Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C

Nanoparticle-doped large area PMMA plates with controlled optical diffusion

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Supporting Information

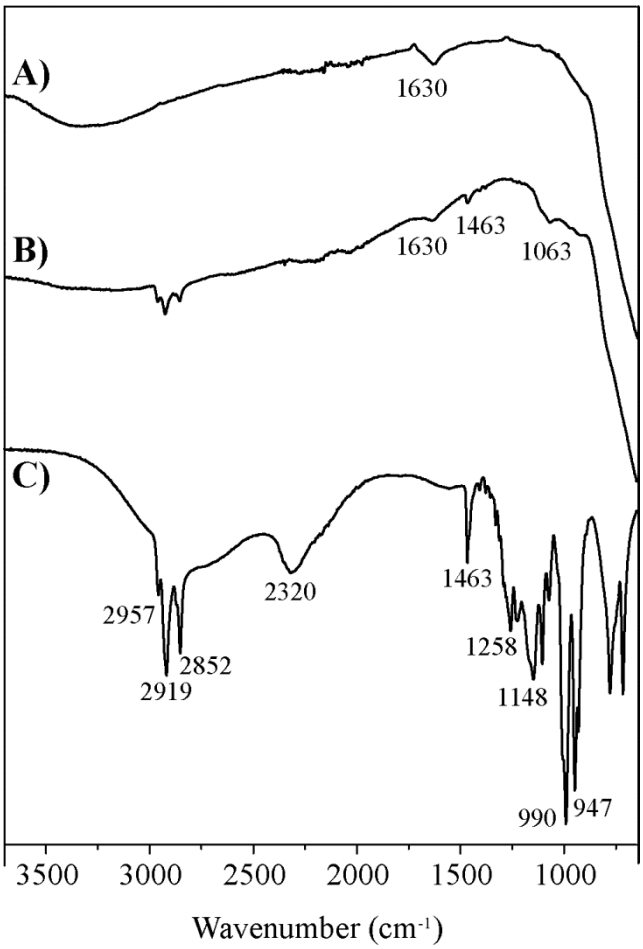

Figure 1. FTIR spectra of: A) P25; B) P25 modified with 1-octylphosphonic acid; C) free 1-ctylphosphonic acid.

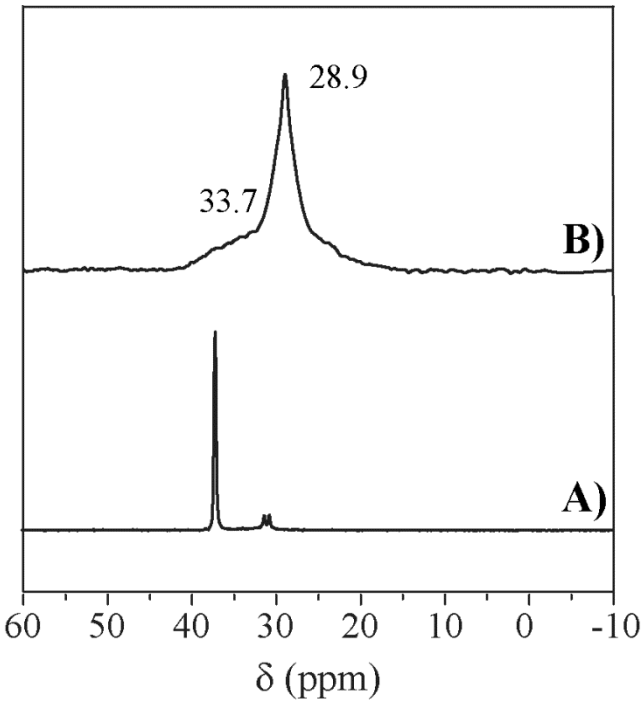

Figure 2 ^{31}P MAS NMR spectra of pure 1-octylphosphonic acid (A) and of the TiO_2 nanoparticle modified with it (B).

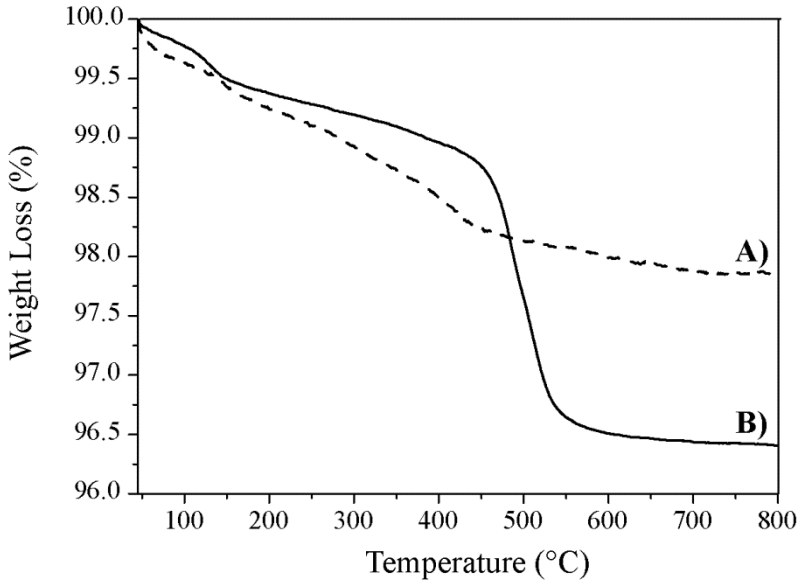

Figure 3. Comparison between TGA curves of commercial titania P25 (A) and the surface modified titania nanoparticles (B).

TABLE 1

Average hydrodynamic diameter of colloids in MMA measured by DLS after 3 days and 30 days since the ultrasonication process.

Sample	Hydrodynamic diameter (nm)	
	3 Days	30 Days
OPA@P25	155 [60] [a]	150 [65]

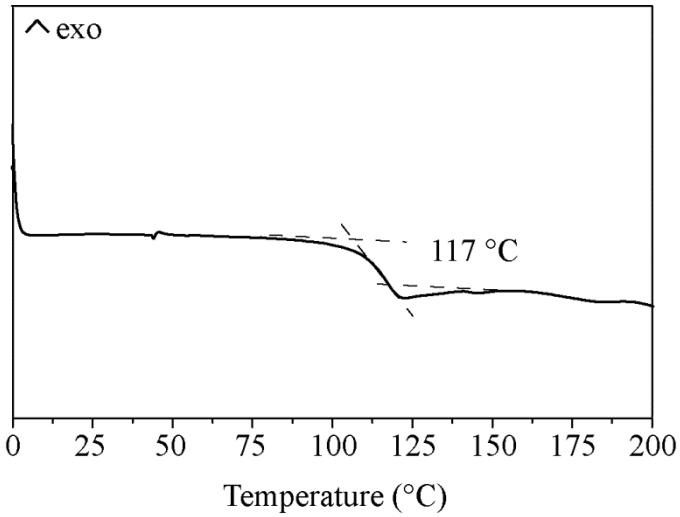

Figure 4. Differential Scanning Calorimetry (DSC) curve of a PMMA plate containing 90 ppm w/w TiO_2. It shows a transition glass of about 117°C.