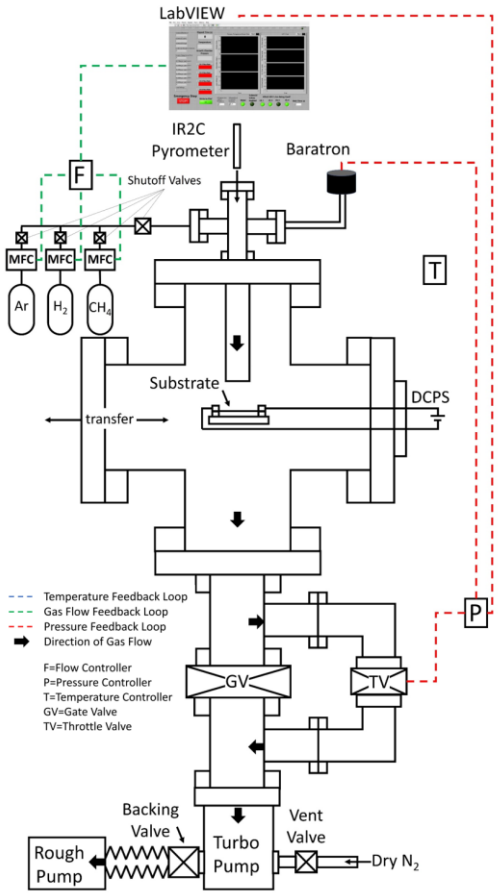
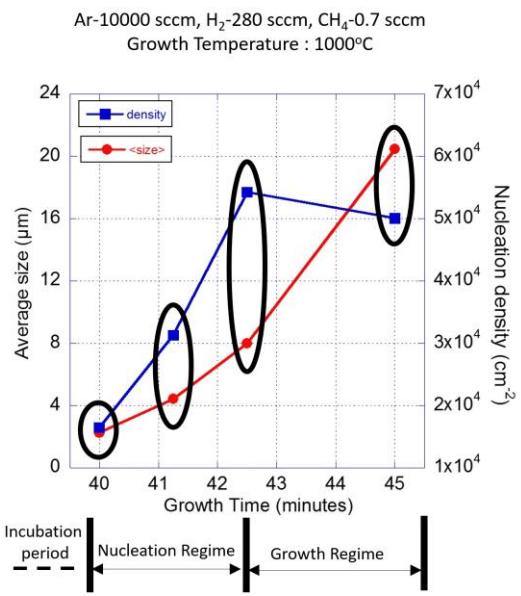
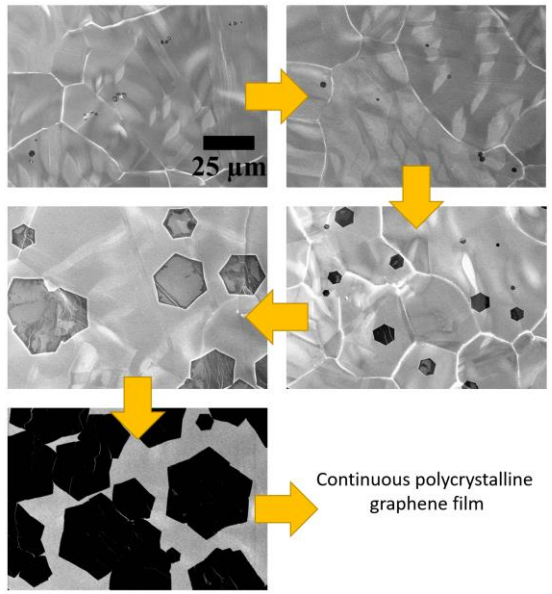
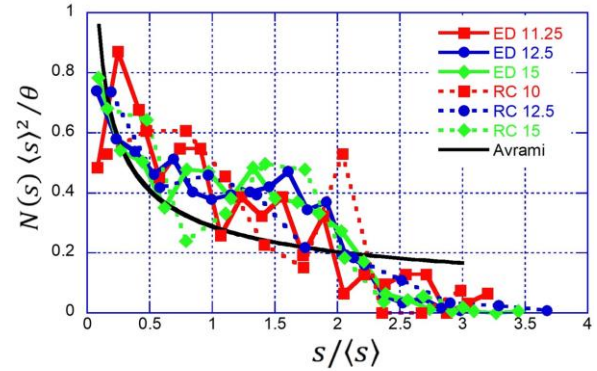
Automated Cold wall CVD chamber setup

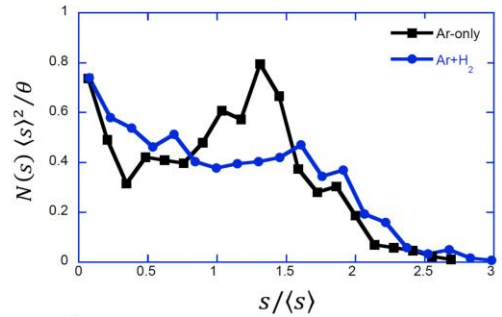


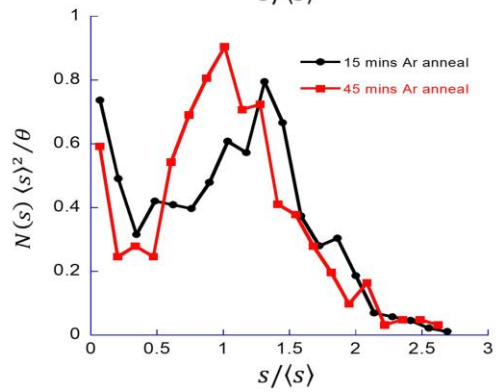


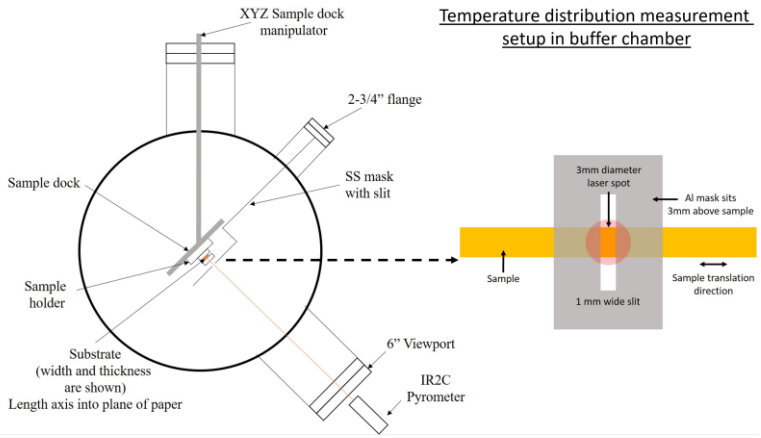




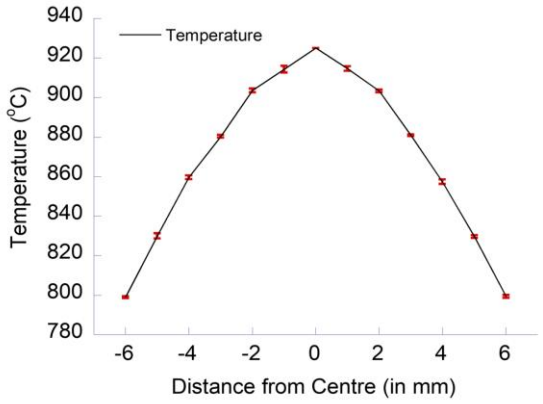
Scaling functions of graphene island size distributions on ED Cu and RC Cu (annealed in Ar+H_2)

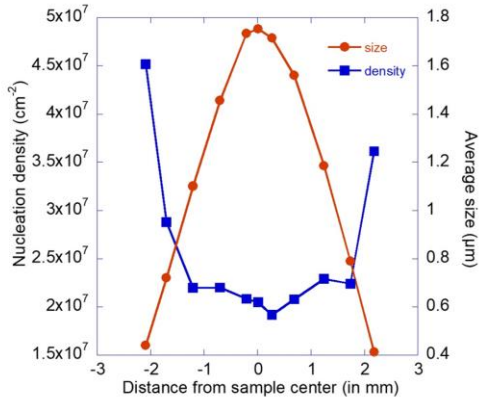




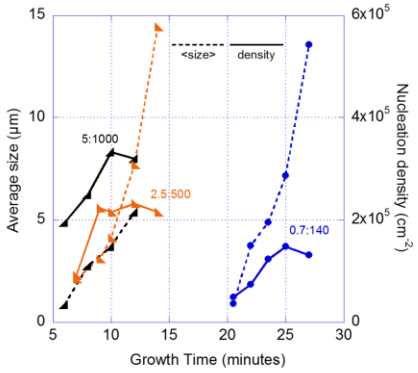


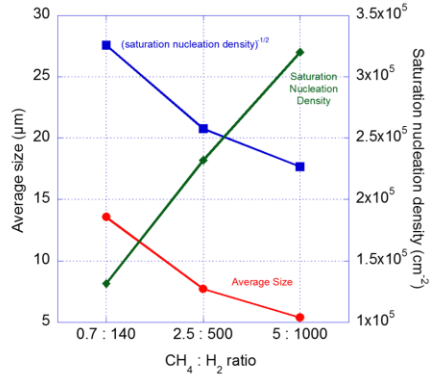
Temperature distribution measurement setup in buffer chamber

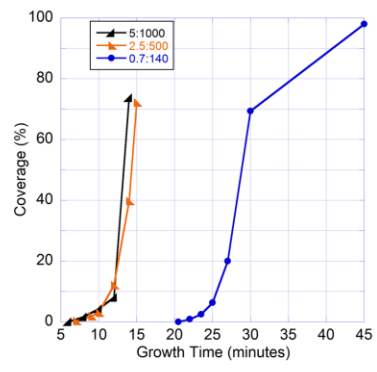




Fixed CH_4:H_2 = 1 : 200 at different Ar dilutions

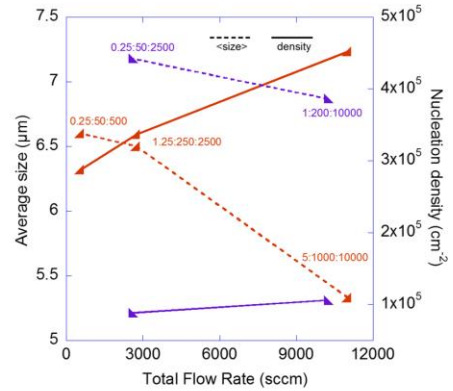


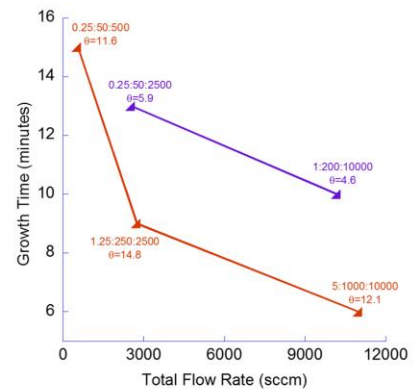




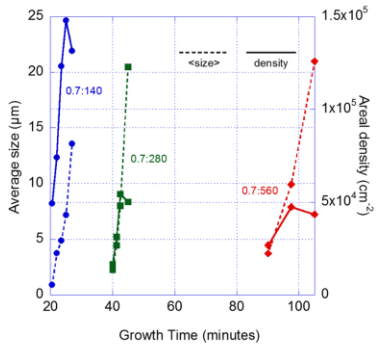
CH_4 flow rates investigated were 5 sccm, 2.5 sccm and 0.7 sccm with corresponding H_2 flow rates being 1000, 500 and 140 sccm. Ar flow rate was 10000 sccm.

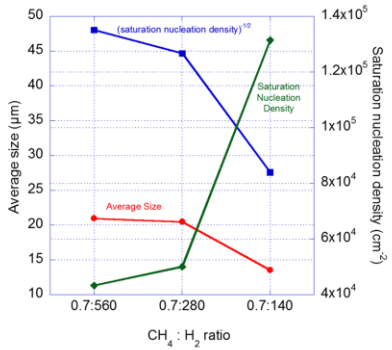
Effect of flow rate

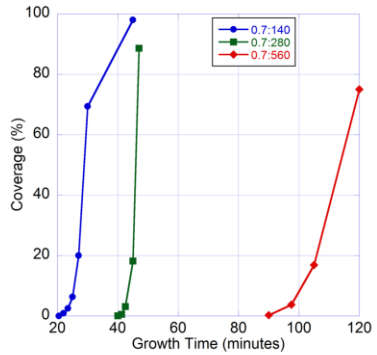




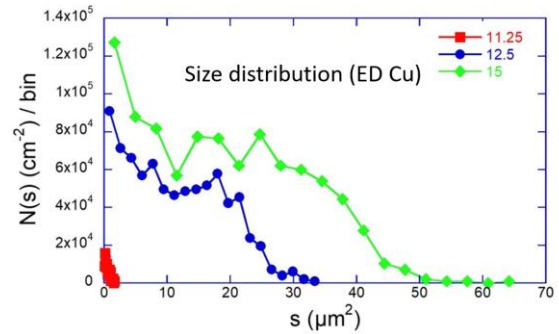
Effect of CH_4:H_2

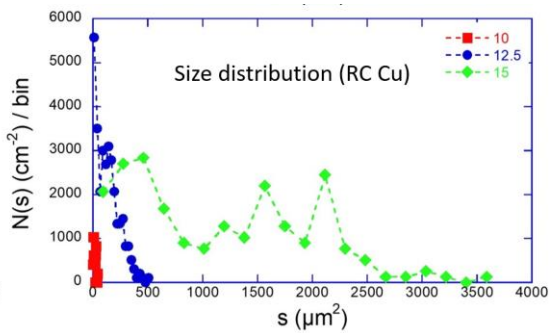


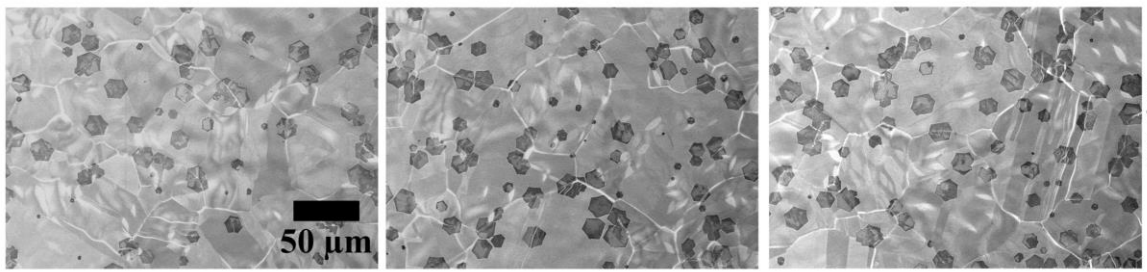


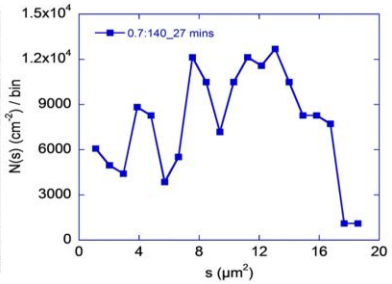


CH_4 flow rate was kept at 0.7 sccm for all sets of experiments while H_2 flow rates investigated were 140 sccm, 280 sccm and 560 sccm. Ar flow rate was 10000 sccm









CH_4, H_2, Ar flow rates of 0.7, 140, 10000 sccm at 1000°C, 700 Torr for 27 minutes on ED Cu

Multiple SEM images analyzed per sample at sample center; a size distribution of spatially random nuclei exists in a given area suggesting different nucleation times, effect of simultaneous nucleation and growth

Growth on liquid Cu