



High-Sensitivity and -Selectivity Gas Sensors with Nanoparticles, Nanostructures, and Thin Films

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Message from the Guest Editors

Advanced gas sensors fabricated with nanoparticles and thin films of semiconductor metal oxides have been widely used for the detection of toxic, hazardous, combustible gases and biomarkers for the safety of human beings, environmental control, and breath analysis.

The goal of this Special Issue is to highlight new achievements on the improvement of gas sensor performance by doping, and the synthesis of nanoparticles and thin films in various morphologies, heterostructures, and nanocomposites. Original research works and reviews are welcome on topics of interest including but not limited to the following:

- Effects of Nanoparticles, nanostructures, and thin-films;
- Nanocomposites, heterostructures;
- p-n and n-n junctions;
- Doping and decoration of metal oxides;
- Synthesis in various morphology and compositions;
- On gas sensing and detection;
- For applications in e-nose, breath analysis, indoor and environmental pollutin, combustion and burning condition monitoring.





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Message from the Editor-in-Chief

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New chemical sensors design

Electrochemical devices, potentiometric sensor, redox electrode

Optical chemical sensors

Analytical methods

Environmental monitoring

Gas detectors

electronic nose, etc.

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