

1. Record Nr.	UNINA9910270888803321
Titolo	Photomechanical materials, composites, and systems : wireless transduction of light into work // edited by Timothy J. White
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , 2017 ©2017
ISBN	1-119-12329-1 1-119-12328-3 1-119-12327-5
Descrizione fisica	1 online resource (447 pages) : color illustrations, photographs
Disciplina	620.1/9204295
Soggetti	Smart materials Polymers - Optical properties Polymers - Mechanical properties Nanocomposites (Materials)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	A historical overview of photomechanical effects in materials, composites, and systems / Toru Ube and Tomiki Ikeda -- Photochromism in the solid state / Oleg Bushuyev and Christopher Barrett -- Photo-mechanics: bend, curl, topography, and topology / Daniel Corbett, Carl Modes and Mark Warner -- Photomechanical effects in amorphous and semi-crystalline polymers / Jeong Jae Wie -- Photomechanical effects in liquid crystalline polymer networks and elastomers / Timothy White -- Photomechanical effects in polymer nanocomposites / Balaji Panchapakesan, James Loomis and Eugene Terentjev -- Photomechanical effects in photochromic crystals / Lingyan Zhu, Fei Tong, Christopher Bardeen and Rabih Al-Kaysi -- Photomechanical effects in piezoelectric ceramics / Kenji Uchino -- Switching surface topographies based on liquid crystal network coatings / Danqing Liu and Dick Broer -- Photoinduced shape programming / Taylor Ware -- Photomechanical effects to enable devices / M. Ravi Shankar -- Photomechanical effects in materials,

composites, and systems: outlook and future challenges / Timothy J. White.

Sommario/riassunto

"Covers the full scope of photomechanical materials: polymers, crystals, ceramics, and nanocomposites"--