

Electronic Supplementary Information

Environmentally Sustainable Biogenic Fabrication of AuNPs decorated-graphitic $g\text{-C}_3\text{N}_4$ Nanostructures towards Improved Photoelectrochemical Performances

Mohammad Ehtisham Khan¹, Mohammad Mansoob Khan^{2*}, Moo Hwan Cho^{1*}

¹School of Chemical Engineering, Yeungnam University, Gyeongsan, Gyeongbuk 38541, South Korea. Phone: +82-53-810-2517, Fax: +82-53- 810-4631.

²Chemical Sciences, Faculty of Science, Universiti Brunei Darussalam, Jalan Tungku Link, Gadong, BE1410, Brunei Darussalam.

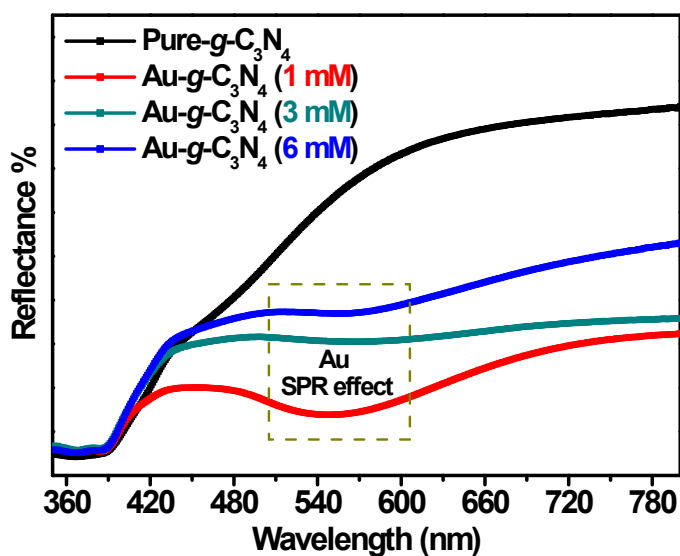
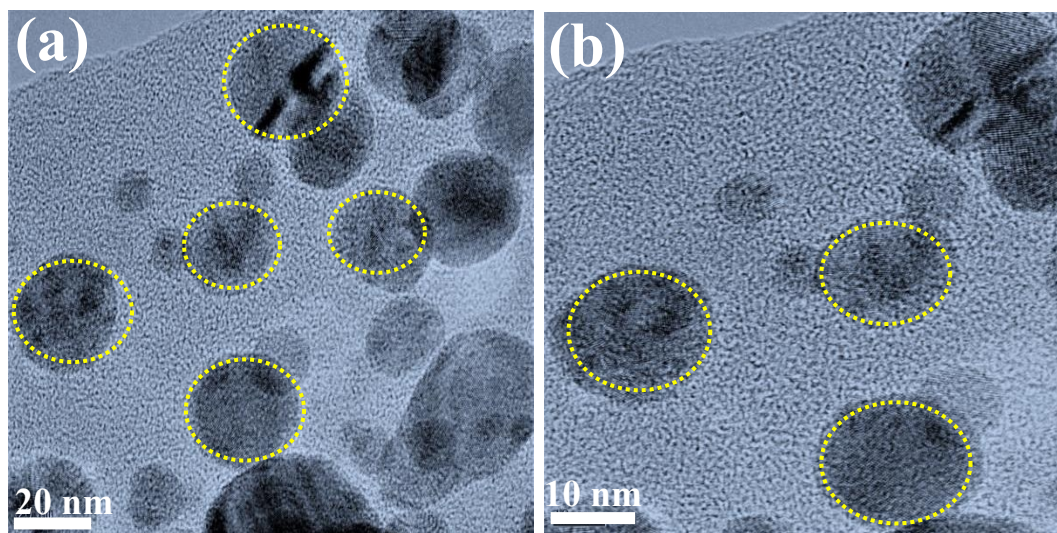


Fig. S1 Reflectance spectra of pure $g\text{-C}_3\text{N}_4$ and $\text{Au-g-C}_3\text{N}_4$ nanostructures.



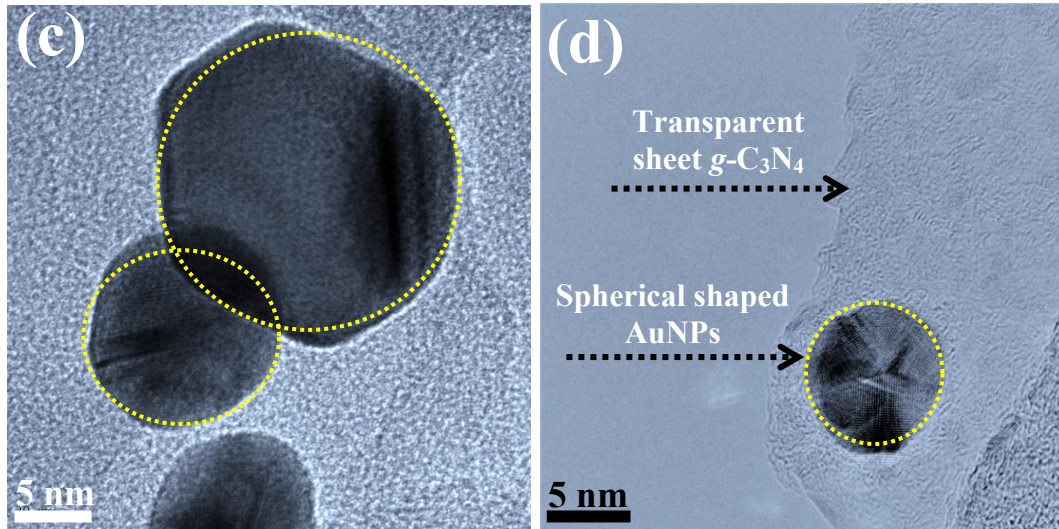


Fig. S2 HR-TEM images of Au-g-C₃N₄ nanostructures.

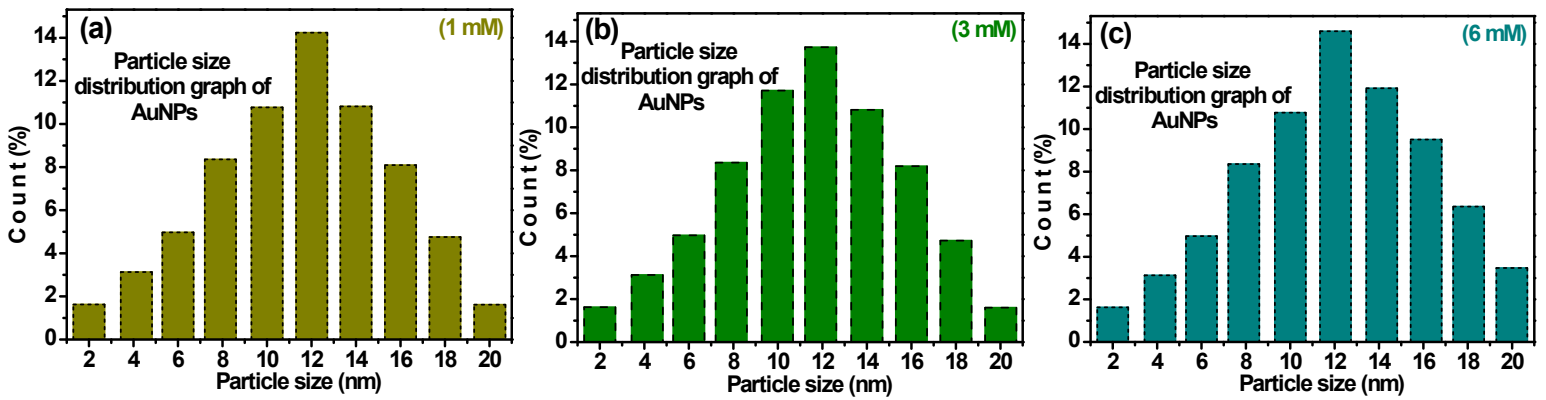


Fig. S3 (a, b and c) Particle size distribution graph of Au-g-C₃N₄ nanostructures.