

1. Record Nr.	UNINA9910254169103321
Autore	Jakhu Ram S
Titolo	Space Mining and Its Regulation // by Ram S. Jakhu, Joseph N. Pelton, Yaw Otu Mankata Nyampong
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-39246-8
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (xxvii, 181 p.)
Collana	Astronautical Engineering, , 2365-9599
Classificazione	64.22 68.08
Disciplina	341.47
Soggetti	Aerospace engineering Astronautics Law of the sea International law Geotechnical engineering Space sciences Aerospace Technology and Astronautics Law of the Sea, Air and Outer Space Geotechnical Engineering & Applied Earth Sciences Space Sciences (including Extraterrestrial Physics, Space Exploration and Astronautics)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references and index
Nota di contenuto	Chapter 1: Introduction -- Chapter 2: The United States Government and Private Enterprise: Past and Current Efforts to Search for and Exploit Space Natural Resources -- Chapter 3: Transport Systems and Targeting of Locations for Space Mining -- Chapter 4: Power and Robotic Systems for Space Mining Operations -- Chapter 5: The Current Status of Legal or Regulatory Provisions Related to Space Mining and Exploiting Space Natural Resources -- Chapter 6: Pending Issues and Problems and Regulatory, Technical and Financial Challenges -- Chapter 7: Conclusions and Top Ten Challenges for Future Space Mining Initiatives Challenges -- Glossary of Key Terms and Acronyms -- Appendices.

This book addresses the complex technical challenges presented by remote space mining in terms of robotics, remote power systems, space transport, IT and communications systems, and more. It also addresses the difficult oversight and regulatory issues that face states and non-state enterprises that would take on the perilous task of obtaining natural resources from the Moon and asteroids. An increasing number of countries are becoming involved in space-related activities that were previously carried out primarily by the United States and the USSR (now the Russian Federation). How these regulatory endeavors might be handled in international treaties, standards, codes of conduct or other means have become a truly international political issue. And there is yet another issue. In the past, space activities traditionally fell under the exclusive domain of government. But the last few years have seen the emergence of the private sector of "space entrepreneurs." This poses many challenges for the pre-existing governance regimes and state-based conceptions of international law. This book examines the adequacies and ambiguities in treaty provisions and national laws and in currently accepted practices involving the growing exploration and exploitation of space-based natural resources.
