





an Open Access Journal by MDPI

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

Deadline for manuscript submissions:

closed (20 April 2024)

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 In₂O₃ (~3.7 eV) and Ga₂O₃ (~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.









an Open Access Journal by MDPI

Editors-in-Chief

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

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

Coatings is a well-established, peerreviewed, online journal dedicated to the vibrant field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers that make the point on the hottest research topics.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Physics, Applied*) / CiteScore - Q2 (*Surfaces, Coatings and Films*)

Contact Us