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The study of optical-electro characteristics in the AZ91D

Jae In Yu, Ho-Chun Eom, Kyung Mun Lee, Kyu Seon Song,
Young-Ho Son, Hong-Sup Shin*, Ki Hong Kim and In Ho Bae**

*Research Institute of KMT Co, Daegu City 702-701, South Korea

**Department of physics, Yeungnam University, Kyonsan 712-749, South Korea

The surface oxidation of magnesium was performed by spark anodizing treatment method. And the optical reflectance spectra of the oxidation layers are studied. Also, I-V measurement experimented. In the anodizing process, the growth of the oxide layer take place at room temperature. The layer's thickness certainly increases proportionally to the voltage, which also accounts for the observed rising of the oxide. Moreover, the increase of oxidation thickness could be the sign of a decrease of reflectance intensity. This result is due to light interference in the oxide layer and determined by its thickness.