1. Record Nr. UNINA9910346700503321

Autore	Chen Ying
Titolo	Deformation Behavior of Thin Metallic Wires under Tensile and Torsional Loadings
Pubbl/distr/stampa	KIT Scientific Publishing, 2013
ISBN	1000035547
Descrizione fisica	1 online resource (V, 158 p. p.)
Collana	Schriftenreihe des Instituts für Angewandte Materialien, Karlsruher Institut für Technologie
Soggetti	Technology: general issues
Lingua di pubblicazione	Tedesco
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Size effects are widely observed in the mechanics of materials at the micron scale. However, the underlying deformation mechanisms remain ambiguous, particularly in the presence of strain gradients. In this work, combined microstructural investigations and mechanical tests (tension and torsion) were conducted on polycrystalline gold micro wires to determine the influences of specimen size, grain size, strain rate and loading type on the deformation behavior of the wires.