Supporting Information

A One-pot synthesis of highly dispersed palladium/polypyrrole/polyacrylonitrile nanofiber membrane and their recyclable catalysis in hydrogen generation from ammonia borane

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Table S1 Comparison of apparent activation energies (E_a, kJ mol^{-1}) for the hydrolysis of ammonia borane with different catalysts.

Catalyst	Apparent Activation energy (kJ mol^{-1})	Reference
Ru(0)@HAp	58	1
Co@M41S	54.6	2
RGO/Pd	51	3
Ni@Ru	44	4
$Cu_{0.33}Fe_{0.67}$ NPs	43.2	5
PAN/PPy/Pd NF	33.5	This study
Pt/γ-Al_2O_3	21	6
Ag@Co/graphene NPs	20	7

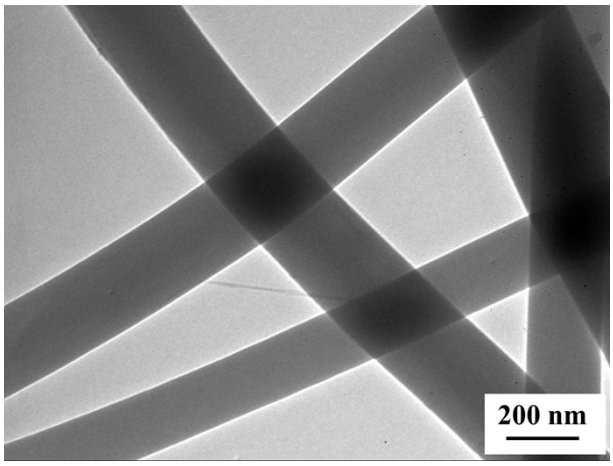

Fig. S1 TEM image of PAN nanofibers.

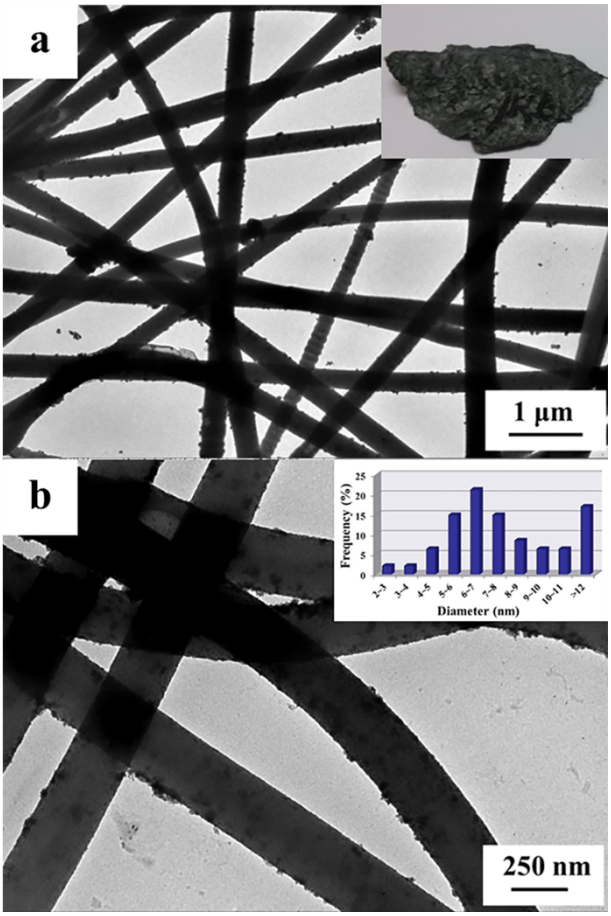

Fig. S2 TEM images of Pd/PPy/PAN composite nanofibers after recycling for five times. (The inset in picture a shows the optical images of Pd/PPy/PAN composite nanofibers after recycling for five times. The inset in picture b shows the diameter distribution of Pd NPs on Pd/PPy/PAN composite nanofibers after recycling for five times.)

References

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