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Nota di contenuto	Foreword; Biographies; Preface; Table of Contents; List of Often Used Acronyms and Symbols; Chapter 1 Introduction; Chapter 2 Device Modeling Overview; Chapter 3 Theory of Homojunction Bipolar Transistors; Chapter 4 Advanced Theory; Chapter 5 Geometry (Layout) Scaling; Chapter 6 Temperature Effects; Chapter 7 Compact Noise Modeling; Chapter 8 HICUM Level2; Chapter 9 Parameter Determination for HICUM/L2; Chapter 10 Model Hierarchy; Chapter 11 Application Examples; Chapter 12 Future Trends; Index
Sommario/riassunto	""Compact Hierarchical Bipolar Transistor Modeling with HICUM"" will be of great practical benefit to professionals from the process development, modeling and circuit design community who are interested in the application of bipolar transistors, which include the SiGe:C HBTs fabricated with existing cutting-edge process technology. This book begins with an overview on the different device designs of modern bipolar transistors, along with their relevant operating conditions; while the subsequent chapter on transistor theory is subdivided into a review of mostly classical theories, brought into