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Dopping effect on tin oxide nanostructures and gas sensing ability

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tin oxide (SnO_2) nanostructures were synthesized using chemical bath method and DC magnetron sputtering. SnO_2 oxide nanostructures were deposited at different temperatures (300 °C, 400 °C, and 500 °C). XRD results shows that as the temperature increases also the crystallinity increases. SEM results also show that particle sizes increase with the increase in temperature. EDS show that the ratio of tin to oxygen is as expected to be. More studies will be carried out on the samples as to show the effect of doping on gas sensing ability of SnO_2 . It was found that the temperature has the effect on nanoparticle sizes and their crystallinity. we believe doping nanoparticle will enhance the gassing sensitivity of Tin Oxide nanostructure.

Apply to be considered for a student award (Yes / No)?

yes

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

PhD

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

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Would you like to submit a short paper for the Conference Proceedings (Yes / No)?

yes

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