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Nota di contenuto	CONTENTS; Preface; About the Authors; Chapter 1 Introduction; 1.1 Background; 1.2 General Description of the SEE Mechanism; 1.3 Overview of Quantitative Evaluation Methods; Chapter 2 Terrestrial Neutron Spectrometry and Dosimetry; 2.1 Introduction; 2.2 Neutron Detection Method; 2.2.1 Multi-moderator spectrometer (Bonner Ball, Bonner sphere); 2.2.2 Organic liquid scintillation spectrometer; 2.2.3 Dose equivalent counter (rem counter); 2.2.4 Phoswich-type detector; 2.3 Experimental Procedure; 2.3.1 Sequential neutron measurements on the ground at sea level 2.3.2 Neutron measurements aboard an airplane and at mountain level 2.3.3 Data analysis; 2.4 Results and Discussions; 2.4.1 Atmospheric pressure effect; 2.4.2 Neutron energy spectra; 2.4.3 Time-sequential results of neutron ambient dose equivalent rates; 2.4.4 Average values of neutron flux and ambient dose equivalent; 2.4.5 Variation with latitude, altitude and solar activity; 2.4.6 Calculation of the cosmic-ray neutron spectrum; 2.5 Concluding Remarks; Chapter 3 Irradiation Testing in the Terrestrial Field; 3.1 What

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energy sources

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Sommario/riassunto

Terrestrial neutron-induced soft errors in semiconductor memory devices are currently a major concern in reliability issues.

Understanding the mechanism and quantifying soft-error rates are primarily crucial for the design and quality assurance of semiconductor memory devices. This book covers the relevant up-to-date topics in terrestrial neutron-induced soft errors, and aims to provide succinct knowledge on neutron-induced soft errors, and aims to provide succinct knowledge on neutron-induced soft errors to the readers by presenting several valuable and unique features. *Sample Chapter(s)*

Chapter 1: Introduction (238 KB)
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