

Supplementary information

Redox mechanism of azathioprine and its interaction with DNA

Mihaela-Cristina Bunea^{1,2}, Victor-Constantin Diculescu¹, Monica Enculescu¹, Horia Iovu² and Teodor Adrian Enache^{1*}

¹National Institute of Materials Physics, Atomistilor 405A, 077125, Magurele Romania

²University Politehnica of Bucharest, Advanced Polymer Materials Group, 1-7 Gh. Polizu Str. Bucharest 011061, Romania

*Corresponding authors: adrian.enache@infim.ro

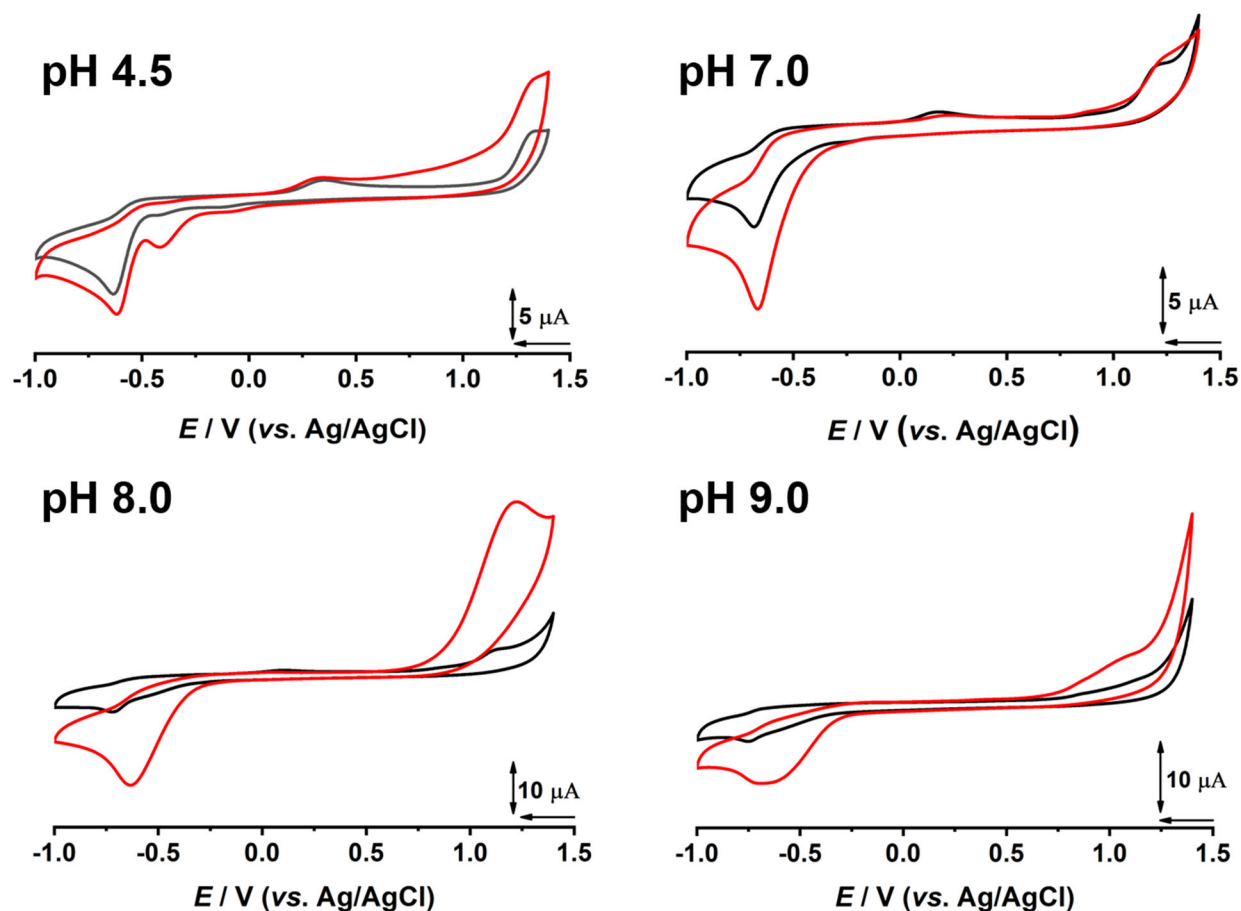


Figure S1. Cyclic voltammograms recorded for (—) normal O₂ content and (—) O₂ bubbled solutions of 500 μM AZA in 0.1 M buffer with different pHs; $\nu = 100 \text{ mVs}^{-1}$.

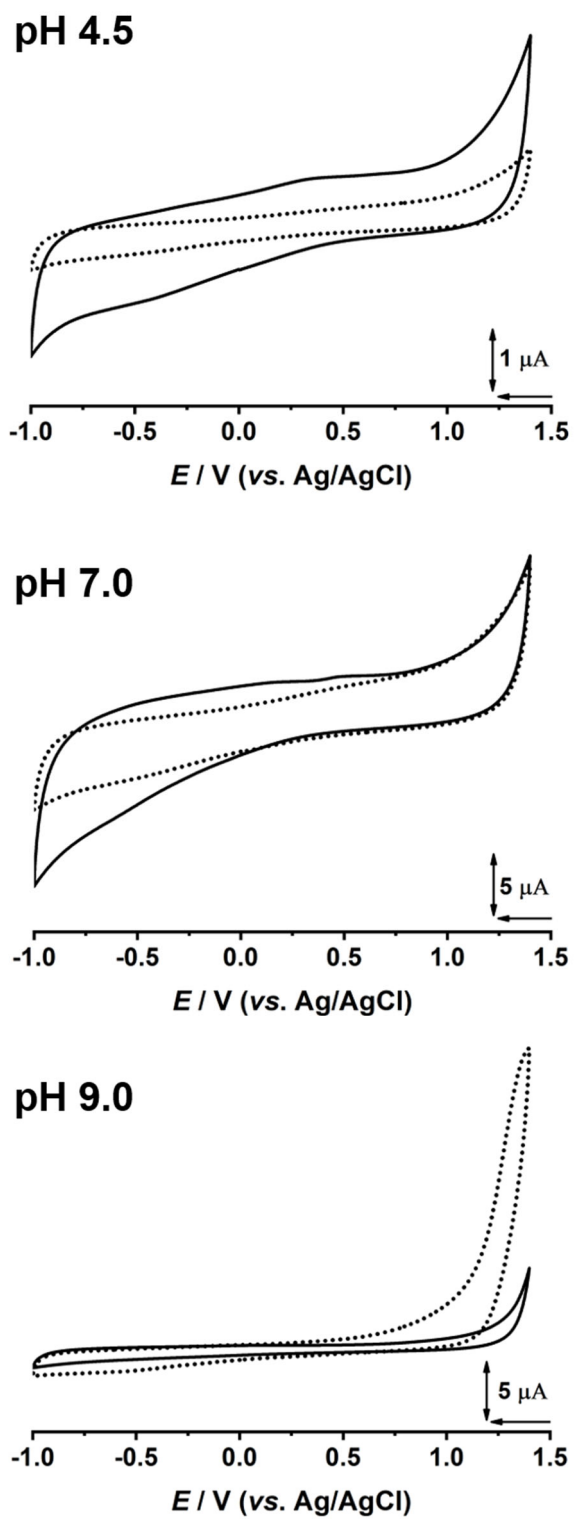


Figure S2. Cyclic voltammogram recorded at glassy carbon electrode in (—) different pHs and (•••) 0.9 mM DMSO

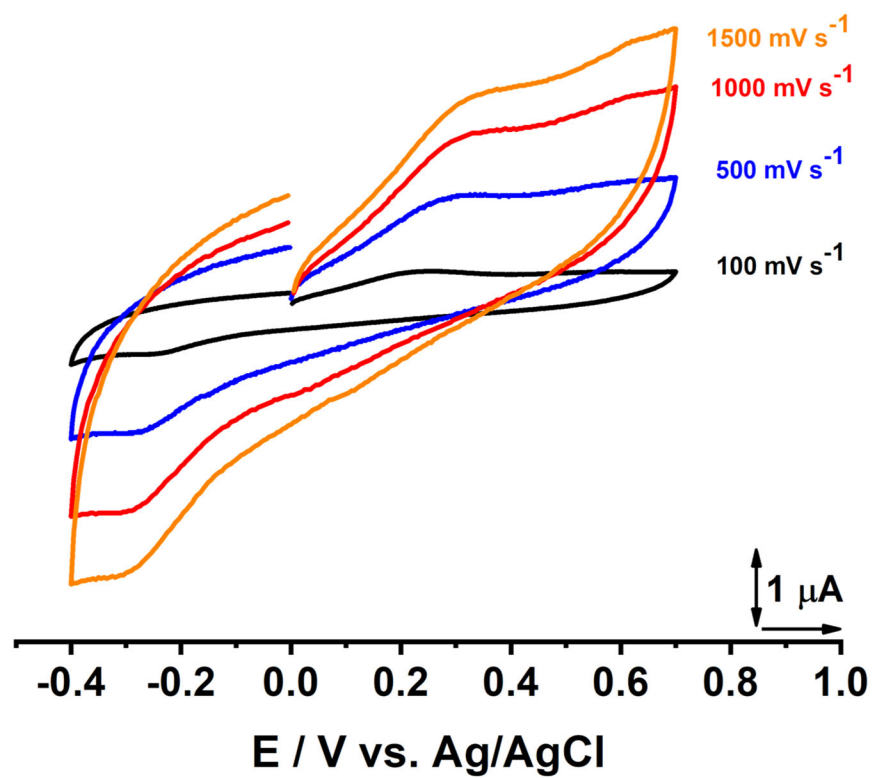


Figure.S3. Cyclic voltammogram recorded in 500 μM AZA after applied potential 10 min from $E_0 = 0 \text{ V}$, $E_{\text{min}} = -0.4 \text{ V}$, $E_{\text{max}} = 0.7 \text{ V} (-0.6 \text{ V})$

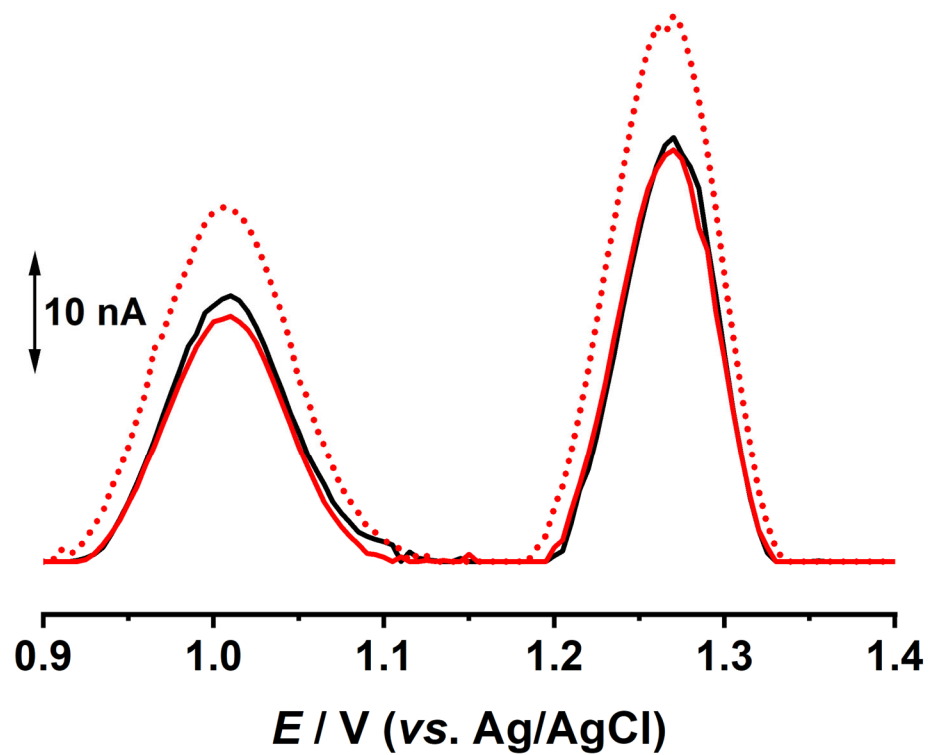


Figure.S4. DP voltammograms recorded for (—) DNA biosensor without applied potential, (—) DNA biosensor incubated in AZA (10 min) without applied potential and (•••) DNA biosensor incubated in AZA (10 min) with applied potential.

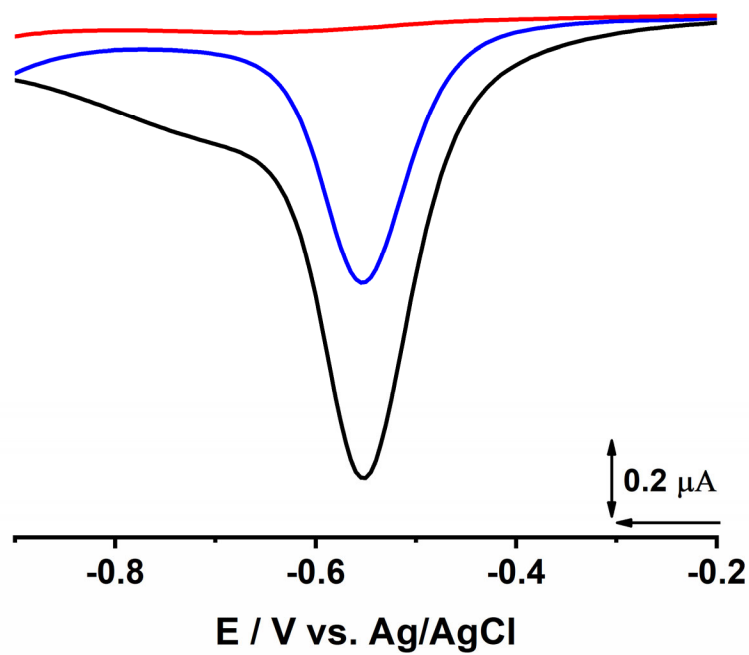


Figure S5. DP voltammograms recorded in acetate buffer pH 4.5 for DNA biosensor incubated with AZA for (—) 10 min without applied potential, (—) 10 min with applied potential and (—) 20 min with applied potential.