Record Nr.	UNINA9910459116103321
Titolo	Shape-memory polymers and multifunctional composites / / editors, Jinsong Leng, Shanyi Du
Pubbl/distr/stampa	Boca Raton : , : Taylor & Francis, , 2010
ISBN	0-429-09335-7 1-62870-640-6 1-4200-9020-8
Descrizione fisica	1 online resource (386 p.)
Altri autori (Persone)	LengJinsong DuShanyi
Disciplina	620.1/920429
Soggetti	Composite materials Polymers - Thermomechanical properties Shape memory effect Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	A CRC title.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front cover; Contents; Preface; Editors; Contributors; Chapter 1: Overview of Shape-Memory Polymers; Chapter 2: The Structural Variety of Shape-Memory Polymers; Chapter 3: Thermomechanical Behavior and Modeling Approaches; Chapter 4: Thermomechanical Characterizations of Shape-Memory Polymers (Dual/Triple-Shape) and Modeling Approaches; Chapter 5: Electrical, Thermomechanical, and Shape-Memory Properties of the PU Shape-Memory Polymer Filled with Carbon Black; Chapter 6: Multifunctional Shape-Memory Polymers and Actuation Methods; Chapter 7: Shape-Memory Polymer Composites Chapter 8: Applications of Shape-Memory Polymers in Aerospace Chapter 9: Shape-Memory Polymer Foam and Applications; Chapter 10: Shape-Memory Polymer Textile; Chapter 11: Applications of Shape- Memory Polymers in Biomedicine; Chapter 12: Novel Applications and Future of Shape-Memory Polymers; Index; Back cover
Sommario/riassunto	Admired for their extraordinary stimuli-sensitive behavior and shape- changing capabilities, shape-memory polymers (SMPs) and multifunctional composites are among the most important smart

1.

materials. They continue to be widely applied in many diverse fields to create things such as self-deployable spacecraft structures, morphing structures, SMP foams, smart textiles, and intelligent medical devices. Written by renowned authors, Shape-Memory Polymers and Multifunctional Composites is a broad overview of the systematic progress associated with this emerging class of mate