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## Gold nanoparticle-decorated on $MoS_2$ nanosheets for simultaneous detection of ascorbic acid, dopamine and uric acid

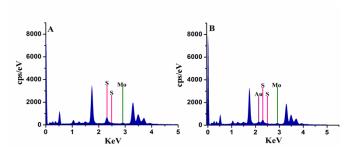
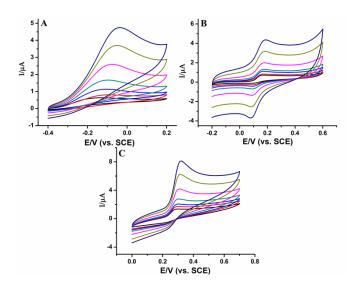


Figure S1. EDX of synthesized (A) MoS<sub>2</sub> and (B) AuNPs-decorated MoS<sub>2</sub>.



**Figure S2.** (A-C) Cyclic voltammograms of AA, DA and UA at AuNPs@MoS<sub>2</sub>/GCE in pH 7.0 PB solution at scan rates of 10, 20, 30, 50, 100, 200, 300 mV/s, respectively.

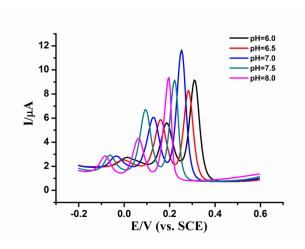


Figure S3. DPV profiles at AuNPs@MoS $_2$ /GCE in pH value containing 30 mM AA,  $10~\mu M~DA~and~60~mM~UA~in~0.1~M~PB~solution.$ 

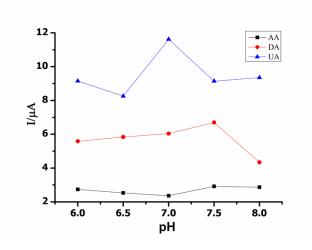


Figure S4. Effect of pH by DPV on the peak current of AA, DA and UA.