Support information

Electrooxidation of Methanol on Pt @Ni Bimetallic Catalyst

Supported on Porous Carbon Nanofibers

JianYi Chen^{a,b}, QiJian Niu^b, GuangKai Chen^b, Jun Nie^{*b}, GuiPing Ma^{*b} a School of Material Science and Engineering, Changzhou University, Changzhou, Jiangsu 213164, P.R. China.

b Key Laboratory of Carbon Fiber and Functional Polymers, Ministry of Education, Beijing University of Chemical Technology, Beijing, 100029, P. R. China.

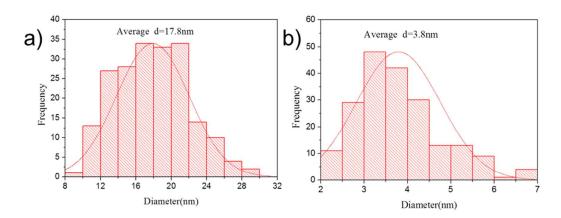


Figure S1. (a) The diameter distributions of Ni nanoparticles deposited on the CNFs.(b) The diameter distributions of Pt nanoparticles deposited on the Ni₅₀/CNFs.

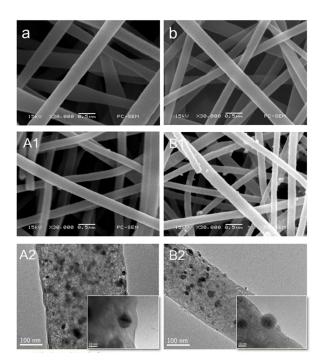


Figure S2. SEM images for the NiAA/PAN nanofibers mats before and after carbonization. (a) NiAA₁₀/PAN nanofibers, (b) NiAA₃₀/PAN nanofibers; (A1) Ni₁₀/CNFs, (B1) Ni₃₀/CNFs. TEM images for the NiAA/PAN nanofibers mats after carbonization. (A2) Ni₁₀/CNFs and (B2) Ni₃₀/CNFs. The insets are high-magnification images of the nanofibers.

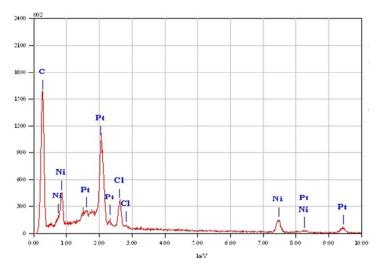


Figure S3. EDS spectra of Ni₅₀/Pt/CNFs.

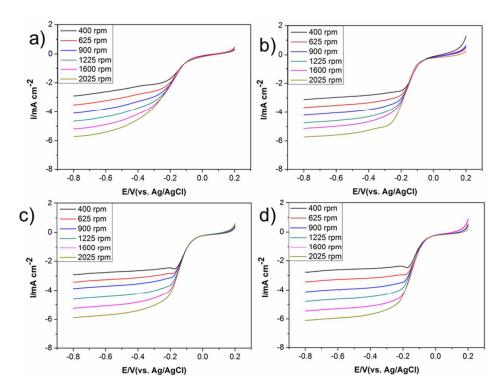


Figure S4. LSV curves of (a) Pt/CNFs, (b) Ni_{10} /Pt/CNFs, (c) Ni_{30} /Pt/CNFs and (d) Ni_{50} /Pt/CNFs obtained at different rotation rates.