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**BOOK OF ABSTRACTS**



## **RADIATION RESPONSE OF TWO TYPES OF COMMERCIAL RADFETs**

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We have studied radiation response of Radiation Sensing Field Effect Transistors (RADFETs) produced by two commercial vendors – Tyndall National Institute (Cork, Ireland) and REM (Oxford, UK).

Two Tyndall device types, differing only in post-oxidation anneal parameters, show different trends during irradiation with zero and positive bias. Regarding the comparison between Tyndall and REM RADFETs, Tyndall samples are significantly more sensitive at zero bias, while the sensitivities of the two types of samples are comparable at the positive bias. We observe the Enhanced Low Dose Rate Sensitivity (ELDRS) effect for both Tyndall and REM samples at very low dose rates, but employ Monte Carlo simulations and additional experiments to show that these effects may be due to experimental setup and are not the real effects.

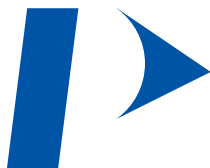
Finally, we re-analyse historical flight data based on the results of these radiation experiments.



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