

and Innovative
at the University
STEAM approach
Advisor: Roseli de Deus L
STEAM
TY?
Education:
interdisciplinary.
carriers and create a
Context:
aims to invest
high-impact STE
STEAM integrates S
g, Arts, and Mathem
ent in solving com
by students.
Methodol
ate students from
s of engineering, phy
participate in educat
b, a new space creat
s in education, locat
ws, curriculum analysi
NEZ, Raquel L. Implementing STEAM in
of Aesthetics, Creativity, and the Arts. p. 10.



IFUSP DESTRUCTIVE RADIATION EFFECTS IN ELECTRONIC DEVICES:
ATMOSPHERIC AND SPACE ENVIRONMENTS

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1. INTRODUCTION
Cosmic radiation
Solar radiation
Ionizing radiation
Non-ionizing radiation

2. CHARGE COLLECTION EFFECTS
Single-event effects (SEE)
Total-dose effects (TDE)
Latch-up

3. CHARGE COLLECTION EFFECTS FORMS
Single-event effects (SEE)
Total-dose effects (TDE)
Latch-up

4. DESTRUCTIVE RADIATION EFFECTS
Single-event effects (SEE)
Total-dose effects (TDE)
Latch-up

5. DESTRUCTIVE RADIATION EFFECTS
Single-event effects (SEE)
Total-dose effects (TDE)
Latch-up

6. DESTRUCTIVE RADIATION EFFECTS
Single-event effects (SEE)
Total-dose effects (TDE)
Latch-up

7. DESTRUCTIVE RADIATION EFFECTS
Single-event effects (SEE)
Total-dose effects (TDE)
Latch-up

8. DESTRUCTIVE RADIATION EFFECTS
Single-event effects (SEE)
Total-dose effects (TDE)
Latch-up

9. DESTRUCTIVE RADIATION EFFECTS
Single-event effects (SEE)
Total-dose effects (TDE)
Latch-up

10. DESTRUCTIVE RADIATION EFFECTS
Single-event effects (SEE)
Total-dose effects (TDE)
Latch-up

