

Novel Zinc Oxide Nanostructured thin Films for Volatile Organic Compounds Gas Sensors

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Abstract:

Novel zinc oxide nanostructured thin films have been obtained by chemical deposition technique and rapid photothermal processing (RPP). ZnO nanostructures were studied for the development of volatile organic compounds (VOC) sensors. The investigations results indicate that by RPP is possible to control the sensing properties and operating temperature. A correlation taking into account the nanostructure of the material, the effects of the dopants, RPP and the response of the VOC sensor was established.

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