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I, Rachel J. Watters, am a librarian, and the Head of Resource Sharing for the General Library System, Memorial Library, located at 728 State Street, Madison, Wisconsin, 53706. Part of my job responsibilities include oversight of Wisconsin TechSearch (“WTS”), an interlibrary loan department at the University of Wisconsin-Madison. I have worked as a librarian at the University of Wisconsin library system since 1998, starting as a graduate student employee in the Kurt F. Wendt Engineering Library and WTS, then as a librarian in Interlibrary Loan at Memorial Library. I began professional employment at WTS in 2002 and became WTS Director in 2011. In 2019, I became of Head of Resource Sharing for UW-Madison’s General Library System. I have a master’s degree in Library and Information Studies from the University of Wisconsin-Madison. Through the course of my studies and employment, I have become well informed about the operations of the University of Wisconsin library system, which follows standard library practices.

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Exhibit A to this Declaration is a true and accurate copy of the front and back covers, front matter, and back inside cover of the *Silicon Processing for the VLSI Era. Volume 3: The submicron MOSFET* (1995) publication, which includes a stamp on the inside back cover showing that this book is the property of the Kurt F. Wendt Library at the University of Wisconsin-Madison.

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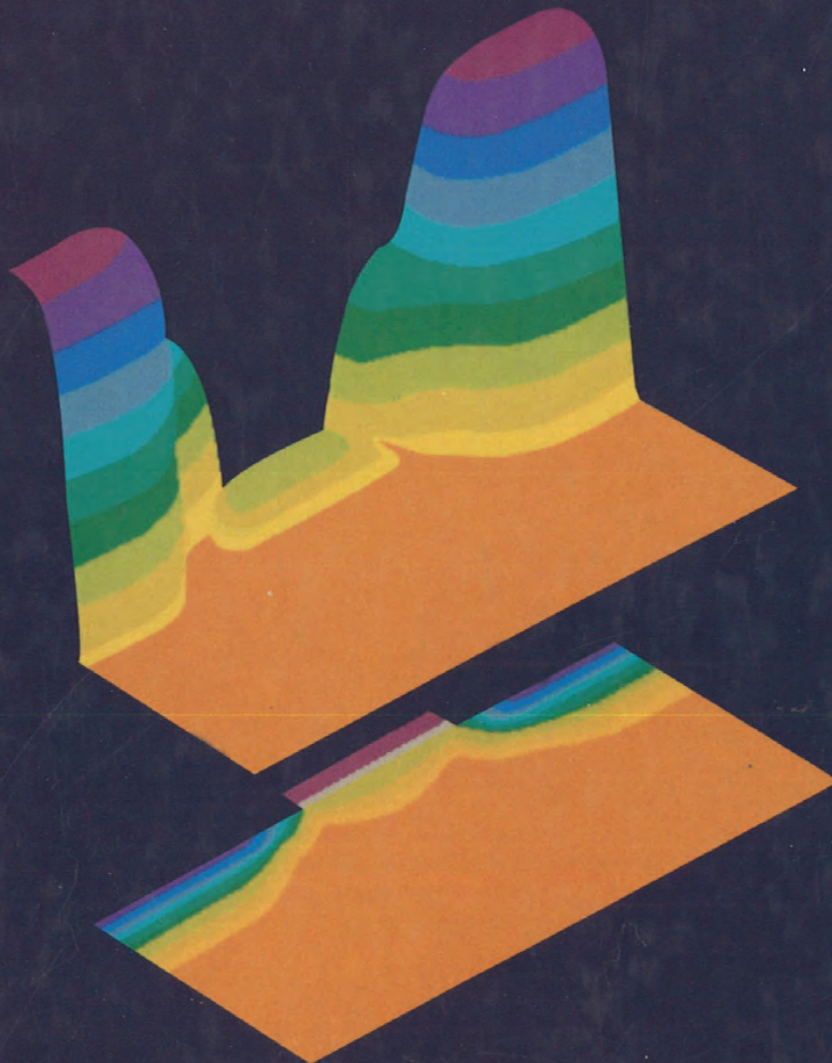
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Head of Resource Sharing

EXHIBIT A

Silicon Processing

for the VLSI Era

Volume 3 - The Submicron MOSFET



S. Wolf

THE COMPANION VOLUMES TO THIS BOOK

Silicon Processing for the VLSI Era

Volume 1 - Process Technology

By STANLEY WOLF and RICHARD N. TAUBER

TABLE of CONTENTS - Ch.1 Silicon: Single-Crystal Growth and Watering; **Ch. 2** Crystalline Defects, Thermal Processing, and Gettering; **Ch. 3** Vacuum Technology for VLSI Applications; **Ch. 4** Basics of Thin Films; **Ch. 5** Silicon Epitaxial Film Growth; **Ch. 6** Chemical Vapor Deposition of Amorphous and Polycrystalline Films; **Ch. 7** Thermal Oxidation of Silicon; **Ch. 8** Diffusion in Silicon; **Ch. 9** Ion Implantation for VLSI; **Ch. 10** Aluminum Thin Films and Physical Vapor Deposition in VLSI; **Ch. 11** Refractory Metals and Their Silicides in VLSI; **Ch. 12** Lithography I: Optical Photoresists - Material Properties and Process Technology; **Ch. 13** Lithography II: Optical Aligners and Photomasks; **Ch. 14** Advanced Lithography: E-Beam and X-Ray; **Ch. 15** Wet Processing: Cleaning, Etching, and Lift-Off; **Ch. 16** Dry Etching for VLSI; **Ch. 17** Material Characterization Techniques for VLSI Fabrication; **Ch. 18** Structured Approach to Design of Experiments for Process Optimization.

1986 LATTICE PRESS 660 pp. ISBN 0-9616721-3-7

Volume 2 - Process Integration

By STANLEY WOLF

TABLE of CONTENTS - Ch. 1 Process Integration for VLSI and ULSI; **Ch. 2** Isolation Technologies for Integrated Circuits; **Ch. 3** Contact Technology and Local Interconnects for VLSI; **Ch. 4** Multilevel Interconnect Technology for VLSI and ULSI; **Ch. 5** NMOS Devices and Process Integration; **Ch. 6** CMOS Process Integration; **Ch. 7** Bipolar and BiCMOS Process Integration; **Ch. 8** Semiconductor Memory Process Integration; **Ch. 9** Process Simulation.

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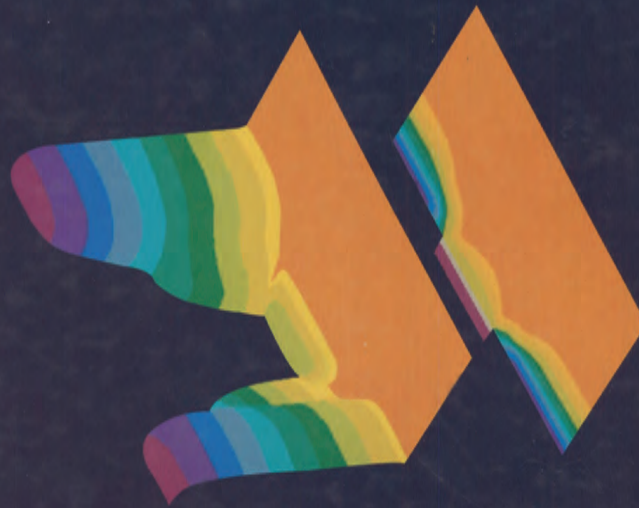
Volume 3

The
Submicron
MOSFET

S. Wolf

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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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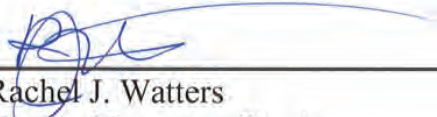
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**VOLUME 4:
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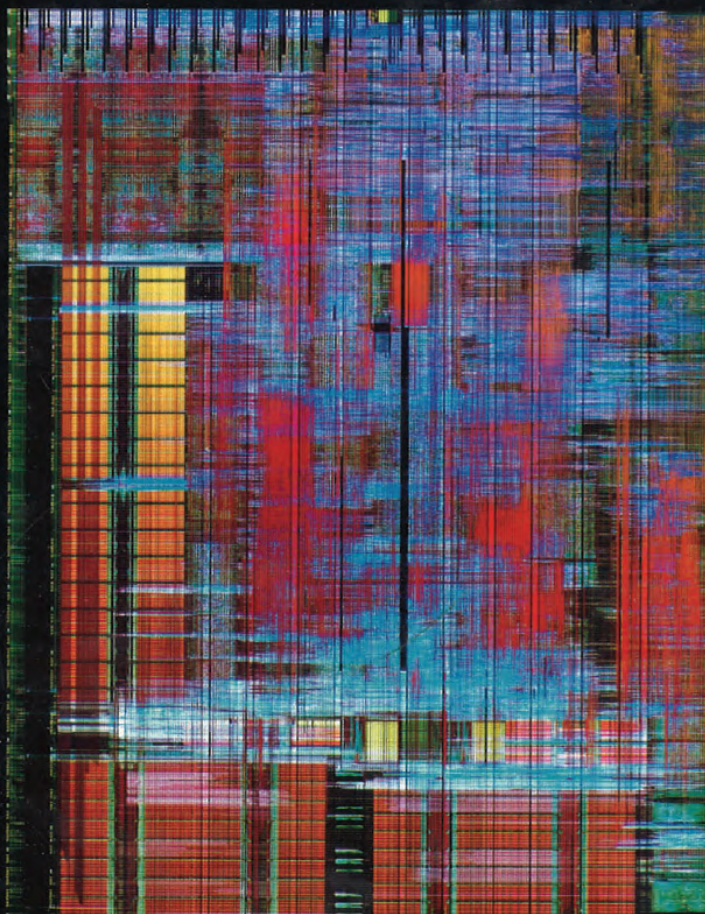


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EXHIBIT A

FIFTH EDITION

SOLID STATE ELECTRONIC DEVICES



BEN G. STREETMAN ■ SANJAY BANERJEE

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

This is the fifth edition of the most widely used introductory book on semiconductor materials, physics, devices and technology. Previous editions have been translated into Chinese, Japanese, Korean, Russian, Spanish, and Polish. The book was written with two basic goals in mind: 1) develop the physics concepts to understand current and future devices; 2) provide a solid foundation for the design of semiconductor devices and technology so that their applications in optoelectronic circuits and systems can be appreciated.

KEY FEATURES:

- 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.
- 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.
- extensive discussion of circuit and other application examples to provide students with feedback about the practical relevance of the theory.
- completely updated discussion of MOS devices, both in the underlying theory as well as discussion of short channel, high field and hot carrier effects in scaled MOSFETs, recognizing the current preponderance of CMOS.
- updated, consolidated treatment of optoelectronic devices, including sources such as blue GaIn-based LEDs and semiconductor vertical-cavity surface-emitting lasers, as well as detectors such as avalanche and resonant-cavity photodiodes.
- 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.



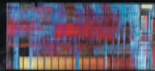
BEN G. STREETMAN is Dean of the College of Engineering at The University of Texas at Austin and holds the Dula D. Cockrell Centennial Chair in Engineering. He is a Professor of Electrical and Computer Engineering and was the founding Director of the Microelectronics Research Center. He has taught at 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.



SANJAY BANERJEE is the Cullen Trust Endowed Professor of Electrical and Computer Engineering, and Director of the Microelectronics Research Center at The University of Texas at Austin. He has more than 225 archival refereed publications and 12 U.S. patents, and has supervised 18 Ph.D. students. His honors include the NSF Presidential Young Investigator Award (1988), the Texas Atomic Energy Centennial Fellowship (1990-1997), Distinguished National Lecturer for the IEEE Electron Devices Society (1997), and Fellow of the IEEE (1996).

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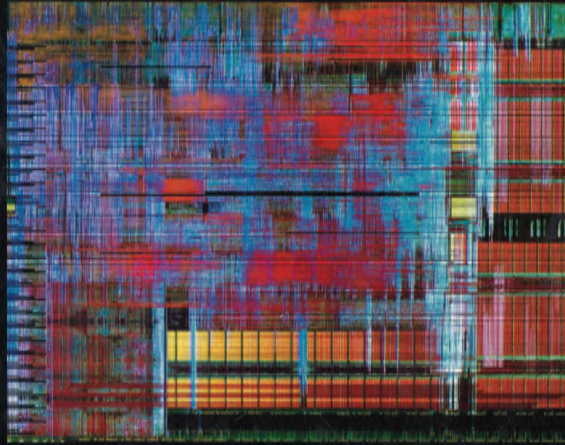
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KEY FEATURES:

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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.
- extensive discussion of circuit and other application examples to provide students with feedback about the practical relevance of the theory.
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- updated, consolidated treatment of optoelectronic devices, including sources such as blue GaN-based LEDs and semiconductor vertical-cavity surface-emitting lasers, as well as detectors such as avalanche and resonant-cavity photodiodes.
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FIFTH EDITION

Solid State Electronic Devices

BEN G. STREETMAN AND SANJAY BANERJEE

*Microelectronics Research Center
Department of Electrical and Computer Engineering
The University of Texas at Austin*



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General

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