

1. Record Nr.	UNINA9910366597203321
Titolo	Shape Memory Polymers, Blends and Composites : Advances and Applications // edited by Jyotishkumar Parameswaranpillai, Suchart Siengchin, Jinu Jacob George, Seno Jose
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2020
ISBN	981-13-8574-2
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (X, 329 p. 193 illus., 134 illus. in color.)
Collana	Advanced Structured Materials, , 1869-8433 ; ; 115
Disciplina	620.11
Soggetti	Engineering—Materials Polymers Ceramics Glass Composite materials Materials Engineering Polymer Sciences Ceramics, Glass, Composites, Natural Materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction to Shape Memory Polymers, Polymer Blends and Composites: State of The Art, Opportunities, New Challenges and Future Outlook -- Classification of Shape Memory Polymers, Polymer Blends and Composites -- Novel Techniques for the Preparation of Shape Memory Polymers, Polymer Blends and Composites at Micro and Nano Scales -- Rheology of Shape Memory Polymers Polymer Blends and Composites -- Microscopy of Shape Memory Polymers, Polymer Blends and Composites -- Dynamical Mechanical Thermal Analysis of Shape Memory Polymers, Polymer Blends and Composites -- Differential Scanning Thermal Analysis of Shape Memory Polymers, Polymer Blends and Composites -- Thermal Stability of Shape Memory Polymers Polymer Blends and Composites -- Mechanical Properties (Shape Memory Properties by Tensile and Tree Point Bending, Fracture Behavior, Toughening Etc. of Shape Memory Polymers, Polymer Blends and Composites -- Completely Biodegradable Shape Memory Polymers,

Blends and Composites -- Optical, Electrical and Magnetic Properties of Shape Memory Polymers Polymer Blends and Composites -- Spectroscopy and Other Miscellanies Techniques for The Characterization of Shape Memory Polymer Blends and Composites -- Modeling of Shape Memory Polymer Blends and Composites -- Applications of Shape Memory Polymer Blends and Composites.

Sommario/riassunto

This book explores the recent advances in the field of shape memory polymers, whose ease of manufacturing and wide range of potential applications have spurred interest in the field. The book presents details about the synthesis, processing, characterization, and applications of shape memory polymers, their blends and composites. It provides a correlation of physical properties of shape memory polymers with macro, micro and nano structures. The contents of this book will be of interest to researchers across academia and industry. .
