

### **S3-1.5**

## **Effect of Dopant on Selectivity of CuO Nanostructured Films – Based Sensors**

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In this work, the effect of different dopants on selectivity performance of gas sensor structures based on CuO nano-structured films that were synthesized from aqueous chemical solutions SCS is reported. The gas sensing studies were performed to investigate response and selectivity of the sensor structures. The un-doped CuO samples showed good selectivity to ethanol vapors with a response of about 149%, while Al-doped CuO samples demonstrated a response of about 175% to hydrogen gas and a better selectivity too. The gas sensing mechanism was proposed and discussed in details.