

**Table S1. Immobilization of lipase on PANI/Ag/GO after optimizing all conditions**

Enzyme loaded (X) (U)	Enzyme activity in washes (Y) (U)	Enzyme activity bound to PANI/Ag/GO-NC			Immobilization yield (%) (B/A x 100)
		Theoretical (X-Y)=(A)	Actual (B)	Effectiveness factor ( $\eta$ )=(B/A)	
7	0.4	6.6	6.2	0.94	94

Each value represents the mean for three independent experiments performed in triplicates, with average standard deviations, < 5%.