

**Figure 1. (a) I-V characteristics and schematics of diode (inlet), (b) effective schottky barrier height of ITO, Ni and schematics of electron conduction of (c) ITO, (d) Ni S/D**

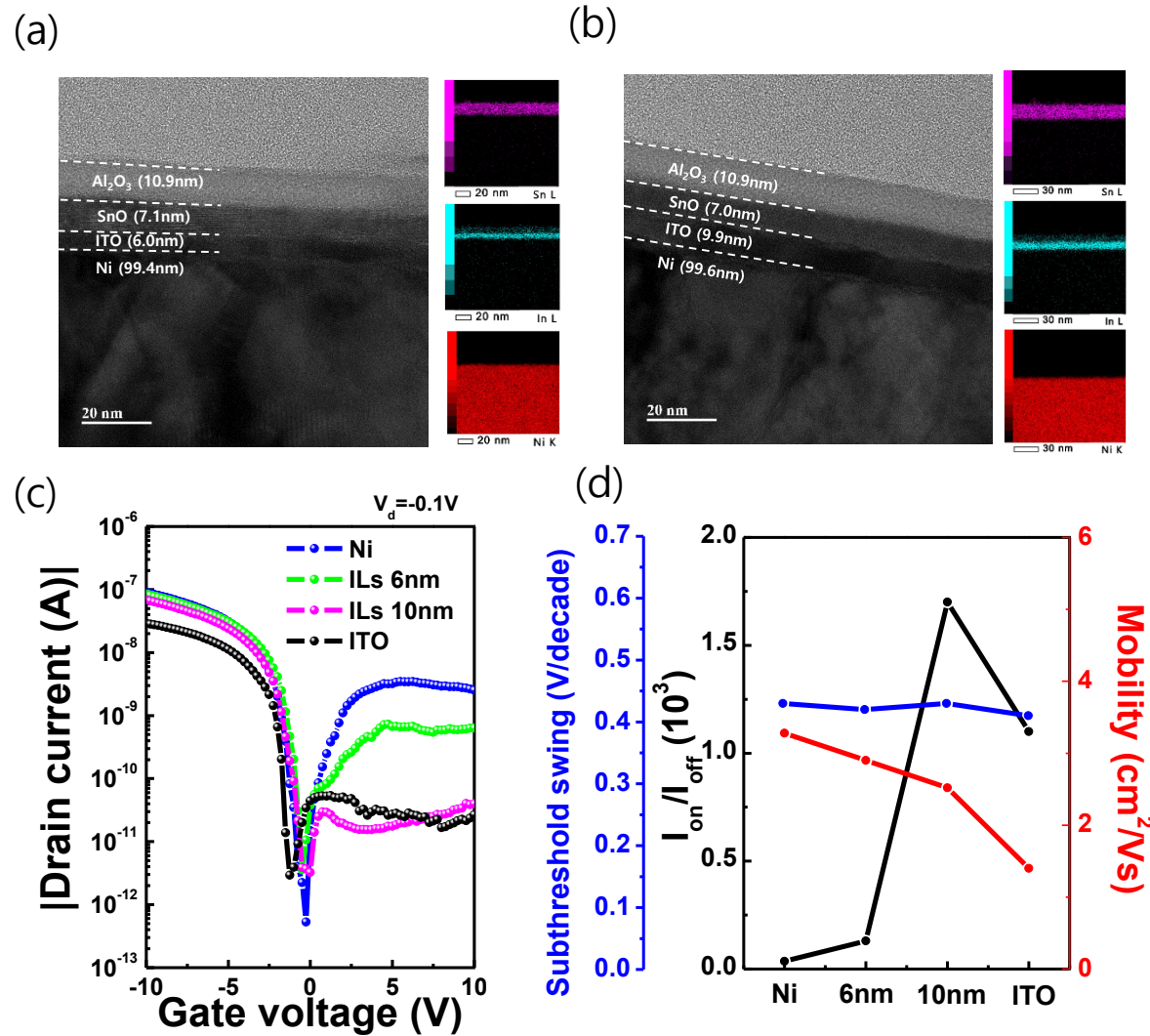


Figure 2. TEM analysis images and EDX mapping of (a) Al<sub>2</sub>O<sub>3</sub>/SnO/ITO 6nm/Ni, (b) Al<sub>2</sub>O<sub>3</sub>/SnO/ITO 10nm/Ni structure and (c) Transfer characteristics, (c) electrical properties compared to S/D metal