## **Special Issue**

# Recent Advances in Thin-Film Transistors and Neuromorphic Devices for Electronic and Sensing Applications

## Message from the Guest Editors

This Special Issue of *Materials*, led by a young researcher actively contributing to the field, aims to foster dynamic scientific exchange and showcase recent advances in thin-film transistor-based neuromorphic and sensing devices. The convergence of TFT technology with neuromorphic computing and biosensing represents one of the most exciting and impactful research frontiers today. We welcome original research and comprehensive review articles covering the following topics:

- Neuromorphic TFTs and synaptic behavior emulation;
- Material innovations (oxide, organic, hybrid semiconductors);
- Light-, voltage-, and chemistry-driven neuromorphic functions;
- Flexible, low-power, and scalable device platforms;
- Thin-film sensors for environmental or biomedical applications.

#### Guest Editors

Dr. I. Sak Lee

Dr. Hyukjoon Yoo

Dr. Kyungtae Park

## Deadline for manuscript submissions

20 November 2025



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/237688

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/materials





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed





## About the Journal

## Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

### Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
 Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

## **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), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

#### **Journal Rank:**

JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)