

**Effect of Gas Ratio of Acetylene to Hydrogen on the Synthesis of Thin Multiwalled  
CNTs by Thermal CVD**

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**Abstract** : This study investigated the effect of  $H_2$  upon the growth of CNTs by changing the ratios of  $H_2$  to Ar during the growth using  $C_2H_2$ . With higher contents of  $H_2$  in Ar, CNTs became longer and thinner, resulting in their higher aspect ratios.

**Key Words** : carbon nanotubes,  $H_2$ , thermal CVD, growth