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Titolo	Low-gravity fluid dynamics and transport phenomena [[electronic resource] /] / edited by Jean N. Koster and Robert L. Sani
Pubbl/distr/stampa	Washington, D.C., : American Institute of Aeronautics and Astronautics, c1990
ISBN	1-60086-603-4 1-60086-384-1
Descrizione fisica	1 online resource (763 p.)
Collana	Progress in astronautics and aeronautics ; ; v. 130
Altri autori (Persone)	KosterJean N SaniRobert L
Disciplina	629.1 s 629.132/3
Soggetti	Fluid mechanics Liquids - Effect of reduced gravity on Capillarity Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	""Cover""; ""Title""; ""Copyright""; ""Table of Contents""; ""Preface""; ""Chapter 1. Applied Fluid Mechanics and Thermodynamics""; ""Fluid Management in Low Gravity""; ""Introduction""; ""Stability Considerations""; ""Surface Tension Systems""; ""Design Principles for Fine Mesh-Screen Capillary Devices""; ""Considerations for PMDs Used with Cryogenic Liquids""; ""Conclusions""; ""References""; ""Nucleate Pool Boiling in Variable Gravity""; ""Introduction""; ""Basic Mechanisms of Nucleate Pool Boiling""; ""Status of Understanding""; ""Experimental Technique""; ""Experimental Results"" ""References""""""Chapter 2. Transport Phenomena in Crystal Growth""; ""Application of Energy-Stability Theory to Problems in Crystal Growth""; ""Introduction""; ""Stability Theory""; ""Model Half-Zone""; ""References""; ""Bridgman Crystal Growth in Low Gravity: A Scaling Analysis""; ""Nomenclature""; ""Introduction""; ""Previous Work Related to Transport in Bridgman-Type Systems""; ""Numerical Analysis of Crystal Growth Under Low-Gravity Conditions""; ""Order-of-Magnitude

Analysis and Discussion""; ""Conclusions""; ""References""
""Steady-State Thermal-Solutal Convection and Diffusion in a Simulated Float Zone""""""Nomenclature""; ""Introduction""; ""Model Formulation""; ""Scaling""; ""Asymptotic Analysis""; ""Results""; ""Summary and Conclusions""; ""References""; ""Thermosolutal Convection in Liquid HgCdTe Near the Liquidus Temperature""; ""Introduction""; ""The Model""; ""Results and Discussion""; ""Conclusions""; ""References""; ""Transport Phenomena During Vapor Growth of Optoelectronic Material: A Mercurous Chloride System""; ""Introduction""; ""Experimental Methods""; ""Results and Discussion""; ""Summary""
""Liquid-Liquid Interface""""""Nonlinear Capillary-Gravity Oscillations""; ""Solitons Excited by the Marangoni Effect""; ""References""; ""Chapter 4. Gravity Modulation Effects""; ""Gravity Jitters: Effects on Typical Fluid Science Experiments""; ""Introduction""; ""Reference Scenario for the Microgravity Environment""; ""Equivalence Criteria and Tolerability Limits""; ""Study Cases""; ""Results of the Fluid Dynamic Modelings""; ""Conclusions""; ""References""; ""Effect of Gravity Jitter on Natural Convection in a Vertical Cylinder""; ""Introduction""; ""Presentation of the Problem""
""Governing Equations""

2. Record Nr. UNINA9910462344203321

Titolo	Improving the decision making abilities of small unit leaders [[electronic resource] /] / Committee on Improving the Decision Making Abilities of Small Unit Leaders, Naval Studies Board, Division on Engineering and Physical Sciences, National Research Council of the National Academies
Pubbl/distr/stampa	Washington, DC, : National Academies Press, c2012
ISBN	1-283-63643-3 0-309-21606-0
Descrizione fisica	1 online resource (131 p.)
Disciplina	355.33041
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Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	""Front Matter""; ""Preface""; ""Acknowledgment of Reviewers""; ""Contents""; ""Summary""; ""1 Introduction: The Operational Environment""; ""2 Challenges of the Operational Environment for the Small Unit Leader: Observations and Findings""; ""3 Scientific Basis and Engineering Approaches for Improving Small Unit Decision Making""; ""4 Recommendations""; ""Appendixes""; ""Appendix A: Biographies of Committee Members""; ""Appendix B: Summary of Committee Meetings and Site Visits""; ""Appendix C: Acronyms and Abbreviations""; ""Appendix D: Marine Corps Small Units"" ""Appendix E: Interview Protocol""""""Appendix F: Biomarkers""; ""Appendix G: Dissenting Opinion""