

**Supporting information**

**Enhanced electrical properties of antimony doped tin oxide thin films deposited  
via aerosol assisted chemical vapour deposition**

Sapna D. Ponja<sup>a</sup>, Benjamin A. D. Williamson<sup>ab</sup>, Sanjayan Sathasivam<sup>a</sup>, David O. Scanlon<sup>abc</sup>, Ivan P. Parkin<sup>a</sup> and Claire J. Carmalt<sup>a\*</sup>

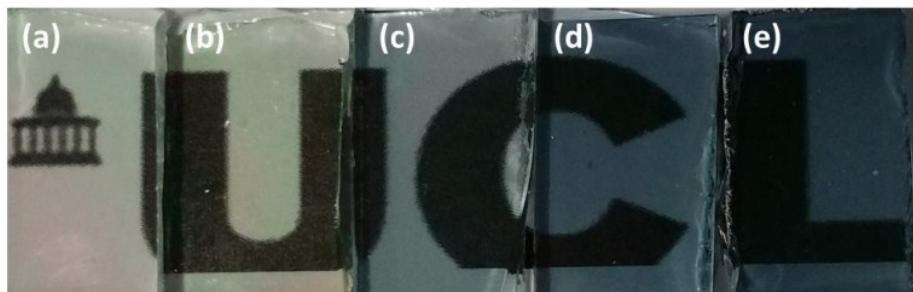
\*Corresponding author

<sup>a</sup>Materials Chemistry Centre, Department of Chemistry, University College London, 20 Gordon Street, London WC1H 0AJ, UK

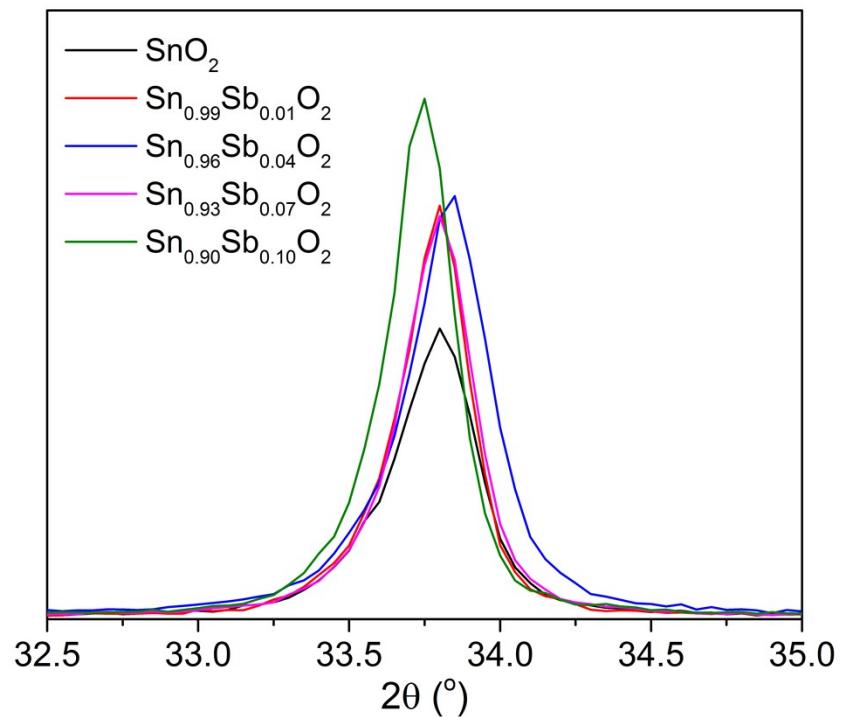
E-mail: [c.j.carmalt@ucl.ac.uk](mailto:c.j.carmalt@ucl.ac.uk)

<sup>b</sup>Thomas Young Centre, University College London, Gower Street, London WC1E 6BT, United Kingdom.

<sup>c</sup>Diamond Light Source Ltd., Diamond House, Harwell Science and Innovation Campus, Didcot, Oxfordshire OX11 0DE, UK.



**Figure S1: Photograph showing the visible light transparency and change in blue colour of the a) SnO<sub>2</sub>, b) Sn<sub>0.99</sub>Sb<sub>0.01</sub>O<sub>2</sub> c) Sn<sub>0.96</sub>Sb<sub>0.04</sub>O<sub>2</sub>, d) Sn<sub>0.93</sub>Sb<sub>0.07</sub>O<sub>2</sub> and e) Sn<sub>0.90</sub>Sb<sub>0.01</sub>O<sub>2</sub>**



**Figure S2:** The  $\text{SnO}_2$  (101) reflection for the undoped and ATO films showing a shift in the peak positions upon doping.