

Investigation of the sensitivity of ITO thin films to chemicals adsorbed on their surface

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The paper presents the results of studies of the sensitivity of ITO thin films to the adsorption of hydrocarbons of various concentrations on their surface. It is shown that thin low-resistance ITO films can be repeatedly used as gas detectors, and their sensitivity to detected gases is practically independent of the heating temperature of the structure. It has been found that additional exposure of gas sensors based on ITO films to UV radiation contributes to a significant increase in their sensitivity to adsorbed substances.

Keywords: gas sensitive materials, ITO, gas sensor.

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