

1. Record Nr.	UNINA9910337616503321
Autore	Pelton Joseph N
Titolo	Space 2.0 [[electronic resource]] : Revolutionary Advances in the Space Industry // by Joseph N. Pelton
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-15281-2
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (222 pages)
Collana	Astronautical Engineering, , 2365-9599
Disciplina	338.0919
Soggetti	Aerospace engineering Astronautics Space sciences Technology—History Globalization Markets Aerospace Technology and Astronautics Space Sciences (including Extraterrestrial Physics, Space Exploration and Astronautics) History of Technology Emerging Markets/Globalization
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	About the Author -- Chapter 1: The World of Space in Flux -- Chapter 2: How Satellite Communications Are Changing -- Chapter 3: Key Trends in Remote Sensing Satellite Systems -- Chapter 4: The Growth and Expansion of Precision Navigation and Timing -- Chapter 5: The New Capabilities of Weather Satellites -- Chapter 6: New Uses of the Protozone -- Chapter 7: On-Orbit Servicing, Active Debris Removal and Repurposing of Defunct Spacecraft -- Chapter 8: Space-Based Solar Power Satellite Systems -- Chapter 9: Space Weapons, the Threat of War in Space and Planetary Defense -- Chapter 10: Trends in Chemical Rocket Systems and New Approaches to Launching Satellites -- Chapter 11: The Longer Term Future of Launch and Propulsion Systems -- Chapter 12: Spaceplanes, Space Tourism and Private Space Habitats --

Sommario/riassunto

A true revolution has rocked the space industry, as Silicon Valley and new startup companies around the world have shaken up the status quo. This has in turn triggered a hefty response among traditional aerospace companies, launching the sector into the new Space 2.0. This book explains how and why this remarkable change has happened, starting from the industry's origins during the Space Age and working its way to the present day. No other industry in the world has experienced the dramatic shift in technology and services as rapidly as the field of satellite services and rocket launch systems has. This book analyzes the dynamic shift over the past decade in how satellites are designed, manufactured, launched, and operated. It also turns an eye to the future, discussing the amazing feats and potential issues we can expect from this shifting arena by 2030. With its beginner-friendly writing style and plethora of illustrations, this book serves as a perfect introductory text to students and professionals alike wishing to learn more about the key trends in the field of space applications and launch systems.
