

MATERIALS RESEARCH SOCIETY
SYMPOSIUM PROCEEDINGS VOLUME 1699

Transparent Electrodes

April 21-25, 2014
San Francisco, California, USA

Printed from e-media with permission by:

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

ISBN: 978-1-5108-0557-6

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

©Materials Research Society 2014

This reprint is produced with the permission of the Materials Research Society and Cambridge University Press.

This publication is in copyright, subject to statutory exception and to the provisions of relevant collective licensing agreements. No reproduction of any part may take place without the written permission of Cambridge University Press.

Cambridge University Press
Cambridge, New York, Melbourne, Madrid, Cape Town,
Singapore, São Paulo, Delhi, Tokyo, Mexico City

Cambridge University Press
32 Avenue of the Americas, New York, NY 10013-2473, USA
www.cambridge.org

Materials Research Society
506 Keystone Drive, Warrendale, PA 15086
www.mrs.org

CODEN: MRSPDH

ISBN: 978-1-5108-0557-6

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-part Internet Web sites referred to in this publication and does not guarantee that any content on such Web sites is, or will remain, accurate or appropriate.

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

TABLE OF CONTENTS

Investigation of Band Tailing in Sputtered ZnO:Al Thin Films Regarding Structural Properties and Impurities	1
<i>S. Schonau, F. Ruske, S. Neubert, B. Rech</i>	
Nanostructured, ITO-free Electrodes for OLED Emission Control.....	7
<i>A. Pradana, C. Kluge, M. Gerken</i>	
Morphology-Driven Electrical and Optical Properties in Graded Hierarchical Transparent Conducting Al:ZnO	13
<i>P. Gondoni, P. Mazzolini, A. Perez, V. Russo, A. Bassi, C. Casari</i>	
Indium Tin Oxide Thin Films Deposited at Low Temperature Using Dual Ion Beam Sputtering.....	19
<i>W. Geerts, N. Simpson, A. Woodall, M. Compton</i>	
Fabrication of Transparent Electrodes with Silver Nanowires and PPT Gel for Organic Optoelectronic Devices	25
<i>M.-C. Tsai, Y.-H. Chen, Y.-H. Ho, S.-J. Yang, P.-K. Wei</i>	
Electronic Properties of the ZnO:Al/n-Si (100), (110) and (111) Interfaces.....	30
<i>P. Lindberg, V. Quemener, K. Bergum, J. Gan, B. Svensson, E. Monakhov</i>	
Inkjet Printing Graphene-Based Transparent Conductive Films	36
<i>P. He, B. Derby</i>	
ITO-Free OLED and OPV Devices with a Transparent Silver Nanowire Electrode	42
<i>F. Pschenitzka</i>	
High Performance ITO Nanoparticles as Nanoink for Printing as a Substitute Process of Sputtering.....	49
<i>A. Muramatsu, K. Kanie, T. Sasaki, M. Nakaya</i>	
Author Index	