Special Issue

Advances in Transparent, Conductive Carbon Nanotube Films

Message from the Guest Editor

Carbon nanotubes (CNTs) have attracted a broad interest within the scientific community over the past decades due to their extraordinary electrical, optical, mechanical, thermal, and chemical properties. The need to replace Indium Tin Oxide (ITO) in transparent electrodes arises from the potential future scarcity of indium and its consequent rising cost, as well as its related environmental issues. Their high electrical conductivity, along with their low optical conductivity, have made carbon nanotube films promising candidates for the development of transparent conducting elements that may replace ITO. Moreover, CNT films offer flexibility, which is a potential advantage that ITO does not offer and expands its possible applications in the field of flexible electronics.

This Special Issue of Applied Sciences presents the latest developments in the fabrication and application of CNT-based transparent conductive films throughout the worldwide scientific community, identifies existing technology gaps, and suggests a path forward for large scale industrial applications.

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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