



Supporting Information

for

Gold nanomakura: nanoarchitectonics and their photothermal response in association with carrageenan hydrogels

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Additional figures

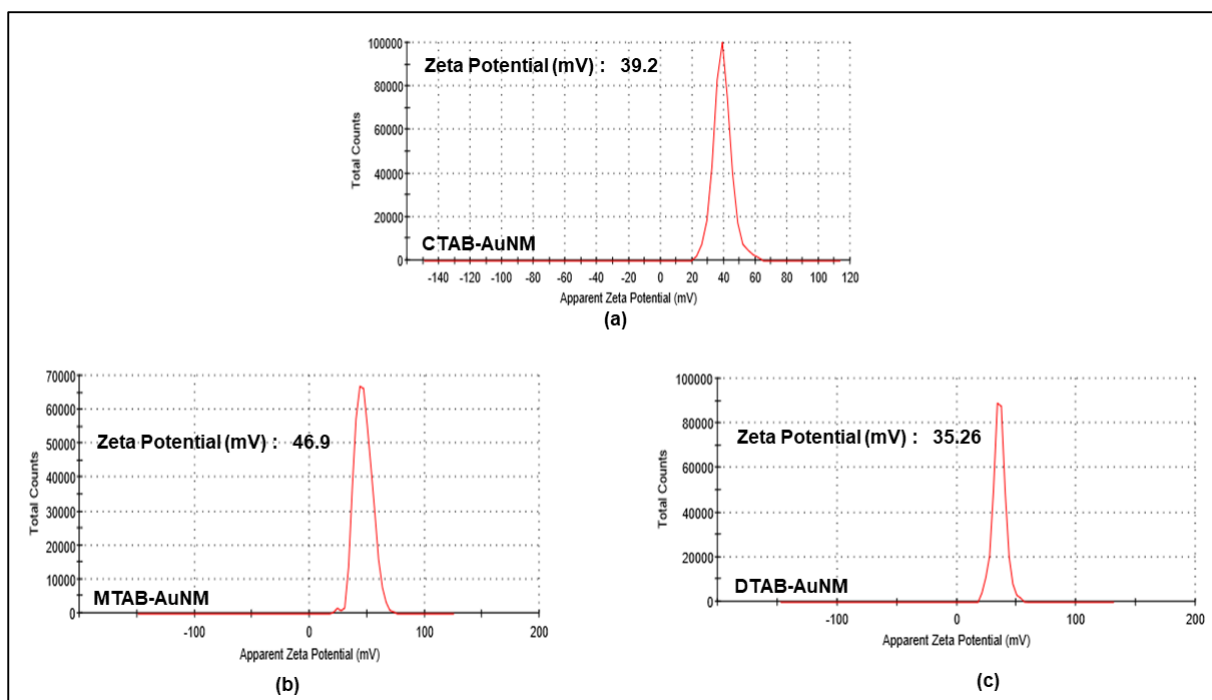


Figure S1: Zeta potential value of CTAB-AuNM, MTAB-AuNM, and DTAB-AuNM, respectively.

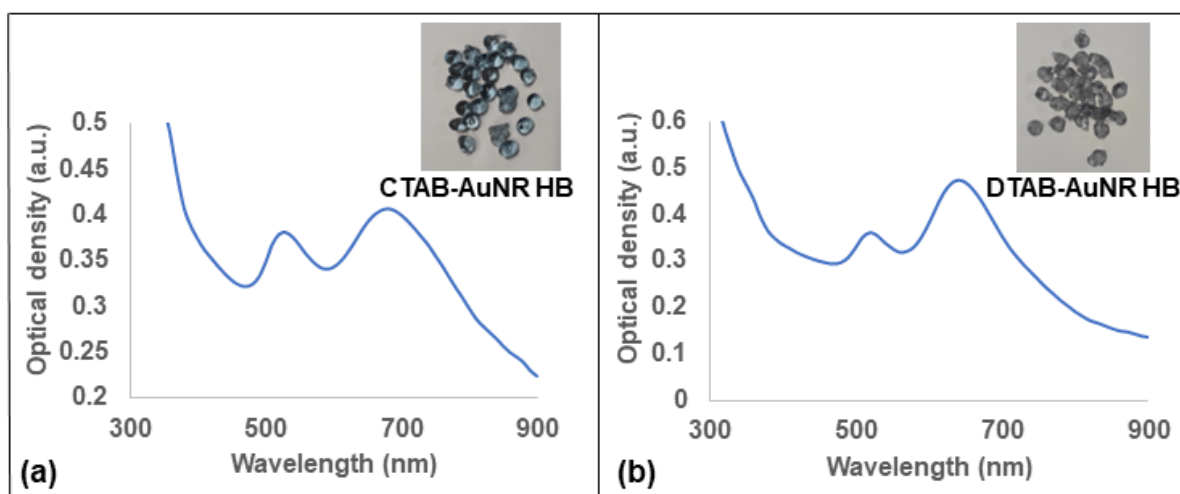


Figure S2: Absorption spectra of CTAB-AuNR and DTAB-AuNR after their incorporation in k-CG. The inset images show the hydrogel beads after casting in KCl.

Photothermal interaction of anisotropic gold nanoparticles in solid state (powder form and hydrogel beads)

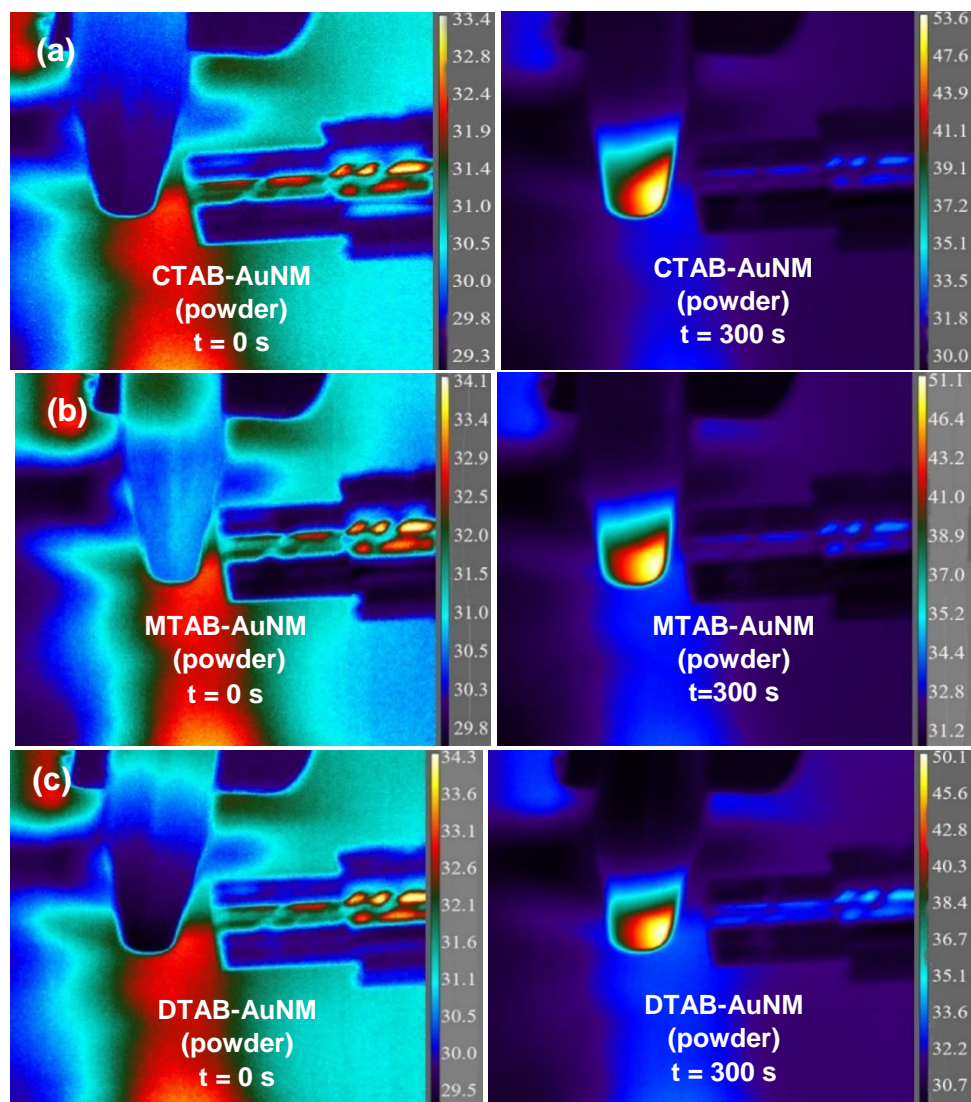


Figure S3: Photothermal response of gold nanomakura in powdered form: (a) CTAB-AuNM, (b) MTAB-AuNM, (c) DTAB-AuNM) at time = 0 s (initial), and 300 s (at the end of irradiation).

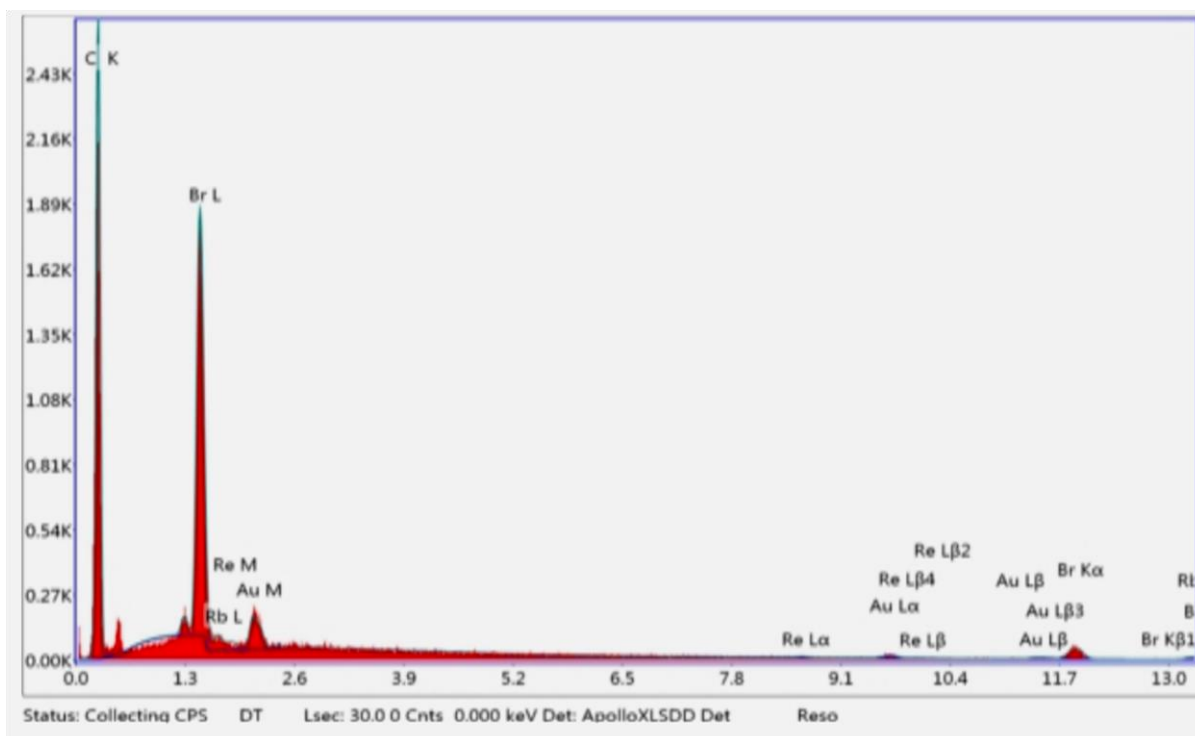


Figure S4: A typical SEM EDX spectrum confirming the presence of gold in AuNM.

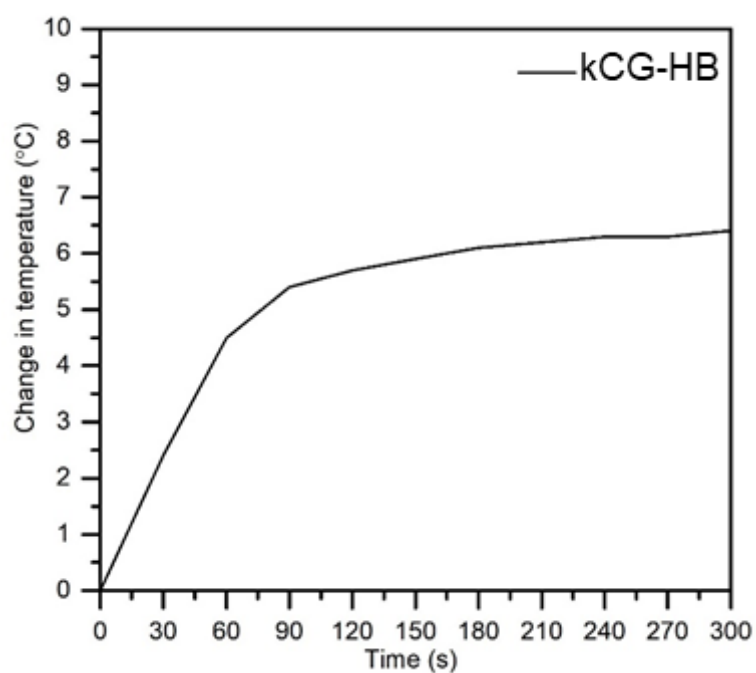


Figure S5: Temporal variation in temperature of the hydrogel beads powder without nanoparticles on photothermal interaction with a visible broadband light source.