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Titolo	Bandwidth and Efficiency Enhancement in Radio Frequency Power Amplifiers for Wireless Transmitters / / by Karun Rawat, Patrick Roblin, Shiban Kishen Koul
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Descrizione fisica	1 online resource (IX, 390 p. 305 illus., 209 illus. in color.)
Collana	Analog Circuits and Signal Processing, , 1872-082X
Disciplina	621.38412
Soggetti	Electronic circuits Signal processing Image processing Speech processing systems Electronics Microelectronics Circuits and Systems Signal, Image and Speech Processing Electronics and Microelectronics, Instrumentation
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Note generali	Includes index.
Nota di contenuto	Introduction to RF Power Amplifier Design and Architecture -- Non-linear Device Characterization and Modeling for Power Amplifier Design -- Power Amplifier Design using nonlinear Model Embedding -- Broadband Techniques in Power Amplifiers -- Digital Techniques for Broadband and Linearized Transmitters -- Advance Material for Power Amplifiers Design and Packaging.
Sommario/riassunto	This book focuses on broadband power amplifier design for wireless communication. Nonlinear model embedding is described as a powerful tool for designing broadband continuous Class-J and continuous class F power amplifiers. The authors also discuss various techniques for extending bandwidth of load modulation based power amplifiers, such as Doherty power amplifier and Chireix outphasing amplifiers. The book also covers recent trends on digital as well as analog techniques

to enhance bandwidth and linearity in wireless transmitters. Presents latest trends in designing broadband power amplifiers; Covers latest techniques for using nonlinear model embedding in designing power amplifiers based on waveform engineering; Describes the latest techniques for extending bandwidth of load modulation based power amplifiers such as Doherty power amplifier and Chireix outphasing amplifiers; Includes coverage of hybrid analog/digital predistortion as wideband solution for wireless transmitters; Discusses recent trends on on-chip power amplifier design with GaN /GaAs MMICs for high frequency applications.