

Supplemental information

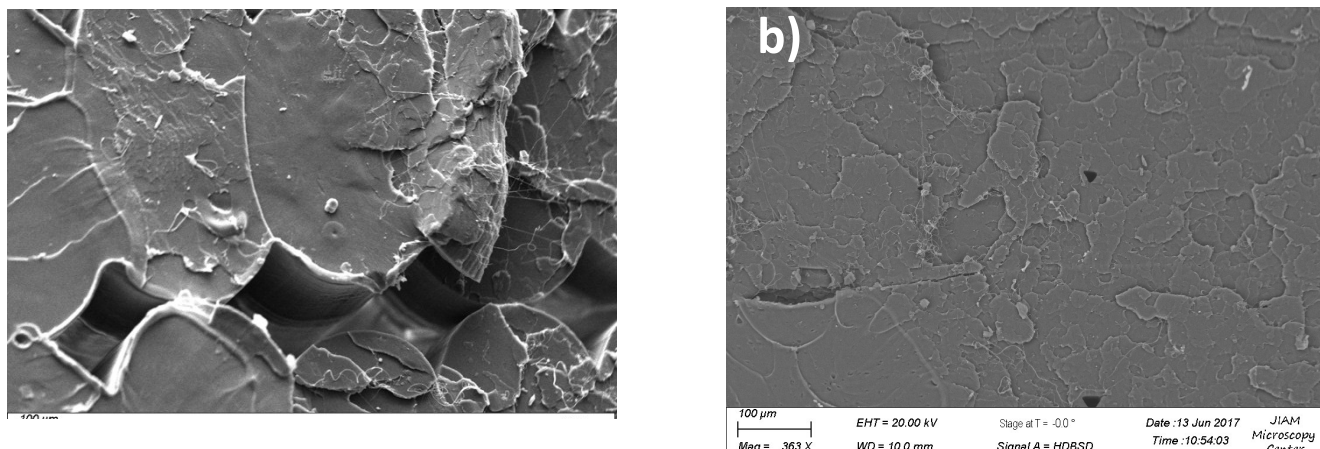


Figure S1: SEM images of the inter-filament voids in the XY orientation for a) PLA printed at 100°C bed temperature b) 0.5% graphene composite printed at 100 °C bed temperature

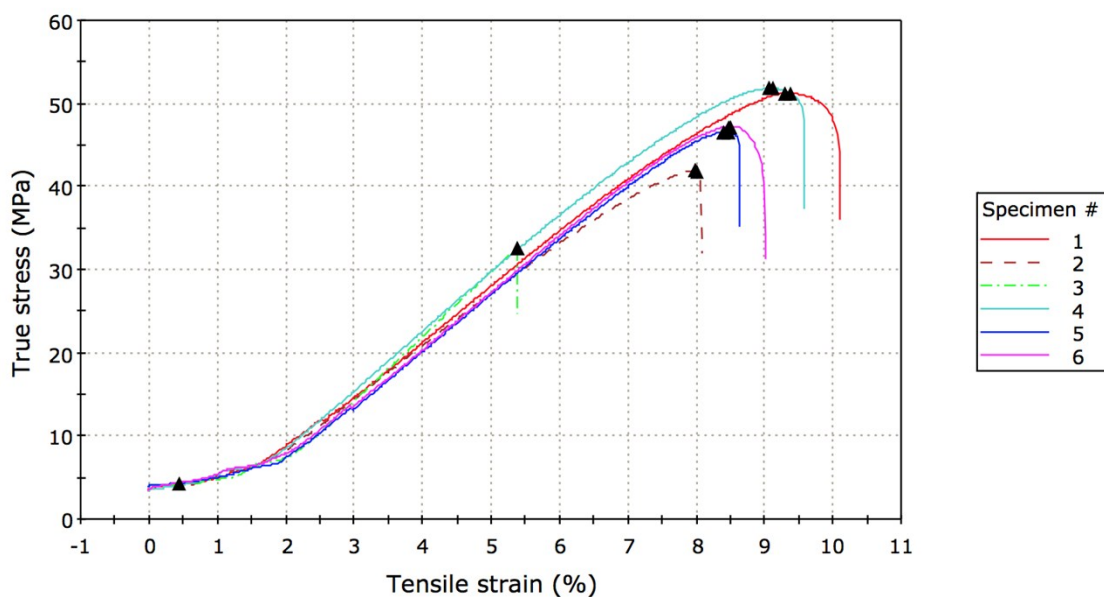


Figure S2: Stress vs Strain for 0.5% graphene composite for XY orientation with bed temperature of 70 °C

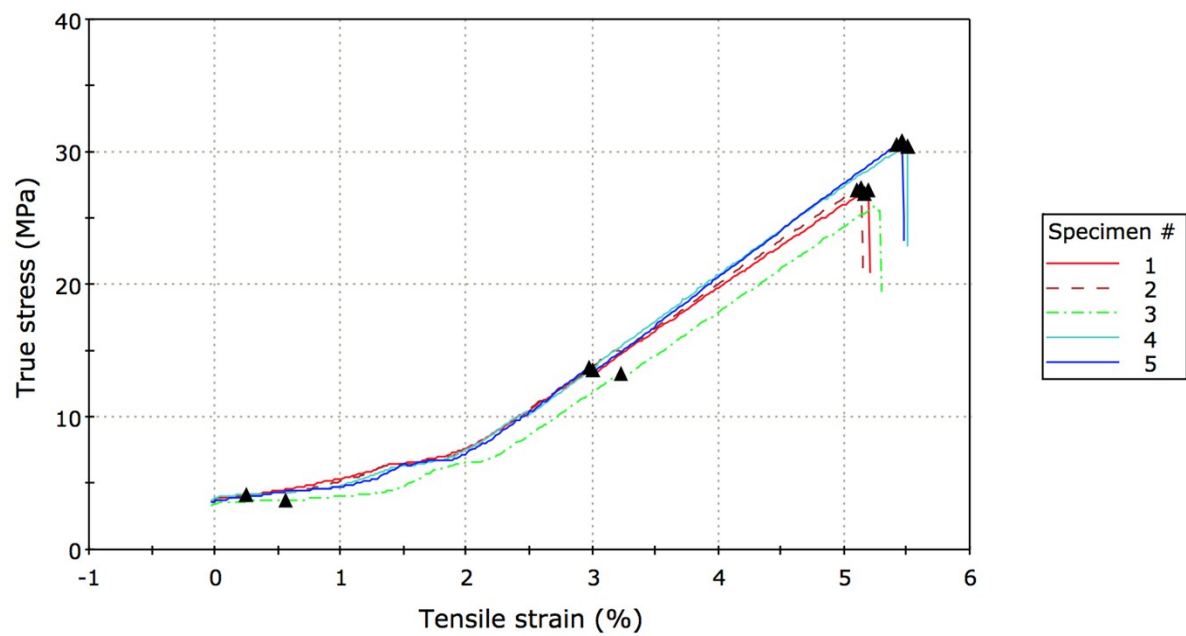


Figure S3: Stress vs Strain for 0.5% graphene composite for Z orientation with bed temperature of 70 °C

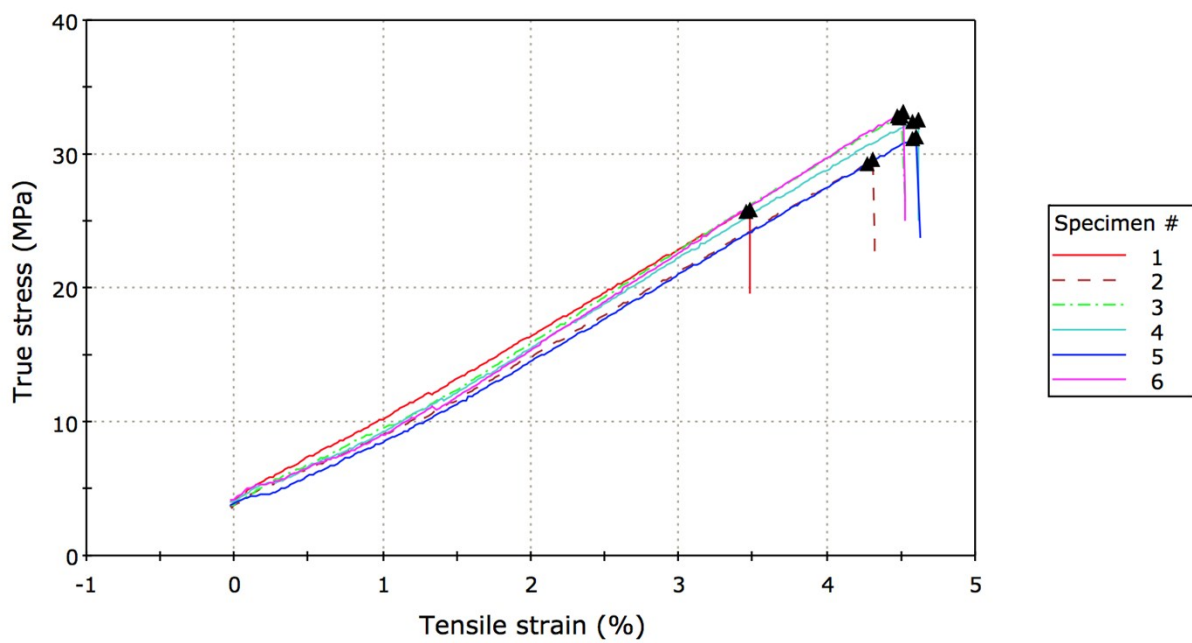


Figure S4: Stress vs Strain for 1 % graphene composite for XY orientation with bed temperature of 70 °C

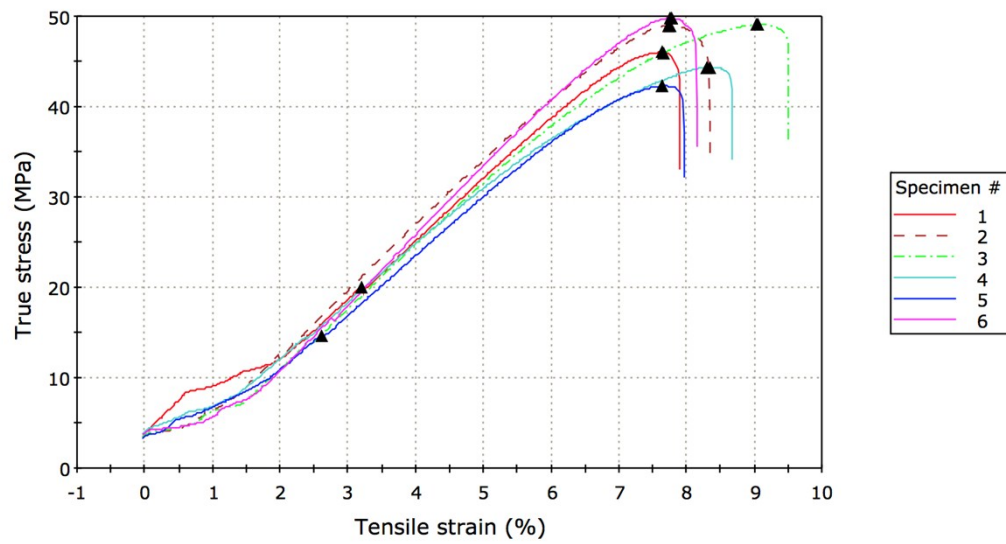


Figure S5: Stress vs Strain for 2% graphene composite for XY orientation with bed temperature of 70 °C

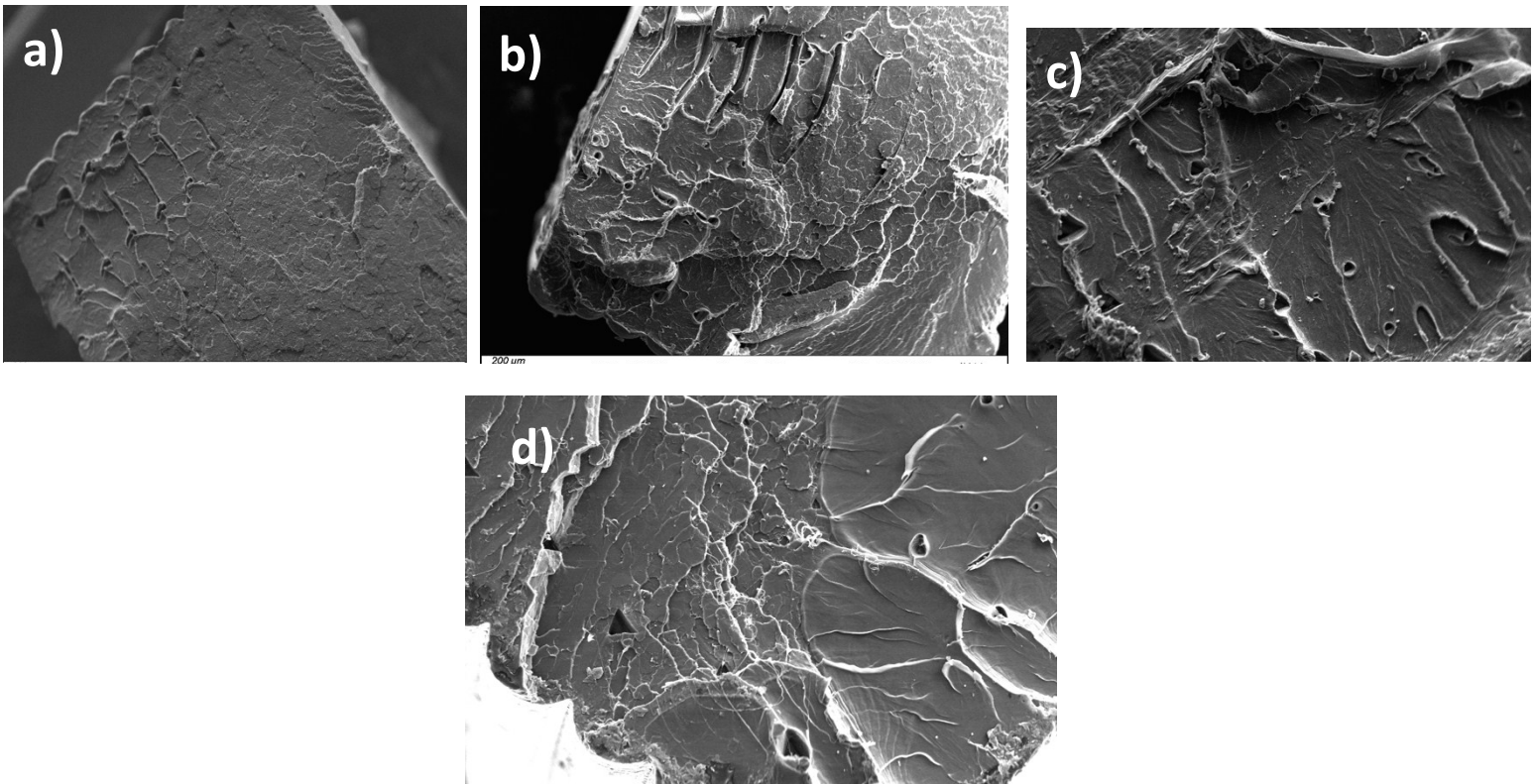


Figure S6: SEM images of the inter-filament voids samples printed at 85 °C. Image (a) shows the 0.5 % graphene composite while image (b) shows the 1% graphene sample and both (c) and (d) show the 2% graphene sample.