Supporting Information

Synthesis and highly enhanced acetylene sensing properties of Au

nanoparticle-decorated hexagonal ZnO nanorings

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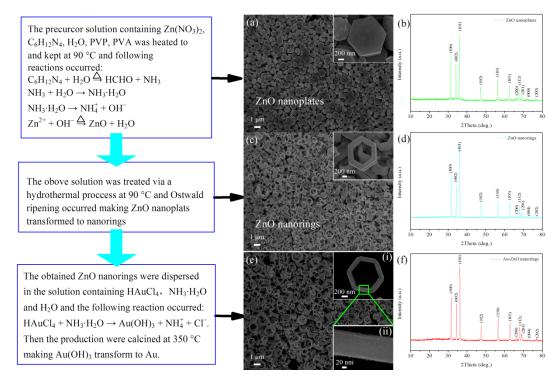


Figure S1. Synthesis process and formation mechanism of ZnO nanorings and Au-ZnO nanorings. (a) and (b) SEM images and XRD pattern of hexagonal ZnO nanoplates; (c) and (d) SEM images and XRD pattern of hexagonal ZnO nanoplates; (e) and (f) SEM images and XRD pattern of Au nanoparticle-decorated hexagonal ZnO nanorings.

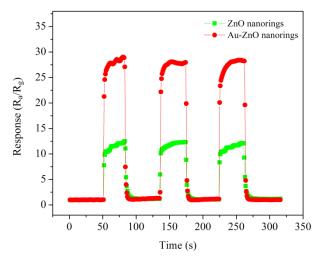


Figure S2. Repeatability of the ZnO and Au-ZnO nanorings to 100 ppm acetylene at their optimum operating temperature.

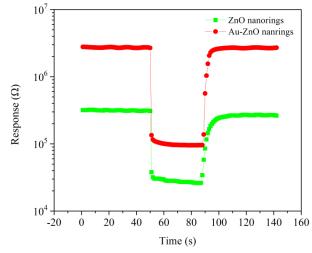


Figure S3. Transient resistance of ZnO and Au-ZnO nanorings to 100 ppm acetylene.