Electronic Supplementary Material (ESI) for Analyst

The effects of ionic liquid on the electrochemical sensing performance of graphene- and carbon nanotube-based electrodes

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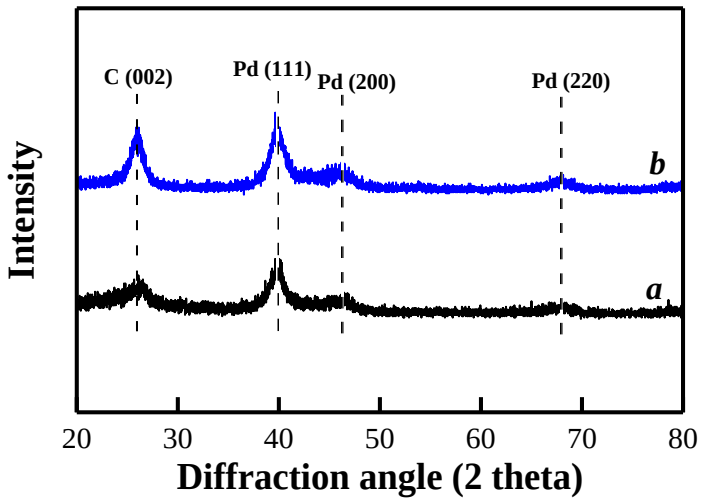

Fig. SI1. XRD patterns of the graphene/Pd (curve *a*) and CNT/Pd (curve *b*) samples.

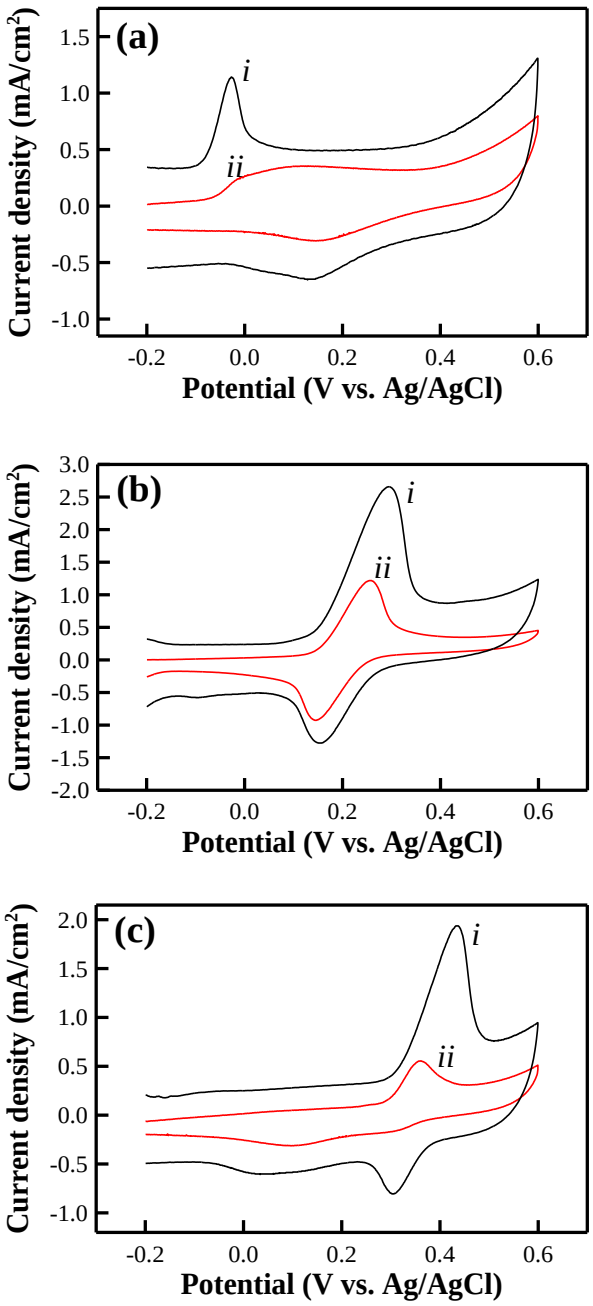

Fig. SI2. Cyclic voltammograms of IL/graphene/Pd (curves *i*), and IL/CNT/Pd (curves *ii*) electrodes recorded in (a) 1 mM AA, (b) 1 mM DA, and (c) 1 mM UA PBS solution at a potential scan rate of 50 mV/s. A hydrophilic 1-ethyl-3-methylimidazolium–tetrafluoroborate IL is this case.

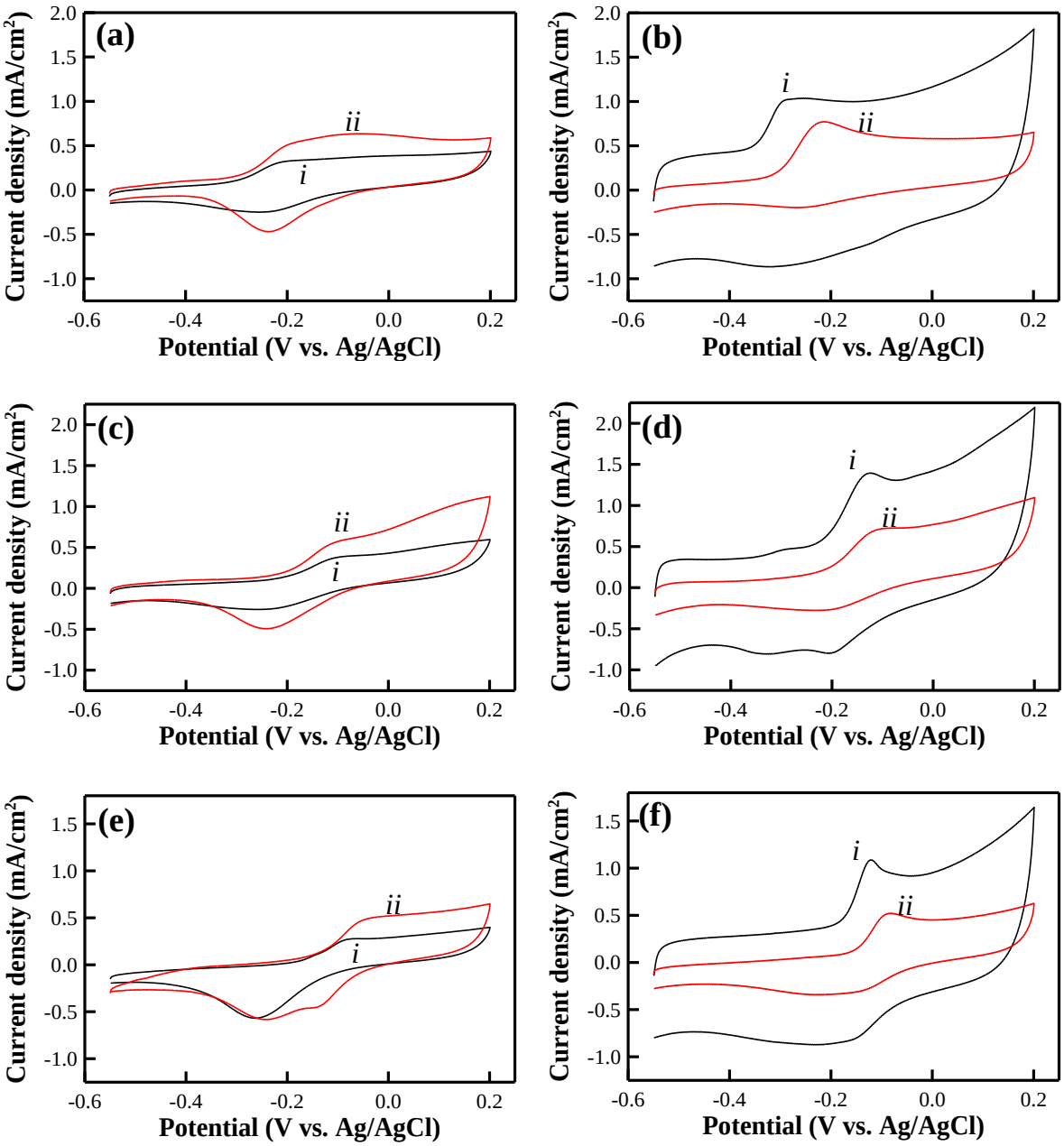

Fig. SI3. Cyclic voltammograms of the graphene/Pd (curves *i*) and CNT/Pd (curves *ii*) electrodes recorded at a potential scan rate of 50 mV/s in NaOH solution that contains 1 mM AA ((a), (b)), 1 mM DA ((c), (d)), and 1 mM UA ((e), (f)). The electrodes are without ((a), (c), (e)) and with ((b), (d), (f)) BMI–PF_6 IL incorporation.

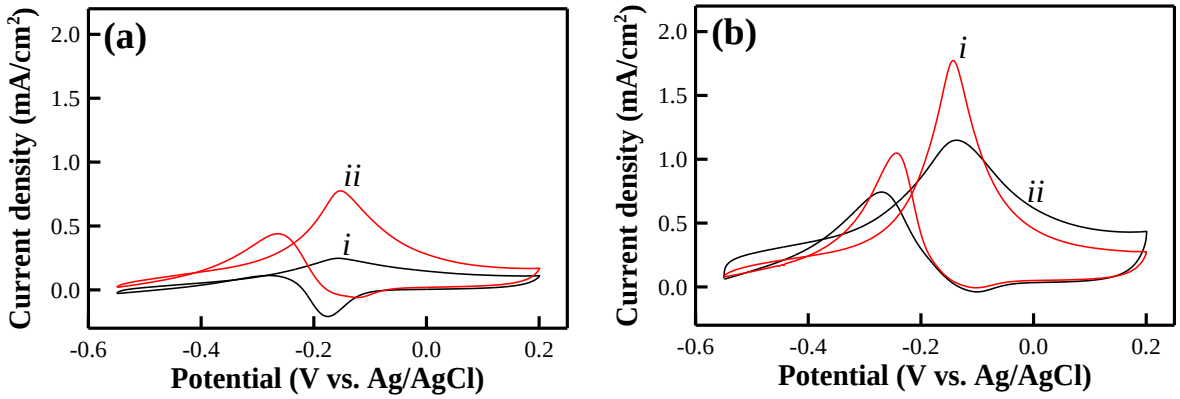

Fig. SI4. Cyclic voltammograms of the graphene/Pd (curves *i*) and CNT/Pd (curves *ii*) electrodes recorded in 5 mM glucose NaOH solution at a potential scan rate of 10 mV/s. The electrodes are (a) without and (b) with BMI–PF_6 IL incorporation, respectively.