

Supplementary Information

Facile Sonochemical Synthesis of Carbon Nanotube-Supported Bimetallic Pt-Rh Nanoparticles for Room Temperature Hydrogenation of Arenes

Horng-Bin Pan, Chien M. Wai*

Department of Chemistry, University of Idaho, Moscow, Idaho, 83844-2343

Telephone: 208-885-6552; Fax: 208-885-6173

E-mail: cwai@uidaho.edu

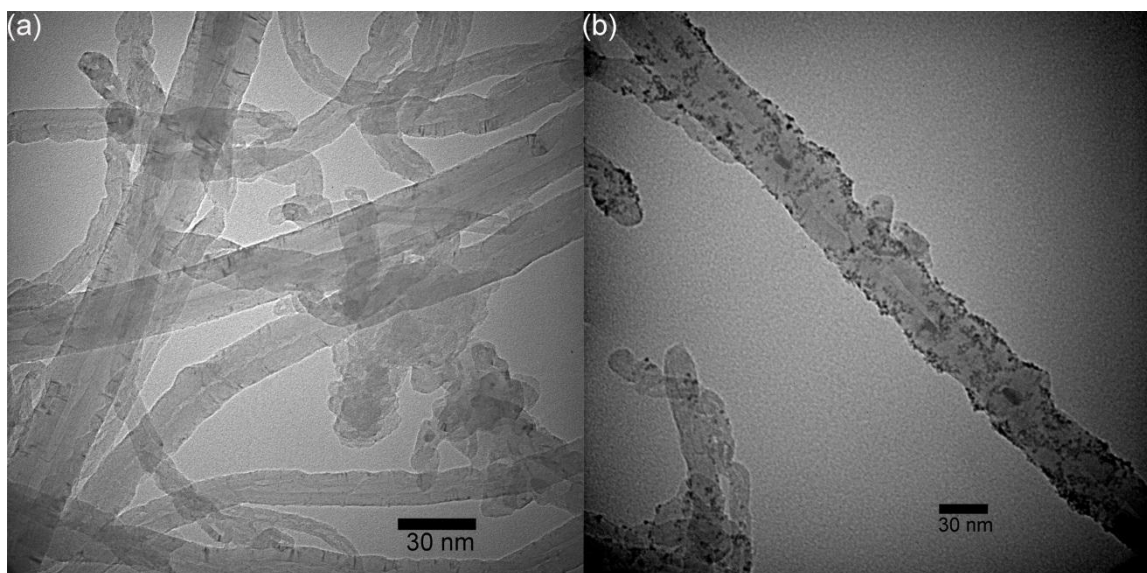
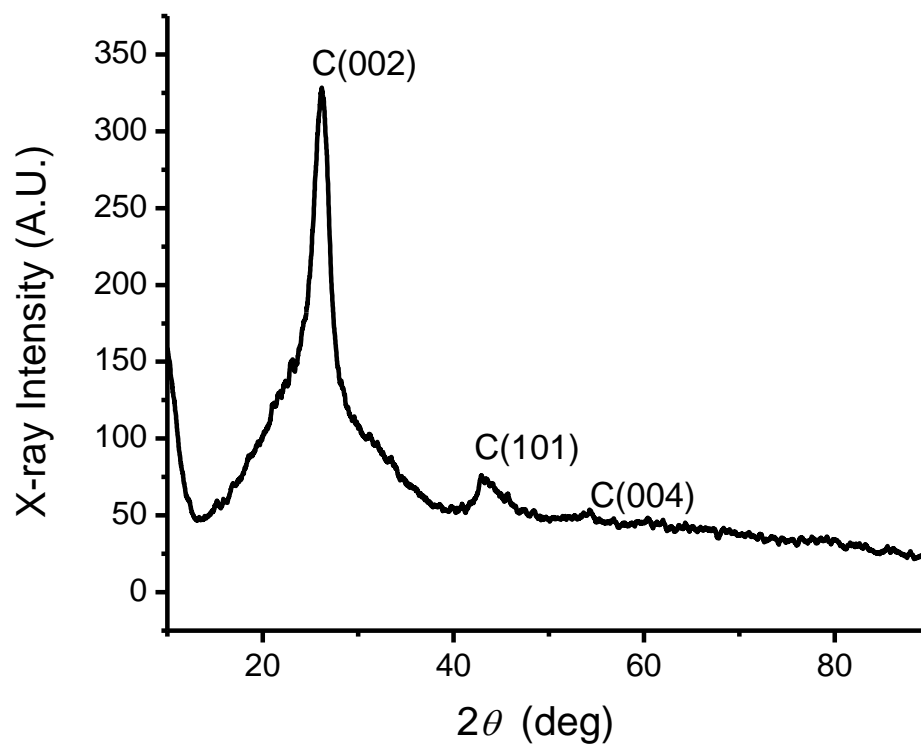
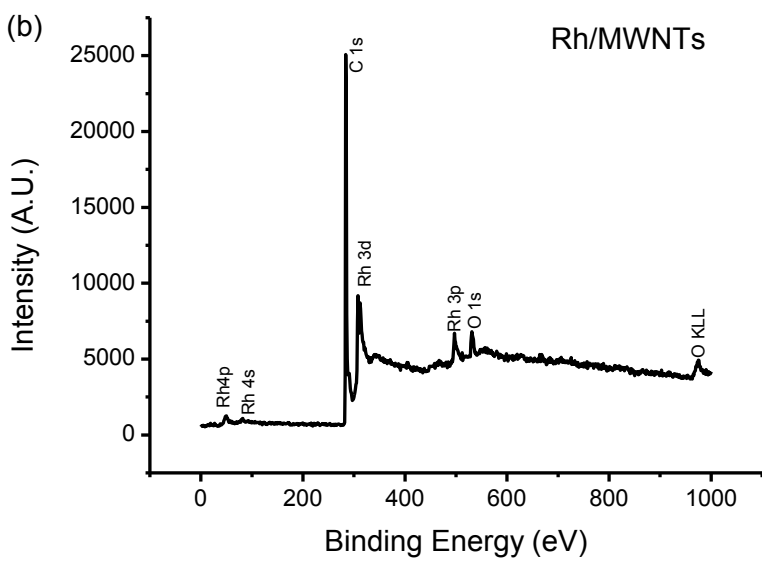
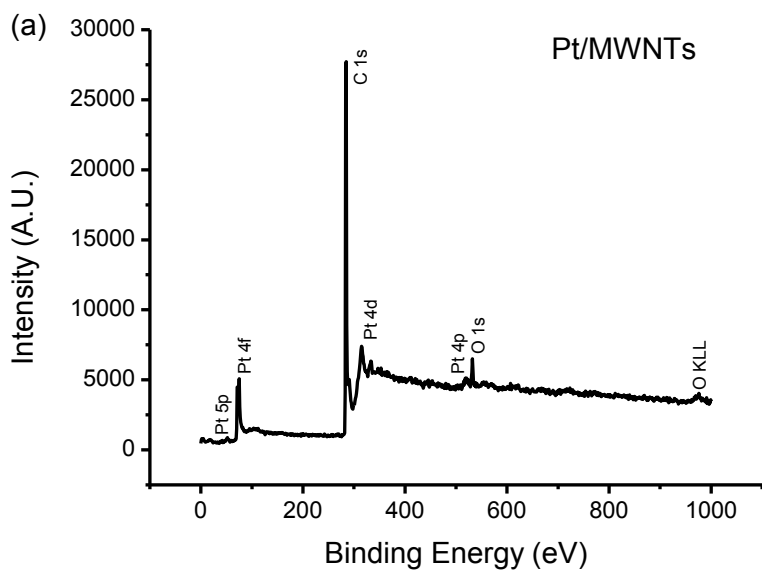


Fig. 1S (a) The TEM image of as-received MWNTs. (b) the low magnifying TEM image of Pt/MWNTs.



g. 2S XRD patterns of carboxylic acid functionalized multi-walled carbon nanotubes.

Fi



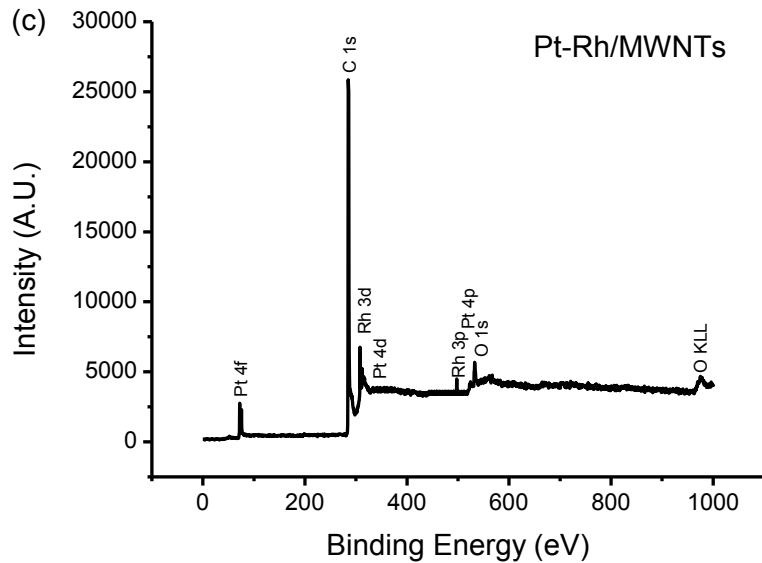


Fig. 3S The survey scan XPS spectra of different CNT-supported metallic nanoparticles: (a) Pt/MWNTs, (b) Rh/MWNTs, and (c) Pt-Rh/MWNTs

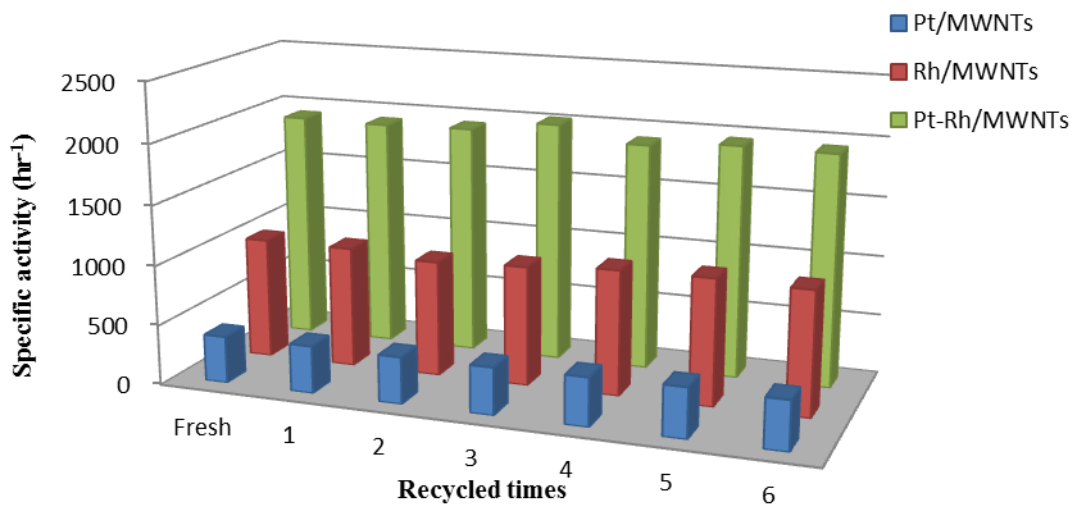


Fig. 4S Activity of recycled different CNT-supported metallic nanoparticle catalysts for hydrogenation of neat toluene.

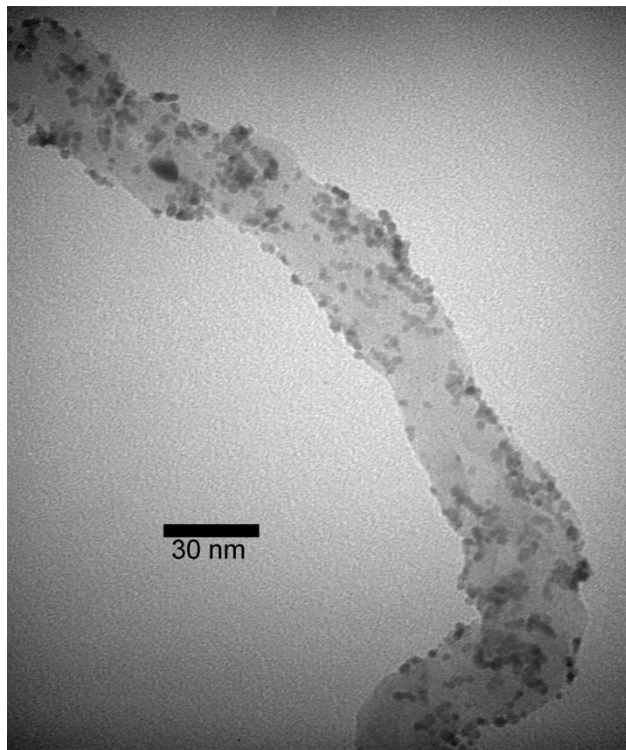


Fig. 5S TEM image of CNT-supported bimetallic Pt-Rh nanocatalysts after 6 times of repeated use.