

## A New Low Voltage Driven Varistor

Jong Pil Lee, Hee Sun Yoon\* and Seung Chul Choi

Department of Materials and Science Engineering, Ajou Univ, Suwon, Korea

\*Department of Molecular Science and Technology, Ajou Univ, Suwon, Korea

### Abstract

A new type of low voltage driven SrTiO<sub>3</sub> varistor was investigated. SrTiO<sub>3</sub> sintered with CuO-SiO<sub>2</sub> additions, the sintering temperature was reduced to 1250-1300C. With the sintering additives, the semiconducting SrTiO<sub>3</sub> was able to fabricate single time sintering in reducing atmosphere(95% N<sub>2</sub> + 5% H<sub>2</sub>). The non-linear coefficient value was 10.3 and the operating voltage was about 7 V.