

Fig.S1.Decomposition of MWCNT (cleaned with HCl and reduced in 5% H_2 -95%Ar at 500 °C) in air atmosphere.

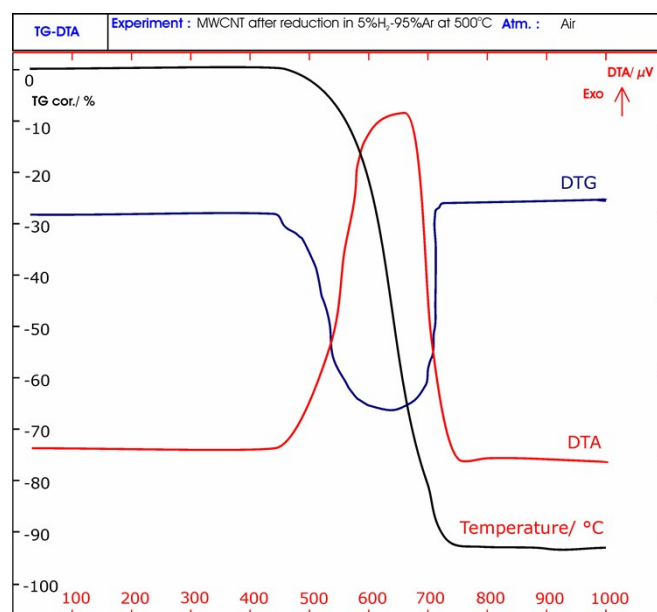
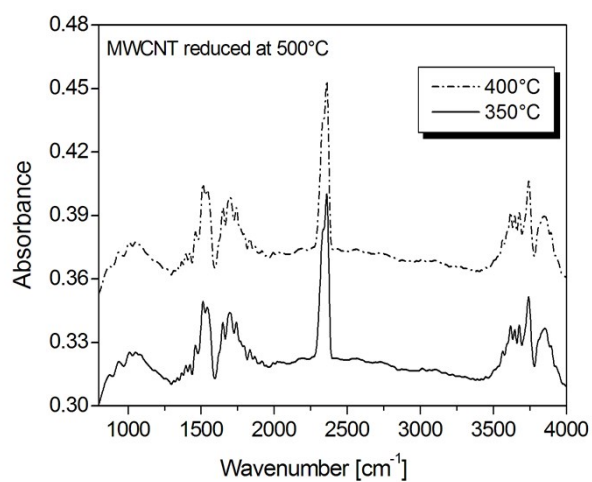


Fig.S2.Decomposition of pristine MWCNT (reduced in a mixture of 5% H_2 -95%Ar at 500 °C) in air atmosphere.

A



B

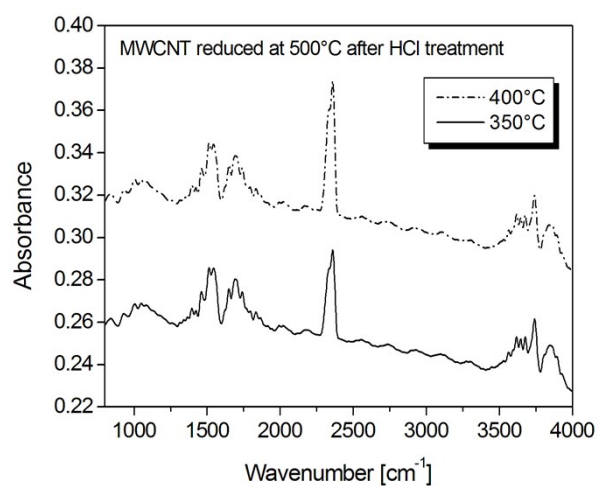


Fig.S3.FTIR spectra of adsorbed species taken after reduction at 500 °C and exposure of the following catalytic systems A) pristine MWCNT B) MWCNT cleaned with HCl to a 1 vol.% methanol-argon mixture at 300 and 400 °C.