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Nota di contenuto	Chapter 1. Introduction, fundamental concepts, and definitions -- Chapter 2. Solid-state device modeling for quasistatic analysis -- Chapter 3. Harmonic balance analysis and related methods -- Chapter 4. Volterra-series and power-series analysis -- Chapter 5. Balanced and multiple-device circuits --
Sommario/riassunto	This newly and thoroughly revised edition of the 1988 Artech House classic offers you a comprehensive, up-to-date treatment of nonlinear microwave and RF circuits. It gives you a current, in-depth understanding of the theory of nonlinear circuit analysis with a focus on Volterra-series and harmonic-balance methods. You get practical guidance in designing nonlinear circuits and modeling solid-state devices for nonlinear circuit analysis by computer. Moreover, you learn how characteristics of such models affect the analysis of these circuits. Critical new topics include microwave heterojunction bipolar transistors (HBTs), heterojunction FETs (HEMTs), silicon MOSFETs, modern IC design approaches, new methods of harmonic-balance analysis, multitone analysis methods, Fourier methods for multitone problems, and artificial frequency mapping. What's more, the second edition has been updated to include discussions on nonlinear analysis of oscillators and design issues relating to RF and wireless technology. More than 120 illustrations support key topics throughout the book.