1. Record Nr. UNINA9910972860403321

Titolo	New developments in quartz research : varieties, crystal chemistry and uses in technology / / Bruno Novak and Pavla Marek, editors
Pubbl/distr/stampa	New York, : Nova Publishers, c2013
ISBN	1-62417-266-0
Edizione	[1st ed.]
Descrizione fisica	1 online resource (287 p.)
Collana	Geology and mineralogy research development
Altri autori (Persone)	NovakBruno <1964-> MarekPavla <1973->
Disciplina	549/.68
Soggetti	Quartz crystals Quartz - Industrial applications
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	Intro -- NEW DEVELOPMENTS IN QUARTZ RESEARCH -- NEW DEVELOPMENTS IN QUARTZ RESEARCH -- CONTENTS -- PREFACE -- QCM IN THE ACTIVE MODE: THEORY AND EXPERIMENT -- ABSTRACT -- ABBREVIATIONS (GLOBAL) -- 1. MEASUREMENT OF BOND RUPTURE FORCE WITH THE HELP OF A QUARTZ CRYSTAL MICROBALANCE -- 1.1. Introduction -- 1.2. Experimental, Theory, Results -- 2. A MATHEMATICAL MODEL -- 2.1. Introduction -- 2.2. One-Dimensional Resonator Model Based on Longitudinal Oscillatory Motions in Thin Plates -- 2.3. The Effect of a Point Load on a Quartz Crystal Microbalance -- 2.4. Oscillatory Motion in a Viscous Liquid -- 2.5. One-Dimensional Model of the QCM in Application to the Rupture Bond Strength Measurement -- 3. APPLICATION OF THE METHOD -- 3.1. Quantitative Detection and Separation of Bacteria Using Rupture Event Scanning -- 3.1.1. Introduction -- 3.1.2. Materials and Methods -- Preparation of Bacterial Samples -- Preparation of Antibody Coated Surfaces -- Detection of E. Coli and S. Aureus -- Scanning Electron Microscopy Imaging -- Data Processing -- 3.1.3. Results and Discussion -- Formation of Antibody Monolayers on the QCM -- Infectivity of REVS Recovered Bacteria -- Scanning Electron Microscopy Images -- Nature of the Acoustic Signal. Modeling -- 3.1.4. Effect of Temperature -- 3.2. Bacteriophage Identification QCM in t -- 3.3. Virus Detection -- 3.4. Quartz Crystal Microbalance as a Sensing Active

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Sommario/riassunto

In this book, the authors present new developments in quartz research. Topics discussed in this compilation include the nature of paramagnetic defects in a-Quartz; veined quartz of the Urals; QCM in the active mode; densification of quartz particle beds by tapping; rapid detection for pollutants and bacteria based on quartz crystal microbalance biosensors; novel quartz oscillator measurement for gas composition changes; detection/adsorption of chemical and biological molecules based on quartz crystal microbalance QCM as sensor; usefulness of quartz crystal microbalance techniques to assess in situ detergency process efficiency; ultra-stable quartz oscillators; and gold analysis after nanoparticle adsorption on quartz reflectors and total reflection x-ray fluorescence (TXRF) analysis.