Electronic Supplementary Information (ESI)

Facile preparation of immobilized surfactant-free palladium nanocatalyst for metal hydride trapping: a novel sensing platform for TXRF analysis

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Fig. S1 TEM images for Pd NPs synthesized using water:ethanol mixture 1:2 (v/v) (a) in the absence of MPTMS (b) in the presence of MPTMS 2 molar excess.

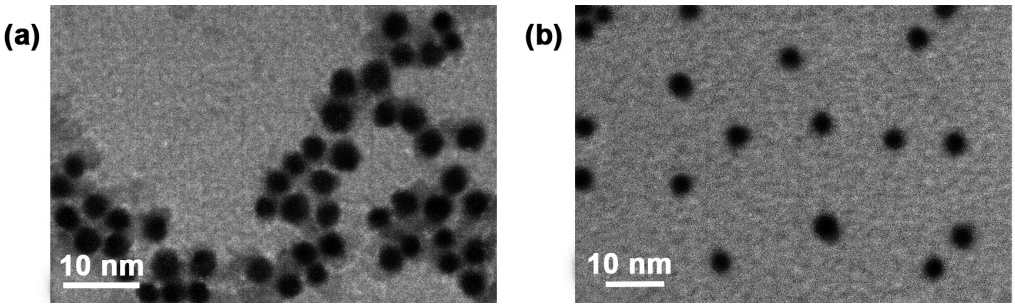

Fig. S2 Effect of the trapping time on the analytical signal of the TXRF sensor

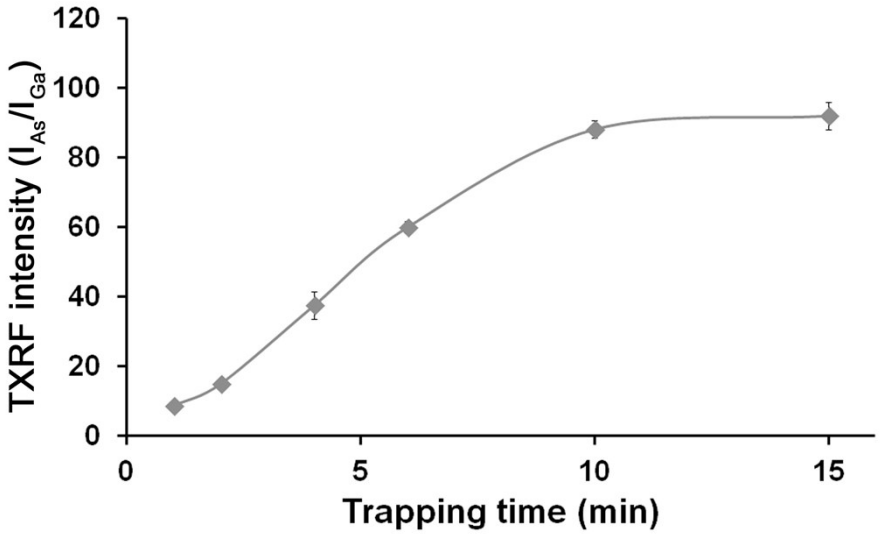

Fig. S3 (a) Absorbance-time profiles obtained in ETAAS experiments for various initial concentrations of As (20 μg L^{-1}, 40 μg L^{-1}, 50 μg L^{-1}, 70 μg L^{-1}, 80 μg L^{-1}, 100 μg L^{-1}). (b) Absorption profile of As in the absence (—) and in the presence (---) of Pd NPs.

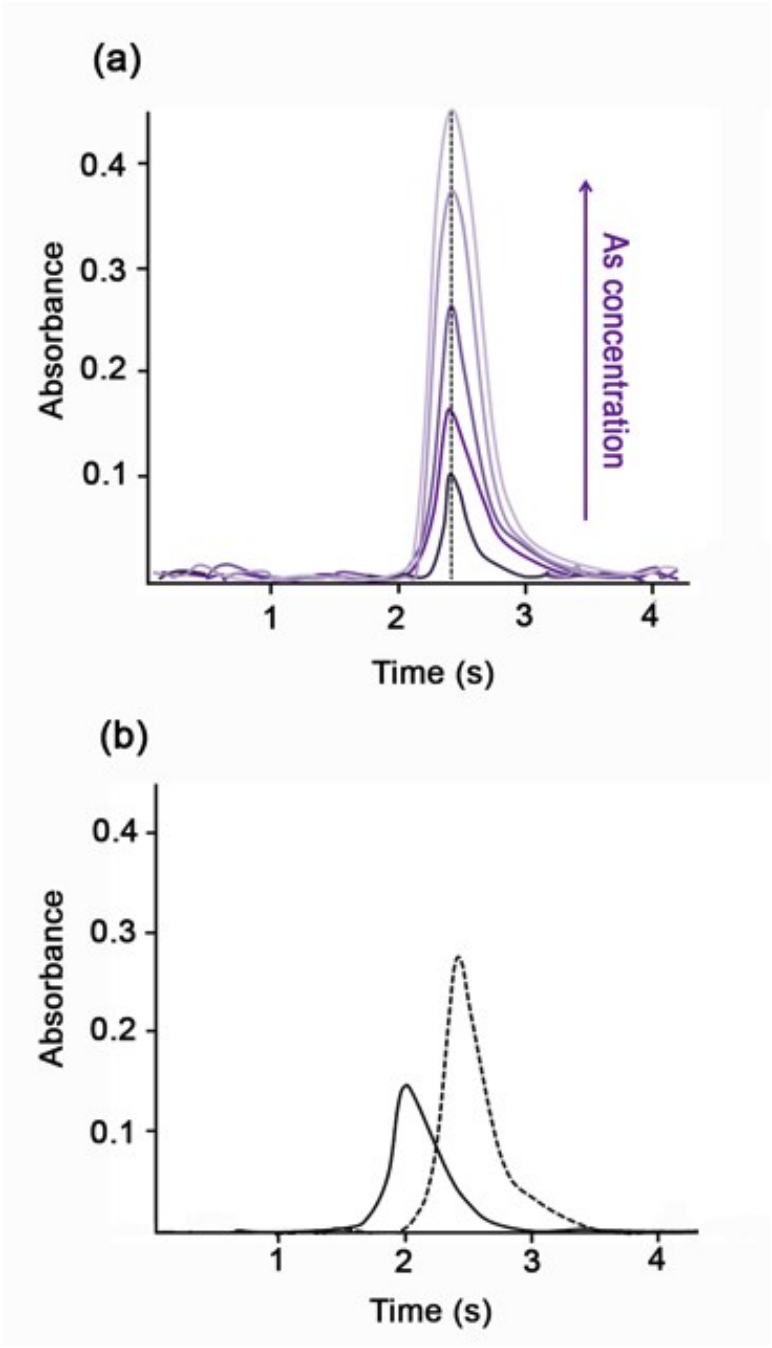

Fig. S4 Schematic diagram showing the sensing platform for TXRF analysis: (a) Arsenic trapping by dissociative chemisorption of AsH_3; (b) Detection of the trapped arsenic.