

1. Record Nr.	UNINA9910465100503321
Titolo	Handbook of material science research [[electronic resource] /] / Charles Rene and Eugene Turcotte, editors
Pubbl/distr/stampa	New York, : Nova Science Publishers, c2010
ISBN	1-61122-536-1
Descrizione fisica	1 online resource (552 p.)
Collana	Materials science and technologies series
Altri autori (Persone)	ReneCharles <1956-> TurcotteEugene <1959->
Disciplina	620.1/1
Soggetti	Materials science Materials science - Research Electronic books.
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	""HANDBOOK OF MATERIAL SCIENCE RESEARCH ""; ""HANDBOOK OF MATERIAL SCIENCE RESEARCH ""; ""CONTENTS ""; ""PREFACE ""; ""DIELECTRIC SPECTROSCOPY OF DIPOLAR GLASSES AND RELAXORS""; ""ABSTRACT ""; ""1. OVERVIEW ""; ""1.1. Ferroelectrics ""; ""1.1.1. Ginzburg-Landau Theory ""; ""Second Order Phase Transition ""; ""First Order Phase Transition ""; ""1.1.2. Soft Mode Concept ""; ""1.1.3. Dielectric Dispersion in Ferroelectrics ""; ""1.2. Dipolar Glasses ""; ""1.2.1. Introduction ""; ""1.2.2. Models of Spin Glasses ""; ""1.2.3. Random Bond-random Field Theory ""; ""1.3. Ferroelectric Relaxors "" ""1.3.1. Introduction "" ""1.3.2. Compositional Order-disorder Phase Transitions and Quenched Disorder in Complex Perovskites""; ""1.3.3. Relaxors in the Ergodic State ""; ""1.3.4. Glassy Nonergodic Relaxor Phase ""; ""1.3.4. Theoretical Description of Nonergodic Phase in Relaxors ""; ""1.4. Dielectric Dispersion in Disordered Materials ""; ""1.4.1. Various Predefined Dielectric Relaxation Functions ""; ""1.4.2. Distribution of Relaxation Times in Disordered Solids ""; ""2. BROADBAND DIELECTRIC SPECTROSCOPY ""; ""2.1. Low Frequency Measurements""; ""2.2. High Frequency Measurements "" ""2.2.1. Experimental Details "" ""2.2.2. Complex Dielectric Permittivity Estimation ""; ""2.3. Method of Thin Cylindrical Rod in Rectangular Waveguide ""; ""2.3.1. Microwave Reflectivity and Transmission

Measurements"; "2.3.3. Calculation of Complex Dielectric Permittivity"; "2.3.4. Sample Preparation "; "2.4. Dielectric Data Analysis "; "2.4.1. Tichonov Regularization Method "; "2.4.2. Debye Program "; "2.4.3. Simulation Results "; "2.4.4. The Regularization Parameter "; "3. DYNAMICS OF PHASE TRANSITIONS OF BPXBPI1-X MIXED CRYSTALS "" " "3.1. Influence of Small Amount of Betaine Phosphate Admixture to Dielectric Dispersion of Betaine Phosphate Crystals "" ""3.1.1. Introduction "; "3.1.2. Ferroelectric Phase Transition Region "; "3.1.3. Coexistence of Ferroelectric Order and Dipolar Glass Disorder "; "3.2. BP1-xBPIx a€? An Unusual Dipolar Glass "; "3.2.1 Introduction "; "3.2.2. Comparison of the Results with the Dipolar Glass Model "; "3.3.3. Discussion "; "4. BROADBAND DIELECTRIC SPECTROSCOPY OF PMN-PSN-PZN RELAXORS "; "4.1. Dielectric Spectroscopy of PMN-PSN-PZN Ceramics "; "4.1.1. Introduction "" " "4.1.2. Broadband Dielectric Studies of PMN-PSN-PZN Ceramics"" "" "4.1.3. THz Dielectric Spectra of PMN-PZN-PSN Ceramics "; "4.1.4. Influence of AC Electric Field to Dielectric Dispersion of PMN-PSN-PZN Ceramics "; "4.2. Far-infrared Spectroscopy of PMN-PSN-PZN Ceramics "; "4.2.1. Infrared Reflectivity of PMN-PSN-PZN Ceramics"; "4.2.2 Phonon Modes of PMN-PSN-PZN Ceramics"; "CONCLUSION "; "REFERENCES "; "MODIFICATION OF STEELa€?S MICROHARDNESS BY COMPRESSION PLASMA FLOWS "; "ABSTRACT "; "1. INTRODUCTION "; "1.1. Some Peculiarities of Microhardness Testing "" " "1.2. High-Power Ion Beams ""

---