

Supplementary Information

to

In situ anion-doped epitaxial strontium titanate films

M. Tyunina^{a,b,*}, O. Pacherova^b, N. Nepomniashchaia^b, V. Vetokhina^b, S. Cichon^b, T. Kocourek^b, A. Dejneka^b

^aMicroelectronics Research Unit, Faculty of Information Technology and Electrical Engineering, University of Oulu, P. O. Box 4500, FI-90014, Finland.

^bInstitute of Physics of the Czech Academy of Sciences, Na Slovance 2, 18221 Prague, Czech Republic

*E-mail: marina.tjunina@oulu.fi ; tjunina@fzu.cz

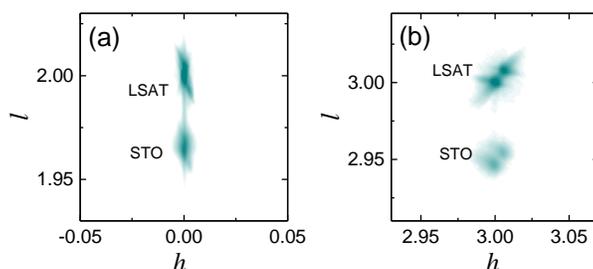


Fig. S1. XRD reciprocal space maps along (a) (002) and (b) (303) reciprocal lattice points in the 200-nm-thick STO film deposited at oxygen pressure of 5 Pa. Coordinates are given in reciprocal lattice units of LSAT substrate.

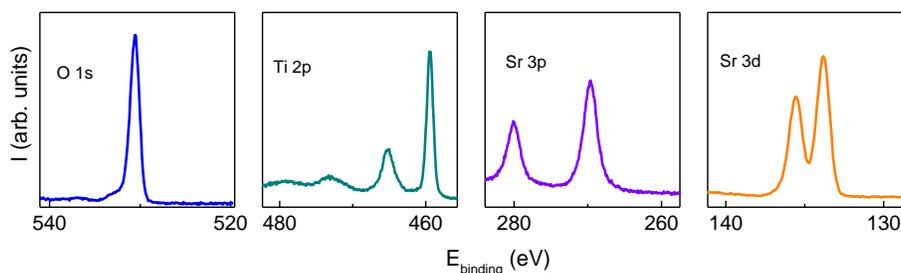


Fig. S2. Typical XPS lines employed for quantification.

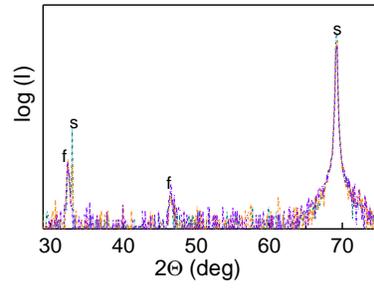


Fig. S3. XRD Θ - 2Θ scans in the 80-nm-thick STO films deposited at 5 Pa of oxygen, nitrogen, or hydrogen on SiO_2 -coated Si substrates. The peaks from substrates and films are marked by s and f, correspondingly.