

Room Temperature Formation of a Low Resistivity Layer at the Interface of Titanium Thin film on Glass Substrates

Hugo Solis, Neville Clark*, Daniel Azofeifa, E. Avendano

Centro de Investigación en Ciencia e Ingeniería de Materiales and Escuela de Física
Universidad de Costa Rica, 11501-2060 San José, Costa Rica

#Corresponding author: neville.clark@ucr.ac.cr

Titanium films were deposited on quartz, glass, polyamide and PET substrates in a high vacuum system at room temperature and their electrical resistance monitored *in situ* as a function of thickness. These measurements indicate that a very thin low electrical resistance layer is formed during the condensation of the initial layers of Ti on glass and quartz substrates. Layers begin to show relative low electrical resistance at around 21 nm for glass and 9 nm for quartz. Samples deposited on polyamide and PET do not show this feature