

Preparation and characterization of hollow nanomaterials derived from Cu₂O as template

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Nanomaterials with unique shape and regular structure have attracted attention due to their superior properties. Extensive studies have been devoted to obtaining specially designed structure. Among the various strategies, hollow nanostructures have attracted growing interest due to their high specific surface area, low density, and structural stability originated from well-defined interior voids. Herein, Cu₂O with regular size was successfully synthesized by facile and fast reducing reaction using NaBH₄ and used as template to build hollow structure. Especially, NaF as a complexing agent was added to minimize size of Cu₂O nanoparticles. This preparation method based on Cu₂O template can be applied to various area.