

Electronic Supplementary Information (ESI)

Controllable Synthesis of Silver Nanoparticle-Decorated Reduced Graphene Oxide Hybrids for Ammonia Detection

Shumao Cui, Shun Mao, Zhenhai Wen, Jingbo Chang, Yang Zhang, and Junhong Chen*

Department of Mechanical Engineering, University of Wisconsin-Milwaukee, 3200 N Cramer

Street, Milwaukee, WI, 53211, USA.

*E-mail: jhchen@uwm.edu; Fax: +1-414-229-6958; Tel: +1-414-229-2615

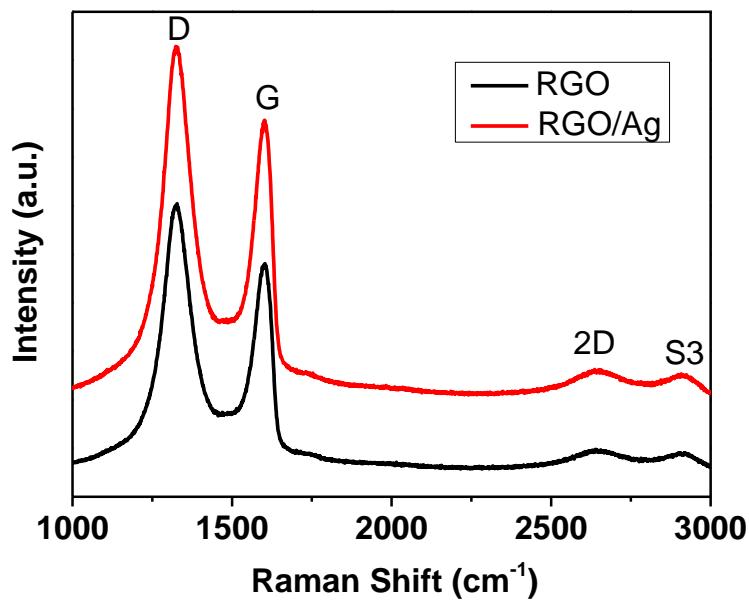


Fig. S1 Raman spectra of RGO and RGO/Ag hybrids.

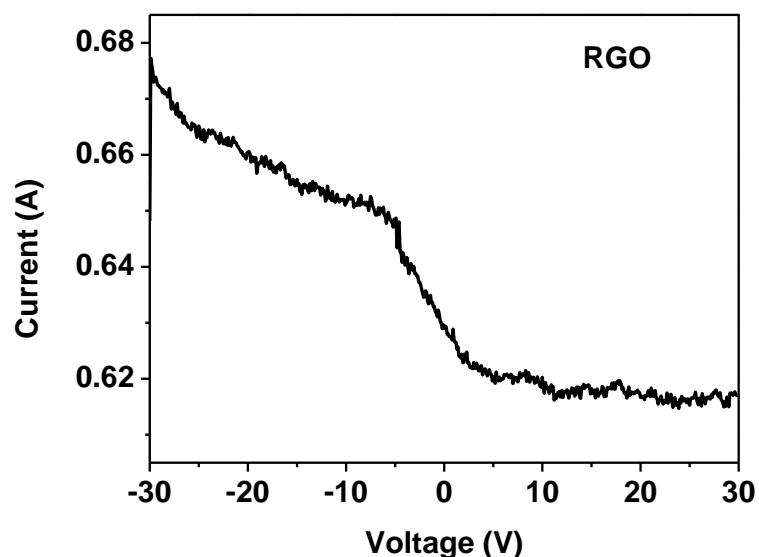


Fig. S2 FET measurement of pure RGO.

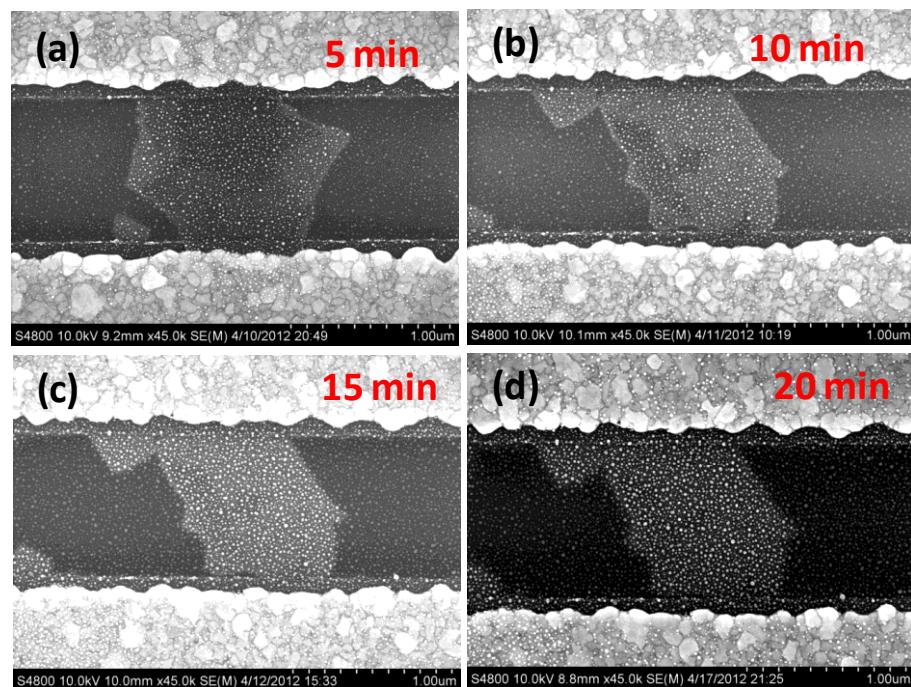


Fig. S3 (a-d) SEM images of RGO flakes decorated with different loadings of Ag NPs controlled by deposition time.

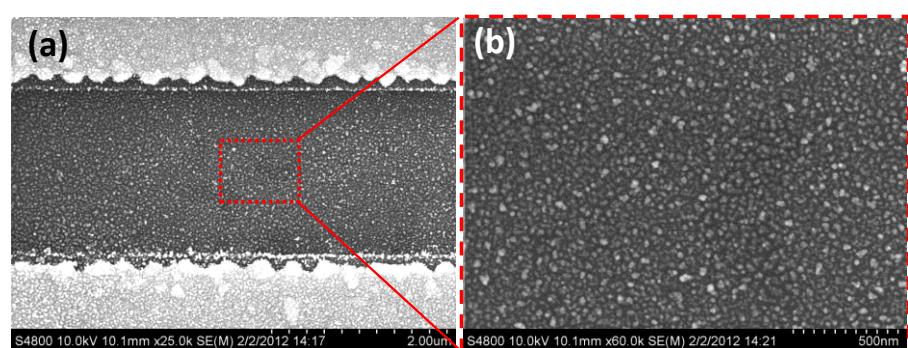


Fig. S4 SEM images of Ag NPs on a gold electrode with deposition time of 1h. Electrical test showed the circuit was still open.

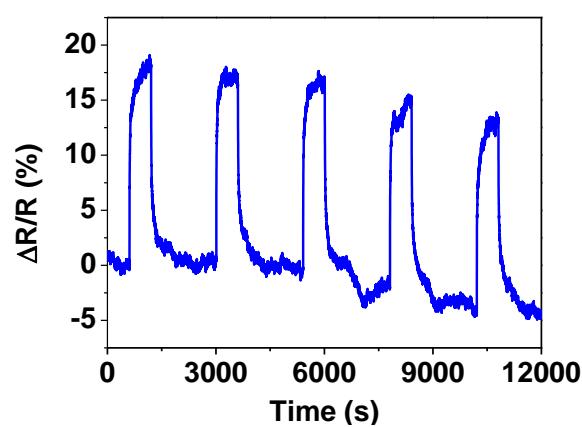


Fig. S5 Dynamic sensing response to 10,000 ppm NH₃ for another RGO/Ag hybrid sensor.