
State-of-the-Art Program on Compound Semiconductors (SOTAPOCS 62)

Editors:

T. Anderson

J. Hite

R. Lynch

C. O'Dwyer

E. Douglas

Sponsoring Division:



Electronics and Photonics



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

ecstransactions™

Vol. 92, No. 6

Copyright 2019 by The Electrochemical Society.
All rights reserved.

This book has been registered with Copyright Clearance Center.
For further information, please contact the Copyright Clearance Center,
Salem, Massachusetts.

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)
ISSN 2151-2051 (cd-rom)

ISBN 978-1-62332-586-2 (CD-ROM)
ISBN 978-1-62332-587-9 (USB)
ISBN 978-1-60768-880-8 (PDF)

Printed in the United States of America.

ECS Transactions, Volume 92, Issue 6
State-of-the-Art Program on Compound Semiconductors
(SOTAPOCS 62)

Table of Contents

<i>Preface</i>	<i>iii</i>
Etching Mechanisms in III-V Semiconductors: Electrochemical Etching of Indium Phosphide <i>D. N. Buckley, N. Quill, C. O'Dwyer, R. P. Lynch</i>	1
Selective Annealing Effects of Asymmetric Schottky-Type AlGaIn Metal-Semiconductor-Metal UV-B Sensor <i>B. J. Park, J. H. Seol, S. H. Hahn</i>	19
Dislocation Compensation in a Metamorphic Semiconductor Heterostructure Utilizing a Uniform or Graded Buffer Layer <i>T. Kujofsa, M. T. Islam, J. E. Ayers</i>	25
A Modeling Study of Dislocation Behavior in InGaAs/GaAs (001) and InAlGaAs/GaAs (001) Heterostructures Utilizing Strained-Layer Superlattices <i>M. T. Islam, T. Kujofsa, J. E. Ayers</i>	31
Model for Dislocation Pinning Interactions in InGaAs/GaAs (001) Heterostructures <i>T. Kujofsa, J. E. Ayers</i>	43
Electrical Double Layer Gated Field Effect Transistor Biosensors for the Quantitative Detection of Beta-Human Chorionic Gonadotropin <i>L. W. Liao, P. H. Chen, Y. L. Wang</i>	57
Epitaxial Growth of Cu ₂ O on Ag Substrate by Electrodeposition <i>D. Dai, P. Y. Huang, L. Chang</i>	61
Author Index	69