Advanced Gate Stack, Source/Drain, and Channel Engineering for Si-Based CMOS 5: New Materials, Processes, and Equipment

Editors:

V. Narayanan
IBM T.J. Watson Research Center
Yorktown Heights, New York, USA

D-L. Kwong
Institute of Microelectronics
Singapore

E. P. Gusev
Qualcomm MEMS Technologies
San Jose, California, USA

F. Roozeboom
NXP Semiconductors Research
and University of Technology
Eindhoven, The Netherlands

H. Iwai
Tokyo Institute of Technology
Yokohama, Japan

P. J. Timans
Mattson Technology Inc.
Fremont, California, USA

Sponsoring Divisions:

Electronics and Photonics

Dielectric Science & Technology

High Temperature Materials

Published by
The Electrochemical Society
65 South Main Street, Building D
Pennington, NJ 08534-2839, USA
tel 609 737 1902
fax 609 737 2743
www.electrochem.org

ecs transactions ™

Vol. 19 No. 1

Published by:

The Electrochemical Society
65 South Main Street
Pennington, New Jersey 08534-2839, USA

Telephone 609.737.1902
Fax 609.737.2743
e-mail: ecs@electrochem.org
Web: www.electrochem.org

ISSN 1938-6737 (online)
ISSN 1938-5862 (print)

ISBN 978-1-56677-709-4 (Hardcover)
ISBN 978-1-60768-059-8 (PDF)

Printed in the United States of America.

***ECS Transactions*, Volume 19, Issue 1**
Advanced Gate Stack, Source/Drain, and Channel Engineering for Si-Based CMOS 5: New Materials, Processes, and Equipment

Table of Contents

Chapter 3
Short-Time Annealing - Dopant Activation & Diffusion

Chapter 4
Shallow Junction Metrology

Chapter 5
Novel Channel Engineering

Chapter 6
Advanced Gate Stacks

Chapter 7
Contacts

** invited paper*