## **Electronic Supplementary Information**

## for

## Facile fabrication of thermally reduced graphene oxideplatinum nanohybrids and their application in catalytic reduction and dye-sensitized solar cells

Nguyen Tri Khoa,<sup>a,c</sup> Doan Van Thuan,<sup>a,c</sup> Soon Wook Kim,<sup>a</sup> Sujung Park,<sup>a</sup> Tran Van Tam,<sup>b</sup> Won Mook Choi,<sup>b</sup> Shinuk Cho,<sup>a</sup> Eui Jung Kim<sup>b\*</sup> and Sung Hong Hahn<sup>a\*</sup>

<sup>a</sup>Department of Physics and Energy Harvest-Storage Research Center, University of Ulsan, Ulsan 680-749, South Korea.

<sup>b</sup>Department of Chemical Engineering, University of Ulsan, Ulsan 680-749, South Korea.

<sup>c</sup>The author contributed equally to this work.

\*Corresponding authors:

Email: shhahn@ulsan.ac.kr (S. H. Hahn). Tel: +82-52-259-2330

Email: ejkim@ulsan.ac.kr (E. J. Kim). Tel: + 82-52-259-2832



Figure S1. FTIR spectra of GO and TRGO.



Figure S2. HRTEM image and corresponding FFT pattern of TRGO:Pt.



Figure S3. Absorption spectra of o-nitroaniline reduced over TRGO:Pt catalysts with different compositions.