

Supplemental Material for:

Selective electrochemical detection of dopamine in the presence of uric acid and ascorbic acid based on composite film modified electrode

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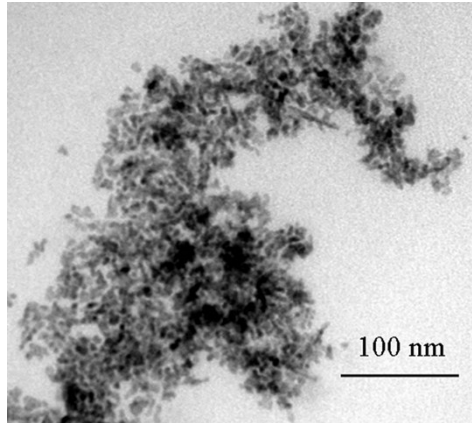


Fig. S1 TEM images of CuO nanoparticles.

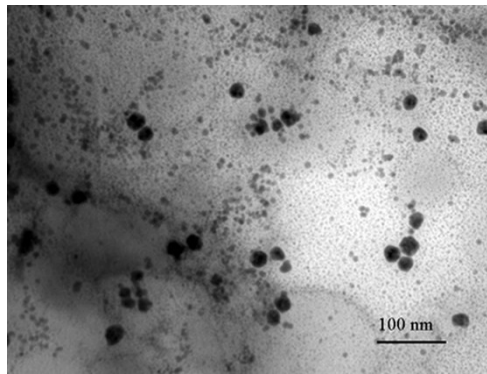


Fig. S2 TEM images of palladium nanoparticles.

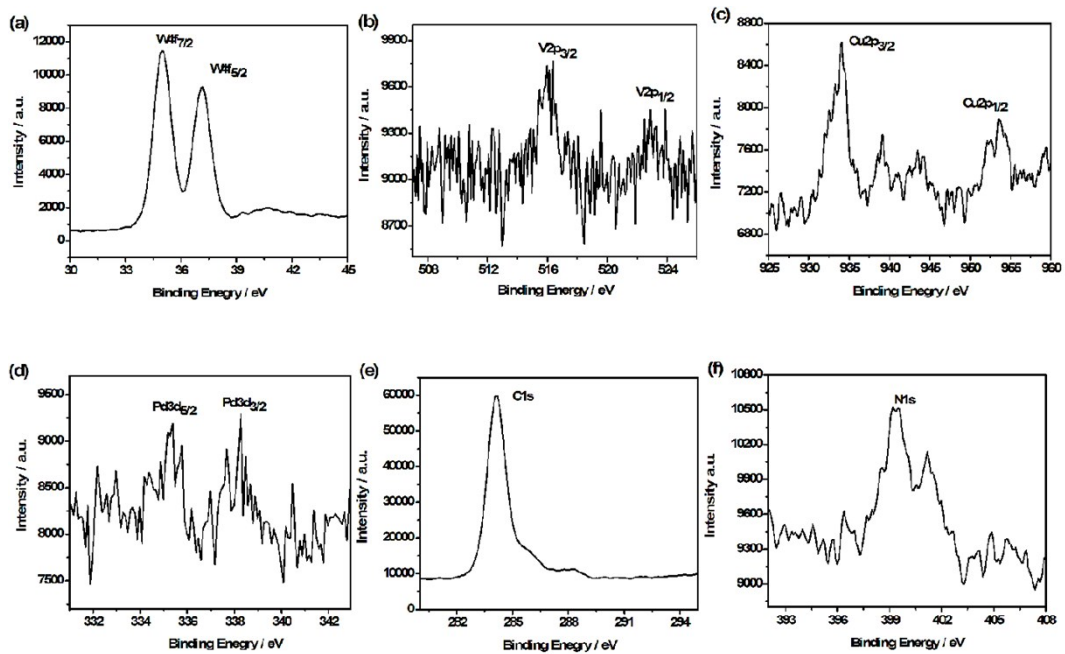


Fig. S3 XPS spectra of W 4f (a), V 2p (b), Cu 2p (c), Pd 3d (d), C 1s (e) and N 1s (f) of the $\{PEI/[(P_2W_{17}V-CuO)/(CS-Pd)]_7/(P_2W_{17}V-CuO)\}$ composite film.

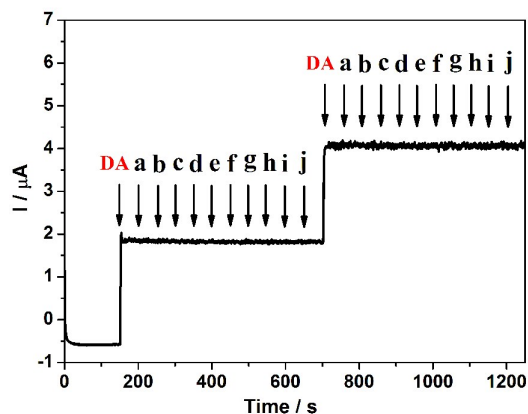


Fig. S4 Amperometric response of the $\{PEI/[(P_2W_{17}V-CuO)/(CS-Pd)]_7/(P_2W_{17}V-CuO)\}$ composite film modified electrode in the presence of 0.01 mM DA containing 1 mM uric acid (a), 1 mM ascorbic acid (b), 1 mM L-tryptophan (c), 1 mM L(+)-glutamic acid (d), 1 mM NADH (e), 1 mM folic acid (f), 10 mM NaCl (g), 10 mM KCl (h), 10 mM $CaCl_2$ (i) and 10 mM NO_2^- (j) in 0.2 M PBS (pH 7.0); applied potential = 0.73 V (Ag/AgCl).

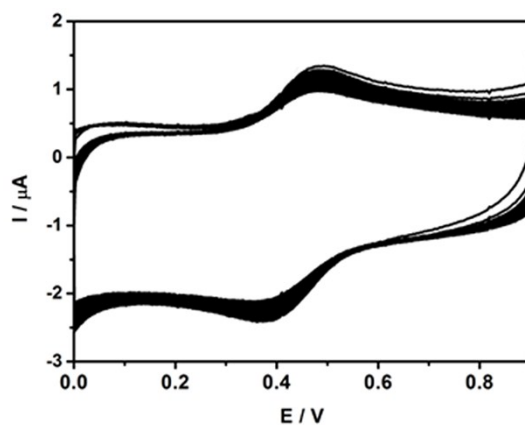


Fig. S5 Cyclic voltammograms of the $\{PEI/[(P_2W_{17}V-CuO)/(CS-Pd)]_7/(P_2W_{17}V-CuO)\}$ composite film curves for 100 cycles in 0.2 M PBS (pH 7.0). Scan rate: 50 mV s^{-1} .

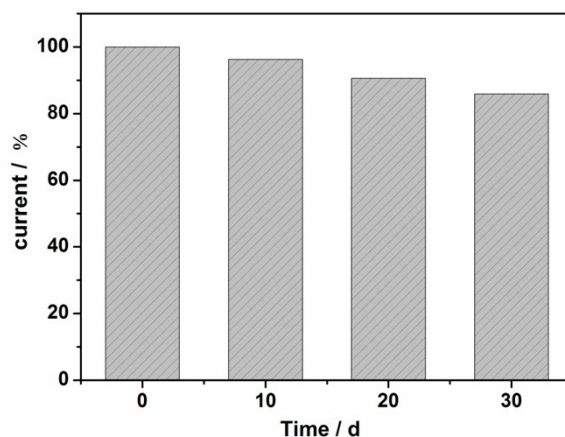


Fig. S6 The amperometric responses of the $\{PEI/[(P_2W_{17}V-CuO)/(CS-Pd)]_7/(P_2W_{17}V-CuO)\}$ composite film to 0.05 mM DA in 30 days in 0.2 M PBS (pH 7.0).