RF Technologies for Low Power Wireless Communications
Tatsuo Itoh (Editor), George Haddad (Editor), James Harvey (Editor)


DESCRIPTION

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.

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**ABOUT THE AUTHOR**

TATSUO ITOH, PhD, is Professor in the Electrical Engineering Department at UCLA. He has published several hundred book chapters and journal articles and is also editor of Numerical Techniques for Microwave and Millimeter-Wave Passive Structures and Finite Element Software for Microwave Engineering (both from Wiley).

GEORGE HADDAD, PhD, is Professor of Electrical Engineering and Computer Science at the University of Michigan. He has authored numerous publications in the areas of solid-state microwave devices and circuits.

JAMES HARVEY is a Research Program Manager at the Electronics Division, Army Research Office, with primary responsibility for the fields of electromagnetics, antennas and antenna structures, innovative microwave and millimeter-wave circuit integration, low-power/minimum-power system design, and landmine detection.

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