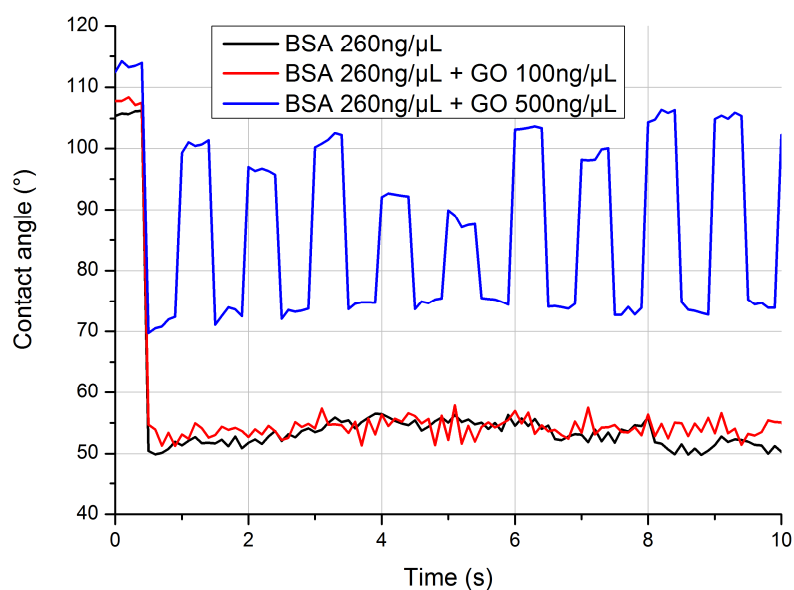


## Supplementary Information

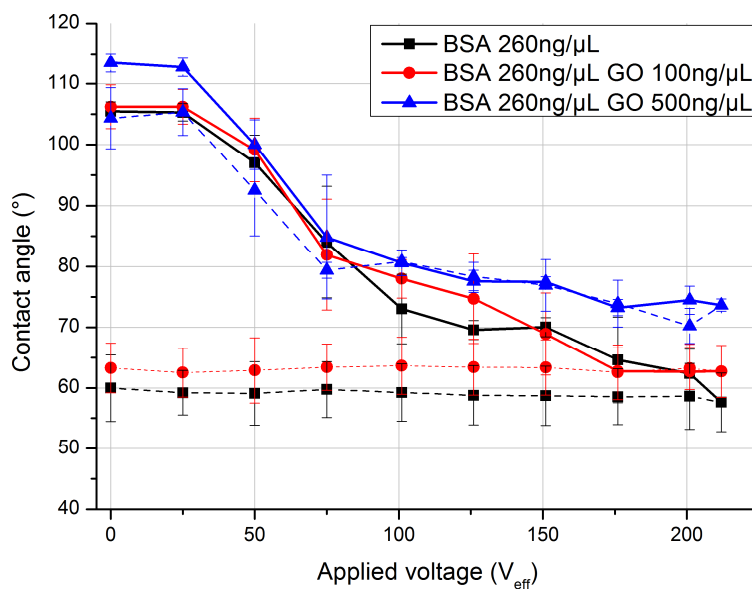
### Investigation of anti biofouling properties of graphene oxide aqueous solutions by electrowetting characterization

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**Figure S1:** 10 EWOD cycles @ 200V<sub>eff</sub> for 6μL droplet containing BSA at 260ng/μL without GO (black), with 100ng/μL (red) and 500ng/μL (blue) of GO.

At higher BSA concentration (260ng/μL, Figure S1) with 500ng/μL of GO, the EWOD becomes reversible. Nonetheless while  $\theta_1$  stays relatively stable at 75°,  $\theta_2$  varies strongly with a mean value of  $95^\circ \pm 7^\circ$ . This behavior can be explained by the fact that the droplet contains a high concentration of BSA compared to results of Figure 3a for the same GO concentration. Saturation of the adsorption of BSA on GO is observed in that case, leading to a partial retraction of the TCL once the voltage is released.



**Figure S2:** Contact angle as a function of applied voltage for BSA concentration of 260ng/μL without GO (black), with 100 ng/μL (red) and 500 ng/μL (blue) of GO, solid line for increasing voltage and dashed line for decreasing voltage.