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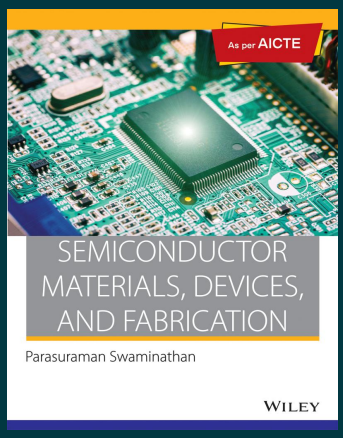

Semiconductor Materials, Devices, and Fabrication, As per AICTE

By Parasuraman Swaminathan

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Description

Semiconductor Materials, Devices, and Fabrication and the associated media content in the DVDs provide an understanding of the materials, devices, and processing techniques used in the current microelectronics industry. The 2 DVDs include 32 lectures, approximately an hour each. The lectures map onto the individual chapters in the book. The content is divided into three parts. Part I explains the basic physics behind semiconductor materials. Part II introduces electronic devices including optical devices. Part III discusses current manufacturing processes in the semiconductor industry, starting from wafer production to final integrated circuit development. The focus in this part is on industry challenges during miniaturization and methods to overcome these challenges.

About the Author

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Parasuraman Swaminathan is an Assistant Professor in the Department of Metallurgical and Materials Engineering at the Indian Institute of Technology, Madras (IITM). He has been a faculty at the institute since July 2013. worked, as a Process and Yield Engineer, in Portland Technology Development division of Intel Corp. USA

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