

Title (en)

PROCESS FOR THE PREPARATION OF A SILICA AEROGEL-LIKE MATERIAL.

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES KIESELSÄUREACHTIGEN MATERIALS.

Title (fr)

PROCEDE DE PREPARATION D'UN MATERIAU ANALOGUE A UN AEROGEL DE SILICE.

Publication

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Application

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Priority

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Abstract (en)

[origin: WO9220623A1] A process for the preparation of silica xerogel by hydrolysis and polycondensation of a tetraalkoxysilane to form an alcogel which is a silica skeleton surrounded by an aqueous methanol, whereafter the aqueous methanol is removed by evaporation. The alcogel formed is brought in contact with a solution of tetraalkoxysilane, the contact is maintained at or above room temperature to strengthen the silica skeleton, whereafter the gel is dried slowly at or above room temperature and at about atmospheric pressure. Before the alcogel is brought in contact with the solution of tetraalkoxysilane it may be washed with a solution (e.g. aqueous methanol) to change the composition of the aqueous alcohol surrounding the silica skeleton or to change the functional groups on the surface of the alcogel.

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