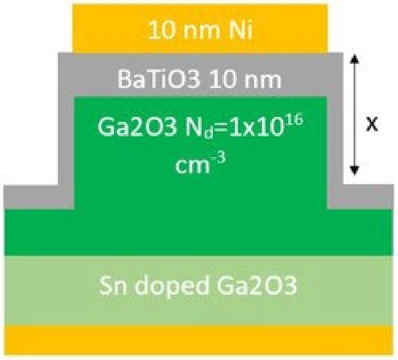

Figure 1: Schematic of the device where X varies between 0, 3, and 6 um.

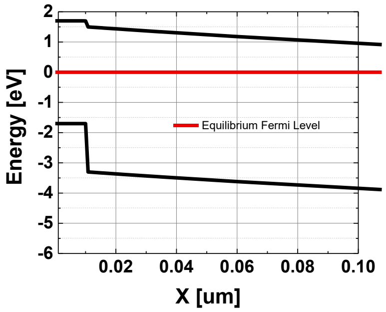

Figure 2: Equilibrium band diagram of BaTiO3- Ga2O3 heterojunction at equilibrium.

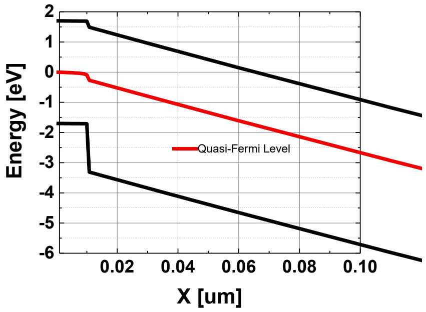

Figure 3: Band diagram of BaTiO3-Ga2O3 heterojunction at -20 V bias.

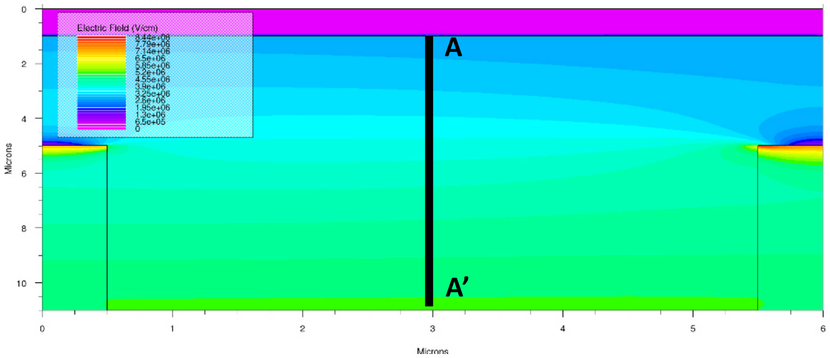

Figure 4: Simulated electric field coutour in 6um-trench device, showing a peak field in the device of 5 MV/cm. A cut-line is defined from A-A'.

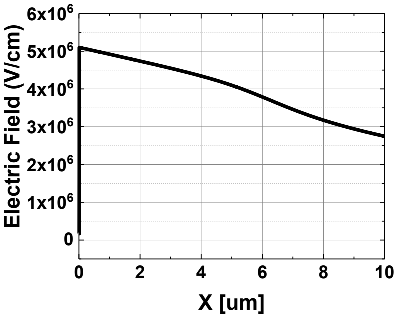

Figure 5: Electric field profile along cutline A-A' from Figure 4. Peak field is at 5 MV/cm.

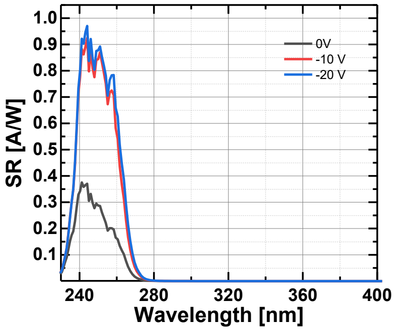

Figure 6: Spectral response of the device at 305K.

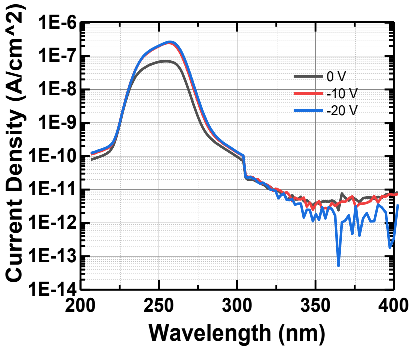

Figure 7: Current vs. wavelength behavior of the device at 305K.

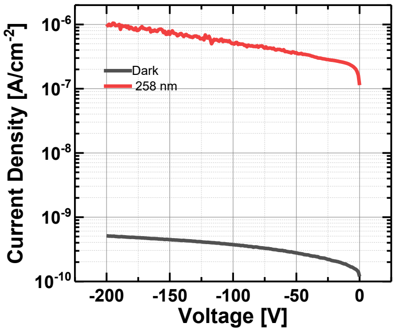

Figure 8: IV curve with and without 258nm illumination.