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Altri autori (Persone)	SchmidAlexandre
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- State of the Art -- Power Transmission and Voltage Regulation -- Circuit design for ultra low-noise and low-power sensor interface -- Circuits and Systems for Multi-Channel Neural Recording -- Digital Impulse Radio Ultra Wide-Band Transmitter -- Summary and Conclusions.
Sommario/riassunto	Wireless Cortical Implantable Systems examines the design for data acquisition and transmission in cortical implants. The first part of the book covers existing system-level cortical implants, as well as future devices. The authors discuss the major constraints in terms of microelectronic integration. The second part of the book focuses on system-level as well as circuit and system level solutions to the development of ultra low-power and low-noise microelectronics for cortical implants. Existing solutions are presented and novel methods and solutions proposed. The third part of the book focuses on the usage of digital impulse radio ultra wide-band transmission as an efficient method to transmit cortically neural recorded data at high data-rate to the outside world. Original architectural and circuit and system solutions are discussed.