

Figure 1. (a) Cross-sectional HR-TEM images of the gate stack of SiN_x/GaN MIS-HEMT. (b) A higher magnification view of ~ 1.5 nm crystalline interfacial layer (CIL). The inset FFT image shows the d-spacing is 2.8-2.9 Å, indicating that the CIL is β -phase Si_3N_4 .

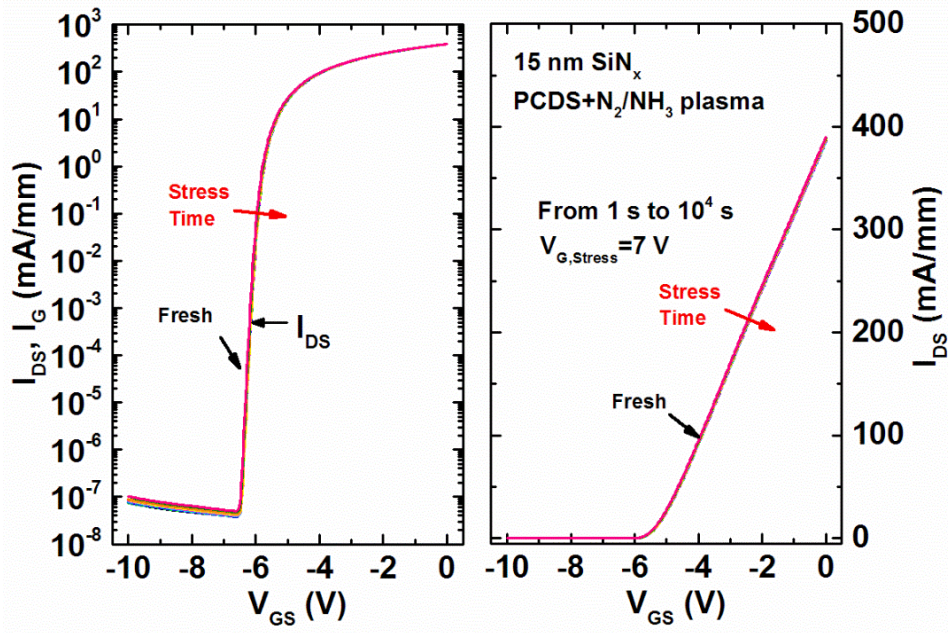


Figure 2. I_{DS} - V_{GS} Transfer curves of PCDS- SiN_x/GaN MIS-HEMTs under 7 V gate stress as a function of the stress time up to 10^4 s.