

Supplementary Material (ESI) for Journal of Materials Chemistry
This journal is (c) The Royal Society of Chemistry 2011

Ammonia Borane Nanofibers Supported by Poly(vinyl pyrrolidone) for Dehydrogenation

Ziwei Tang,^a Shaofeng Li,^a Zunxian Yang,^{*b} and Xuebin Yu^{*a}

^a *Department of Materials Science, Fudan University, Shanghai 200433, China*

^b *Engineering Research Center for Field Emission Display Technology of Ministry of Education, Fuzhou University, Fuzhou 350002, China*

E-mail: yuxuebin@fudan.edu.cn; yangzunxian@hotmail.com

Supplementary Material (ESI) for Journal of Materials Chemistry
This journal is (c) The Royal Society of Chemistry 2011

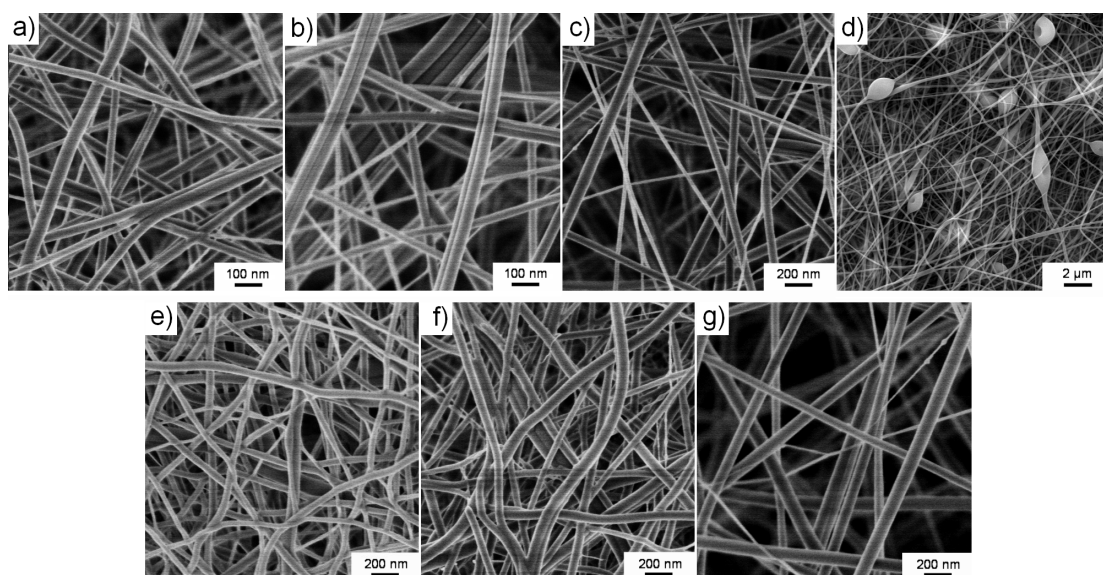


Fig. S1 SEM micrographs of AB-PVP nanofibers with various AB concentrations of (a) 5 wt %, (b) 10 wt %, (c) 20 wt % and (d) 25 wt %, and AB-MgCl₂-PVP nanofibers (AB content of 19 wt %) with different MgCl₂ concentrations of (e) 1 wt %, (f) 3 wt % and (g) 5 wt %.

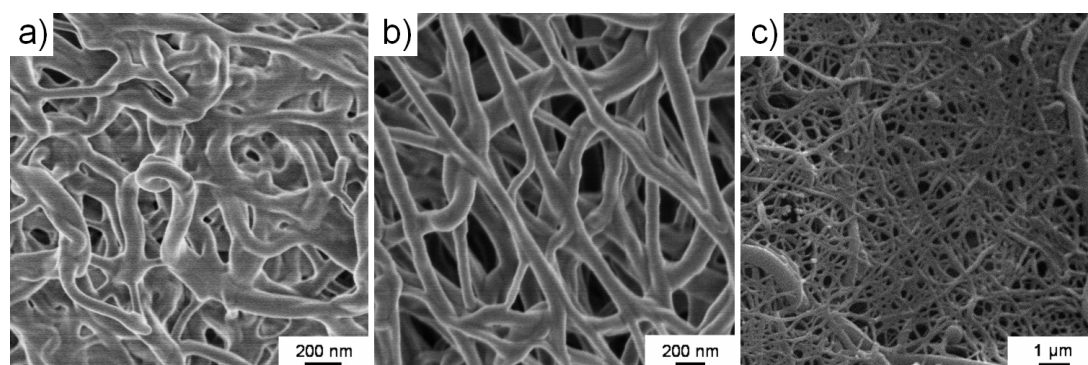
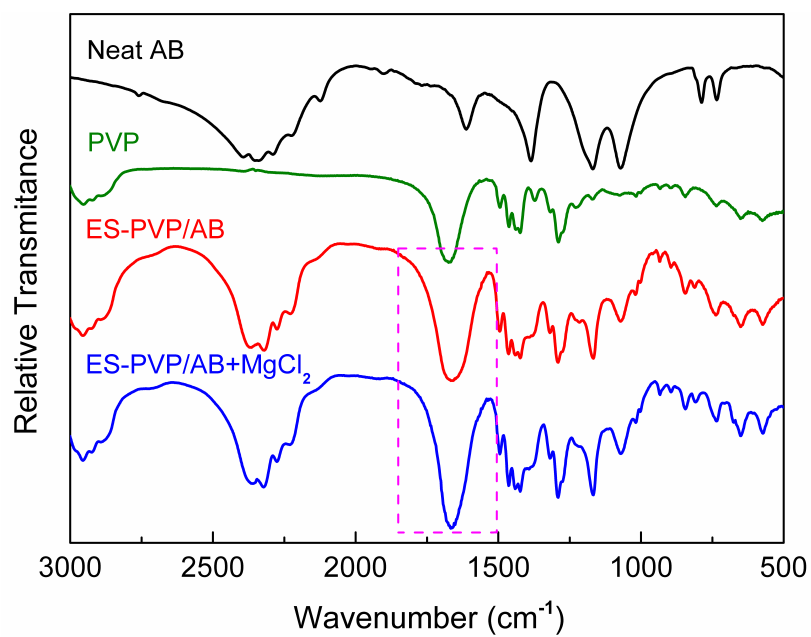
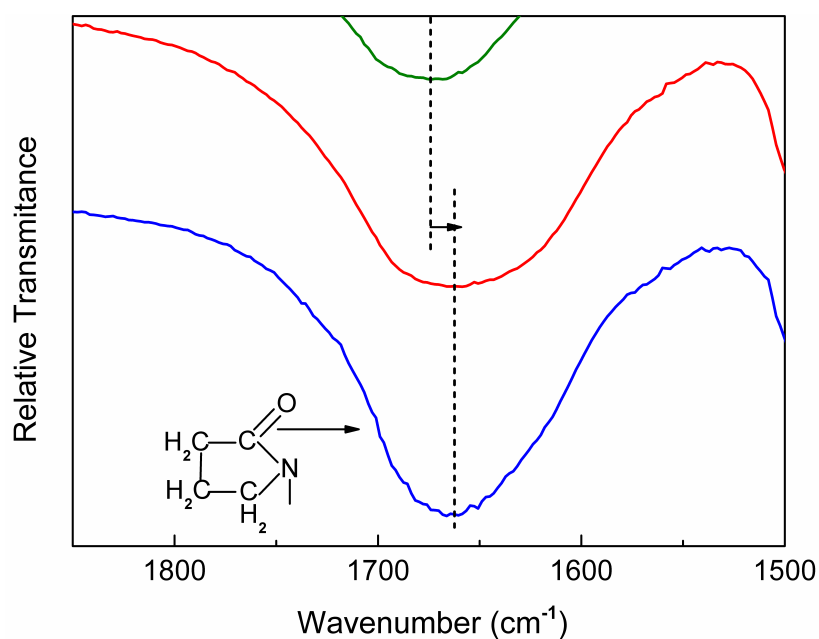


Fig. S2 SEM micrographs of (a) ES-PVP/AB and (b) ES-PVP/AB+MgCl₂ when heated to 200 °C, and (c) ES-PVP/AB after calcined at 550 °C for 3 h.

Supplementary Material (ESI) for Journal of Materials Chemistry
This journal is (c) The Royal Society of Chemistry 2011



(a)



(b)

Fig. S3 FTIR spectra of (a) neat AB (black), PVP (green), ES-PVP/AB (red) and ES-PVP/AB+ MgCl_2 (blue), (b) magnified picture of the rectangular area marked in (a).

Supplementary Material (ESI) for Journal of Materials Chemistry
This journal is (c) The Royal Society of Chemistry 2011

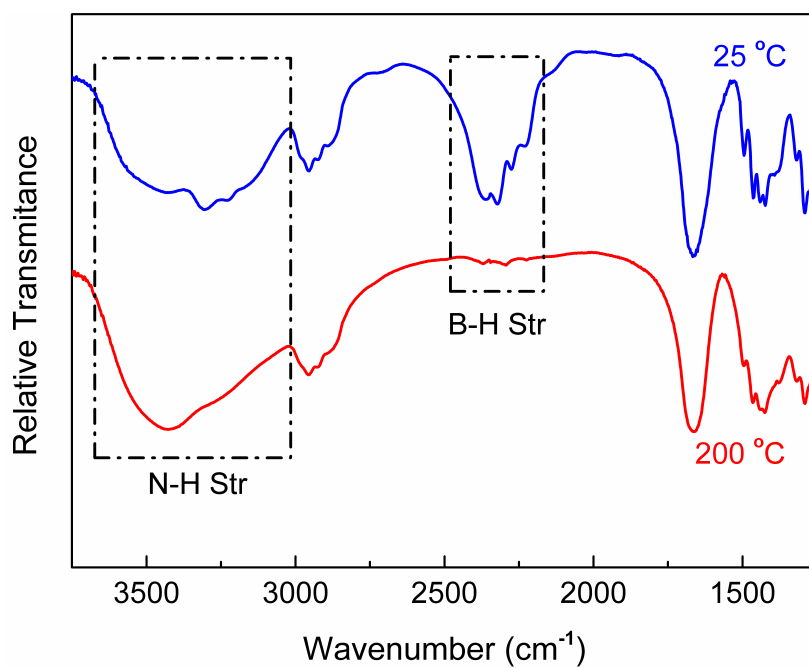


Fig. S4 FTIR spectra of ES-PVP/AB (a) before thermal decomposition and (b) when heated to 200 °C.