

Figure 1 – SIMS results showing interfacial Si unaffected by HF etching in samples grow in our plasma-assisted MBE

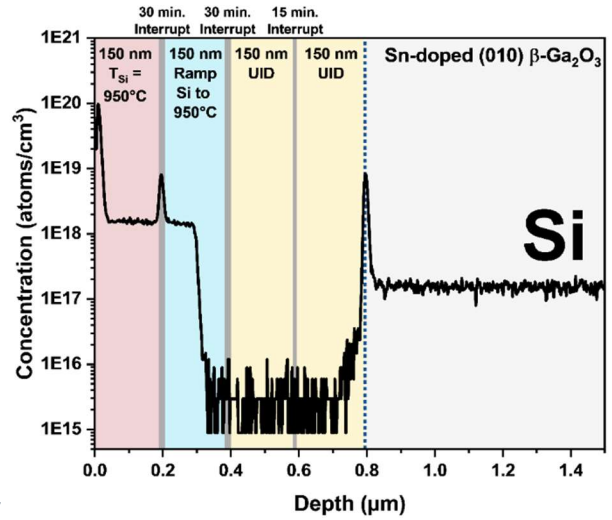


Figure 2 – SIMS stack testing for sources of unintentional Si doping. A hot Si source can cause Si re-accumulation in equal concentration to the interfacial contamination.

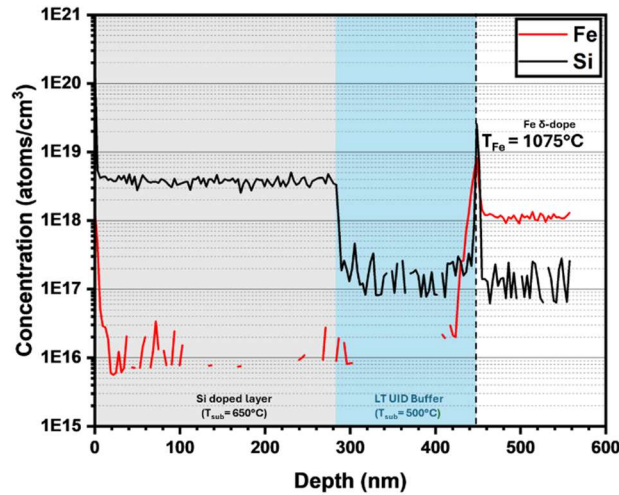


Figure 3 – SIMS results showing the Fe and Si doping profile within the two-layer growth process. Fe remains near the substrate interface.

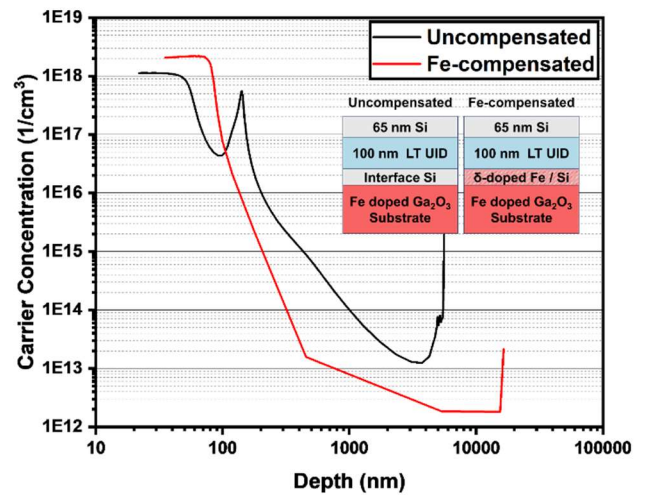


Figure 4 – C-V results showing no spike in carrier concentration near the substrate interface in sample with Fe compensation doping.

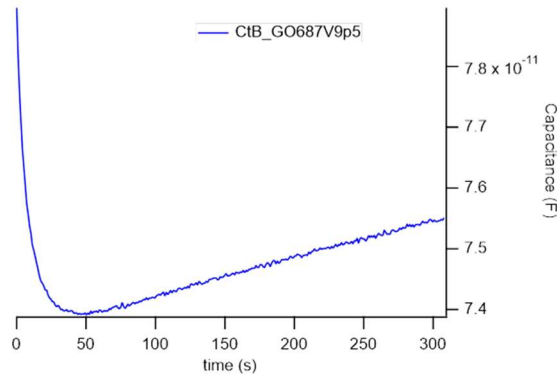


Figure 5 – Time-dependent C-V transients showing initial decrease due to acceptors followed by an increase due to donors.