1. Record Nr. UNINA9910483409803321 Autore Dominoni Annalisa Titolo Design of supporting systems for life in outer space : a design perspective on space missions near Earth and beyond / / Annalisa Dominoni Cham, Switzerland:,: Springer,, [2021] Pubbl/distr/stampa ©2021 **ISBN** 3-030-60942-1 Edizione [1st ed. 2021.] Descrizione fisica 1 online resource (XIII, 209 p. 93 illus., 88 illus. in color.) Collana Research for Development, , 2198-7300 Disciplina 629,477 Soggetti Life support systems (Space environment) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia The Strategic Role of Design for Space -- Living in Space by the Lens of Nota di contenuto Design -- Research and Design for Space Life -- Space Design Between Research, Project and Education. This book is a rich source of information on design research and Sommario/riassunto solutions for the support and development of space missions. International experiences and researches are presented in order to cast light on the role of space design in improving living and working conditions in outer space and to highlight the particularities of the necessary design skills, taking into account specific requirements and constraints. The challenge facing designers is how to approach environmentally extreme conditions in such a way that they are transformed from limitations into opportunities. The author has herself developed products that have been tested during on-orbit experiments on the International Space Station. Drawing on this unique experience and other case studies, the author proposes a new design methodology for space and demonstrates how the discipline of design is able to generate innovation thanks to the strong capacity of visioning. Ultimately this will lead to the development of further new equipment for astronauts that will facilitate space travel. While the book is intended primarily for students and researchers, it is also of interest for a broad readership attracted by space, innovation, and future

scenarios.