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## Growth and characterization of RuO<sub>2</sub> thin films nanostructures

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**Abstract content** &nbsp; (Max 300 words) <a href="http://events.saip.org.za/getFile.py/?target=\_blank">Formatting & Special chars</a>

RuO<sub>2</sub> thin films were deposited from 99.999% of ruthenium target on p-type silicon substrate and also on glass substrates. Substrates were used to study other physical properties of the deposited films. Thin films of ruthenium oxide were grown by direct current (DC) unbalanced magnetron sputtering methods in argon atmosphere at a rate of 6-10sccm and oxygen rate of 2-6sccm, with varying power starting from 100W- 200W. The physical and electrical properties of RuO<sub>2</sub> thin films were investigated by using XRD,SEM,RBS and AFM.

Keywords: RuO<sub>2</sub>, nanostructures, temperature, sputtering

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

No

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

PhD

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

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yes

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no

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