# Chemical Bath Deposition of Textured ZnO Thin Films in Water/Ethanol Solvent System

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Chemical bath deposition (CBD) has been well developed to fabricate large-area semiconductor thin films in view of its several advantages: it does not require sophisticated instruments; the starting chemicals are commonly available and cheap; the preparation parameters are easily controlled. Previous works on ZnO mainly concentrated on the preparation of nanorod arrays in aqueous solution; however, little work has been done to deposit dense and adherent films. Based on the above discussion, the present study is dedicated to the heterogeneous growth of CBD ZnO thin films in water/ethanol solvent system. By varying the volume ratios of water to ethanol, i.e., VW/VE, we have synthesized ZnO films with a series of controlled textures. The growth mechanism for the film deposition has been tentatively suggested.