Supporting Information

In Situ Atomic-Scale Study on the Ultralarge Bending Behaviors of TiO_2-B/Anatase Dual-Phase Nanowires

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Supporting movie information

Movie S1. *In situ* TEM bending test of a TiO_2-B/anatase dual-phase nanowire.

Supporting figures information

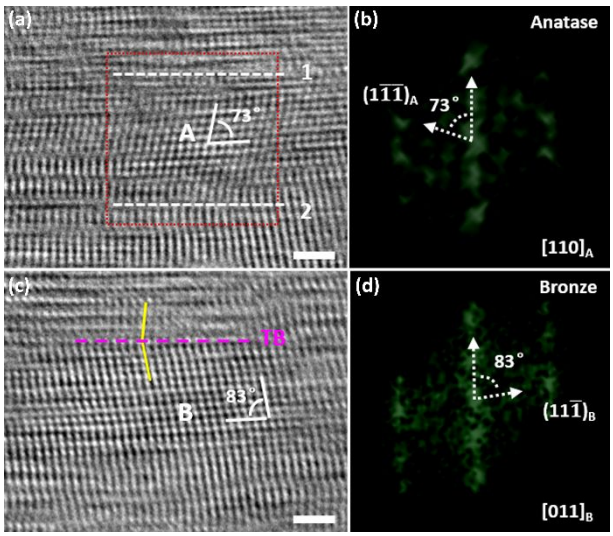

Figure S1. Observation of the phase transition with the bending strain increasing from 2.5% to 4.2%. (a) and (c) HRTEM images showing the lattice revolution of a mixed-phase area with the bending strain increasing from 2.5% to 4.2%, respectively. Scale bars: 2 nm. (b) and (d) The FFT patterns corresponding to the same region in the square box in (a) under the bending strains of 2.5% and 4.2%, respectively.

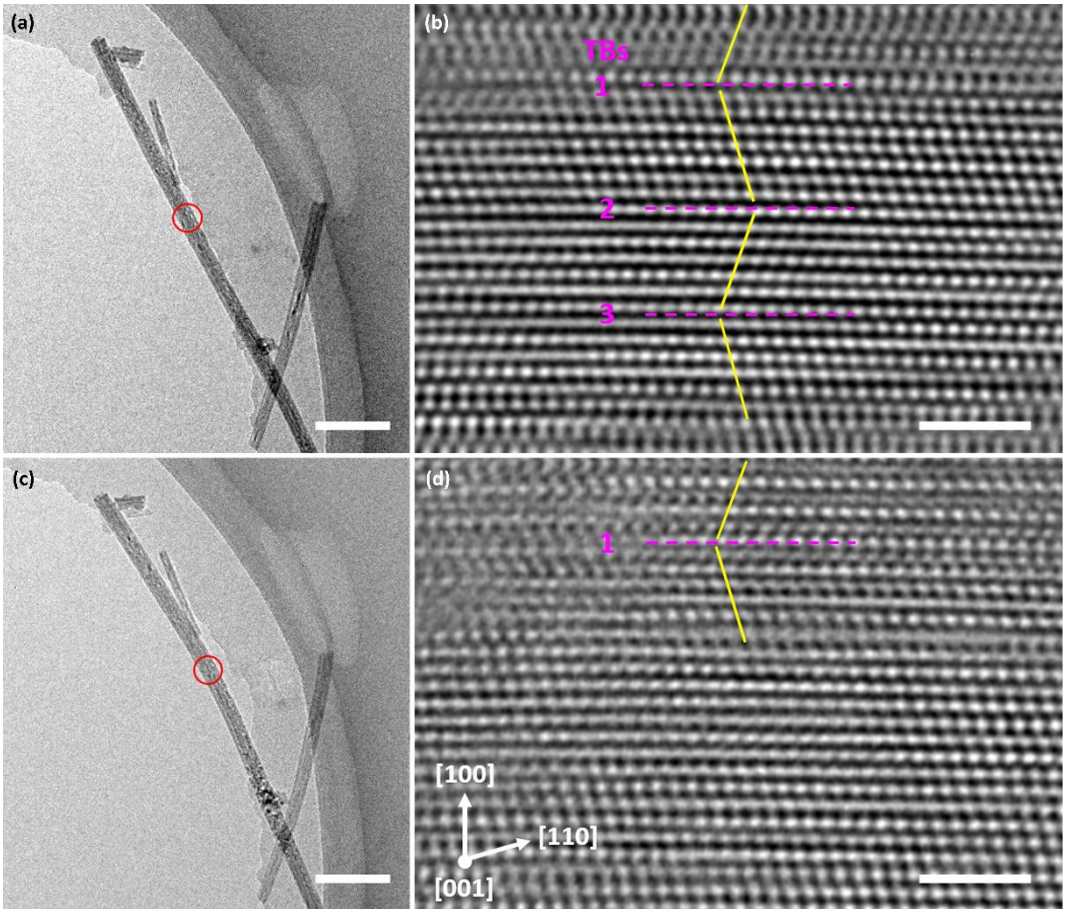

Figure S2. TB behaviors of a bending TiO_2 NW viewed along the [001] zone axis of TiO_2-B. (a) low-magnified and (b) HRTEM images of the NW before bent. (c) low-magnified and (d) HRTEM images of the same NW after bent. Scale bars: 200 nm in (a) and (c), 2 nm in (b) and (d).

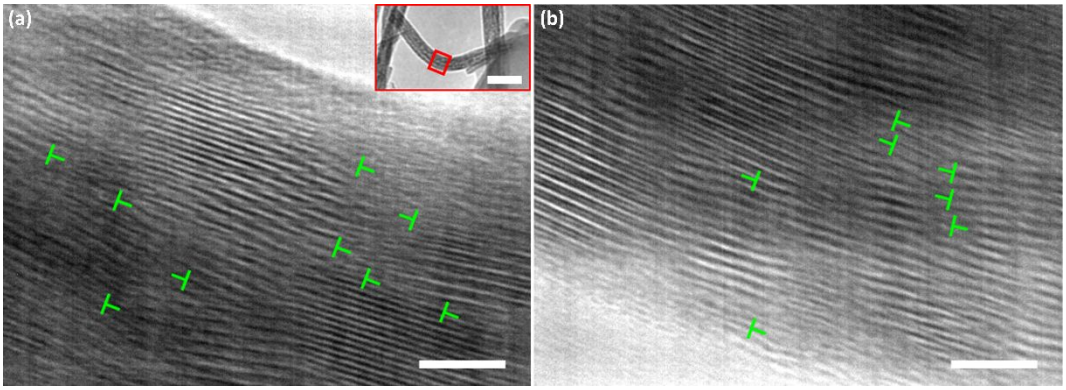

Figure S3. Dislocation patterns of the bent NW with a bending strain of 20.3%. (a,b) HRTEM images corresponding to the compressive and tensile regions of the framed area in the inset of (a), respectively. Scale bars: 5 nm in (a) and (b), 100 nm in the inset of (a).