Electronic supporting information

Transition Metal ions coordinated porous organic polymer to Enhance the of Peroxidase for Detection of Ascorbic acid and Dopamine

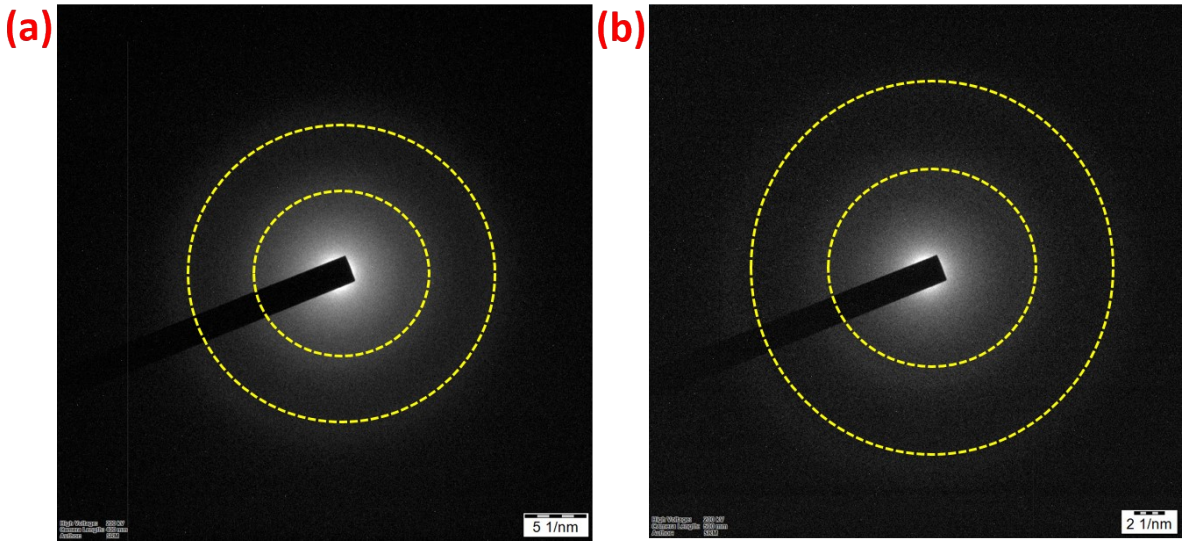

Fig.S1 TEM-SAD pattern for POP and Cu^{2+}@POP.

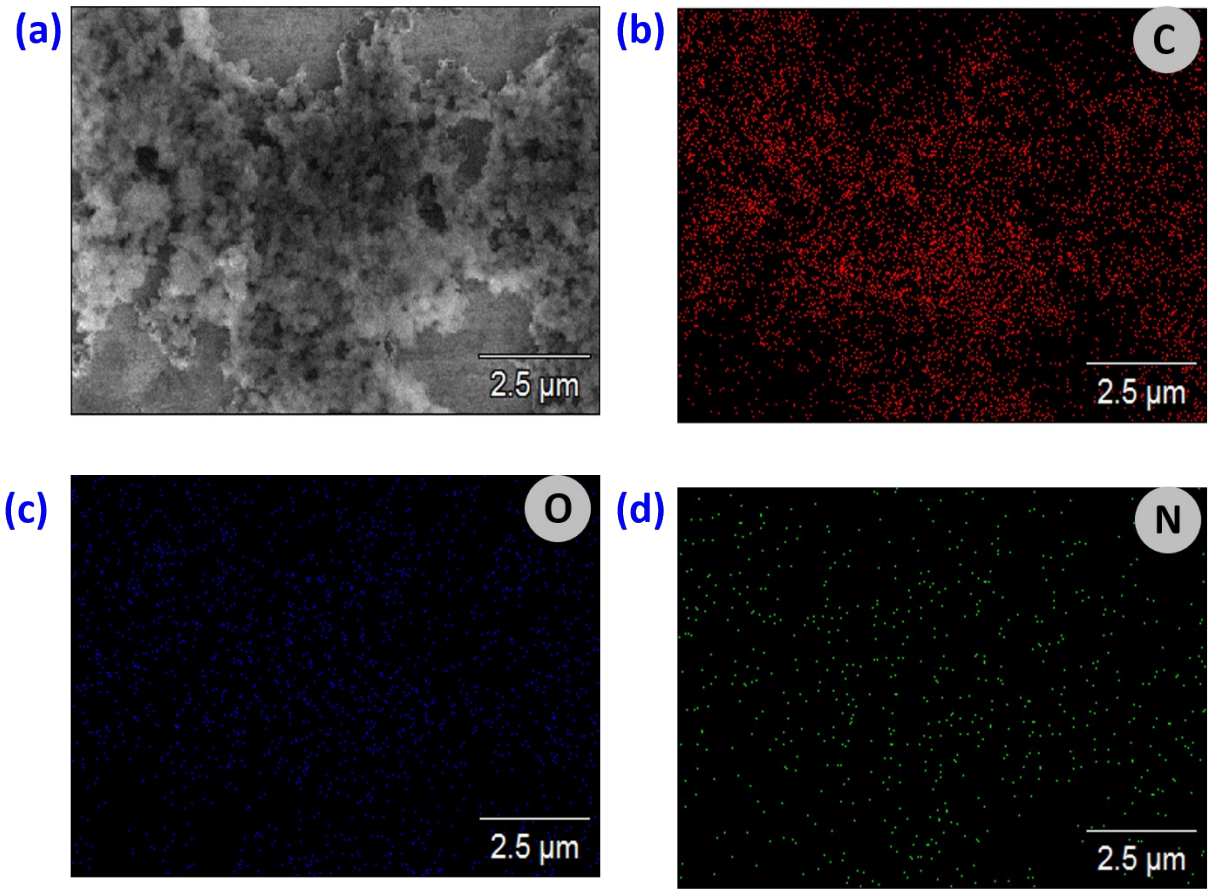

Fig.S2 SEM image and SEM-Mapping of POP.

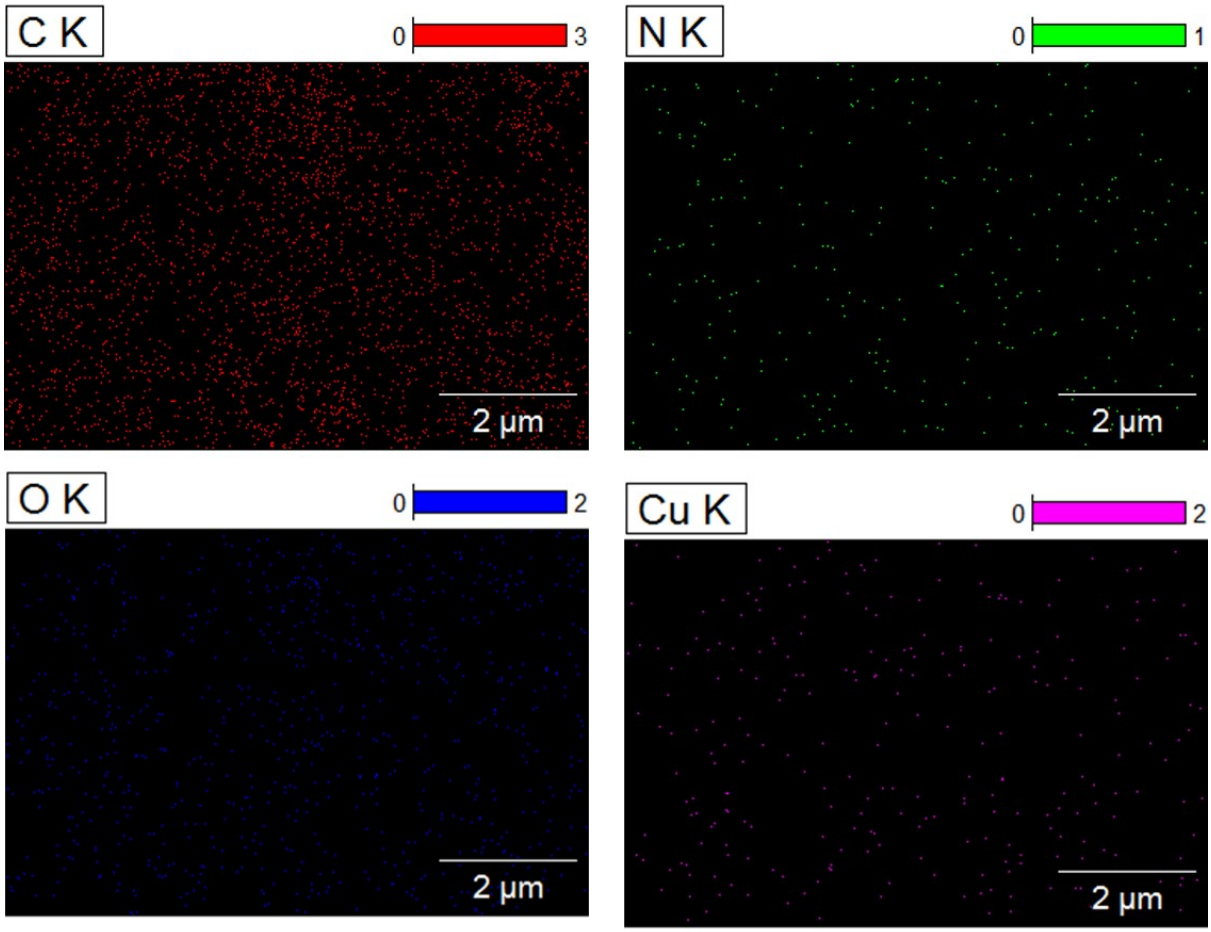

Fig.S3 SEM-Mapping analysis for Cu^{2+}@POP.

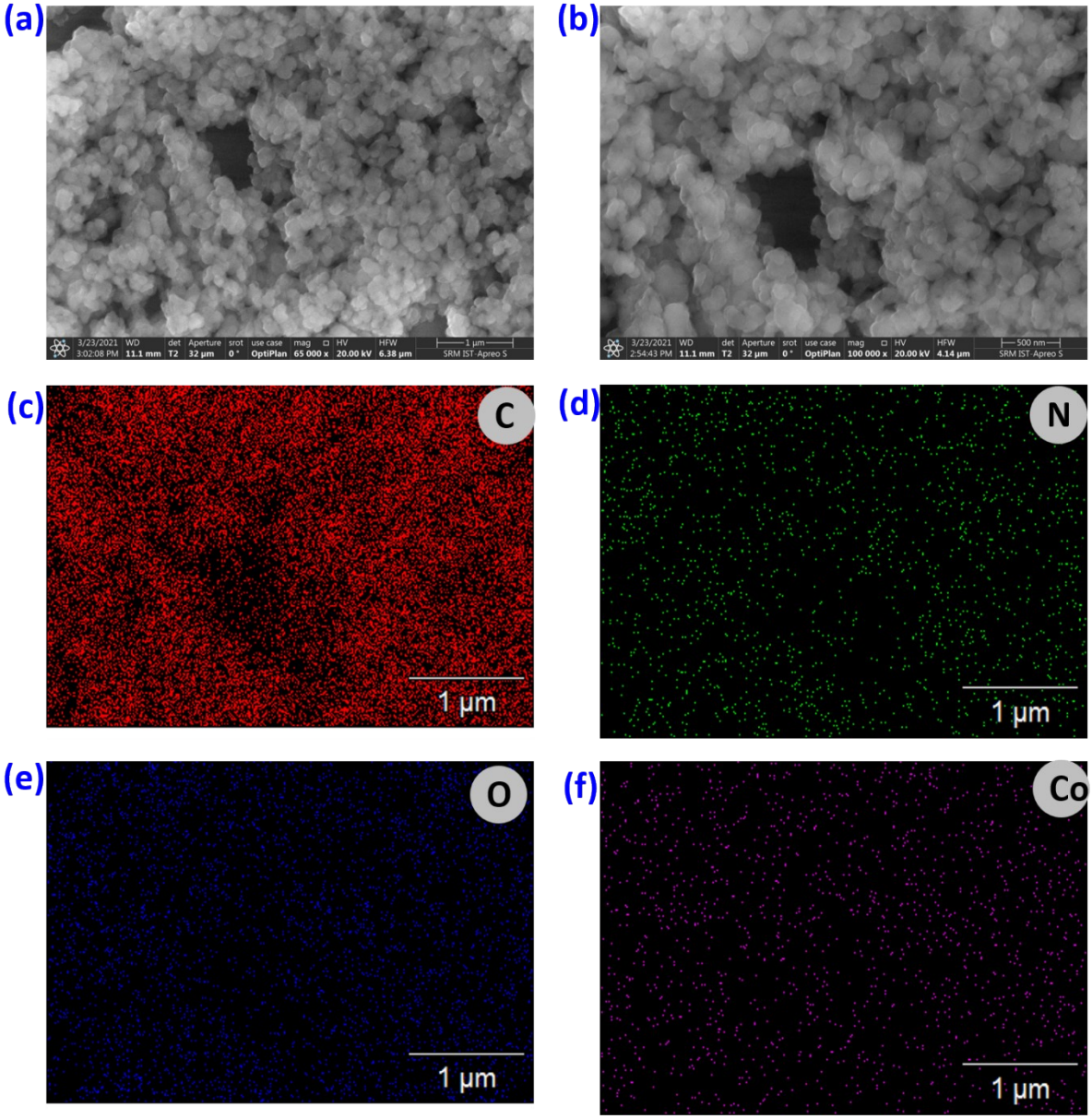

Fig.S4 SEM image and SEM-Mapping of Co^{2+}@POP.

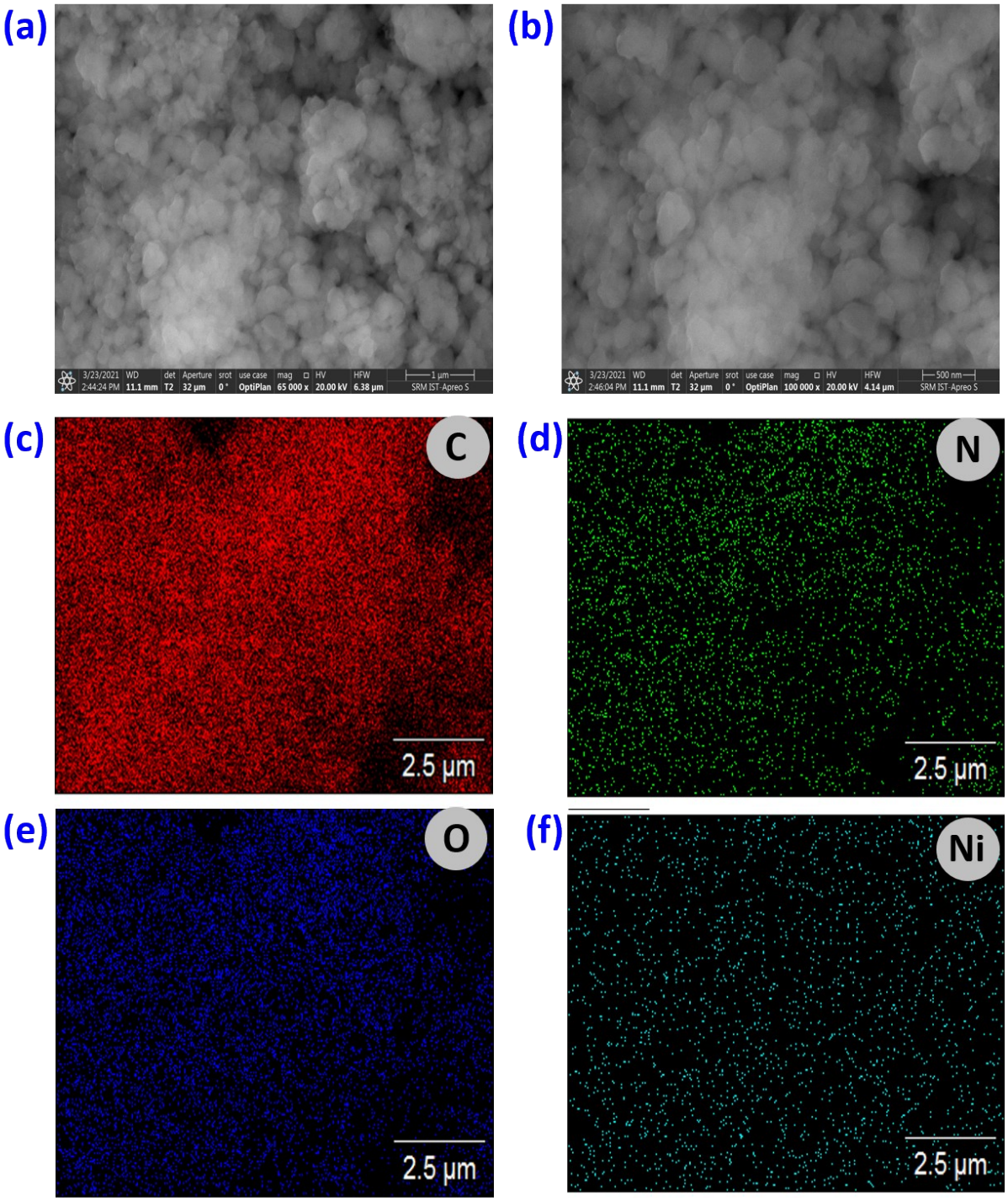

Fig.S5 SEM image and SEM-Mapping of Ni^{2+}@POP.

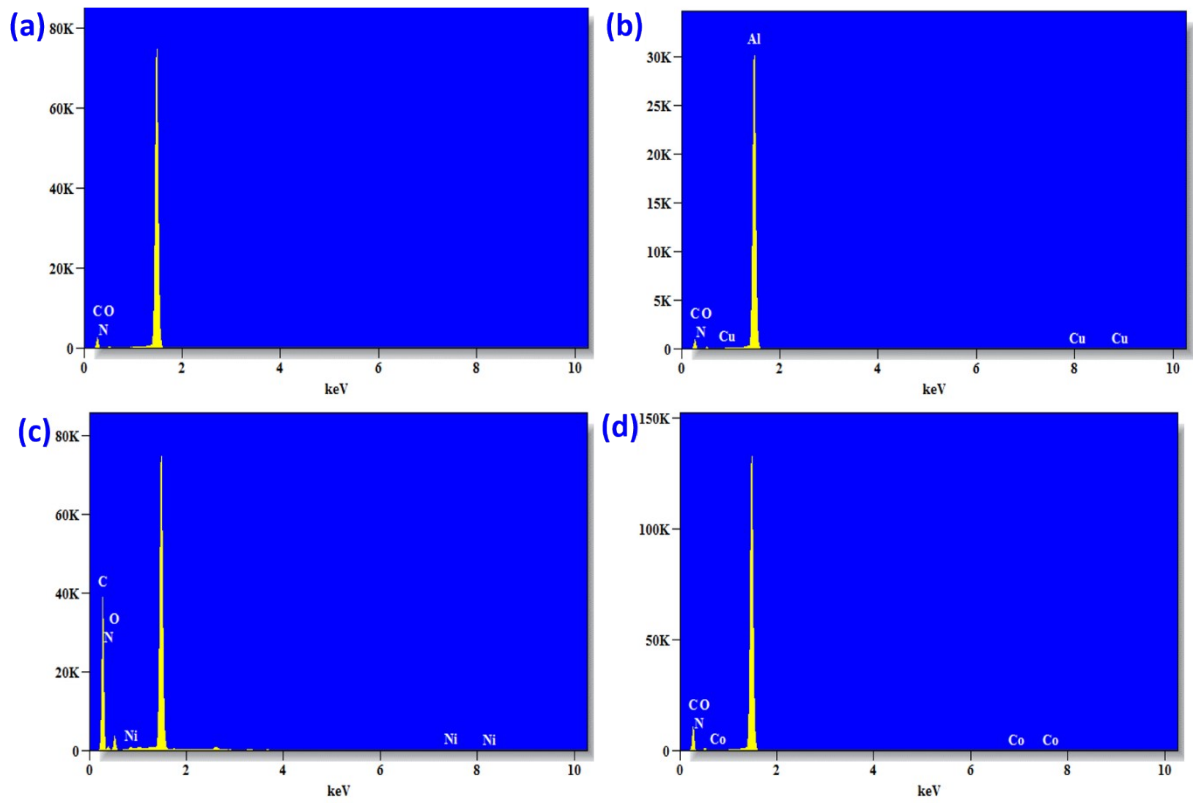

Fig.S7 EDX spectra of POP, Cu^{2+}@POP, Ni^{2+}@POP and Co^{2+}@POP.

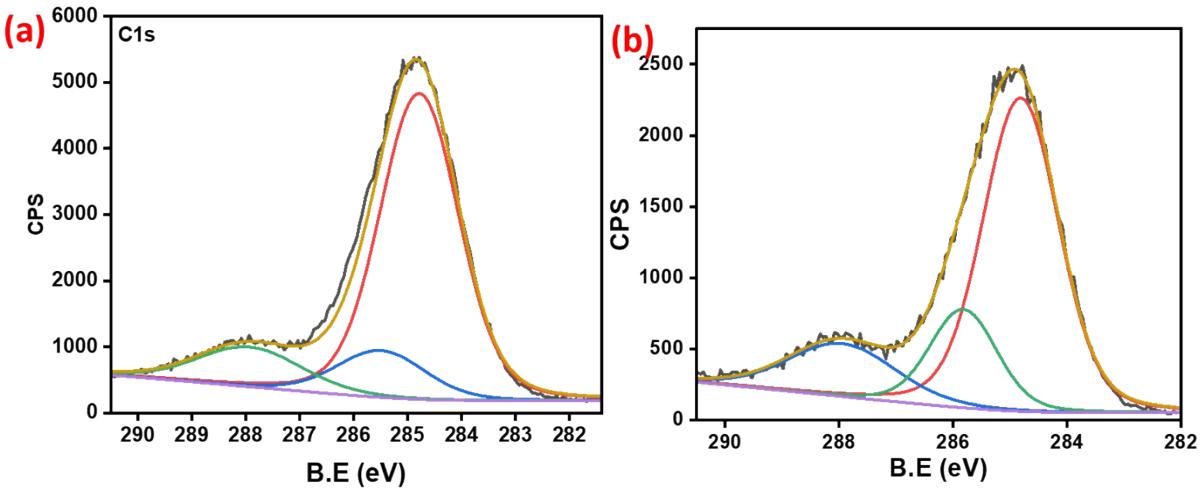

Fig.S3 C1s spectra of POP and Cu^{2+}@POP.

Michaelis-Menten kinetics equation

The Michaelis-Menten kinetics equation is $V = (V_{max} \times [S])/(K_m + [S])$. Lineweaver-Burk double reciprocal plot is expressed as: $1/V = (V_{max}/K_m)(1/[S]) + (V_{max}/1)$. Where, Michaelis-Menten constant (K_m), maximum velocity (V_{max}), and subtract concentration (S). The value K_m is important factor to find catalytic activity and affinity between enzyme and substrate, respectively.

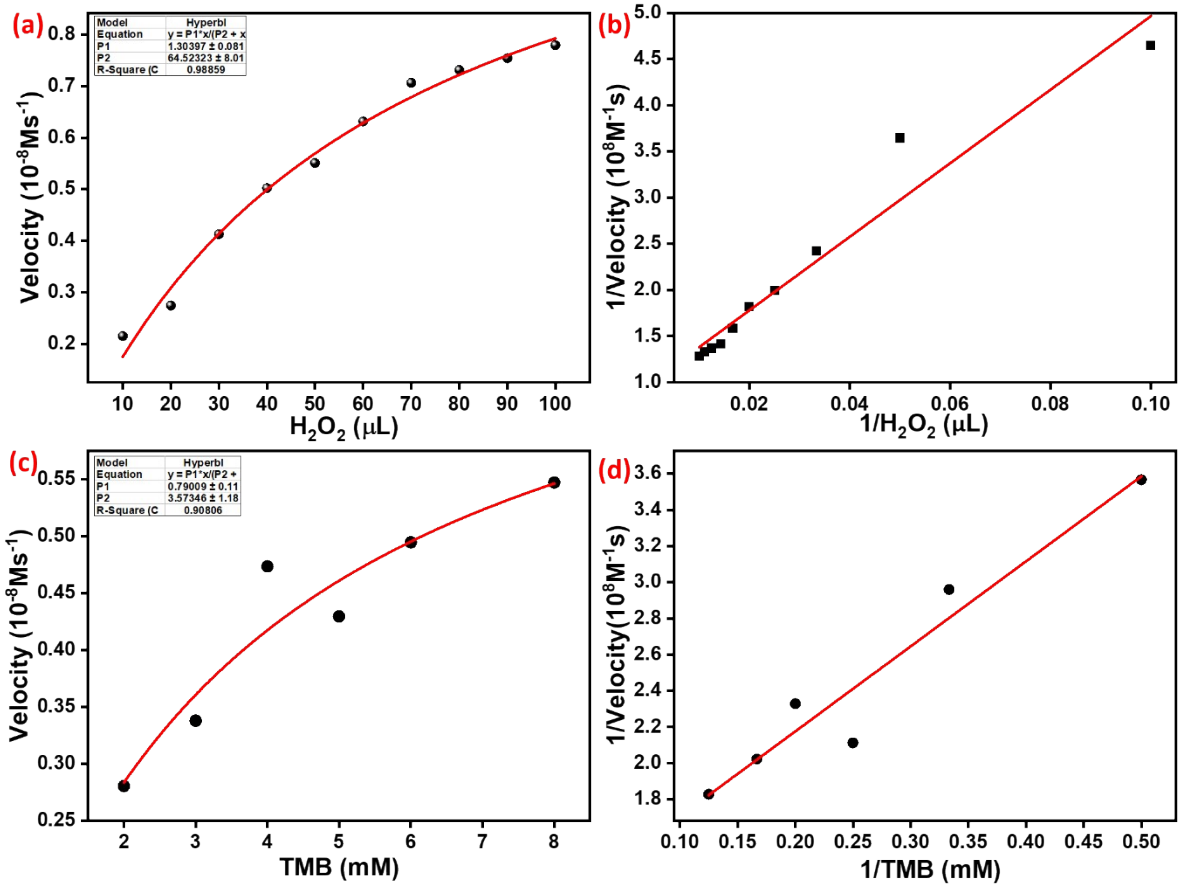

Fig.S8 EDX spectra of POP, Cu^{2+}@POP, Ni^{2+}@POP and Co^{2+}@POP.

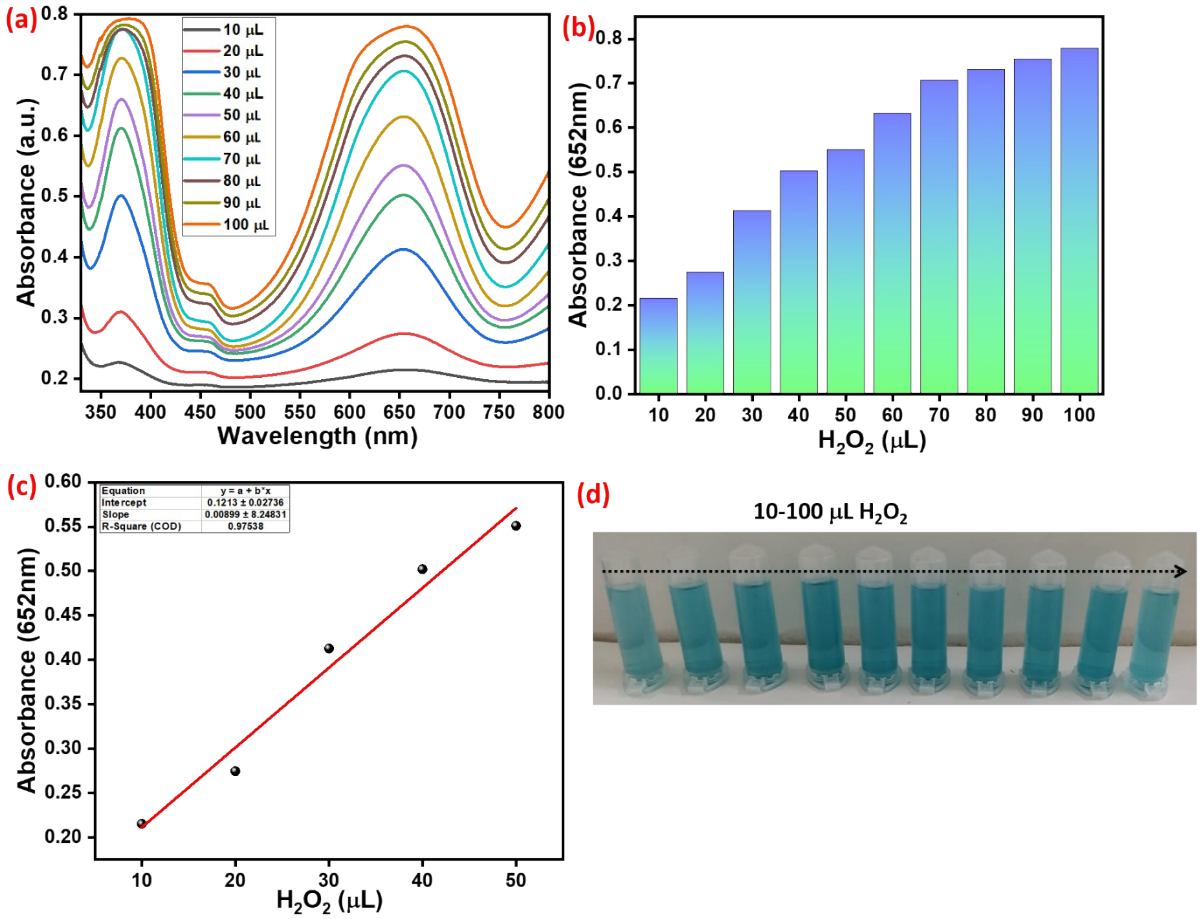

Fig.S9 (a) UV-Vis spectra for different concentrations of H_2O_2, (b) Absorbance suppress relative intensity was plot of absorbance band at 652 nm versus various concentration of H_2O_2 (c) The linear calibration plot at different concentration of the H_2O_2 in the reaction system and (d) inserted optical images shows different concentration of the H_2O_2.

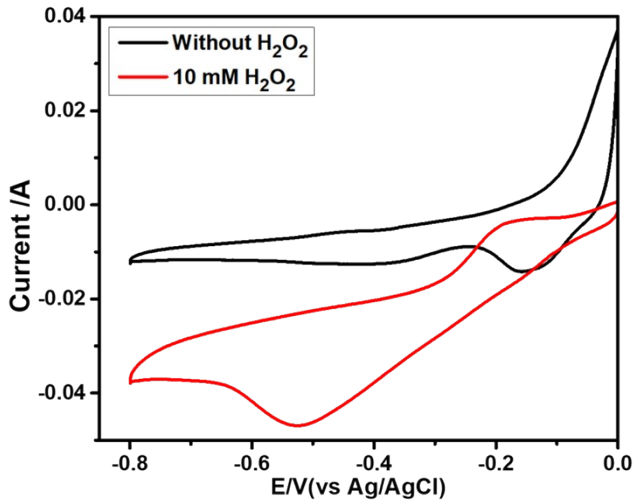

Fig. S10 Cyclic voltammetric curve of with and without H_2O_2 in the presence of Cu^{2+}@POP.