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## Electrical properties of highly oxygenated silicon diodes for radiation detection applications; overview

*Thursday, 11 July 2019 15:00 (2 hours)*

Defects in silicon are intentionally introduced to improve properties of the material for fabrication of radiation detectors. These defects are introduced either by doping or irradiation of silicon. In trying to understand properties of these defects, it has been found that they interact with impurities naturally present in the silicon, oxygen, leading to a change in electrical properties of the devices fabricated from the material. It is with this reason a study on the effects of oxygen dopants is presented in this work. The study will contribute in enhancing the knowledge in defects in silicon that, in turn, open new vistas for more highly efficient radiation detectors.

Key words: silicon,defects,oxygen,electrical properties,detectors.

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

Yes

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

PhD

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