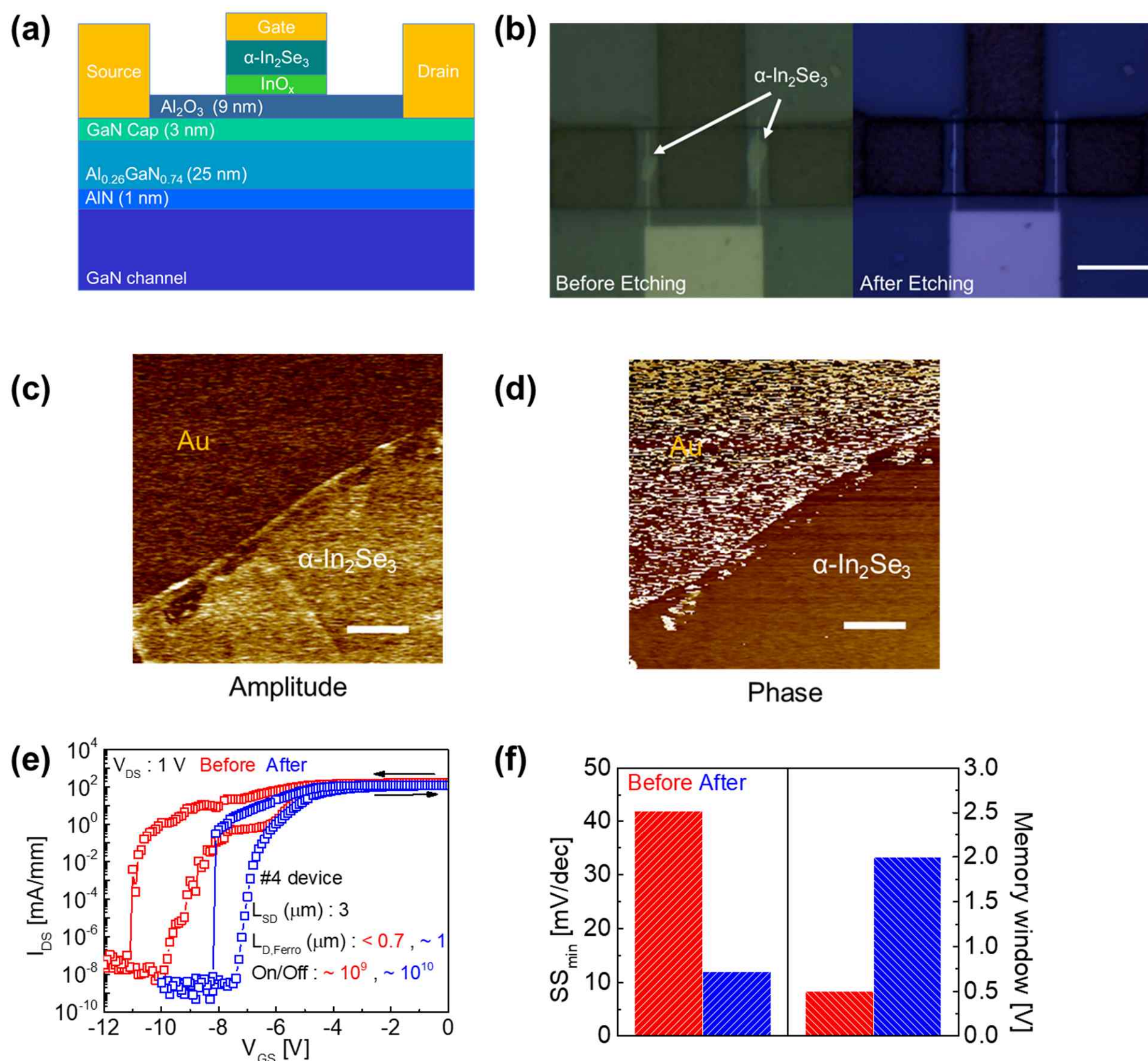

(a) Cross-section of the fabricated α-In_2Se_3/GaN Heterostructure device. (b) Optical microscope images before and after gate-aligned etching process (scale bar is 10 μm). (c), (d) The programmed phase transition image by an external electric field. (e) Comparison of transfer characteristics before and after the etching process. (f) The SS_{min} and memory window before and after etching.