

Supplemental Document

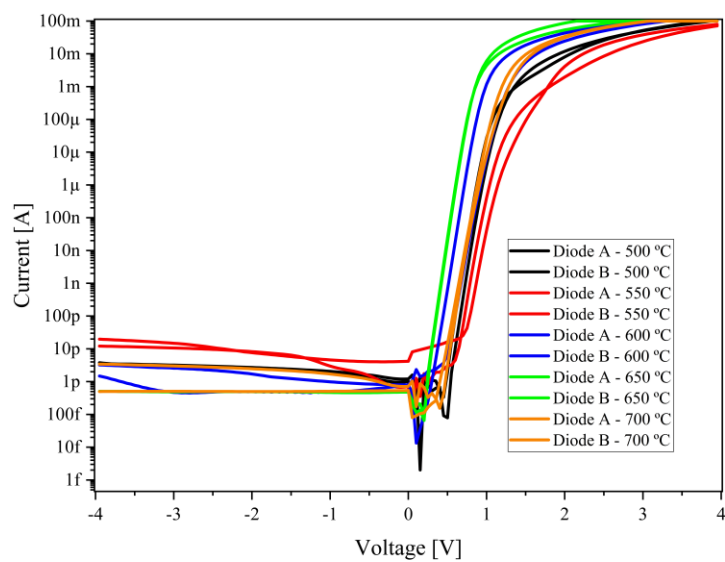


Figure 1: IV curve of pair of devices annealed at each temperature.

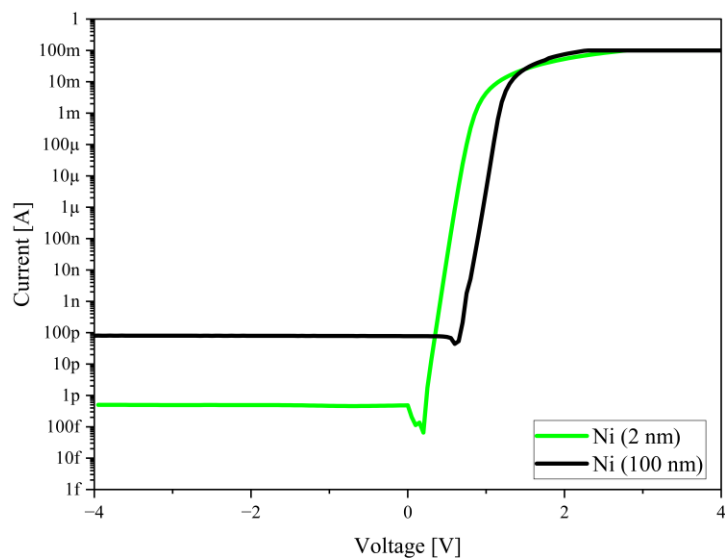


Figure 2: 2 nm diode and 100 nm diode IV curve

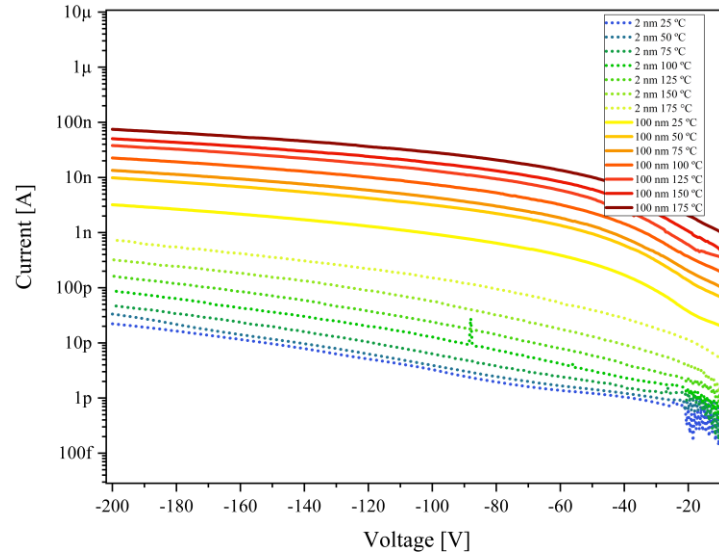


Figure 3: 2 nm and 100 nm devices under reverse leakage current and temperature variations.

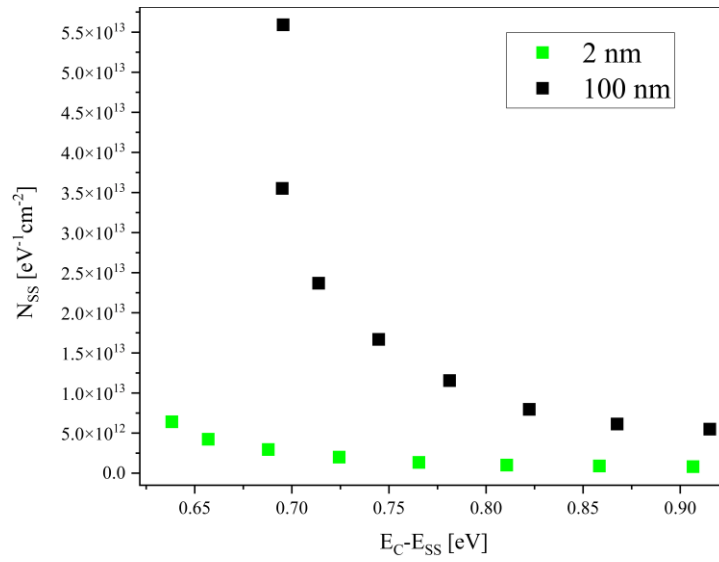


Figure 4: Density of surface states of 2 nm and 100 nm devices.