

Synthesis of silver cubes from silver nanowire seeds

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Silver nanoparticles are increasingly used in various fields, including surface plasmon resonance sensors, conductive materials for flexible electrodes, catalysts and photothermal effects. In order to achieve high performance in these areas, high purity silver nanoparticles manufacturing and thickness and length control are essential.

The presentation introduces the synthesis of high purity silver nanowire seeds and the growth of silver nanowire seeds through the synthesis of polyol in controlled reaction atmosphere. Not only can silver nanowires be controlled in thickness and length according to the seed Growth Act of nanowire, but silver nanocube can also be composed and controlled in size.