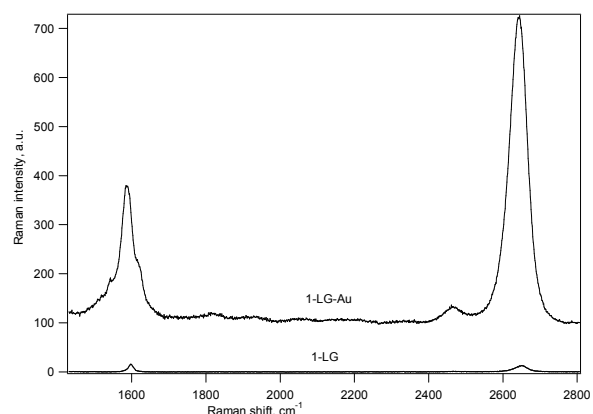
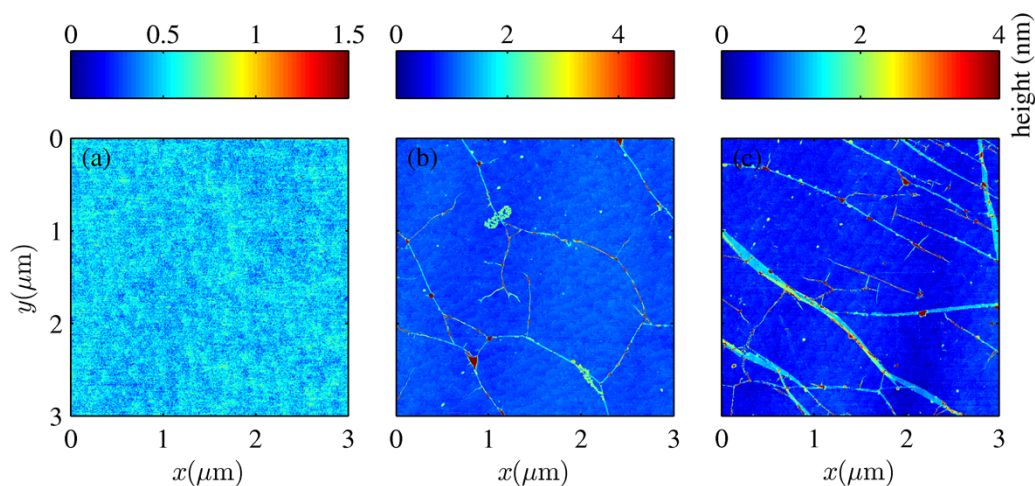


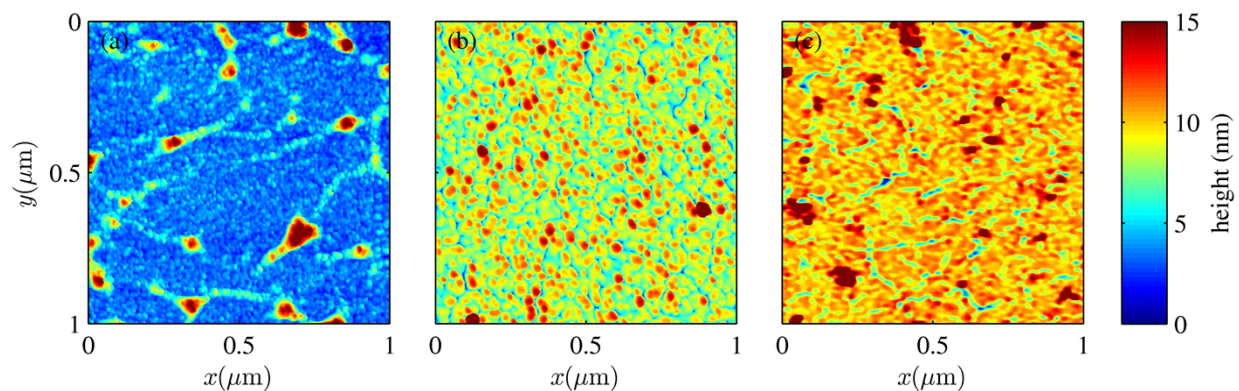
Supplementary information



SupFigure 1. The Raman spectra of 1-LG and 1-LG-Au sample (with 15 nm of Au) on Si/SiO₂ substrate.



SupFigure 2. AFM image of a) sapphire <11-20> and b, c) sapphire <11-20> with graphene at two different places on the sample.



SupFigure 3. AFM image of graphene on sapphire $\langle 11\text{-}20 \rangle$ covered by a) 5, b) 10 and c) 20 nm layer of Au. The size of the imaged area is $1\mu\text{m}^2$. The height scale bar is the same for all figures for easier comparison of the samples.