1. Record Nr. UNINA9910454396503321

Autore	Iwamoto Mitsumasa
Titolo	The physical properties of organic monolayers [[electronic resource] /] / Mitsumasa Iwamoto, Wu Chen-Xu
Pubbl/distr/stampa	Singapore ; ; [River Edge], NJ, : World Scientific, c2001
ISBN	1-281-95189-7 9786611951894 981-281-039-0
Descrizione fisica	1 online resource (216 p.)
Altri autori (Persone)	WuChen-Xu
Disciplina	530.4/275 530.4275 541.33
Soggetti	Monomolecular films Organic compounds Thin films Surface chemistry 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	PREFACE; CONTENTS; CHAPTER 1 INTRODUCTION; 1.1 Monolayer Structure and Monolayer Properties; 1.2 Surface Pressure/Area Isotherm; 1.3 Maxwell Displacement Current Measurement Technique; 1.4 Molecular Dynamics of Monolayer Films; References; CHAPTER 2 POLARIZATION AND DIELECTRIC CONSTANT FOR 2D MEDIA; 2.1 Polarization; 2.2 Spontaneous Polarization; 2.3 First Order Polarization and Dielectric Constant; 2.4 Nonlinear Polarization; 2.5 Summary; References; CHAPTER 3 MAXWELL DISPLACEMENT CURRENT METHOD; 3.1 Maxwell Displacement Current; 3.2 Maxwell Displacement Current by Monolayer Compression 3.3 MDC Generated across Organic Monolayers Consisting of Molecules with Dielectric Anisotropy 3.4 Phase Transition of Chiral Phospholipid Monolayers by Maxwell Displacement Current Measurement; 3.5 Maxwell Displacement Current by Photoirradiation; 3.6 Evaluation of Liquid Crystal Alignment Using MDC Technique; 3.7 Summary;

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7.2 Chirality Representation 7.3 SHG-CD Effect; 7.4 SHG-MDC Measuring System; 7.5 Quantum Mechanical Analysis of Photoisomerization; 7.6 Summary; References; CHAPTER 8 THERMALLY-STIMULATED CURRENT; 8.1 Thermally-stimulated Current; 8.2 Depolarization due to Thermal Stimulation; 8.3 TSC Experiment; 8.4 Phase Transition; 8.5 Thermodynamics Approach to Monolayers; 8.6 Summary; References; CHAPTER 9 ELECTRONIC PROPERTIES AT MIM INTERFACES; 9.1 Tunneling Current and Electronic Device Applications; 9.2 Nanometric Interfacial Electrostatic Phenomena in Ultrathin Films; 9.3 I-V Characteristic
9.4 Summary References

Sommario/riassunto

This book provides a fundamental physical picture of various phenomena occurring in organic monolayers, dealing with dielectric, elastic, and electronic properties. The dielectric properties are discussed in terms of orientational order parameters, which are used to interpret the dielectric spectrum observed through Maxwell displacement current measurement and optical second harmonic generation measurement. The elastic theory of organic monolayers is based on that of liquid crystals and emphasis is placed on the interfacial effect when discussing the electronic properties of organic monolayers