Highly sensitive electrochemical detection of hazardous 2,4-dinitrophenylhydrazine using MgCo-TiO_2/g-C_3N_4 heterostructure nanocomposites

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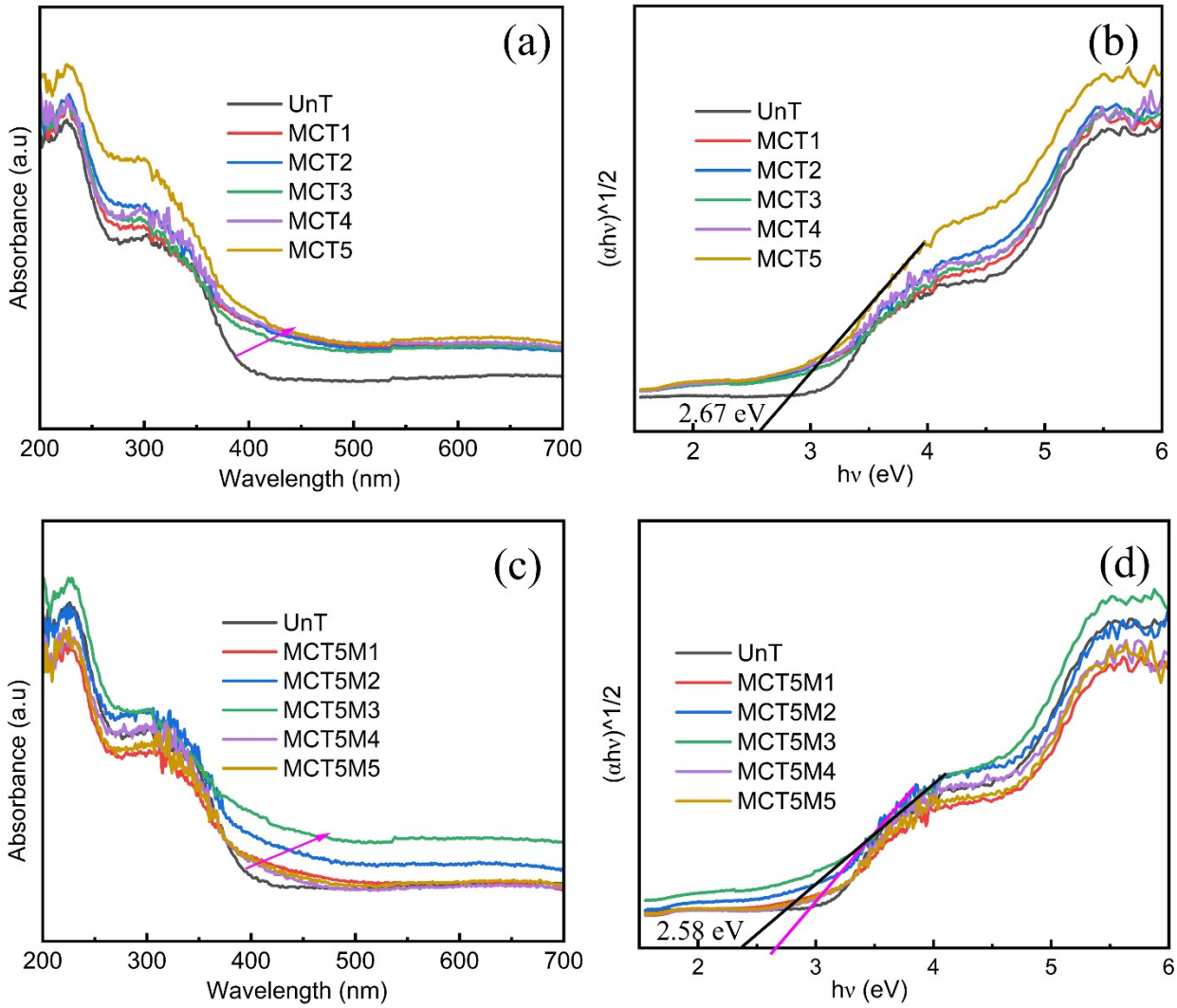

Fig. S1 UV-Vis DRS spectra for sol gel synthesized absorbance (**a**) and along with the square root of Kubelka–Munk functions (**b**) and microwave assisted sol gel synthesized materials (**c**) and along with the square root of Kubelka–Munk functions (**d**).

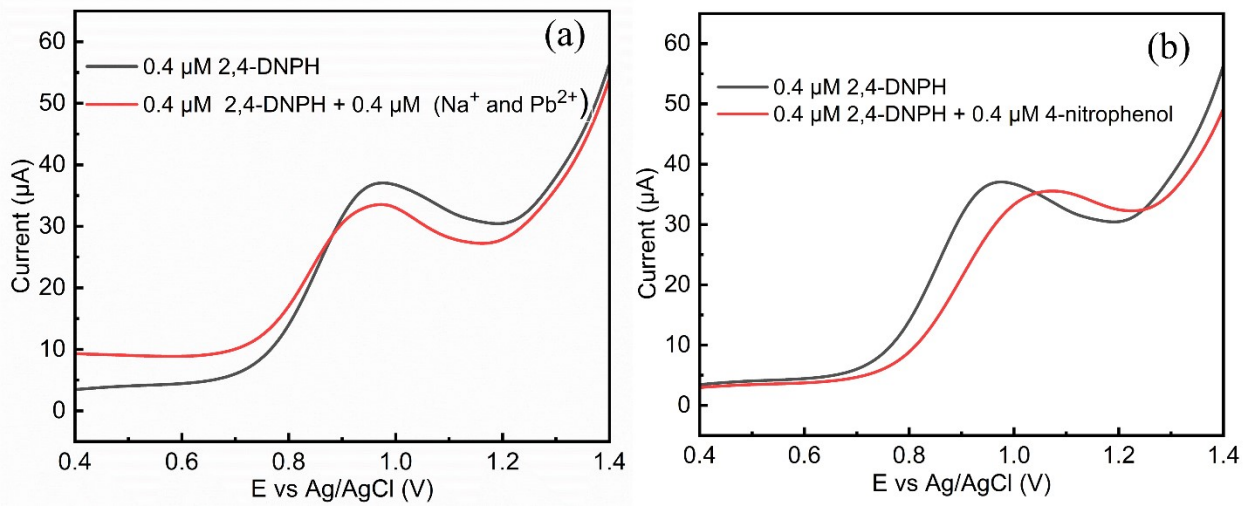

Fig. S2 LSV Voltammogram metals ions (Na^{+} and Pb^{2+}) (**a**) and 4-nitrophenol(**b**) interferences in 0.4 μM 2,4-DNPH (pH 3) at scan 30 mV/s scan rate by MgCo-TiO_2/g-C_3N_4/GCE sensor.

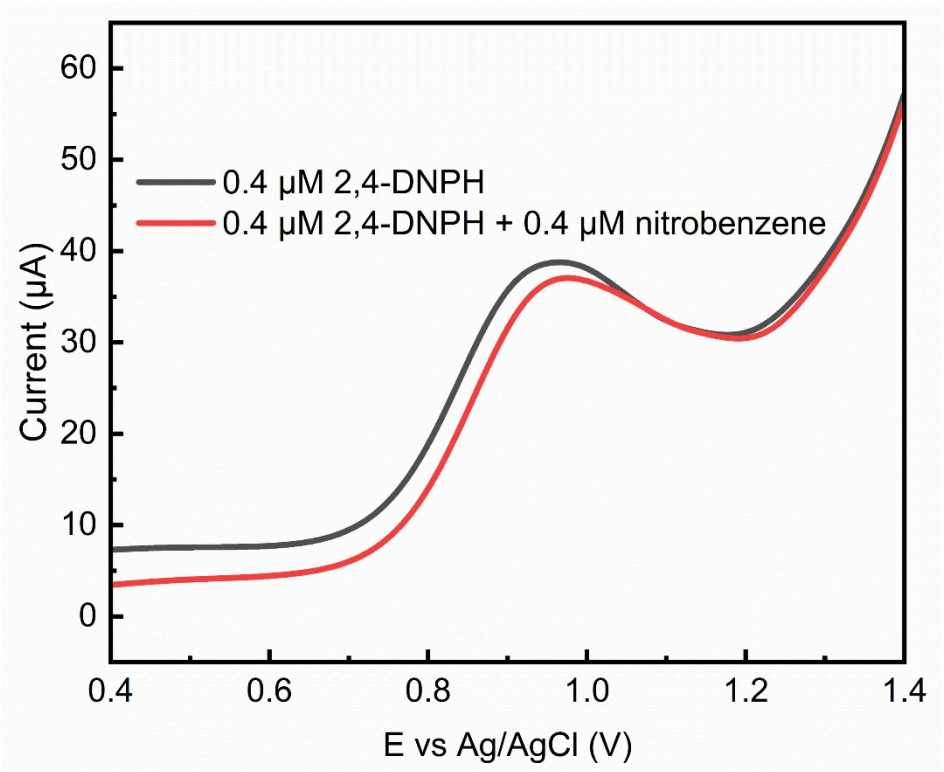

Fig.S3 LSV voltammogram 4-nitrobenzene interferences in 0.4 μM 2,4-DNPH (pH 3) at scan 30 mV/s scan rate by MgCo-TiO_2/g-C_3N_4/GCE sensor.

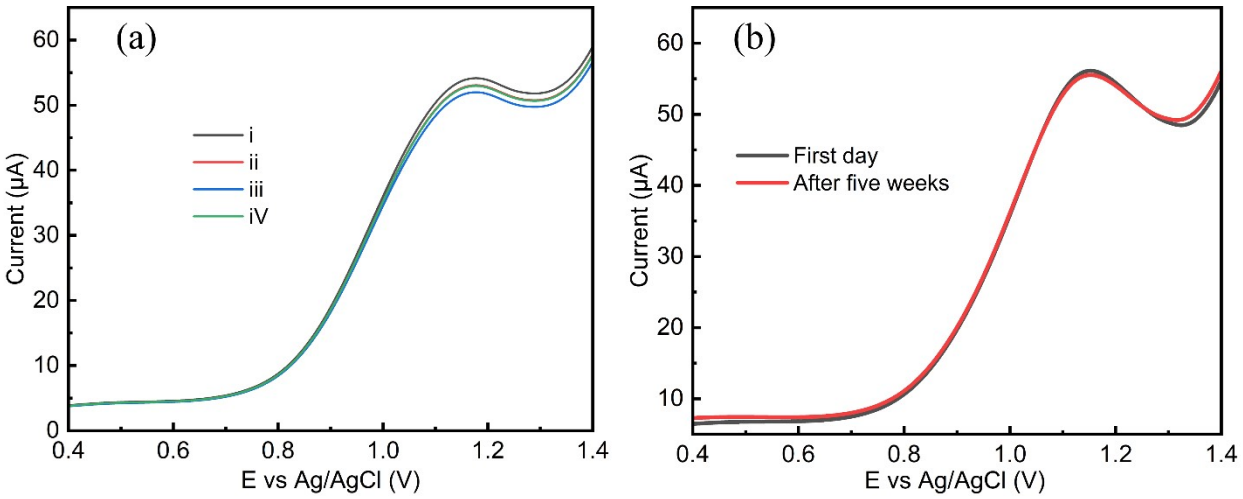

Fig.S4 LSV voltammogram of four consecutive measurements (**a**) and stability(**b**) in 0.4 µM 2,4-DNPH (pH 3) at scan 30 mV/s scan rate by MgCo-TiO_2/g-C_3N_4/GCE sensor.