

Figure 1(a): Cross section schematic of our fabricated device, (b) FIB cross-section SEM image of a passivated device

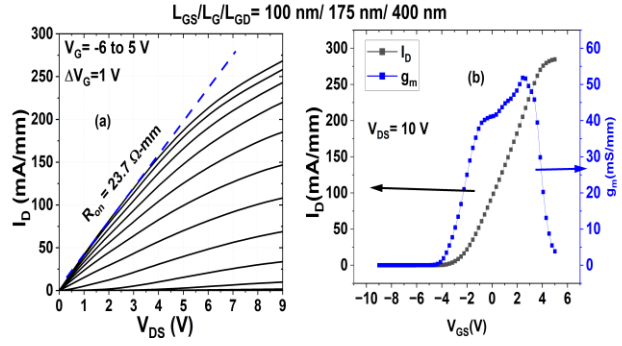


Figure 2 (a) Output and (b) transfer curve of a test device

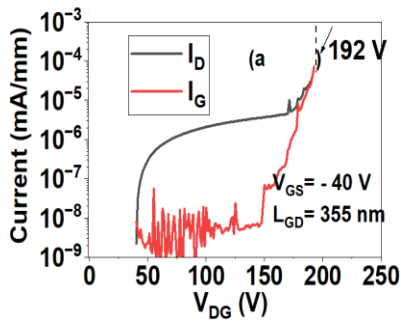


Figure 3 (a) 192 V breakdown voltage recorded for $L_{GD} = 355$ nm (b) E_{AVG} vs L_{GD} benchmarking with other Gallium oxide and GaN HEMT devices

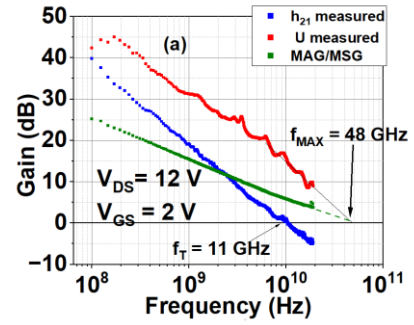
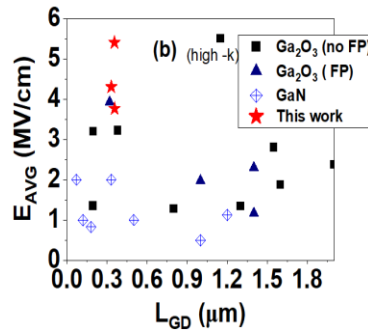


Figure 4: small signal analysis showing 48 GHz f_{max}

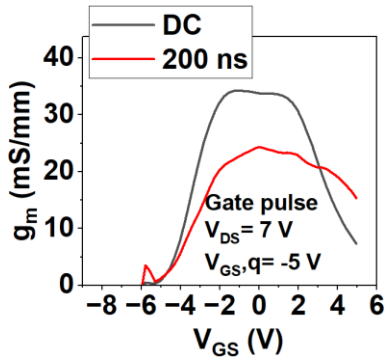


Figure 5: g_m measured at 200 ns Showing current collapse for Gate pulse

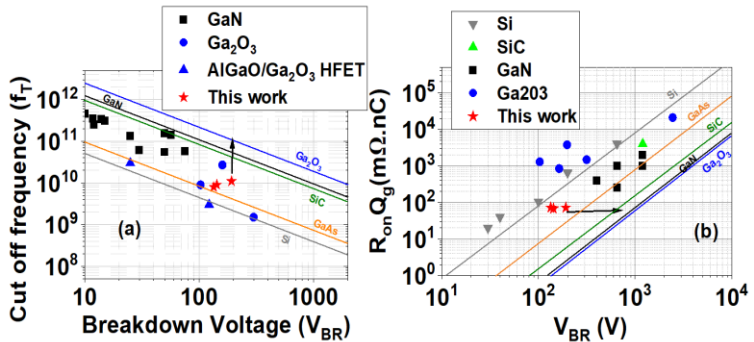


Figure 6 (a) f_T vs V_{BR} benchmarking of our device, (b) Huang's material figure of merit benchmarking ($R_{on} Q_g$ vs V_{BR})