1. Record Nr. UNINA9910438052203321 Autore Marien Hagen Titolo Analog Organic Electronics [[electronic resource]]: Building Blocks for Organic Smart Sensor Systems on Foil / / by Hagen Marien, Michiel Stevaert, Paul Heremans New York, NY:,: Springer New York:,: Imprint: Springer,, 2013 Pubbl/distr/stampa **ISBN** 1-4614-3421-1 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (172 p.) Collana Analog Circuits and Signal Processing, , 1872-082X Disciplina 535.357 Soggetti Electronic circuits Electronics Microelectronics Nanotechnology Circuits and Systems Electronics and Microelectronics, Instrumentation Nanotechnology and Microengineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references and index. Nota di bibliografia Introduction -- Organic Thin-Film Transistor Technology: Properties Nota di contenuto and Functionality -- Amplifier Design -- A/D Conversion -- Sensors --DC-DC Conversion -- Conclusions. This book provides insight into organic electronics technology and in Sommario/riassunto analog circuit techniques that can be used to increase the performance of both analog and digital organic circuits. It explores the domain of organic electronics technology for analog circuit applications, specifically smart sensor systems. It focuses on all the building blocks in the data path of an organic sensor system between the sensor and the digital processing block. Sensors, amplifiers, analog-to-digital converters and DC-DC converters are discussed in detail. Coverage includes circuit techniques, circuit implementation, design decisions and measurement results of the building blocks described. Offers readers the first book to focus on analog organic circuit design;

Discusses organic electronics technology for analog circuit applications in the context of smart sensor systems; Describes all building blocks

necessary for an organic sensor system between the sensor and the digital processing block; Includes circuit techniques, circuit implementation, design decisions and measurement results.