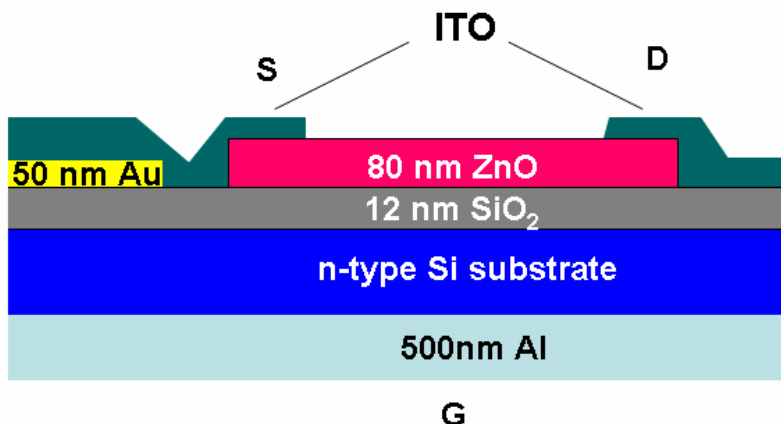


ZnO Nanowire FET

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DESCRIPTION OF WORK

- ◆ Nanowire FETs with:
- ◆ ZnO channel
- ◆ SiO₂ gate-dielectric
- ◆ ITO source-drain contacts



MAJOR OBSERVATIONS

- ◆ The 55 mS/mm transconductance and other performance parameters are the best reported for any ZnO-based FET.
- ◆ The results demonstrate that high-performance ZnO NW FETs can be fabricated by conventional processes without special gate dielectrics or surface layers.

Publications

- ◆ Matthew A. Hollister, John D. Le, Guanghua Xiao, Xuekun Lu, and Richard A. Kiehl, "High Performance ZnO Nanowire FET with ITO Contacts," 2007 Device Research Conference, Notre Dame University, South Bend, Indiana, June 18-20, 2007.,