

Supporting information

Highly Efficient Electrochemical Detection of H₂O₂ Utilizing an Innovative Copper Porphyrinic Nanosheet Decorated Bismuth Metal-Organic Framework Modified Electrode

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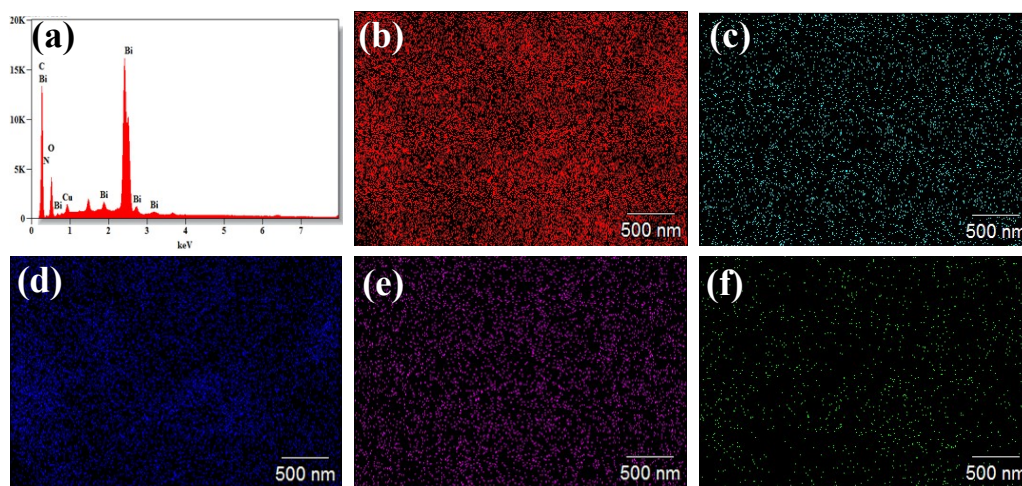


Fig. S1 (a) EDX spectrum of intercalated Bi-MOF and Cu-TCPP nanosheet, (b-f) shows the elemental mapping of Carbon, Copper, Oxygen, Bismuth, and Nitrogen.

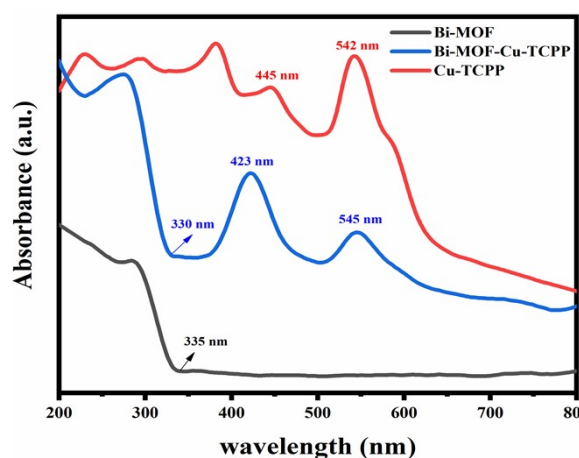


Fig. S2 UV-Vis spectra of Bi-MOF, Bi-BTC-Cu-TCPP, Cu-TCPP

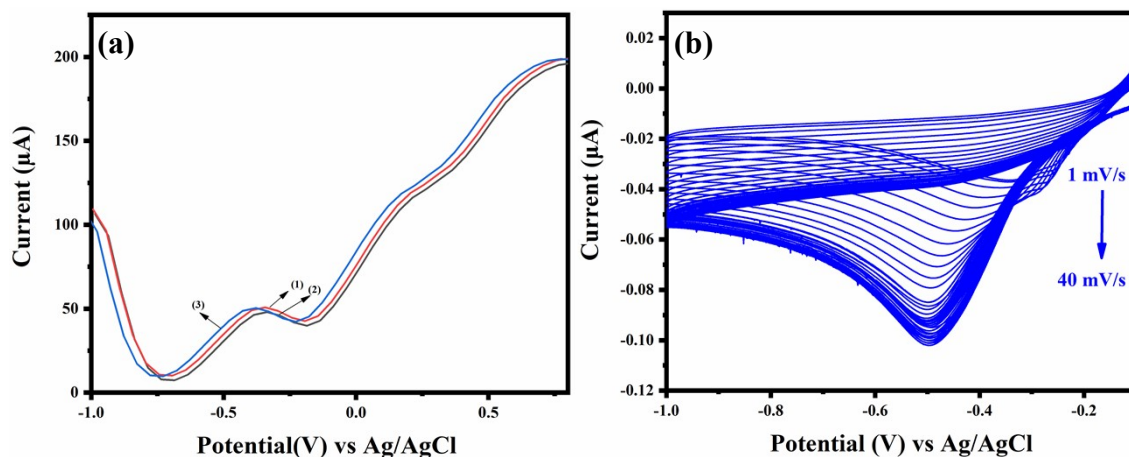


Fig. S3 (a) Repeatability and Current response bar diagram of H_2O_2 1st Cycle (1), 2nd Cycle (2), 3rd Cycle (3), (b) Stability of Bi-BTC-Cu-TCPP in the presence of H_2O_2 .

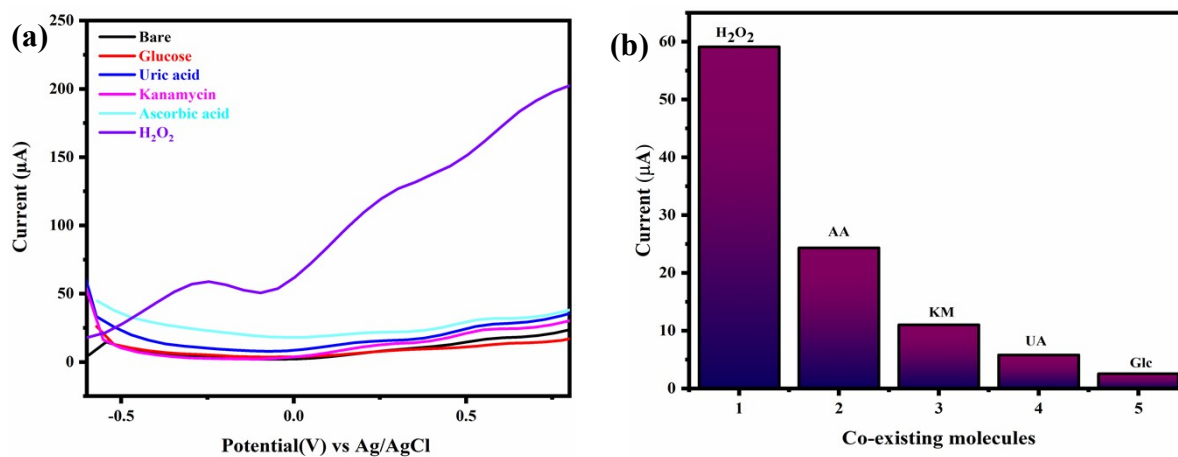


Fig. S4 (a) DPV analysis interference molecules and H_2O_2 , (d) Corresponding bar diagram for current vs. Co-existing molecules.

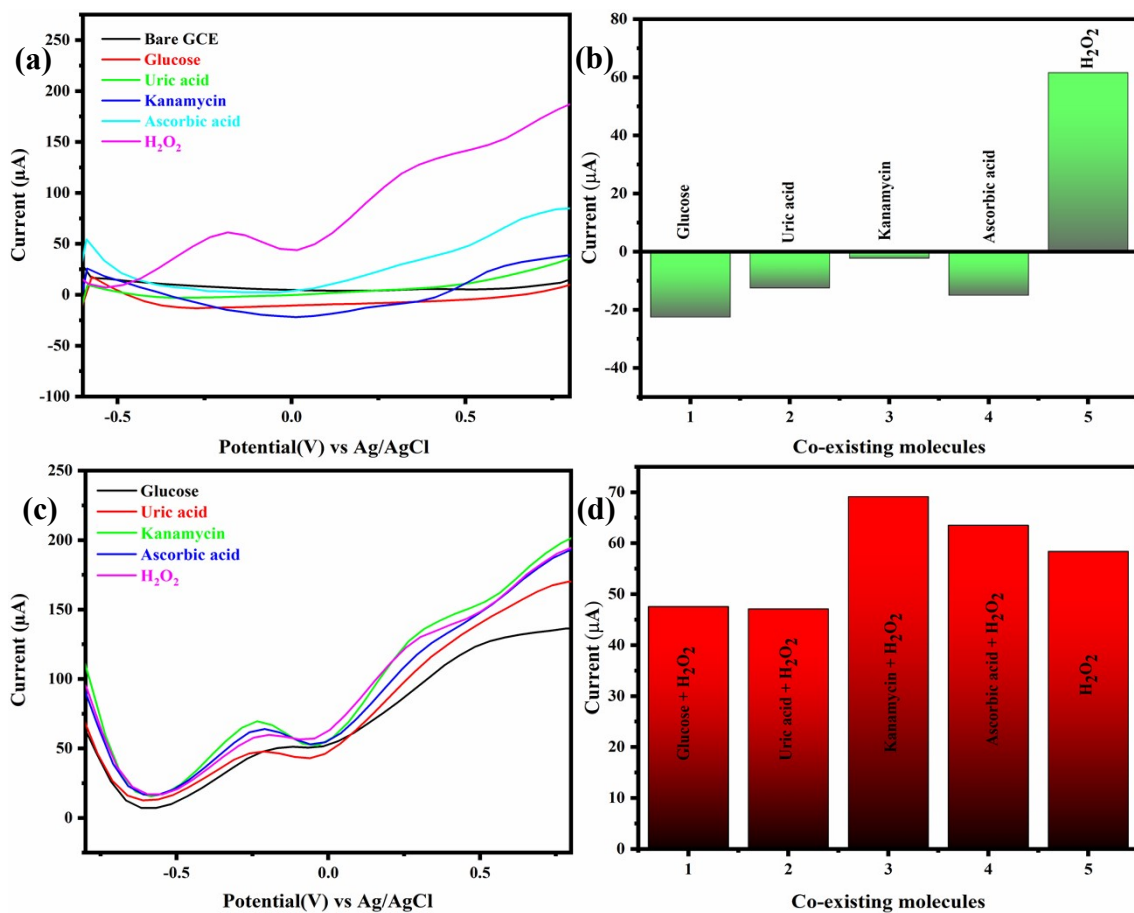


Fig. S5 (a) DPV analysis interference molecules in the absence of H_2O_2 in the milk sample, (b) Corresponding bar diagram for current vs. co-existing molecules in the absence of H_2O , (c) DPV analysis interference molecules in the presence of H_2O_2 in the milk sample, (d) Corresponding bar diagram for current vs. co-existing molecules in the presence of H_2O_2 .