**Supplementary Material**

**2D/3D Copper-Based Metal-Organic Frameworks for Electrochemical Detection of Hydrogen Peroxide**

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**Figure S1.** (A, B) Synthesis of Cu-TCPP. (C, D) Synthesis of HKUST-1.



**Figure S2.** (A,B,C) CV curves of GCE, Cu-TCPP/GCE, HKUST-1/GCE in 0.1 M PBS (the black curve) and 10 mM H2O2 (the red curve). (D) Comparison of the current peak of Cu-TCPP/GCE and HKUST-1/GCE in 0.1 M PBS with absent or present 10 mM H2O2.(n=3)



**Figure S3.** Histograms of the current peak of Cu-TCPP/GCE and HKUST-1/GCE in 0.1 M PBS at different H2O2 concentrations (2, 4, 6, 8, and 10 mM) (n=3).



**Figure S4.** Amperometric responses of HKUST-1/GCE with different applied potentials (-0.3, -0.4, -0.5, -0.55, -0.6 V) by successively injecting 0.4 mM H2O2 in PBS solution.



**Figure S5.** Histograms of stability test over 5 day by CV measurements in PBS solution containing 10 mM H2O2 at a scan rate of 100 mV·s-1.



**Figure S6.** Amperometric responses of HKUST-1/GCE to the successive addition of milk sample containing different concentration of H2O2 (0, 40, 80, 120 μM) in PBS solution at an applied potential of -0.5 V.