

Table of Contents

Foreword

Raman Spectroscopy Applied to the Study of Phase Transitions	
E. Husson	1
ESR and NMR in Non-Conducting Solids	
A. Deville and B. Gaillard	41
Relaxor Ferroelectric Complex Perovskites: Structure, Properties and Phase Transitions	
Z.G. Ye	81
Properties and Phase Transitions in $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$ (PZT)	
K. Roleder	123
Modulated Structures Associated with Charge-Density Waves	
A.M. Ghorayeb	159
Oxide-Ion and Protonic Solid Electrolytes	
A. Pawłowski and B. Hilczer	199
Phase Transitions in VO_2 Polymorphs and Related Physical Properties	
C. Cesari, C. Leroux and G.E. Nihoul	227
Nanometric Amorphization of Oxide Materials under Dense Electronic Excitation: Swift Heavy Ion Irradiations	
M. Toulemonde and F. Studer	267
The Structural Principles and Their Consequences for the Anion-Deficient Fluorite-Related Oxides of the Higher Rare Earths	
Z.C. Kang and L. Eyring	301
Transmission Electron Microscope Study of Defect Structures Accomodating Non-Stoichiometry in Rutile	
M.G. Blanchin	359
Structure and Superconductivity of the Bi-, Tl- and Hg-Cuprates	
P. Bordet	383
Conductivity of Layered Superconducting Crystals in the Normal State: Case of $\text{Bi}_{2+x}\text{Sr}_2\text{Ca}_{1-y}\text{Cu}_2\text{O}_{8+\delta}$ - Importance of the Oxygen and Cationic Concentrations, Role of Superconductive Fluctuations Above T_c	
C. Boulesteix, T. Badeche, Y. Marietti, O. Monnereau and V. Grachev	413
Magnetoelectric Phenomena in R_2CuO_4 Rare-Earth Cuprates	
H. Wiegmann, I.M. Vitebsky, A.A. Stepanov, A.G.M. Jansen and P. Wyder	429
Phase Transitions in Multiphase Composites. Modellings of Interface Reactivity and of Transport Properties	
J.R. Gavarri, L. Tortet and J. Musso	447