

# Dataset: 22 nm bulk FinFET Total Ionizing Dose simulation

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## Abstract

Total Ionizing Dose is simulated using the gamma radiation model in a 22 nm FinFET device in Synopsys Sentaurus TCAD. Charge transport and trapping are activated in the field oxides.

## Code availability

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## Description

'22nm\_FinFET\_Id\_Vg.gzp' contains Current-Voltage calibration to characteristics of 22nm commercial FinFET node.

'22nm\_FinFET\_Radiation.gzp' contains 3D gamma radiation simulations of the device under zero bias. Gamma radiation, charge transport and trapping are activated in the bulk oxides.

## Usage Notes

All files are workbench projects which were extracted with openssl encryption and no key.

The process simulation runs fine on version H-2013.03 of Sentaurus TCAD.

## Citing

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