# High-performance platform for electrochemical sensing α-fetoprotein based on molecularly imprinted polymerized ionic liquid film on a gold nanoparticle modified electrode surface

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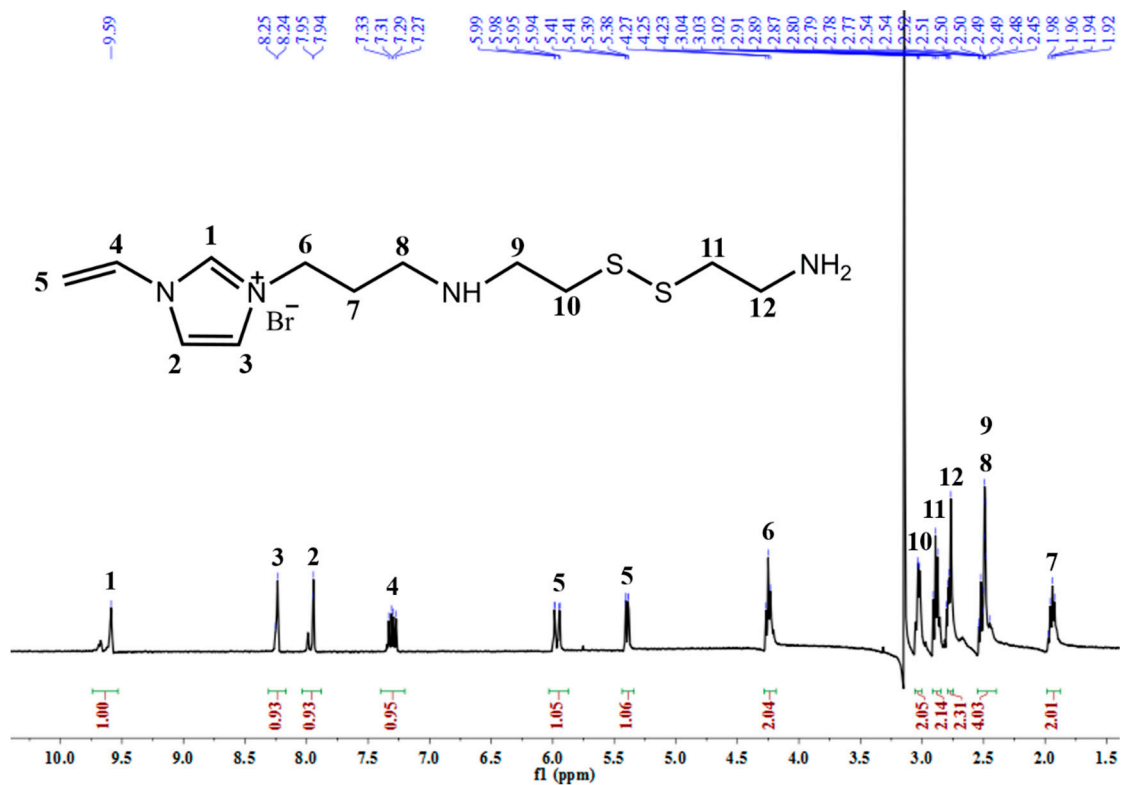
[1]These authors contributed equally to this work.

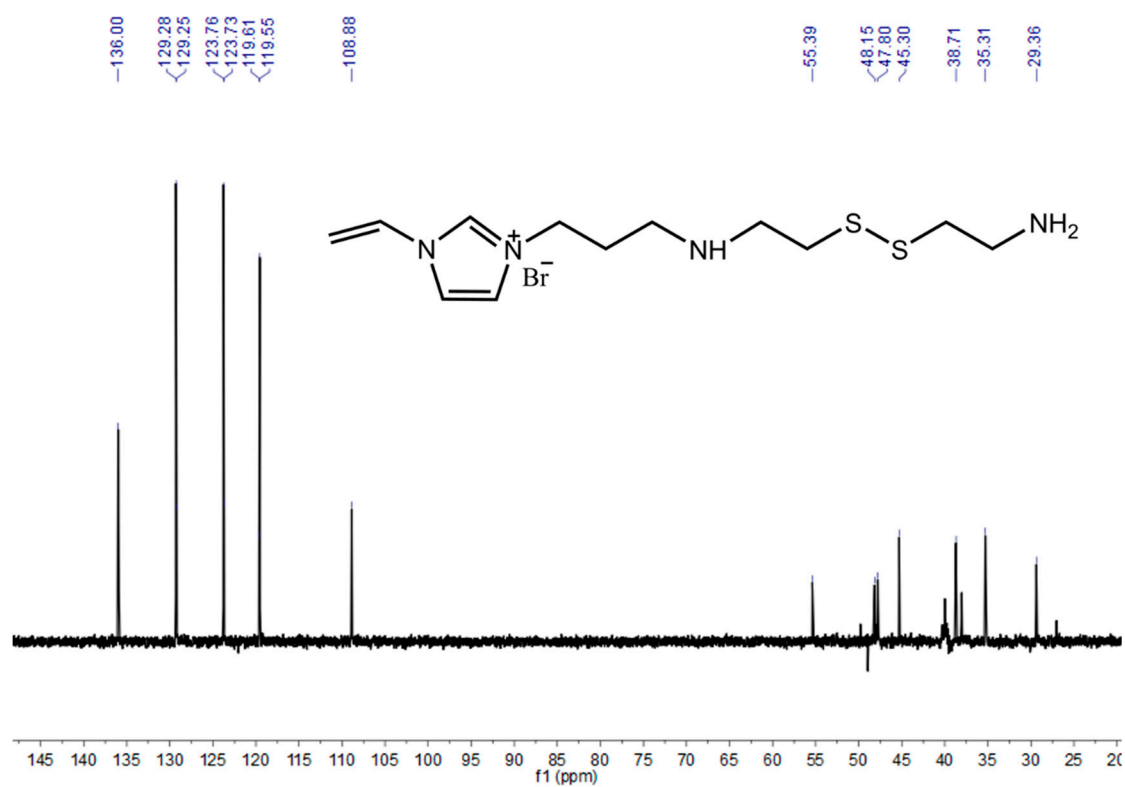Fig. S 1. $^1$H-NMR spectrum of (Cys)VIMBF$_4$ ionic liquid (solvent: Methanol-$d_4$)

Fig. S 2. $^{13}$C-NMR spectrum of (Cys)VIMBF$_4$ ionic liquid (solvent: Methanol-$d_4$)
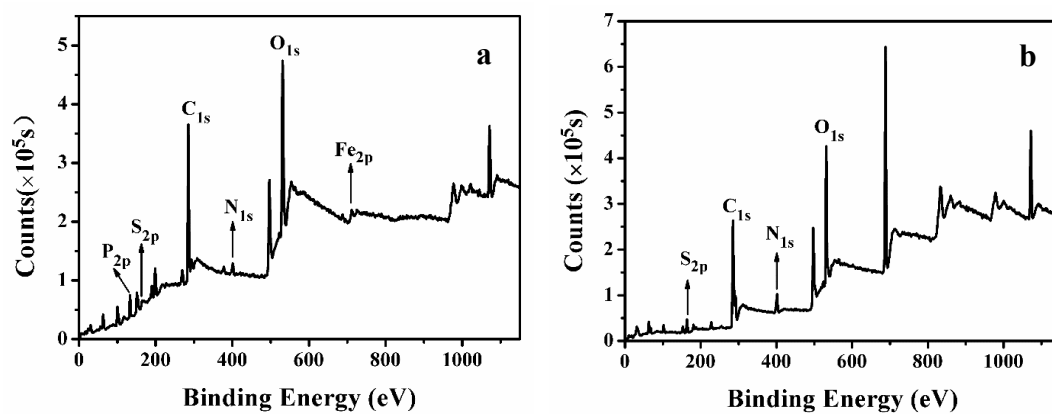
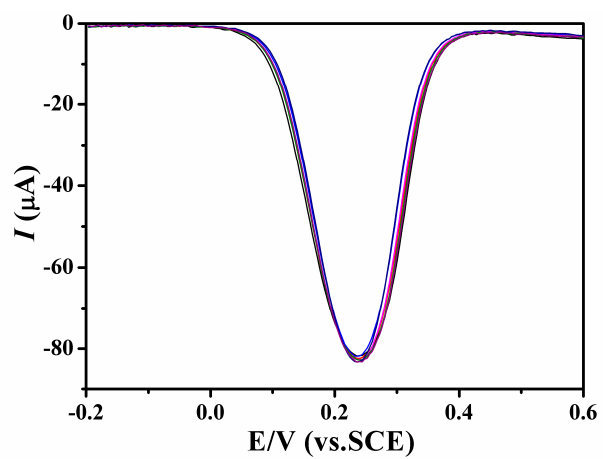Fig. S3. X-ray photoelectron spectroscopic characterizations of imprinted (a) and non-imprinted polymers (b)

Fig. S 4 Differential pulse voltammograms of $K_4Fe(CN)_6/K_3Fe(CN)_6$ at the NIP sensor with AFP concentration varying from 0.03 to 1.0 ng mL$^{-1}$
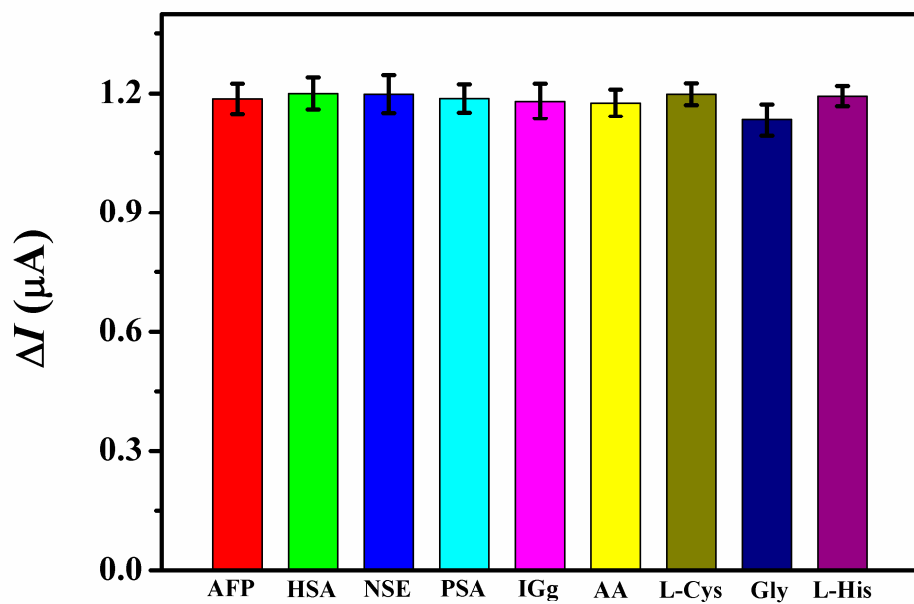
Fig. S 5. Electrochemical responses of the imprinted sensor toward 1.0 ng mL$^{-1}$ AFP in the presence of 50 ng mL$^{-1}$ HSA, NSE, PSA, IGg, L-Cys, Gly and L-His.