1.

Record Nr.	UNINA9910819617503321
Autore	Schroter Michael
Titolo	Compact hierarchial bipolar transistor modeling with HICUM / / Michael Schroter, Anjan Chakravorty
Pubbl/distr/stampa	Hackensack, N.J., : World Scientific, 2010
ISBN	1-283-14370-4 9786613143709 981-4273-22-8
Edizione	[1st ed.]
Descrizione fisica	1 online resource (740 p.)
Collana	ASSET : international series on advances in solid state electronics and technology
Altri autori (Persone)	ChakravortyAnjan
Disciplina	621.381528
Soggetti	Bipolar transistors
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
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