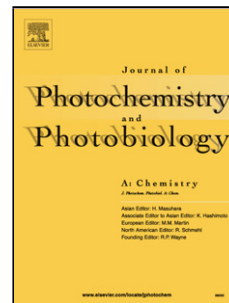


Accepted Manuscript

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PII: S1010-6030(18)30010-8
DOI: <https://doi.org/10.1016/j.jphotochem.2018.04.011>
Reference: JPC 11226

To appear in: *Journal of Photochemistry and Photobiology A: Chemistry*

Received date: 4-1-2018
Revised date: 5-4-2018
Accepted date: 5-4-2018

Please cite this article as: Nnamdi Nwahara, Ojodomo J. Achadu, Tebello Nyokong, In-situ synthesis of gold nanoparticles on graphene quantum dots-phthalocyanine nanoplateforms: First description of the photophysical and surface enhanced Raman scattering behaviour, *Journal of Photochemistry and Photobiology A: Chemistry* <https://doi.org/10.1016/j.jphotochem.2018.04.011>

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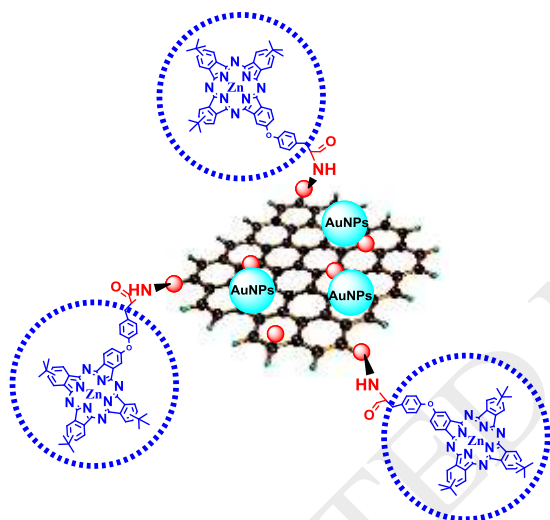
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Graphical Abstract



Gold nanoparticles were assembled onto graphene quantum dots –phthalocyanines arrays with improved singlet oxygen production and strong surface enhanced Raman scattering properties.

Highlights

- Assembly of gold nanoparticles are assembled onto functional graphene quantum dots-phthalocyanines composites
- The nanocomposite displayed high triplet quantum yields, which translated into high singlet oxygen quantum yield as high as 87%.
- The composites demonstrated strong surface enhanced Raman scattering properties with an unprecedented intrinsic maximal enhancement factor of more than 30-fold.

Abstract

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