FZU
Institute of Physics of the Czech Academy of Sciences

SEMINAR

28. 07. 2022 at 14:00

Meeting Room 117, Na Slovance 1999/2, Prague 8

Elizaveta IAPAROVA

Department of Functional Materials, Division of Condensed Matter Physics

Plastic deformation of NiTi SME wire upon heating under controlled applied stress

Results of a series of thermomechanical loading tests on 15 ms nanocrystalline NiTi SME wire involving heating under constant tensile stress until fracture will be reported and discussed in view of the existing knowledge of thermomechanical behaviours of NiTi SME wires with different microstructures.

The wires behavior on heating strongly depends on the stress applied at low temperature, and a dependence of yield stress in martensite on the deformation temperature obtained before allows to predict the beginning of plasticity in NiTi upon heating.

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