

Properties of self-oxidized single crystalline perovskite N:BaTiO₃ oxynitrides epitaxial thin films

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Supplementary file

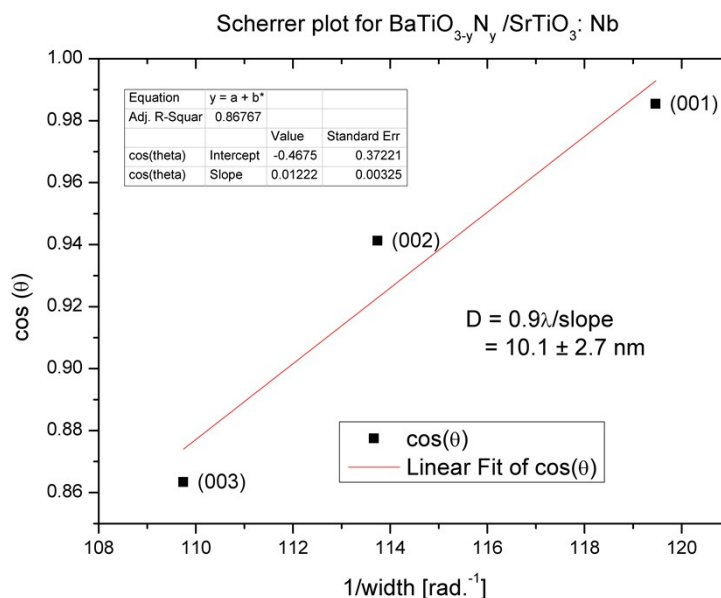


Figure S1. Scherrer plot for the N-doped BaTiO₃ layers. The measured data is represented by the solid squares and the linear fit by the red line

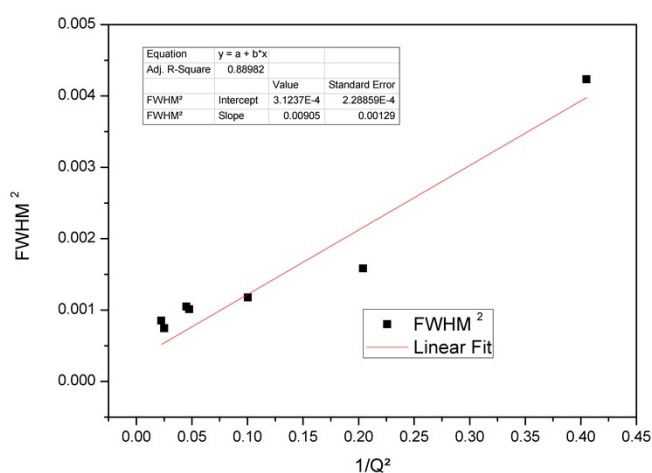


Figure S2. FWHM widths of all accessible in surface plane Bragg peaks of the N-doped BaTiO₃ layer as a function of 1/Q² (black) and best linear fit (red line).

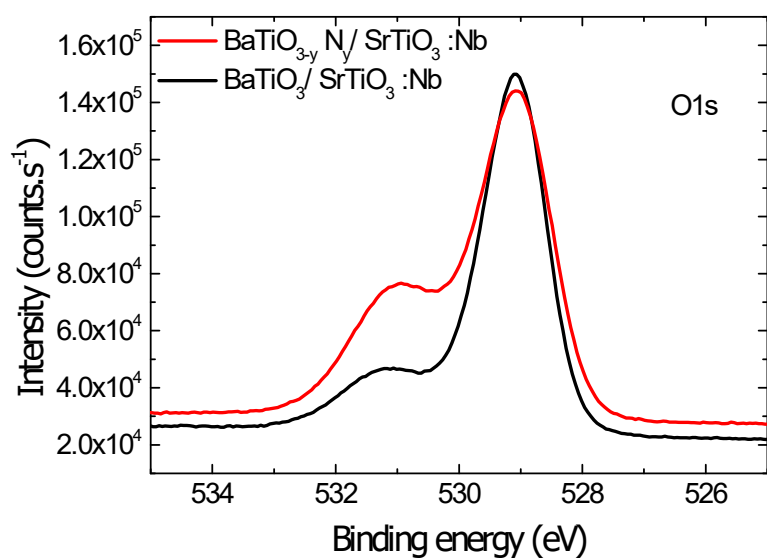


Figure S3. Photoemission O-1s core levels of undoped (black) and N-doped (red) BaTiO₃ layers.

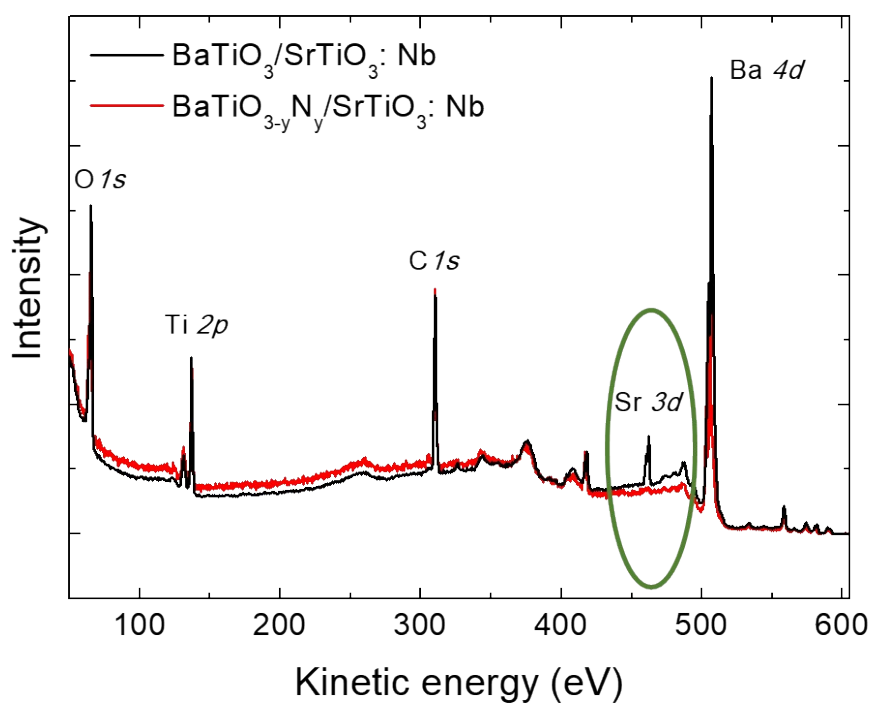


Figure S4. Wide photoemission scans of undoped (black) and N-doped (red) BaTiO₃ layers.

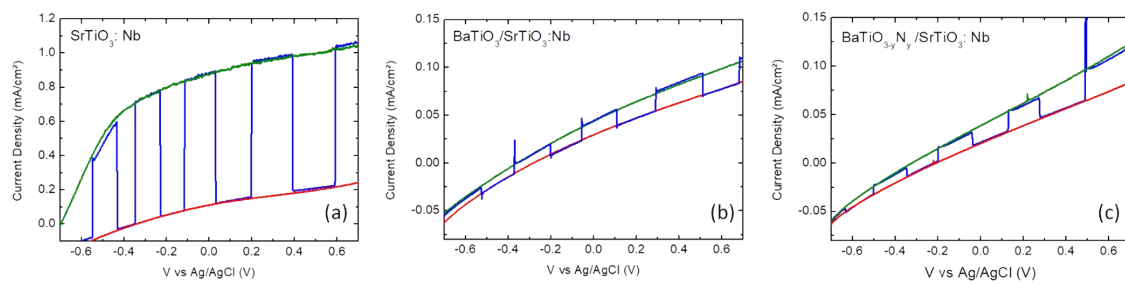


Figure S5. IV voltammetry curves, light ON (green curves), light OFF (red curves), light switched between ON and OFF (bleu curves) for (a) a bare SrTiO₃:Nb substrate, (b) a BaTiO₃ overlayer and (c) a N doped BaTiO₃ overlayer.