



Gas Sensors: Simulation, Modeling, and Characterization

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Message from the Guest Editors

In recent decades, a large amount of research work has been devoted to understanding the sensing mechanism of gas sensors. In most cases, e.g., metal oxide sensors, the sensing principle is understood in its essential features, but an exhaustive knowledge of their behavior has not yet been achieved in general.

The development of a gas sensor dynamic model is strictly related to the techniques used for sensor characterization: from this point of view, there is a wide range of possibilities, each open to different implementations, depending on the specific sensor and operation conditions (consider, for example, temperature modulation).

The aim of this Special Issue is to highlight recent advances in these fields, with reference to the different families of devices that can be used for gas sensing. Authors are therefore invited to submit works dealing with simulations, modeling, and characterization for resistive, electrochemical, optical, mass-variation, and any other type of gas sensors, also with reference to results obtained with new gas sensor materials. Both review articles and research papers are welcome.





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