TAILORING THE MORPHOLOGY OF SnO₂ THIN LAYERS

Al. ENEȘCA¹ L. ANDRONIC¹ A. DUȚĂ¹

Abstract: The aim of the paper is to demonstrate the influence of different deposition techniques on the morphology of SnO_2 thin films used as photocatalysts or sensors. An important aspect is represented by the precursor properties and deposition temperature. In most cases, the layers are involved in post-deposition treatment for improving the crystallinity and optoelectrical properties. Compared to the more widely used indium tin oxide (ITO), SnO_2 films are inexpensive, chemically stable in acid and alkaline solutions, thermally stable in oxidizing environments at high temperatures, and also mechanically strong, which are important features for the fabrication as component in different devices.

Key words: deposition technique, morphology, epitaxial, tin oxide.

¹ Chemistry Dept., *Transilvania* University of Braşov.