Electronic Supplementary Material (ESI) for RSC Advances.

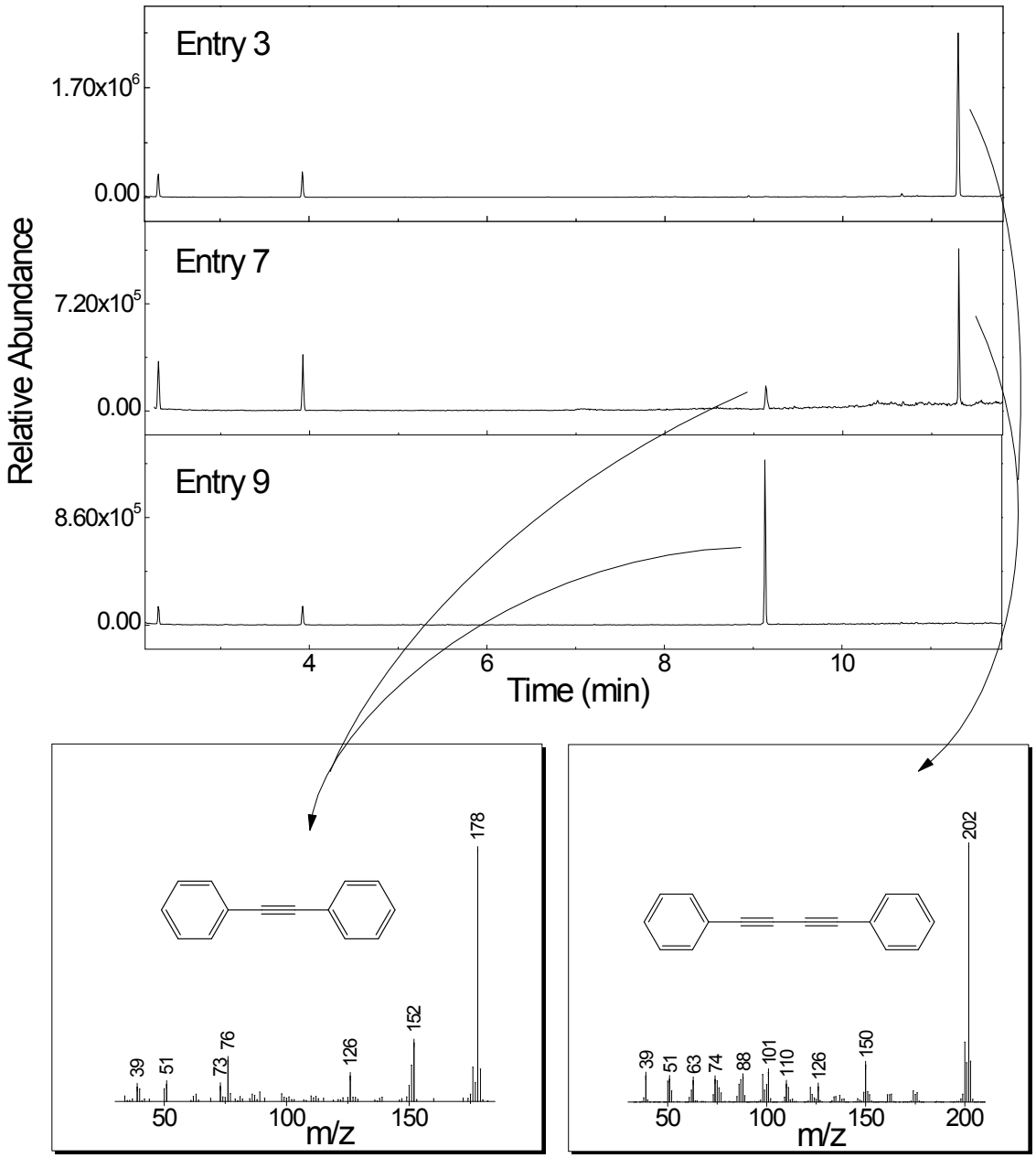
Supplementary Information

Fast Synthesis of Ag-Pd@reduced graphene oxide bimetallic nanoparticles and their applications as carbon-carbon coupling catalysts

Mingxi Chen[a] Zhe Zhang[a] Lingzhi Li[a] Yu Liu[a*] Wei Wang[b] Jianping Gao[a1]

[a]School of Science, Tianjin University, Tianjin 300072, P R China

[b]School of Chemical Engineering, Tianjin University, Tianjin 300072, P R China



[1] Corresponding author. Tel.: +862227403475; Fax: (+86)22-2740-3475.
E-mail address: jianpinggaols@126.com (J.P. Gao).

Figure S1. GC-MS of Sonogashira carbon coupling reaction

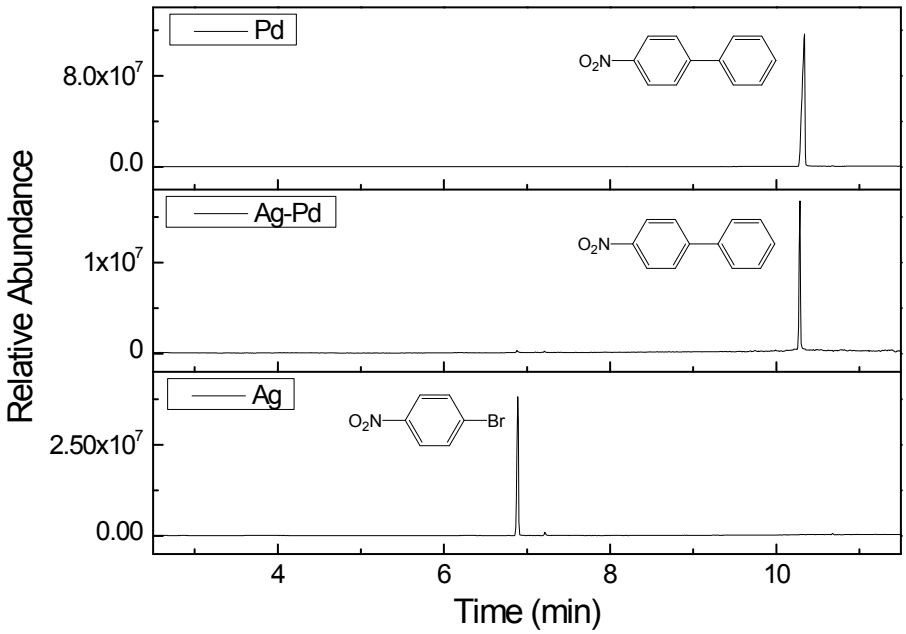


Figure S2. Gas Chromatography-Mass Spectrometry (GC-MS) of the Suzuki−Miyaura carbon coupling (SMCC) reaction between phenylboronic acid and 1-bromo-4-nitrobenzene.

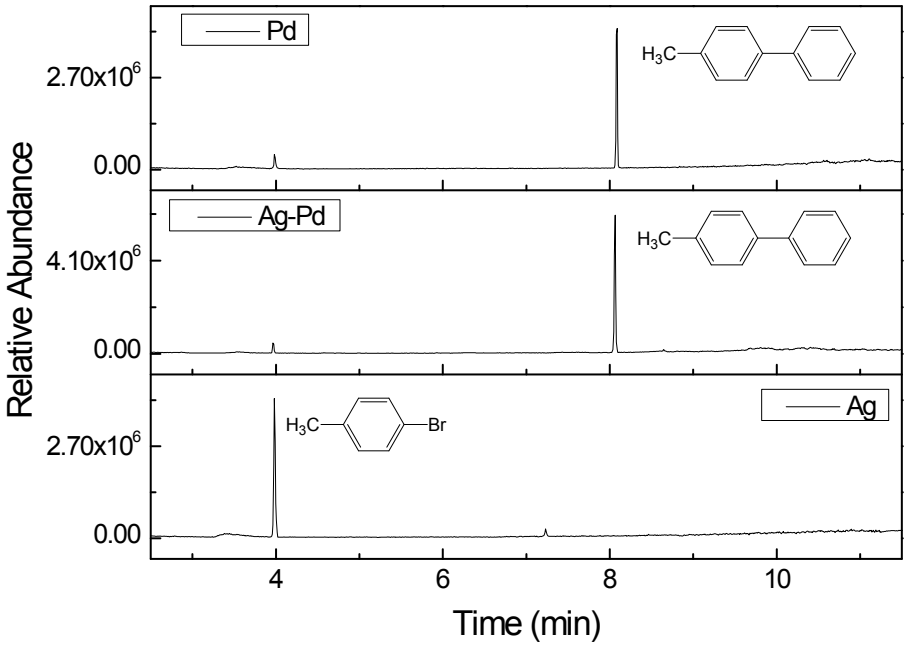


Figure S3. GC-MS of the SMCC reaction between phenylboronic acid and 4-bromotoluene.

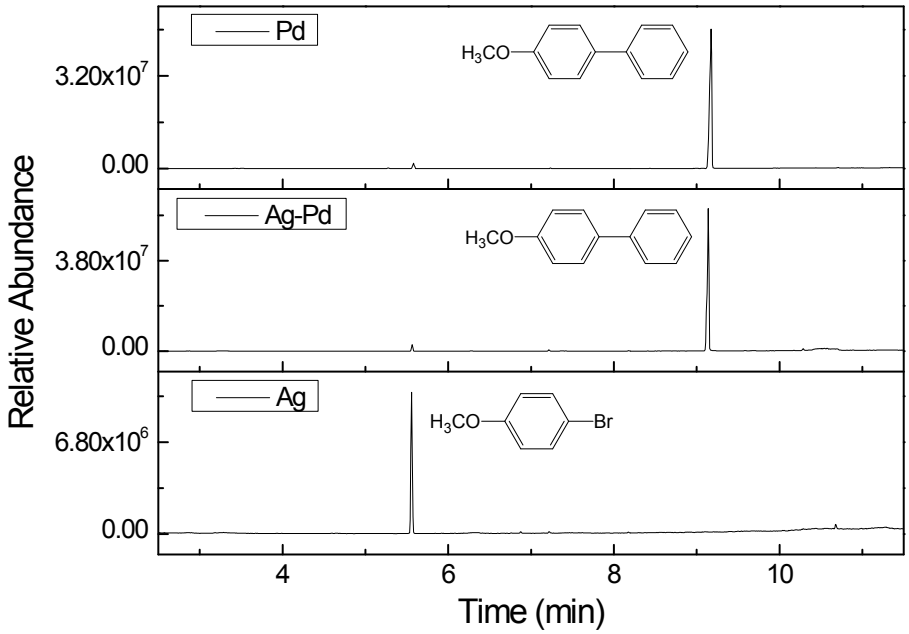


Figure S4. GC-MS of the SMCC reaction between phenylboronic acid and 4-bromoanisole.

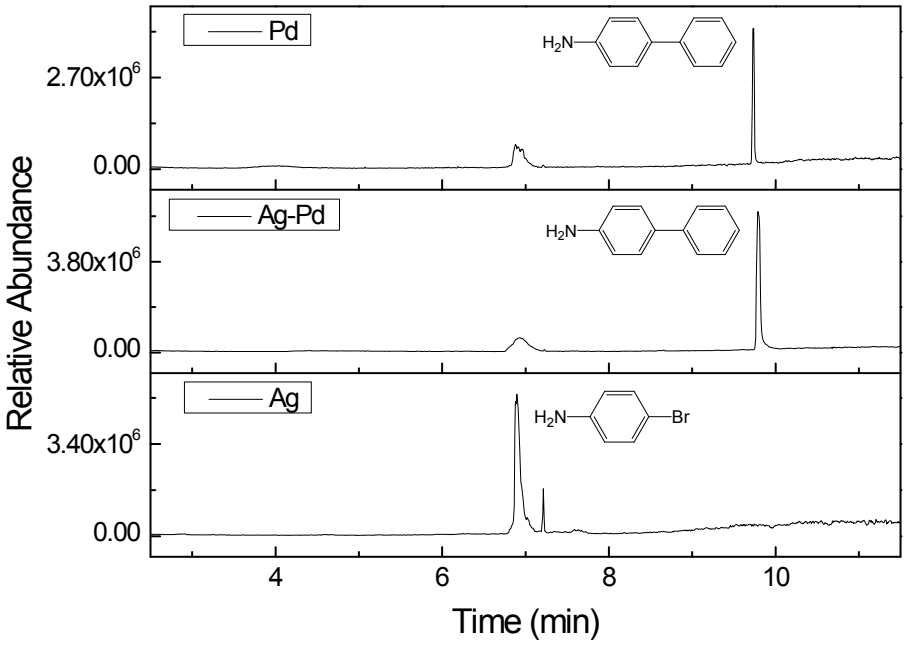


Figure S5. GC-MS of the SMCC reaction between phenylboronic acid and 4-bromoaniline.

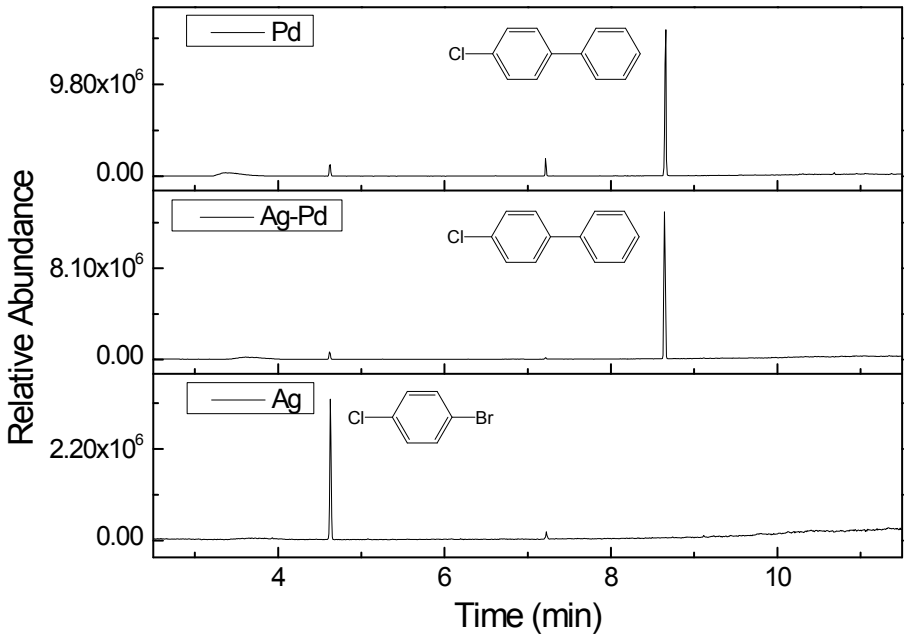


Figure S6. GC-MS of the SMCC reaction between phenylboronic acid and 4-bromoaniline.

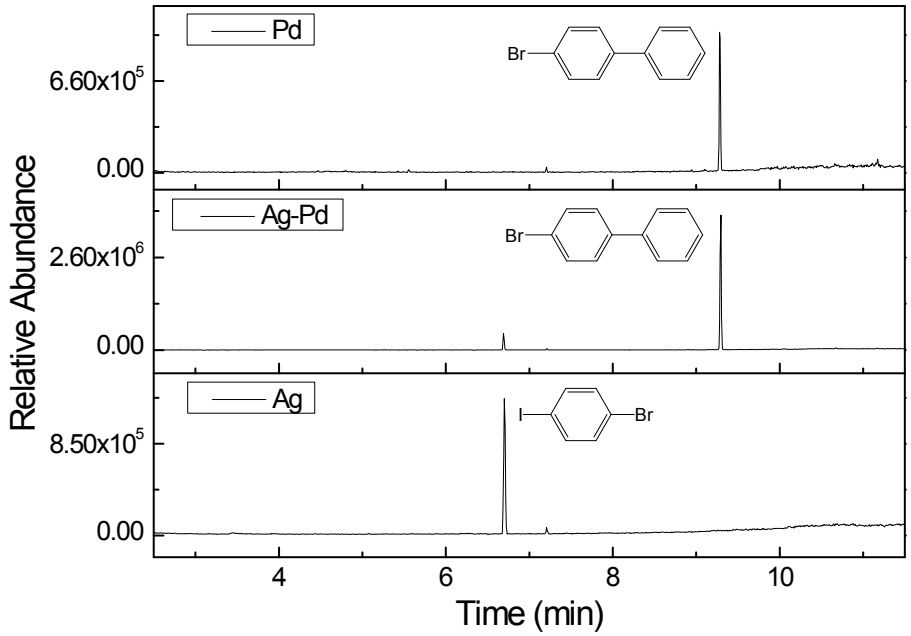


Figure S7. GC-MS of the SMCC reaction between phenylboronic acid and 1-bromo-4-iodobenzene.

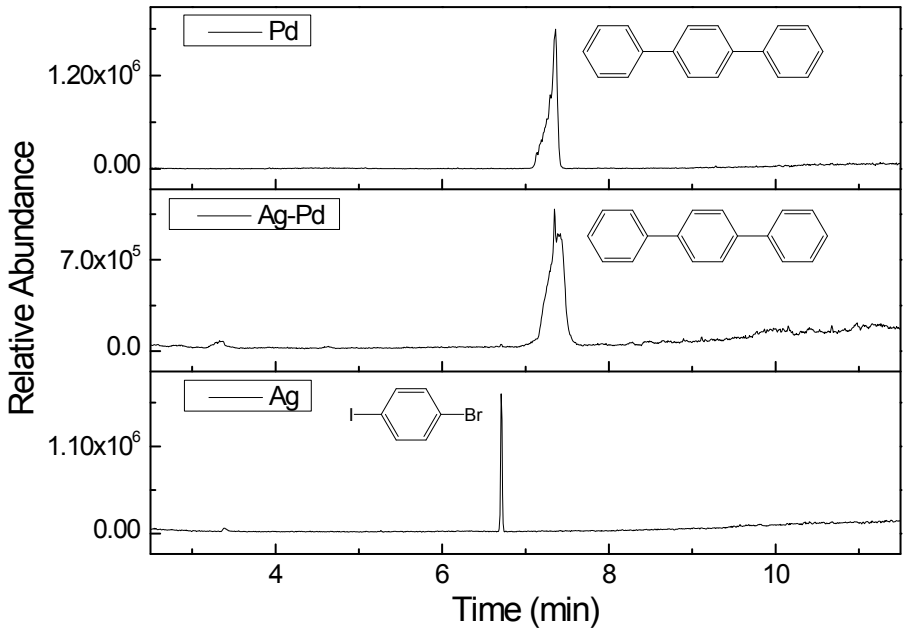


Figure S8. GC-MS of the SMCC reaction between phenylboronic acid and 1-bromo-4-iodobenzene.

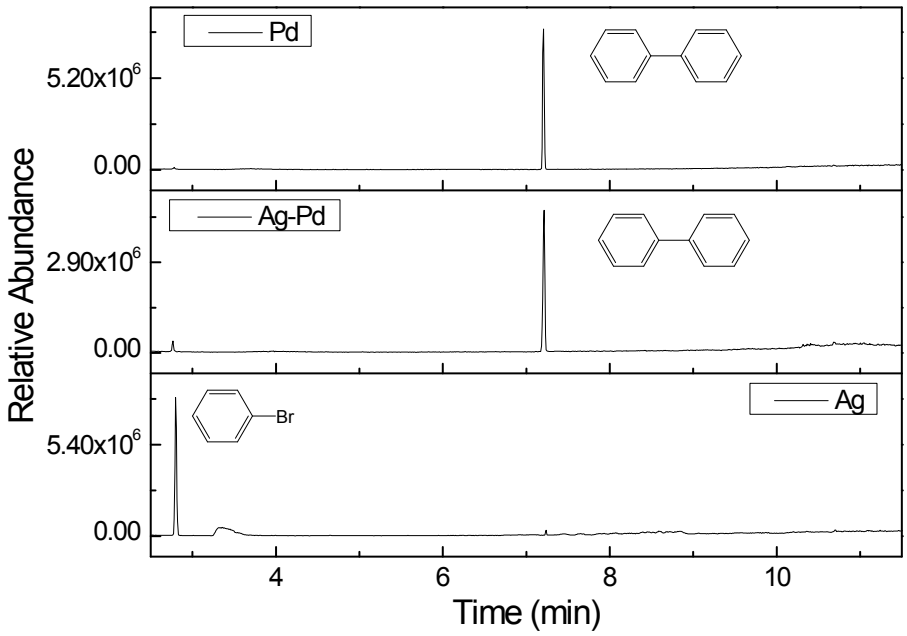


Figure S9. GC-MS of the SMCC reaction between phenylboronic acid and bromobenzene.

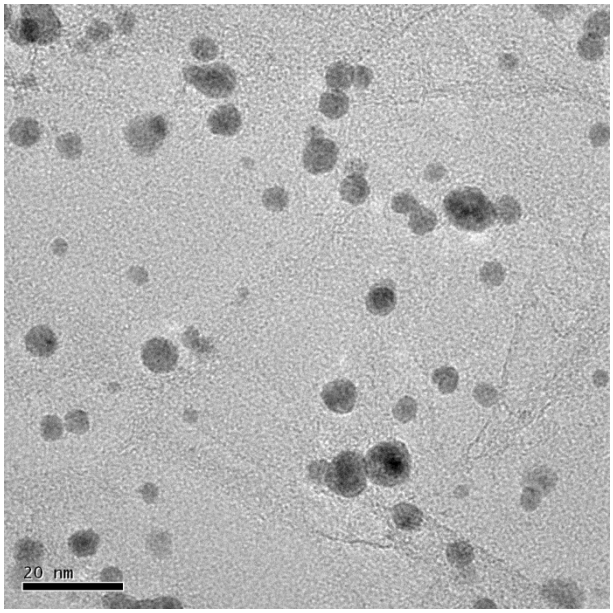


Figure S10. TEM images of the Ag-Pd@rGO bimetallic nanoparticles after SCC reaction

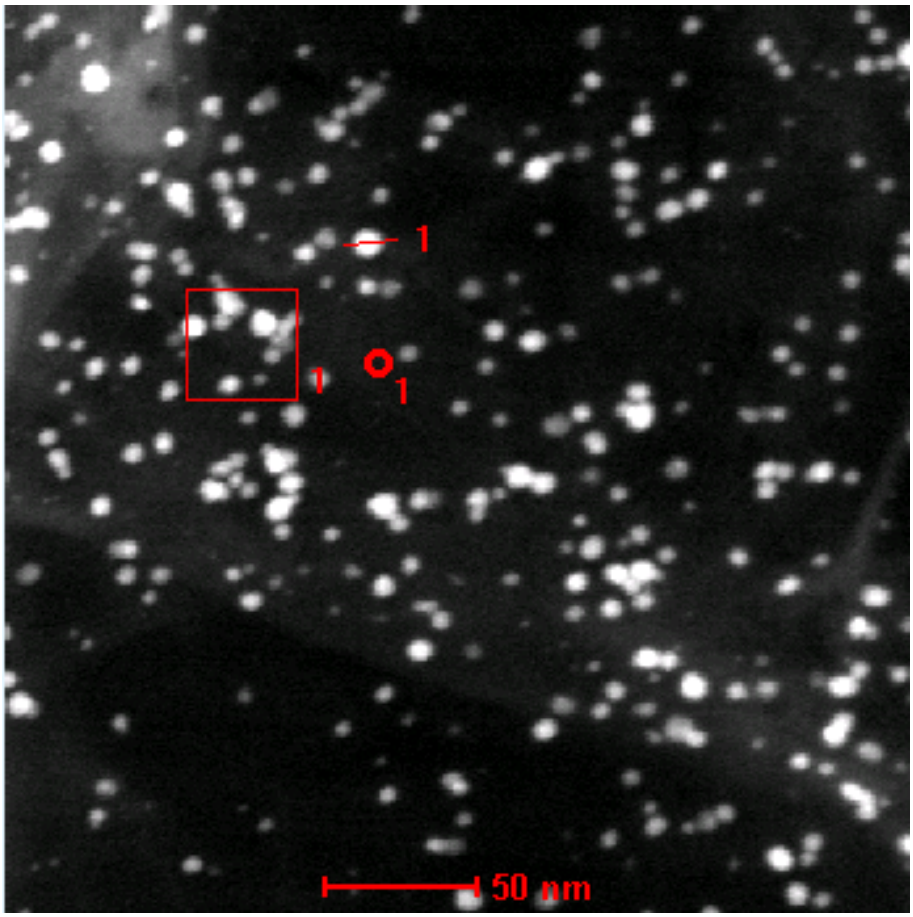


Figure S11. HAADF-STEM images of the Ag-Pd@rGO bimetallic nanoparticles