

# Supplemental

## Atomic Layer Deposited Transition Metal Nitrides (TiN and InN) and Metal Semiconductor Heterojunctions for Quantum Applications

N. Nepal, Joseph C Prestigiacomo, Maria G Sales, Peter M Litwin, Tyler A. Growden and V. D. Wheeler

*U.S. Naval Research Laboratory, Washington, DC 20375, USA*

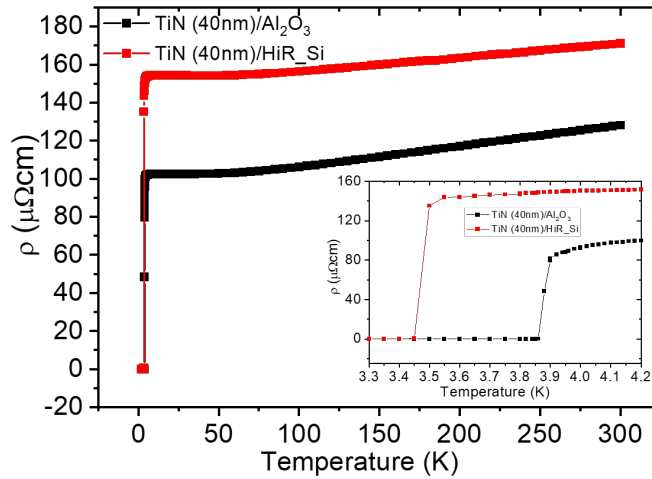


Figure 1. Temperature dependent sheet resistance of 40 nm thick ALD TiN. Measured critical temperatures of TiN on sapphire and insulating Si are 3.86 and 3.45 K, respectively.

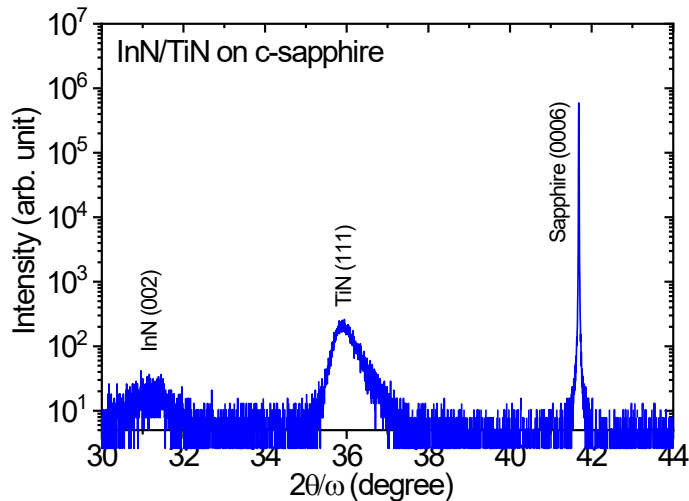


Figure 2. High-resolution x-ray diffraction measurement of InN/TiN heterojunction on sapphire.

InN and TiN XRD peak positions show that ALD grown InN and TiN are wurtzite and cubic respectively.