

## Enhanced electrochemical sensing of dopamine in the presence of AA and UA using curcumin functionalized gold nanoparticles modified electrode

K. Krishna Kumar<sup>a</sup>, M. Devendiran<sup>b</sup>, RA. Kalaivani<sup>b</sup>, S. Sriman Narayanan<sup>\*a</sup>

<sup>a</sup> Department of Analytical Chemistry, School of Chemical Science, University of Madras, Guindy Campus, Chennai, Tamil Nadu, India-600025

<sup>b</sup> Central Instrumentation Laboratory(CIL), Department of Chemistry, School of Basic Science, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Pallavaram, Chennai, Tamil Nadu, India-600117

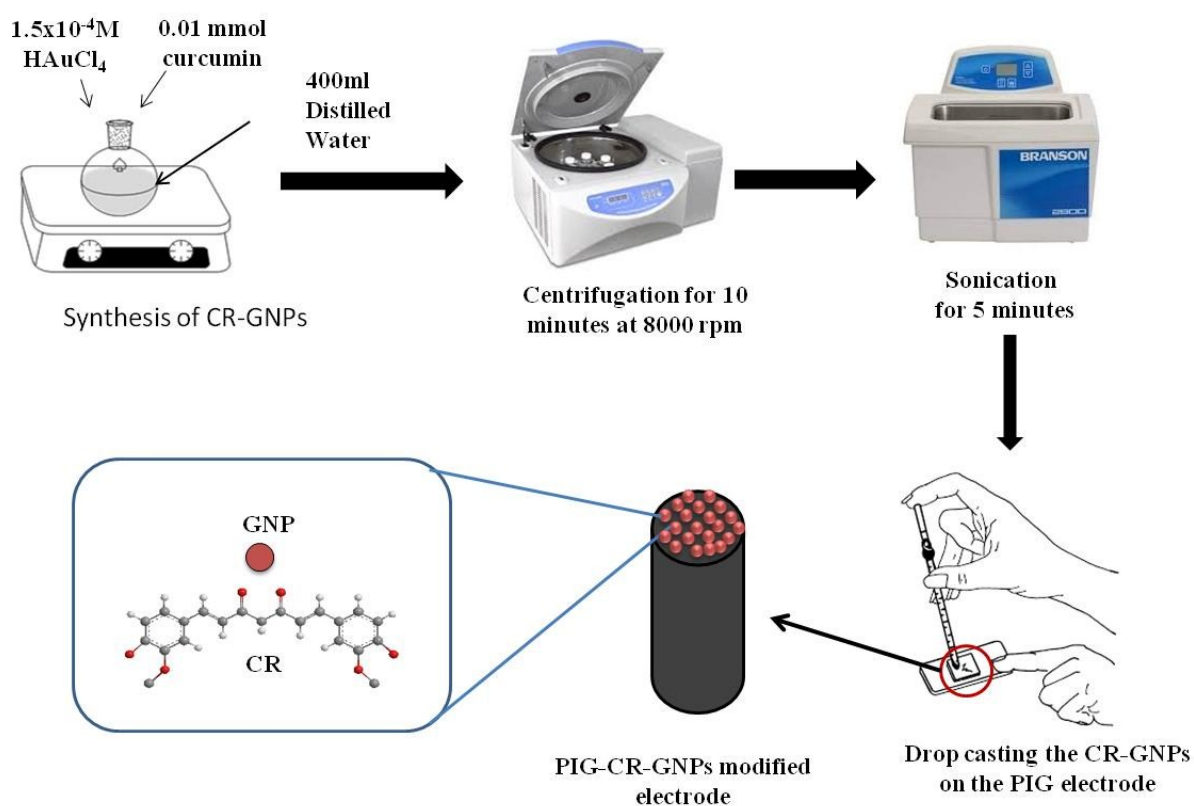
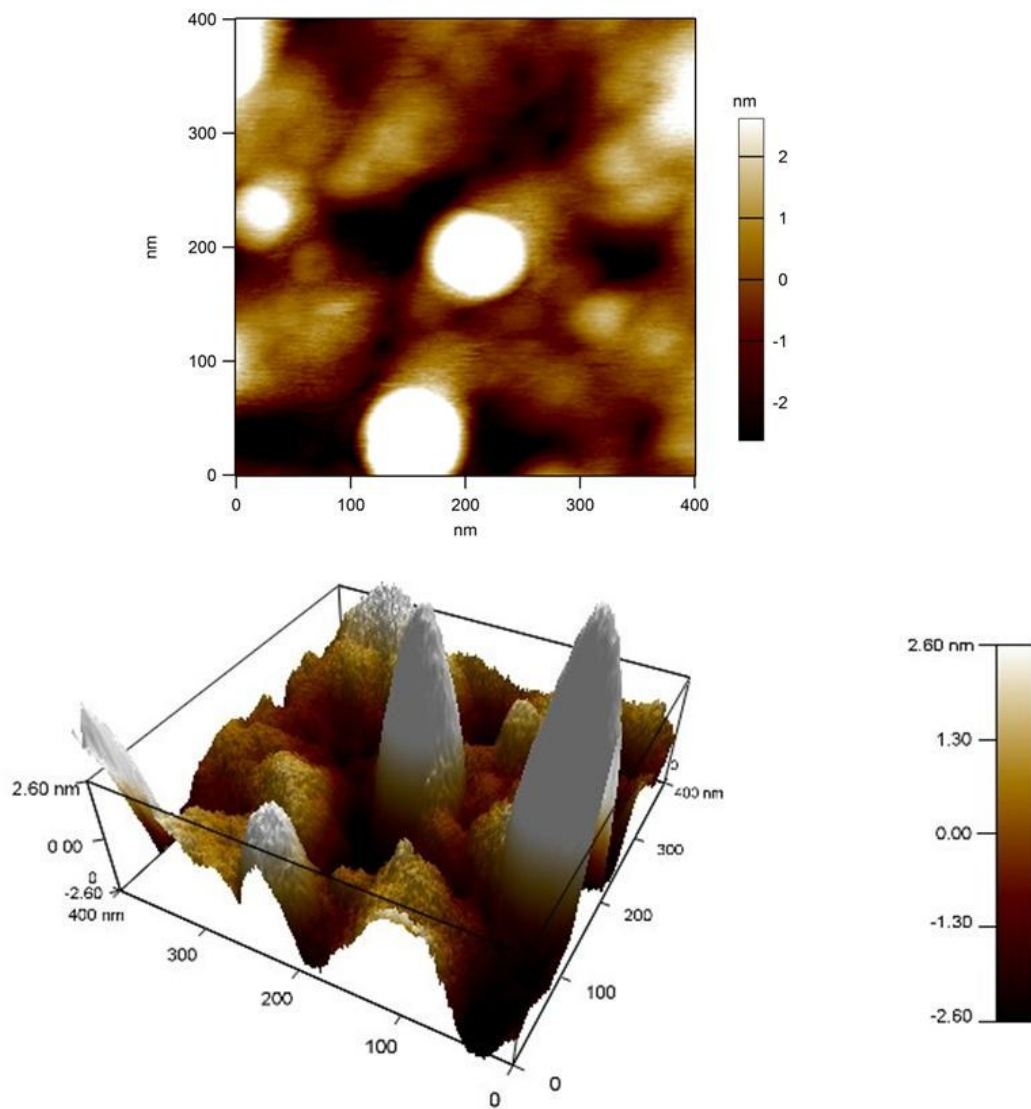
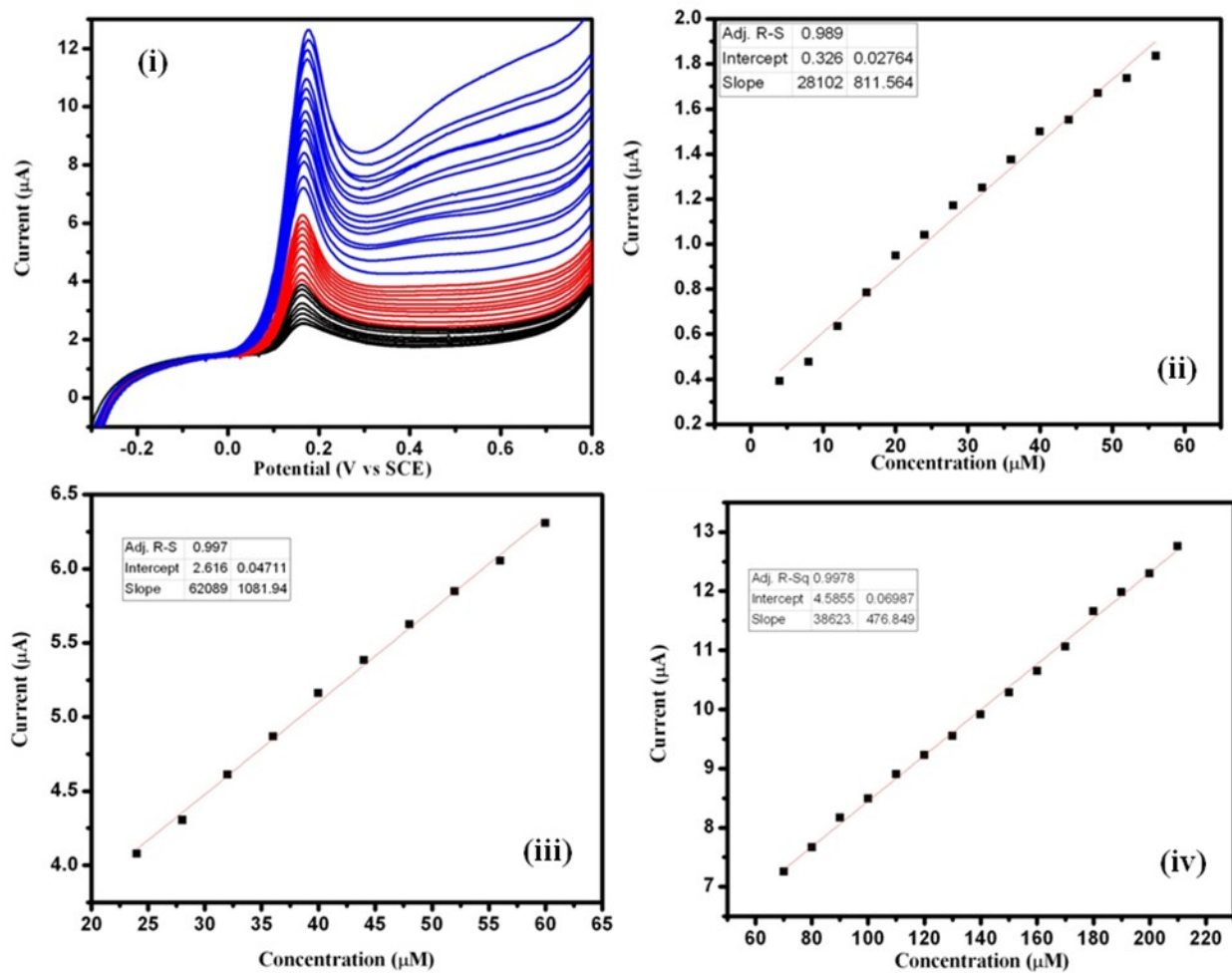


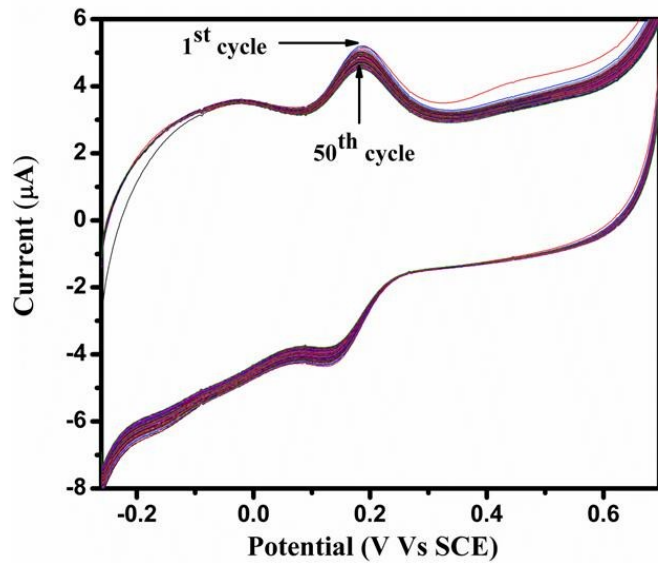
Fig. S1 (ESI†). Schematic representation of green synthesis and surface modification of CR-GNP



**Fig. S2 (ESI†).** AFM image of CR-GNP modified electrode



**Fig.S3 (ESI†).** (i) Linear Sweep Voltammetry (LSV) for different concentration of DA at different volume of addition and (ii- iv) its corresponding linear calibration plot



**Fig. S4 (ESI†).** Cyclic voltammogram of CR-GNP modified electrode in 50 ml phosphate buffer (pH 7.02) ; Stability 50 cycles