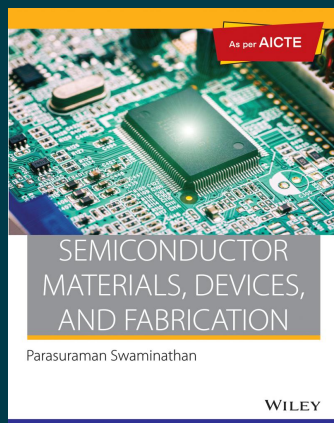


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Semiconductor Materials, Devices, and Fabrication, As per AICTE

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

• Table of Contents

Preface

About the Author

Part I – Semiconductor Materials

Chapter 1 Electronic Materials

1.1 Introduction

1.2 Molecular Orbital Formation

1.3 Molecular Orbitals in Extended Systems

1.4 Energy Bands in Metals

Chapter 2 Semiconductors: Introduction

2.1 Introduction

2.2 Band Formation in Semiconductors

2.3 Classification of Semiconductors

2.4 Electron Effective Mass

Chapter 3 Electron Statistics in a Solid

Learning Objectives

3.1 Density of States

3.2 Electron Occupation Probability

3.3 Density of States in Silver

3.4 Fermi Function versus Boltzmann Function

Chapter 4 Intrinsic Semiconductors

4.1 Introduction

4.2 Intrinsic Silicon

4.3 Conductivity Equation

4.4 Carrier Concentration in Semiconductors

4.5 Fermi Level Position in Intrinsic Semiconductors

4.6 Temperature Effect on n_i

Chapter 5 Extrinsic Semiconductors

5.1 Introduction

5.2 Doping Types

5.3 Compensation Doping

5.4 Dopant Materials

5.5 Fermi Level in Extrinsic Semiconductors

5.6 Temperature Dependence of Carrier Concentration

5.7 Carrier Mobility

5.8 Degenerate Semiconductors

5.9 Amorphous Semiconductors

Part II - Devices

Chapter 6 Metal-Semiconductor Junctions

Learning Objectives

6.1 Metal-Metal Junctions

6.2 Schottky Junctions

6.3 Ohmic Junctions

Chapter 7 pn Junctions

Learning Objectives

7.1 Introduction

7.2 pn Junction

7.3 Calculation of Junction Parameters

7.4 Junction Potential versus Fermi Level Position

7.5 pn Junction Under Bias

7.6 Reverse Bias

7.7 Junction Breakdown

7.8 Heterojunctions

Chapter 8 Transistors

8.1 Introduction

8.2 Bipolar Junction Transistor

8.3 Junction Field-effect Transistor

8.4 Metal Oxide Semiconductor FET

8.5 MOS Band Structure

8.6 Role of Oxide Layer

Chapter 9 Light Semiconductor Interaction

9.1 Optical Absorption

9.2 Recombination and Carrier Lifetime

9.3 Continuity Equation

Chapter 10 LEDs and LASERS

10.1 Optical Emission

10.2 pn Junction-based LEDs

10.3 LED Materials

10.4 Solid-state LASERS

10.5 Device Structure

10.6 Specialty Lasers

Chapter 11 Photodetectors and Solar Cells

11.1 Photodetectors Working Principle

11.2 Types of Photodetectors

11.3 Solar Cell Basics

11.4 pn Junction Solar Cell

11.5 Solar Cell Materials and Efficiency

Part III – Fabrication

Chapter 12 Development of ICs

12.1 Introduction

12.2 Integrated Circuits

12.3 Device Miniaturization

12.4 Challenges in IC Manufacturing

12.5 IC Manufacturing Stages

Chapter 13 Silicon Wafer Manufacturing

13.1 Wafer Specification

13.2 Polysilicon Manufacture

13.3 Single Crystal Si Manufacture

13.4 Wafer Manufacturing

Chapter 14 Integrated Circuit Fabrication

14.1 Fabrication Overview

14.2 Layering

14.3 Patterning

14.4 Doping

14.5 Heat Treatment

14.6 MOSFET Fabrication

Chapter 15 Oxidation and Doping

15.1 Oxidation

15.2 Types of Oxidation Processes

15.2.1 Oxide Growth Model and Parameters

15.3 Oxide Furnaces

15.4 Doping Techniques

15.5 Thermal Diffusion

15.6 Ion Implantation

Chapter 16 Lithography

16.1 Introduction

16.2 Process Overview

16.3 Photoresists

16.4 Mask Making

16.5 Photoresist Application

16.6 Alignment and Exposure

16.7 Developing

16.8 Lithography Advances

Chapter 17 Etching and Deposition

17.1 Etching Basics

17.2 Wet Etching

17.3 Dry Etching

17.4 Deposition

Chapter 18 Metallization and Polishing

18.1 Metallization Basics

18.2 Metallization Materials

18.3 Metallization Techniques

18.4 Planarization

18.5 Copper Dual-Damascene Process

Chapter 19 IC Process Control

19.1 Process Evaluation

19.2 Electrical Measurements

19.3 Thickness Measurement

19.4 Defect Detection

19.5 Process Evaluation

19.6 Yield Models and Fabrication Costs
19.7 Clean Room Contamination
19.8 Clean Room Design and Materials
Chapter 20 IC Architecture and Packaging
20.1 Integrated Circuit Components
20.2 MEMS Systems
20.3 Silicon Micro-architecture
20.4 Packaging
Summary
Practice Questions
Answers
Bibliography
Index

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