1. Record Nr. UNINA9910508434803321 Autore Wu Ji Titolo Introduction to space science / / Ji Wu Pubbl/distr/stampa Singapore:,: Springer,, [2021] ©2021 981-16-5751-3 **ISBN** Edizione [1st ed. 2021.] Descrizione fisica 1 online resource (xvi, 193 pages): illustrations (some color), charts, portraits Collana Springer Aerospace Technology, , 1869-1749 Disciplina 629.4 Soggetti **Astronautics** Astrodynamics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Chapter 1: Reasons to conduct research in space -- Chapter 2: History Nota di contenuto of Human Space Exploration -- Chapter 3: Major frontiers in space science (I) -- Chapter 4: Major frontiers in space science (II) -- Chapter 5: Space Systems Engineering and Its Systems -- Chapter 6: Technical fundamentals (I): orbit, attitude and TT&C -- Chapter 7: Technical fundamentals (II): scientific payloads and its application environment --Chapter 8: Technical fundamentals (III): Mission Planning and Operations -- Chapter 9: Managements (I): Call for Mission Proposals and Its Selection -- Chapter 10: Managements (II): Mission Development and the Duty of Scientists and Engineers -- Chapter 11: Managements (III): Quality Management and Risk Control -- Chapter 12: Managements (IV): Full Mission Lifecycle Management and Output Evaluation -- Chapter 13: International Cooperation -- Chapter 14: Strategic Planning of Space Science in China -- Chapter 15: Relations of Space science, Space Technology and Space Applications. This book highlights the technological and managerial fundamentals Sommario/riassunto and frontier questions of space science. Space science is a new interdisciplinary and comprehensive subject that takes spacecraft as the main tools to study the planet Earth, the solar-terrestrial space, the solar system, and even the whole universe, to answer significant

> questions covering the formation and evolution of the solar system and the universe, the origin and evolution of life and the structure of the

material. The book introduces major scientific questions in various branches of space science and provides related technological and managerial knowledge. It also discusses the necessity of international cooperation and elaborates on the strategic planning of space science in China. The book can be used as a reference book or textbook for scientists, engineers, college students, and the public participating in space science programs.