Supplementary information for the manuscript

Dynamic Deformation Behaviors in Single Body-Centered-Cubic (BCC) phase Refractory High-entropy Alloys

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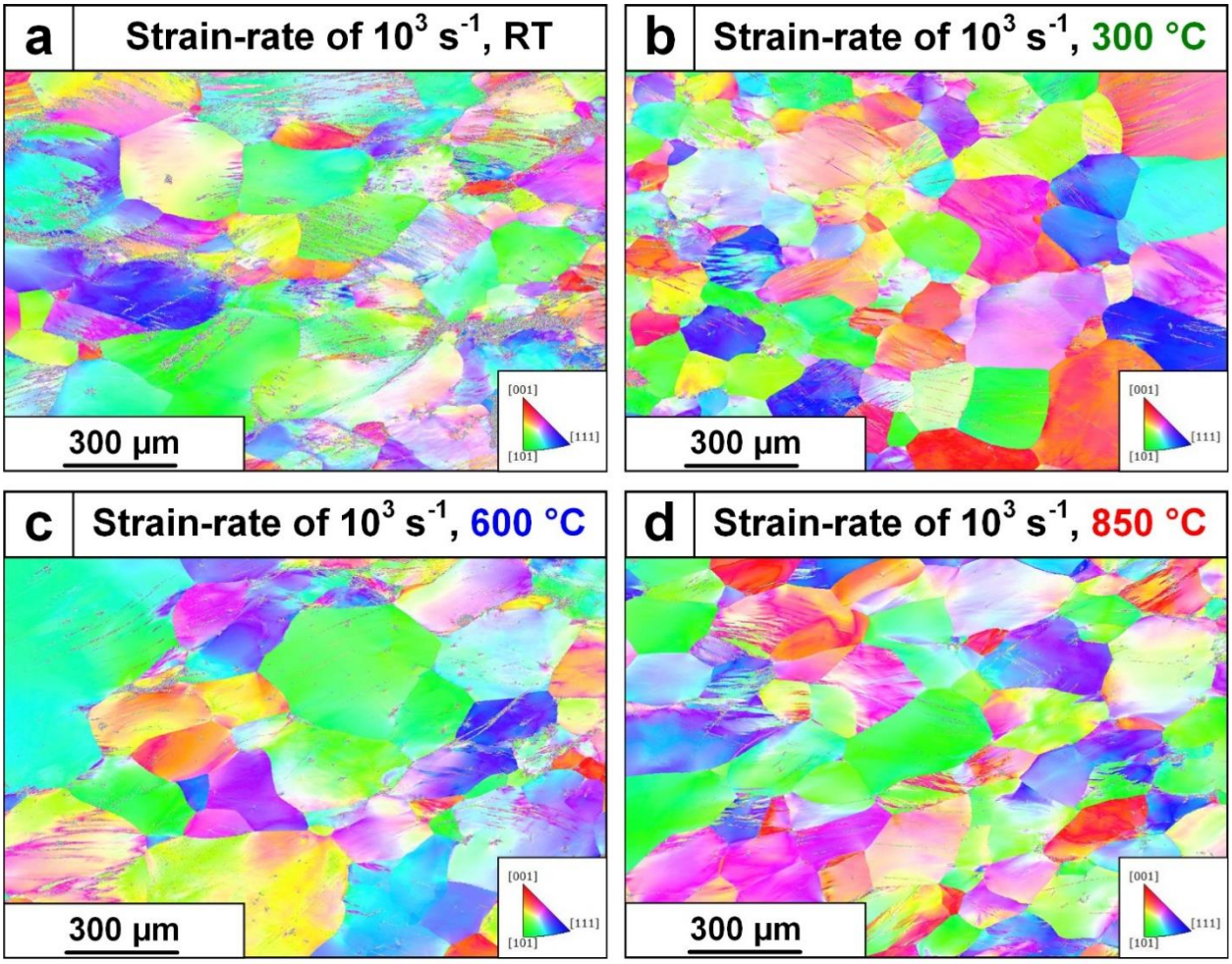
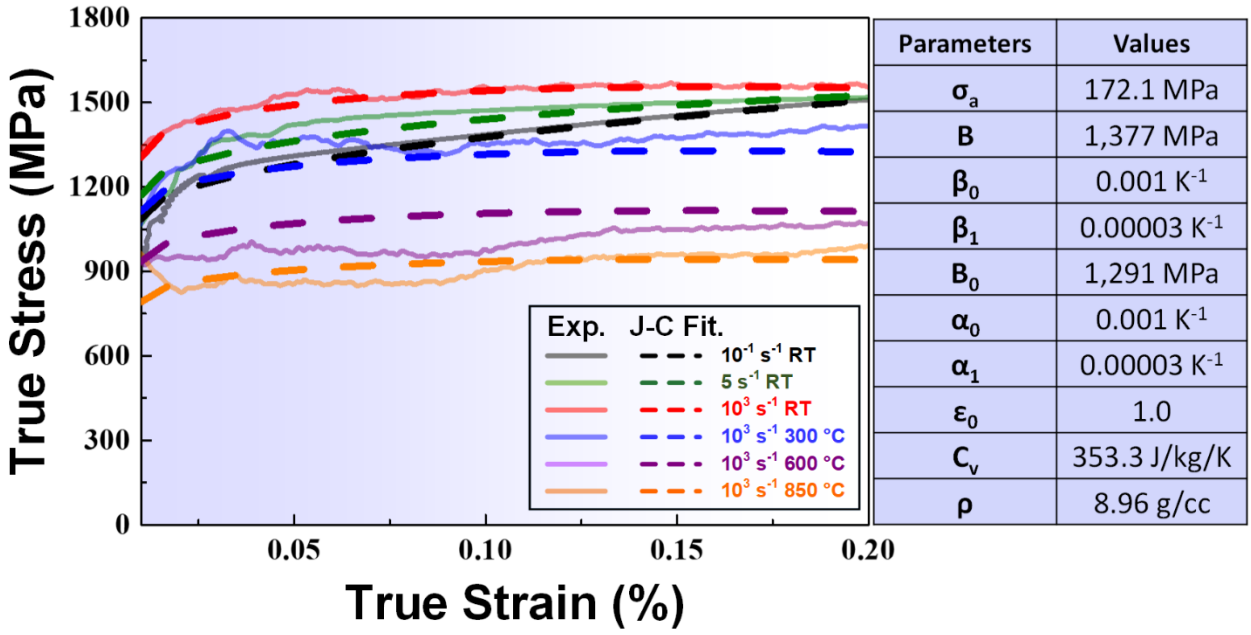


Supplementary Figure S1. The electron backscatter diffraction (EBSD)-inverse pole figure (IPF) images obtained from the deformed NbTaTiV at elevated temperature. a, RT, **b**, 300 °C, **c**, 600 °C, and **d**, 850 °C after deformation at a strain-rate of 10^3 s^{-1}.



Parameters	Values
σ_a	172.1 MPa
B	1,377 MPa
β_0	0.001 K^{-1}
β_1	0.00003 K^{-1}
B_0	1,291 MPa
α_0	0.001 K^{-1}
α_1	0.00003 K^{-1}
ε_0	1.0
C_v	353.3 J/kg/K
ρ	8.96 g/cc

Supplementary Figure S2. The modified Zerilli-Armstrong modeling as function of strain-rate and temperature. True experimentally obtained stress-strain curves for the NbTaTiV at various strain-rates and temperatures and fitting curves employed by the modified Zerilli-Armstrong constitutive model. Optimized parameters for the constitutive strength model (modified Z-A) for the NbTaTiV are presented, while the figure shows the experimental and model curves for a representative set of test conditions.