Supplementary

High-temperature plastic deformation of <110>-oriented BaTiO₃ single crystals

Marion Höfling^{1,2*}, Lukas Porz¹, Michael Scherer¹, Shuang Gao^{1,3}, Fangping Zhuo¹, Daniel Isaia¹, Jürgen Rödel¹

^{*} Corresponding author: hoefling@ceramics.tu-darmstadt.de

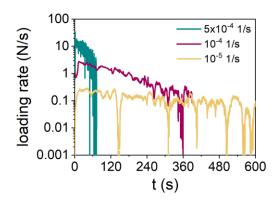


Fig. S1 Loading rate as function of time for the strain-rate control experiments in Figure 3a. The resulting loading rate of 20 N/s for the initial strain rate of $5x10^{-4}$ 1/s implies a high risk of sample failure in the first few seconds.

License: CC BY 4.0 International - Creative Commons, Attribution

¹ Department of Materials and Earth Sciences, Technical University of Darmstadt, 64287 Darmstadt, Germany

² Department of Physics, Technical University of Denmark, 2800 Kgs. Lyngby, Denmark

³ Key Laboratory of Advanced Technologies of Materials (Ministry of Education), School of Materials Science and Engineering, Southwest Jiaotong University, Chengdu 610031, PR China

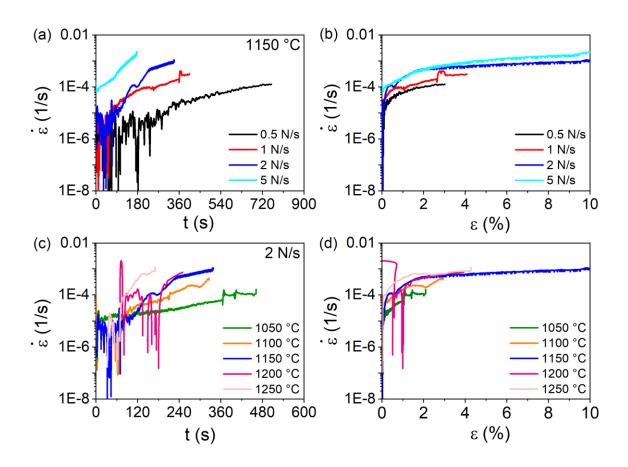


Fig. S2 Strain rate as a function of time and of strain for load control compression experiments at (a, b) different loading rates and (c,d) at different temperatures.

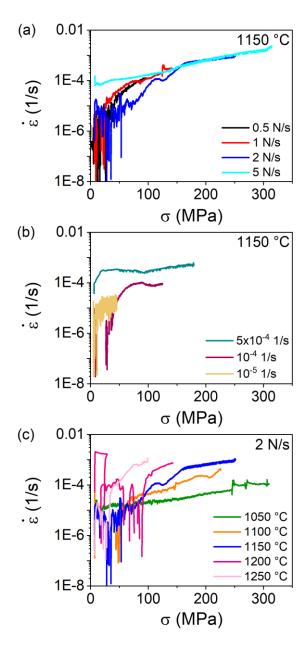


Fig. S3 Strain rate as a function of stress for (a) loading rate control, (b) strain rate control and (c) temperature dependent load control experiments.