

Table S1 Comparison of present work for the simultaneous determination of AA, DA and UA with previous literature reports

No.	Electrode	Technique	pH	Scan rate (V/s)	Oxidation peak potentials (mV)			Detection limit of DA ( $\mu\text{M}$ )	Reference
					AA	DA	UA		
1	Oracet blue modified GCE <sup>a</sup>	DPV <sup>b</sup>	8.0	-	-35	130	225	0.02	Zare et al., J. Electroanal. Chem., 2006, <b>589</b> , 60-69.
2	Poly (vinyl alcohol) covalently modified GCE	CV <sup>c</sup>	7.0	0.05	70	210	350	1.4	Li et al., Sensor. Actuat. B, 2006, <b>115</b> , 134-139.
		DPV	7.0	0.05	-10	170	300		
3	Poly (evans blue) film modified GCE	CV	4.5	0.10	191	373	553	0.25	Lin et al., Bioelectrochemistry, 2008, <b>73</b> , 11-17.
		DPV	4.5	0.10	180	204	362		
4	Palladium nanoparticle-loaded carbon nanofibers modified carbon paste electrode	CV	7.0	0.05	150	231	262	0.2	Huang et al., Biosens. Bioelectron., 2008, <b>24</b> , 632-637.
		DPV	4.5	0.02	158	402	550		
5	Oxided-GCE	CV	7.0	-	64	227	354	-	Thiagarajan et al., Biosens. Bioelectron., 2009, <b>24</b> , 2712-2715.
6	Single-walled carbon nanohorn modified GCE	LSV <sup>d</sup>	7.0	0.1	13	224	376	0.06	Zhu et al., Biosens. Bioelectron., 2009, <b>25</b> , 940-943.
7	Polymerized luminol film modified GCE	DPV	7.0	0.1	-	167	295	-	Kumar et al., Electroanal., 2009, <b>21</b> , 2281 - 2286.
8	Ordered mesoporous carbon/Nafion composite film modified GCE	CV	7.4	0.1	0	190	340	0.5	Zheng et al., J. Electroanal. Chem., 2009, <b>625</b> , 82-87.
9	Poly(acid chrome blue K) modified GCE	CV	4.0	-	115	315	483	0.5	R. Zhang et al., Sensors. Actuat., B, 2009, <b>138</b> , 174-181.
		DPV	4.0	-	95	288	454		
10	Mutilwalled carbon nanotube modified carbon-ceramic electrode	DPV	4.5	0.02	92	297	458	0.31	Habibi et al., Electrochim. Acta, 2010, <b>55</b> , 5492-5498.
11	Poly(sulfonazo III) modified GCE	CV	3.0	0.10	170	350	500	0.03	Ensaifi et al., Sensor. Actuat. B, 2010, <b>147</b> , 213-221.
12	Graphene/size-selected Pt nanocomposites modified GCE	CV	7.0	0.05	40	225	369	0.03	Sun et al., Biosens. Bioelectron., 2011, <b>26</b> 3450-3455.
		DPV	7.0	-	-50	190	310		
13	Functionalized-graphene modified graphite electrode	CV	7.0	0.05	-29	170	334	0.25	M. Mallesha et al., Bioelectrochemistry, 2011, <b>81</b> , 104-108.
		DPV	7.0	0.02	-105	99	235		
14	Graphene oxide-templated polyaniline microsheets modified GCE	DPV	7.4	-	-55	195	385	0.5	Bao et al., Electroanal., 2011, <b>23</b> , 878 - 884.
15	Graphene-doped film of layered double hydroxides modified GCE	CV	7.0	0.1	-23	169	297	0.3	Wang et al., Microchim Acta, 2011, <b>174</b> , 41-46.
16	SiC modified GCE	CV	7.0	0.1	~30	~200	~337	0.05	Wu et al., Chem. Commun., 2011, <b>47</b> , 6458-6460.
17	Graphene nanoflake films on Si	CV	7.0	0.1	6.4	187.6	323.6	0.17	Shang et al., Adv. Funct. Mater., 2008, <b>18</b> , 3506-3514.
18	Carbon nanosheets modified Pt electrode	CV	7.0	0.1	-1	214	355	0.12	Present work

<sup>a</sup> Glassy carbon electrode

<sup>b</sup> Differential pulse voltammetry

<sup>c</sup> Cyclic voltammetry

<sup>d</sup> Linear sweep voltammmetry