

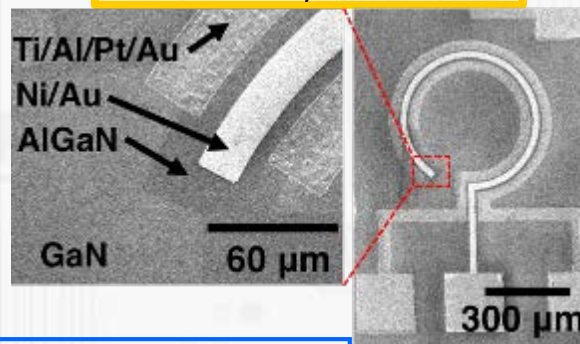
Debbie G. Senesky Stanford University

- Design of GaN & SiC sensors & electronics
- Micro- & nano-fabrication of GaN & SiC structures/devices
- High-temperature (up to **600°C!**) electrical and materials characterization

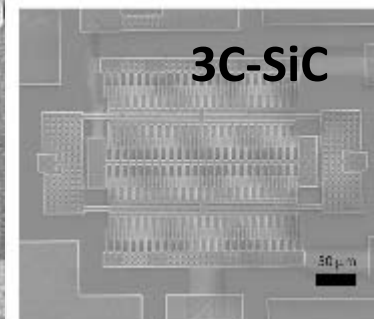


EXtreme Environment Microsystems Lab (XLab)
<http://xlab.stanford.edu>

AlGaN/GaN High Electron Mobility Sensor



GaN & SiC Sensors & Electronics

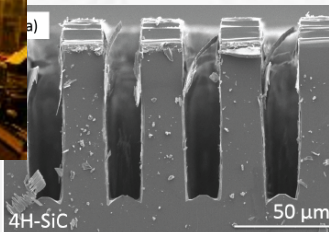


Silicon carbide (SiC) MEMS Sensor

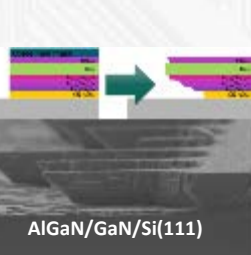
Nanofabrication in Stanford Facility



Stanford Nanofabrication Facility (SNF)

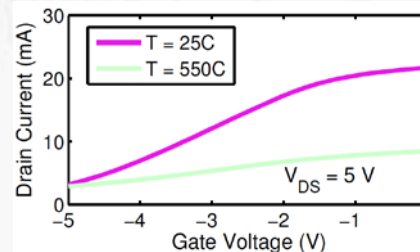


Deep plasma etching of 4H-SiC

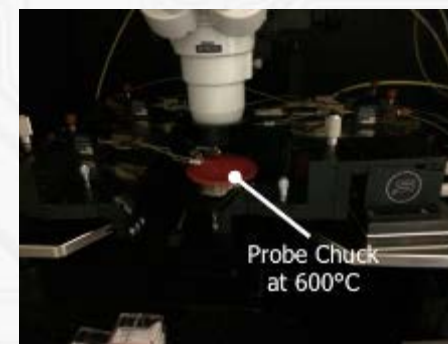


MOCVD and release of AlGaN/GaN

High-temperature characterization



Current-voltage response of AlGaN/GaN transistor at **550°C!**



High-temperature (600°C) probe station