

# A Versatile and Ultrasensitive Electrochemical Sensing Platform for Detection of Chlorpromazine Based on Nitrogen-doped Carbon Dots/Cuprous Oxide Composite

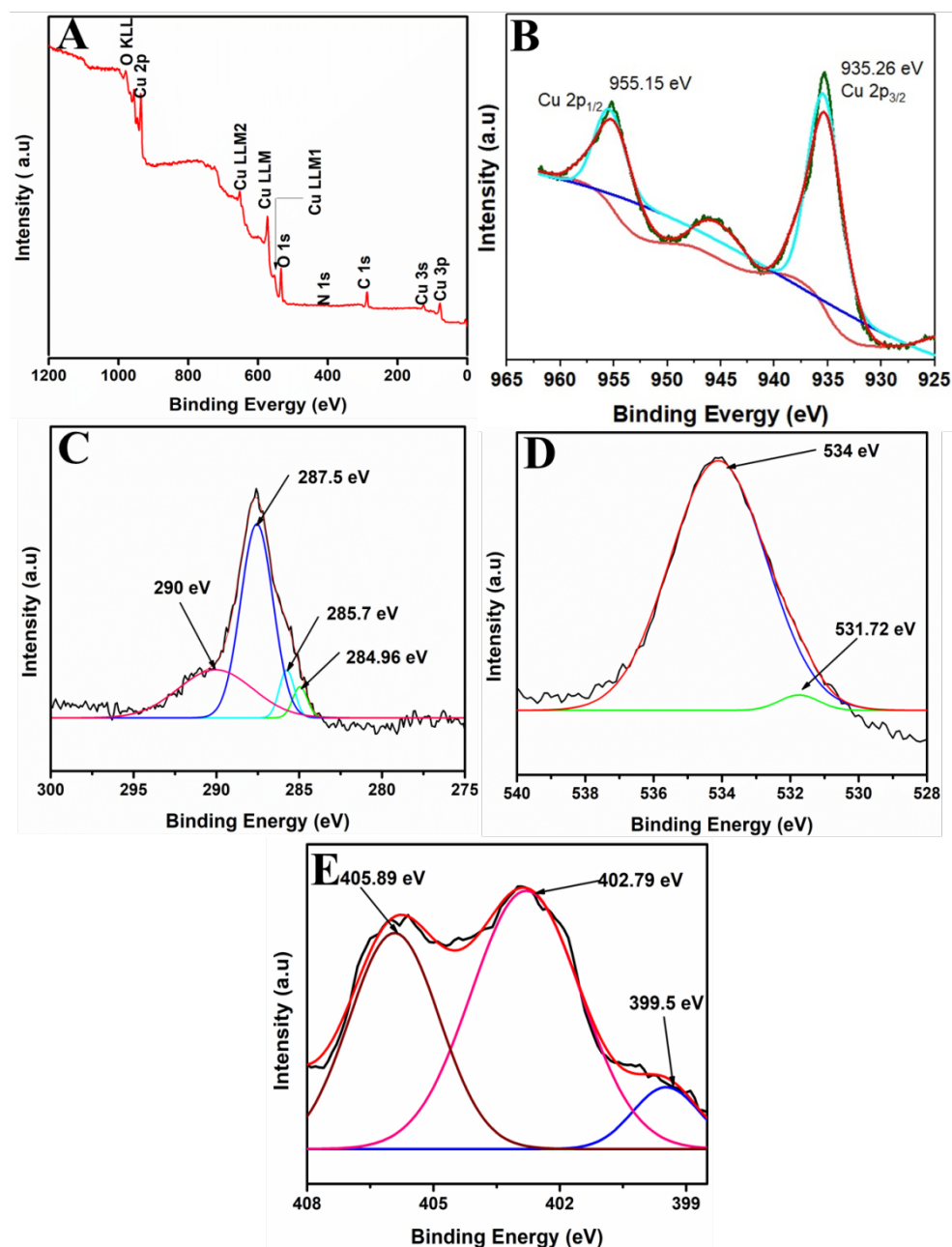
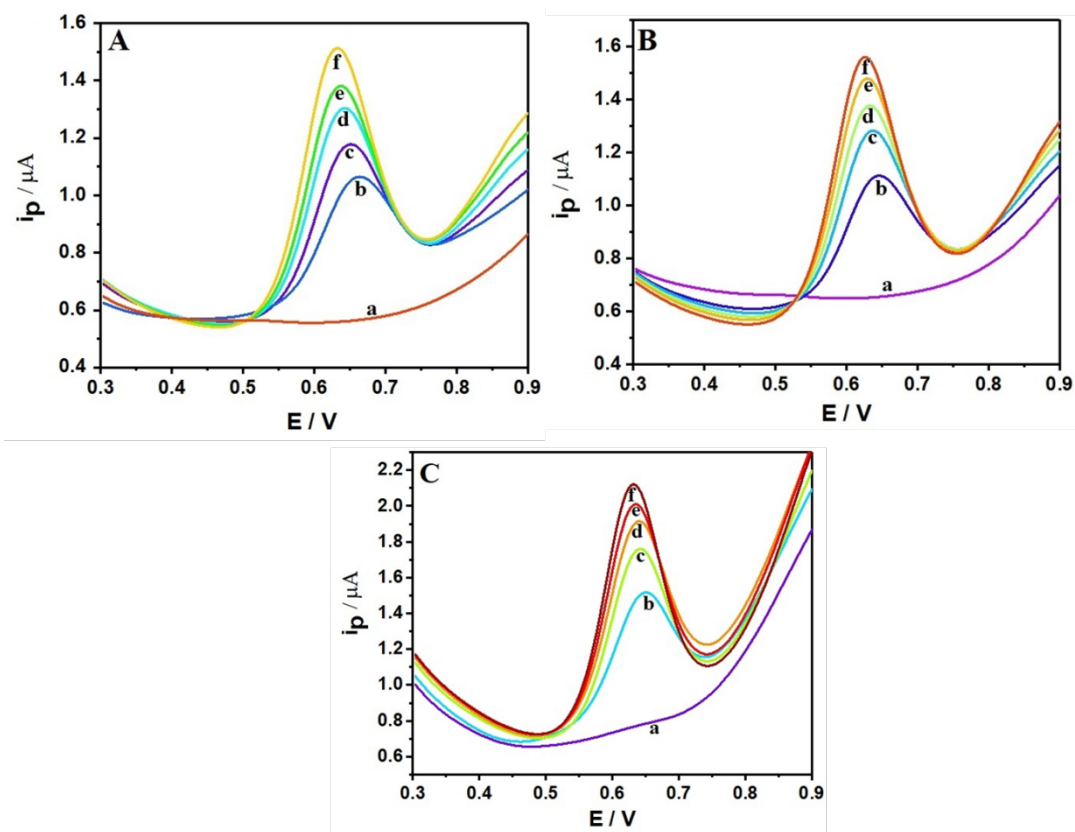
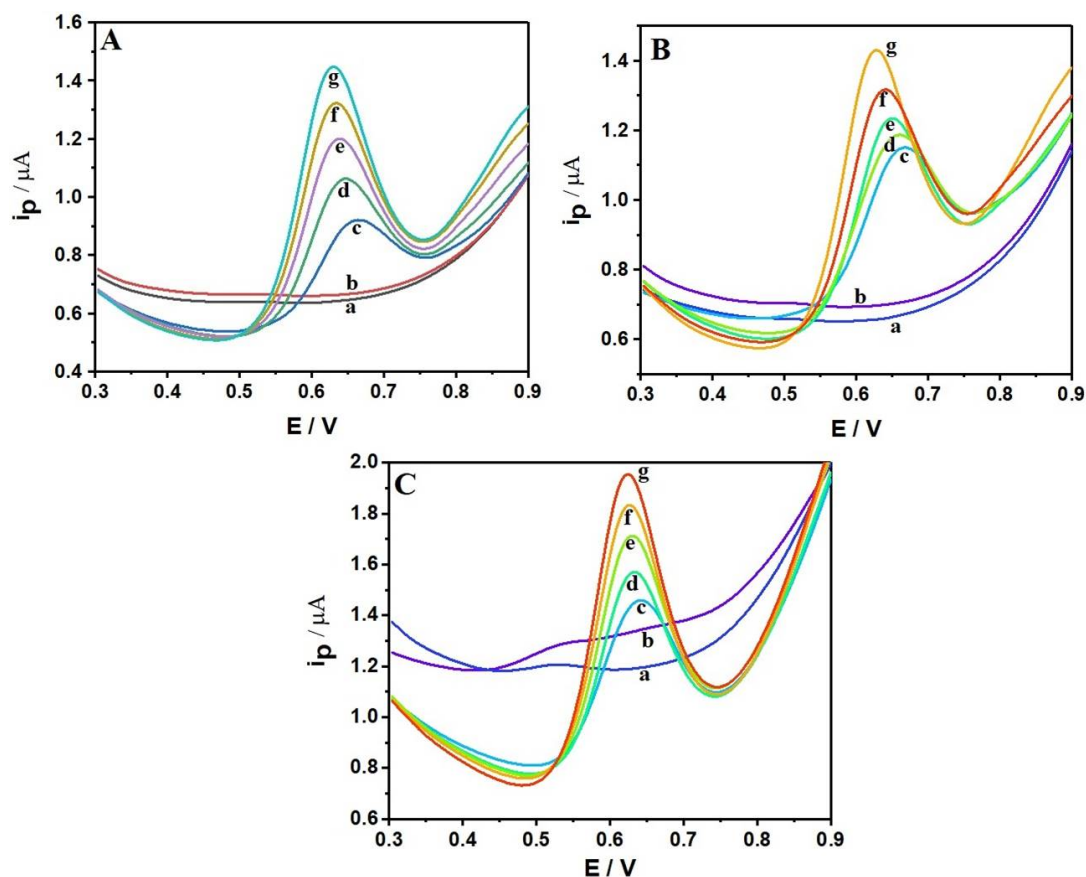


Figure S1. (A) XPS survey spectrum of N-CDs/Cu<sub>2</sub>O composite, XPS signals of (B) Cu 2p, (C) C 1s, (D) O 1s and (E) N 1s.



**Figure S2.** (A) Differential pulse voltammetric responses of N-CDs/Cu<sub>2</sub>O/Nf/GCE for standard addition of (c) 5  $\mu$ M, (d) 10  $\mu$ M, (e) 15  $\mu$ M and (f) 20  $\mu$ M of CPZ standard sample to (b) 10  $\mu$ M tablet sample in 0.1 M PBS (pH 7.0) and (a) blank response; (B) Differential pulse voltammetric responses of N-CDs/Cu<sub>2</sub>O/Nf/GCE for standard addition of (c) 5  $\mu$ M, (d) 10  $\mu$ M, (e) 15  $\mu$ M and (f) 20  $\mu$ M of CPZ standard sample to (b) 20  $\mu$ M tablet sample in 0.1 M PBS (pH 7.0) and (a) blank response; (C) Differential pulse voltammetric responses of N-CDs/Cu<sub>2</sub>O/Nf/GCE for standard addition of (c) 5  $\mu$ M, (d) 10  $\mu$ M, (e) 15  $\mu$ M and (f) 20  $\mu$ M of CPZ standard sample to (b) 30  $\mu$ M tablet sample in 0.1 M PBS (pH 7.0) and (a) blank response.



**Figure S3.** (A) Differential pulse voltammetric responses of N-CDs/Cu<sub>2</sub>O/Nf/GCE for standard addition of (d) 5  $\mu$ M, (e) 10  $\mu$ M, (f) 15  $\mu$ M and (g) 20  $\mu$ M CPZ standard sample to (c) 10  $\mu$ M spiked CPZ sample in 0.1 M PBS (pH 7.0) containing human urine sample and (a) blank response, (b) urine sample response; (B) Differential pulse voltammetric responses of N-CDs/Cu<sub>2</sub>O/Nf/GCE for standard addition of (d) 5  $\mu$ M, (e) 10  $\mu$ M, (f) 15  $\mu$ M and (g) 20  $\mu$ M CPZ standard sample to (c) 20  $\mu$ M spiked CPZ sample in 0.1 M PBS (pH 7.0) containing human urine sample and (a) blank response, (b) urine sample response; (C) Differential pulse voltammetric responses of N-CDs/Cu<sub>2</sub>O/Nf/GCE for standard addition of (d) 5  $\mu$ M, (e) 10  $\mu$ M, (f) 15  $\mu$ M and (g) 20  $\mu$ M CPZ standard sample to (c) 30  $\mu$ M spiked CPZ sample in 0.1 M PBS (pH 7.0) containing human urine sample and (a) blank response, (b) urine sample response.