

Supplementary Information

Development of Ionic Liquid Modified Disposable Graphite Electrodes for Label-Free Electrochemical Detection of DNA Hybridization Related to *Microcystis* spp. *Sensors* 2015, 15, 22737-22749

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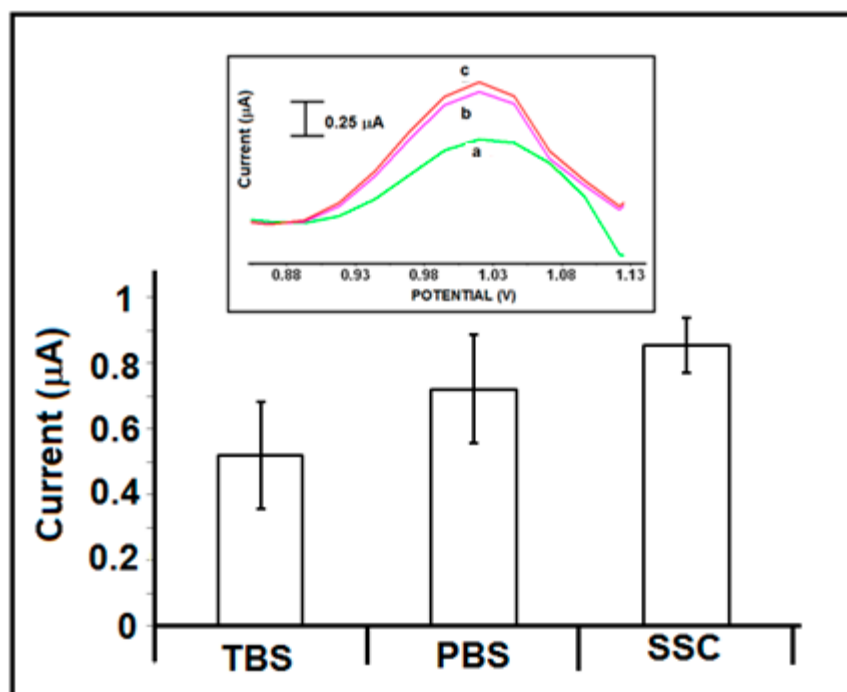


Figure S1. Histograms representing the average guanine signals (n=3) obtained after hybridization of 15 μg/mL MYC DNA probe and 20 μg/mL MYC DNA target in TBS (pH 7.0), PBS (pH 7.4) and SSC (pH 7.0). Inset: The voltammograms representing the guanine signals obtained after hybridization of 15 μg/mL MYC DNA probe and 20 μg/mL MYC DNA target in (a) TBS (pH 7.0), (b) PBS (pH 7.4) and (c) SSC (pH 7.0).

Table S1. The anodic peak currents (I_a), anodic charge values (Q_a), peak to peak separations (ΔE_p) and calculated surface areas (A) of PGE and IL modified PGEs.

	I_a (μA)	$Q_a * 10^{-4}$ (Coulomb)	ΔE_p (mV)	A (cm^2)
PGE	62.31	18.1	222	0.188
%5 IL modified PGE	88.30	20.8	144	0.266
%10 IL modified PGE	116.20	23.2	125	0.351
%15 IL modified PGE	113.60	21.8	117	0.343

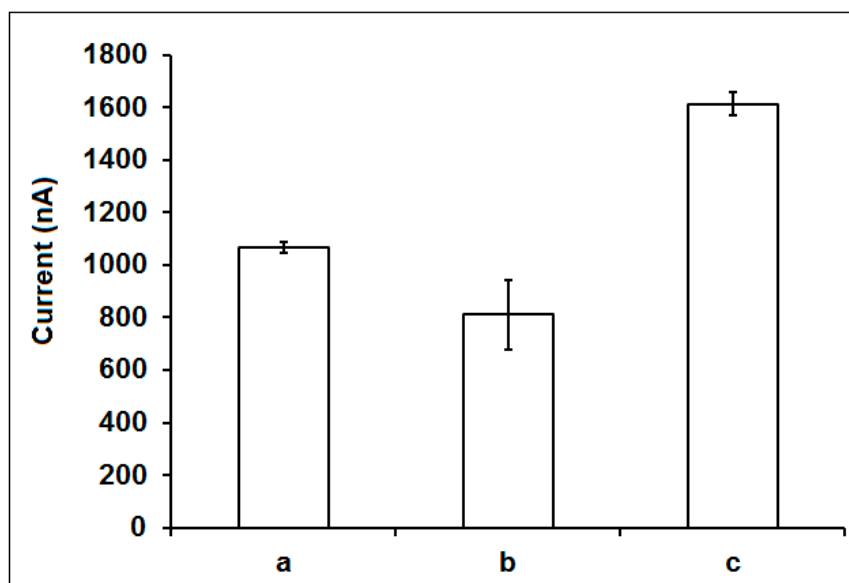


Figure S2. Histograms representing the guanine signals ($n=3$) after hybridization between 15 $\mu g/mL$ MYC DNA probe and 20 $\mu g/mL$ (a) MYC DNA target, (b) MM and (c) the mixture of DNA target:MM (1:1) by using IL-PGEs.