

MATERIALS RESEARCH SOCIETY
SYMPOSIUM PROCEEDINGS VOLUME 1285

Challenges in Roll-to-Roll (R2R) Fabrication for Electronics and Other Functionalities

November 29 - December 3, 2010
Boston, Massachusetts, USA

Printed from e-media with permission by:

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

ISBN: 978-1-61839-500-9

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

©Materials Research Society 2011

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: 978-1-61839-500-9

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

Laser Treatment of Organic Thin Film Solar Cells	1
<i>Maurice Clair, Christian Scholz, Bernd Keiper, Jens Haenel</i>	
Fe-42%Ni Austenitic Alloy as a Novel Substrate for Flexible Electronics	6
<i>Xiaoxiao Ma, Shahrukh A. Khan, Nackbong Choi, Miltiadis Hatalis, Mark Robinson</i>	
Concepts of Metal-Organic Decomposition (MOD) Silver Inks for Structured Metallization by Inkjet Printing	13
<i>Claudia Schoner, Stephan F. Jahn, Alexander Jakob, Thomas Blaudeck, Heinrich Lang, Reinhard R. Baumann</i>	
Roll-to-roll Manufacture of Pentacene-based Thin Film Transistors with a Flash-evaporated Polymer Dielectric Cured with an E-beam	19
<i>Gamal A. W. Abbas, Donna Cheng, Kanad Mallik, Hazel E. Assender</i>	
Mass-printed Integrated Circuits with Enhanced Performance Using Novel Materials and Concepts	25
<i>Georg C. Schmidt, Maxi Bellmann, Heiko Kempa, Mike Hamsch, Kay Reuter, Michael Stanel, Arved C. Hübler</i>	
Author Index	