

SUPPORTING INFORMATION

A versatile new method for synthesis and deposition of doped, visible light-activated TiO₂ thin films

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Atomic force microscopy

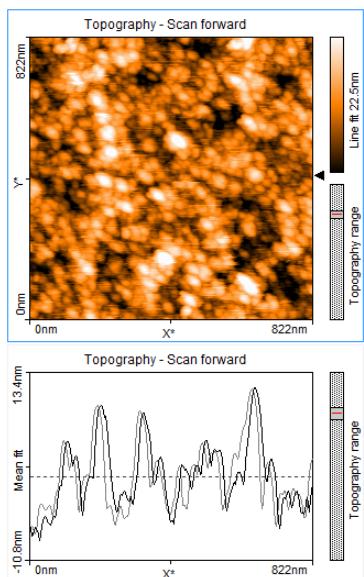


Figure 1. AFM image and topographical line scan of sample

Images were obtained in non-contact mode using a Nanosurf Nanite B instrument. Nanoparticle size estimated from the z-scale roughness is ~ 6 - 8nm. The larger features are due to agglomeration of nanoparticles.

PXRD, XPS and uv-vis spectroscopy

Film crystallinity was investigated using a Philips PW1820 X-ray powder diffractometer operating with copper radiation (Cu K_α).

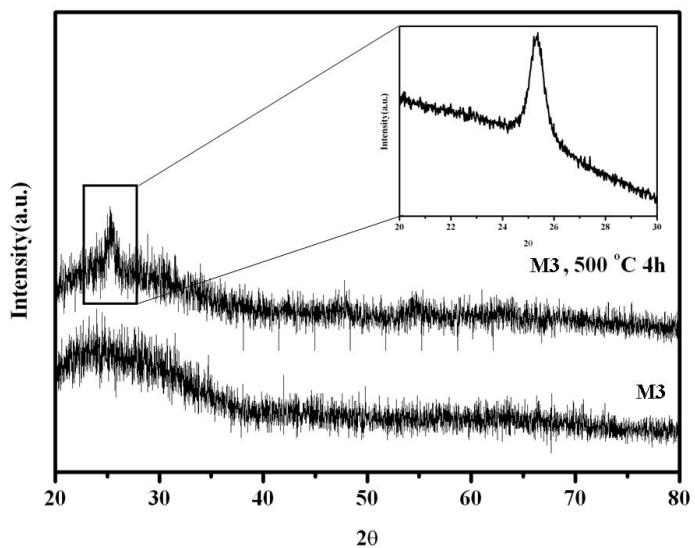


Figure 2. XRD data acquired from sample M3 before and after calcination showing conversion from amorphous state to crystalline anatase.

XPS data were acquired with a VG ADES 400 system operated at a base vacuum of 1.4×10^{-10} mbar.

Ultraviolet-visible absorption spectra were recorded on a Varian UV-Vis spectrometer 4000.