Supplemental information

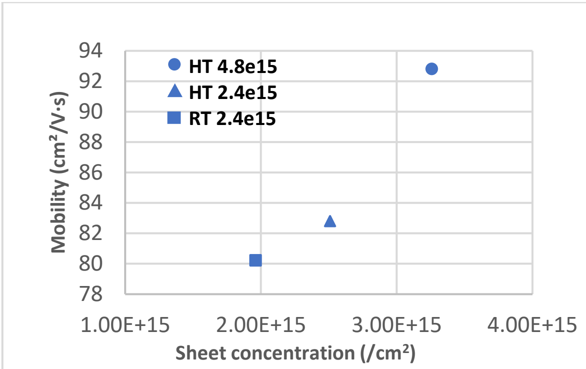


Fig. 1: Summary of mobility and sheet concentration for RT and HT(600^0 C) Si implants into Ga_2O_3 with total fluences of 2.4e15 and 4.8e15 cm^{-2}.

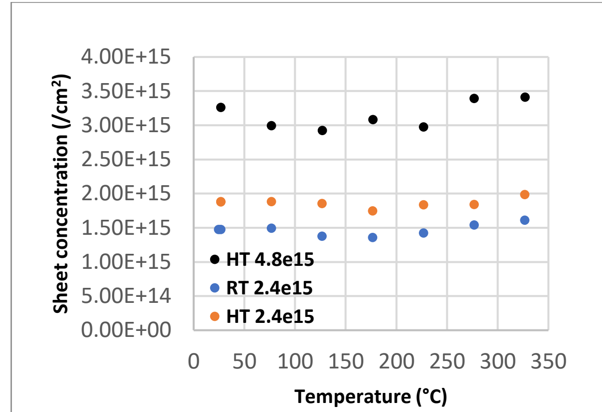


Fig. 2: Sheet charge concentration versus temperature for HT and RT implanted samples.

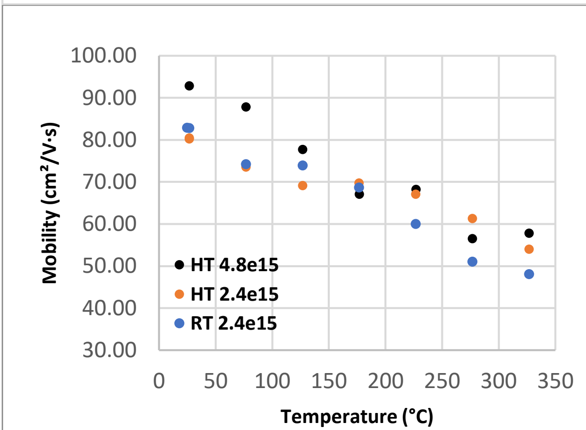


Fig. 3: Electron mobility versus temperature for HT and RT implanted samples.

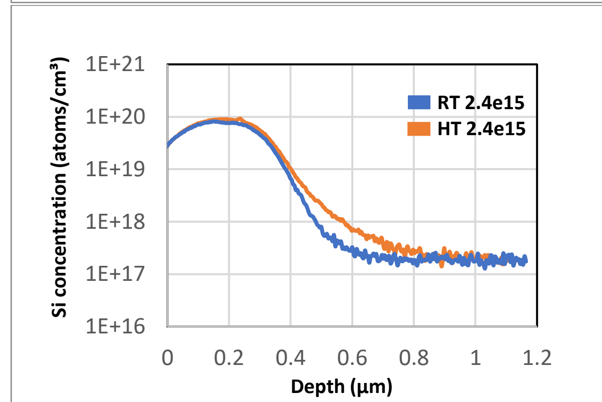
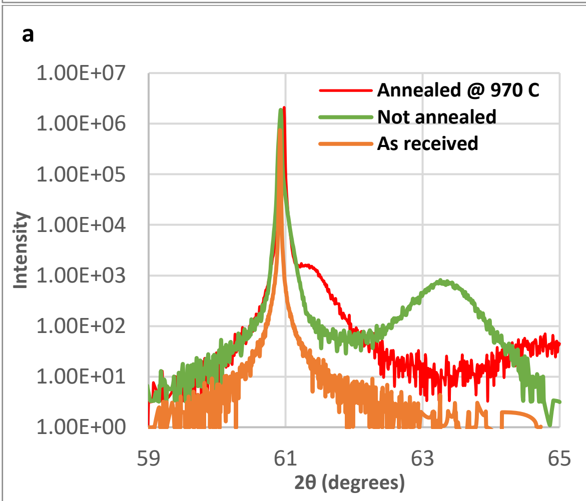


Fig. 4: SIMS profiles of Si in β-Ga_2O_3 implanted with 275 and 425 KeV Si^+ ions with total fluence of 2.4e15 ions/cm² for HT and RT samples.



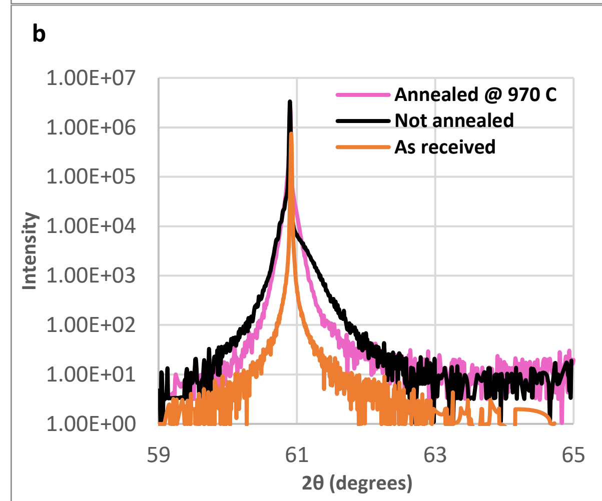


Fig. 5: HRXRD spectra of Ga_2O_3 implanted with 4.8e15 cm^{-2} Si^+ at (a) RT and at (b) HT, before and after annealing compared to the as-received MBE sample spectrum.