Supplementary Page:

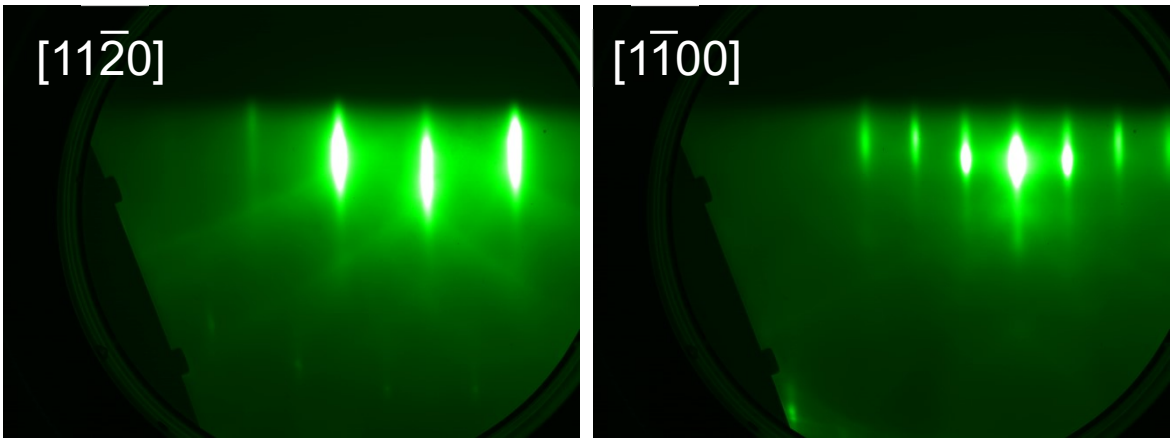

Figure 1. RHEED patterns showing a √3 x √3 R30° (apparent (1x3) in L_0 Laue zone [5]) RHEED pattern of 4H-SiC surface at ~ 300 °C after heating to ~ 1000 °C real temperature (1100 °C heater temperature). The Si/TiN backside layer stack gave rise to efficient absorption of the heater radiation and efficient heating of the SiC substrate.

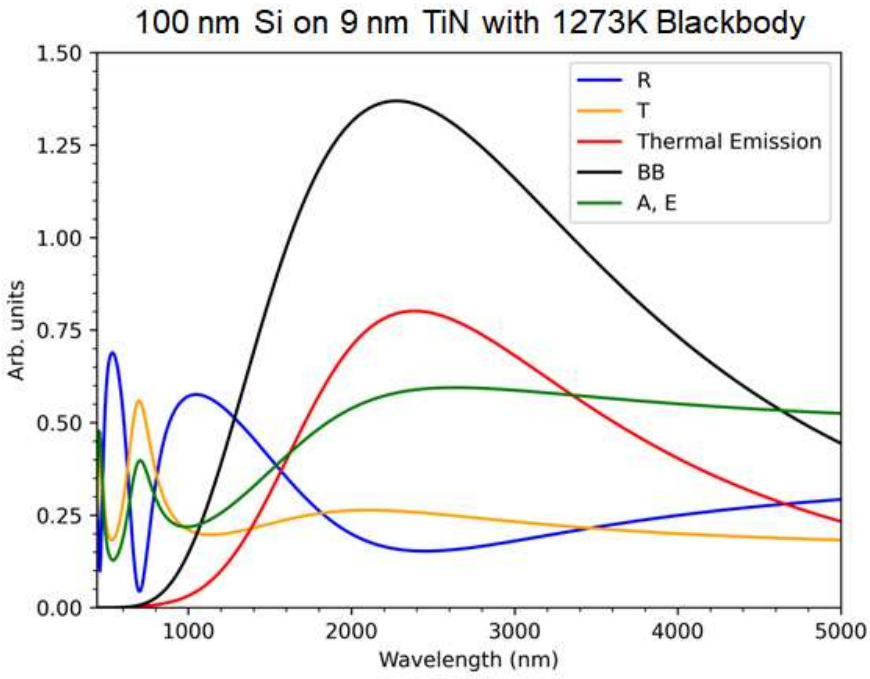

Figure 2. WPTherml [4] simulation of 100 nm Si on top of 9 nm TiN with a 1000 °C blackbody. Blue curve R is reflectivity. Orange curve T is transmissivity. Red curve is the thermal emission of the layer stack. The absorptivity / emissivity (A, E, green curve) at the 2.3 µm blackbody (BB, black curve) peak is around 58%, indicating efficient absorption of the radiation by the layer stack.