

Characterizing of CuO Incorporated CMOS Dielectric for Fast Switching System

Authors : Nissar Mohammad Karim, Norhayati Soin

Abstract : To ensure fast switching in high-K incorporated Complementary Metal Oxide Semiconductor (CMOS) transistors, the results on the basis of d (NBTI) by incorporating SiO₂ dielectric with aged samples of CuO sol-gels have been reported. Precursor ageing has been carried out for 4 days. The minimum obtained refractive index is 1.0099 which was found after 3 hours of adhesive UV curing. Obtaining a low refractive index exhibits a low dielectric constant and hence a faster system.

Keywords : refractive index, sol-gel, precursor ageing, metallurgical and materials engineering

Conference Title : ICAM 2015 : International Conference on Advanced Materials

Conference Location : Jeddah, Saudi Arabia

Conference Dates : January 26-27, 2015