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Fabrication and Characterisation of CdO-CNS hybrid for LPG Sensing

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Abstract content (Max 300 words) Formatting & Special chars

In this research work Cadmium oxide (CdO) nanorods were synthesised by chemical bath deposition on a CdO film deposited via DC sputtering deposition on a silicon substrate. The produced nanorods were characterized by scanning electron microscope (SEM), Atomic force microscope (AFM), X-ray diffraction (XRD), and Rutherford backscattering spectrometry (RBS). CdO-Carbon nanostructures hybrids were grown by acetylene chemical vapour deposition on the nanorods at different temperatures with the CdO rods as the catalyst for the carbon nanostructures growth. The different structures grown using the two different techniques were exposed to LPG and Nitrogen gases while monitoring the change in the sensors electrical resistances. The gas sensing responses shows different sensing abilities of the sensors at different operating temperatures and different gas concentrations.

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No

Level for award (Hons, MSc, PhD, N/A)?

MSc

Main supervisor (name and email) and his / her institution

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