

Figure 1: (a) AlGaAs /GeSn heterostructure band diagram (b) Silvaco simulated band structure

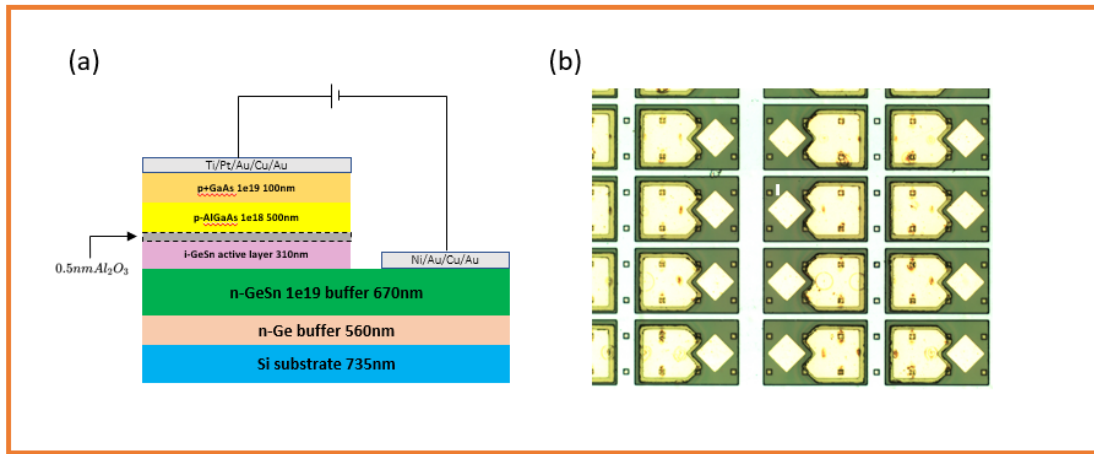


Figure 2: (a) AlGaAs/GeSn diode device structure (b) Optical microscope image of the diodes

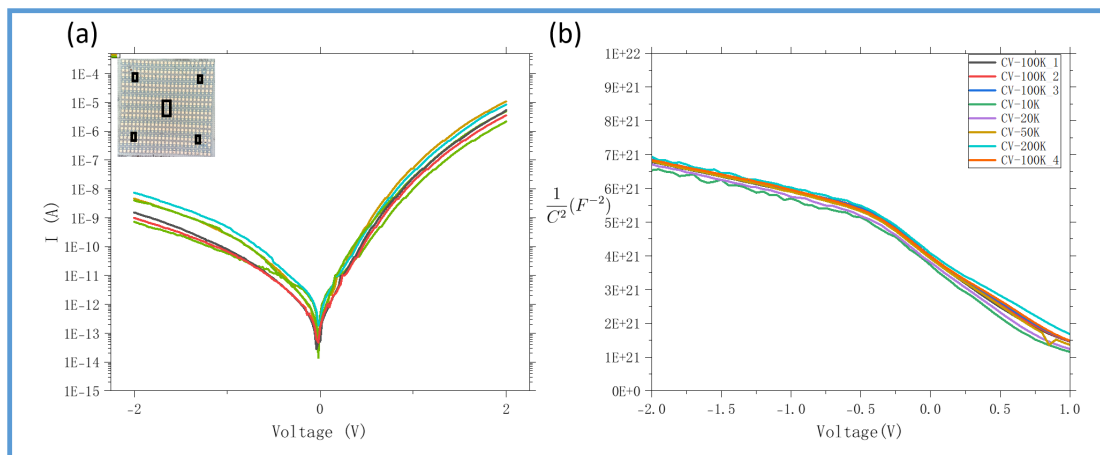


Figure 3: (a) I-V performances from -2V to 2V from the different regions of the sample (b) C-V performances under frequency from 10KHz to 200KHz(100KHz was measured multiple times to check the stability)