

Figure 1:

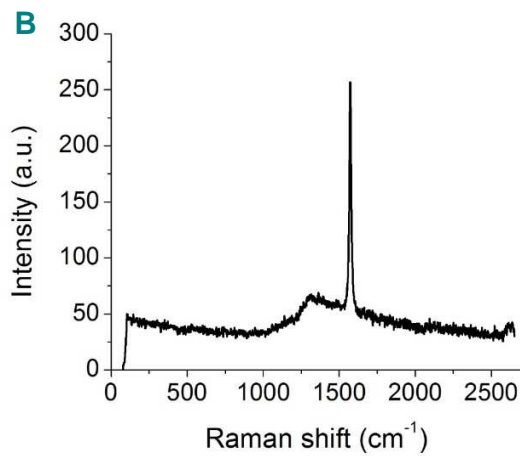
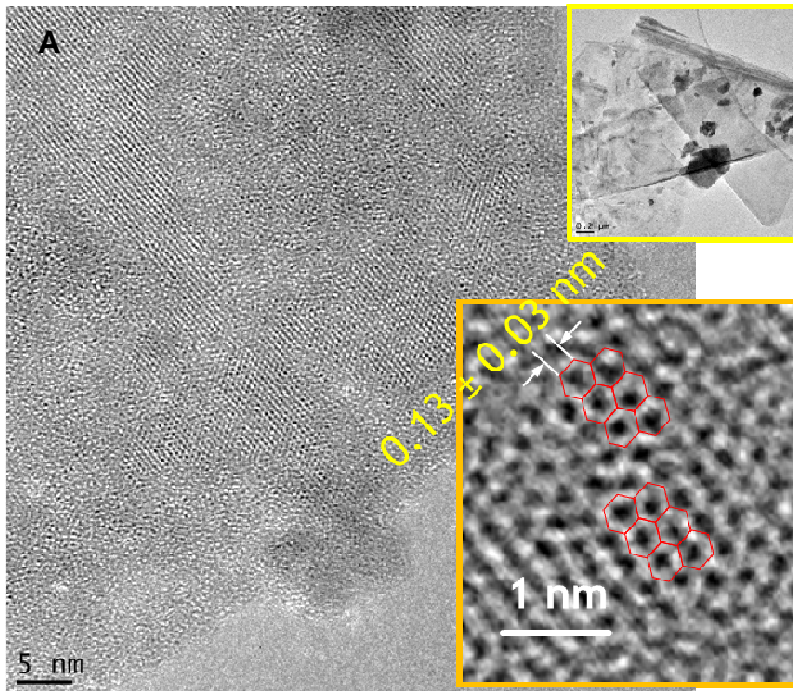


Figure 1A) High resolution TEM image of single-layer graphene. Inset (top right) shows low-resolution image of single-layer graphene. Inset (lower right) shows atomic scale TEM image indicating arrangement of carbon atoms (red hexagons) with bond length closely matching that of C-C in graphene network. Figure 1B) Raman spectra for various graphene flakes showing significantly large G-band peak intensity as compared to D and 2D band. This also corresponds to very low I_D/I_G ratio of $\sim 0.15 \pm 0.05$