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Soggetti	Aerospace engineering Astronautics Electronics Microelectronics Physics Electronic circuits Optical materials Electronic materials Energy systems Aerospace Technology and Astronautics Electronics and Microelectronics, Instrumentation Applied and Technical Physics Circuits and Systems Optical and Electronic Materials Energy Systems
Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Basic Knowledge of EMC and Methods of EMI Control -- Electromagnetic Compatibility Management -- Introduction to Spacecraft EMC Prediction Analysis Methods -- Analysis of Spacecraft System-Level Electromagnetic Compatibility -- EMC Design and Implementation of General Electronic Equipment -- Typical Spacecraft Electronic Component Selection and Module EMC Design -- EMC Design and Rectification for Typical Equipment -- Spacecraft Magnetic Design and Test Technology -- EMC Test Verification of Spacecraft Electronic

Sommario/riassunto

This book explores key techniques and methods in electromagnetic compatibility management, analysis, design, improvement and test verification for spacecraft. The first part introduces the general EMC technology of spacecraft, the electromagnetic interference control method and management of electromagnetic compatibility. The second part discusses the EMC prediction analysis technique and its application in spacecraft, while the third presents the EMC design of spacecraft modules and typical equipment. The final two parts address spacecraft magnetic design testing technologies and spacecraft testing technologies. The book also covers the program control test process, the special power control unit (PCU), electric propulsion, PIM test and multipaction testing for spacecraft, making it a valuable resource for researchers and engineers alike.
