

1. Record Nr.	UNINA9910799942703321
Autore	Bukhina M. F (Maia Faddeevna)
Titolo	Low-temperature behaviour of elastomers // M.F. Bukhina and S.K. Kuryand
Pubbl/distr/stampa	Leiden ; ; Boston : , : VSP, , 2007
ISBN	0-429-08799-3 1-281-92650-7 9786611926502 90-474-2242-2 1-60119-402-1
Descrizione fisica	1 online resource (193 p.)
Collana	New concepts in polymer science ; ; 31
Altri autori (Persone)	KuryandS. K
Disciplina	547.842
Soggetti	Elastomers - Thermal properties Materials at low temperatures
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. [157]-181) and indexes.
Nota di contenuto	Front Cover; Contents; Foreword; Introduction; 1. Glass transition of elastomers; 2. Mechanical properties of elastomers near the glass transition temperature; 3. Crystallization of elastomers at low temperatures; 4. Stress-induced crystallization of elastomers; 5. Strength properties of elastomers at low temperatures; 6. Contribution of crystallization and glass transition to low-temperature resistance of elastomers; 7. Low-temperature resistance specifics of particular elastomers; References
Sommario/riassunto	This book focuses on the effect the composition of rubbers and the conditions of their processing have on low-temperature resistance. It considers the nature and development of two physical processes, glass transition and crystallization, determining low-temperature behavior of elastomers. The book addresses the effects of deformation, pressure, and temperature on these processes. It discusses the contribution of different factors in frost-resistance of elastomeric materials and articles and the possibility of increasing frost-resistance by optimization of composition and design.

