Thin Film Transistor Technologies 14 (TFTT 14)

Editor:

Y. Kuo

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Preface

This issue of *ECS Transactions* contains papers presented at the 14th Symposium on "Thin Film Transistor Technologies (TFTT 14)," held during the AiMES 2018, ECS and SMEQ Joint International Meeting, in Cancun, Mexico, from September 30 – October 4, 2018. This symposium was sponsored by the Electronics and Photonics Division of The Electrochemical Society. This is the 28th year of the symposium, which makes it the longest continuously held TFTT conference in the world.

The editor wishes to express his sincere appreciation to the following people for their involvement in organizing and conducting the symposium: authors and presenters of papers, symposium co-organizers, section chairs, and ECS staff.

There were 40 papers presented in the TFTT 14 symposium. They were divided into nine sessions: (1) Poly-Si TFTs, (2) TFT Materials 1, (3) TFT Materials 2, (4) TFT Devices, Modeling, and Reliability 1, (5) TFT Devices, Modeling, and Reliability 2, (6) Oxide TFT Fabrication Processes 1, (7) Oxide TFT Fabrication Processes 2, (8) TFTs Beyond Display Applications, and (9) Posters. Presenters were from universities, industry, and research institutes located in China, France, Japan, Korea, the Netherlands, Taiwan, and the United States.

Papers in this *ECS Transactions* issue are divided into five chapters. All papers were published as received without alteration of their technical content.

This symposium clearly shows the progress of TFT science and technology:

- There are still strong R&D activities on the poly-Si TFTs with emphasis on fabricating transistors using low-cost methods at the low temperature.
- New materials or structures for high-mobility or p-type TFTs are explored. This includes fundamental material and device characteristics.
- Device studies are focused on ultra high frequency, low defects, high reliability, light sensitivity, and flexible applications.
- Oxide TFTs dominate current studies. Low temperature, solution processing, or printed fabrication methods are being investigated. Process effects on reliability are also studied.
- New TFT applications beyond displays, such as neuromorphic systems, flexible electronics, and chemical and taste sensors, are of strong interest in the community.

Yue Kuo Dow Professor Thin Film Nano & Microelectronics Research Laboratory Texas A&M University College Station, TX October 2, 2016

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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.

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