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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Wide Output Dynamic Range Exponential Function Synthesizers -- Wide Output Dynamic Range Gaussian Function -- Hyperbolic Functions Synthesis -- Third Order Function Synthesizers -- Fourth-Order Function Synthesizers.
Sommario/riassunto	This book is dedicated to the analysis and design of analog CMOS nonlinear function synthesizer structures, based on original superior-order approximation functions. A variety of analog function synthesizer structures are discussed, based on accurate approximation functions. Readers will be enabled to implement numerous circuit functions with applications in analog signal processing, including exponential, Gaussian or hyperbolic functions. Generalizing the methods for obtaining these particular functions, the author analyzes superior-order approximation functions, which represent the core for developing CMOS analog nonlinear function synthesizers. · Describes novel methods for generating a multitude of circuit functions, based on superior-order improved accuracy approximation functions; · Presents techniques for analog function synthesizers that can be applied easily to a wide variety of analog signal processing circuits; · Enables the design of analog signal processing circuits with reduced complexity, low-voltage, low-power operation, real-time operation, and multifunctionality. ·

