

## Tentative Outline

### **Title of the Thematic Issue: China Contribution in Gas Sensor Design**

**Guest Editor Name:** Ghenadii Korotcenkov

**Guest Editor Affiliation:** Department of Theoretical Physics, Moldova State University, Chisinau, Moldova

### **Aims & Scope:**

Gas sensors are becoming a mandatory attribute of residential buildings, manufacturing enterprises, cars, airplanes, space stations, gas pipelines, hospitals, agricultural farms, etc. With the advent of gas sensors, the main contribution to their development was made by scientists from Japan, Europe and the USA. But in recent years, a significant proportion of these studies have been carried out in China, and significant achievements in the synthesis and testing of nanomaterials intended for use in gas sensors have been obtained in China. Therefore, it is time to summarize these studies and outline new directions in the development of gas-sensitive materials, the search for new approaches to studying the nature of gas-sensitive effects and new measurement principles that will improve the parameters of existing devices and open new possibilities for their applications. Therefore, all those involved in the field of these studies are invited to participate in our project. To provide a complete picture of the research conducted in China, it is proposed that the scientific groups involved in the development of gas sensors present both a review article that systematizes the research results in recent years, and original articles reflecting the results of current research. Keep in mind that articles submitted before December 31, 2020 will be published without payment.

**Keywords:** metal oxides, polymers, solid electrolytes, semiconductors, 1D nanomaterials, graphene, carbon nanotubes, 2D nanomaterials, mesoporous-macroporous; hierarchical structures, nanofibers, nanocomposites, heterostructures.

### **Subtopics:**

Conductometric gas sensors;  
Fiber optic gas sensors;  
Electrochemical sensors;  
Mass sensitive sensors;  
Gas sensitive materials;  
Synthesis, deposition, characterization, optimization;  
Gas sensor applications;

**Issue Type:** fulllength

**Schedule:**

**Manuscript submission deadline:** 1<sup>st</sup> April 2021

**Peer Review Due:** 1<sup>st</sup> May 2021

**Revision Due:** 1<sup>st</sup> June 2021

**Announcement of acceptance by the Guest Editor:** 20<sup>th</sup> June 2021

**Final manuscript due:** 15<sup>th</sup> July 2021