

Electronic Supplementary Material

Ratiometric fluorescence nanosensor for glutathione detection based on spatially confined dual-emission of α -lipoic acid-modified gold nanoclusters and silicon nanoparticles

Abdullah S. Albalawi^{*a}, Alanoud Alkhamali^a, Mohamed M. El-Wakil^{*b}, Ramadan Ali^a

^a Department of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Tabuk, Tabuk 71491, Saudi Arabia.

^b Department of Pharmaceutical Analytical Chemistry, Faculty of Pharmacy, Assiut University, Assiut, 71526, Egypt.

Correspondence

^a abs_albalawi@ut.edu.sa

^b mohamed.elwakeel@pharm.aun.edu.eg, mohamed.mohamoud@ymail.com

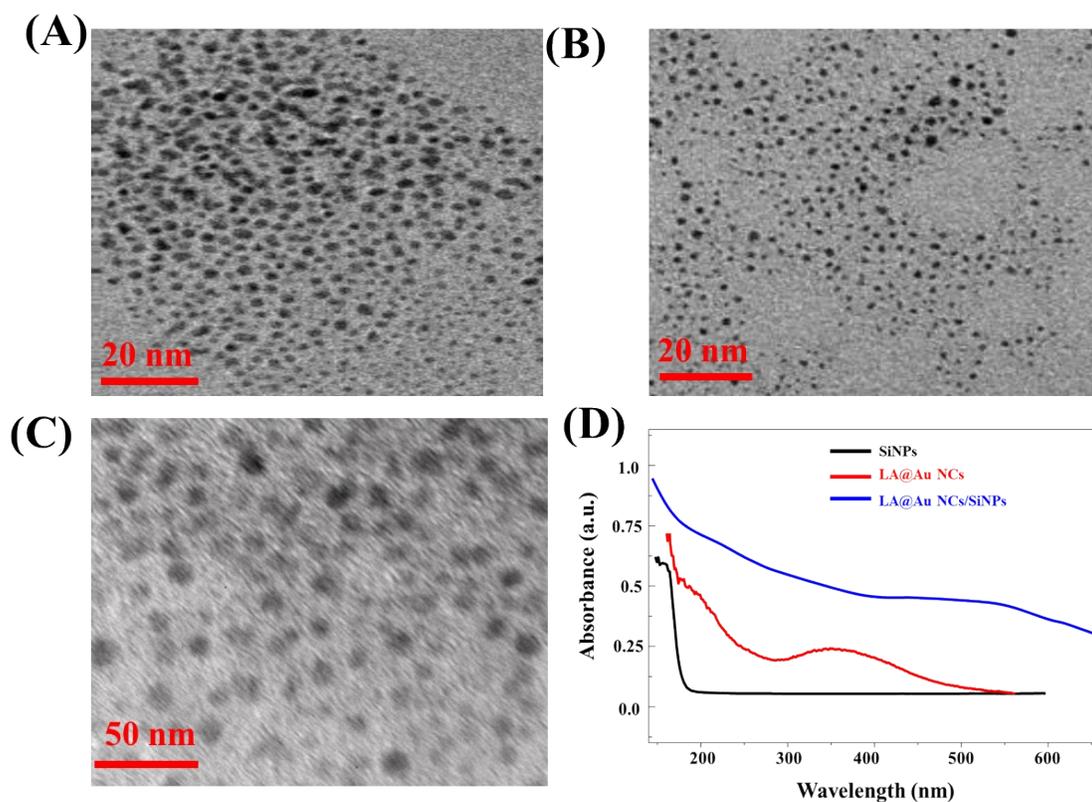


Fig.S1 TEM images of SiNPs (a), LA@Au NCs (b), and LA@Au NCs/SiNPs (c) while (d) refers to UV/Vis absorption spectra of SiNPs, LA@Au NCs, and LA@Au NCs/SiNPs.

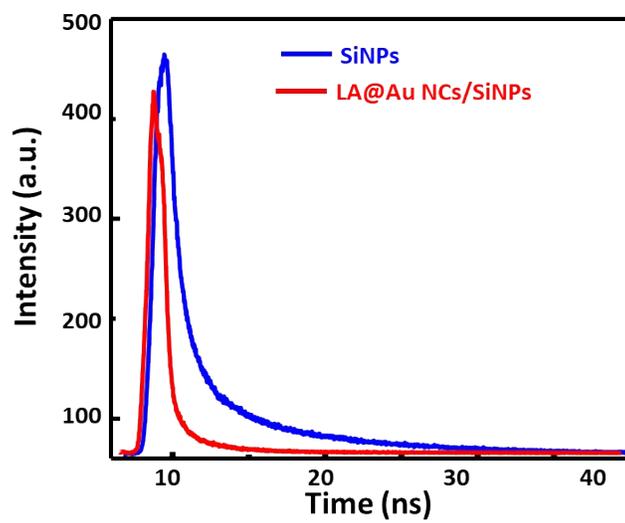


Fig.S2 Fluorescence lifetimes of SiNPs and LA@Au NCs/SiNPs.

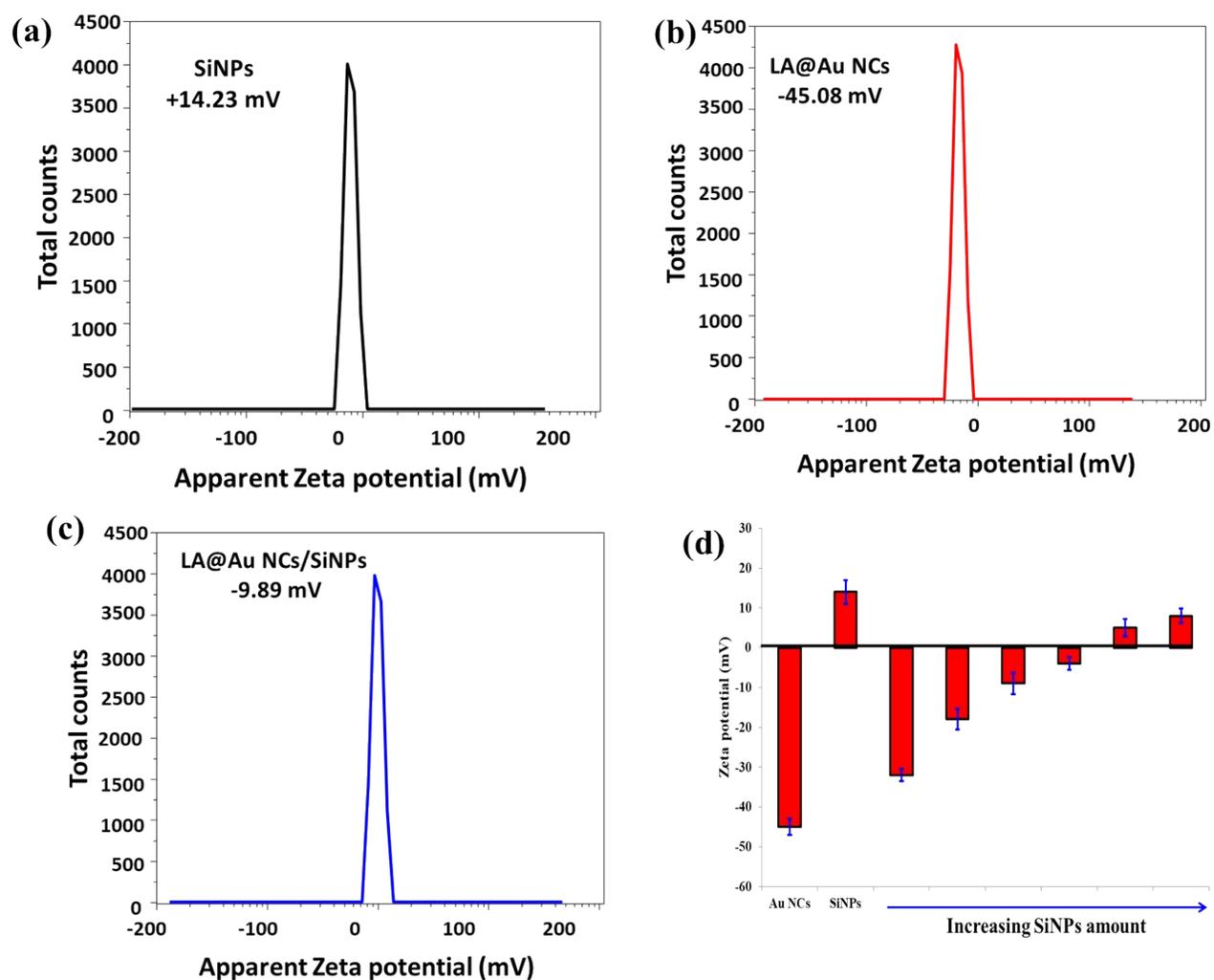


Fig.S3 Zeta potentials of SiNPs (a), LA@Au NCs (b), and LA@Au NCs/SiNPs (c) while (d) is Zeta potential histograms of SiNPs, LA@Au NCs, and LA@Au NCs with different amounts of SiNPs.

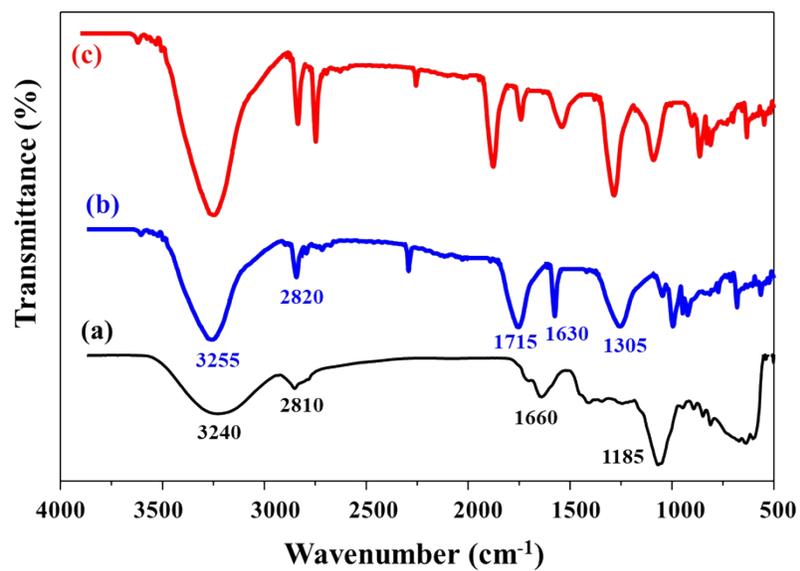


Fig.S4 FT-IR spectra of SiNPs (a), LA@Au NCs (b), and LA@Au NCs/SiNPs (c).

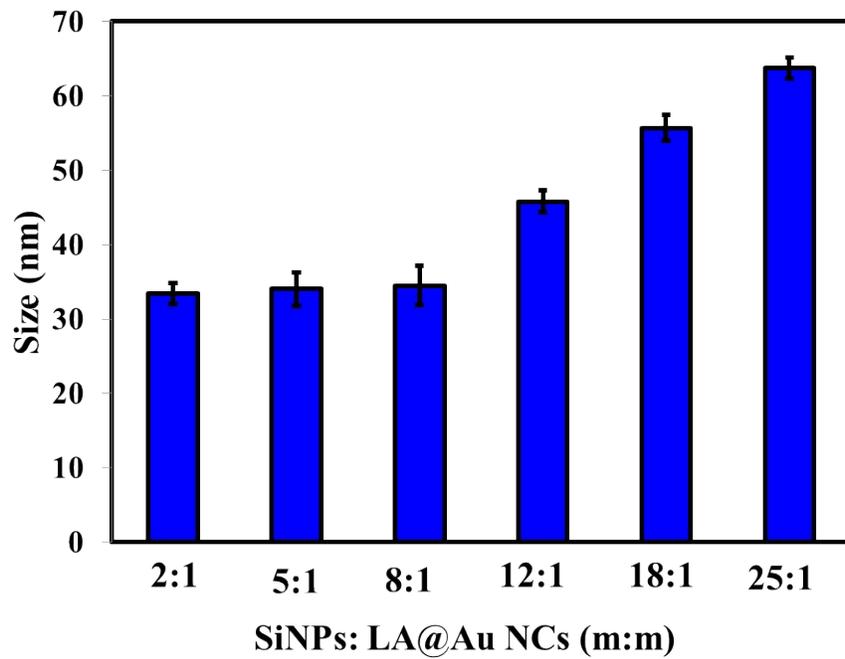


Fig.S5 DLS of different mass ratios of SiNPs:LA@Au NCs.