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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Gm Stage and Passives in deep-scaled CMOS -- Gain-Bandwidth Enhancement Techniques for mm-Wave fully integrated Amplifiers -- mm-Wave LC VCOs -- mm-Wave Dividers -- mm-Wave Broadband Downconverters -- mm-Wave Highly-Linear Broadband Power Amplifiers -- Conclusion.
Sommario/riassunto	This book discusses design techniques, layout details and measurements of several key analog building blocks that currently limit the performance of 5G and E-Band transceivers implemented in deep-scaled CMOS. The authors present recent developments in low-noise quadrature VCOs and tunable inductor-less frequency dividers. Moreover, the design of low-loss broadband transformer-based filters that realize inter-stage matching, power division/combining and impedance transformation is discussed in great detail. The design and measurements of a low-noise amplifier, a downconverter and a highly-linear power amplifier that leverage the proposed techniques are shown. All the prototypes were realized in advanced nanometer scaled CMOS technologies without RF thick to metal option. Discusses the major implication of CMOS technology scaling on mm-Wave low power

circuit design; Includes detailed design techniques, layout implementations and design examples of state-of-the-art mm-Wave broadband quadrature oscillators, frequency dividers, low-noise amplifiers, downconverters, and highly-linear power amplifiers; Provide a reference work for neophytes as well as more experienced mm-Wave design engineers.

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