Record Nr. UNINA9910299836403321 Smart Sensors and Systems / / edited by Youn-Long Lin, Chong-Min **Titolo** Kyung, Hiroto Yasuura, Yongpan Liu Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 **ISBN** 3-319-14711-0 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (465 p.) 620 Disciplina Soggetti Electronic circuits Microprocessors Biomedical engineering Circuits and Systems **Processor Architectures Electronic Circuits and Devices** Biomedical Engineering and Bioengineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references at the end of each chapters. Nota di bibliografia Nota di contenuto "C-chip" platform for electrical biomolecular sensors --Chemomechanical Transduction Systems: A Sensing Platform by Surface Force Measurement -- Fully Printable Organic Transistor Technology for Sensor Transducer -- The Three-Dimensional Evolution of Hyperspectral Imaging -- Computational Photography Using Programmable Aperture -- Exploratory Visual Analytics for Winter Road Management using Statistically Preprocessed Probe-Car Data -- Novel metal oxide gas sensors for mobile devices -- Handheld Gas Sensing Systems -- Odor Sensing Technologies for Visualization of Odor Quality and Space -- Energy-Harvesting Smart Sensing Systems with Supercapacitor Based Energy Storage. This book describes for readers technology used for effective sensing Sommario/riassunto of our physical world and intelligent processing techniques for sensed information, which are essential to the success of Internet of Things (IoTs). The authors provide a multidisciplinary view of sensor

technology from MEMS, biological, chemical, and electrical domains

and showcase smart sensor systems in real applications including smart home, transportation, medical, environmental, agricultural, etc. Unlike earlier books on sensors, this book will provide a "global" view on smart sensors covering abstraction levels from device, circuit, systems, and algorithms.