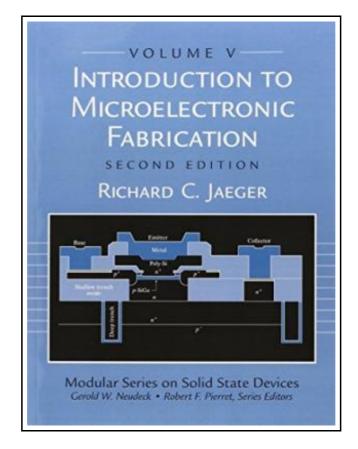
### Introduction to Microelectronic Fabrication: Volume 5 of Modular Series on Solid State Devices (2nd Edition)



Filesize: 9.56 MB

### Reviews

This ebook is very gripping and exciting. It is one of the most amazing book we have study. Its been printed in an remarkably easy way and it is only after i finished reading this book through which really transformed me, affect the way i think. *(Camille Greenholt)* 

### INTRODUCTION TO MICROELECTRONIC FABRICATION: VOLUME 5 OF MODULAR SERIES ON SOLID STATE DEVICES (2ND EDITION)



To download Introduction to Microelectronic Fabrication: Volume 5 of Modular Series on Solid State Devices (2nd Edition) eBook, please follow the link below and save the file or have access to additional information which might be highly relevant to INTRODUCTION TO MICROELECTRONIC FABRICATION: VOLUME 5 OF MODULAR SERIES ON SOLID STATE DEVICES (2ND EDITION) book.

Prentice Hall, 2001. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service! Summary: (NOTE:Each chapter concludes with Summary, References, and Problems.) Preface. 1. An Overview of Microelectronic Fabrication. A Historical Perspective. An Overview of Monolithic Fabrication Processes and Structures. Metal-Oxide-Semiconductor (MOS) Processes. Basic Bipolar Processing. Safety. 2. Lithography. The Photolithographic Process. Etching Techniques. Photomask Fabrication. Exposure Systems. Exposure Sources. Optical and Electron Microscopy. Further Reading. 3. Thermal Oxidation of Silicon. The Oxidation Process. Modeling Oxidation. Factors Influencing Oxidation Rate. Dopant Redistribution During Oxidation. Masking Properties of Silicon Dioxide. Technology of Oxidation. Oxide Quality. Selective Oxidation and Shallow Trench Formation. Oxide Thickness Characterization. Process Simulation. 4. Diffusion. The Diffusion Process. Mathematical Model for Diffusion. The Diffusion Coefficient. Successive Diffusions. Solid-Solubility Limits. Junction Formation and Characterization. Sheet Resistance. Generation-Depth and Impurity Profile Measurement. Diffusion Simulation. Diffusion Systems. Gettering. 5. Ion Implantation. Implantation Technology. Mathematical Model for Ion Implantation. Selective Implantation. Junction Depth and Sheet Resistance. Channeling, Lattice Damage, and Annealing. Shallow Implantation. Source Listing 6. Film Deposition. Evaporation. Sputtering. Chemical Vapor Deposition. Epitaxy. Further Reading. 7. Interconnections and Contacts. Interconnections in Integrated Circuits. Metal Interconnections and Contact Technology. Diffused Interconnections. Polysilicon Interconnections and Buried Contacts. Silicides and Multilayer-Contact Technology. The Liftoff Process. Multilevel Metallization. Copper Interconnects and Damascene Processes. Further Reading. 8. Packaging and Yield. Testing. Wafer Thinning and Die Separation. Die Attachment. Wire Bonding. Packages. Flip-Chip and Tape-Automated-Bonding Processes. Yield. Further Reading. 9. MOS Process Integration. Basic MOS Device Considerations. MOS Transistor Layout and Design Rules. Complementary MOS (CMOS) Technology. Silicon on Insulator. 10. Bipolar Process Integration. The Junction-Isolated Structure. Current Gain. Transit Time. Basewidth. Breakdown Voltages. Other Elements in SBC Technology. Layout Considerations. Advanced Bipolar Structures. Other Bipolar Isolation Techniques. BICMOS. 11. Processes for Microelectromechanical SystemsMEMS. Mechanical Properties of Silicon. Bulk Micromachining. Silicon Etchants. Surface Micromachining....

Read Introduction to Microelectronic Fabrication: Volume 5 of Modular Series on Solid State Devices (2nd Edition) Online

Download PDF Introduction to Microelectronic Fabrication: Volume 5 of Modular Series on Solid State Devices (2nd Edition)

**Download ePUB Introduction to Microelectronic Fabrication: Volume 5 of Modular** Series on Solid State Devices (2nd Edition)

### **Related Books**



[PDF] Grandpa Spanielson's Chicken Pox Stories: Story #1: The Octopus (I Can Read Book 2)

Click the web link listed below to download "Grandpa Spanielson's Chicken Pox Stories: Story #1: The Octopus (I Can Read Book 2)" PDF file. Save eBook »

PDF

[PDF] The Web Collection Revealed, Premium Edition: Adobe Dreamweaver CS6, Flash CS6, and Photoshop CS6 (Stay Current with Adobe Creative Cloud) Click the web link listed below to download "The Web Collection Revealed, Premium Edition: Adobe Dreamweaver CS6, Flash CS6, and Photoshop CS6 (Stay Current with Adobe Creative Cloud)" PDF file.

Save eBook »



## [PDF] Star Flights Bedtime Spaceship: Journey Through Space While Drifting Off to Sleep

Click the web link listed below to download "Star Flights Bedtime Spaceship: Journey Through Space While Drifting Off to Sleep" PDF file.

Save eBook »



#### [PDF] Maisy's Christmas Tree

Click the web link listed below to download "Maisy's Christmas Tree" PDF file. Save eBook »



# [PDF] Music for Children with Hearing Loss: A Resource for Parents and Teachers (Paperback)

Click the web link listed below to download "Music for Children with Hearing Loss: A Resource for Parents and Teachers (Paperback)" PDF file.
Save eBook »



### [PDF] TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (2-4 years old) in small classes (3)(Chinese Edition)

Click the web link listed below to download "TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (2-4 years old) in small classes (3)(Chinese Edition)" PDF file.

Save eBook »

[PDF] The genuine book marketing case analysis of the the lam light. Yin Qihua Science Press 21.00(Chinese Edition) Click the hyperlink beneath to get "The genuine book marketing case analysis of the the lam light. Yin Qihua Science Press 21.00(Chinese Edition)" document. Save Document »
[PDF] The Mystery in Chocolate Town Hershey, Pennsylvania Carole Marsh Mysteries Teachers Guide Click the hyperlink beneath to get "The Mystery in Chocolate Town Hershey, Pennsylvania Carole Marsh Mysteries Teachers Guide" document. Save Document »
[PDF] The Mystery at Motown Carole Marsh Mysteries Click the hyperlink beneath to get "The Mystery at Motown Carole Marsh Mysteries" document. Save Document »
[PDF] Access2003 Chinese version of the basic tutorial (secondary vocational schools teaching computer series) Click the hyperlink beneath to get "Access2003 Chinese version of the basic tutorial (secondary vocational schools teaching computer series)" document. Save Document »
[PDF] A Dog of Flanders: Unabridged; In Easy-to-Read Type (Dover Children's Thrift Classics) Click the hyperlink beneath to get "A Dog of Flanders: Unabridged; In Easy-to-Read Type (Dover Children's Thrift Classics)" document. Save Document »
[PDF] Hands Free Mama: A Guide to Putting Down the Phone, Burning the To- Do List, and Letting Go of Perfection to Grasp What Really Matters! (Paperback) Click the hyperlink beneath to get "Hands Free Mama: A Guide to Putting Down the Phone.

Click the hyperlink beneath to get "Hands Free Mama: A Guide to Putting Down the Phone, Burning the To-Do List, and Letting Go of Perfection to Grasp What Really Matters! (Paperback)" document.

Save Document »