

SYNTHESIS OF ZnO NANOTUBES BY MPECVD

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ABSTRACT

We have synthesized ZnO nanowires (NWs) using a microwave plasma enhanced chemical vapor deposition (MPECVD) method, which has been believed to be the most promising candidates for the synthesis of NWs due to the low temperature and the large area growth possibilities. Vertically oriented NWs were successfully synthesized by MPECVD with C_2H_2/H_2 as source gases. NWs were analyzed by SEM, EDX, TEM, and XRD.

Keywords: Carbon nanotubes, MPECVD, Ni thin films, reaction time.