

1. Record Nr.	UNINA9910437780003321
Autore	Chakravorti Sivaji
Titolo	Recent trends in the condition monitoring of transformers : theory, implementation and analysis // Sivaji Chakravorti, Debangshu Dey, Biswendu Chatterjee
Pubbl/distr/stampa	London : , : Springer, , 2013
ISBN	1-4471-5550-5
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (xvi, 280 pages) : illustrations (some color)
Collana	Power Systems, , 1612-1287
Disciplina	621.314
Soggetti	Electric power systems - State estimation Electric power system stability Electric transformers - Testing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"ISSN: 1612-1287."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Impulse Fault Analysis -- Partial Discharge Measurement and Analysis -- Conventional Diagnostic Techniques -- Time Domain Dielectric Response Measurements -- Frequency Domain Spectroscopy -- Frequency Response Analysis -- Remaining Life Analysis.
Sommario/riassunto	Recent Trends in the Condition Monitoring of Transformers reflects the current interest in replacing traditional techniques used in power transformer condition monitoring with non-invasive measures such as polarization/depolarization current measurement, recovery voltage measurement, frequency domain spectroscopy and frequency response analysis. The book stresses the importance of scrutinizing the condition of transformer insulation which may fail under present day conditions of intensive use with the resulting degradation of dielectric properties causing functional failure of the transformer. The text shows the reader how to overcome the key challenges facing today's maintenance policies, namely: <ul style="list-style-type: none"> <li>· the selection of appropriate techniques for dealing with each type of failure process accounting for the needs of plant owners, plant users and wider society; and</li> <li>· cost-efficiency and durability of effect. Many of the failure-management methods presented rely on the fact that most failures give warning when they are imminent. These potential failures give rise to</li> </ul>

identifiable physical conditions and the novel approaches described detect them so that action can be taken to avoid degeneration into full-blown functional failure. This "on-condition" maintenance means that equipment can be left in service as long as a specified set of performance standards continue to be met, avoiding the costly downtime imposed by routine and perhaps unnecessary maintenance but without risking equally expensive failure. Recent Trends in the Condition Monitoring of Transformers will be of considerable interest to both academic researchers in power systems and to engineers working in the power generation and distribution industry showing how new and more efficient methods of fault diagnosis and condition management can increase transformer efficiency and cut costs. .

2. Record Nr.	UNINA9910815157103321
Titolo	Structure of dairy products // edited by Adnan Tamime
Pubbl/distr/stampa	Oxford, UK ; ; Ames, Iowa, : Blackwell Pub., 2007
ISBN	9786611312145 9781281312143 1281312142 9781615834532 1615834532 9780470995921 0470995920 9780470995914 0470995912
Edizione	[1st ed.]
Descrizione fisica	1 online resource (310 p.)
Collana	Society of Dairy Technology series
Altri autori (Persone)	TamimeA. Y
Disciplina	636.2/142
Soggetti	Dairy products - Analysis Dairy processing
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.

Structure of Dairy Products; Contents; Preface to Technical Series; Preface; Contributors; 1 Overview of Microscopical Approaches; 1.1 Introduction; 1.2 Light microscopy; 1.2.1 Compound light microscope; Dark field and phase contrast; Polarised light and differential interference contrast; Fluorescent microscopy; Staining; 1.2.2 Confocal scanning light microscopy(CSLM); 1.2.3 Specimen preparation; 1.3 Electron microscopy; 1.3.1 Scanning electron microscopy; 1.3.2 Transmission electron microscopy; Thin sectioning; Replica techniques; Dispersions; 1.4 Other techniques; 1.5 Conclusions  
Bibliography  
2 Instrumental Techniques for Sample Preparation; 2.1 Introduction; 2.2 Light microscopy techniques; 2.2.1 Wide-field light microscopy; 2.2.2 Fluorescence light microscopy; 2.2.3 Confocal scanning laser microscopy(CSLM); 2.2.4 Sectioned material for light microscopy; 2.2.5 Cold-stage light microscopy; 2.3 Scanning electron microscopy; 2.3.1 Electron guns; 2.3.2 Cathode comparison parameters; 2.3.3 Low-temperature scanning electron microscopy; 2.3.4 Environmental/variable pressure scanning electron microscopy; 2.4 Transmission electron microscopy  
2.4.1 Embedded material for transmission electron microscopy  
2.4.2 Negative staining transmission electron microscopy; 2.4.3 Low-temperature transmission electron microscopy; Freeze-fracture replication; Low-temperature preparation methods; Freeze-substitution for transmission electron microscopy; Cryo-transmission electron microscopy; 2.4.4 Energy-filtering transmission electron microscopy techniques; Global imaging; Contrast enhancement; Thick section imaging; Frozen hydrated specimens; Electron spectroscopic imaging; 2.5 X-ray microanalysis; 2.6 Rheology; 2.7 Light scattering  
2.7.1 Laser light scattering  
2.7.2 Dynamic light scattering; 2.8 Nuclear magnetic resonance spectroscopy; 2.9 Digital imaging and image analysis; 2.9.1 Hardware; 2.9.2 Software; 2.9.3 Major steps in applying image analysis; Image acquisition; Calibration; Image enhancement; 2.10 Laboratory safety; 2.10.1 Light microscopy; 2.10.2 Scanning electron microscopy/transmission electron microscopy; 2.10.3 Systems using lasers; 2.11 Future techniques in dairy product structure; 2.11.1 Scanning probe microscopy; 2.11.2 Diffusing wave and ultrasonic spectroscopy; 2.11.3 Microwave techniques in microscopy  
References  
3 Microstructure of Milk Components; 3.1 Introduction; 3.2 Cow's milk composition; 3.2.1 Milk fat globule; Milk fat; Milk fat globule membrane; 3.2.2 Colloidal milk proteins; Microstructure of casein micelles; Molecular structure of casein micelles; Interactions and stabilisation of casein micelles; 3.2.3 Whey proteins; 3.2.4 Lactose; 3.3 Concluding remarks; References; 4 Microstructure of Dairy Fat Products; 4.1 Introduction; 4.2 Microstructure of cream and butter; 4.2.1 Background; 4.2.2 Cream; 4.2.3 Whipped cream; 4.2.4 Butter; 4.3 Milk fat; 4.3.1 Composition; 4.3.2 Fractionation  
4.4 Microstructure

Structure of Dairy Products  
SOCIETY OF DAIRY TECHNOLOGY  
SERIE  
Edited by A. Y. Tamime  
The Society of Dairy Technology (SDT) has joined with Blackwell Publishing to produce a series of technical dairy-related handbooks providing an invaluable resource for all those involved in the dairy industry; from practitioners to technologists working in both traditional and modern large-scale dairy operations. The previous 30 years have witnessed great interest in the microstructure of dairy products, which has a vital bearing on, e.g. texture, sensory qualities, shelf life and packaging