

Title (en)

METHODS OF FORMING NANOPARTICLES

Title (de)

VERFAHREN ZUR HERSTELLUNG VON NANOPARTIKELN

Title (fr)

PROCÉDÉS DE FORMATION DE NANOPARTICULES

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Application

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Abstract (en)

[origin: WO2008030110A2] The present invention provides a method for preparing nanoparticles of group IV elements, particularly nanoparticles of Si, Ge and Sn, and binary and ternary alloys of these elements. The method comprises the solution-phase decomposition of one or more group IV metal precursors at elevated temperature and under an inert atmosphere at atmospheric pressure, using a decomposition-promoting reagent. A surface-bonding agent is added to the reaction mixture to form an organic layer surrounding the nanoparticles and prevent aggregation.

IPC 8 full level

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