

Carbon nanotube growth via chemical vapour decomposition method.

Abstract

This paper illustrates a short review in the carbon nanotubes structure and other carbon forms and explains different forms of carbon nanotubes. The various attractive and unique properties of carbon nanotubes are also discussed. There are several methods for carbon nanotubes production but the best sufficient method for mass production with lower cost is the chemical vapour decomposition method, which is the main subject of present article. Furthermore, the various effective factors on the carbon nanotubes growth in the chemical vapour decomposition process like temperature, inert gas flow rate, carbon source, catalyst and the reaction time are discussed here.

Keyword: Carbon nanotube; Catalytic; Chemical vapour decomposition; Synthesis