

## Characterizing of CuO Incorporated CMOS Dielectric for Fast Switching System

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**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 SiO<sub>2</sub> 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

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