

**International Semiconductor Conference
Sinaia, Romania
2009, 12-14 October**

Microsensor on single ZnO microwire

**G. Chai, E. Rusu, L. Chow, G. I. Stratan, H. Heinrich, S. Park,
A. Schulte, O. Lupan, V. Trofim, S. Railean**

<https://doi.org/10.1109/SMICND.2009.5336549>

Abstract

For development of individual ZnO microwire in hydrogen sensors an environmentally benign synthesis process and fabrication route are required. Here we report a synthesis route for ZnO microwires using vapour phase process. Furthermore, our synthesis technique permits microwires to be transferred to other substrates. This offers the possibility of using focused ion beam instrument for handling. We fabricated a single microwire-based sensor and found ~4% sensitive hydrogen 200 ppm in the air at room temperature.