Sample of initial length $(L_0)_z$ = 30.3 nm.

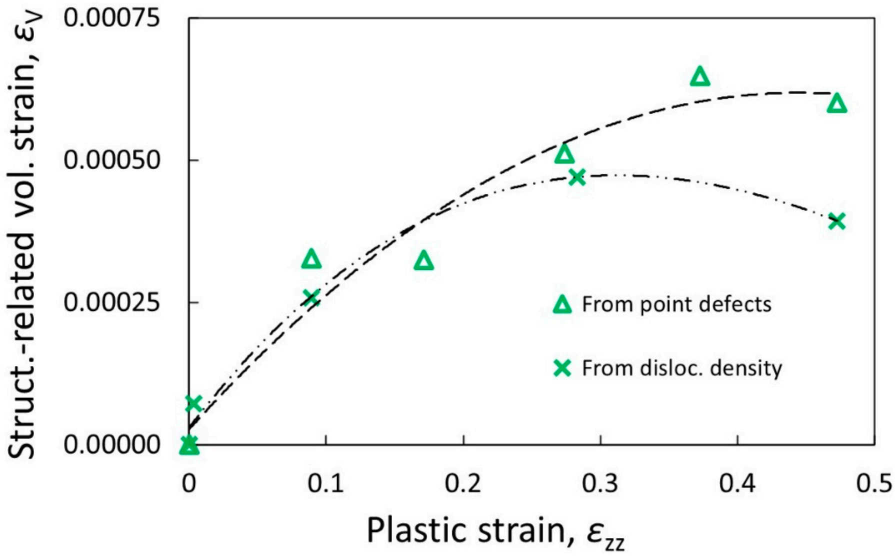

Figure S1. Contribution of point defects and dislocation density to volume deformation as a function of plastic elongation.

Contribution to volume deformation ε_V

Table S1. DISLOCATIONS. Data from measurements of dislocation density $\boldsymbol{\rho}$ inside the grains.

ε	ρ (10^{16} m^{-2})	$10^4 \cdot (\varepsilon_V)_{pl}$
0	0	0
0.049	0.23	0.726
0.12	0.83	2.59
0.31	1.51	4.71
0.5	1.26	3.94

Dislocation density inside the grains as a function of total strain ε calculated from quantitative stereology method (length per unit volume calculated from line intersection method on axial projections, volume corrected for GB volume).

Table S2. POINT DEFECTS. Data from measurements of point defects density N_V inside the grains.

ε	N_V (nm^{-3})	$10^{-4} \cdot (\varepsilon_V)_{pl}$
0	0	0
0.12	0.0209	3.3
0.2	0.0208	3.2
0.3	0.0328	5.1
0.4	0.0415	6.5
0.5	0-0384	6.0

Point defect density per unit volume as a function of total strain ε calculated from point counting method on axial projections of sections 10 nm thick, effective thickness assumed as (10 nm + 3·r_d); excess volume per defect assumed b^3 and radius of defect $r_d = 0.6035\,nm$.