Supporting Information

Formation of PANI Tower-shaped Hierarchical Nanostructures by a Limited Hydrothermal Reaction

By Jinbo Fei, Yue Cui, Xuehai Yan, Yang Yang, Ying Su and Junbai Li *

Beijing National Lab for Molecular Sciences, Key Lab of Colloid and Interface Science, the Center for Molecular Sciences, Institute of Chemistry, Chinese Academy of Sciences, Beijing 100190, China

Email: jbli@iccas.ac.cn

Fig. S1 a) SEM image of $\gamma$-Fe$_2$O$_3$; b) TEM image of $\gamma$-Fe$_2$O$_3$.

Fig. S2 Photo image of a) $\gamma$-Fe$_2$O$_3$ nanoparticles dispersed in water; b) PANI as-prepared suspended in water.
Fig. S3 Photo images of the solution during the different times kept at 100°C. 1h; 2h; 4h; 6h; 8h.

The solution is prepared by mixing 0.016 g of $\gamma$-Fe$_2$O$_3$ nanoparticles with 8 mL of 0.36 M H$_2$SO$_4$. 