

Supporting Information

Zinc oxide nanorod assisted rapid single-step process for conversion of electrospun poly(acrylonitrile) nanofibers to carbon nanofibers with high graphitic content

Ratyakshi Nain, Dharendra Singh, Manjeet Jassal¹, Ashwini K. Agrawal²

SMITA Research Lab, Indian Institute of Technology Delhi, Hauz Khas, New Delhi -110016, India

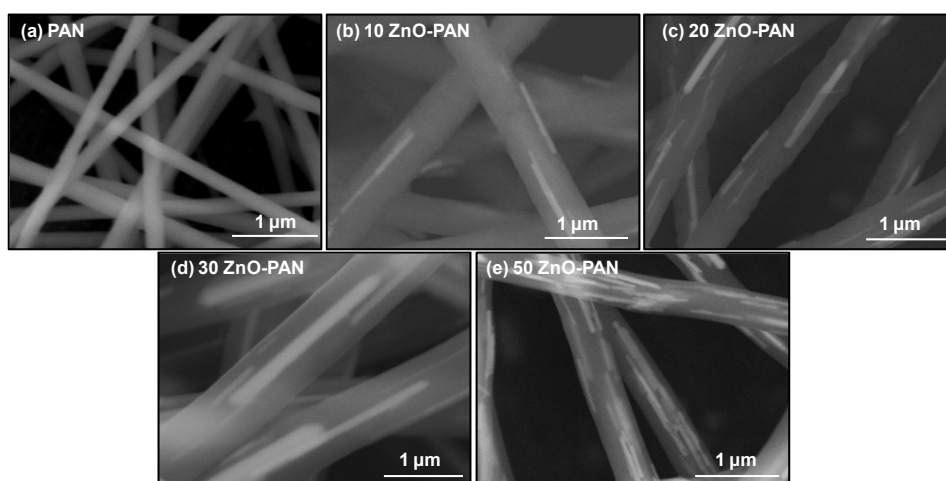


Figure S1 SEM images of electrospun nanofibers (a) PAN (b) 10 ZnO-PAN (c) 20 ZnO-PAN (d) 30 ZnO-PAN and (e) 50 ZnO-PAN.

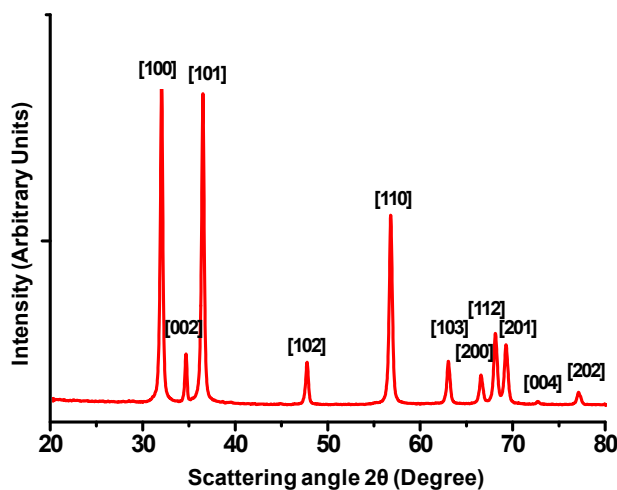


Figure S2 XRD spectrum of ZnO nanorods.

¹ Corresponding authors: Tel: +91-11-26591426. Fax: +91-11-26526154. E-mail address: manjeet.jassal@smiita-iitd.com (Manjeet Jassal)

² Tel: +91-11-26591415. Fax: +91-11-26526154. E-mail address: ashwini@smiita-iitd.com (Ashwini K. Agrawal)

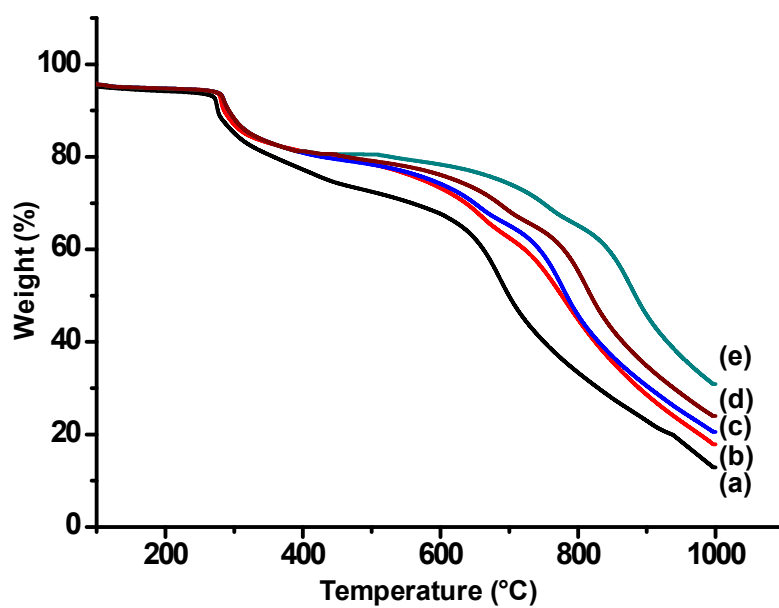


Figure S3 TGA curves for ZnO-PAN nanofibers with (a) 0 (b) 10 (c) 20 (d) 30 and (e) 50 wt% of ZnO nanorods.

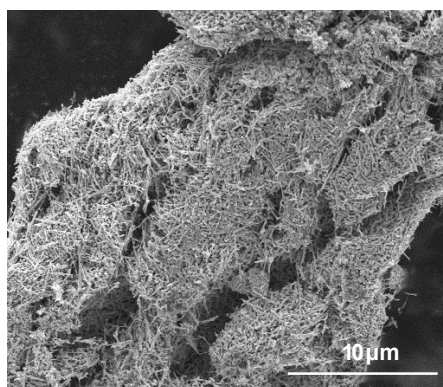


Figure S4 FE-SEM micrograph of ZnO nanorods aggregates expelled at 1000 °C.

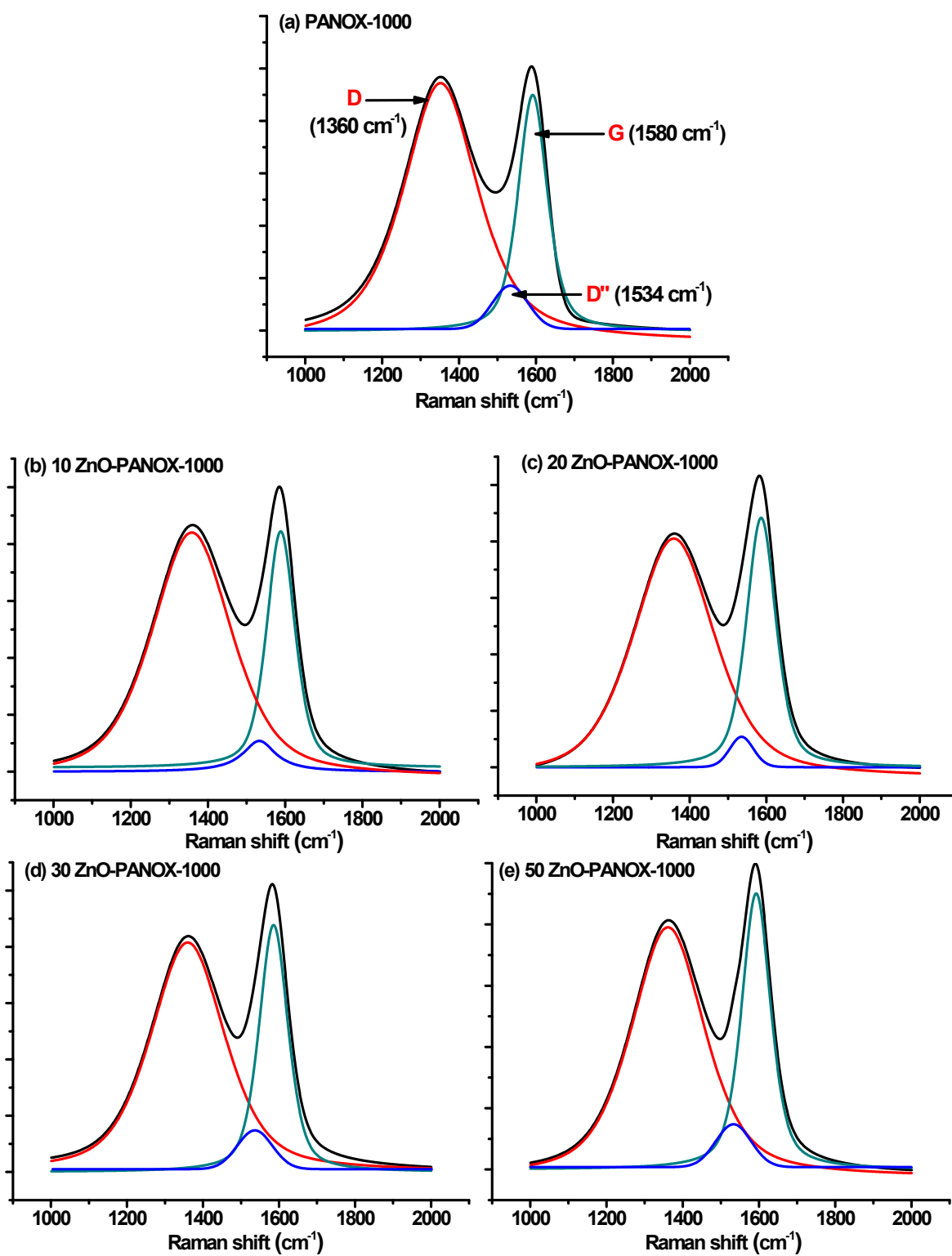


Figure S5 Raman spectra of (a) PANOX-1000 (b) 10 ZnO-PANOX-1000 (c) 20 ZnO-PANOX-1000 (d) 30 ZnO-PANOX-1000 and (e) 50 ZnO-PANOX-1000.

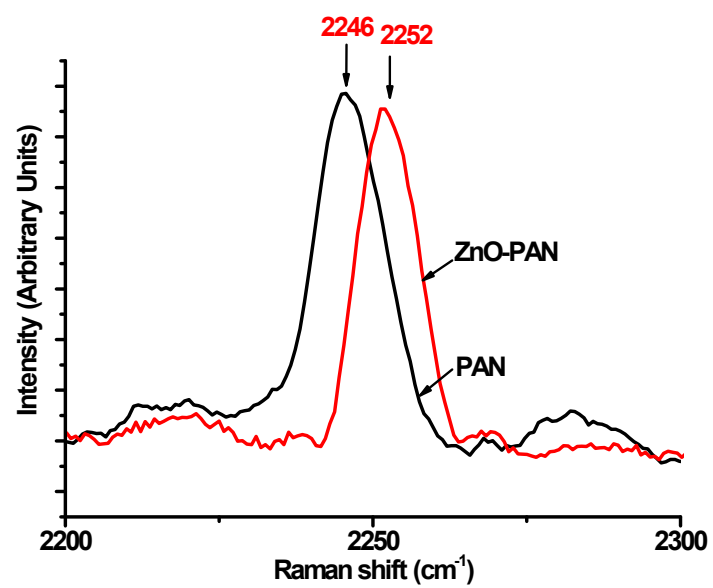


Figure S6 Raman spectra of PAN and ZnO-PAN precursor nanofibers.