

1. Record Nr.	UNINA9910164287603321
Titolo	Time Dependent and Nonlinear Effects in Polymers and Composites
Pubbl/distr/stampa	[Place of publication not identified], : American Society for Testing & Materials, 2000
ISBN	0-8031-5417-8
Descrizione fisica	1 online resource (vii, 377 pages)
Collana	ASTM special technical publication ; ; 1357
Disciplina	620.1/9204292
Soggetti	Composite materials - Mechanical properties Polymers - Mechanical properties
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Sommario/riassunto	Annotation Improved reliability in commercial and military applications requires improved understanding of and predictive models for the time- dependent and nonlinear mechanical behavior of polymeric composites. The May 1998 American Society for Testing and Materials symposium sought to fuse the efforts in this direction of specialists in polymers and composites; these 18 papers are therefore grouped under the subheadings of polymers and composites. Primary polymer topics are chemical and physical aging, nonlinear viscoelasticity, and viscoplasticity. Composites' issues include: the effect of physical aging on time-dependent behavior, multiaxial nonlinear effects, compressive behavior, nonlinear viscoelasticity and viscoplasticity, failure mechanisms, hygrothermal effects, durability, and accelerated strength testing. Schapery is affiliated with the U. of Texas at Austin, and Sun is at Purdue U. Annotation copyrighted by Book News, Inc., Portland, OR.