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Collana	Smart Sensors, Measurement and Instrumentation, , 2194-8402 ; ; 13
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Soggetti	Electronics Microelectronics Signal processing Image processing Speech processing systems Environmental monitoring Electronics and Microelectronics, Instrumentation Signal, Image and Speech Processing Monitoring/Environmental Analysis
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 at the end of each chapters and index.
Nota di contenuto	Sensing Technologies for Intelligent Environments: A Review -- Micro Motes: A Highly Penetrating Probe for Inaccessible Environments -- A Multi-Sensor Smart System for Volcanic Ash Monitoring -- Portable High Frequency Surface Wave Radar OSMAR-S -- Using Motion Sensor for Landslide Monitoring and Hazard Mitigation.-Distributed Intelligent Monitoring System for Water Environment -- Application to Environmental Surveillance: Dynamic Image Estimation Fusion and Optimal Remote Sensing with Fuzzy Integral -- Precision Cultivation System for Greenhouse Production -- Environment Monitoring System Based on IEEE 1451 Standards -- Application for Wireless Sensor

Networks Technology for Induction Motor Monitoring in Industrial Environments -- Advanced Monitoring System on Debris Flow Hazards.

Sommario/riassunto

Developing environmental sensing and monitoring technologies become essential especially for industries that may cause severe contamination. Intelligent environmental sensing uses novel sensor techniques, intelligent signal and data processing algorithms, and wireless sensor networks to enhance environmental sensing and monitoring. It finds applications in many environmental problems such as oil and gas, water quality, and agriculture. This book addresses issues related to three main approaches to intelligent environmental sensing and discusses their latest technological developments. Key contents of the book include: Agricultural monitoring Classification, detection, and estimation Data fusion Geological monitoring Motor monitoring Multi-sensor systems Oil reservoirs monitoring Sensor motes Water quality monitoring Wireless sensor network protocol .