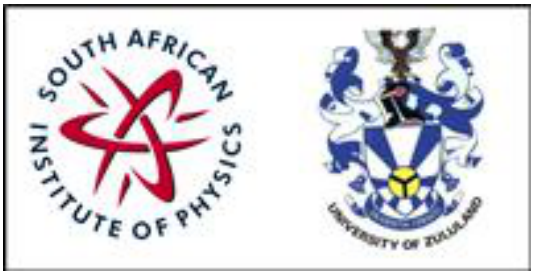

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Comparative analysis of fabricated Titanium Schottky doides on silicon and gold doped silicon

Tuesday, 9 July 2013 17:40 (1 hour)

Abstract content
   (Max 300 words)

Titanium (Ti) Schottky contacts were fabricated on (100) p-type silicon (p-Si). An Indium Garium (InGa) ohmic contact was deposited on the highly doped surface of the p-Si wafer. IV and CV measurements were conducted and results are presented. Also, detailed measurements of thin gold films fabricated by vacuum resistive deposition on the (111) n-type and (100) p-type silicon (Si) wafers are reported. The gold were diffused into Si at 1000 ℃ for times ranging from 15 minutes to 120 min. Diffusion profiles by Rutherford backscattering spectroscopy (RBS) are presented. Ti Schottky contacts were deposited on the gold doped (100) p-Si with an InGa ohmic contact for a diode sample. IV and CV were performed on this sample. A comparative analysis of above-mentioned samples is presented.

Keywords: Schottky, resistive deposition, diffusion.

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PhD

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