

Figure S1. The schematic of the experimental set-up (drop volume tensiometer).



Figure S2. Equilibrium surface concentration vs. F-127 bulk concentration in the absence \circ and presence \blacksquare of 0.01 wt% ZnO nanoparticles at 25 °C.



Figure S3. Dynamic surface concentration vs. time at different F-127 concentrations, 0.0001 ■, 0.00008 ° and 0.00004 ▲, M. (a) in the absence and (b) in the presence of 0.01 wt% ZnO nanoparticles at 25 °C.



Figure S4. The plot of $(\Gamma/\Gamma_e) + \ln(1 - \Gamma/\Gamma_e)$ vs. time for close to equilibrium data at $C_{F-127} = 0.00001$ M, in the absence \circ and in the presence \blacksquare , of 0.01 wt% ZnO nanoparticles at 25 °C.



Figure S5. Apparent diffusion coefficient D_a vs. F-127 bulk concentration in the absence \circ and presence \blacksquare of ZnO nanoparticles at 25 °C.



Figure S6. Effective diffusion coefficient D_E vs. F-127 bulk concentration in the absence \circ and presence \blacksquare of ZnO nanoparticles at 25 °C.



(b)

Figure S7. The images of aqueous phase drop covered by n-decane at a quartz substrate at two F-127 concentrations (a) 0.00004 (b) 0.0001 M.

(a)