



Nanostructured Metal Oxides for Cancer Detection and Therapy

Guest Editor:

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Deadline for manuscript
submissions:

closed (30 September 2021)

Message from the Guest Editor

Despite the wide assortment of chemoresistive materials, still metal-oxides keep a leading role in gas-sensing, because of their high sensitivity, low cost and easy implementation. Unfortunately the system lacks in intrinsic selectivity. Therefore, several studies aiming at creating selective sensor arrays have been carried out.

In recent years, large part of the Sensor Community has concentrated research efforts into two separate directions, which, in fact, rarely can be followed by a single research group.

The first line consists in basic understanding of the mechanisms of sensing. The second one explores the wide range of applications of this technology to people health care.

In particular, breath and skin analysis to detect cancer markers, e.g., volatile organic compounds, with metal-oxide-based devices are the most followed routes, specifically to detect melanomas, lung cancer and derived metastases. Recently, also fecal, urine, blood and ill-tissue analyses have attracted widespread interest. Therefore, the aim of this special issue is to provide a broader view of the most promising results of the leading laboratories in the field.





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Message from the Editor-in-Chief

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