

Title (en)
METHOD FOR PRODUCING AN AEROGEL MATERIAL

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES AEROGELMATERIALS

Title (fr)
PROCÉDÉ DE PRODUCTION D'UN MATÉRIAU AÉROGEL

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Application
EP 18773176 A 20180920

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Abstract (en)
[origin: WO2019170264A1] The present invention relates to a method for producing an aerogel material based on amorphous silicon dioxide, comprising the following steps: a) preparing a mixture containing silicon dioxide sol, alcohol and an acid-catalytically activatable hydrophobicization agent; b1) adding a base to the mixture formed in step a) and mixing the resulting mixture; b2) gelating the mixture obtained in step b2) containing silicon dioxide sol, wherein a silicon dioxide gel is created, and optional ageing of the gel; c) adding a hydrophobicization catalyst to the optionally aged silicon dioxide gel formed in step b2), in situ formation or controlled release of a hydrophobicization catalyst and initiating catalysed hydrophobicization of the silicon dioxide; d) removing the volatile components from the mixture formed in step c) by subcritical drying, wherein the aerogel material is formed, wherein at least steps b2) to d) are carried out in one and the same reactor.

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