This informative resource presents the first comprehensive treatment of silicon-germanium heterojunction bipolar transistors (SiGe HBTs). It offers you a complete, from-the-ground-up understanding of SiGe HBT devices and technology, from a very broad perspective. The book covers motivation, history, materials, fabrication, device physics, operational principles, and circuit-level properties associated with this new cutting-edge semiconductor device technology. Including over 600 equations and more than 350 illustrations, this hands-on reference shows you in clear and concise language how to design, simulate, fabricate, and measure a SiGe HBT.

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John D. Cressler is Professor of electrical and computer engineering at The Georgia Institute of Technology. Professor Cressler received his Ph.D. in applied physics from Columbia University.

Guofu Niu is Associate Professor of electrical and computer engineering at Auburn University. He received his Ph.D. in electrical engineering from Fudan University, in Shanghai, China.


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