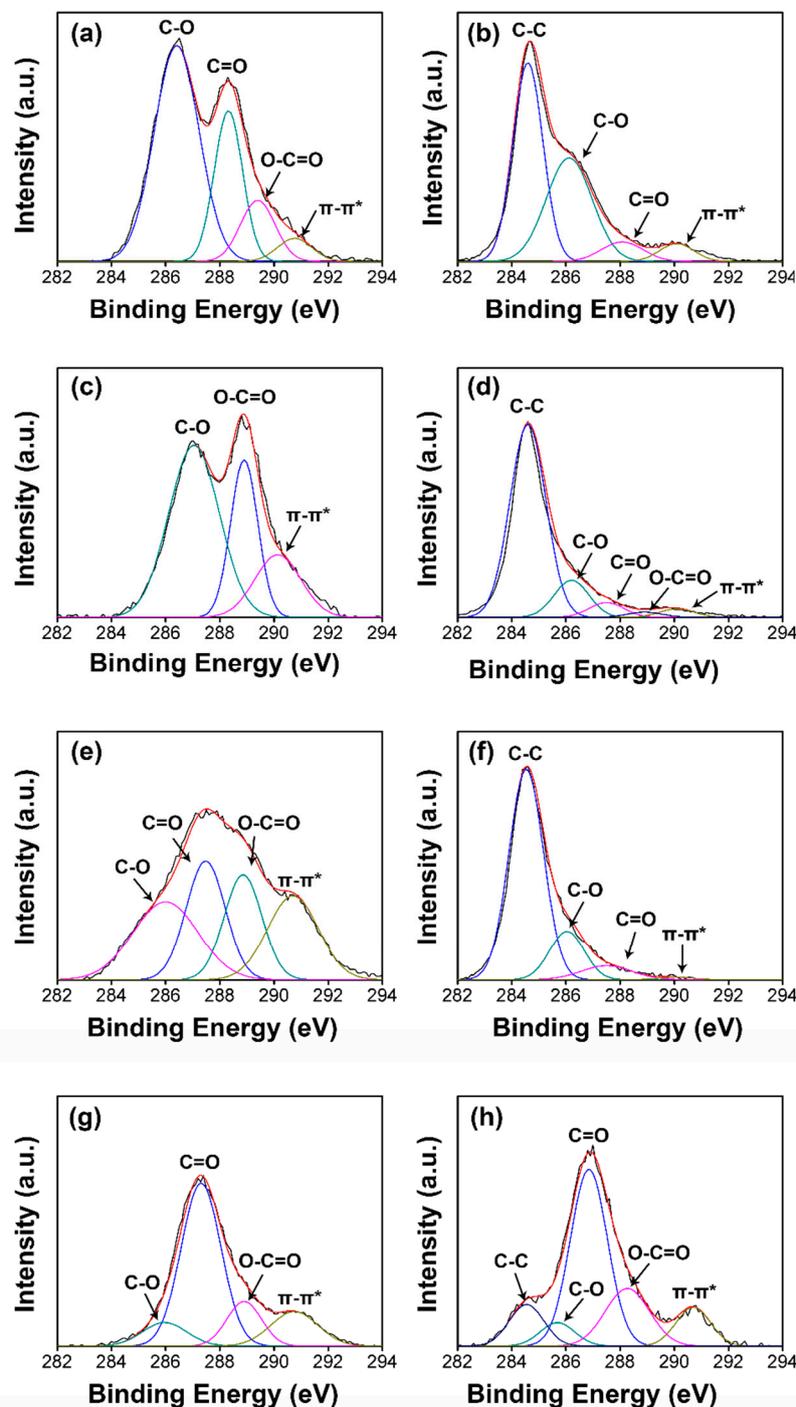
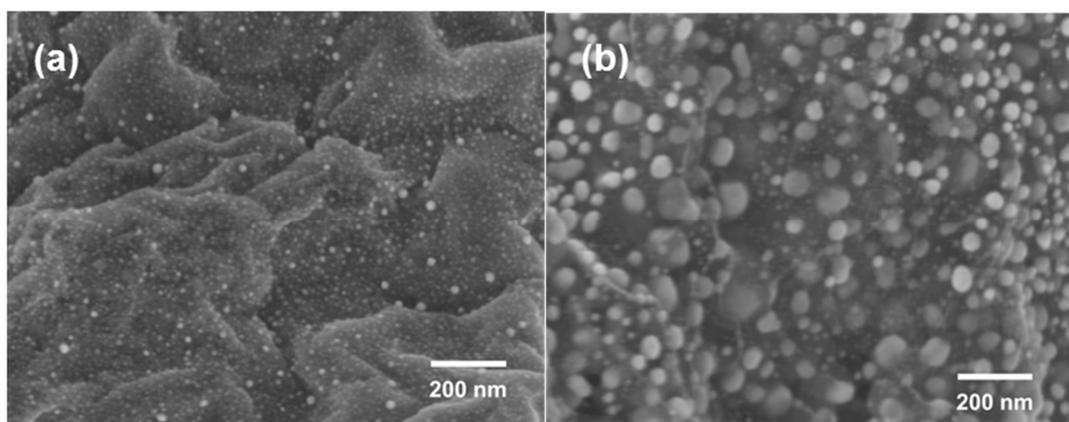


# Supplementary Materials: Fabrication of Graphene Aerogels with Heavily Loaded Metallic Nanoparticles

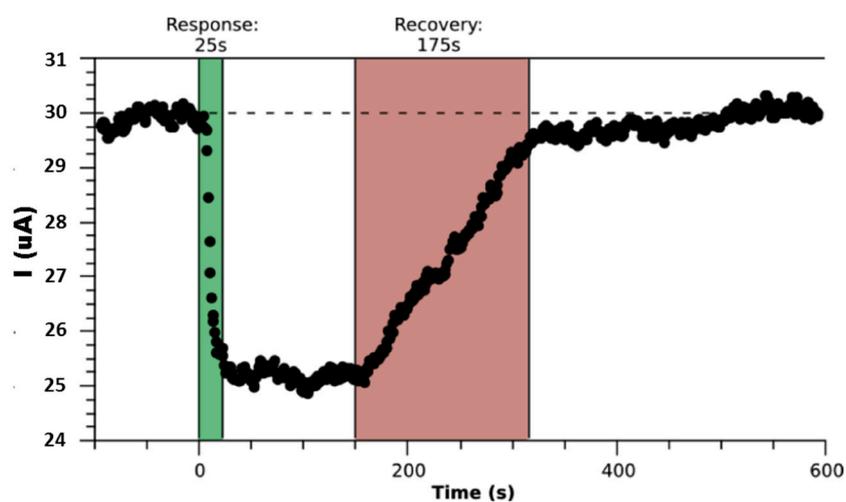
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**Figure S1.** Deconvoluted XPS spectra of the carbon in the aerogels. C in Pd loaded aerogels (a) as prepared and (b) after reduction, C in Pt loaded aerogels (c) as prepared and (d) after reduction, C in Ni loaded aerogels (e) as prepared and (f) after reduction, C in Sn loaded aerogels (g) as prepared and (h) after reduction.



**Figure S2.** SEM images of Pd nanoparticles on GA surfaces made from (a) 30 mM and (b) 70 mM Pd ion in GO suspensions.



**Figure S3.** The change of the current of a hydrogen sensor when exposed to 1000 ppm hydrogen gas. The responding time and recovery time are highlight in green and brown, respectively.