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Altri autori (Persone)	HuijsingJohan H. <1938-> MakinwaKofi A. A
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Soggetti	Integrated circuits Signal processing
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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 -- Dynamic Offset Cancellation Techniques for Operational Amplifiers -- Current-Feedback Instrumentation Amplifiers and Gain Accuracy Improvement Techniques -- A Chopper Instrumentation Amplifier with Offset Reduction Loop -- A Chopper Instrumentation Amplifier with Gain Error Reduction Loop -- Read-Out Integrated Circuits -- Conclusions.
Sommario/riassunto	This book presents innovative solutions in the design of precision instrumentation amplifier and read-out ICs, which can be used to boost millivolt-level signals transmitted by modern sensors, to levels compatible with the input ranges of typical Analog-to-Digital Converters (ADCs). The discussion includes the theory, design and realization of interface electronics for bridge transducers and thermocouples. It describes the use of power efficient techniques to mitigate low frequency errors, resulting in interface electronics with high accuracy, low noise and low drift. Since this book is mainly about techniques for eliminating low frequency errors, it describes the nature of these errors and the associated dynamic offset cancellation techniques used to mitigate them. Surveys comprehensively offset cancellation and accuracy improvement techniques applied in precision

amplifier designs; Presents techniques in precision circuit design to mitigate low frequency errors in millivolt-level signals transmitted by modern sensors to analog-to-digital converters; Describes design of two stand-alone precision instrumentation amplifiers to drive an external ADC; Describes design of a read-out IC combining the instrumentation amplifier and the ADC into one chip.

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