Record Nr. UNINA9910781433303321 Spacecraft contamination [[electronic resource]]: sources and **Titolo** prevention / / edited by J.A. Roux, T.D. McCay New York, N.Y., : American Institute of Aeronautics and Astronautics, Pubbl/distr/stampa Inc., c1984 **ISBN** 1-60086-564-X 1-60086-345-0 Descrizione fisica 1 online resource (343 p.) Collana Progress in astronautics and aeronautics; ; v. 91 Altri autori (Persone) RouxJ. A McCayT. D Disciplina 629.1 s Soggetti Space vehicles - Contamination Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "Technical papers selected from the AIAA 21st Aerospace Sciences Note generali Meeting, January 1983, and the AIAA 18th Thermophysics Conference, June 1983, and subsequently revised for this volume." Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Cover; Title; Copyright; Table of Contents; Chapter I. Contamination Overview; Improved Methods for Characterizing Material-Induced Contamination; Potential for Cross Contamination for Payloads in the STS Bay; Chapter II. Sources and Prevention of Contamination; Debris from Spallation of Foam Insulation of Cryogenic Fuel Tanks in Space Launch Systems; Particle Dispersion around a Spacecraft; Impact of the STS Ground/Launch Particle Contamination Environment on an Optical Sensor: Analysis of Contamination Degradation of Thermal Control Surfaces on Operational Satellites Abatement of Gaseous and Particulate Contamination in a Space InstrumentChapter III. Properties and Effects of Contamination; Infrared Optical Properties of Thin CO, NO, CH4, HCI, N2O, O2, N2, and Ar Cryofilms; Infrared Optical Properties of Solid Mixtures of Molecular Species at 20 K; Measurements of Infrared Optical Properties of A12O3 Rocket Particles: Improvements in Rocket Engine Nozzle and High Altitude Plume Computations; as/eH Measurements of Thermal Control Coatings over Four Years at Geosynchronous Altitude Calorimetric Measurements of Thermal Control Surfaces on Operational

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