Supplementary Information

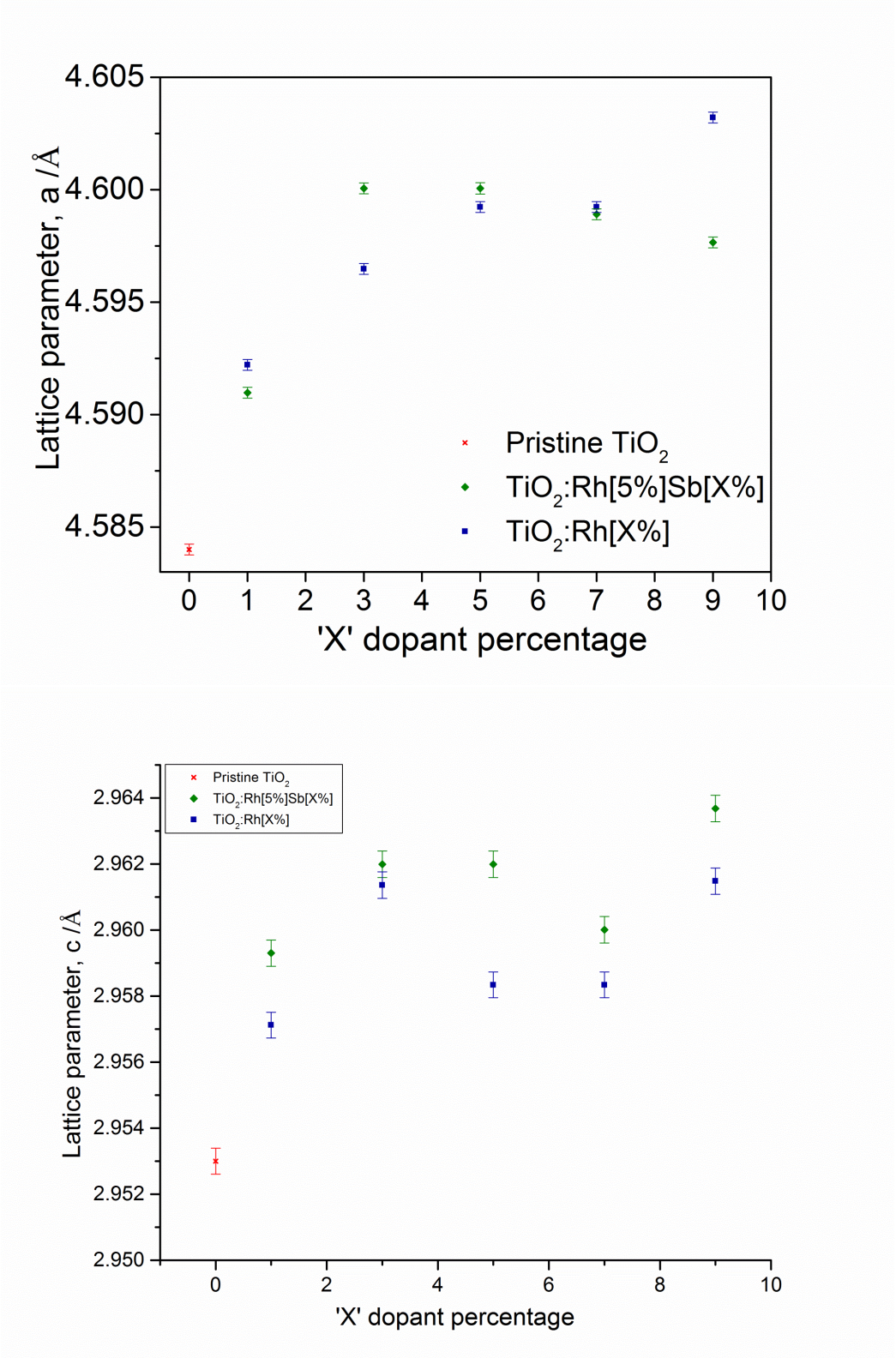

Figure S1: Lattice parameters a (top) and c (bottom) of pristine TiO2 (red x), Rh doped samples (green square) and Rh/Sb doped samples (green diamond).

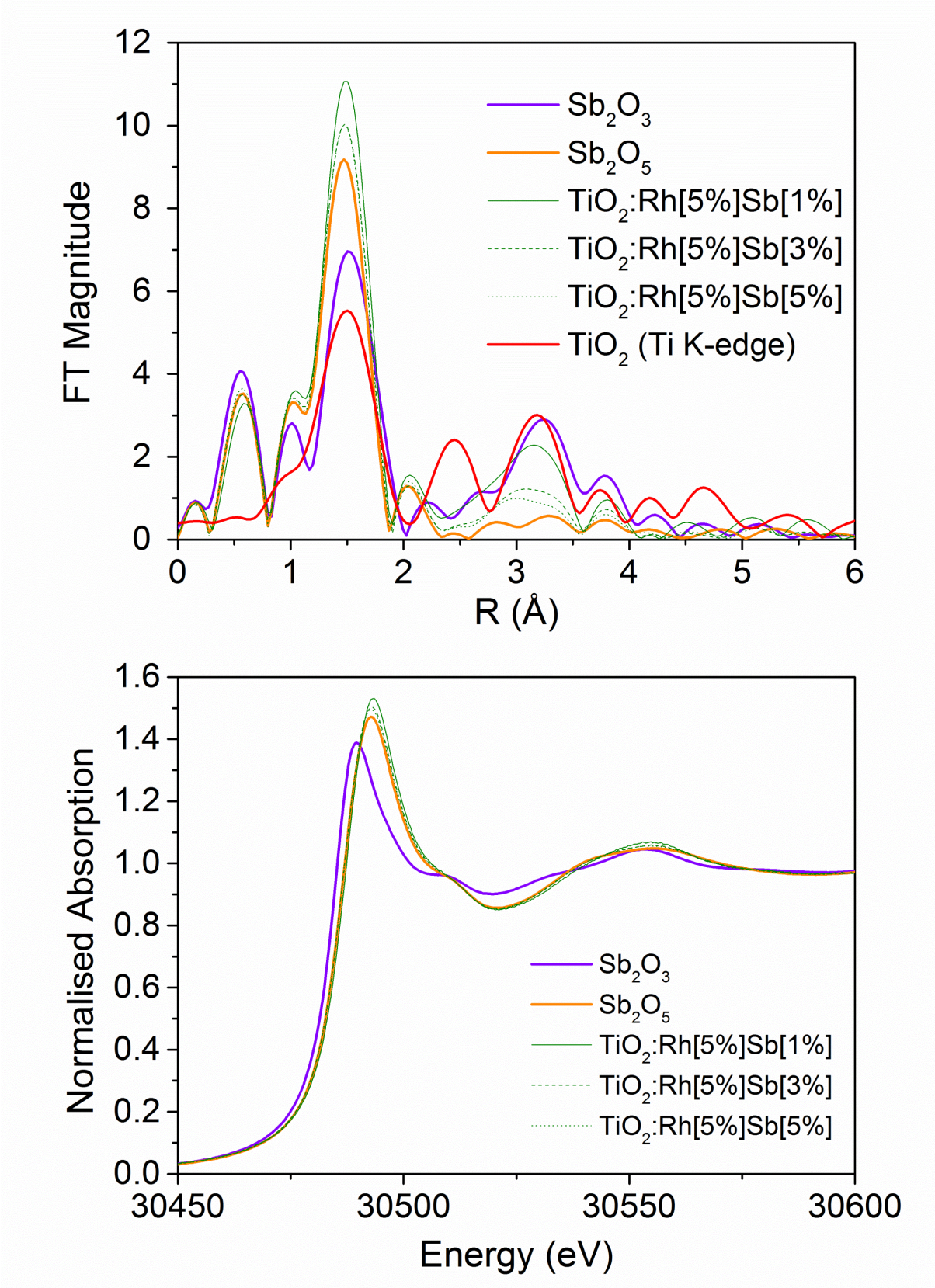

Figure S2:EXAFS Fourier Transform of TiO2Rh[5%]Sb[1%], TiO2Rh[5%]Sb[3%] and TiO2Rh[5%]Sb[5%] by comparison with TiO2 and Sb2O3 and Sb2O5 purchased powders, and 3b: Sb K-edge absorption spectra of Sb2O3, Sb2O5, TiO2Rh[5%]Sb[1%], TiO2Rh[5%]Sb[3%] and TiO2Rh[5%]Sb[5%]

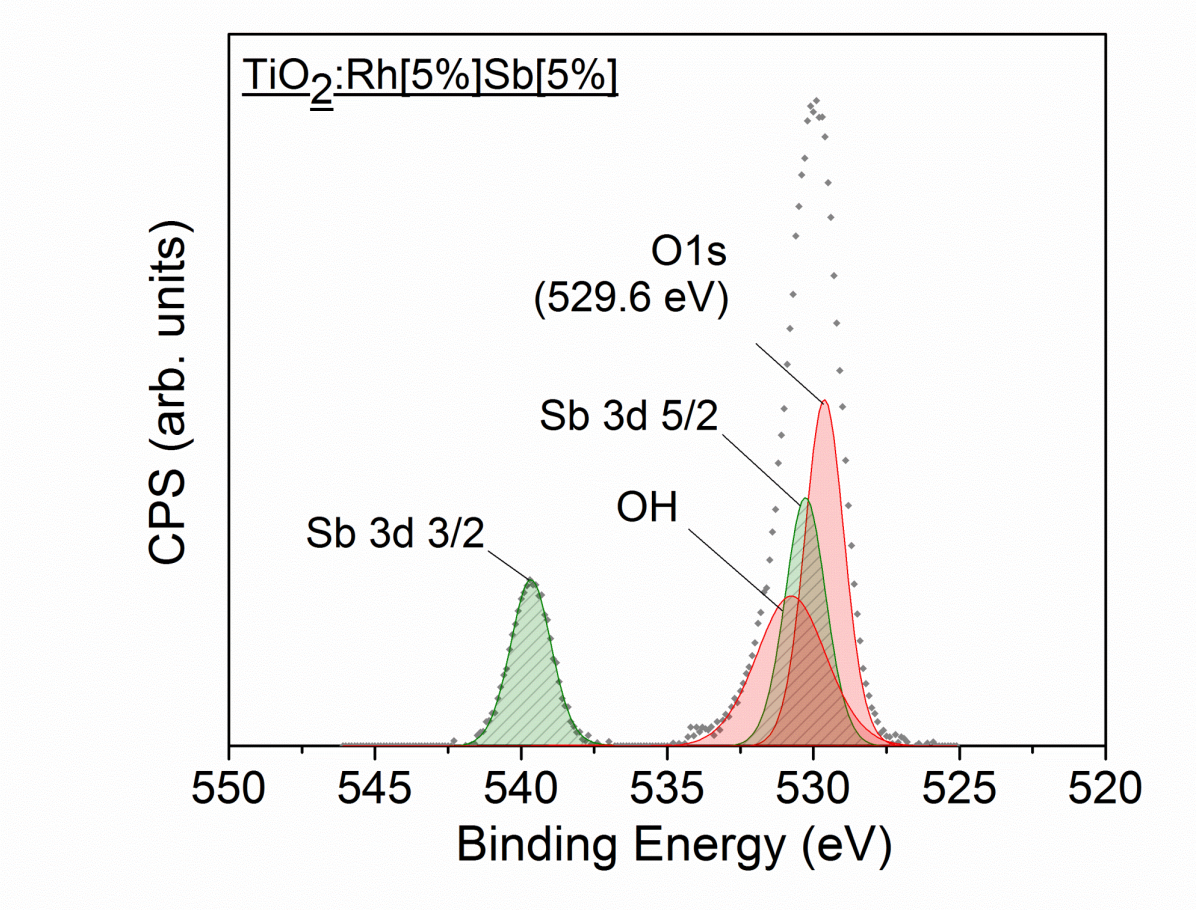

Figure S3: Example O1s/Sb3d spectrum showing the Sb 3d 3/2 and Sb 3d 5/2 peaks both in green, and O1s and OH peaks shown in red. The peak at 529.9 eV encompasses contributions from both oxygen and antimony; these have been deconvoluted by constraint the Sb 3d 5/2 contribution to the Sb 3d 3/2 peak, which is not masked by other elemental contributions. The remainder of the overall peak area has been attributed to the O1s core line and an OH shoulder.