

1. Record Nr.	UNINA9910955547803321
Titolo	Photoinduced phase transitions / / editor, K. Nasu
Pubbl/distr/stampa	Singapore ; ; Hackensack, NJ, : World Scientific, c2004
ISBN	9786611877125 9781281877123 1281877123 9789812565723 9812565728
Edizione	[1st ed.]
Descrizione fisica	1 online resource (354 p.)
Altri autori (Persone)	NasuK <1946-> (Keiichiro)
Disciplina	530.4/14 530.474
Soggetti	Exciton theory Phase transformations (Statistical physics) Charge transfer - Research Ionic crystals - Spectra High spin physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
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 Abe Chapter 6 Photoinduced Phase Transitions in One-Dimensional Correlated Electron Systems Hiroshi Okamoto, Shin-ichiro Iwai and Hiroyuki

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.