

## **Performance of hexagon Au electrode on ZnO thin film schottky diode gas sensor**

### **Abstract**

This paper presents an analysis of Schottky diode performance with the utilization of zinc oxide (ZnO) thin film as a gas sensor. The presented device is implemented with new type of electrode shape which is hexagon compared to conventional circular Schottky contact. The Schottky diode was integrated with thin film layer of ZnO by using sol-gel method. I-V characteristic of the device response to gas target was obtained and discussed in this paper. Results show larger voltage shift obtained at the reverse biased mode up to 1200 mV at room temperature. The results suggested future research can be done in enhancing the metal oxide thin film based device

### **Keywords**

Hexagon Schottky contact; Schottky diode; Thin film; ZnO