SUPPORTING INFORMATION

Synthesis of recrystallized anatase TiO₂ mesocrystal with Wulff shape assisted by oriented attachment

Rafael O. da Silva^a, Ricardo H. Gonçalves^a, Daniel G. Stroppa^b, Antonio J. Ramirez^b and Edson R. Leite^a*

^aChemistry Department, Federal University of São Carlos, São Carlos, SP, 13656-905, Brazil;

^b Brazilian Synchrotron Light Laboratory, Campinas, SP,13083-970, Brazil

*derl@power.ufscar.br

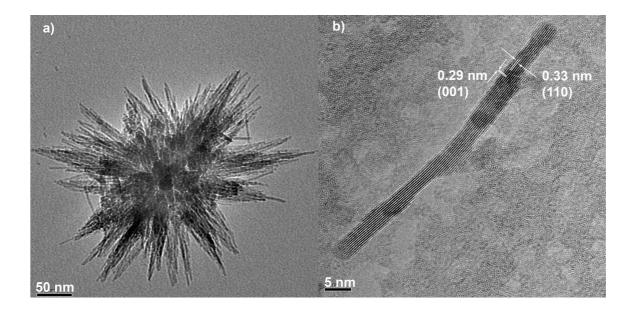


Figure S1 – a) Low magnification HRTEM image of the material synthesized at 100° C (24h of treatment time) with magnetic stirrer, showing a nanostructured material with fiber like morphology; b) High magnification HRTEM image showing a fiber in detail. The plane distance measured support the formation of TiO₂ rutile phase. XRD measurement of this sample confirms the formation of TiO₂ rutile phase (see Figure S2).

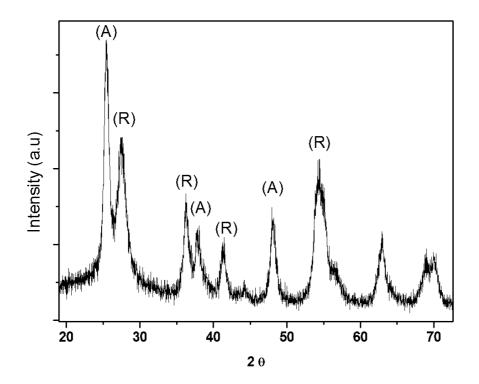


Figure S2 – XRD analysis of the material synthesized at 100° C (24h of treatment time) with magnetic stirrer, showing the formation of rutile TiO₂ phase. (A) = Anatase phase; (B) = Rutile phase.

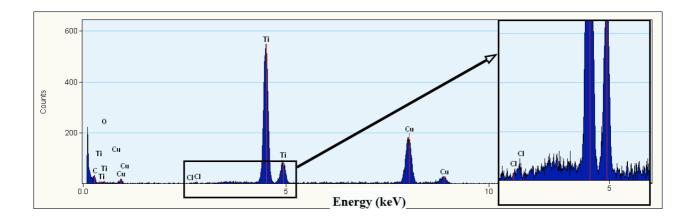


Figure S3 – TEM-EDS analysis of the material synthesized at 100°C (40h of treatment time), without magnetic stirrer. The inset shows in detail the energy region of Cl.