

Supporting Information

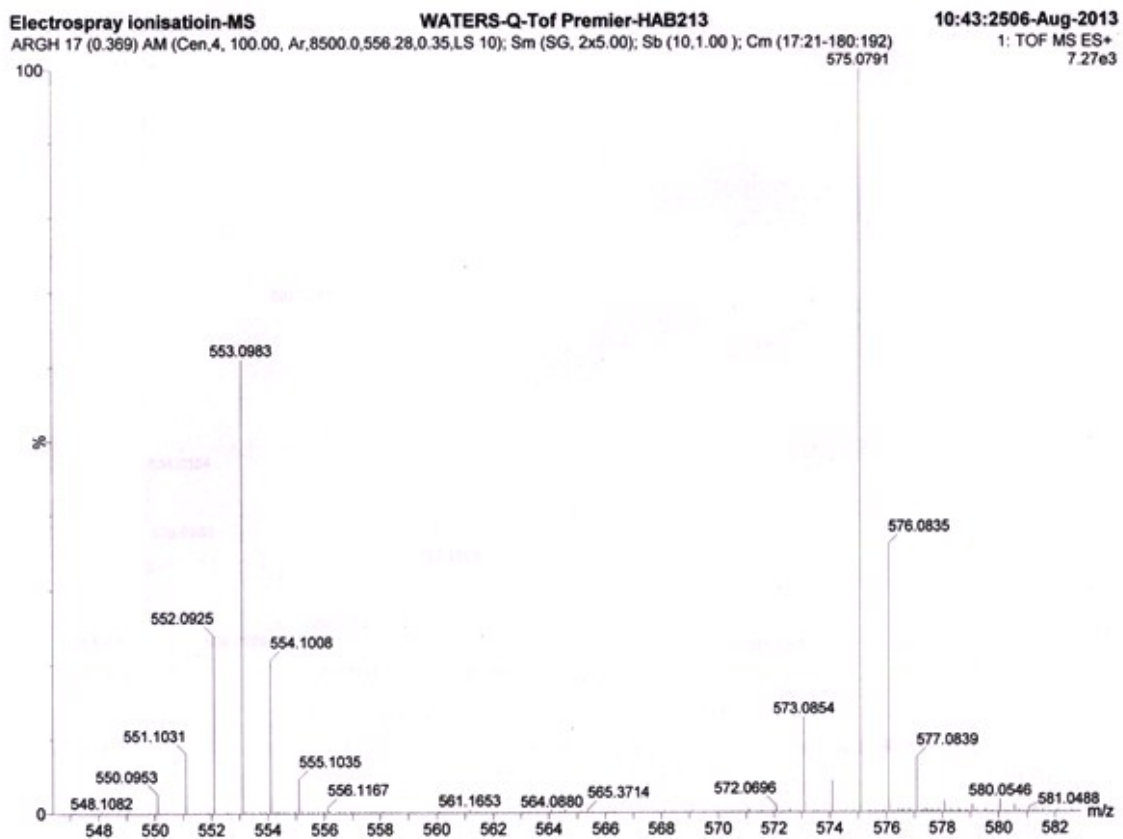
For

Nanocomposite of ferrocenoyl glutaric acid hydrazone and multiwalled carbon nanotubes as a sensor of azide ion

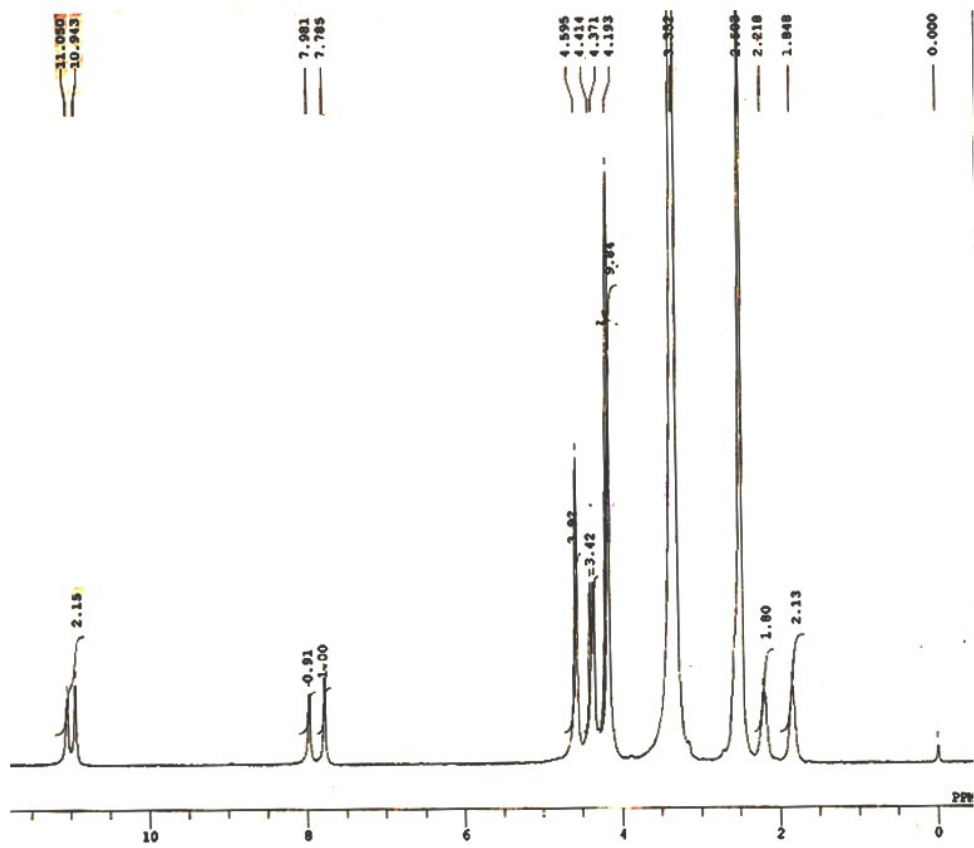
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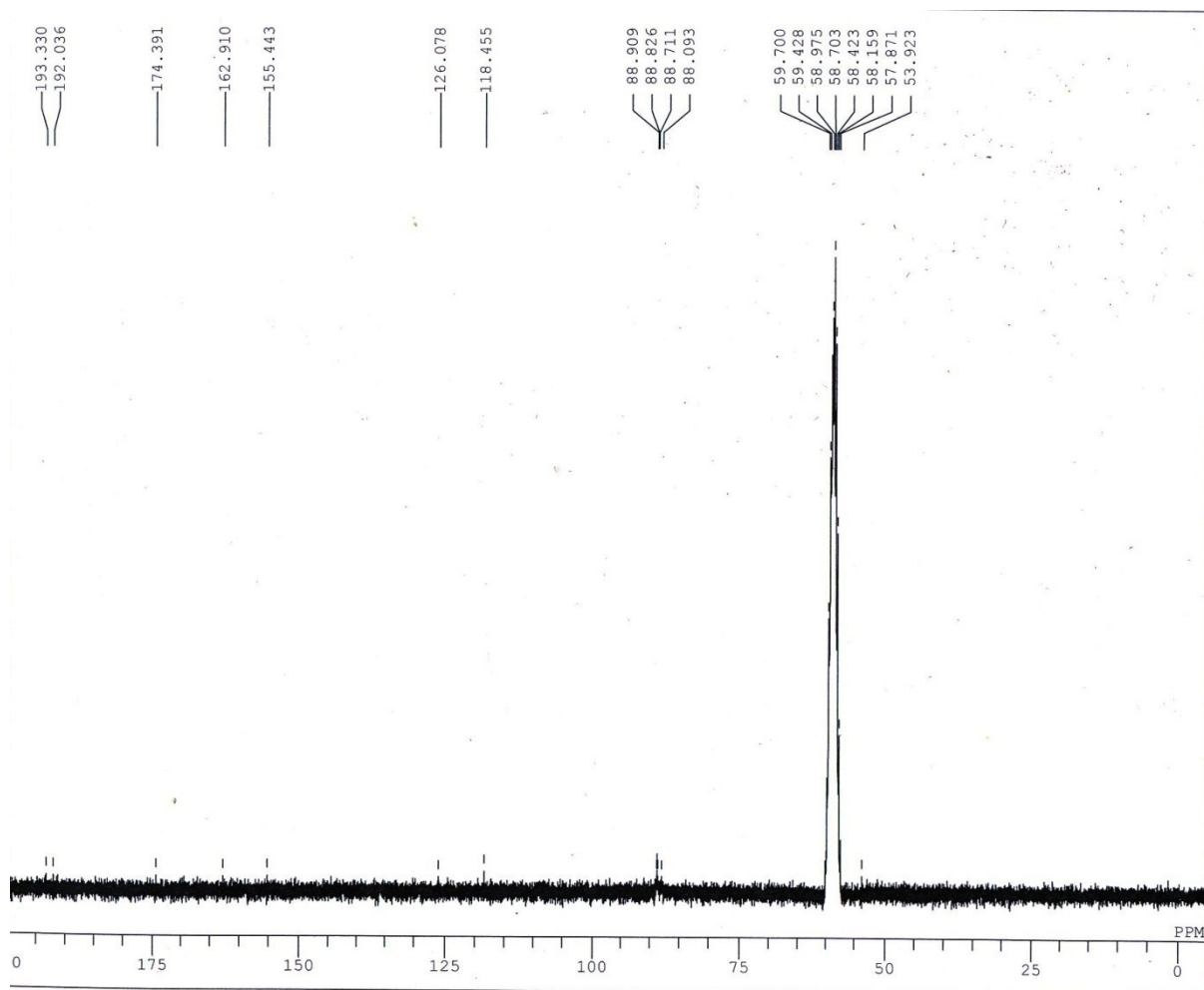
Mass spectroscopic data of ferrocenoyl glutaric acid hydrazoneS1
¹ H NMR spectrum of ferrocenoyl glutaric acid hydrazoneS2
¹³ C NMR spectrum of ferrocenoyl glutaric acid hydrazoneS3
IR spectrum of ferrocenoyl glutaric acid hydrazoneS4
CV of ferrocene-4-carboxylaldehyde/MWCNTs/nafion modified GCE at different scan rates (10-250 mV/s; Fig. S5 (a)), photograph showing bad film forming ability of ferrocene-4-carboxylaldehyde/MWCNTs/nafion (Fig. S5 (b)) and photograph showing very good film forming ability of L/MWCNTs/nafion nanocomposite modified electrode (Fig. S5 (c))S5
Interference data for L/MWCNTs/nafion nanocomposite modified electrodeS6
Bar graph (A) Detection of 1.86 mM concentration of azide by varying different concentration of nafion, keeping MWCNTs and L constant, (B) Detection of 1.86 mM concentration of azide by varying different concentration of MWCNTs, keeping nafion and L constant; (C) Detection of 1.86 mM concentration of azide by varying different concentration of L, keeping MWCNTs and nafion constant (D) Effect of deposition time on the response of modified electrode (E) Effect of pH on modified electrodeS7



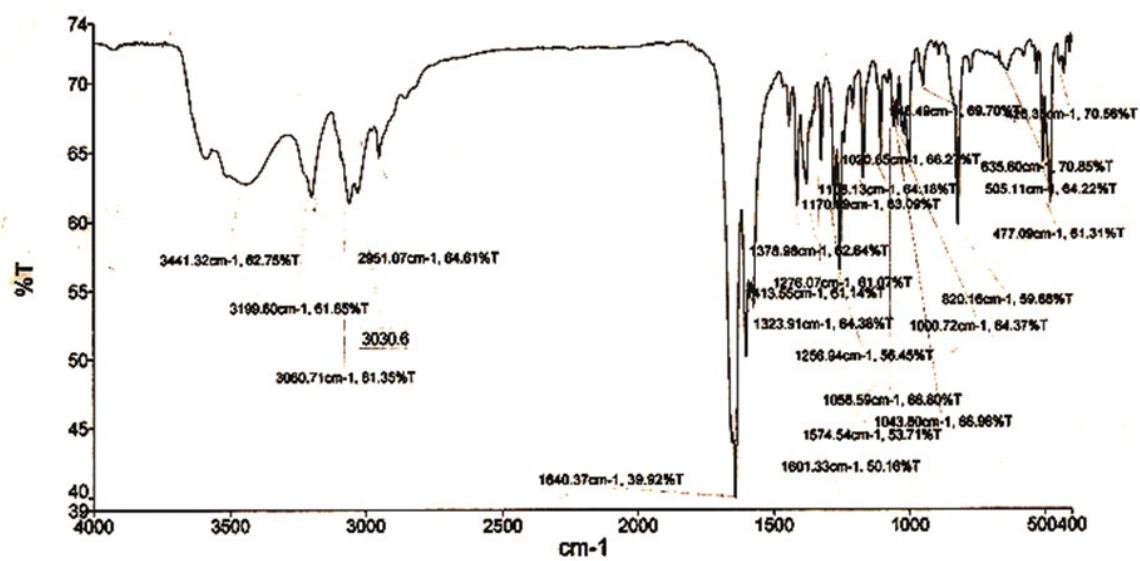
S1:ESI-Mass spectroscopic data of ferrocenoyl glutaric acid hydrazone



S2: ^1H NMR spectrum of ferrocenoyl glutaric acid hydrazone



S3: ^{13}C NMR spectrum of ferrocenoyl glutaric acid hydrazone



S4:IR spectrum of ferrocenyl glutaric acid hydrazone

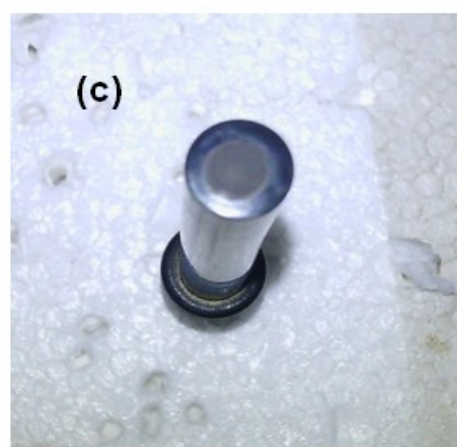
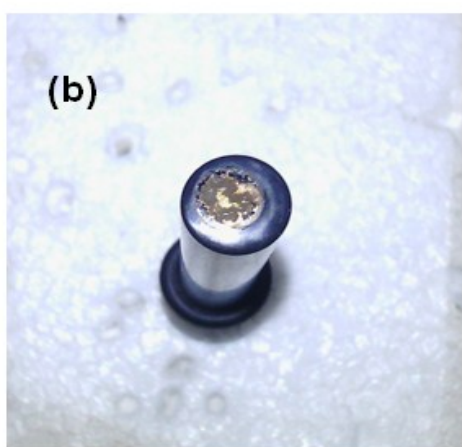
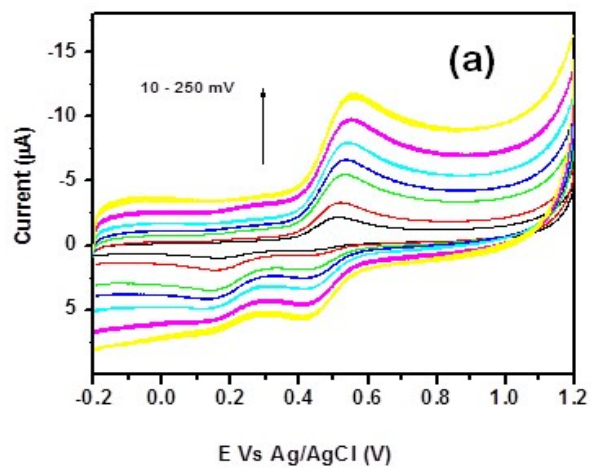
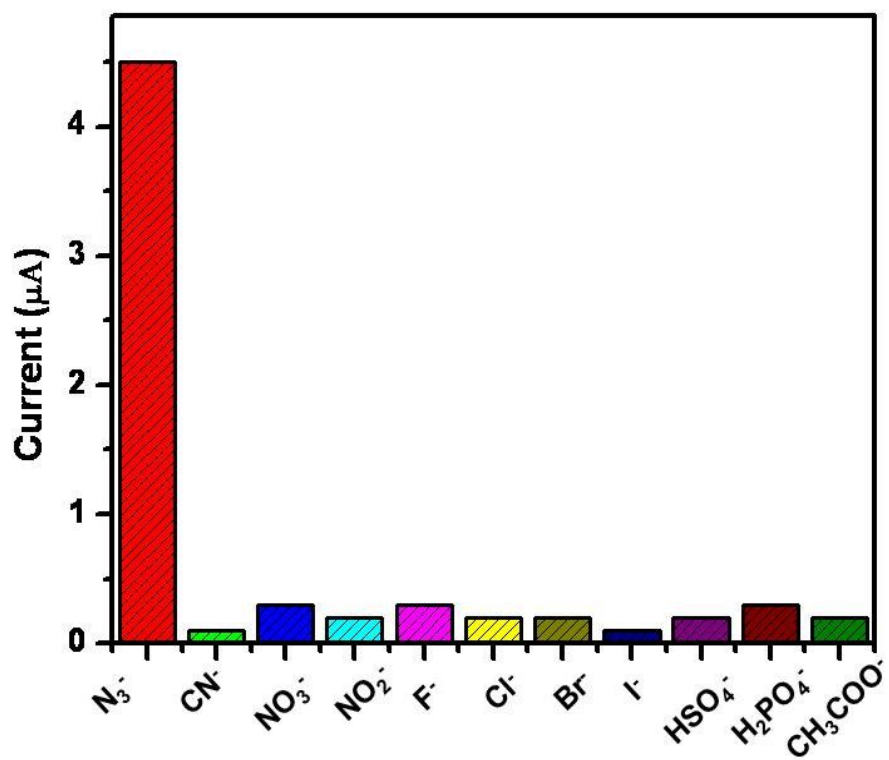


Fig. S5. CV of ferrocene-4-carboxylaldehyde/MWCNTs/nafion modified GCE at different scan rates, 10-250 mV/s (a); photograph of ferrocene-4-carboxylaldehyde/MWCNTs/nafion (b); and photograph of L/MWCNTs/nafion nanocomposite modified electrode (c).



S6: Interference data for L/MWCNTs/nafion nanocomposite modified GCE

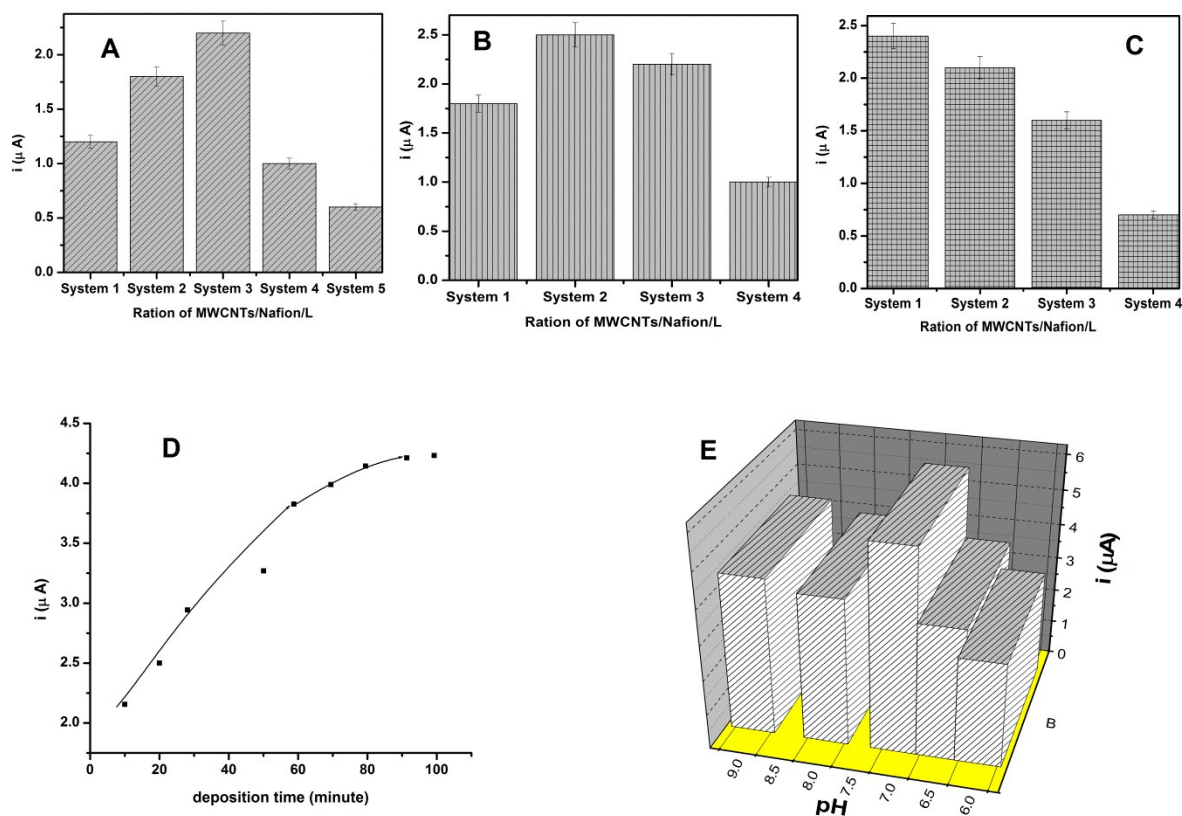


Fig.S7 Bar graph (A) Detection of 0.0422 mM concentration of azide by varying different concentration of nafion, keeping MWCNTs and L constant, (B) Detection of 0.0422 mM concentration of azide by varying different concentration of MWCNTs, keeping nafion and L constant; (C) Detection of 0.0422 mM concentration of azide by varying different concentration of L, keeping MWCNTs and nafion constant (D) Effect of deposition time on the response of modified electrode on addition of 0.0422 mM azide (E) Effect of pH on modified electrode