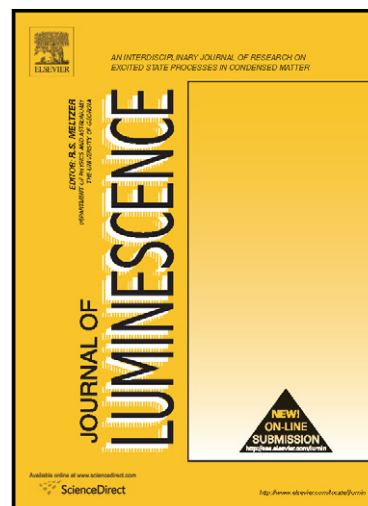


# Author's Accepted Manuscript

Gold and silver nanoparticle based Super-quenching of fluorescence: A review

Debanjana Ghosh, Nitin Chattopadhyay



[www.elsevier.com/locate/jlumin](http://www.elsevier.com/locate/jlumin)

PII: S0022-2313(14)00723-6  
DOI: <http://dx.doi.org/10.1016/j.jlumin.2014.12.018>  
Reference: LUMIN13073

To appear in: *Journal of Luminescence*

Received date: 6 August 2014  
Revised date: 2 December 2014  
Accepted date: 9 December 2014

Cite this article as: Debanjana Ghosh, Nitin Chattopadhyay, Gold and silver nanoparticle based Superquenching of fluorescence: A review, *Journal of Luminescence*, <http://dx.doi.org/10.1016/j.jlumin.2014.12.018>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**Gold and Silver Nanoparticle Based Superquenching of Fluorescence: A Review**Debanjana Ghosh<sup>†</sup> and Nitin Chattopadhyay\*

Department of Chemistry, Jadavpur University, Kolkata – 700 032, India.

\*Corresponding author: Fax: 91-33-2414 6584

E-mail: nitin.chattopadhyay@yahoo.com

<sup>†</sup> Present Address: Department of Chemistry, Georgia Southern University, P.O. Box 8064, Statesboro, GA 30460, USA.**Highlights:**

- Super efficient quenching of fluorescence of probes by gold and silver nanoparticles is highlighted.
- The amplified fluorescence quenching of dyes and polymers is rationalized.
- Energy transfer is assigned to be responsible for the efficient quenching process.
- Amplified quenching has its potential use in designing sensitive chemical/biological sensors.

Download English Version:

<https://daneshyari.com/en/article/5399375>

Download Persian Version:

<https://daneshyari.com/article/5399375>

[Daneshyari.com](https://daneshyari.com)