

화학증착방법으로 성장시킨 탄화규소 나노와이어의 전기적 특성
 Electrical characteristics of SiC nanowires grown by CVD

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SiC is promising materials because of its typical properties. So, SiC nanowires and rods were fabricated using various methods. Among these methods, CVD was an effective method to grow SiC nanowire on the Si for using optical and electrical devices. SiC nanowires were synthesized by CVD using single precursors on Si substrate. To grow SiC nanowire, various metals were used as catalysts. Catalyst affects microstructures and growth conditions. Electric and optical properties were varied with kind of catalyst. Difference of these characteristics was due to the reactivity of catalyst and stability of growth process



Fig. 1. SEM images of the SiC nanowire using Au catalyst.

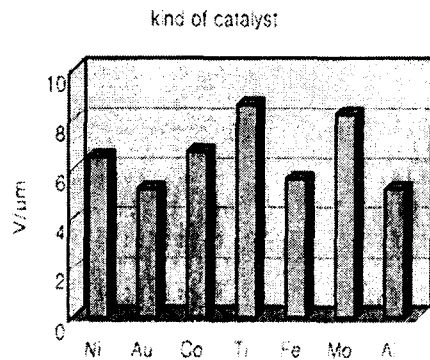


Fig. 2. Variations of the threshold voltages with catalysts.

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