

Electronic Supplementary Information (ESI)

Fabrication of graphene oxide decorated with Au-Ag alloy nanoparticles and its superior catalytic performance for the reduction of 4-nitrophenol

Tao Wu¹ Lei Zhang¹ Jianping Gao^{*1} Yu Liu¹ Chunjuan Gao²

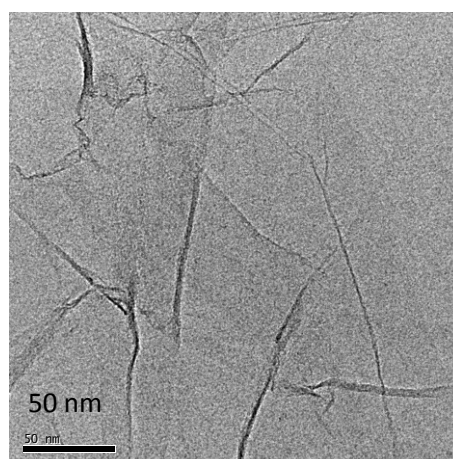
Jing Yan^{†1}

(¹School of Science, Tianjin University, Tianjin, 300072, P. R. China;

²Institute of Tianjin Seawater Desalination and Multipurpose Utilization, State Oceanic Administration, Tianjin, 300192, P. R. China)



A



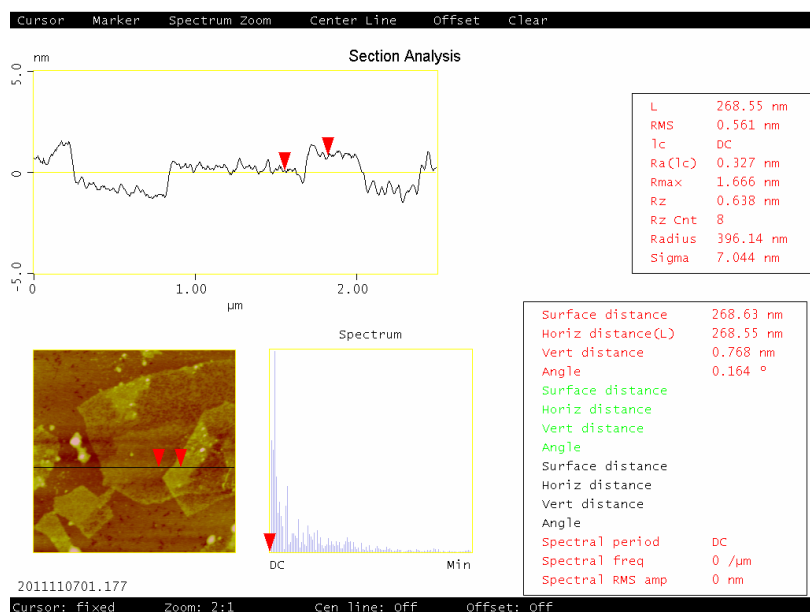
B

* Corresponding authors: Fax: +86 22 274 034 75

E-mail address: jianpinggao2012@126.com (J. P. Gao).

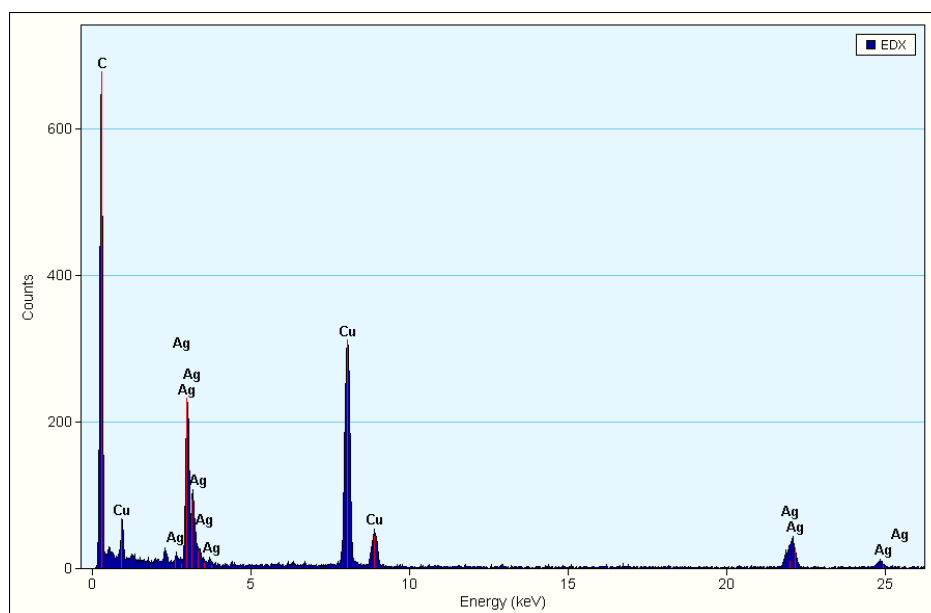
† Corresponding authors: Fax: +86 22 274 034 75

E-mail address: yanjings2012@163.com (J. Yan)

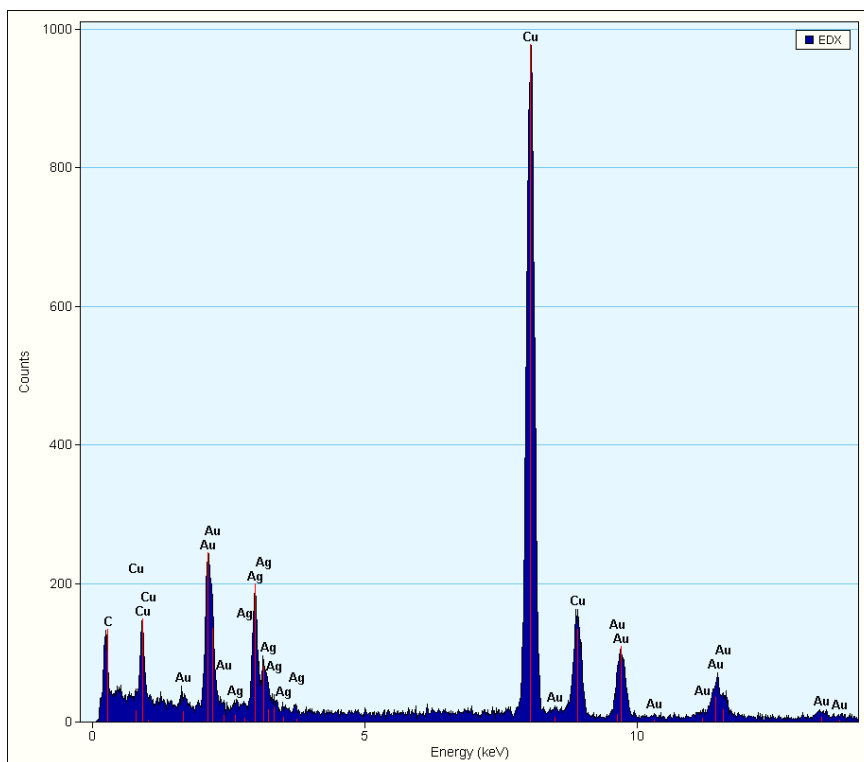


C

Figure S1 (A) Optical photos of stable GO, Ag/GO and Au-Ag/GO (I) suspension (from left to right); (B) the TEM image of GO nanosheets; (C) the AFM image of GO nanosheets

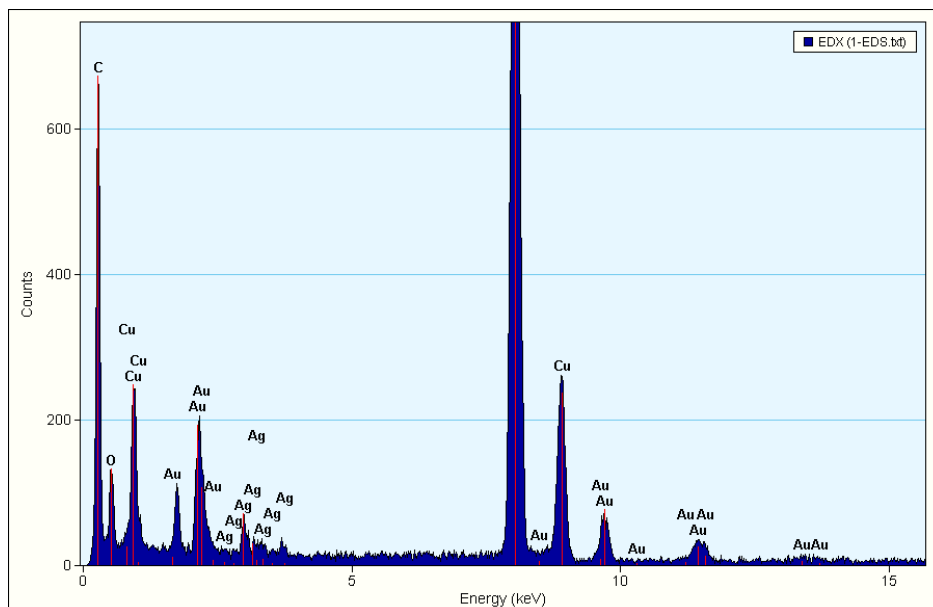


A



B

Figure S2 EDX spectra of (A) Ag/GO and (B) Au-Ag/GO (I)



A

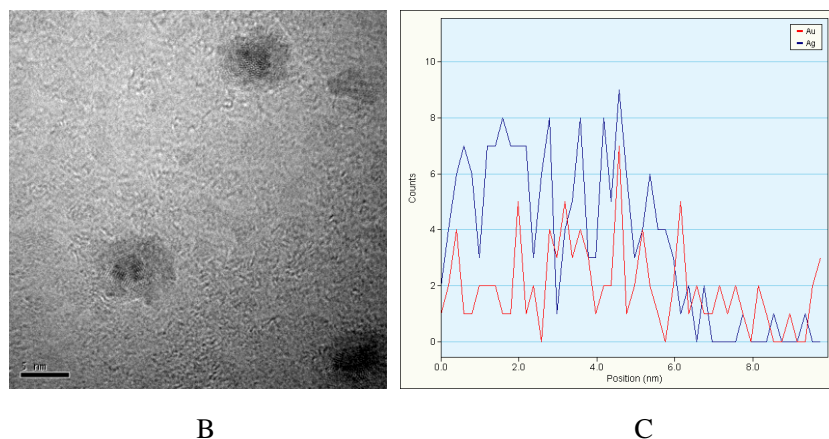


Figure S3 (A) EDX spectrum of Au-Ag/GO (II); (B) HRTEM images of Au-Ag/GO (II); (C) EDX liner scanning image of the NPs in (B)

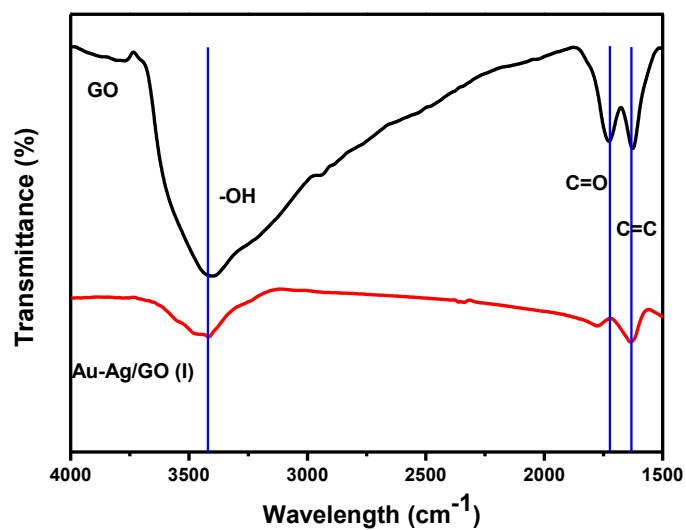


Figure S4 FTIR spectra of GO and Au-Ag/GO (I)

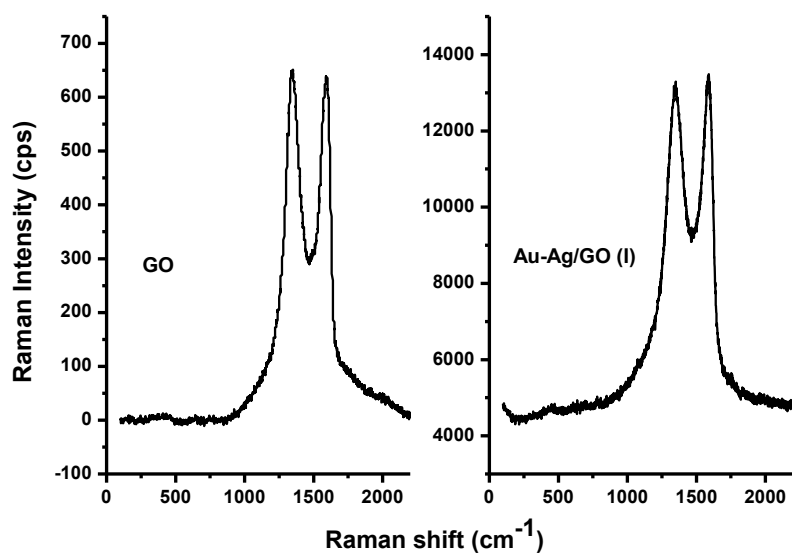


Figure S5 Raman spectra of GO and Au-Ag/GO (I)

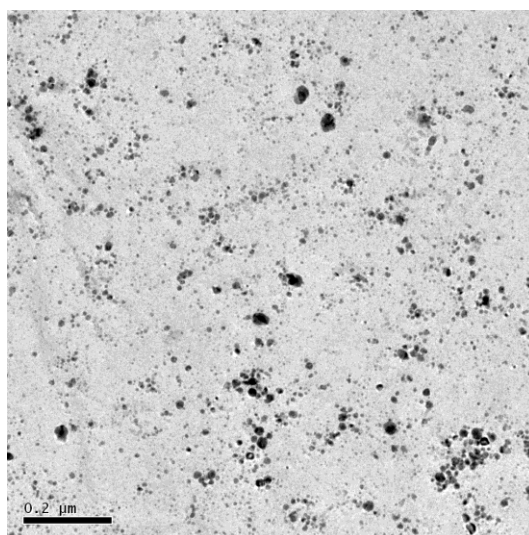
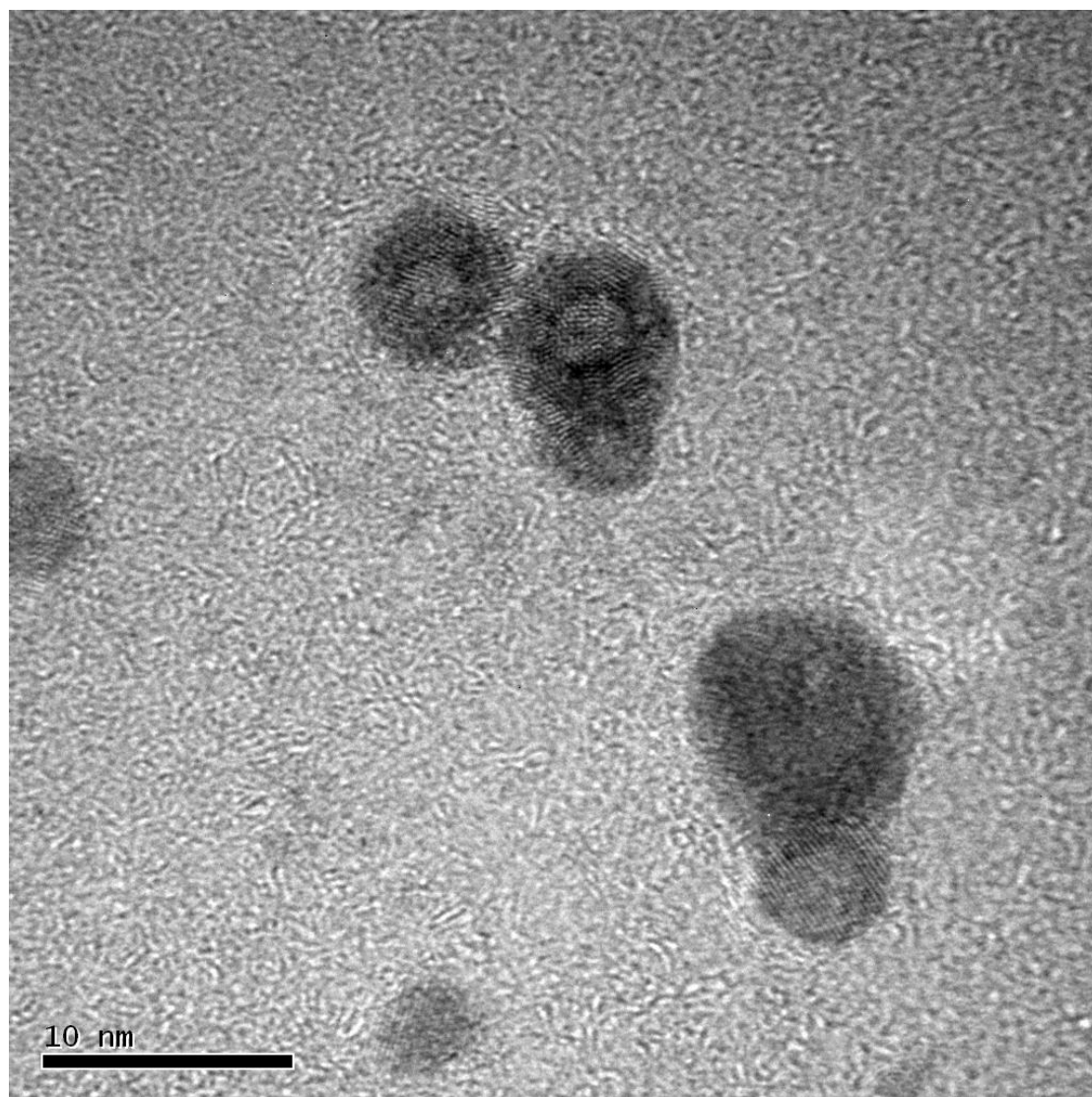
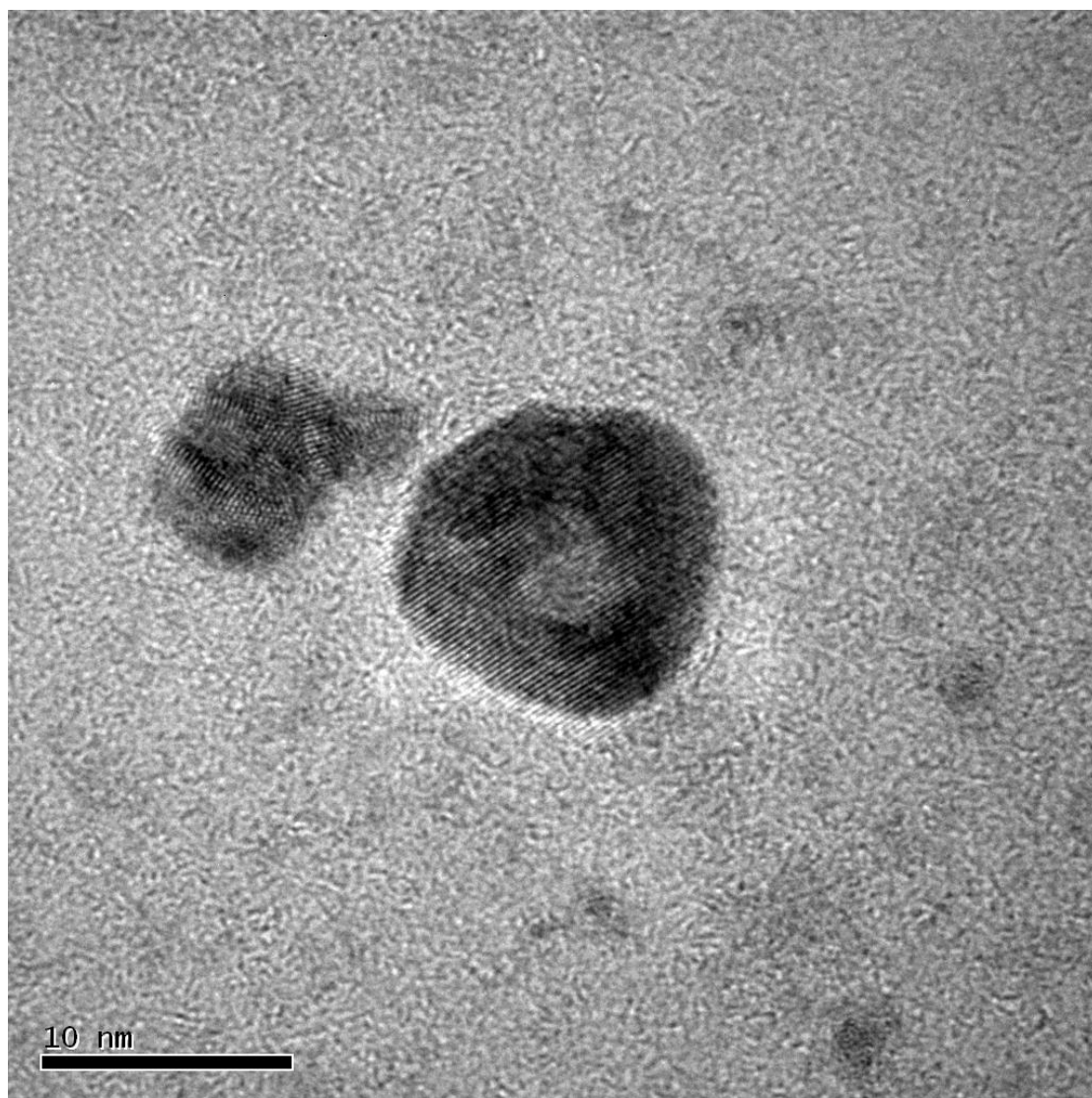


Figure S6 TEM image of Au-Ag/GO (I) after the catalytic test



A



B

Figure S7 (A) the original TEM images of Figure 1F; (B) the original TEM images of
Figure 1G