

## Supplemental Information

### 5 nm Thick Indium Nitride Channel Layers Fabricated by PEALD for 3D Transistor Architectures

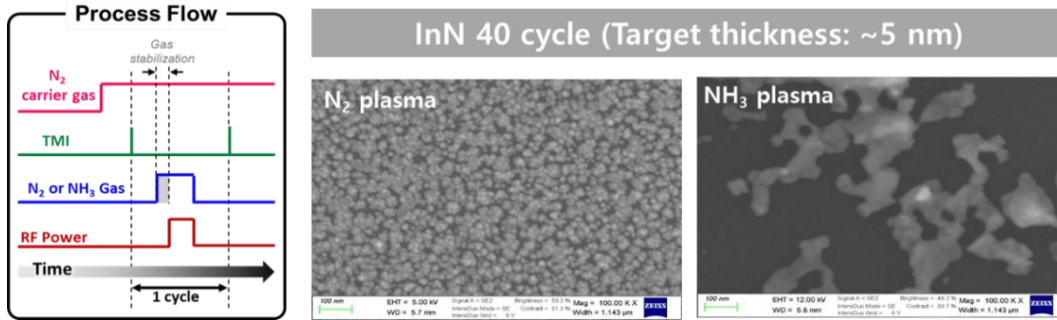


Fig. 1. Process flow of InN ALD using TMI and N<sub>2</sub> or NH<sub>3</sub> plasma (left). InN film conformality after 40 cycle process (right).

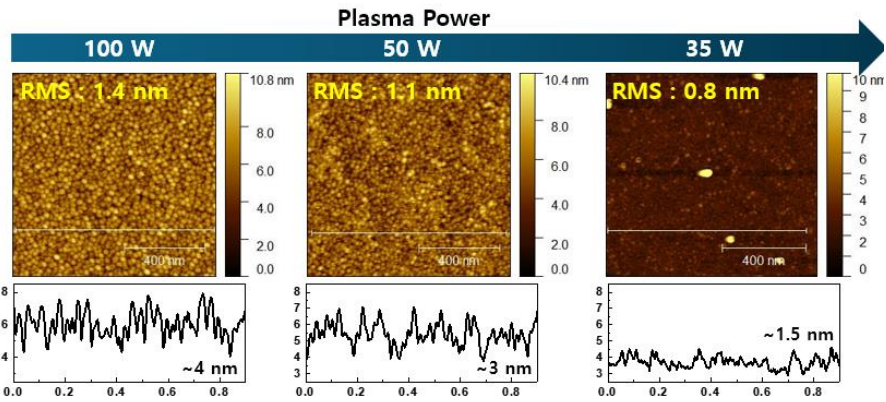


Fig. 2. Roughness changes of InN thin film according to N<sub>2</sub> plasma power

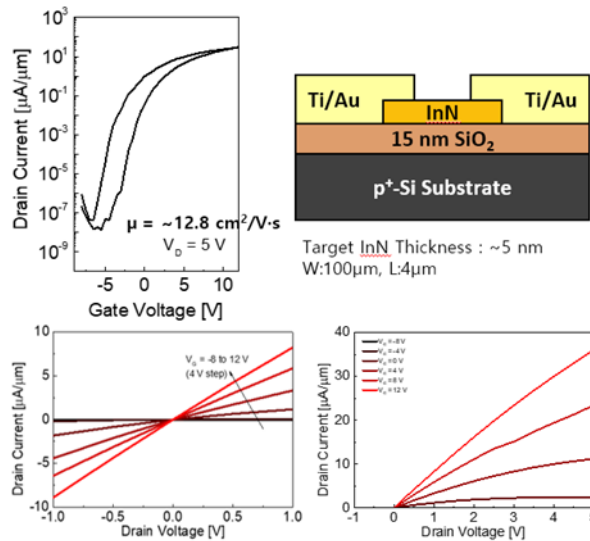


Fig. 3. Transfer and output curves of 5 nm InN devices ( $V_D = 5$  V,  $W = 100$   $\mu\text{m}$ ,  $L = 4$   $\mu\text{m}$ ).