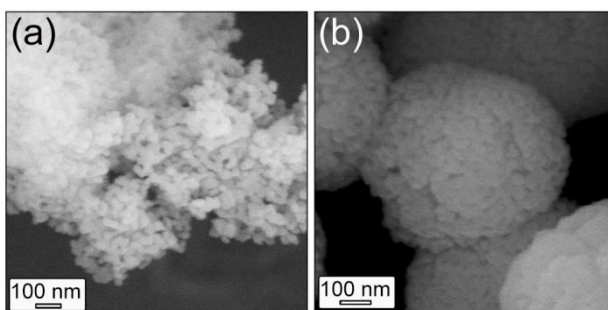


## Nanostructured ZnO/Sepiolite Monolithic Sorbents for H<sub>2</sub>S Removal

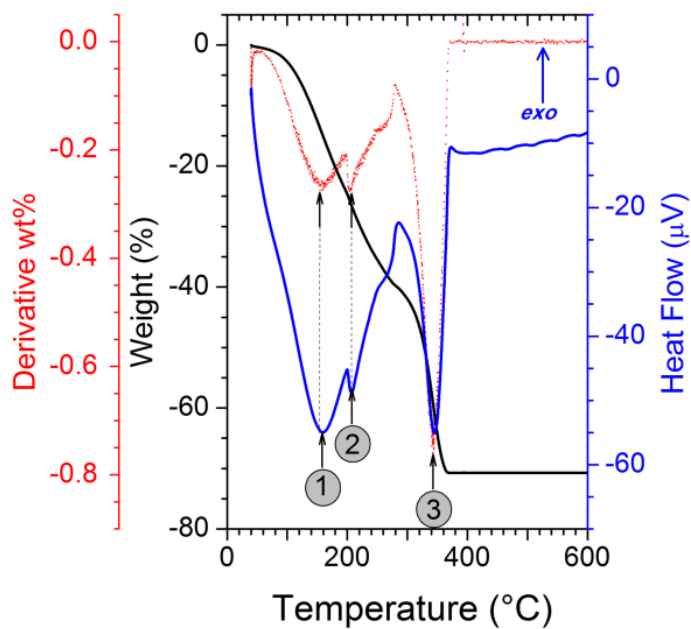
### Supporting Information

*R. Portela et al. Supporting Info 1*



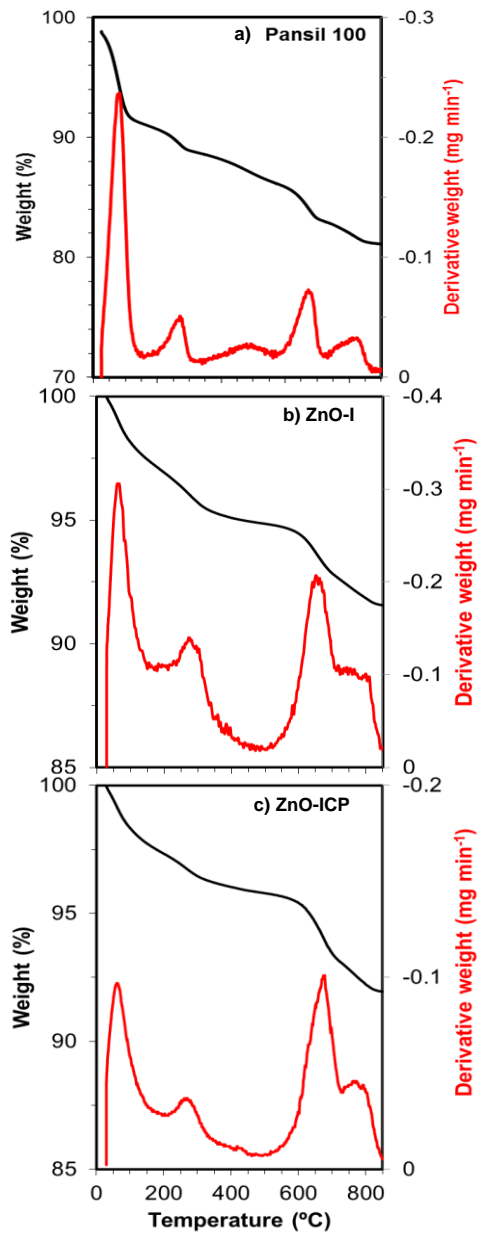
**Supporting Info 1.** Field emission-scanning electron microscopy micrographs of the initial materials used in the dry-nanodispersion method; **(a)** ZnO nanoparticles, and **(b)** hierarchically organized nanoparticles of ZnO.

*R. Portela et al. Supporting Info 2*



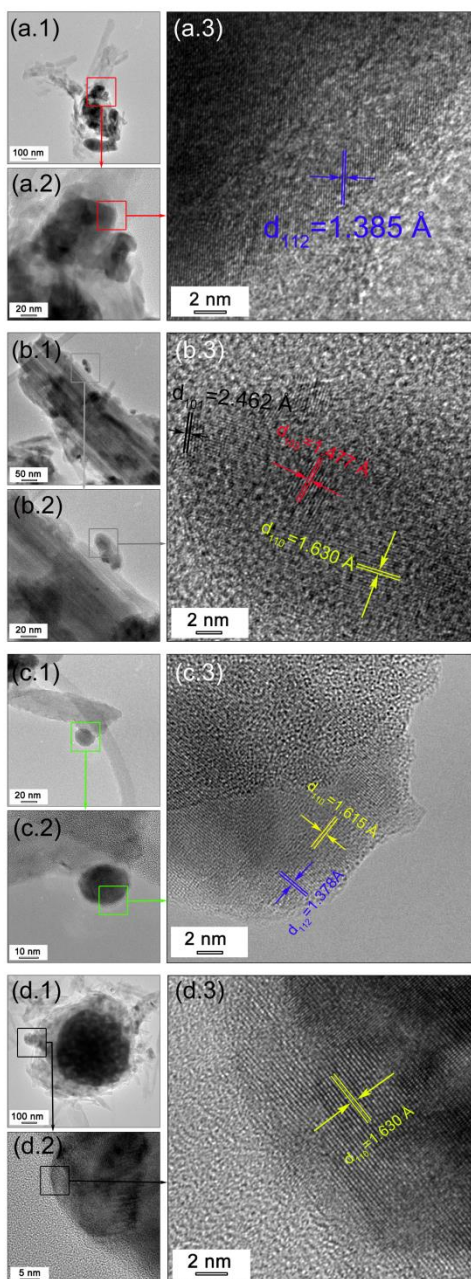
**Supporting Info 2.** TGA-DTA curves of Zn(NO<sub>3</sub>)<sub>2</sub>·6(H<sub>2</sub>O), used as ZnO precursor. The labelled regions correspond to dehydration (①, ②) and nitrate elimination (③) processes. The blue trace is the DTA curve, while the TGA weight loss and its derivate are represented by black and red traces, respectively.

*R. Portela et al. Supporting Info 3*



**Supporting Info 3.** TGA of raw material sepiolite (a) and calcined composites ZnO-I (b) and ZnO-ICP (c).

*R. Portela et al. Supporting Info 4*



**Supporting Info 4.** TEM (1, 2) and HR-TEM (3) images of the thermally treated samples synthesized by impregnation method (a), by impregnated carbon procedure (b), and by dry-mixing with isolated ZnO nanoparticles (c) or hierarchically organized nanoparticles (d). From high resolution-TEM images (a3-d3) the interplanar distance of the ZnO on the ZnO/sepiolite catalyst series can be measured.

