

Supporting Information

Selective amperometric sensing platform for lead based on target-induced strand release

Feng Li^{a,b}, Limin Yang^a, Mingqin Chen^b, Peng Li^b, Bo Tang^{a,*}

^a College of Chemistry, Chemical Engineering and Materials Science, Key Laboratory of Molecular and Nano Probes, Ministry of Education, Shandong Normal University, Jinan 250014, China. Fax: 86-531-86180017; E-mail: tangb@sdu.edu.cn

^b College of Environment and Safety Engineering, Qingdao University of Science and Technology, Qingdao 266042, PR China.

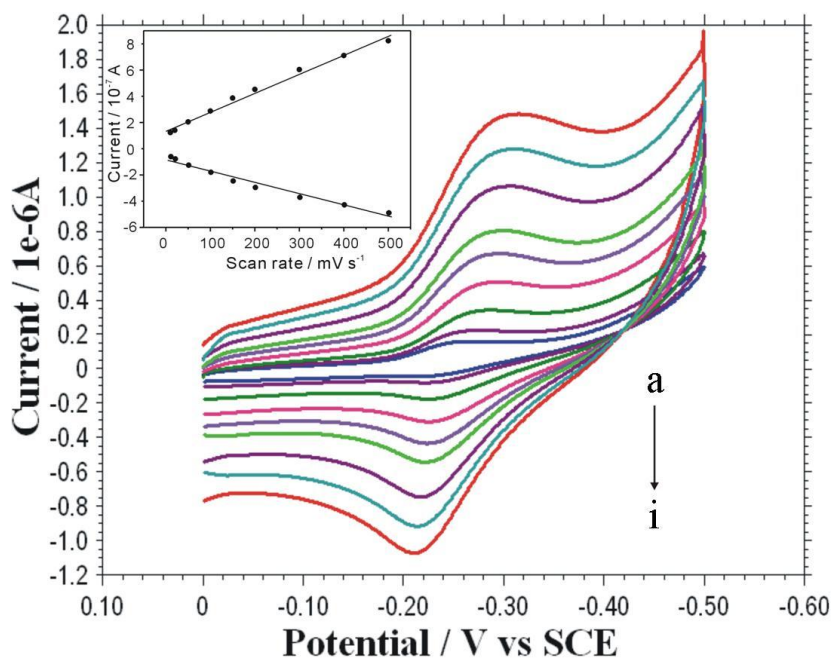


Fig. S1 CVs of MB/T-C/Den Au/Au in 20 mM Tris-HCl (20 mM NaCl, pH 7.0) at different scan rates of (a) 10, (b) 20, (c) 50, (d) 100, (e) 150, (f) 200, (g) 300, (h) 400, and (i) 500 mV s⁻¹. Inset shows the plots of peak current versus the scan rate.

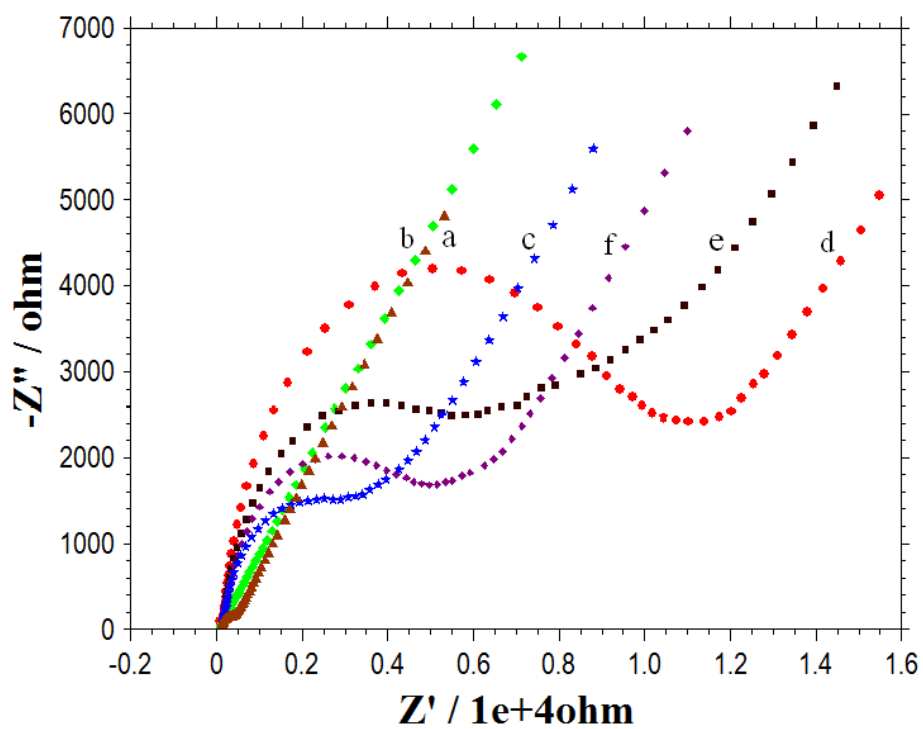


Fig. S2 Nyquist plots of the bare Au electrode (a), DenAu/Au (b), C/DenAu/Au (c), T-C/DenAu/Au (d), MB/T-C/DenAu/Au (e), and $Pb^{2+}/MB/T-C/DenAu/Au$ (f) in 1.0 mM $Fe(CN)_6^{3-/4-}$ solution containing 0.1 M KCl.

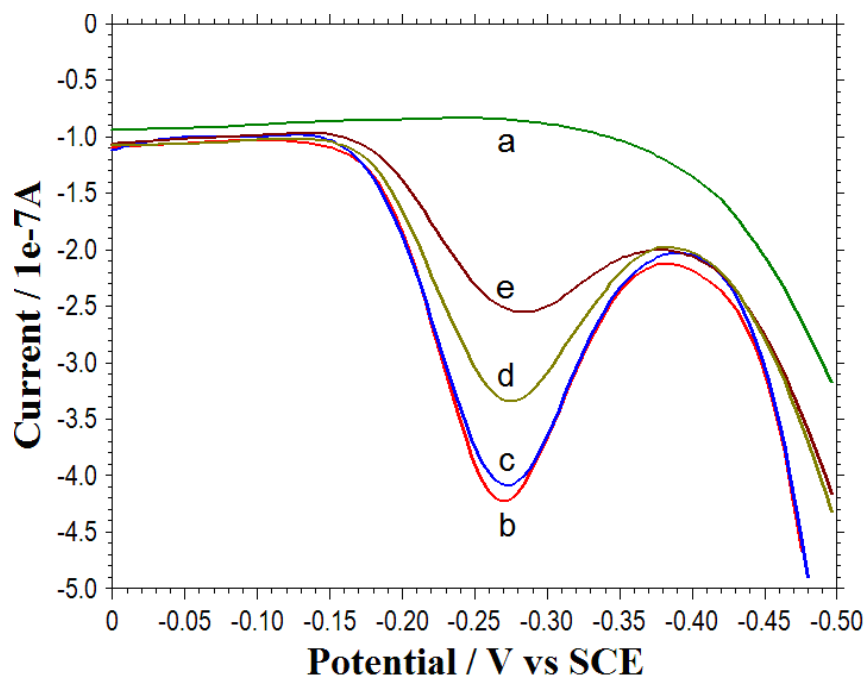


Fig. S3 DPVs of T-C/DenAu/Au (a) and MB/T-C/DenAu/Au with analysis of Pb^{2+} in river water sample: blank sample (b), river water (c), river water + 5.0×10^{-10} M Pb^{2+} (d), and river water + 5.0×10^{-9} M Pb^{2+} (e).