Record Nr. UNINA9910438052203321 Autore Marien Hagen Titolo Analog organic electronics: building blocks for organic smart sensor systems on foil / / Hagen Marien, Michiel Steyaert, Paul Heremans New York, NY,: Springer, 2012, c2013 Pubbl/distr/stampa 9781461434214 **ISBN** 1461434211 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (172 p.) Collana Analog circuits and signal processing Altri autori (Persone) HeremansPaul L StevaertMichiel <1959-> Disciplina 535.357 Soggetti Analog electronic systems Organic electronics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Introduction -- Organic Thin-Film Transistor Technology: Properties and Functionality -- Amplifier Design -- A/D Conversion -- Sensors --DC-DC Conversion -- Conclusions. Sommario/riassunto This book provides insight into organic electronics technology and in 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.