Supporting Information

Organic-Ligand Mediated Synthesis of Shape-Tunable Gold Nanoparticles: An Application of Their Thin-Film as Refractive Index Sensors

Md. Harunar Rashid, Rama Ranjan Bhattacharjee and Tarun K. Mandal*

Polymer Science Unit and Centre for Advanced Materials, Indian Association for the

Cultivation of Science, Jadavpur, Kolkata 700 032, India

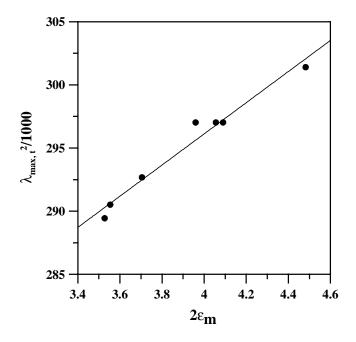


Figure S1. Plot showing the variation of $\lambda_{max, t}^2$ with dielectric constant of different organic solvents.

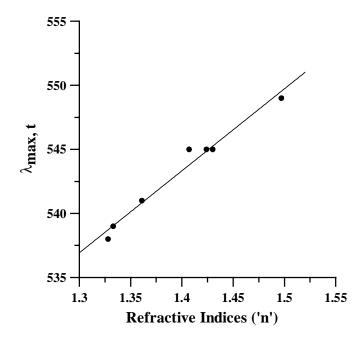


Figure S2. The variation of measured $\lambda_{max, t}$ of GNP's thin-film coated with the sample CY-Au-4.35 on the inner walls of cuvette in presence of different solvents with their respective refractive indices.

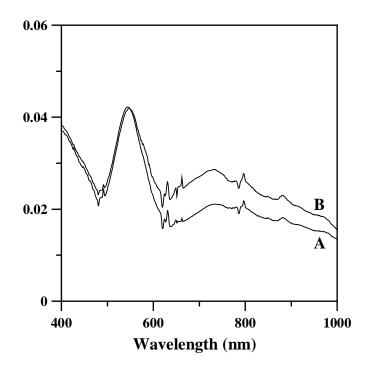


Figure S3. UV-vis spectra of GNPs present in the thin-film grown from sample CY-Au-6.38 recorded in presence of ethanol after (A) 1 day and (B) 3 months of deposition.