

Figure Supp.1: Raman Spectrum of the Cu/Cu₂O-filled CNOs showing the presence of a small peak ascribed to copper oxide and other peaks which could be ascribed to the D, G and 2D bands.

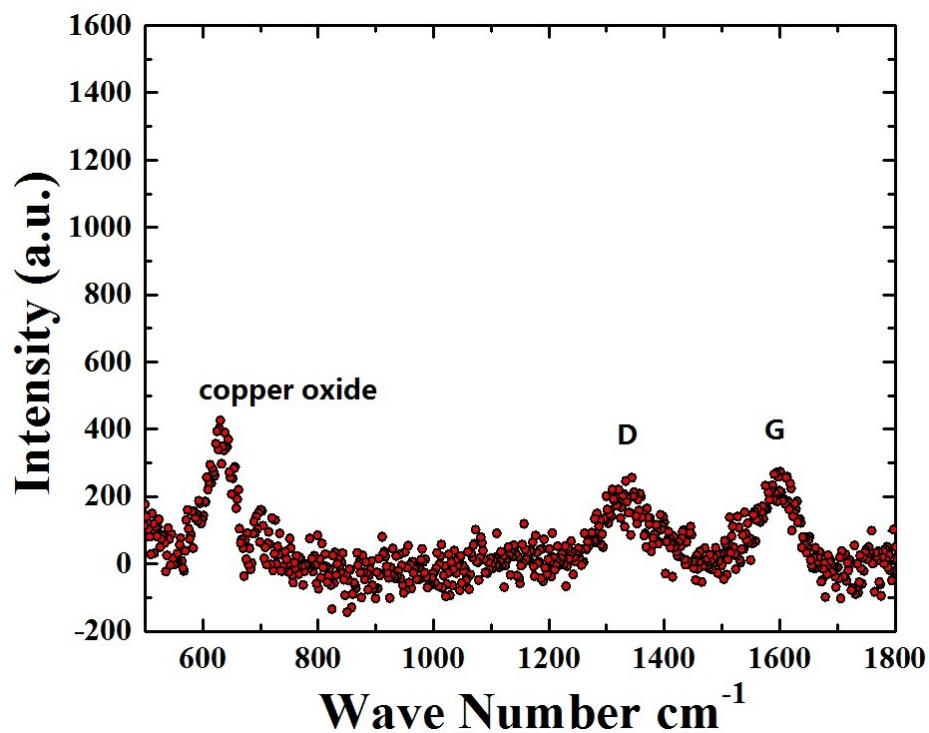


Figure Supp.2: Raman Spectrum of the region of the sample containing Cu₂O-filled CNOs showing the presence of a small peak ascribed to copper oxide and other small peak-features which could be ascribed to the D and G bands.

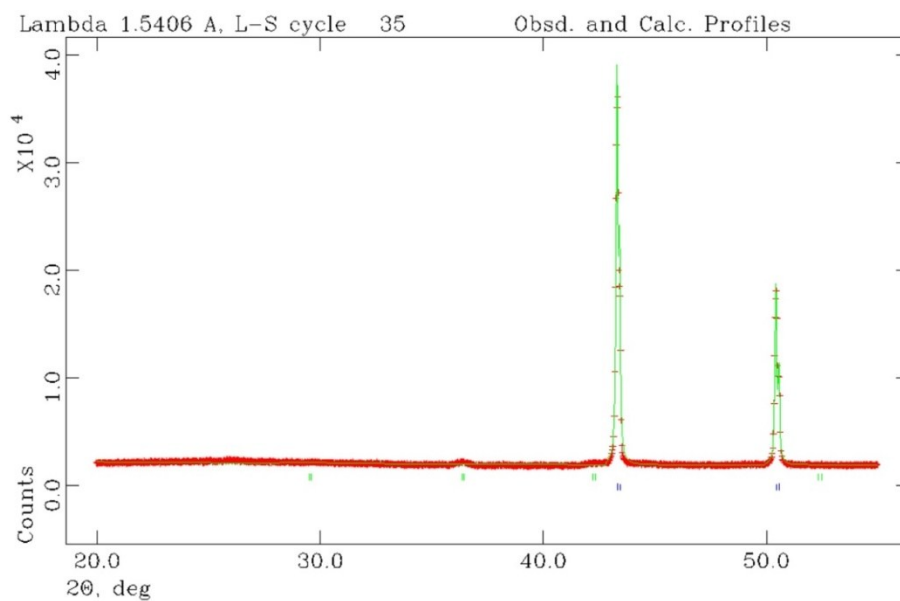


Figure Supp.3: Rietveld refinement of the diffractogram shown in the manuscript, Fig.10. By excluding the carbon contribution the ratio between Cu and Cu₂O could be extracted as follows: Cu 94%, Cu₂O 6%.

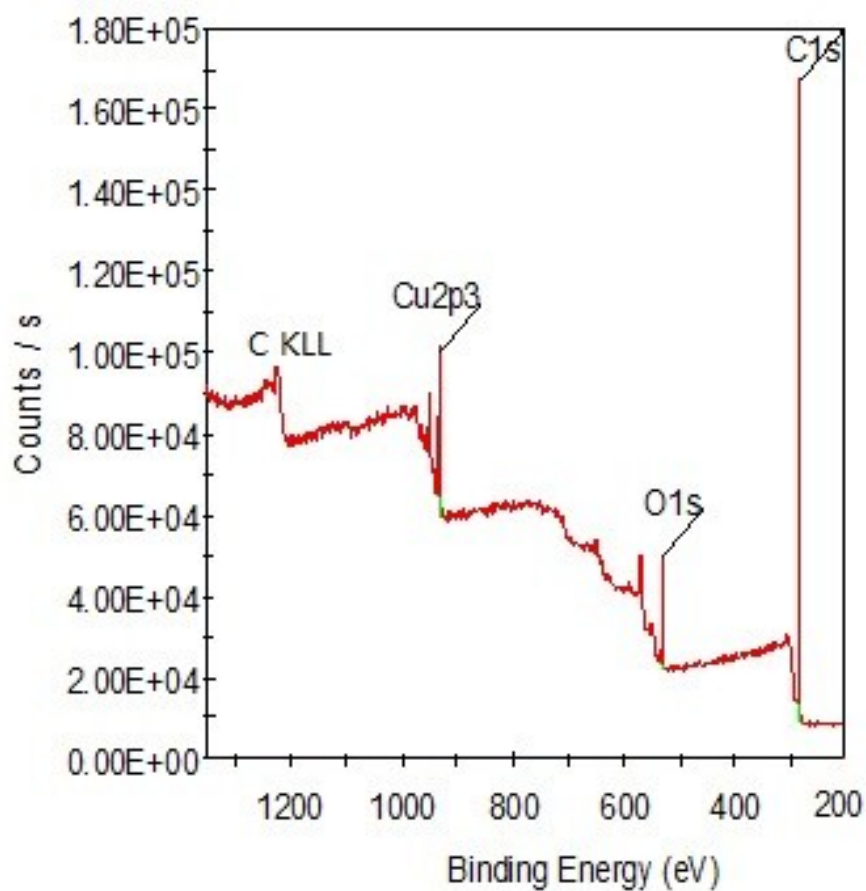


Figure Supp.4: XPS analyses of the Cu/Cu₂O filled CNOs.