Instrumentation and Measurement

january 2015 updated catalog

forthcoming, new and backlist titles

Instrumentation et mesure

catalogue mis à jour Janvier 2015

Titres à paraître, nouveautés et fonds

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## Instrumentation and Measurement

**Instrumentation et mesure**

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<tr>
<td>Dominique Placko, ENS Cachan</td>
<td><a href="mailto:dominique.placko@satie.ens-cachan.fr">dominique.placko@satie.ens-cachan.fr</a></td>
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Frédéric Taillade, EDF – R&D, Chatou

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Instrumentation et mesure

Forthcoming Titles – Titres à paraître

New Techniques in Digital Holography by Pascal Picart

Instruments pour l’optique des objets spatiaux par Cerrutti-Maori Guy, Otrio Georges

Forthcoming Sets – Séries à paraître

Fiber Optic Sensors – Capteurs à fibres optiques
Coordinated by Frédéric Taillade
This book focuses on the processing chain that needs to be set up in order to extract relevant information on various systems. The design of new microsensors is particularly highlighted and various applications are presented. It presents recent progress in instrumentation, microsystem design, giving an insight into the modification of the sensor itself but also its environment.

Contents

2. Love Wave Characterization of Mesoporous Titania Films.
4. AC Nanocalorimeter on Self-standing Parylene Membrane.
7. Large Deformable Antennas.

Uncertainty Theories and Multisensor Data Fusion
Alain Appriou, ONERA, France

Considering the different uncertainty formalisms (probability, fuzzy set theory, possibility theory, belief function theory), a set of coherent operators corresponding to the different steps of a complete fusion process is developed in this book.

Contents

1. Multisensor Data Fusion.
2. Reference Formalisms.
5. Combination of Sources.
6. Data Modeling.
7. Classification: Decision-making and Exploitation of the Diversity of Information Sources.
This book details the functioning of sensors and instruments used to assess the useful parameters in oceanography: temperature, conductivity, pressure, sound velocity, current in magnitude and direction, time and position with global positioning systems, height of water and tide, waves, as well as optical and chemical properties like turbidity, dissolved gas (O2, CO2), pH, nutrients and other dissolved elements.

Contents

1. What We Measure and What We Process.
3. Measurements at Sea.

The constant progress being made in the theoretical and technological aspects concerning studies and developments of chemical sensors, biosensors and biochips is presented in this book by different scientists and professors from different universities and constitutes an updating of the state of the art for chemical sensors, biosensors and biochips.

This title places a large emphasis on interaction between chemical and biological species, in a gaseous or liquid state, and details mineral and biological materials acting as sensitive elements. The role of electrical, electrochemical, piezoelectric and optical transducers in detection mechanisms are presented through their developments and from a performance point-of-view. Micro-reactors, nanotechnologies and flexible substrates are considered in relation to their role in neural networks.

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<td>Applied Metrology for Manufacturing Engineering</td>
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<td>9781848211889 • 2011</td>
<td>704</td>
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