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Flat-Panel Displays and Sensors—Principles, Materials and Processes

Editors: Babu R. Chalamala, Richard H. Friend, Thomas N. Jackson and Frank R. Libsch
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Flat-Panel Displays and Sensors—Principles, Materials and Processes

Symposium held April 4–9, 1999, San Francisco, California, U.S.A.

EDITORS:

Babu R. Chalamala

*Motorola, Inc.
Tempe, Arizona, U.S.A.*

Richard H. Friend

*Cavendish Laboratory
Cambridge, United Kingdom*

Thomas N. Jackson

*The Pennsylvania State University
University Park, Pennsylvania, U.S.A.*

Frank R. Libsch

*IBM T.J. Watson Research Center
Yorktown Heights, New York, U.S.A.*



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Frontmatter
[More information](#)

CONTENTS

Preface xv
Materials Research Society Symposium Proceedings xvi

PART I: INORGANIC LOW-VOLTAGE
PHOSPHORS

Performing Accurate Cathodoluminescence Measurements
of Phosphor Powders and Screens 3
L.E. Shea and R.J. Walko

Film Preparation Conditions and Characterization of Co-Deposited
Tungsten Doped Zinc Oxide Phosphor 9
J.B. Sobti, V. Bhatia, P.M. Babuchna, and M.H. Weichold

An Investigation of the Chromaticity of Blue Emitting
Yttrium Silicate 15
E.J. Bosze, G.A. Hirata, and J. McKittrick

Modeling of Cathodoluminescence and Photoluminescence
Properties of Pulsed Laser-Deposited Europium-Activated
Yttrium Oxide Thin Film Phosphors 21
K.G. Cho, D. Kumar, Z. Chen, P.H. Holloway, and R.K. Singh

PART II: THIN FILM PHOSPHORS

*Thin-Film Oxide Phosphors as Electroluminescent Materials 29
T. Minami

A SIMS Study of Electroluminescent Phosphors: SrS:Cu 41
L.H. Zhang, L. Wang, W. Tong, and Y-B. Xin

PART III: FIELD EMISSION DISPLAYS

*Cathode Lifetime Issues in Field Emission Displays 49
R.H. Reuss and B.R. Chalamala

Field Emission From Polymers 61
I. Musa, G.A.J. Amaratunga, and W. Eccleston

Band-Bending Effects on Field Electron Emission From
n- and p-Type Silicon Gated Emitter Tips 67
T. Matsukawa, K. Tokunaga, S. Kanemaru, and J. Itoh

*Invited Paper

Cambridge University Press
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Flat-Panel Displays and Sensors—Principles, Materials and Processes
Editors: Babu R. Chalamala, Richard H. Friend, Thomas N. Jackson and Frank R. Libsch
Frontmatter
[More information](#)

**PART IV: FIELD EMISSION DEVICES
AND DISPLAYS**

*Mechanism of Efficient Field Emission From Carbon Nanotubes	75
<i>W. Zhu, C. Bower, O. Zhou, G.P. Kochanski, and S. Jin</i>	
Field Emission Energy Distribution and Current-Voltage Characteristics Using Single Tip Gated Diodes	85
<i>J.M. Bernhard, A.A. Rouse, E.D. Sosa, B.E. Gnade, D.E. Golden, B.R. Chalamala, S. Aggarwal, and R. Ramesh</i>	
Selective Area Laser Induced Deposition of Metal Boride Thin Films	91
<i>Z.C. Zhong, V. Holmes, P.A. Dowben, and D.J. Sellmyer</i>	
*Lifetime and Stability of Carbon Cold Cathodes	97
<i>R.L. Fink, L.H. Thuesen, Z.L. Tolt, Z. Yaniv, and C.M. Marrese</i>	
Properties of Electron Emitting Diode Fabricated With Single-Crystalline Diamond	105
<i>T. Ito and M. Nishimura</i>	
Oriented Carbon Nanotube Growth for Field Emission Applications	111
<i>A.N. Obraztsov, I. Pavlovsky, A.P. Volkov, V.L. Kuznetsov, and A.L. Chuvin</i>	
Field Emission Properties of Thin Molybdenum Carbide and Diamond Films Deposited by Dielectrophoresis	117
<i>A.A. Rouse, J.B. Bernhard, E.D. Sosa, and D.E. Golden</i>	

PART V: TFTs AND DISPLAYS

A High-Voltage Hydrogenated Amorphous Silicon Thin-Film Transistor for Reflective Active-Matrix Cholesteric LCD	125
<i>J.Y. Nahm, J.H. Lan, and J. Kanicki</i>	
High-Dielectric Constant Insulators and the AMLCD Process: Is Amorphous BST a Candidate?	129
<i>P. Andry, D. Neumayer, P. Duncombe, C. Dimitrakopoulos, F. Libsch, R. Laibowitz, A. Grill, and R. Wisniew</i>	
Why SiN_x:H is the Preferred Gate Dielectric for Amorphous Si Thin-Film Transistors (TFTs) and SiO₂ is the Preferred Gate Dielectric for Polycrystalline Si TFTs	135
<i>G. Lucovsky and J.C. Phillips</i>	

PART VI: MICROELECTRONICS

Gate Current Suppressed Lateral FEAs With Integrated TFTs	143
<i>M-S. Lim, C-M. Park, and M-K. Han</i>	

*Invited Paper

Cambridge University Press
978-1-107-41394-8 - Materials Research Society Symposium Proceedings: Volume 558:
Flat-Panel Displays and Sensors—Principles, Materials and Processes
Editors: Babu R. Chalamala, Richard H. Friend, Thomas N. Jackson and Frank R. Libsch
Frontmatter
[More information](#)

Substrate Sensitivity of the Adhesion and Material Properties of RF-PECVD Amorphous Carbon 149
S. Paul and F.J. Clough

Fabrication of Planar Diamond Electron Emitters for Flat-Panel Displays 155
H. Kawamura, S. Kato, T. Maki, and T. Kobayashi

Changes of Contact Potential Difference Induced by Frictional Damage in Ultrahigh Vacuum 161
L. Zhang and K. Nakayama

Ultrafast Silicon Based Internal Photoemission Detectors 167
M. Löken, Th. Lipinsky, L. Kappius, S. Mantl, and Ch. Buchal

PART VII: AMLCD I

***A Novel Two-Pass Excimer Laser Crystallization Process to Obtain Homogeneous Large Grain Polysilicon 175**
L. Mariucci, R. Carluccio, A. Pecora, V. Foglietti, G. Fortunato, and D. Della Sala

A Projection-Type Excimer-Laser Crystallization System for Ultra-Large Grain Growth of Si Thin Films 187
C-H. Oh, M. Nakata, and M. Matsumura

Melting and Resolidification Dynamics of α -Si and Poly-Si Thin Films During Excimer Laser Annealing 193
M. Hatano, S. Moon, M. Lee, K. Suzuki, and C.P. Grigoropoulos

Artificial Formation of Nucleation Seed in Excimer Laser Recrystallization of Poly-Si 199
J-H. Jeon, K-C. Park, J-H. Kang, M-C. Lee, and M-K. Han

Properties of Polysilicon Films Oxidized in Inductively Coupled Plasma and Its Effect on Thin-Film Transistors 205
Y.W. Choi, J.H. Ahn, and B.T. Ahn

PART VIII: AMLCD II

***A New Laser Printing Technique for the Fabrication of Thin-Film Transistors 213**
D. Toet, P.M. Smith, T.W. Sigmon, and M.O. Thompson

Stress and Dopant Activation in Solid Phase Crystallized Si Films 225
A.K. Kalkan and S.J. Fonash

ITO/ α -Si:H Schottky Photodiode With Low Leakage Current and High Stability 231
Q. Ma, A. Nathan, and R.V.R. Murthy

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Flat-Panel Displays and Sensors—Principles, Materials and Processes
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Frontmatter
[More information](#)

A $\mu\text{C-Si:H}$ p-i-n Imager for 2-D Pattern Recognition 237
*J. Martins, M. Fernandes, F. Sousa, P. Louro, A. Maçarico,
and M. Vieira*

**Properties of Image Sensor Structure Obtained Below 120°C
on the Foil by Reactive Magnetron Sputtering 243**
A. Kolodziej, P. Krewniak, and R. Tadeusiewicz

PART IX: LARGE AREA PROCESSES

**Structure and Properties of Quasi-Monocrystalline
Silicon Thin Films 251**
T.J. Rinke, R.B. Bergmann, and J.H. Werner

**Investigation of the Role of Chemical-Mechanical
Polishing in Improving the Performance of Polysilicon TFTs 257**
*B. Lee, L.J. Quinn, P.T. Baine, S.J.N. Mitchell, B.M. Armstrong,
and H.S. Gamble*

**Growth Mechanism of Thin-Film Wide-Gap Semiconductors
by Chemical Bath Deposition Technique 263**
P.K. Nair, P. Parmananda, and M.T.S. Nair

PART X: SENSORS

***Large Area, Full-Color Image Sensors Made With Organic
Semiconductors 271**
G. Yu, G. Srdanov, J. Wang, and A.J. Heeger

**Three and Six Channel Sensors: Realization and
Colorimetric Characterization 279**
*D. Knipp, P. Herzog, H. Stiebig, H. Siekmann, F. König,
and H. Wagner*

**Novel Device Concept for Voltage-Bias Controlled Color
Detection in Amorphous Silicon Sensitized CMOS Cameras 285**
T. Neidlinger, C. Harendt, J. Glöckner, and M.B. Schubert

PART XI: ORGANIC LUMINESCENT MATERIALS

Photoluminescent Polymer Films for Display Applications 293
A. Palmans, A. Montali, C. Weder, and P. Smith

**Electroluminescence and Photoluminescence of
Fluorene-Carbazole Copolymer 299**
O. Stephan and J.C. Vial

Fluorescent Hexacatenar Liquid Crystals 305
B. Hoag, D.L. Gin, U. Theissl, E. Zojer, and G. Leising

*Invited Paper

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Frontmatter[More information](#)

Optical Properties and Characterization of Eu³⁺ Activated PMMA:PAAc Copolymer Samples: Eu Concentration Effects	311
---	------------

R. Sosa F., M. Flores, R. Rodriguez T., and A. Muñoz F.

Photoluminescence of Poly(p-phenylene vinylene) Encapsulated in Mesoporous Silica	319
--	------------

A.G. Pattantyus-Abraham and M.O. Wolf

Energy and Charge Transfer in Electroluminescent Polymer/Porphyrin Blends	325
--	------------

*V. Cleave, G. Yahioglu, P. Le Barny, R.H. Friend,
N. Tessler, D.H. Huang, and A.B. Holmes*

From a Reaction Mechanism to New PPVs for High Performance Polymer-LEDs	331
--	------------

*H. Spreitzer, H. Becker, W. Kreuder, E. Kluge,
and H. Schenk***PART XII: POSTER SESSION**

Simulations of Passive Matrix Polymer Image Sensors	339
--	------------

D. Braun and G. Yu

A Study of the Viability of Poly(o-methoxyaniline) Layer-by-Layer Films as Gas Sensors	345
---	------------

M. Raposo and O.N. Oliveira, Jr.

New Poly-Si TFTs With Selectively Doped Region in the Channel	351
--	------------

*M.-C. Lee, J.-H. Jeon, J.-S. Yoo, K.-C. Park, M.-K. Han,
and C.-E. Yoon*

A Novel Four Terminal Poly-Si TFT Suppressing Kink and Improving Reliability	357
---	------------

C.-M. Park, J.-H. Kang, K.-C. Park, and M.-K. Han

Physical Characteristics of Very Low Temperature Anodic Oxides of Polycrystalline Si Films	363
---	------------

H. Plantier, J. Pelletier, R.A.B. Devine, and G. Vincent

Back Gate Effects in N-Channel Monocrystalline Silicon Devices-on-Glass and Their Suppression by Boron Ion Implantation	369
--	------------

P. Baine, S.J.N. Mitchell, H.S. Gamble, and B.M. Armstrong

Fabrication of a-Si:H TFTs at 120°C on Flexible Polyimide Substrates	375
---	------------

A. Sazonov, A. Nathan, R.V.R. Murthy, and S.G. Chamberlain

a-Si TFTs on Thin Steel Foil Substrates: How Thin Can We Go?	381
---	------------

E. Ma and S. Wagner

Jet Printing of Copper Lines at 200°C Maximum Process Temperature 387
C.M. Hong and S. Wagner

Electrical Properties of Ultra Thin Tin Oxide Films 393
Y. Matsui and Y. Goto

Heteroepitaxial Growth of In₂O₃ on YSZ (100) Single Crystal Surface 399
M. Orita, H. Ohta, H. Tanji, H. Hosono, and H. Kawazoe

Spin-On Polymer Gate Dielectric for High Performance Organic Thin Film Transistors 403
C.D. Sheraw, D.J. Gundlach, and T.N. Jackson

Polymer LEDs Based on n-alkylsulfinyl PPV Precursor Polymers 409
R. Kiebooms, R. Resel, D. Vanderzande, and G. Leising

Supramolecular Assembly Strategies Using Alternate Adsorption of Polyelectrolytes: Applications in PLED and LC Display Devices 415
R.C. Advincula, S. Inaoka, D. Roitman, C. Frank, W. Knoll, A. Baba, and F. Kaneko

The Photoluminescence Temperature Dependence of Aluminium tris(8-hydroxyquinoline) as a Function of Excitation Energy 421
R.J. Curry and W.P. Gillin

Characterization of the Physico-Chemical Properties of Surface-Treated Indium Tin Oxide Anodes for Organic Light-Emitting Diodes 427
J.S. Kim, M. Granström, R.H. Friend, N. Johansson, W.R. Salaneck, A. Cola, G. Gigli, R. Cingolani, and F. Cacialli

Doped Organic Light-Emitting Diodes Based on Random Copolymers Containing Both Hole and Electron Transport Groups 433
X. Jiang, R.A. Register, F. Pschenitzka, J.C. Sturm, K.A. Killeen, and M.E. Thompson

Improved Electroluminescence Lifetime and Efficiency of Polymer Light-Emitting Diodes With Plasma-Treated Indium Tin Oxide Anodes 439
J.S. Kim, R.H. Friend, and F. Cacialli

Energy Level Alignment at TPD/Metal Interfaces Studied by Kelvin Method 445
N. Hayashi, E. Ito, H. Ishii, Y. Ouchi, and K. Seki

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Frontmatter

[More information](#)**PART XIII: OLEDs AND ELECTROLUMINESCENT MATERIALS**

Temperature and Field Dependence in Polymer Light Emitting Diodes	453
<i>L.D. Bozano, S.A. Carter, J.C. Scott, G.G. Malliaras, and P.J. Brock</i>	
*Self-Assembly Processes for Organic LED Transport Layers and Electrode Passivation	459
<i>J.E. Malinsky, W. Li, Q. Wang, J. Cui, H. Chou, T.J. Marks, G.E. Jabbour, S.E. Shaheen, J.D. Anderson, P. Lee, A.G. Richter, B. Kippelen, P. Dutta, N. Peyghambarian, and N. Armstrong</i>	
*Polyquinolines: Multifunctional Polymers for Electro-Optic and Light-Emitting Applications	469
<i>A.K-Y. Jen and H. Ma</i>	
1.5 μm Luminescence From ErQ Based Organic Light-Emitting Diodes	481
<i>R.J. Curry and W.P. Gillin</i>	
Exciton Dissociation and Mobility in Conducting Polymers and Oligomers	485
<i>S.C. Jain, W. Geens, J. Poortmans, A. Mehra, J. Nijs, and R. Mertens</i>	
Frequency Resolved Photoluminescence (PL), Delayed Fluorescence and Triplet-Triplet Annihilation in π-Conjugated Polymers	491
<i>J. Partee, E.L. Frankevich, B. Uhlhorn, J. Shinar, Y. Ding, and T.J. Barton</i>	

PART XIV: ORGANIC EL I

*The Physics of Organic Light-Emitting Devices	499
<i>J.C. Scott, G.G. Malliaras, L. Bozano, S.A. Carter, and S. Ramos</i>	
Long-Term Degradation Mechanism of Organic Light-Emitting Devices Based on Small Molecules	507
<i>H. Aziz, Z.D. Popovic, N-X. Hu, A-M. Hor, and G. Xu</i>	
Three-Color Doping of Polymer OLEDs by Masked Dye Diffusion	513
<i>F. Pschenitzka and J.C. Sturm</i>	

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Flat-Panel Displays and Sensors—Principles, Materials and Processes
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Frontmatter
[More information](#)

**PART XV: NOVEL FABRICATION AND
MATERIALS FOR FIELD EMITTERS**

Some <<Exotic>> Aspects of Physics With Microtips 521
R. Baptist

**Properties of Si/Cs/O Nanocluster Thin Films With
Negative Electron Affinity 533**
L.N. Dinh, W. McLean II, M.A. Schildbach, and M. Balooch

Towards the Realization of an InP/CdS/LaS Cold Cathode 545
*M. Cahay, A. Malhotra, Y. Modukuru, H. Tang, W. Bresser,
P. Boolchand, P. Mumford, and W. Friz*

**Secondary Electron Emission Studies of Diamond and GaN
Materials 551**
J.E. Yater, A. Shih, and D.S. Katzer

**Surface Treatment Effects on the Electron Emission
Characteristics of Ultra Thin AlN Coated Molybdenum Tips 563**
*D.H. Kang, V.V. Zhirnov, G.J. Wojak, R.C. Sanwald,
M. Park, J.J. Hren, and J.J. Cuomo*

High Current Field Emission From ZrC With Differing Cone Angles 569
*W.A. Mackie, T. Xie, K.S. Lee, A.T. McCallum, M.J. Kirby,
and P.R. Davis*

**PART XVI: CARBON AND DIAMOND
FIELD EMITTERS**

Electron Field Emission From Undoped and Doped DLC Films 577
*V.G. Litovchenko, A.A. Evtukh, N.I. Klyui, Yu.M. Litvin,
S.Yu. Kudzinovsky, A.G. Chakhovskoi, and T.E. Felter*

Analysis of High-Current Yield of Diamond-Based Field Emitters 583
V.V. Zhirnov, C.L. Rinne, G. Wojak, and J.J. Hren

**Defect and Raman Spectroscopy of Chemical Vapor
Deposition Grown Diamond Films 589**
J.M. Perez, R.E. Stallcup II, and I.A. Akwani

**Field Emission From Carbon Films Deposited by VHF CVD
on Different Substrates 595**
*A.I. Kosarev, A.S. Abramov, A.J. Vinogradov, M.V. Shutov,
T.E. Felter, A.N. Andronov, and S.V. Robozerov*

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Frontmatter
[More information](#)

**PART XVII: THEORY AND MODELING OF
ELECTRON FIELD EMISSION**

**Analysis of Measured I(V) Relations for Electron Emission
From Insulating Diamond Films on Various Si Substrates 603**
K.L. Jensen, A. Göhl, and G. Müller

Author Index 609

Subject Index 613

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Frontmatter

[More information](#)

PREFACE

Flat-panel displays and sensors have found a variety of commercial, industrial, and military applications with active areas from less than 1 cm² to almost 1 m². Most current applications are based on amorphous or polycrystalline silicon, but novel materials and devices, including organic emitters and transistors, show promise for future systems, and field emission devices and displays continue to make significant progress. In addition, the technology developed for flat-panel displays increasingly is of interest for sensors and other large area electronic applications.

"Flat-Panel Displays and Sensors—Principles, Materials and Processes," Symposium B held April 4–9 at the 1999 MRS Spring Meeting in San Francisco, California, highlighted some of the progress in this area. The symposium featured sessions on phosphors and field emission devices and displays, thin-film transistors and active matrix liquid crystal displays, organic luminescent and other electroluminescent materials, sensors, and large area processing, and covered topics from fundamental materials studies to detailed device applications.

Flat-panel display and sensor technology has a large overlap with other areas of materials interest. Symposium B held fruitful joint sessions with Symposium A, "Amorphous and Heterogeneous Silicon Thin Films: Fundamentals to Devices—1999," Symposium C, "Materials Issues in Vacuum Microelectronics II," Symposium E, "Luminescent Materials," and Symposium F, "Organic Nonlinear Optical Materials and Devices."

On behalf of the participants, the organizers of Symposium B thank the financial sponsors of the symposium:

IBM T.J. Watson Research Center
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Babu Chalamala
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