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Altri autori (Persone)	HaddadGeorge I HarveyJames F ItohTatsuo
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction (James F Harvey, Robert J. Trew, and Dwight L Woolard). -- 1. Wireless Communications System Architecture and Performance (Wayne Stark and Larry Milstein). -- 2. Advanced GaAs-Based HBT Designs for Wireless Communications Systems (M. Frank Chang and Peter M. Asbeck). -- 3. InP-Based Devices and Circuits (Dimitris Pavlidis, Donald Sawdai, and George I. Haddad). -- 4. Si/SiGe HBT Technology for Low-Power Mobile Communications System Applications (Lany Larson and M. Frank Chang). -- 5. Flicker Noise Reduction in GaN Field-Effect Transistors (Kang L. Wang and Alexander Balandin). -- 6. Power Amplifier Approaches for High Efficiency and Linearity (Peter M. Asbeck, Zoya Popovic, Tatsuo Itoh, and Lany Larson).

-- 7. Characterization of Amplifier Nonlinearities and Their Effects in Communications Systems (Jack East, Wayne Stark, and George I. Haddad). -- 8. Planar-Oriented Passive Components (Yongxi Qian and Tatsuo Itoh). -- 9. Active and High-Performance Antennas (William R. Deal, Vesna Radisic, Yongxi Qian, and Tatsuo Itoh). -- 10. Microelectromechanical Switches for RF Applications (Sergio P. Pacheco and Linda P. B. Katehi). -- 11. Micromachined K-Band High-Q Resonators, Filters, and Low Phase Noise Oscillators (Andrew R. Brown and Gabriel M. Rebeiz). -- 12. Transceiver Front-End Architectures Using Vibrating Micromechanical Signal Processors (Clark T.-C. Nguyen). -- Index.

Sommario/riassunto

A survey of microwave technology tailored for professionals in wireless communications RF Technologies for Low Power Wireless Communications updates recent developments in wireless communications from a hardware design standpoint and offers specialized coverage of microwave technology with a focus on the low power wireless units required in modern wireless systems. It explores results of recent research that focused on a holistic, integrated approach to the topics of materials, devices, circuits, modulation, and architectures rather than the more traditional approach of research into isolated topical areas. Twelve chapters deal with various fundamental research aspects of low power wireless electronics written by world-class experts in each field. The first chapter offers an overview of wireless architecture and performance, followed by detailed coverage of: . Advanced GaAs-based HBT designs. InP-based devices and circuits. Si/SiGe HBT technology. Noise in GaN devices. Power amplifier architectures and nonlinearities. Planar-oriented components. MEMS and micromachined components. Resonators, filters, and low-noise oscillators. Antennas. Transceiver front-end architectures With a clear focus and expert contributors, RF Technologies for Low Power Wireless Communications will be of interest to a wide range of electrical engineering disciplines working in wireless technologies.
