

*Electronic Supplementary Information*

**Photocatalytic degradation of phenol using a new developed  
TiO<sub>2</sub>/graphene/heteropoly acid nanocomposite: Synthesis, characterization  
and the process optimization**

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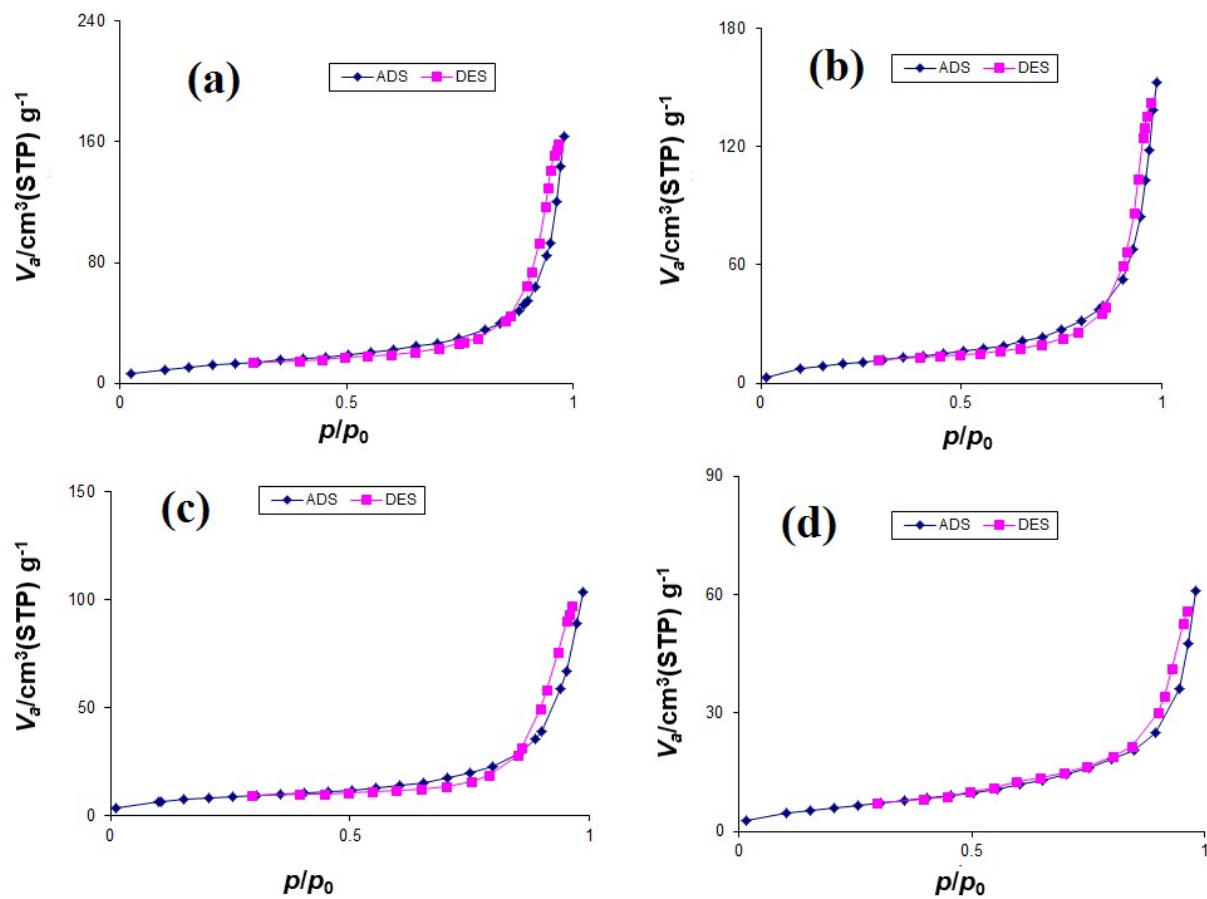
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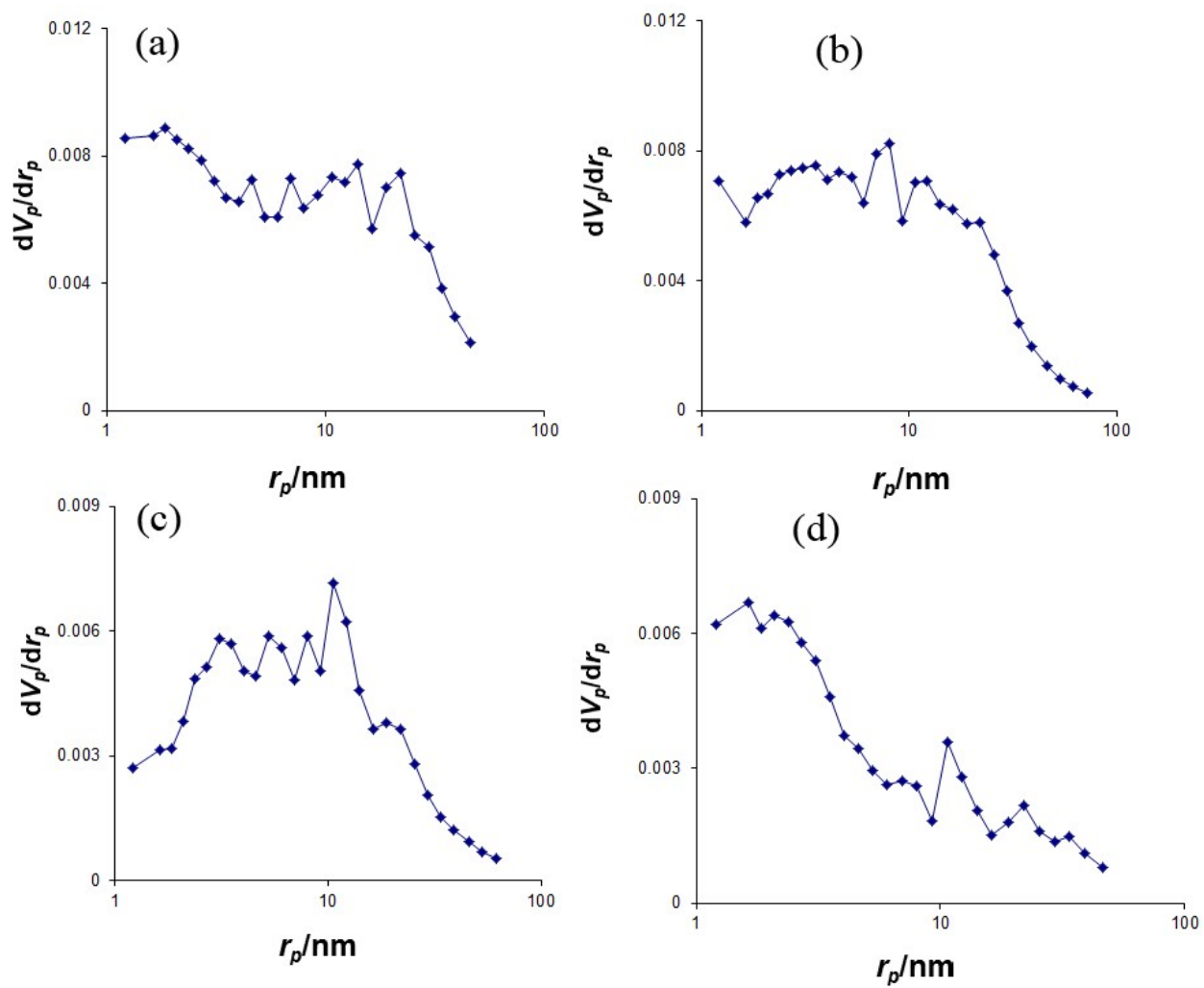
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**Fig. S1.** Adsorption-desorption isotherm of (a)  $\text{TiO}_2/\text{Gr}/5\text{PW}$  (b)  $\text{TiO}_2/\text{Gr}/10 \text{PW}$  (c)  $\text{TiO}_2/\text{Gr}/20\text{PW}$  (d)  $\text{TiO}_2/\text{Gr}/40\text{PW}$  nanocomposites.



**Fig. S2.** Pore size distribution of (a) TiO<sub>2</sub>/Gr/5PW (b) TiO<sub>2</sub>/Gr/10 PW (c) TiO<sub>2</sub>/Gr/20PW (d) TiO<sub>2</sub>/Gr/40PW nanocomposites.