## **Electronic Supplementary Information**

## Improvement of boehmite nanoparticles aqueous dispersability by controlling their size, shape and crystallinity

Pablo Pardo, José Miguel Calatayud and Javier Alarcón

University of Valencia, Department of Inorganic Chemistry, Calle Doctor Moliner 50, 46100-

Burjasot (Valencia), Spain

Figure 1S. Particle size distributions calculated from length measurements on TEM images.



Figure 2S. Powder X-ray diffraction patterns of additive-free xerogel and hydrothermally treated sample 0-150-24. Boehmite reflections are indicated in brackets.





Figure 3S. XRD patterns for the set of samples prepared without additive. Boehmite reflections are indicated in brackets.



Figure 4S. XRD patterns for the set of samples prepared with tartaric acid. Boehmite reflections are indicated in brackets.





Figure 6S. HRTEM image





Figure 7S. Comparison of particle size distributions between additive-free samples treated at 150 °C for 24 h and 168 h (A) and at 200 °C for 24 h and 168 h (B) determined by DLS.