Record Nr. UNINA9910140604603321 Photochemistry and photophysics of polymer materials [[electronic **Titolo** resource] /] / edited by Norman S. Allen Pubbl/distr/stampa Hoboken, N.J., : J. Wiley, c2010 **ISBN** 1-282-54930-8 9786612549304 0-470-59417-9 0-470-59416-0 Descrizione fisica 1 online resource (708 p.) Altri autori (Persone) AllenNorman S Disciplina 547.70455 620.1/920495 Polymers - Optical properties Soggetti Polymers - Effect of radiation on Photochemistry - Industrial applications Photoelectrochemistry - Industrial applications Photopolymerization Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references and index. Nota di bibliografia PHOTOCHEMISTRY AND PHOTOPHYSICS OF POLYMER MATERIALS: Nota di contenuto CONTENTS; Preface; Contributors; 1 Energy Transfer and Electronic Energy Migration Processes; 2 Optical Properties of Polyelectrolytes; 3 Chemiluminescence Processes in Polymeric Materials; 4 Nonlinear Optical Polymeric Materials; 5 Metallodendrimers: Photophysical Properties and Related Applications: 6 Photochromic Polymers for Optical Data Storage: Azobenzenes and Photodimers; 7 Optical and Luminescence Properties and Applications of Metal Complex-Based Polymers; 8 Photovoltaic Polymer Materials; 9 Organic Light-Emitting Diodes 10 Photoinitiators for Free Radical Polymerization Reactions11 Photoinitiated Cationic Polymerization: Reactivity and Mechanistic Aspects; 12 Photoimaging and Lithographic Processes in Polymers; 13 Photografting of Polymeric Materials; 14 Photoablation of Polymer

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Presents the state of the technology, from fundamentals to new materials and applications Today's electronic devices, computers, solar cells, printing, imaging, copying, and recording technology, to name a few, all owe a debt to our growing understanding of the photophysics and photochemistry of polymeric materials. This book draws together, analyzes, and presents our current understanding of polymer photochemistry and photophysics. In addition to exploring materials, mechanisms, processes, and properties, the handbook also highlights the latest applications in the field and points to