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# Advances in Thin Film Transistors: Properties and Applications, 2nd Edition

Guest Editors:

Dr. Sheng-Po Chang

Dr. Kuan-Jen Chen

**Dr. Chih-Chiang Yang** 

Dr. Ke-Jing Lee

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#### **Message from the Guest Editors**

Recently, transparent oxide semiconductors (TOSs) have been the object of extensive research in various connected fields. Owing to their advantages of high mobility, good transparency, and ideal uniformity, TOSs are more suitable for the application of thin-film transistors (TFTs) than conventional Si TFTs. In addition, the features of a lowtemperature process and their compatibility with flexible electronics enable TOSs to become the mainstream channel materials in next-generation flat panel displays, such as active-matrix liquid crystal displays (AMLCDs) and active-matrix organic light-emitting diodes (AMOLEDs). Both In<sub>2</sub>O<sub>3</sub> (~3.7 eV) and Ga<sub>2</sub>O<sub>3</sub> (~4.9 eV) with wide energy band gaps possess excellent transparency. By adjusting to each stoichiometry, indium-based transparent conducting oxide materials have been widely used in flat panel displays and optoelectronic devices, among other applications. Thin-film transistors (TFTs) have been in extensive use as on/off switch and current driving devices for various applications, ever since the concept of TFTs was reported. This Special Issue aims to cover recent advances in TFT technologies.



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#### Prof. Dr. Wei Pan

State Key Laboratory of New Ceramics and Fine Processing, School of Materials Science & Engineering, Tsinghua University, Beijing 100084, China

#### Dr. Emerson Coy

NanoBioMedical Centre, Adam Mickiewicz University in Poznań, ul. Wszechnicy Piastowskiej 3, 61-614 Poznań, Poland

### Message from the Editorial Board

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