



Contribution ID: 217

Type: Oral Presentation

Tin Oxide nanoparticle structural modification with ZnO/Zn for gas sensing applications.

Wednesday, 5 July 2023 14:40 (20 minutes)

Tin oxide nanoparticles were synthesized using hydrothermal process, tin tetrachloride was dissolved in distilled water, and ammonia was used as a precursor to control pH. Zinc and zinc oxide were used as dopants to modify the structural properties of tin oxide nanoparticles. The synthesized nanoparticles were characterized using the X-ray diffraction (XRD), high resolution transmission electron microscope (HRTEM), scanning electron microscope (SEM), and X-ray photoelectron microscope (XPS) to study their structural, morphological, average particle size and surface properties.

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

Yes

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

MSc

Primary author: Mr MNGOMEZUULU, Philani S. (University of Zululand)

Co-authors: Mr THETHWAYO, Charles T. (University of Zululand); Dr BIYELA, Puleng N. (University of Zululand)

Presenter: Mr MNGOMEZUULU, Philani S. (University of Zululand)

Session Classification: Physics of Condensed Matter and Materials Track 2

Track Classification: Track A - Physics of Condensed Matter and Materials