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Titolo	Fundamentals of contamination control / / Alan C. Tribble
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ISBN	1-61583-730-2 0-8194-7861-X
Descrizione fisica	1 online resource (196 p.)
Collana	Tutorial texts in optical engineering ; ; v. TT 44
Disciplina	629.47/4
Soggetti	Space vehicles - Contamination - Prevention
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 139-168) and index.
Nota di contenuto	1. Introduction -- 2. Molecular contamination -- Effects of molecular films -- Quantifying molecular contamination -- Generation, transportation, and deposition of molecular contaminants -- Synergistic effects -- Estimating end of life molecular cleanliness requirements -- Predicting end of life molecular cleanliness levels -- Design guidelines for controlling molecular contamination -- 3. Particulate contamination -- Effects of particles -- Quantifying particulate contamination -- Generation, transportation, and deposition -- Particle redistribution during launch and on-orbit operations -- Estimating end of life particle cleanliness requirements -- Predicting end of life particulate cleanliness levels -- Design guidelines for controlling particulate contamination -- 4. Contamination control -- Preventing contamination -- Monitoring contamination -- Cleaning contaminated surfaces -- Maintaining surface cleanliness -- Launch and orbital operations.
Sommario/riassunto	This Tutorial Text provides a comprehensive introduction to the subject of contamination control, with specific applications to the aerospace industry. The author draws upon his many years as a practicing contamination control engineer, researcher, and teacher. The book examines methods to quantify the cleanliness level required by various contamination-sensitive surfaces and to predict the end-of-life contamination level for those surfaces, and it identifies contamination control techniques required to ensure mission success.

