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OF PHYSICS (SAIP 2022)

NELSON MANDELA
UNIVERSITY

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100 years
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Gqeberha
formerly Port Elizabeth

Contribution ID: **144**

Type: **Oral Presentation**

Simulation Modelling the Conductivity of Metal Oxide Gas Sensors from the First Principles

Monday, 4 July 2022 15:45 (15 minutes)

It is beneficial to construct a model that will aid in the development of ways to analyze a system qualitatively or quantitatively in any study. The goal of this research was to create a system that imitated physical adsorption on the surface of Metal Oxide gas sensors from the ground up. A mathematical expression was developed that relates time to the amount of adsorbed gas molecules. Python was used to create a simulation environment. The findings were compared to experimental data from the literature.

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

yes

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

Hons

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