

## Effective Work-Function of PEALD Metal Nitrides and its Tuning by Co-deposition

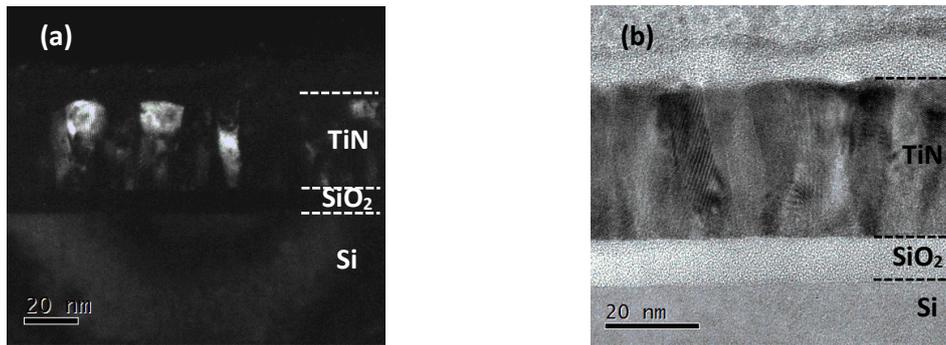


Figure 1 : TEM cross-section of as deposited TiN (30nm) on SiO<sub>2</sub> 10nm/Si shows poly-crystalline structure; (a) dark field, (b) bright field.

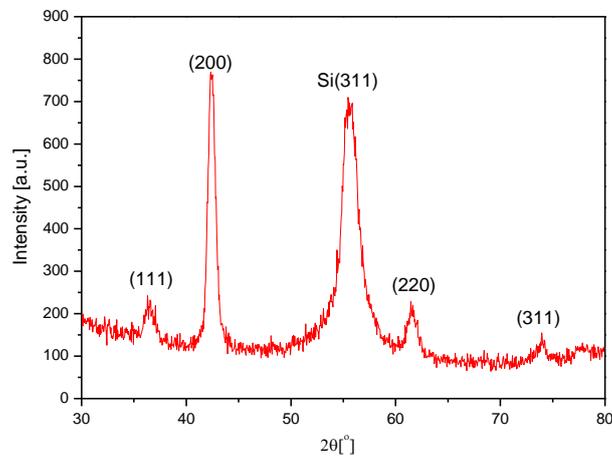


Figure 2: Glancing mode X-ray diffraction of as deposited TiN (30nm). The film is crystallized, showing the peaks of TiN cubic phase.

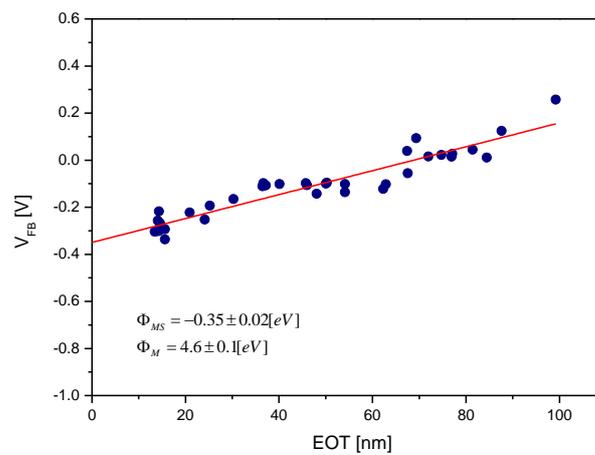


Figure 3:  $V_{FB}$  – EOT plot for EWF extraction of TiN on SiO<sub>2</sub>.