1. Record Nr. UNINA9910299922903321

Titolo	Hybrid ADCs, Smart Sensors for the IoT, and Sub-1V & Advanced Node Analog Circuit Design [[electronic resource]] : Advances in Analog Circuit Design 2017 / / edited by Pieter Harpe, Kofi A. A. Makinwa, Andrea Baschirotto
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-61285-9
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XI, 359 p. 298 illus., 169 illus. in color.)
Disciplina	621.3815
Soggetti	Electronic circuits Microprocessors Circuits and Systems Electronic Circuits and Devices Processor Architectures
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Part I.Hybrid Data Converters -- Chapter 1. HYBRID DATA CONVERTERS -- Hybrid and segmented ADC techniques to optimize power efficiency and area. The case of a 0.076mm2 600MS/s 12b SAR- ADC -- Chapter 3. Interleaved Pipelined Sar Adcs: Combined Power for Efficient Accurate High-Speed Conversion -- Chapter 4.Hybrid Vco Based 0-1 Mash and Hybrid Sar._ Chapter 5. A Hybrid Architecture for a Reconfigurable Sar Adc._chapter 6. A Hybrid ADC for High Resolution: The Zoom ADC -- Part II.Smart Sensors for the IoT -- Chapter 7. Advances in Biomedical Sensor Systems for Wearable Health -- Chapter 8.An Ultra-Lowpower, Robust Photoplethysmographic Readout Exploiting Compressive Sampling, Artifact Reduction and Sensor Fusion -- Chapter 9.A 32kHz-DTCXO RTC Module with an Overall Accuracy of ±1ppm and an All-Digital 0.1ppm Compensation Resolution Scheme -- Chapter 10.Energy-Efficient High-Resolution Resistor-Based Temperature Sensors -- Chapter 11. A High-Resolution Self-Oscillating Integrating Dual-Slope CDC For Mems Sensors -- Chapter 12. Ultra-Low Power Charge-Pump Based Bandgap References -- Part III.Sub-1V

	& Advanced-Node Analog Circuit Design.-Chapter 13. FD-SOI Technology, Advantages for Analog/RF and Mixed-Signal Designs -- Chapter 14.Analog/Mixed-signal Design In Finfet Technologies -- Chapter 15.Analog circuits in 28nm and 14nm FinFET -- Chapter 16. Pipeline and SAR ADCS for Advanced Nodes -- Chapter 17.Time-Based Biomedical Readout in Ultra-Low Voltage, Small-Scale CMOS Technology -- Chapter 18.A 4.4mW-TX, 3.6mW-RX Fully Integrated Bluetooth Low-Energy Transceiver for IoT Applications.
Sommario/riassunto	This book is based on the 18 tutorials presented during the 26th workshop on Advances in Analog Circuit Design. Expert designers present readers with information about a variety of topics at the frontier of analog circuit design, with specific contributions focusing on hybrid ADCs, smart sensors for the IoT, sub-1V and advanced-node analog circuit design. This book serves as a valuable reference to the state-of-the-art, for anyone involved in analog circuit research and development. .