Thin Film Transistors 15 (TFT) 15

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Sponsoring Divisions:
Electronics and Photonics
The Japan Society of Applied Physics
Preface

The papers included in this issue of *ECS Transactions* were originally scheduled to be presented in the symposium “Thin Film Transistor Technologies (TFT 15),” held during PRiME 2020 in Honolulu, Hawaii, from October 4-9, 2020. Due to the COVID-19 pandemic, the meeting was changed to an online format. This symposium was sponsored by the Electronics and Photonics Division (EPD) of The Electrochemical Society. This is the 30th year of the symposium, which continuously holds the record of the longest continuous held TFT conference in the world.

The success of this TFT symposium series is greatly contributed by global TFT experts who share their experience and wisdom through presenting technical speeches, authoring papers in special issues of the *ECS Transactions* volumes, co-organizing the meetings, chairing topical sections, and joining panel discussions. The participation of young researchers and students in these symposia also has non-negligible impacts to the growth of this meeting as well as the TFT related fields. The dedicated work of the ECS staff in the past three decades deserves our applause.

There are 40 papers presented in the TFT 15 symposium, divided into eight sessions. Presenters and authors are from universities, industry, and research institutes located in Belgium, France, Ireland, Japan, Korea, Norway, Taiwan, the United Kingdom, and the United States.

1. TFT Device Characteristics and Reliability I
2. TFT Device Characteristics and Reliability II
3. Processes I
4. Processes II
5. Processes III
6. Non-Si and Non-Oxide TFTs
7. TFT Applications in Displays, ICs, and Beyond
8. Posters.

The 21 papers in this *Transactions* volume are divided into the following four chapters. All papers are published as received without alteration of their technical contents.

1. Device Characterization and Reliability
2. Processes
3. Non-Si and Non-Oxide TFTs
4. Applications in Displays, ICs, and Beyond

The progress of the TFT technology in the past 30 years shows the following trends.

- Si based TFTs dominate the production with main research focus on poly-Si TFTs, especially the low cost, high through, highly reliable manufacture technology.
- Oxide TFTs are emerging with targets on simple, reliable, large-area production processes.
- Organic, 2D, and perovskite materials are being actively explored on TFT devices.
- Applications beyond displays, as well as flexible electronics, are hot research topics.

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# Table of Contents

**Preface**  

**Chapter 2**  

**H03 – Device Characterization and Reliability**

*(Invited) Hot Carrier Phenomena in Oxide Thin-Film Transistors*  

Characteristics and Applications of CAAC-IGZO FET with Gate Length of 13nm  

*(Invited) Highly Reliable Metal Oxide Thin Film Transistors for Flexible Devices*  
Y. Uraoka, D. Corsino, J. P. Bermundo, M. N. Fujii, M. Uenuma  

*(Invited) UV and Gate Stress Induced Defects in Amorphous Indium Gallium Zinc Oxide Thin Film Transistors and Self-Repair*  
J. Jiang, Y. Kuo  

*(Invited) Device Scalability of InGaZnO TFTs for Next-Generation Displays*  
S. Oh, S. H. Kim, M. Kim, S. M. Yu, Y. Choi, J. S. Park, J. H. Lim  

TCAD Simulation of a 3D NAND Memory Utilizing In-Ga-Zn-Oxide: "3D OS NAND" with 4 V Drive, High Endurance and Density  
H. Kunitake, H. Kimura, K. Tsuda, H. Godo, T. Murakawa, H. Sawai, H. Baba, S. Sasagawa, T. Ikeda, S. Yamazaki  

*(Invited) Highly Stable Self-Aligned Top-Gate Indium Gallium Zinc Oxide Thin-Film Transistors for High-Resolution OLED TV and Mobile Displays*  
J. B. Kim, Y. C. Tsai, R. Lim, Z. Wang, M. Hao, S. W. Wang, J. W. Park, L. Zhao, M. Bender, D. K. Yim, S. Y. Choi
Chapter 3
H03 – Processes

Interpretation of Donor Activation in Boron and Argon Implanted Self-Aligned Bottom-Gate IGZO TFTs
M. S. Kabir, R. R. Chowdhury, R. G. Manley, K. D. Hirschman

Low-Temperature Processed Metal-Semiconductor Field-Effect Transistor with In-Ga-Zn-O Channel Deposited by Ar+O2+H2 Sputtering
Y. Magari, M. Furuta

(Invited) Improved Copper Electrode Integration for Thin Film Electronics on Glass
H. Kim, B. Zhu, M. H. Huang, R. Vaddi, R. G. Manley

Effect of Glass Substrate on the Film Properties of Poly Silicon by Excimer Laser Annealing
B. Zhu, R. Vaddi, M. H. Huang, H. Kim, R. G. Manley

Influence of Glass Surface Modification on Thin Film Copper Electrodes
M. H. Huang, Y. Shi, B. Zhu, R. Vaddi, H. Kim, R. G. Manley

Edge-Directed LTPS Via Flash Lamp Annealing Using a Cr Adhesion Layer for Improved Wettability
G. Packard, A. Rosenfeld, M. Hum, R. G. Manley, K. D. Hirschman

Flash Lamp Annealed LTPS TFTs with ITO Bottom-Gate Structures
G. Packard, A. Rosenfeld, R. G. Manley, K. D. Hirschman

Photoconductive Solution Processed ZnO Quasi-superlattice Films

Chapter 4
H03 – Non-Si and Non-Oxide TFTs

(Invited) Percolation Carbon Nanotube Thin Film Transistors
M. Shur, J. Park, Y. Zhang, X. Liu, T. Ytterdal
(Invited) Optimizing Material Systems for All-Inkjet-Printed Organic Thin-Film Transistors
C. Jiang, A. Nathan

Chapter 5
H03 – Applications in Displays, ICs, and Beyond

(Invited) Display and LSI Applications of Oxide Semiconductor LSIs (OS LSIs) Using Crystalline In-Ga-Zn Oxide (IGZO): Applications Related to Coronavirus COVID-19 Pandemic
T. Onuki, Y. Okamoto, T. Aoki, T. Matsuzaki, M. Kozuma, H. Kunitake, R. Motoyoshi, H. Kimura, Y. Yamane, S. Sasagawa, S. Yamazaki

(Invited) Sub-40mV Sigma V_{TH} Igzo nFETs in 300mm Fab

(Invited) Hafnia Ferroelectric Device for Semiconductor, Sensor, and Display Applications
S. Jeon

P3HT:ZnS Based Photovoltaic Devices with Enhanced Performance Assisted by Oxidised Carbon Nanotubes
C. Wei, M. T. Bishop, Y. Wang, F. Gao, C. Wang, G. Z. Chen

Author Index

233
Facts about ECS

The Electrochemical Society (ECS) is an international, nonprofit, scientific, educational organization advancing the theory and practice of electrochemistry and solid state science and technology, and allied subjects. The Society was founded in Philadelphia in 1902 and incorporated in 1930. There are currently over 8,000 members from around the globe representing 13 technical division and 23 geographical sections and a growing student membership program with over 100 student chapters. The Society is also supported by more than 2,000 corporations, government agencies, and academic institutions through institutional membership, corporate programs, and subscriptions.

The technical activities of the Society are carried on by divisions. Sections of the Society host symposia, programs, and events focused on their respective geographic regions. Major international meetings of the Society are held in the spring and fall of each year. At these meetings, the divisions and partnered organizations hold general sessions and sponsor symposia on specialized subjects.

The Society has an active publications program that includes the following:

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