Electronic Supplementary Material (ESI) for Analyst.

Supporting information

Enhancing electrochemical properties of two-dimensional zeolitic imidazole framework by incorporating conductive polymer for dopamine detection

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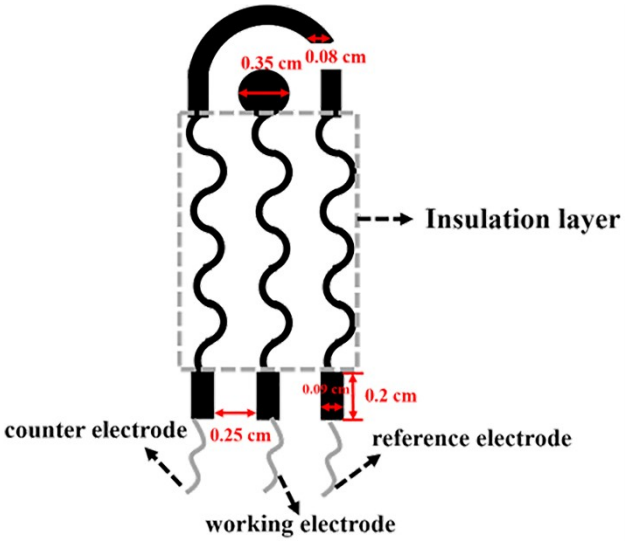

Fig. S1 Schematic diagram of screen printing electrode size (250 mesh count, 0.4 mm wire diameter, standard mesh tension, 68 μm mesh thickness).

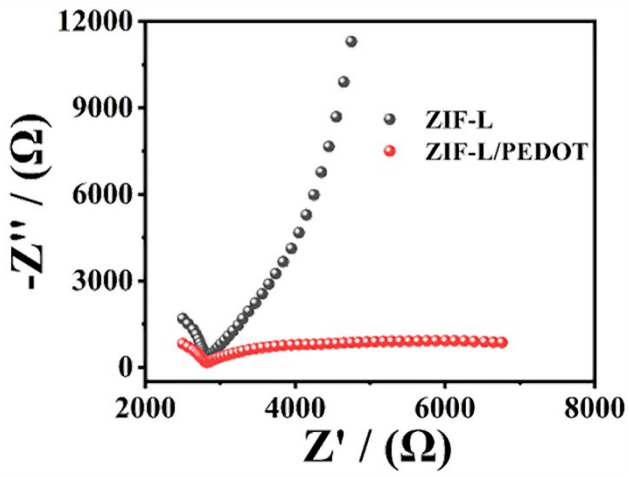

Fig. S2 Electrochemical impedance spectra of ZIF-L and ZIF-L/PEDOT electrodes in 10 mM $Fe(CN)_6^{3-/4-}$ containing 0.1 M KCl frequency range from 10^5 to 10^{-1} Hz with amplitude of 5 mV at direct current bias potential of 0.24V.

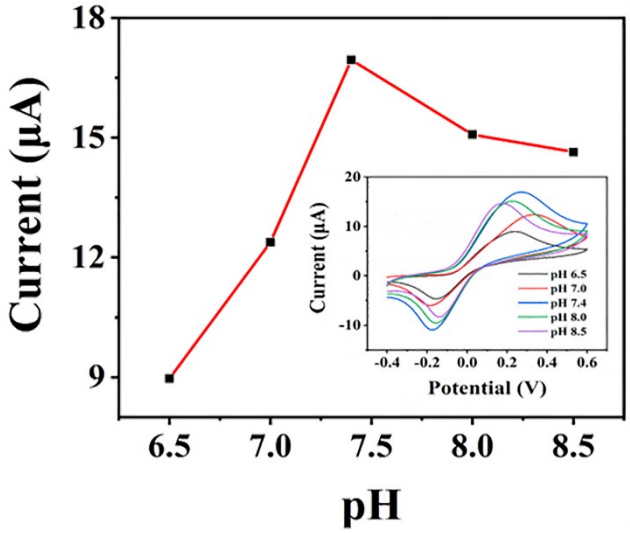

Fig. S3 CV curves peak current of ZIF-L/PEDOT at 300 μM DA in different pH, Scan rate: 50 mV s^{-1}, Inset: CV curves at different pH.

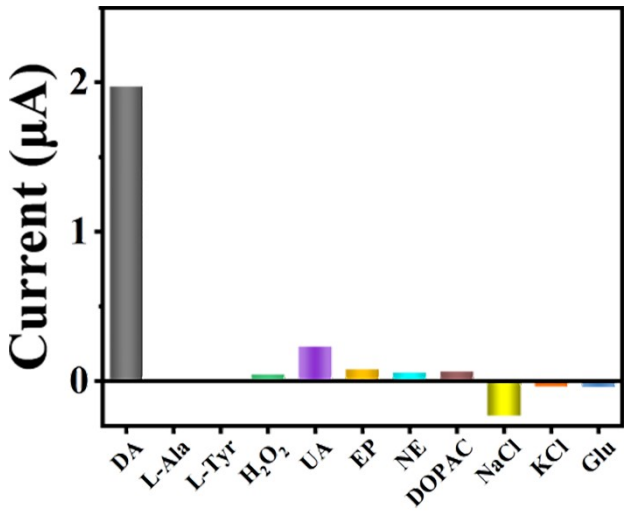

Fig. S4 The corresponding response current of ZIF-L/PEDOT exposed to DA and other interferences.

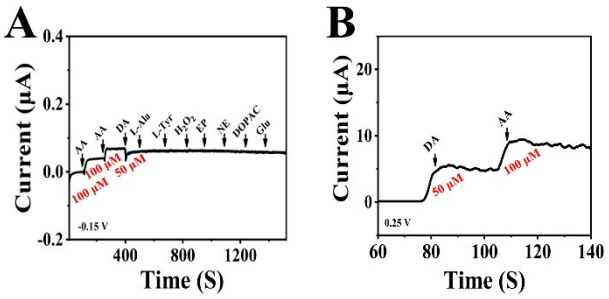

Fig. S5 Interference test of ZIF-L/PEDOT electrode for (A) 100 μM AA, 50 μM DA and 500 μM L-Ala, 500 μM L-Tyr, 500 μM H_2O_2, 500 nM EP, 500 nM NE, 500 nM DOPAC, and 5 mM Glu in 0.01 M PBS at -0.15V, (B) 50 μM DA and 100 μM AA in 0.01 M PBS at 0.25V.

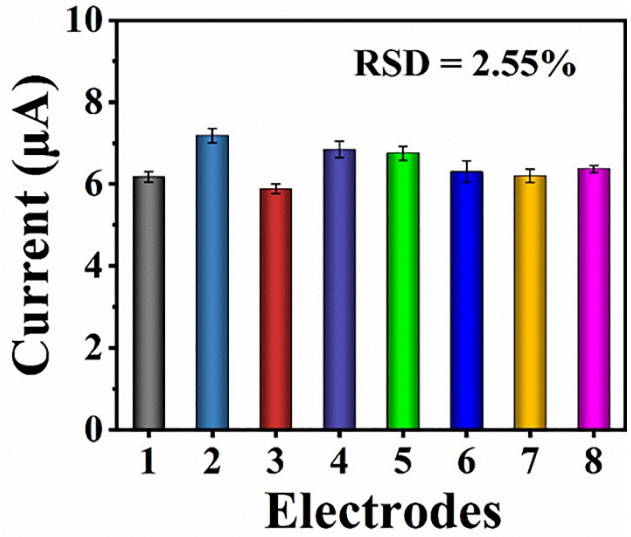

Fig. S6 Reproducible current response of eight ZIF-L/PEDOT electrodes in 0.01 M PBS containing 300 μM DA.

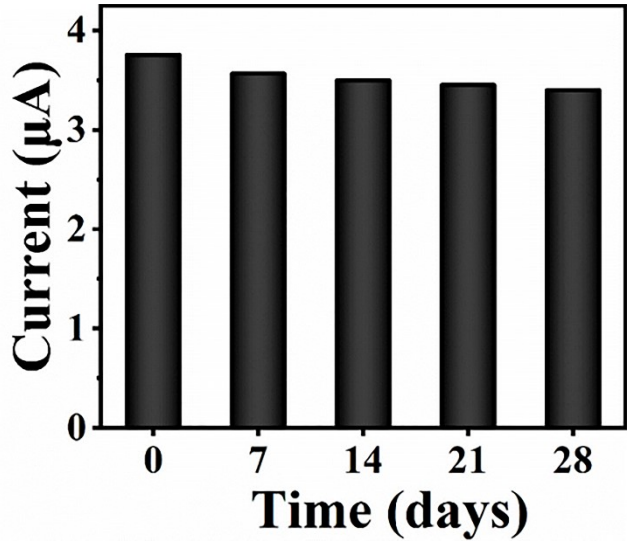

Fig. S7 Current response of 100 μM DA after 0, 7, 14, 21, 28 days in 0.01 M PBS.