

Accepted Manuscript

Title: Ga-Ti-codoped ZnO embedded silver nanoparticles as an alternative anode in blue and green OLEDs

Authors: Jayaraman Jayabharathi, Elayaperumal Sarojpurani, Venugopal Thanikachalam, Palanivel Jeeva



PII: S1010-6030(17)31520-4
DOI: <https://doi.org/10.1016/j.jphotochem.2017.12.035>
Reference: JPC 11073

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

Received date: 16-10-2017
Revised date: 21-12-2017
Accepted date: 26-12-2017

Please cite this article as: Jayaraman Jayabharathi, Elayaperumal Sarojpurani, Venugopal Thanikachalam, Palanivel Jeeva, Ga-Ti-codoped ZnO embedded silver nanoparticles as an alternative anode in blue and green OLEDs, *Journal of Photochemistry and Photobiology A: Chemistry* <https://doi.org/10.1016/j.jphotochem.2017.12.035>

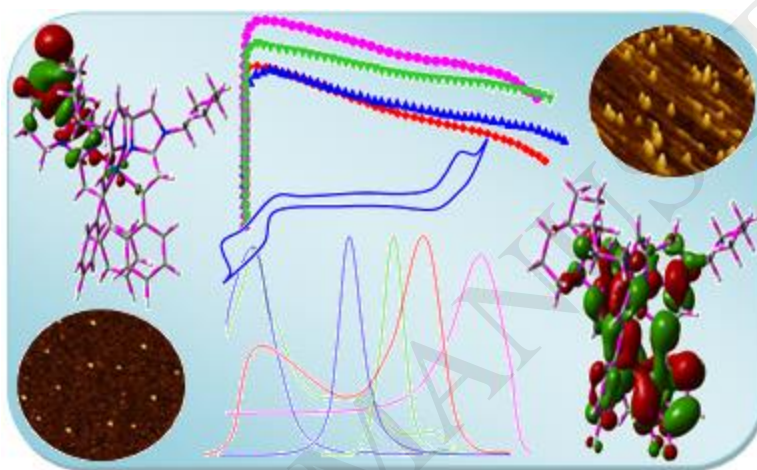
This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please 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.

Ga-Ti-codoped ZnO embedded silver nanoparticles as an alternative anode in blue and green OLEDs

Jayaraman Jayabharathi*, Elayaperumal Sarojpurani, Venugopal Thanikachalam, Palanivel Jeeva

Department of Chemistry, Annamalai University, Annamalainagar 608 002, Tamilnadu, India

Graphical Abstract



Highlights

- OLEDs were fabricated with embedded silver nanoparticles at glass and Ga-Ti-codoped ZnO interface to enhance efficiencies.
- Blue emitting device exhibit luminance of 40268 cd/m^2 , η_c -38.3 cd/A and η_p - 41.6 lm w^{-1} with η_{ex} -18.6 % .
- Green device with emissive layer $\text{Ir}(\text{fpi})_3$ show emission at 520 nm, luminance - 44894 cd/m^2 , η_c - 40.6 cd/A η_p - 43.4 lm w^{-1} and η_{ex} - 15.6 %.
- The coupling of surface plasmonic and hole injection ability by Ag NPs is the route for efficiency enhancement.

Download English Version:

<https://daneshyari.com/en/article/6492659>

Download Persian Version:

<https://daneshyari.com/article/6492659>

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