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

SUPPORTING INFORMATION

INSERTION OF NANOSTRUCTURED TITANATES INTO THE PORES OF AN ANODISED TIO_2 NANOTUBE ARRAY BY MECHANICALLY STIMULATED ELECTROPHORETIC DEPOSITION

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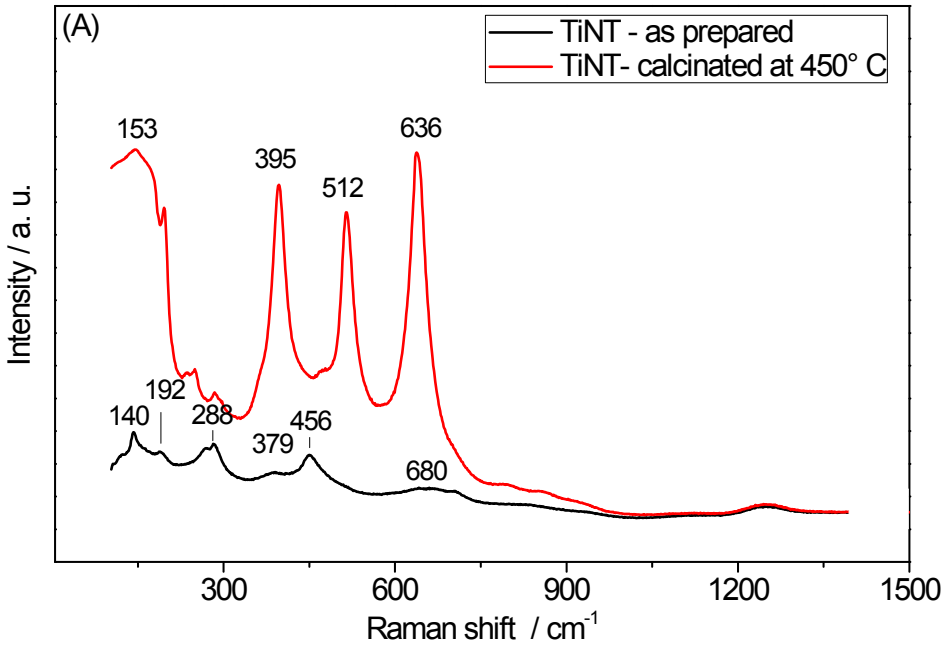

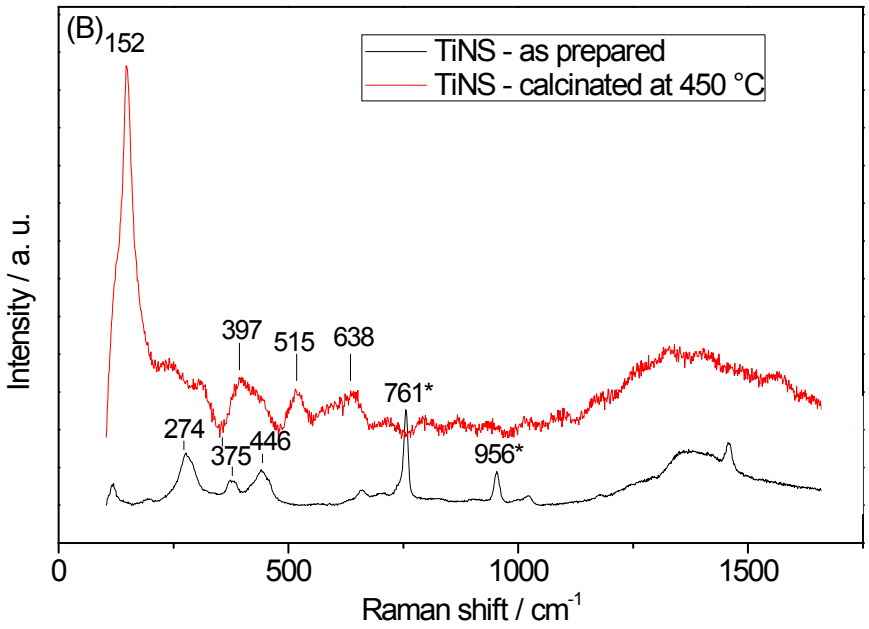

Fig. S1: Raman spectra of titanate nanotubes - TiNT (A) and nanosheets - TiNS (B) as prepared and calcinated at 450 °C. The asterisks tagged in the peaks of TiNS arise from TMAOH [1].

TEM characterization

The electronic transmission microscopy (TEM) was realized using a JEOL 3010 microscope, operating at 300 kV. The TiNS/TiO_2NT-EPDmod electrode was scratched and the substrate removed was sonicated for 5 min in ethanol then 100 µL was transferred onto a copper grid covered with a perforated carbon film.

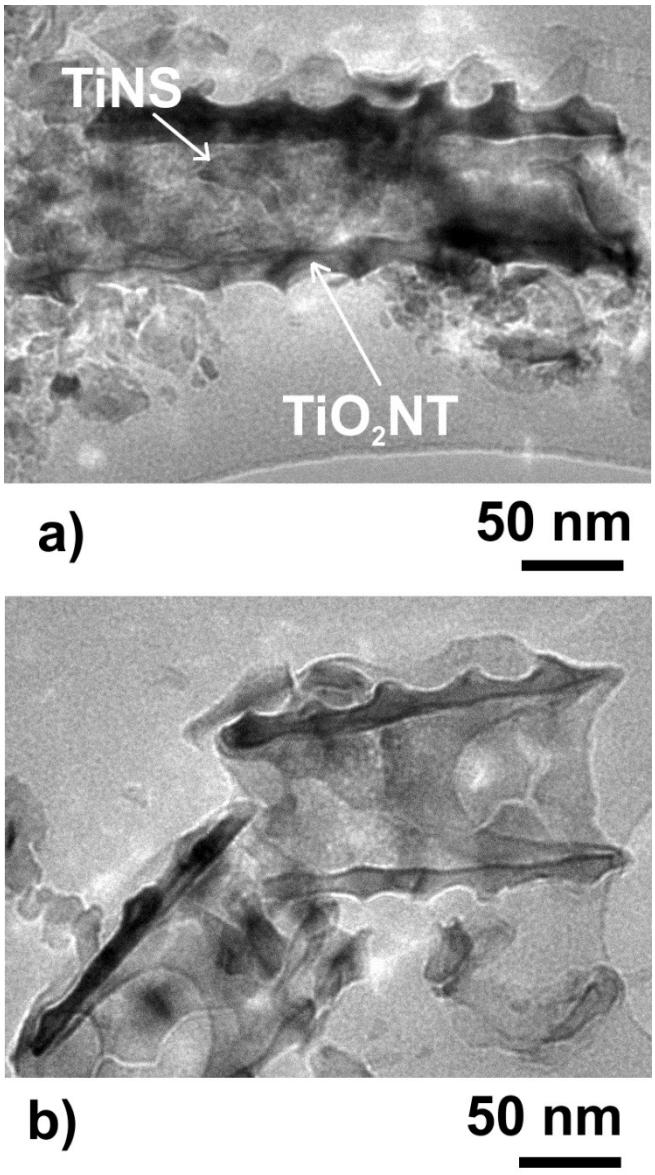

Figure S2: TEM image of (a) TiNS/TiO_2NT-EPDmod and (b) bare TiO_2NT. Arrows indicate corresponding structures. Sample has been obtained by scratching the coat from the substrate following its dispersion in ethanol under ultrasound.

References

[1] E. Tae, K. Lee, J. Jeong and K. Yoon, *J. Am. Chem. Soc.*, **130**, 2008, 6534-6543.