1. Record Nr. UNINA9910783485203321

Autore	Puskar Anton
Titolo	Internal friction of materials [[electronic resource] /] / Anton Puskar
Pubbl/distr/stampa	Cambridge, UK, : Cambridge International Science Publishing, 2003
ISBN	1-280-36122-0 9786610361229 1-904602-50-9
Descrizione fisica	1 online resource (342 p.)
Disciplina	620.11292
Soggetti	Internal friction Plasticity Materials - Dynamic testing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 313-322) and index.
Nota di contenuto	Preliminaries; Preface; CONTENTS; 1 AIMS OF INTERNAL FRICTION MEASUREMENTS; 2 NATURE AND MECHANISMS OF ANELASTICITY; 3 FACTORS AFFECTING ANELASTICITY OF MATERIALS; 4 MEASUREMENTS OF INTERNAL FRICTION AND THE DEFECT OF THE YOUNG MODULUS; 5 STRUCTURAL INSTABILITY OF ALLOYS; 6 CYCLIC MICROPLASTICITY; References; Index
Sommario/riassunto	The author presents important new results for the relationship between internal friction and the defect of the elasticity modulus with many principal processes such as plastic deformation, effect of temperature of plastic deformation, effects on the structural stability of alloys and composites up to cyclic microplasticity. The existence of critical strain amplitudes is discussed and supported by experiments, and attention is given to the link of cyclic microplasticity with dislocation density and activation volume of plastic deformation up to the effect of individual factors on the cyclic