



Sensing properties of tellurium based thin films to propylamine and carbon oxide

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Abstract

The effect of propylamine ($C_3H_7NH_2$) and carbon oxide on electrical conductivity of tellurium based thin films has been investigated. It is shown that the absorption of the propylamine vapor leads to reversible increase of the resistance of the layer, while the absorption of CO vapor decreases the resistance. The sensitivity as well as the response and recovery time depend on the gas concentration. Comparative characterization of the sensitivity to different gases and discussion are given.