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# **Recent Progress in Organic Thin-Film Transistors**

Guest Editor:

### Message from the Guest Editor

**Dr. Gunel Huseynova** Physics Department, Umea University, 907 36 Umea, Sweden

Deadline for manuscript submissions: closed (10 December 2022) Dear Colleagues,

Organic thin films (OTFs) have attracted significant attention due to their unique mechanical and optoelectronic properties combined with their low cost, solution processability, chemical tunability. biodegradability, and so on. Various organic materials have been investigated for application in organic thin-film transistors (OTFTs). These devices use organic semiconductors as the active layer in their channel. In addition to semiconducting layers, a wide range of organic materials have been studied as gate-insulating and electrode layers in OTFTs.

This Special Issue looks at advances achieved in OTFTs including:

- OTFTs based on small-molecule organic semiconducting films;
- OTFTs based on polymeric semiconducting films;
- Solution-processed OTFs;
- Dielectric OTFs for OTFTs;
- Thin film deposition techniques;
- Pre- and post-film treatment methods;
- Electrical properties of OTFs;
- Methods for improvement of the electrical conductivity/carrier mobility of OTFs;
- Doping of OTFs for OTFTs;
- Progress in the field of OTF-based electrode layers for OTFTs;

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- Mechanical populties of OTFs;
- Novel fabrication



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## 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.

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