Supporting Information

Synthesis of Nanosize-controllable Copper and its Alloys in Carbon Shells

Chien-Hua Huang,^{*a*} H. Paul Wang,^{*a*} Juu-En Chang^{*a*} and Edward M. Eyring^{*b*}

^a Department of Environmental Engineering, Sustainable Environmental Research Center, and Center for Micro/Nano Science and Technology, National Cheng Kung University, Tainan City, Taiwan. Fax: +886 6 275 2790; Tel: + 886 6 276 3608; E-mail: wanghp@mail.ncku.edu.tw

^b Department of Chemistry, University of Utah, Salt Lake City, UT 84112, USA. Fax: +1 801 581 8433; Tel: +1 801 581 8658; E-mail: eyring@chem.utah.edu

* To whom correspondence should be addressed.

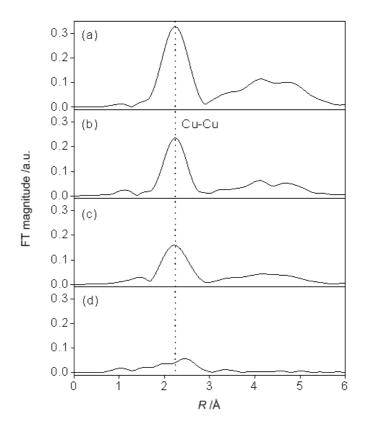


Fig. 1 EXAFS spectra of copper in the Cu@C nanoparticles. (a) bulky Cu (CN = 12), (b) nanosize Cu (7 nm) (CN = 8), (c) bimetal Cu/Ag (1:1) (CN = 6) and (d) alloy CuPd (1:1) within the carbon shells.