

1. Record Nr.	UNINA9910957163703321
Titolo	Microgravity research in support of technologies for the human exploration and development of space and planetary bodies // Committee on Microgravity Research, Space Studies Board, Commission on Physical Sciences, Mathematics, and Applications, National Research Council
Pubbl/distr/stampa	Washington, D.C., : National Academies Press, c2000
ISBN	9780309173032 0309173035 9780309518673 0309518679 9780585342382 0585342385
Edizione	[1st ed.]
Descrizione fisica	1 online resource (223 p.)
Collana	Compass series
Disciplina	620/.419/072073
Soggetti	Research in reduced gravity environments Reduced gravity environments Outer space Exploration
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Support for this project was provided by Contract NASW 96013 between the National Academy of Sciences and the National Aeronautics and Space Administration"--T.p. verso.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	""Front Matter""; ""Preface""; ""Acknowledgment of Reviewers""; ""Contents""; ""Executive Summary""; ""I Introduction""; ""II Brief Descriptions of Phenomena Important in Reduced Gravity""; ""III Survey of Technologies for the Human Exploration and Development of Space""; ""IV Phenomena of Importance in Reduced Gravity""; ""V Other Concerns""; ""VI Summary of Recommended Research on Fundamental Phenomena""; ""VII Programmatic Recommendations""; ""A Statement of Task""; ""B Symbols""; ""C Glossary""; ""D Acronyms""; ""E Biographies of Committee Members""
Sommario/riassunto	The frontier represented by the near solar system confronts humanity with intriguing challenges and opportunities. With the inception of the

Human Exploration and Development of Space (HEDS) enterprise in 1995, NASA has acknowledged the opportunities and has accepted the very significant challenges. Microgravity Research in Support of Technologies for the Human Exploration and Development of Space and Planetary Bodies was commissioned by NASA to assist it in coordinating the scientific information relevant to anticipating, identifying, and solving the technical problems that must be addressed throughout the HEDS program over the coming decades. This report assesses scientific and related technological issues facing NASA's Human Exploration and Development of Space endeavor, looking specifically at mission enabling and enhancing technologies which, for development, require an improved understanding of fluid and material behavior in a reduced gravity environment.

---