Special Issue

Advanced/Alternative Transparent Conducting Oxides (Second Volume)

Message from the Guest Editor

Nowadays, TCO materials are more important for industry due to the increasing demands of flexible and wearable electronics. However, ITO and FTO are not suitable for flexible and wearable eletronics due to the several intrinsic drawbacks. In addition, indium is a rare earth material, resulting in a relatively high material cost for ITO production. Therefore, advanced or alternative materials (eg. metal nanowire or CNT) for TCO are required to develop and investigate next generation smart electronics such as flexible and wearable electronics. Topics include, but are not limited to:

- Searching and investigating various types of advanced/alternative transparent conducting oxides
 - Doped oxide (indium, fluorine, zinc, etc.)-based transparent conductive oxides
 - Advanced TCO of 1D materials: Carbon nanotubes (CNT), metal (Au, Ag, Cu, Ni) nanowire, other 1D materials
 - Advanced TCO of 2D materials: graphene, graphene/metal nanowire hybrids, other 2D materials
- New synthesis methods, process and fabrication methods, applications for advanced/alternative transparent conducting oxides

Guest Editor

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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.

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