Electronic Supplementary Material (ESI) for RSC Advances

Nonspecific Binding Removal and Specific Binding Regeneration Using Longitudinal Acoustic Wave

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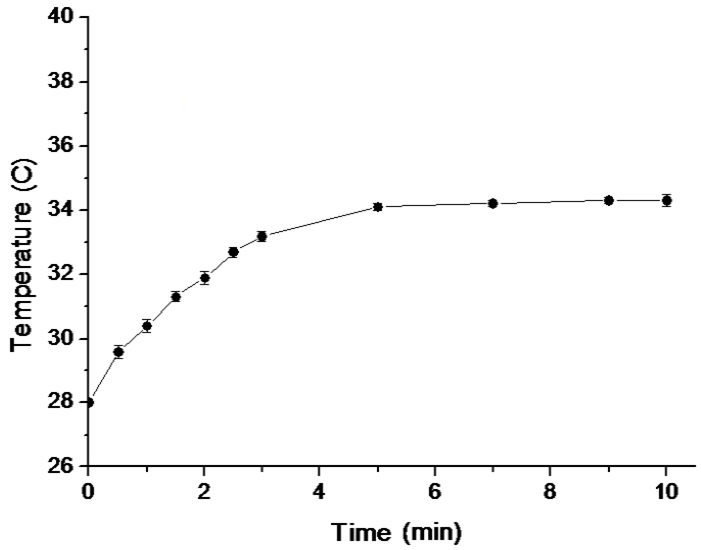

Figure S-1. Measured temperature in the LAW operation chamber versus time when the PZT transducer is activated (n = 3). LAW voltage = 50 V_{rms}; LAW frequency: from 100 kHz to 1 MHz.

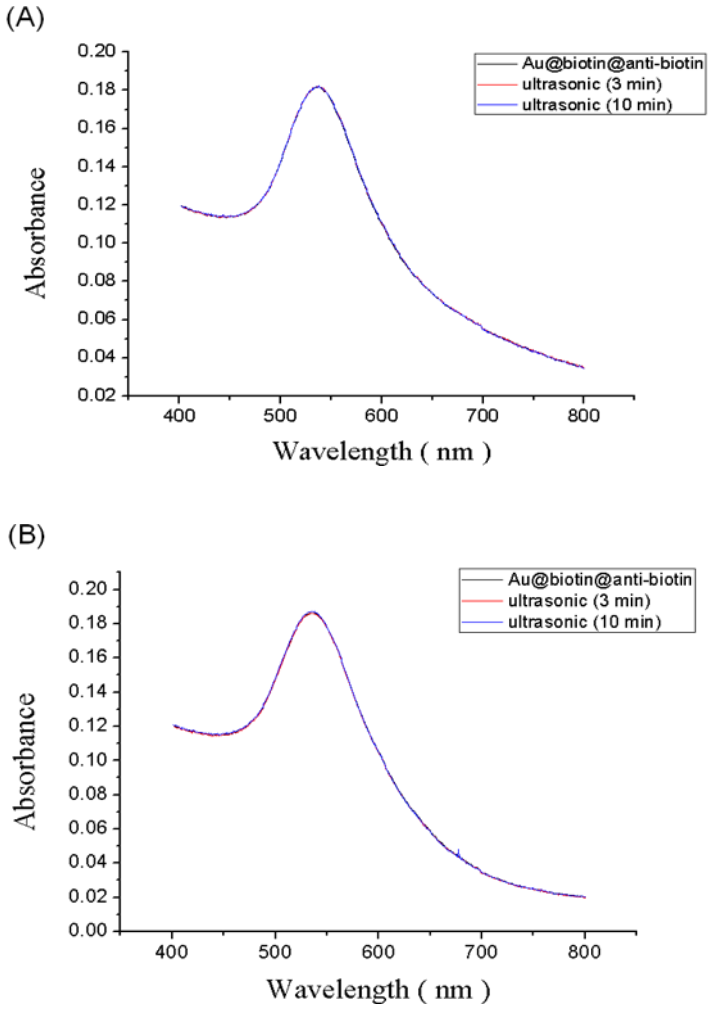

Figure S-2. Controlled experiments: biotin-functionalized GNP-GSCs with pre-adsorbed anti-biotin were immersed in a commercially available ultrasonic bath. Absorbance spectra of (a) initial GNP-GSC with pre-adsorbed anti-biotin (black line), (b) GNP-GSCs with pre-adsorbed anti-biotin after ultrasonic activation for 3 min (red line), and (c) GNP-GSCs with pre-adsorbed anti-biotin after ultrasonic activation for 10 min (blue line).