

Synthesis of semiconductor nanoparticles using metal precursors comprising non- or weakly coordinating anions

5

A B S T R A C T

The present invention relates to a method for the synthesis of semiconductor nanoparticles comprising elements of the groups IB, IIB, IIIA, IVA, VA or VIA of the periodic classification wherein the composition of the core nanoparticle is selected from the group
10 consisting of IB-VIA, IIB-VIA, IIIA-VIA, IB-IIIA-VIA or IB-IIB-IVA-VIA, IIB-IIIA-VIA, IIB-IVA-VA or mixtures thereof, and at least one shell comprises elements of the groups IIB and VIA, , wherein in case the core composition is IIB-VIA the shell comprises at least a further element selected from the groups IB, IIIA, IVA or VA, using metal precursors comprising non- or weakly coordinating anions. It further relates to the consecutive process for the
15 synthesis that includes first the preparation of a binary nanoparticle system then modified to make a ternary system which again can be further modified to make a quaternary system.

FIGURES NONE