

The Electrochemical Society

Corrosion of Electronic Materials and Devices

at the 210th ECS Meeting

ECS Transactions Volume 3 No.43

October 29 – November 23, 2006
Cancun, Mexico

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571
www.proceedings.com

ISBN: 978-1-60560-170-0

Some format issues inherent in the e-media version may also appear in this print version.

Copyright 2008 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)

Printed in the United States of America.

ECS Transactions, Volume 3, Issue 43
Corrosion of Electronic Materials and Devices

Table of Contents

Preface

Investigations on the Fe-doped TiO₂ Nanotube Arrays as a Photoanode for
Cathodic Protection of Stainless Steel 1
J. Li, H. Yun and C. Lin

The Investigation of Au/Pd-Ni/Ni Plating for Electrical Contacts 11
O. Hiramoto

Ionic Migration in Soldered Joints of a Printed Circuit Board 19
M. A. Neri, C. Carreño and A. Martínez Villafañe

Corrosion Products Formed on Silver and Copper Plates Exposed in a Volcanic
Area 27
M. Watanabe, T. Handa, T. Ichino and N. Kuwaki

Hexavalent Chromium-Free Pre-Treatment for Galvanized Steel 37
L. A. Hernandez, L. S. Hernández, J. M. Miranda and O. Dominguez

Author Index 49