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Nota di contenuto	Preface; Contents; Chapter 1 Theories for Photoinduced Structural Phase Transitions and their Dynamics Keiichiro Nasu; Chapter 2 Time-Resolved Spectroscopy of the Dynamics of Photoinduced Ionic-to-Neutral Phase Transition in Tetrathiafulvalen-P-Chloranil Crystals Katsumi Tanimura; Chapter 3 Study on the Cooperative Photoinduced Low-Spin to High-Spin State Conversion Processes Osamu Sakai and Tetsuo Ogawa; Chapter 4 Femtosecond Dynamics of the Photo-Induced Lattice Rearrangements in Quasi-One-Dimensional Halogen-Bridged Platinum Complexes Tohru Suemoto, Shinichi Tomimoto and Taira Matsuoka Chapter 5 Monte Carlo Simulations on Ising-Like Models for Photoinduced Phase Transitions Tohru Kawamoto and Shuji AbeChapter 6 Photoinduced Phase Transitions in One-Dimensional Correlated Electron Systems Hiroshi Okamoto, Shin-ichiro Iwai and Hiroyuki Matsuzaki; Chapter 7 Probing Photoinduced Structural Phase Transitions by Fast or Ultra-Fast Time-Resolved X-Ray Diffraction

Herve Cailleau, Eric Collet, Marylise Buron-Le Cointe, Marie-Helene Lemee-Cailleau and; Index

Sommario/riassunto

A new class of insulating solids was recently discovered. When irradiated by a few visible photons, these solids give rise to a macroscopic excited domain that has new structural and electronic orders quite different from the starting ground state. This occurrence is called "photoinduced phase transition", and this multi-authored book reviews recent theoretical and experimental studies of this new phenomenon.
