

Electronic supplementary information

Size Tuning of Au Nanoparticles formed by Electron Beam Irradiation of Au₂₅ Quantum Clusters Anchored Within and Outside of Dipeptide Nanotubes

Perumal Ramasamy^{a,†}, Samit Guha^{a,‡}, Edakkattuparambil Sidharth Shibu,[†]

Theruvakkattil S. Sreeprasad,[†] Soumabha Bag,[†] Arindam Banerjee,^{‡,*} Thalappil Pradeep^{†,*}

^a These two authors have contributed equally.

[†] Dr. Perumal Ramasamy, Edakkattuparambil Sidharth Shibu , Theruvakkattil S. Sreeprasad , Soumabha Bag and Prof. Thalappil Pradeep
DST Unit on Nanoscience, Department of Chemistry and Sophisticated Analytical Instrument Facility, Indian Institute of Technology Madras, Chennai 600 036, India.
Fax: + 91-44 2257-0545.

E-mail: pradeep@iitm.ac.in

[‡]Samit Guha and Dr. Arindam Banerjee
Department of Biological Chemistry, Indian Association for the Cultivation of Science,
Jadavpur, Kolkata 700032, India.
Fax: (+)91-33-2473-2805
E-mail: bcab@iacs.res.in

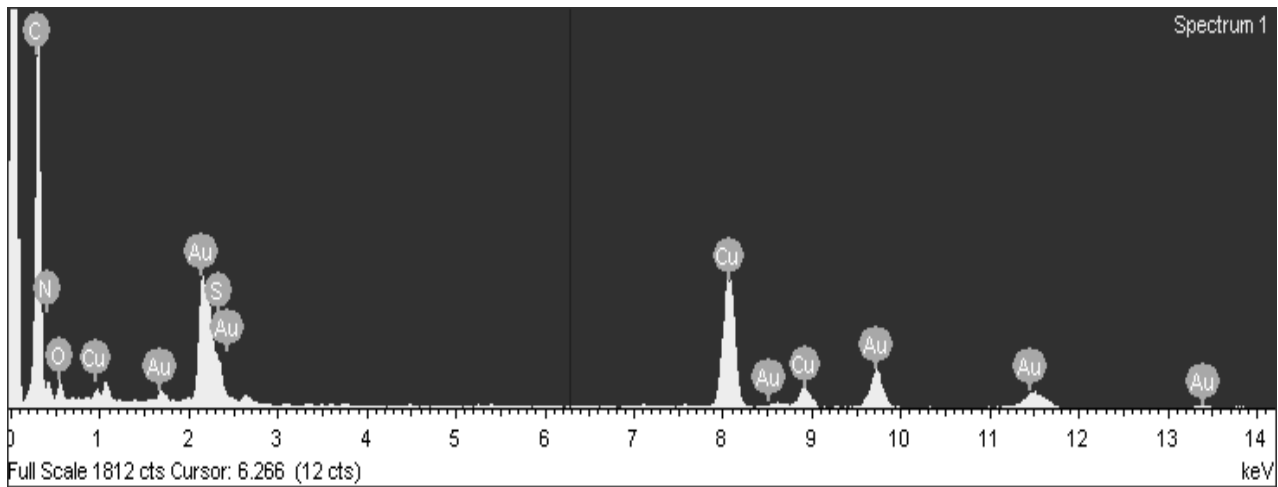


Figure S1: EDAX analysis of DPNTs with gold before exposure to electron beam indicates the presence of C, N, O, S and Au. The carbon contribution is also due to the grid.

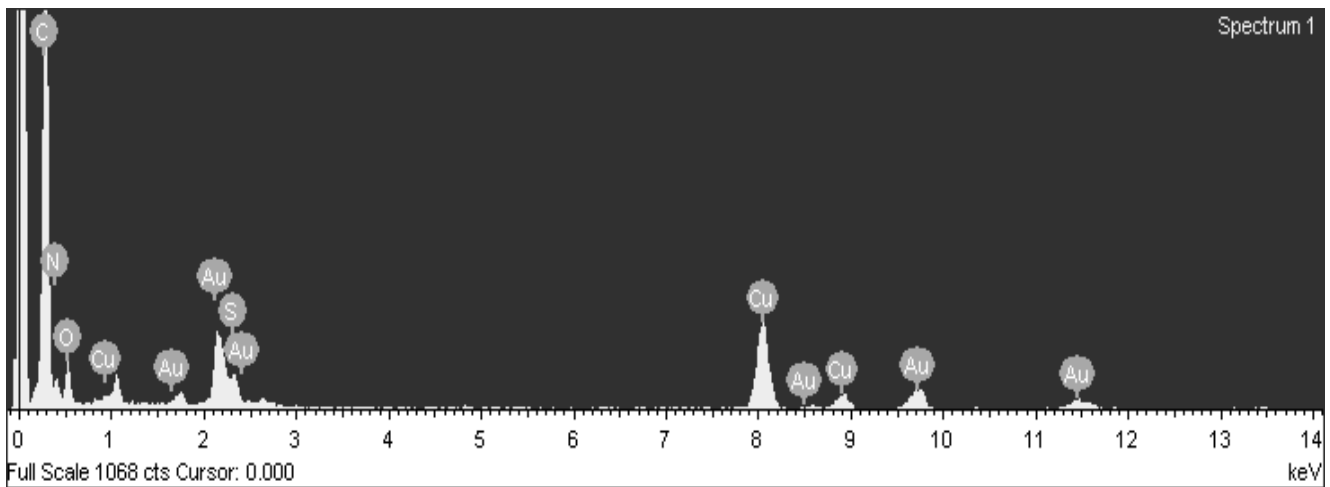
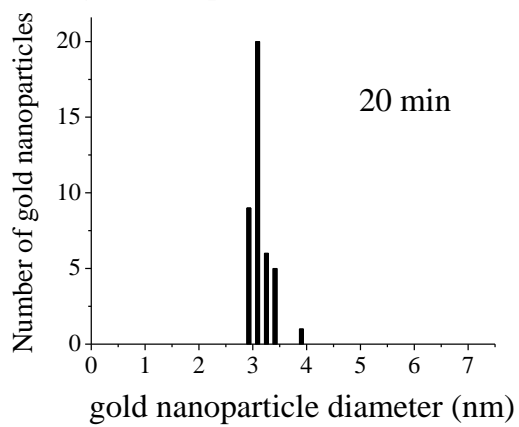
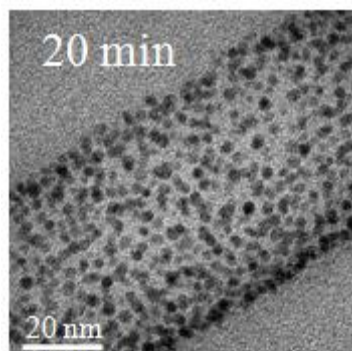
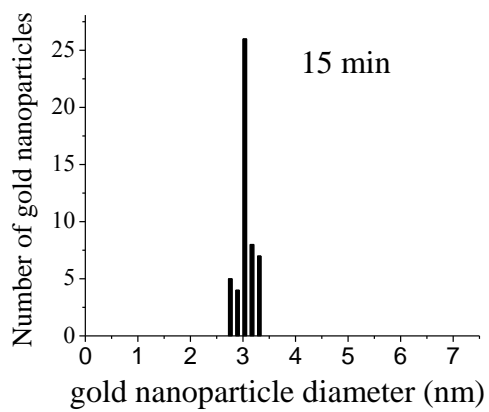
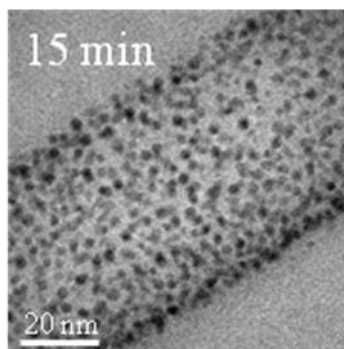
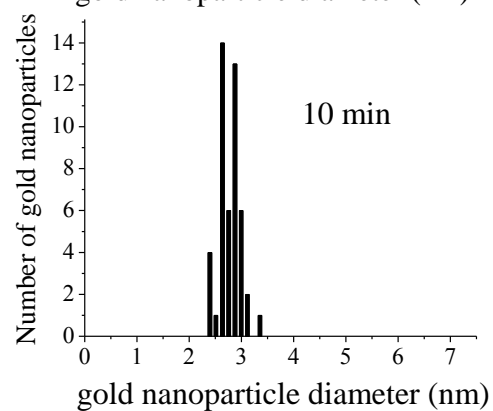
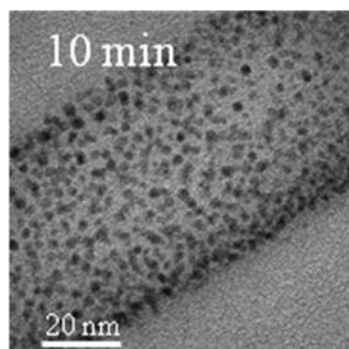
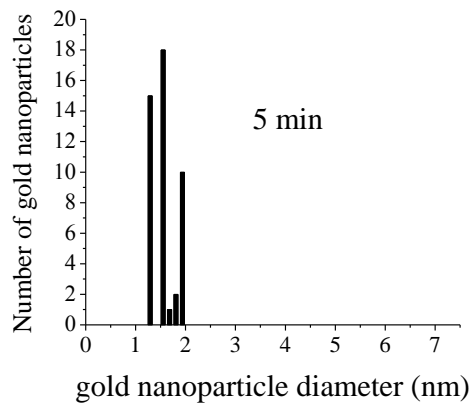
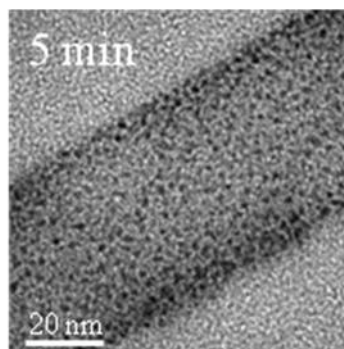


Figure S2: EDAX analysis of DPNTs with gold after exposure to electron beam indicates the presence of C, N, O, S and Au. The carbon contribution is also due to the grid.



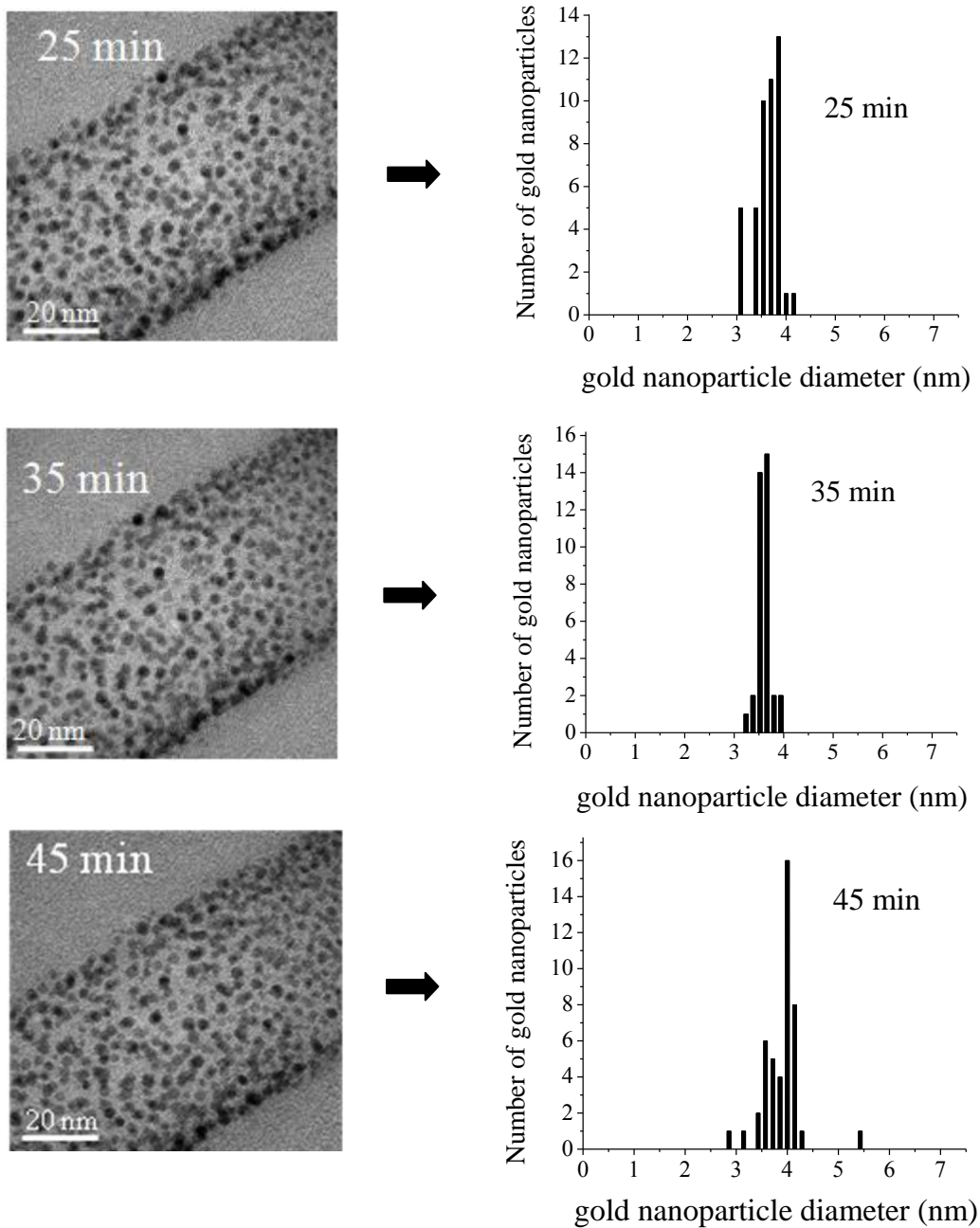


Figure S3: Size distributions of gold nanoparticles in DPNTs/ Au composite with respect to 100 keV electron beam exposure time. The nanoparticles show homogeneity at any given time.

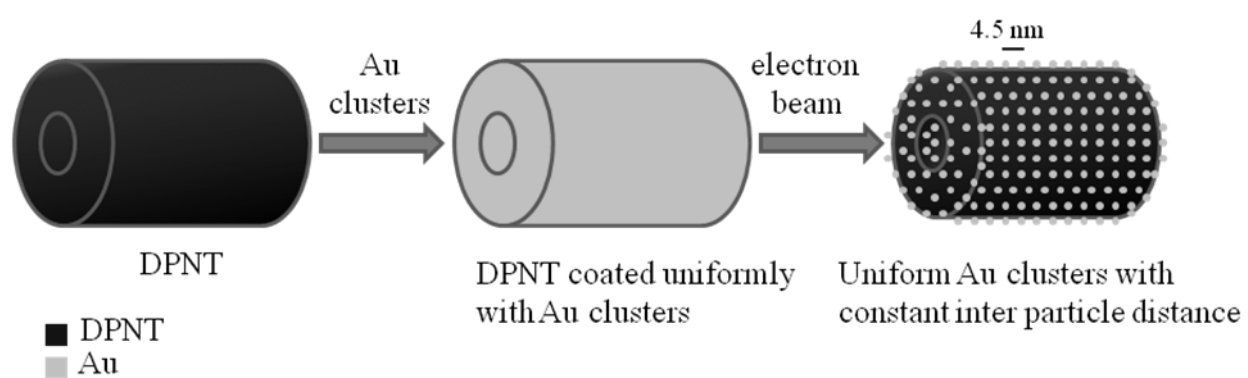


Figure S4: Schematic representation for formation of uniform gold nanoparticles on DPNTs due to exposure to electron beam.