Impact of oxygen functional groups on reduced graphene oxide based sensors

for ammonia and toluene detection at room temperature

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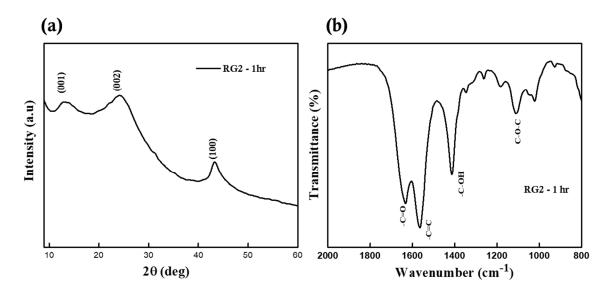


Figure. S1: (a) XRD and (b) FTIR spectra of RG2 (1 hour)

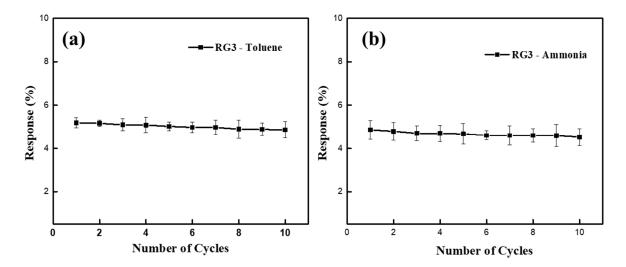


Figure S2: The stability of RG3 sensor with 10 repetitive cycles in the presence of 40 % RH (a) Toluene and (b) Ammonia. Error bars represent standard deviations (n=3)

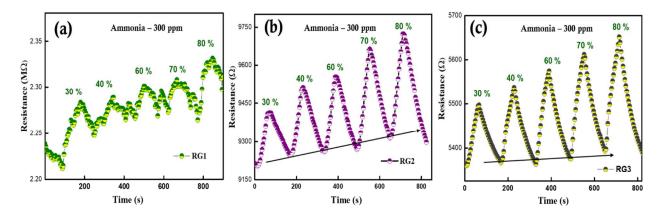


Figure S3: Response of the rGO based sensor for detection of 300 ppm of Ammonia at different relative humidity (30 % to 80 %) (a) RG1, (b) RG2 and (c) RG3 respectively

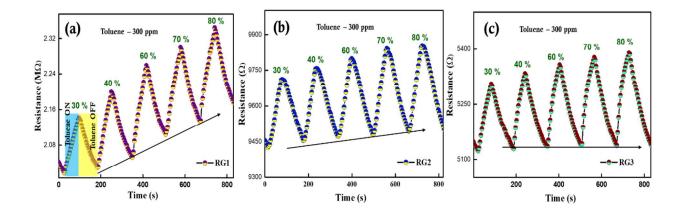


Figure S4 : Response of the rGO based sensor for detection of 300 ppm of Toluene at different relative humidity (30 % to 80 %) (a) RG1, (b) RG2 and (c) RG3 respectively.