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Nota di contenuto	TORVEASTRO project: plans and achievements -- Orbiting space station robots: issues, challenges and requirements for a novel design -- Dimensional design of Torveastro, a space orbital station service robot -- Assembly and testing of a new joint mechanism for TORVEASTRO -- Kinematics equations for the control system of the TORVEastro robot -- Arm control design in TORVEastro prototype -- Performance analysis of Torveastro, an outer space service robot -- Materials for Space Astronaut Service Robots -- Additive manufacturing of light alloys for aerospace: an overview -- Continuum robots for space applications -- Design and performance of a berthing space manipulator -- How swarm robot dynamic can describe mechanical systems -- Mechanism Design Optimization of a Portable Scanner for Measuring Atmosphere Light Pollution -- Repetitive Path Planning with Experience-based Bidirectional Rapidly-exploring Random Trees.
Sommario/riassunto	This book gathers the latest advances, innovations, and applications in the field of space robots as presented at the International Conference on Robots for Space Applications in Orbital Stations (TORVEASTRO), held in Rome, Italy on April 20-21, 2023. Topics addressed include history of space and robotics, bio-inspired space robotics, grasping, handling and intelligent manipulation, kinematics and dynamics, navigation & motion planning, robot vision and control, human-

machine interfaces, new designs and prototypes, humanoid astronaut robots, and service space robots. .