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Mechanical strain engineering of dielectric tunability in polycrystalline SrTiO₃ thin films

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Supplementary information



Figure S1. Strain $(d_{\psi}-d_0)/d_0$ of SrTiO₃ films deposited on Al₂O₃/Pt, SrTiO₃/Pt, and MgO/Pt substrates and their linear fits used for stress calculations.



Figure S2. In-plane average grain size (*left axis*) and roughness (*right axis*) of SrTiO₃ films deposited on Al₂O₃/Pt, SrTiO₃/Pt (ST/Pt) and MgO/Pt substrates.





Figure S3. In-plane surface morphology (*left*) and the corresponding 3D views (*right*) of $SrTiO_3$ thin films deposited on AI_2O_3/Pt (a), $SrTiO_3/Pt$ (b) and MgO/Pt (c) substrates obtained by atomic force microscopy.