicate based nanoparticles

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Abstract

New organotrialkoxysilanes containing urea and semicarbazide fragments, which were characterized by ¹H NMR, IR spectroscopy and elemental analysis, were synthesized. The modification of colloidal silica particles LUDOX (TM40) by synthesized precursors were studied. New hybrid organo-inorganic silica nanoparticles, characterized by dynamic light scattering, were obtained.