

1. Record Nr.	UNINA9910580214903321
Autore	Serra-Graells Francesc
Titolo	Integrated Circuits and Systems for Smart Sensory Applications
Pubbl/distr/stampa	Basel, : MDPI - Multidisciplinary Digital Publishing Institute, 2022
Descrizione fisica	1 electronic resource (206 p.)
Soggetti	Technology: general issues History of engineering & technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>Connected intelligent sensing reshapes our society by empowering people with increasing new ways of mutual interactions. As integration technologies keep their scaling roadmap, the horizon of sensory applications is rapidly widening, thanks to myriad light-weight low-power or, in some cases even self-powered, smart devices with high-connectivity capabilities. CMOS integrated circuits technology is the best candidate to supply the required smartness and to pioneer these emerging sensory systems. As a result, new challenges are arising around the design of these integrated circuits and systems for sensory applications in terms of low-power edge computing, power management strategies, low-range wireless communications, integration with sensing devices. In this Special Issue recent advances in application-specific integrated circuits (ASIC) and systems for smart sensory applications in the following five emerging topics: (I) dedicated short-range communications transceivers; (II) digital smart sensors, (III) implantable neural interfaces, (IV) Power Management Strategies in wireless sensor nodes and (V) neuromorphic hardware.</p>