

Electronic Supplementary Information

Core/shell structured covalently bonded TiO₂/poly(3,4-ethylenedioxythiophene) dispersions and their electrorheological responses: Effect of anisotropy

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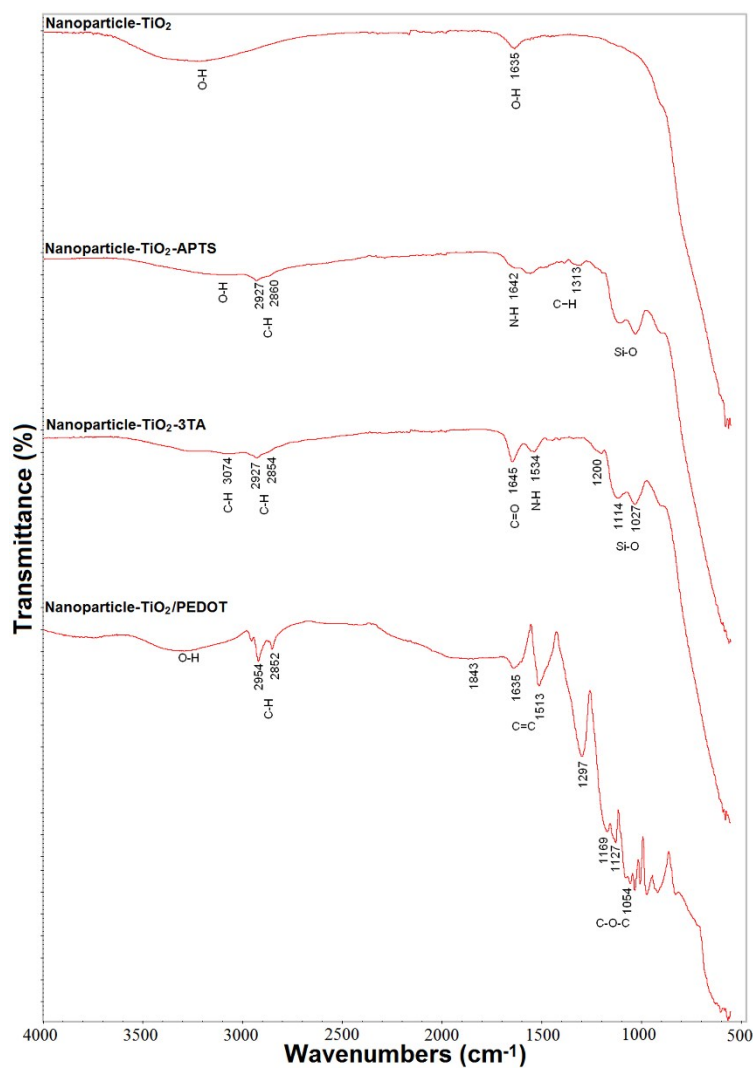


Fig. S1 ATR-FTIR spectra of nanoparticle-TiO₂, nanoparticle-TiO₂-APTS, nanoparticle-TiO₂-3TA and nanoparticle-TiO₂/PEDOT.

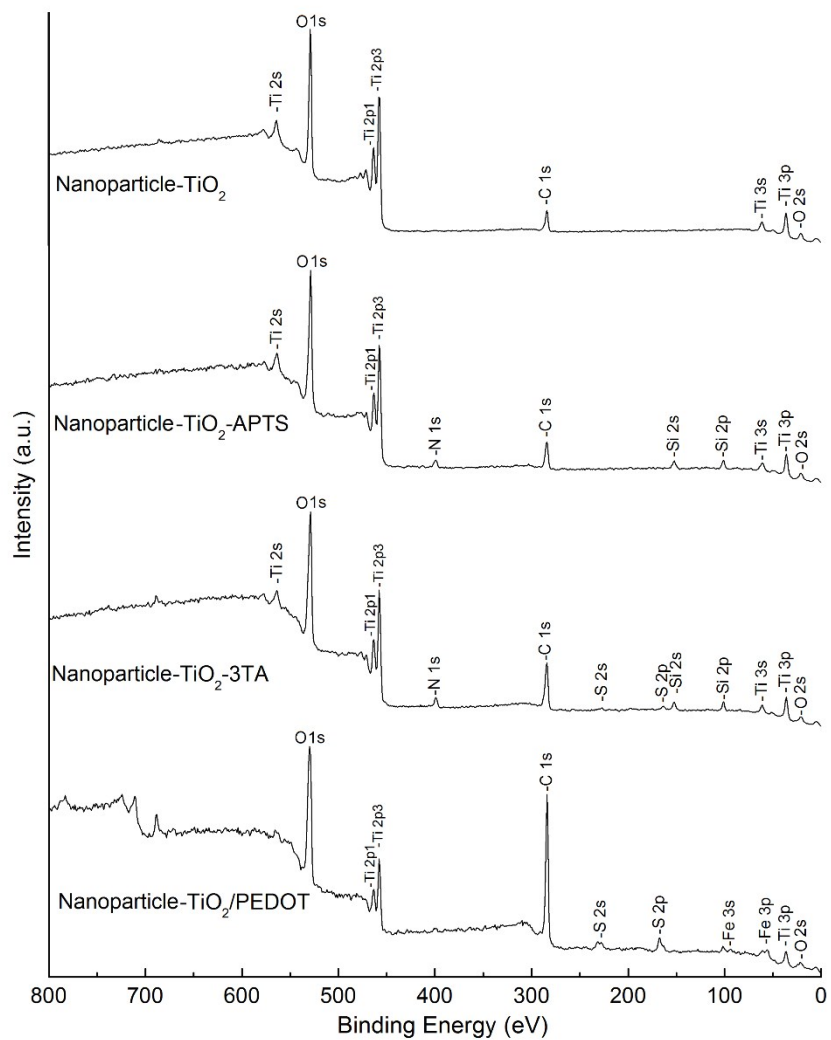


Fig. S2 XPS survey-scan of nanoparticle-TiO₂, nanoparticle-TiO₂-APTS, nanoparticle-TiO₂-3TA and nanoparticle-TiO₂/PEDOT.

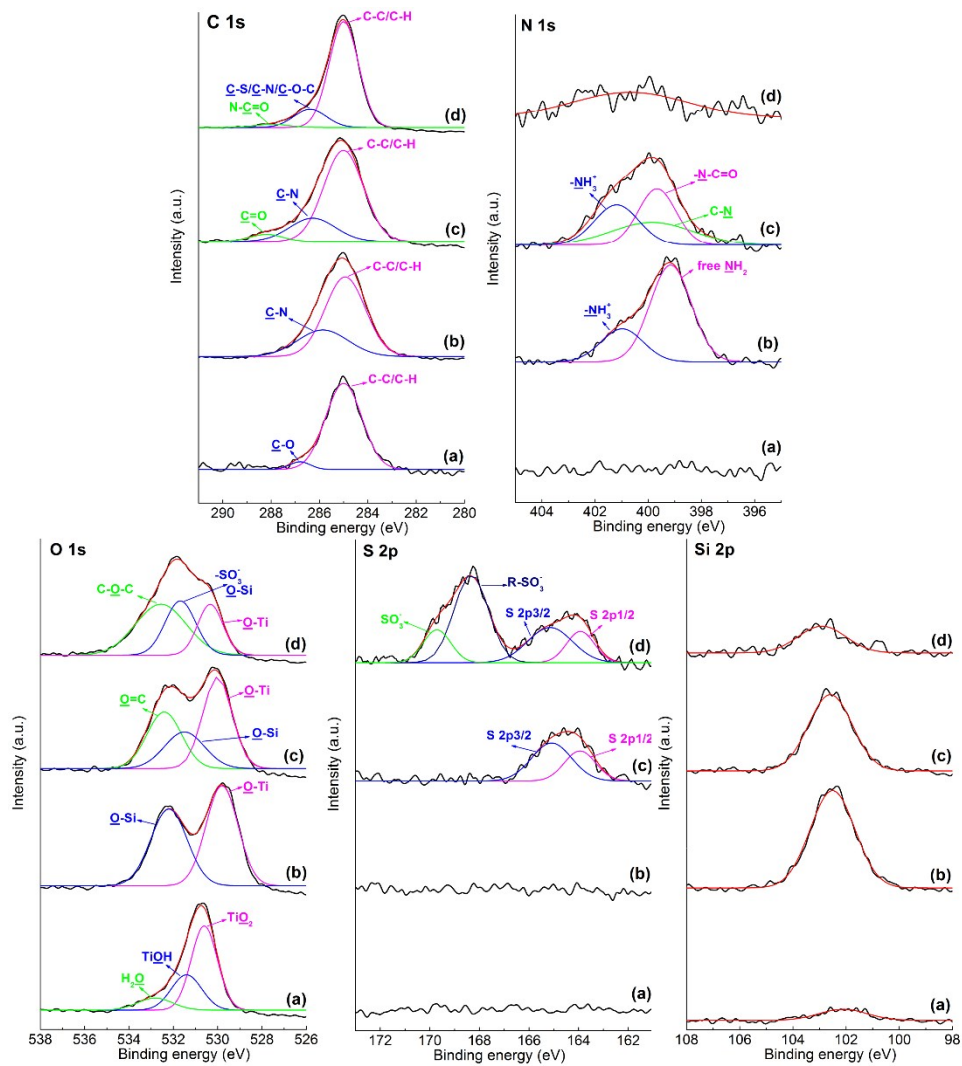


Fig. S3 C 1s, O 1s, N 1s, Si 2p and S 2p core-level spectra of nanorod-TiO₂ (curve a), nanorod-TiO₂-APTS (curve b), nanorod-TiO₂-3TA (curve c) and nanorod-TiO₂/PEDOT (curve d).

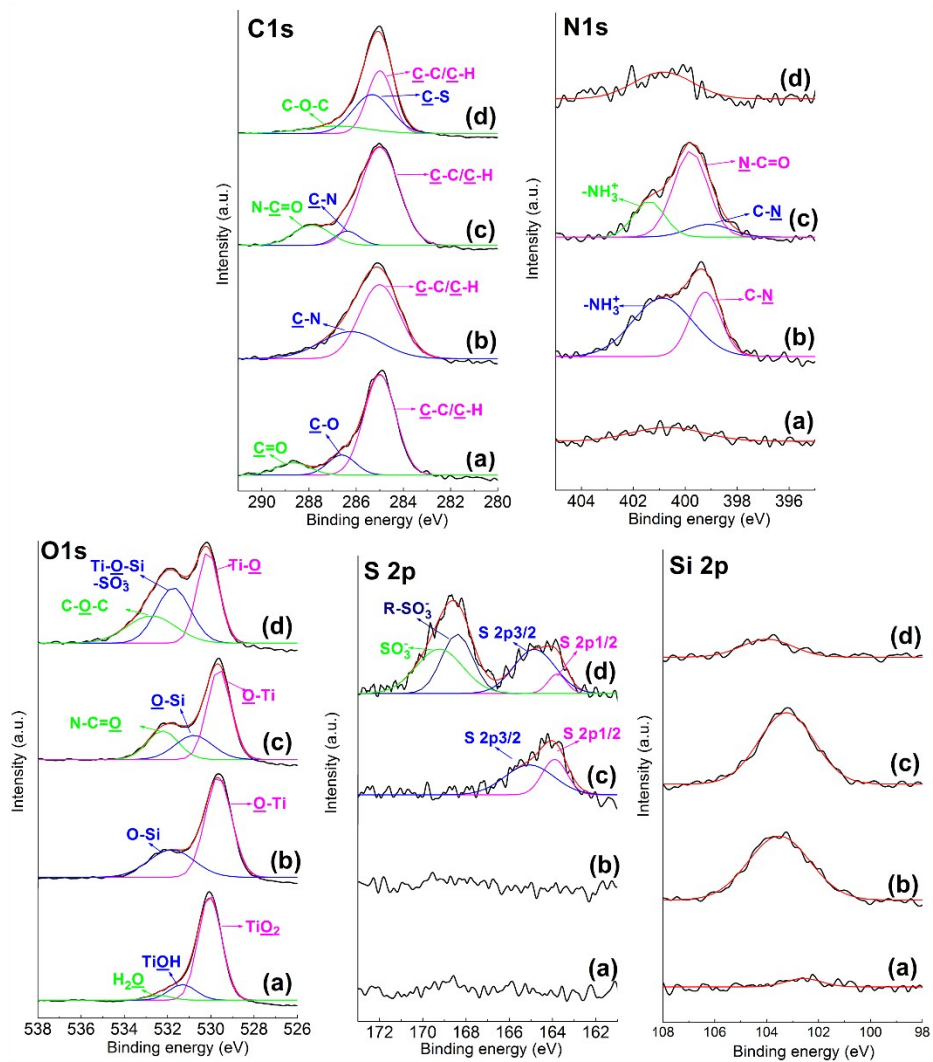


Fig. S4 C 1s, O 1s, N 1s, Si 2p and S 2p core-level spectra of nanoparticle-TiO₂ (curve a), nanoparticle-TiO₂-APTS (curve b), nanoparticle-TiO₂-3TA (curve c) and nanoparticle-TiO₂/PEDOT (curve d).

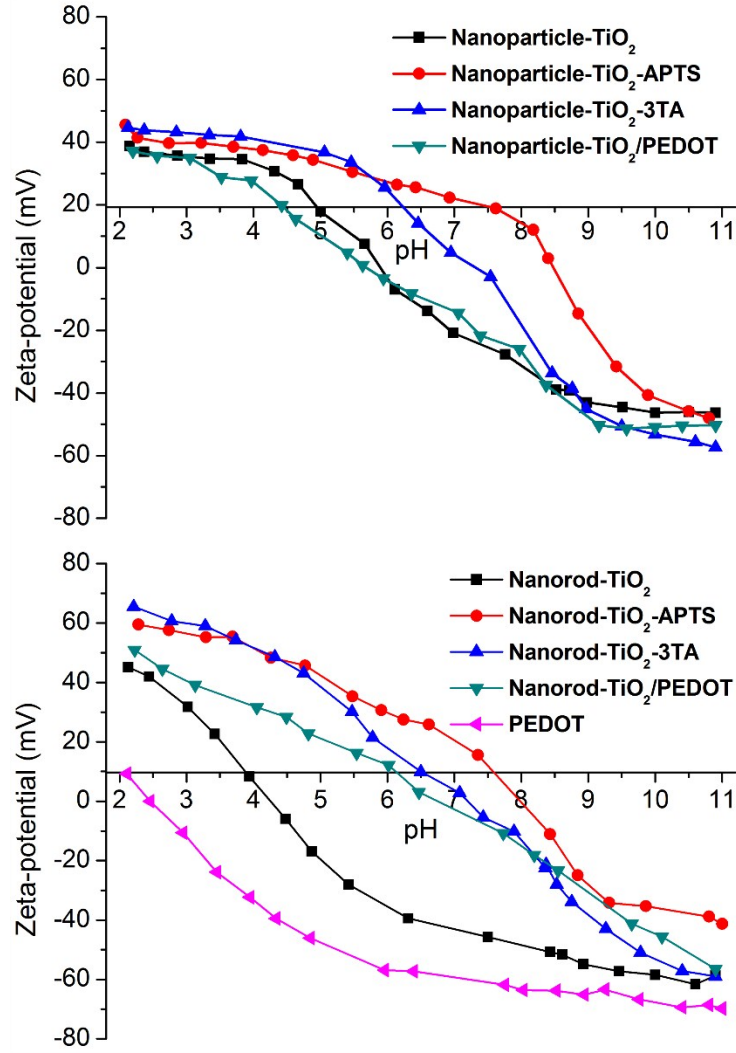


Fig. S5 Change in ζ -potential of the samples with pH.

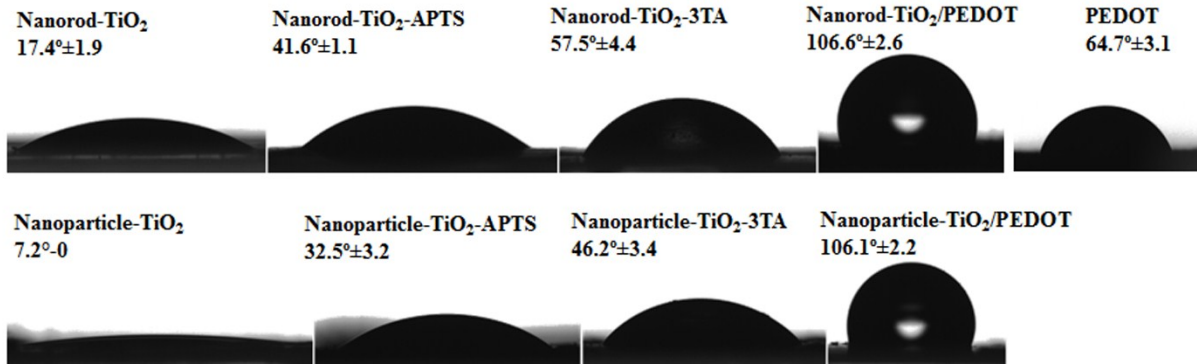


Fig. S6 CA images and θ values of the samples.

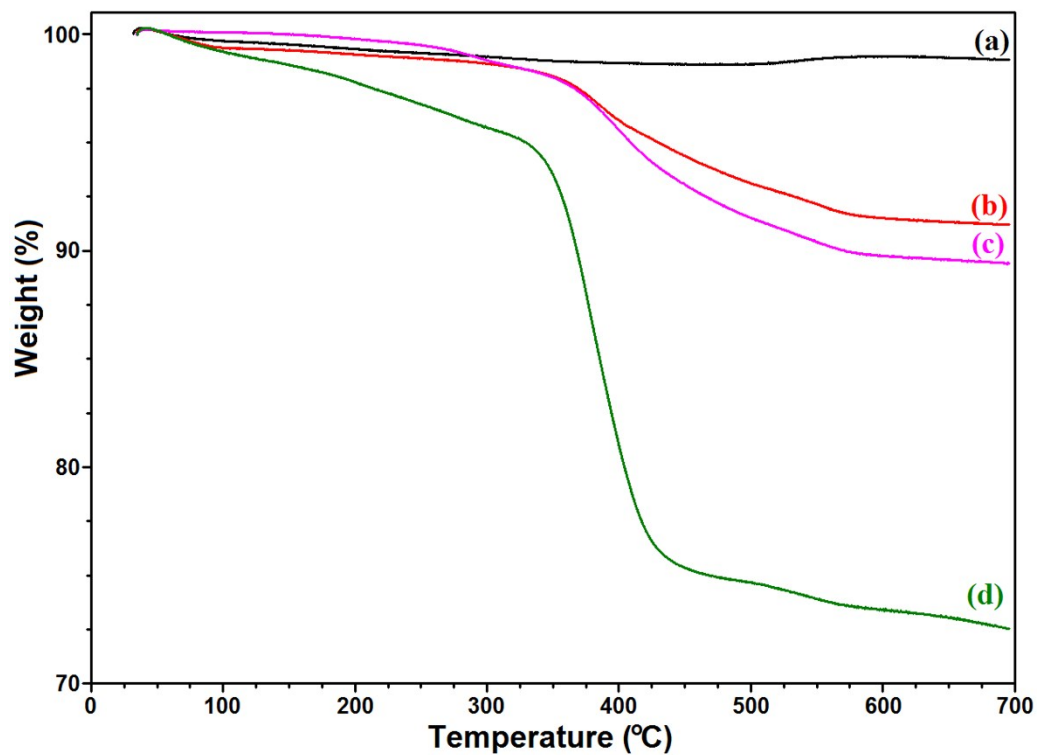


Fig. S7 TGA curves of nanoparticle-TiO₂ (a), nanoparticle-TiO₂-APTS (b), nanoparticle-TiO₂-3TA (c) and nanoparticle-TiO₂/PEDOT (d).