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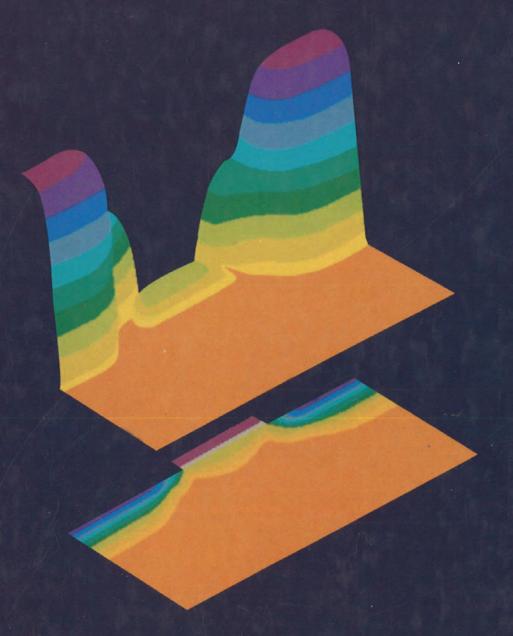
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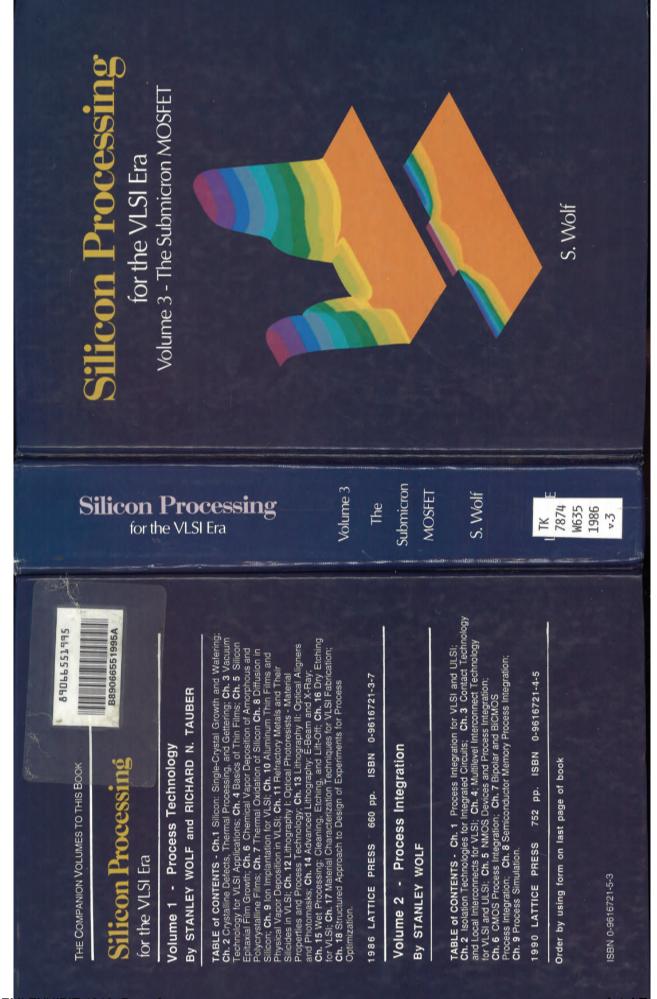
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Silicon Processing

for the VLSI Era Volume 3 - The Submicron MOSFET



S. Wolf



SILICON PROCESSING FOR THE VLSI ERA

VOLUME 3:
THE SUBMICRON MOSFET

STANLEY WOLF Ph.D.

Professor, Department of Electrical Engineering California State University, Long Beach Long Beach, California

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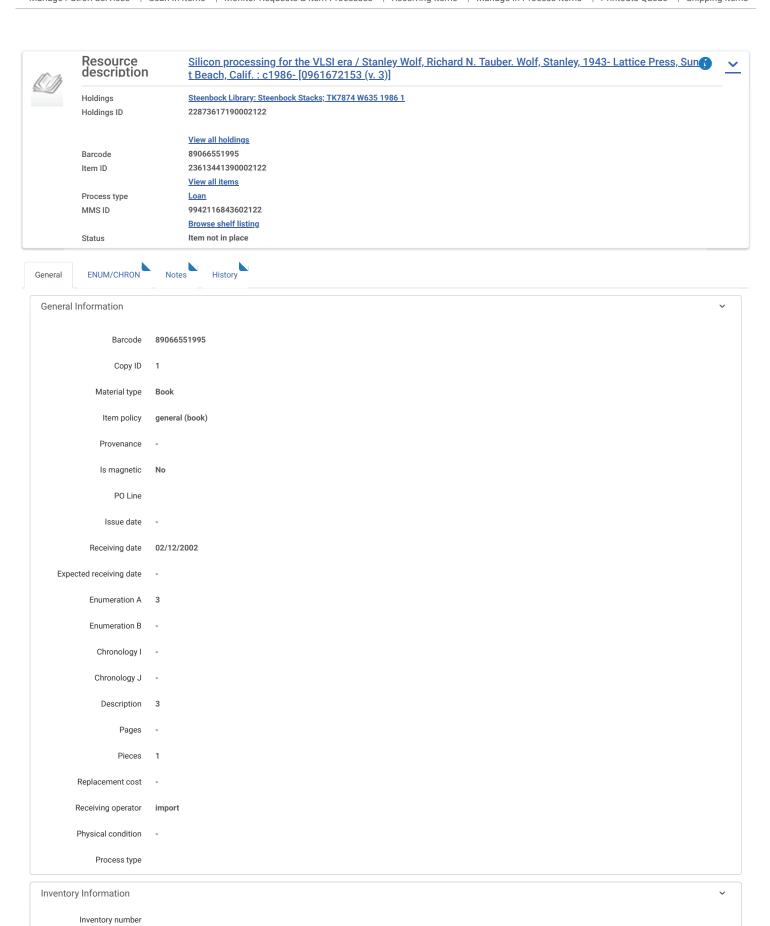
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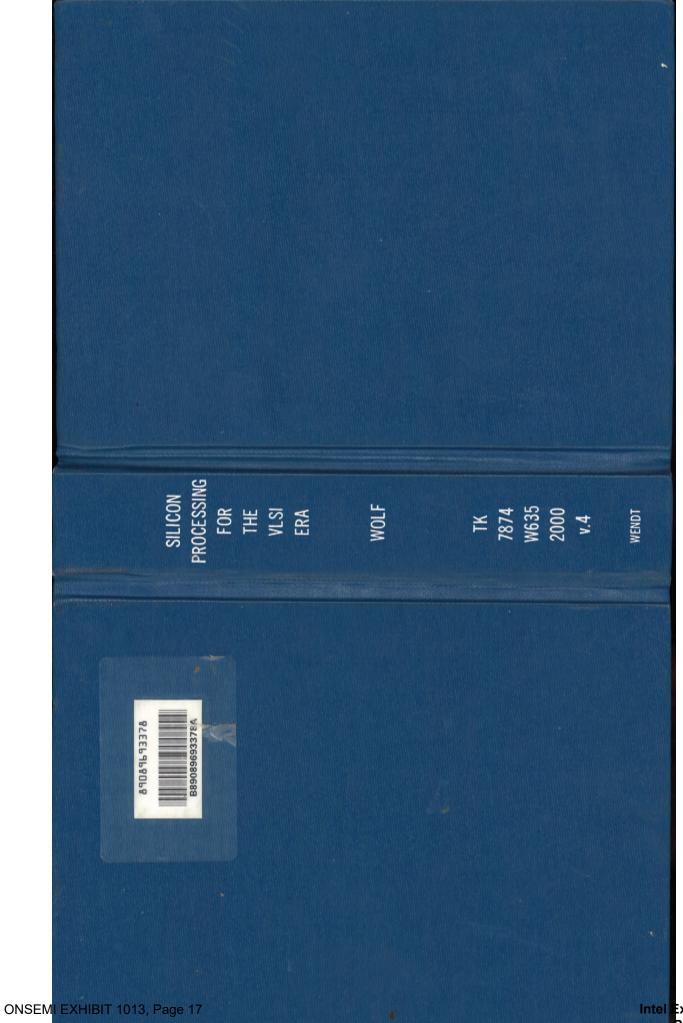
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MASTER TABLE OF CONTENTS

PREFACE

Chap. 1 - THE EVOLUTION OF THE STRUCTURE OF MOSFETS	1
Chap. 2 - 300-MM SILICON WAFERS	17
Chap. 3 - GATE DIELECTRICS: THIN GATE OXIDES	75
Chap. 4 - HIGH-k DIELECTRICS	145
Chap. 5 - THE STRUCTURE OF DEEP-SUBMICRON MOSFETS: Retrograde-Wells; Super-Steep Retrograde Channel Dop Drain Engineering; Punchthrough-Control Implants	181 oing;
Chap. 6 - DEEP-SUBMICRON LITHOGRAPHY I: PHOTORESISTS	227
Chap. 7 - DEEP-SUBMICRON LITHOGRAPHY II: OPTICS AND HARDWARE	259
Chap. 8 - CHEMICAL MECHANICAL POLISHING (CMP)	313
Chap. 9 - SHALLOW TRENCH ISOLATION (STI)	433
Chap. 10 - SILICON-GERMANIUM (Si-Ge) TECHNOLOGY FOR HIGH-PERFORMANCE TELECOMMUNICATIONS ICS	475
Chap. 11 - SILICON-ON-INSULATOR (SOI) TECHNOLOGY	501
Chap. 12 - MULTILEVEL INTERCONNECTS FOR ULSI	573
Chap. 13 - POLYCIDES AND SALICIDES OF TISi2, CoSi2 AND NISI	603
Chap. 14 - LOW-k DIELECTRICS	639
Chap. 15 - DUAL-DAMASCENE INTERCONNECTS	671
Chap. 16 - COPPER INTERCONNECT PROCESS TECHNOLOGY	711
INDEX	795

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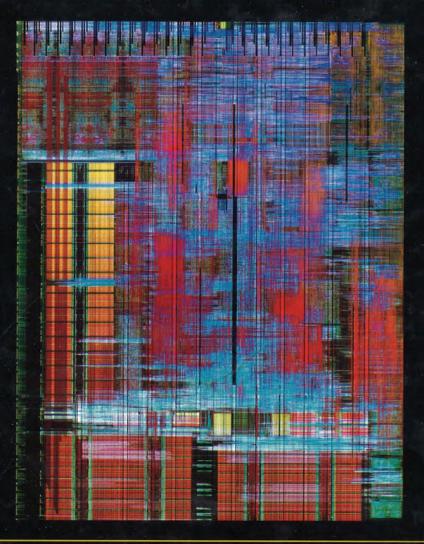
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ELECTRONIC DEVICES



BEN G. STREETMAN - SANJAY BANERJEE

Prentice Hall Series in Solid State Physical Electronics, Nick Holonyak, Jr., Series Editor

physics, devices and technology. Previous editions have been translate and Polish. The book was written with two basic goals in mind: 1) develop physics concepts to understand current and future devices, 2) provide a sto current semiconductor devices and technology so that their applications optoelectronic circuits and systems can be appreciated.

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greatly expanded and updated discussion of device fabrication processes and CMOS integrated circuit technology, along with new data in the Appendices, provides a useful understanding of how semiconductor devices are made. incorporates the basics of semiconductor materials and conduction processes in solids needed to understand p-n junctions, bipolar and metal oxide semiconductor (MOS) transistors, optoelectronic and other devices.

extensive discussion of circuit and other application examples to provide students with feedback about the practical relevance of the theory.

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includes a listing of the key equations for semiconductor devices on the inside covers of the book, arranged thematically to help students digest the concepts.

about 200 problems and current references which extend concepts in the text.

BEN G. STREETMAN is Dean of the College of Engineering at The University of Texas at Austin and holds the Dula D. Cockrell Centennial Chair in Engineering. He is a Professor of Electrical and Computer Engineering and was the founding Director of the Microelectronics. Research Center. He has taught at the University of Illinois at Urbana-Champaign as well as the University of Texas at Austin. He has received numerous awards including the Education Medal of IEEE. The Frederick Emmons Terman Medal of the ASEE, and membership in the National Academy of Engineering. He has published more than 270 articles in the technical literature. Thirty-three students of Electrical Engineering. Materials Science, and Physics have received their Ph.D.s under his direction.

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BEN G. STREETMAN - SANJAY BANERJEE

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Solid State Electronic Devices

BEN G. STREETMAN AND SANJAY BANERJEE

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