

Title (en)

ENZYME AND TEMPLATE-CONTROLLED SYNTHESIS OF SILICA FROM NON-ORGANIC SILICON COMPOUNDS AS WELL AS AMINOSILANES AND SILAZANES AND USE THEREOF

Title (de)

ENZYM- UND TEMPLATE-GESTEUERTE SYNTHESE VON SILICA AUS NICHT-ORGANISCHEN SILICIUMVERBINDUNGEN SOWIE AMINOSILANEN UND SILAZANEN UND VERWENDUNG

Title (fr)

SYNTHESE DE SILICE PAR MATRICE ET ENZYMES A PARTIR DE COMPOSES DE SILICIUM NON ORGANIQUES AINSI QUE D'AMINOSILANES ET DE SILAZANES ET UTILISATION

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Application

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Abstract (en)

[origin: WO2005106003A1] The present invention relates to a method for synthesis of amorphous silicon dioxide (silica, condensation products of silicic acid) and other polymeric metal (IV) compounds from non-organic silicon compounds or metal (IV) compounds as well as from aminosilanes and silazanes, whereby (1) a template (collagen or another molecule, interacting with orthosilicic acid or polymeric silicic acid and salts thereof or other metal (IV) compounds) and (2) a silicase/carbonic anhydrase or a silicatein or similar polypeptide are used for synthesis. Said invention also relates to the technical use thereof.

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