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   Nota di contenuto   Sensors and their characteristics -- Advanced Interfacing Techniques for the Capacitive Sensors -- A Simple Embedded Sensor: Excitation and Interfacing -- AdvancedTechniques for Directly Interfacing Resistive Sensors to Digital Systems -- Interfaces for AutarkicWireless Sensors and Actuators in the Internet of Things -- Lock-In Amplifier Architectures for Sub-Ppm Resolution Measurements -- Biomedical Sensors and Their Interfacing -- Interfacing and Pre-ProcessingTechniques with Olfactory and Taste Sensors -- Harnessing Vision and Touch for Compliant Robotic Interaction with Soft or Rigid Objects -- IEEE1451 Smart Sensors Architectures for Vital Signs and Motor Activity Monitoring.

Sommario/riassunto   This book presents ways of interfacing sensors to the digital world, and discusses the marriage between sensor systems and the IoT: the opportunities and challenges. As sensor output is often affected by noise and interference, the book presents effective schemes for recovering the data from a signal that is buried in noise. It also explores interesting applications in the area of health care, un-obstructive monitoring and the electronic nose and tongue. It is a valuable resource for engineers and scientists in the area of sensors and interfacing wanting to update their knowledge of the latest developments in the field and learn more about sensing applications and challenges.