

The Impact of Nano-Lithographic Structures on AZOY Thin Films

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Transparent conducting AZOY (contains a small amount of Y_2O_3 in addition to Al_2O_3 and ZnO) films had been deposited by RF magnetron sputtering on polymer substrates at room temperature. We compared the hydrophobicity, transparency, and conductivity of AZOY films with and without nanoimprint lithography structure. In this study, UV imprinting was used to prepare nanostructures on the polymer surface. The structural characteristics of the films were analyzed using Scanning electron microscopy, Contact Angle Measurement, Hall effect measurement and UV-1800.

Key words: Magnetron sputtering, Transparent conductive coating, UV imprinting