

SLS 성장방법에 의한 SiC 나노와이어의 성장 Growth of SiC nanowires by SLS growth mechanism

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Most of all nano-structures, SiC had a high electrical conductivity and mechanical strengths at high temperatures. So it was considered a useful material for nanosized device materials and added materials for strength hardening. Much methods were developed for SiC nanowire and nanorods like CVD, carbothermal reduction, Laser ablation and CNT-confined reduction. These methods used the VLS (Vapor-Liquid-Solid) growth mechanism. In these experiments, SiC nanowire was grown by SLS (Solid-Liquid-Solid) growth mechanism used Graphite substrate. And we characterized its microstructure to compare with VLS growth mechanism.



Fig. SEM image of grown SiC nanowires by SLS mechanism ; (a) TMS, (b) HMDS.

Acknowledgment

This research was performed with the financial support of the Center for Nanostructured Materials Technology under the 21st Century Frontier R&D Program of the Ministry of Science and Technology, Korea