NOMENCLATURE

σ_b, σ_τ	ultimate (nominal) stress or yield stress, respectively;
σ_S	ultimate shear strength;
ε_b, ε_f	strain values at ultimate (nominal) strength or fracture stress, respectively;
v_d	cross-head speed (tension or compression) of the test machine;
ε^*	creep-strain rate (creep rate);
ε_0^*	diffusion-controlled flow strain in solid helium;
υ_l, υ_t	longitudinal or transverse sound speed, respectively, in a crystal;
a, b, c	crystal lattice parameters;
b	Burgers vector;
ρ'	locked dislocation density;
ρ_0	mobile dislocation density;
C_{ij}	elastic constants;
B_T, B_S	isothermal or adiabatic elastic modulus, respectively;
E_S, G_S	adiabatic Young's modulus or adiabatic shear modulus, respectively;
E_c, G_c	static Young's modulus or static shear modulus, respectively;
T_m	melting temperature;
η^*	solid-state viscosity;
ρ	substance density;
U	activation energy of plastic deformation of a crystal;
U_0	energy barrier for dislocation motion in a crystal;
γ	activation volume of plastic deformation of a crystal;
τ, τ_0, τ_f	current, initial, or limiting stress, respectively, in a crystal under stress-relaxation condition;
ξ	width of dislocation;

ζ	stacking-fault energy;
ξ^*, s^*	stress-relaxation constants;
H	hardness;
ν_0	oscillation frequency of atoms or molecules;
a_k	impact toughness;
f	frequency of torsion oscillations;
Δ	low-frequency damping;
Q^{-1}	internal friction;
σ_L, ε_L	potential constants of atomic (molecular) interaction;
M	work-hardening coefficient of crystals;
λ_t, λ_φ	De Boer's parameter of translation or libration oscillations, respectively;
h	Planck's constant;
h_0	indentation depth (hardness measurements);
α_0	logarithmic-creep constant of crystalline materials;
β	exponential-creep coefficient of crystalline materials;
m	strain exponent for high-temperature creep of polycrystalline materials.