1

Supplementary Information

Growth of diazonium functionalized ZnO nanoflakes on flexible carbon cloth for electrochemical sensing of acetone in the liquid phase

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Fig. S1. (A) Linear sweep voltammogram of ZnO NFs/ZnO NPs/CC in diazonium salt at scan rate of 100 mVs⁻¹ (B) at various incubation time (a-0, b-15, and c-30) minutes with a scan rate of 100 mVs⁻¹.



Fig. S2. Electrochemical response of acetone (a) bare CC in acetone (0.5 ppm) in PBS (pH 7.4, scan rate 100 mVs⁻¹) (b) upon incubation with NFs modified CC, (c) NFs modified CC in the presence of LSV reduced diazonium reacted acetone (0.5 ppm) at scan rate 100 mVs⁻¹, (d) NFs modified CC in acetone (0.5 ppm) & diazonium salt.



Fig.S3. (A) XRD patterns of ZnO NPs/CC and ZnO NFs/CC



Fig .S4. SEM image of ZnO NFs/ZnO NPs/CC after detection of acetone.